

Aquaculture Stewardship Council and Marine Stewardship Council

ASC-MSC Seaweed (Algae) Audit Announcement Template

[Specify if Initial, Surveillance or Re-certification]

Version 1.0 (Issued 8 December 2017)



Aquaculture
Stewardship
Council



Scheme documents:

ASC-MSC Seaweed (Algae) Standard

ASC-MSC Seaweed (Algae) Certification and Accreditation Requirements

This document is to be cited as:

ASC-MSC Seaweed (Algae) Audit Announcement Template v1.0

Versions issued

Version no.	Date	Description of amendment
1.0	8-Dec-17	N/A - new document



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Production unit details

<p>Name of the production unit 생산 단위명</p>	<p>Wando Eco-friendly Seafood Cooperative (WESC) 완도친환경수산물협동조합</p>
<p>Target species common name/s 대상 종 일반명</p>	<p>Hijiki and Kelp 흑, 다시마</p>
<p>Species Latin name 학명</p>	<p>Hizikia fusiformis and Saccharina japonica 히즈키아 푸시로미스, 사카리나 자포니카</p>
<p>Production system 생산시스템</p>	<p>Off-shore aquaculture / artificial seedlings collected from existing farm / Floating rope method 바다 양식 / 인공 채묘에 의한 종묘 생산 / 연승수하식 양식</p>
<p>Location of the production unit 생산단위의 위치</p>	<p>Production units are located in Wando-Gun, Jeollanam-do, Republic of Korea. [South Sea shore of Korean Peninsula / FAO Major Fishing Areas: Pacific, NORTHWEST (Major Fishing Area 61)] Farms are located in the sea around 3 islands called Sinjido(Sinji Island), Yaksando (Yaksan Island) and Geumildo(Geumil Island), and primary processing places (Sun-drying, Mixing with salt) are located in the same islands and in Wando-eup in the South sea in Wando-Gun. See location maps in the tab, 'Aquafarm Locations' 생산단위들은 대한민국 전라남도 완도군에 위치하고 있음. [한반도 남해안 / FAO Major Fishing Areas: 태평양 북서쪽 (Major Fishing Area 61)] 양식장은 3개 섬 (신지도, 약산도, 금일도) 주위 바다에, 초기 가공장은 3개 섬 (신지도, 약산도, 금일도) 및 완도를 내에 위치하고 있음. 'Aquafarm Locations' 탭에 삽입된 지도 참조</p>
<p>Stock Region 생태자원 위치</p>	<p>N/A 해당 없음</p>
<p>Receiving water body 수역</p>	<p>Wando-Gun Sea Area, Jellanam-Do, Republic of Korea 대한민국 전라남도 완도군 해역</p>
<p>Clients part of the production unit 생산 단위의 담당자</p>	<p>Mr. Hyun Kyu Woo/Marketing Director, Wando Eco-friendly Seafood Cooperative (WESC) 우현규 본부장, 완도친환경수산물협동조합</p>
<p>Facilities 시설 현황</p>	<p>Sea : Aquaculture equipment, rope, stone anchorage, float, boat, a pumping equipment and a rubber hose for washing 해양 : 양식 기자재, 로프, 무게추, 부자, 운송선, 펌프 및 고무호스 Land : cutter, a hot-water boiler 육지 : 절단기, 보일러</p>
<p>Unit of Certification (if different) 인증 단위</p>	<p>Wando Eco-friendly Seafood Cooperative (WESC) 완도친환경수산물협동조합 #201, Corporate Support Building, Marin-Bio Research Center, 21-7, Nonggongdanji 4-gil, Wando-eup, Wando-gun, 59108, Jeollanam-do, Republic of Korea 전라남도 완도읍 완도읍 농공단지 4길 21-7 해양바이오연구센터 기업지원동 201호 (Address for farms and primary processing place of Member Farmers) 조합원 양식장/가공장소 (Farm doesn't have the address but have GPS Coordinate) 양식장은 주소가 없어 GPS 좌표로 기재함 1) Farm of Mr. Myung-Jin KIM 김명진 양식장 : (No. 13670) N 34° 18' 50.8" E 126° 53' 20.4" ; (No. 13672) N 34° 20' 26.1" E 126° 54' 3.3" / Processing place & Storage: 1514-18, Sinji-ro, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°20'35.7"N 126°53'37.1"E), 전남 완도군 약산면 해동리 678-1 2) Farm of Mr. Tae-Min KIM & Ms. Bo-Ae JUNG 김태민 & 정보애 양식장 : (No. 11670) N 34° 18' 22.7" E 126° 51' 44.6" / Processing place & Storage: 1039-3, Woryang-ri, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°19'01.0"N 126°50'52.4"E), 전라남도 완도군 신지면 월양리 1039-3 3) Farm of Mr. Seung-Ho JEONG 정승호 양식장 : (No. 13830) N 34° 17' 59.3" E 126° 51' 27.4" / Processing place & Storage: 1141-1, Woryang-ri, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°18'39.1"N 126°51'12.3"E), 전라남도 완도군 신지면 월양리 1141-1 4) Farm of Mr. Kyung-Un KIM 김경운 양식장 : (No. 13690) N 34° 23' 07.6" E 126° 57' 46.9" / Processing place & Storage: 678-1, Haedong-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°22'53.6"N 126°58'13.7"E), 전남 완도군 약산면 해동리 678-1 5) Farm of Mr. Gwan-Seop JEONG & Ms. Seon-Ae YU 정관섭 & 유선애 양식장 : (No. 13690) N 34° 23' 11.72" E 126° 57' 37.78" / Processing place: 410, Haedong-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°23'03.7"N 126°55'37.9"E), 전남 완도군 약산면 해동리 410 / Storage: 710, Haedong-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°22'53.6"N 126°56'21.2"E), 전남 완도군 약산면 해동리 710 6) Farm of Mr. Choong-Hun CHOI & Ms. Mi-So LEE 최충훈 & 이미소 양식장 : (No. 13661) N 34° 24' 38.6" E 126° 53' 52.0" / Processing place: 125-1, Udu-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°23'29.2"N 126°53'40.2"E), 전남 완도군 약산면 우두리 125-1 / Storage: 77-3, Udu-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°23'42.5"N 126°53'33.4"E) 전남 완도군 약산면 우두리 77-3 7) Farm of Mr. Myung-Young KIM 김용영 양식장 : (No. 13572) N 34° 24' 07.34" E 127° 00' 45.42" / Processing place & Storage: 1225-9, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°22'06.5"N 127°01'44.6"E), 전라남도 완도군 금일읍 적치리 1225-9 8) Farm of Mr. Hyun-Seung KIM & Ms. Jeong-Young LEE 김현승 & 이정영 양식장 : (No. 13572) N 34° 25' 02.91" E 126° 59' 26.98", (No. 14033) N34°22'30.53"E 127°02'24.91" / Processing place & Storage: 1075, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°22'03.8"N 127°01'30.4"E), 전라남도 완도군 금일읍 적치리 1075, 9) Farm of Mr. Young-Soo JEON 전영수 양식장 : (No. 13794) N 34° 23' 55.51" E 126° 59' 57.92" / Processing place & Storage: 1233, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°21'53.5"N 127°01'41.5"E), 전라남도 완도군 금일읍 적치리 1233 10) Farm of Mr. Hong-Joo JEON 홍중주 양식장 : (No. 14033) N 34° 24' 19.07" E 126° 59' 51.03" / Processing place & Storage: 1230-1, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°22'06.2"N 127°01'39.0"E), 전라남도 완도군 금일읍 적치리 1230-1 11) Farm of Mr. Hyuk SEO 서혁 양식장 : (No. 13693) N 34° 19' 46.2" E 127° 01' 48.8" / Processing place 1457, Sin-gu-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°20'28.5"N 127°02'18.0"E), 전남 완도군 금일읍 신구리 1457 / Storage 478, Sin-gu-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°20'51.6"N 127°02'37.5"E), 전라남도 완도군 금일읍 신구리 478 12) Farm of Mr. Il-Jin Jo 조익진 양식장 : (No. 13671) N 34° 19' 19.42" E 126° 54' 51.74", N 34° 19' 57.32" E 126° 55' 05.92" / Processing place & Storage: 15, Jukcheong-gil, Wando-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°20'44.0"N 126°44'09.5"E), 전라남도 완도읍 죽청길 15 13) Farm of Mr. Myeong-Chul Ji & Ms. Dal-Lae Ji 지명철 & 기달래 : (No. 11341) N 34° 17' 48.78" E 126° 49' 09.49" / Processing place & Storage: 1084-7, Woryang-ri, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°18'36.7"N 126°51'03.3"E), 전라남도 완도군 신지면 월양리 1084-7</p>
<p>Harvest season</p>	<p>December to early July, 12월부터 7월 초까지</p>
<p>Management system</p>	<p>Two levels of the government, i.e. the Ministry of Maritime Affairs and Fisheries (MMAF), being the central authority, as well as local governments in the province, city and district, are involved in fisheries conservation, management and development. The Korean Government also introduced a fishermen-oriented co-management system for more effective implementation of responsible fisheries. Under this system, an organization of fishermen, such as a fishery corporation or a group of fishermen in villages set up self-regulation according to the fishery-related laws and regulations with endorsement of the local government. 2개 수준의 정부, 중앙 정부 수준에서의 해양수산부 그리고 지방 정부 수준에서 수산물의 보전, 관리, 개발에 관여하고 있음. 또한 한국정부는 어업인 중심의 공동 관리 시스템을 도입하여, 책임있는 어업의 효과적인 실행을 추구하고 있음. 이 시스템에서는 어민 조직, 즉 수산업 협동조합 또는 마을의 어촌계 등을 통해 수산업 관련 법률 및 지역정부의 규제 방안 등을 자체 준수하도록 노력하고 있음. The Fisheries Act requires any person who intends to cultivate seaweeds, shellfish or other marine animals (by demarcating specified waters and utilizing the bed of the waters or providing other facilities under water) to obtain a license from the local government. Other categories of cultivating fisheries include mixed cultivating fisheries, cooperative cultivating fisheries and village cultivating fisheries. Any license should be issued within the limits of the fishing ground utilization and development plan. According to the act, MMAF shall determine, inter alia, the water depth of the fishing grounds (exclusive of water depths of cooperative and village cultivating fisheries, which are to be determined by Presidential Decree), limits of fishing zones and distances between fishing grounds, methods of fishing ground equipment, cultivation, catching or gathering, and matters concerning cultivated products. The act prescribes the order of priority for the issuance of licenses, specifies the grounds for refusal and revocation of licenses, and stipulates that licenses may be subject to restrictions or conditions if necessary, inter alia, for the breeding and protection of fishery resources or any other public interest. Licenses are generally valid for a period of ten years. 수산업법에 따라 해조류, 갑각류 또는 기타 해양 동물 (특정 수역의 경계를 정하고 수역을 활용하거나 수중에 다른 시설을 제공함)을 양식하고자하는 사람에게 지방 정부의 면허를 취득하도록 요구됨. 다른 종류의 수산 양식에는 복합 양식 어업, 협동 양식 어업 및 마을 양식 어업이 포함됨. 모든 면허는 어장 이용 및 개발 계획의 한계 내에서 발행되어야 함. 국가법률에 따라, 해양 수산부는 그 중에서도 어장 수심 (대통령령으로 정하는 협동 조합 및 마을 정착 어업의 수심을 제외함), 어장의 한계 및 각 어장 간의 거리, 어업장비, 양식, 어획 또는 포집 그리고 양식 수산물 관련 사항을 결정함. 이 법은 면허발급 우선순위 순서를 정하고, 면허거부 및 폐지의 근거를 명시하며, 면허는 수산자원이나 기타 공공의 이익을 위하여 필요한 경우 기간 동안 제한이나 조건의 대상이 될 수 있다고 규정하고 있다. 면허증은 일반적으로 10년 동안 유효함.</p>

	<p>Acts that directly relate to fisheries licenses and permits include the Fisheries Act and the Inland Water Fisheries Act. In addition, the "Fishery Management Act" for the use and management duties of the farms, the "Act on the indication of the origin of agricultural and marine products" for the indication of the origin of aquaculture products, the "Act on the Agricultural and Fishery Products Quality Control" For the support of fish farmers, there are "Agriculture, Forestry and Fisheries Credit Guarantee Act" and "Agricultural and Fishery Accident Insurance Act". 어업 허가 및 허가 관련 법안에는 수산법과 육지 수산법이 포함된다. 또한, 농가의 사용 및 관리 의무에 관한 "어업관리법"과 수산물의 유래를 표시하는 "농수산물 및 수산물 원산지 표시에 관한 법률". 어업농의 지원을 위한 "농어, 수산물 품질 관리법"이 있음. 농림수산식품부보조법 및 농업 및 어업 재해보험법 등이 있음.</p> <p>Wando Eco-friendly Seafood Cooperative (WESC) has a governance structure. Member Assembly is the highest organization from which key decisions are made. Board committee and steering committee are two main pillars supporting member assembly.</p> <p>Operational manual for certified seaweeds aquaculture is established by steering committee. All farmers apply the operational manual in their daily activities.</p> <p>완도친환경수산물협동조합은 거버넌스구조를 가지고 있음. 조합원 총회는 최고의 거버넌스 기구이며, 중요 의사결정이 이루어짐. 이사회 및 운영위원회는 총회를 지지하는 중요한 2개의 조직이며 상시적인 의사결정이 이루어짐. 인증 수산물 양식을 위한 운영 매뉴얼이 운영위원회에 의해 제정되었고, 모든 양식장에서는 매뉴얼을 적용해서 업무를 수행하고 있음.</p> <p>The cooperative has established procedures for management system. The operations manual states details of work procedure, and responsibilities of member farmers. 협동조합에서는 경영시스템 절차를 수립했음. 운영 매뉴얼은 상세한 작업 절차, 회원 양식장의 책임들이 기재되어 있음.</p>
Seaweed category	Bii Cultivation at sea: Supply of seed from wild stocks NOT required or negligible / Bii 바다양식 : 인공 채묘, 야생 자원 필요하지 않거나 무시할만한 수준
Statement that the production unit is within scope	<p>Harvesting or farming activities are only eligible for certification if the target species is a seaweed. 자연 채집 또는 양식 활동을 통한 인증 대상의 목표 수종은 해조류일. All farms subject to this certification audit conduct aquafarming of seaweeds. 이번 인증심사 대상 양식장들은 해조류 양식을 하고 있음.</p> <p>The Standard applies globally to all locations and scales of operations, including both harvesting of wild stocks and production from aquaculture systems. 이 표준은 자연 서식지의 수확과 양식 체계의 생산을 포함하여 모든 장소와 규모의 작업에 국제적으로 적용된다. Wando Eco-friendly Seafood Cooperative (WESC) and member farms subject to this certification audit are committed to comply with the standard and conduct farming as per the standard.</p> <p>완도친환경수산물협동조합 및 인증심사 대상 회원 양식장들은 표준을 준수할 것을 다짐했으며, 표준을 적용해서 양식을 하고 있음.</p> <p>The Standard applies to seaweed production units only. Other production units in scope for assessment under the existing ASC or MSC standards are in no way affected by the Seaweed Standard. 이 기준은 해조류 생산 단위에만 적용된다. 현존하는 ASC 또는 MSC 표준에 따른 평가의 범위에 있는 다른 생산 단위는 해조류 표준에 영향을 받지 않는다. Only seaweeds farms are in scope for the assessment. 해조류 양식장만 심사 대상에 포함되어 있음.</p> <p>Harvesting or farming activities involving the introduction of alien (i.e. non-native) species are not eligible for certification, unless: The introduction occurred at least 20 years prior to the date the application is made for assessment against the Seaweed Standard, or The alien species is cultured in on-land facilities that are completely separated from the aquatic environment. 도입은 해조류 기준에 대한 평가를 위해 신청한 날로부터 적어도 20년 전에 이루어졌으며, 또는 외계 종은 수생 환경과 완전히 분리된 육지 시설에서 배양된다. 인증을 추구하는 조직은 최소 12개월 또는 1회의 수확 주기 중 더 적은 것으로 운영되어야 한다. Farming of the targeted species began more than 20 years ago in the area. 대상 해조류의 양식은 해당 지역에서 20년 전에 시작되었음.</p> <p>Organisations seeking certification shall have been in operation for at least 12 months, or one harvest cycle, whichever is less. Farms have been in operation more than 12 months. 양식장들은 12개월 이상 운영을 하고 있음.</p> <p>Organisations seeking certification shall have available records of performance data covering the periods of time specified in the Standard. Wando Eco-friendly Seafood Cooperative (WESC) and member farms subject to this certification audit retain the records of performance data covering the periods of time specified in the Standard and can provide the assessors with the records for review. 완도친환경수산물협동조합 및 심사 대상 양식장들은 규격에서 정의하고 있는 기간에 해당하는 성과 데이터 기록을 보유하고 있으며, 심사원들의 검토를 위해 제공할 수 있음.</p> <p>Harvesting or farming activities which use mutagenic, carcinogenic or teratogenic pesticides, or any other chemicals that persist as toxins in the marine environment or on the farm or farmed seaweeds, are not eligible for certification. 돌연변이 유발, 발암성 또는 기형성 살충제를 사용하는 수확 또는 농업 활동 또는 해양 환경이나 농장 또는 양식 해조에서 독소로 유지되는 다른 화학물질은 인증 대상이 되지 않는다.</p> <p>No chemical is used in the farm 양식장에서는 화학약품이 사용되지 않음.</p>
Production unit operators	<p>Farmers outplant seedling supplied from nursery house in the open water farms. When seaweeds grow enough, farmers harvest and transport to land. 3 different types of seaweeds (Fresh seaweed, dried seaweed and salt-mixed seaweed) are sold to the market. Harvested seaweeds are sun-dried in the proximity field owned or rented to each farmer to produce the dried seaweed or boiled and mixed with salt by each farmer to produce salt-mixed seaweed. When a sales order is received, the seaweed is transported to buyer and the ownership changes.</p> <p>양식장에서는 종묘장에서 공급받은 종묘를 양식장에 이식함. 다시마가 충분히 성장하면, 수확 후 육지로 이송함. 3가지 형태의 다시마(생 다시마, 건조 다시마, 염장 다시마)가 시장에 출하됨. 건조 다시마는 양식장 대표가 소유임대단지 건조장에서 일광 건조되며, 염장 제품은 양식장 대표들에 의해 삶은 후 소금과 혼합하게 됨. 판매 주문을 받으며, 구매자에게 운송되며, 소유권이 변경됨.</p> <ol style="list-style-type: none"> 1) Farm of Mr. Myung-Jin KIM 김명진 양식장 : 1 Vessel, 1 truck, 2 Kelp farms, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 2곳, 일광건조장 1곳 운영 2) Farm of Mr. Tae-Min KIM & Ms. Bo-Ae JUNG 김태민 & 정보애 양식장: 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 3) Farm of Mr. Seung-Ho JEONG 정승호 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 4) Farm of Mr. Kyung-Un KIM 김경운 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 5) Farm of Mr. Gwan-Seop JEONG & Ms. Seon-Ae YU 정관섭 & 유선애 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 6) Farm of Mr. Choong-Hun CHOI & Ms. Mi-So LEE 최중훈 & 이미소 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 7) Farm of Mr. Yong-Young KIM 김용영 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 8) Farm of Mr. Hyun-Seung KIM & Ms. Jeong-Young LEE 김현승 & 이정영 양식장: 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 9) Farm of Mr. Young-Soo JEON 전영수 양식장: 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 10) Farm of Mr. Young-Soo JEON 전홍주 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 11) Farm of Mr. Hyuk SEO 서혁 양식장 : 1 Vessels, 1 truck, 1 Kelp farm, 1 sun dry field 선박 1대, 트럭 1대, 다시마 양식장 1곳, 일광건조장 1곳 운영 12) Farm of Mr. Ik-Jin Jo 조익진 양식장 : 1 Vessel, 1 truck, 1 Hijiiki farm, 1 sun dry field 선박 1대, 트럭 1대, 툫 양식장 1곳, 일광건조장 1곳 운영 13) Farm of Mr. Myeong-Chul JI & Ms. Da-Lae KI 지명철 & 기달래: 1 Vessel, 1 truck, 1 Hijiiki farm, 1 sun dry field 선박 1대, 트럭 1대, 툫 양식장 1곳, 일광건조장 1곳 운영
Information to identify Micro family business	<p>Recognition of Micro Family business is not applicable. 소규모 가족 비즈니스에 해당되지 않음.</p>

Harvest/production data	<p>1) Farm of Mr. Myung-Jin KIM 김명진 양식장 : Kelp 7 tons/year 다시마 연간 7톤 2) Farm of Mr. Tae-Min KIM & Ms. Bo-Ae JUNG 김태민 & 정보애 양식장 : Kelp 10 tons/year 다시마 연간 10톤 3) Farm of Mr. Seung-Ho JEONG 정승호 양식장 : Kelp 8 tons/year 다시마 연간 8톤 4) Farm of Mr. Kyung-Un KIM 김경운 양식장 : Kelp 4 tons/year 다시마 연간 4톤 5) Farm of Mr. Gwan-Seop JEONG & Ms. Seon-Ae YU 정관섭 & 유선애 양식장 : Kelp 4 tons/year 다시마 연간 4톤 6) Farm of Mr. Choong-Hun CHOI & Ms. Mi-So LEE 최중헌 & 이미소 양식장 : Kelp 6 tons/year 다시마 연간 6톤 7) Farm of Mr. Yong-Young KIM 김용영 양식장 : Kelp 10 tons/year 다시마 연간 10톤 8) Farm of Mr. Hyun-Seung KIM & Ms. Jeong-Young LEE 김현승 & 이정영 양식장 : Kelp 12 tons/year 다시마 연간 12톤 9) Farm of Mr. Young-Soo JEON 전영수 양식장 : Kelp 6 tons/year 다시마 6톤 10) Farm of Mr. Young-Soo JEON 전홍주 양식장 : Kelp 6 tons/year 다시마 연간 6톤 11) Farm of Mr. Hyuk SEO 서혁 양식장 : Kelp 3.5 ton/year 다시마 연간 3.5톤 12) Farm of Mr. Ik-Jin Jo 조익진 양식장 : Hijiki 13 tons/year 툷 연간 13톤 13) Farm of Mr. Myeong-Chul Ji & Ms. Dal-Lae Ki 지명철 & 기달래 : Hijiki 7 tons/year 툷 연간 7톤</p>
History of the Production unit	<p>Korean total fisheries and aquaculture production reached a peak of 3.1 million tonnes in 1986, declined progressively to less than two million tonnes in 2004 and has only fluctuated slightly since then. Total fish production was 2.1 million tonnes (2015) with aquaculture production accounting for approximately 23 percent of total production. Aquaculture is an important element in the fisheries sector of the country. In 2015 the total aquaculture production was about 1.6 million tonnes with the farm gate value of USD 2.16 billion. Seaweeds farming production was 1.2 million tonnes in 2015, accounting for 71 percent of the total aquaculture production by quantity and 20 percent in value. (reference: Fishery and Aquaculture Country Profile in FAO website)</p> <p>The first aquaculture of Kelp and Hijiki in Wando began in 1968 and 1980 respectively. (reference: Wando Seaweeds EXPO 2017 website), which is the far more than 20 years ago. The number of farms have increased since then in Wando sea area and seaweeds farming in this area is one of the most popular industries. Not only Kelp and Hijiki which are the target species for the this certification audit but also other seaweed including Sea Mustard, Laver, Enteromorpha, seaweed fulvescens are commonly farmed in the area.</p> <p>The member farmers of Wando Eco-friendly Seafood Cooperative (WESC) began the aquaculture farming from 1985 at the earliest.</p> <p>대한민국의 수산 및 양식 생산량은 1986년에 3백10만톤의 정점에 다달았으며, 이후 2004년 2백만톤이하로 점차 감소해오고 있으며, 약간의 변동만 있어 왔음. 총 어획량은 2015년 2백10만톤이었으며, 이중 약 23%가 양식 생산량이 차지하고 있음. 수산양식은 대한민국의 수산업 분야에서 중요한 요소임. 2015년 총 양식 생산량은 약 66십만톤, 출하금액 기준 21억 6천만달러였음. 2015년 해조류 양식 생산량은 66십만톤으로 전체 양식 생산량의 71%, 금액기준으로 20%를 차지하고 있음. (참고 자료: Fishery and Aquaculture Country Profile in FAO 홈페이지)</p> <p>완도군 지역에서 다시마와 툷의 양식은 1968년과 1980년에 처음 시작되었음. (참고 자료: 완도 해조류 엑스포 2017 홈페이지) 이는 20년 훨씬 전임. 완도군 해역에서 이후 양식장의 수는 증가해오고 있으며, 해조류 양식은 지역의 가장 흔한 산업의 하나로 자기매김하였음. 해조류 양식은 20년 훨씬 전에 지역에서 시작되었음.</p> <p>완도 지역에서는 이번 인증 심사 대상인 다시마와 툷 뿐아니라 미역, 김, 파래, 매생이 등도 양식되고 있음.</p> <p>완도 친환경 수산물 협동조합 조합원들은 가장 빠른 경우 1985년부터 양식을 시작했음.</p>
Other production unit in the area	<p>In wando Sea area, a lot of aquaculture farms are in operation. Main species farmed includes seaweeds such as Kelp and Hijiki, Sea Mustard, Laver, Enteromorpha, seaweed fulvescens and abalone.</p> <p>2 organizations in Wando sea area are certified to or 1 in assessment of ASC Abalone farm certification.</p> <p>WESC is certified to ASC-MSC Seaweed Certification with 11 farms in 2020.</p> <p>완도군 주변 해역에는 다시마, 툷, 미역, 김, 파래, 매생이를 비롯한 해조류들과 전복양식장이 다수 존재함.</p> <p>완도군 주변 해역 내에 ASC 전복 양식장 인증을 받았거나, 현재 심사가 진행중인 전복 양식장이 있음.</p>
Main commercial market	<p>Korean domestic buyers 대한민국 국내 시장</p>
Any other information the CAB wishes to provide (including any specific issues within the production unit that need to be highlighted)	<p>N/A 해당 없음</p>

Audit details

<p>Conformity Assessment Body (CAB)</p>	<p>Name of the CAB DNV GL Business Assurance Norway AS (ASI-ACC-025) 디엔브이제일 비즈니스 어슈어런스 노르웨이</p> <p>Name of assessment team leader Che King Lee 처킹리</p> <p>Name of first point of contact for the assessment (if different to the assessment team leader). Seung Hyun Kwak 박승현</p> <p>Email address globalaquafish@dnv.com</p> <p>Phone Number +82 2 724 841</p> <p>Mailing address 18F, Kyobo Bldg., 1, Jongno, Jongro-gu, Seoul, 03154 Republic of Korea 대한민국 서울특별시 중로구 종로 1, 교보빌딩 18층 우편번호 03154</p>
<p>Client</p>	<p>Name of company Wando Eco-friendly Seafood Cooperative (WESC) 완도친환경수산물협동조합</p> <p>Name of first point of contact for the assessment (if different to the assessment team leader). Hyun Kyu Woo 우현규</p> <p>Position in the client organisation Marketing Director 마케팅 본부장</p> <p>Email address wando2438@naver.com</p> <p>Phone Number +82 61 552 2420</p> <p>Mailing address 전라남도 완도군 완도를 농공단지 4길 21-7 해양바이오연구센터 기어지빌딩 201호 #201, Corporate Support Building, Marin-Bio Research Center, 21-7, Nonqaonadanii 4-gil, Wando-eup, Wando-gun, 59108, Jeollanam-do</p>
<p>Type of audit</p>	<p>Indicate if this is the initial audit surveillance, re-assessment etc. Initial audit 최초 심사</p>
<p>Estimated length of the audit and timeline</p>	<p>A predicted date by which the assessment is expected to be completed and certification awarded if the assessment result is positive. Include projected dates for key reports.</p> <p>Site visit 현장 방문 : 31 May - 4 June 2021 (2021년 5월 31일 ~ 6월 4일) Public comment draft report 심사 보고서 초안 일반 공개 : 21 June 2021 (2021년 6월 21일) Final Report 최종보고서 : 12 July 2021 (2021년 7월 12일) Public Certification Report and Certificate issue 최종 인증보고서 및 인증서 승인 : 9 August 2021 (2021년 8월 9일)</p> <p>The audit team is planning to pay the site visit on 31 May - 4 June 2021, however due to COVID-19 pandemic it is uncertain if one of the auditors can travel to Korea for site visit, because of the travel restriction imposed by respective governments and precautionary measures such as self-isolation or quarantine for some period upon arrival to prevent spread of the COVID-19. Based on 'Derogation 3: Covid-19 Fishery and Chain of Custody Remote Auditing' issued by MSC and 'ASC-MSC-Seaweed (Algae) Certification and Accreditation Requirement (V1.01)' requirement, Variation request was submitted on the assisted remote audit and the approved VR is issued On 13 April 2021. The assisted remote audit will be performed. 심사팀은 2021년 5월 31일부터 6월 4일까지 현장 방문을 계획하고 있으나, 코로나바이러스의 발생으로 인해, 심사팀중 한명의 심사원이 한국으로 출장을 올 수 있을 지 불확실한 상황임. 이는 코로나 바이러스 감염 확산을 방지하기 위해 각국 정부가 취한 여행 제한 조치, 자가격리, 일정기간 강제 격리 등 예방 조치로 기인한 것임. 이에 MSC가 발행한 'COVID-19 어업 및 추적성 원격 심사에 대한 예외 3' 과 'ASC-MSC 해조류 인증 및 인정 요구사항 (v1.01)'에 기반하여 예외 요구사항이 제출되었고, 2021년 4월 13일 승인을 받음. 지원 원격 심사가 실시될 예정임.</p>
<p>Team Leader</p>	<p>Indicate name of team leader and areas that he/she is responsible for. Explain how they meet the competency criteria in Annex A of the CAR and confirm they have no conflicts of interest in relation to the production unit under assessment. Che King Lee has more than 30 years of aquafarming experience and he has worked in relevant industries such as consultancy, feed manufacturing, seafood processing, etc. He has completed ASC-MSC Seaweed auditor courses, Bivalve, Salmon, Shrimp and Tilapia. He is a qualified food safety and ASC, ASC CoC Auditor. 처킹리는 양식업에서 30년 이상의 경험이 있으며, 관련 업계 예를 들면 컨설팅, 사료 제조업, 해산물 가공업 등의 경험이 있음. 그는 ASC-MSC 해조류 심사원 과정, Bivalve, Salmon, Shrimp and Tilapia 심사원 과정을 완료했으며, 식품 안전 및 ASC, ASC CoC 심사원임.</p>
<p>Proposed assessors</p>	<p>Indicate name of assessors and areas for which they are responsible. Explain how they meet the competency criteria in Annex A of the CAR and confirm that the assessors in question have no conflicts of interest in relation to the production unit under assessment. [Environmental assessor, Social assessor] Seung Hyun Kwak has B. Eng. in Environmental Engineering and MBA. He possesses work experience in Environment, Health & Safety management for 8 years. He has audit experiences for more than 13 years in social compliance audit and Environment and Health & Safety audit, ASC-MSC Seaweed certification audit, ASC farm audit and the assurance on GHG emissions, Sustainability report. He also conducts trainings in the Health & Safety, Environment, Human Rights and social compliance and management system. He has successfully completed lead auditor training courses based on ISO 19011 principles, including ISO 14001 lead auditor course, OHSAS 18001 course, SA 8000 basic course and advanced course. He also completed EICC Labor & Ethics Lead auditor course. His core competence includes audit, assurance and training on EHS, GHG, Sustainability, and social compliance. Seung Hyun Kwak is a qualified RBA (previously EICC) lead auditor. He has conducted more than 100 social compliance audits including 20 RBA audits. Recently he conducted ASC-MSC Seaweed certification audit and ASC Abalone certification audit. [환경심사원, 사회심사원] 박승현은 환경 공학 학사 및 경영학 석사 학위를 받았음. 그는 8년 이상의 환경 및 안전보건 경영에 대한 직접 업무 경력을 가지고 있음. 그는 13년 이상의 기간동안, 사회 심사, 환경 및 안전보건 심사, ASC-MSC 해조류 인증 심사, ASC 양식장 인증 심사, 그리고 GHG 및 지속가능경영 보고서 검증 심사를 진행해 오고 있음. 그는 또한 안전보건, 환경, 인권 및 사회적 책임 및 경영시스템 관련 교육을 실시하고 있음. 그는 ISO 19011 원칙에 따른 선임심사원 과정들을 수료하였음. 이는 ISO 14001 선임심사원 과정, OHSAS 18001 선임 심사원 과정, SA 8000 기본 과정 및 SA8000 상위 과정을 포함하고 있습니다. 또한 EICC 노동 및 윤리 선임심사원 과정도 수료하였음. 그는 환경, 안전보건, 온실가스 지속가능경영, 사회적 책임에 대한 심사, 보증 및 교육에 책임역량을 가지고 있음. 그는 양식업, 정유, 석유화학, 시멘트, 전력, 건설, 금융, 전기전자사를 포함한 일반 제조 업체 등 다양한 산업에 대한 기업 온실가스 검증, 물 발자국 검증, 지속가능성 보고서 검증을 수행했고, 노동과 인권, 환경 및 안전보건에 대한 사회적 책임에 대한 심사 또한 전문을 100건 이상 진행했음. 박승현은 RBA 선임심사원이며, 20건의 RBA 심사를 포함한 100여건 이상의 사회적 책임 심사를 진행했음. 최근 ASC-MSC 해조류 인증 심사, ASC 양식장 인증 심사로 수행했음.</p>
<p>Site visit Date</p>	<p>Include start of the audit and end date 31 May - 4 June 2021 (2021년 5월 31일-6월 4일)</p>

Location and date of site visit	<p>The site visit shall include visits to both production sites and management locations as necessary to review the impacts and management of the production unit. GPS coordinates</p> <p>Wando Eco-friendly Seafood Cooperative (WESCO) 완도친환경수산물협동조합 #201, Corporate Support Building, Marine Bio Research Center, 217, Nongyongdanji 4-gil, Wando-eup, Wando-gun, 59108, Jeollanam-do, Republic of Korea 전라남도 완도군 농장단지 4길 21-7 해양바이오연구센터 기업지원동 201호 (Address for farms and primary processing place of Member Farmers) 조합원 양식장/가공장소 (Farm doesn't have the address but have GPS Coordinate) 양식장은 주소가 없어 GPS 좌표를 기재함 1) Farm of Mr. Myung-Jin KIM 김명진 양식장 : (No. 13670) N 34° 18' 50.8" E 126° 53' 20.4" ; (No. 13672) N 34° 20' 26.1" E 126° 54' 3.3" / Processing place & Storage: 1514-18, Sinji-ro, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°20'35.7"N 126°53'37.1"E), 전라남도 완도군 신지면 신지로 1514-18 2) Farm of Mr. Tae-Min KIM & Ms. Bo-Ae JUNG 김태민 & 정보애 양식장 : (No. 11670) N 34° 18' 22.7" E 126° 51' 44.6" / Processing place & Storage: 1039-3, Woryang-ri, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°19'01.0"N 126°50'52.4"E), 전라남도 완도군 신지면 팔랑리 1039-3 3) Farm of Mr. Seung-Ho JEONG 정승호 양식장 : (No. 13830) N 34° 17' 59.3" E 126° 51' 27.4" / Processing place & Storage: 1141-1, Woryang-ri, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°18'39.1"N 126°51'12.9"E), 전라남도 완도군 신지면 팔랑리 1141-1 4) Farm of Mr. Kyung-Un KIM 김경운 양식장 : (No. 13690) N 34° 23' 07.6" E 126° 57' 46.9" / Processing place & Storage: 678-1, Haedong-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°22'53.6"N 126°56'13.7"E), 전남 완도군 약산면 해동리 678-1 5) Farm of Mr. Gwan-Seop JEONG & Ms. Seon-Ae YU 권관섭 & 유선애 양식장 : (No. 13690) N 34° 23' 11.72" E 126° 57' 37.78" / Processing place: 410, Haedong-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°23'03.7"N 126°55'37.9"E), 전남 완도군 약산면 해동리 410 / Storage: 710, Haedong-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°22'53.6"N 126°56'21.2"E), 전남 완도군 약산면 해동리 710 6) Farm of Mr. Choong-Hun CHOI & Ms. Mi-So LEE 최충훈 & 이미소 양식장 : (No. 13661) N 34° 24' 38.6" E 126° 53' 52.0" / Processing place: 125-1, Udu-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°23'29.2"N 126°53'40.2"E), 전남 완도군 약산면 우두리 125-1 / Storage: 77-3, Udu-ri, Yaksan-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°23'42.5"N 126°53'33.4"E) 전남 완도군 약산면 우두리 77-3 7) Farm of Mr. Yong-Young KIM 김용영 양식장 : (No. 13572) N 34° 24' 07.34" E 127° 00' 45.42" / Processing place & Storage: 1225-9, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°22'06.5"N 127°01'44.6"E), 전라남도 완도군 금일읍 척치리 1225-9 8) Farm of Mr. Hyun-Seung KIM & Ms. Jeong-Young LEE 김현승 & 이정영 양식장 : (No. 13572) N 34° 25' 02.91" E 126° 59' 26.98" ; (No. 14033) N 34° 22' 30.53" E 127° 02' 24.91" / Processing place & Storage: 1075, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°22'03.8"N 127°01'30.4"E), 전라남도 완도군 금일읍 척치리 1075 9) Farm of Mr. Young-Soo JEON 전영수 양식장 : (No. 13794) N 34° 23' 55.51" E 126° 59' 57.92" / Processing place & Storage: 1233, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°21'53.5"N 127°01'41.5"E), 전라남도 완도군 금일읍 척치리 1233 10) Farm of Mr. Hong-Joo JEON 홍중주 양식장 : (No. 14033) N 34° 24' 19.07" E 126° 59' 51.03" / Processing place & Storage: 1230-1, Cheokchi-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°22'06.2"N 127°01'39.0"E), 전라남도 완도군 금일읍 척치리 1230-1 11) Farm of Mr. Hyuk SEO 서혁 양식장 : (No. 13693) N 34° 19' 46.2" E 127° 01' 48.8" / Processing place 1457, Sin-gu-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°20'28.5"N 127°02'18.0"E), 전남 완도군 금일읍 신구리 1457 / Storage 478, Sin-gu-ri, Geumil-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°20'51.6"N 127°02'37.5"E), 전라남도 완도군 금일읍 신구리 478 12) Farm of Mr. Ik-Jin Jo 조익진 양식장 : (No. 13671) N 34° 19' 19.42" E 126° 54' 51.74" ; N 34° 19' 57.32" E 126° 55' 05.92" / Processing place & Storage: 15, Jukcheong-gil, Wando-eup, Wando-gun, Jeollanam-do, Republic of Korea (34°20'44.0"N 126°44'09.5"E), 전라남도 완도군 완도읍 죽정길 15 13) Farm of Mr. Myeong-Chul Ji & Ms. Dal-Lae Ki 지명철 & 기달래 양식장 : (No. 11341) N 34° 17' 48.78" E 126° 49' 09.49" / Processing place & Storage: 1084-7, Woryang-ri, Sinji-myeon, Wando-gun, Jeollanam-do, Republic of Korea (34°18'36.7"N 126°51'03.3"E), 전라남도 완도군 신지면 팔랑리 1084-7</p>
Stakeholders	<p>A list of the major stakeholders in the production unit and the nature of their interest.</p> <p>Employees of Wando Eco-friendly Seafood Cooperative and member farms 완도친환경수산물협동조합 근로자 Neighbor village people 양식장 주변 마을 주민 Local government 지방 정부 Local community 지역 사회 Researchers / Academia 연구소/ 학계 Client 고객</p>
Risk Based Framework	<p>To be completed only if planning to use the RBF. In case the RBF will not be used, remove the cells below. RBF will not be used. 적용제외</p>
RBF meeting	<p>Indicate the proposed date/s and location/s. NA 해당없음</p>
PI that RBF is to be applied to	<p>NA 해당없음</p>
Justification for use	<p>NA 해당없음</p>
Invitation for stakeholders	<p>"A key purpose of the site visit is to collect information and speak to stakeholders with an interest in the production unit. For those parts of the assessment involving the Risk-Based Framework (RBF) we will be using a stakeholder-driven, qualitative and semi-quantitative analysis during the site visit. To achieve a robust outcome from this consultative approach, we rely heavily on participation of a broad range of stakeholders with a balance of knowledge of the production unit. We encourage any stakeholders with experience or knowledge of the production unit to participate in these meetings."</p> <p>Stakeholders who are available during the site visit will be interviewed face-to-face. Other stakeholders will be interviewed by phone, video-conferencing and/or by e-mail to collect information and opinion of them.</p> <p>현장 방문 시 가능한 이해관계자는 대면 인터뷰를 진행할 예정입니다. 다른 이해관계자는 전화, 화상회의 및/또는 이메일을 통해 정보와 의견을 수집할 예정입니다.</p>

Stakeholders that do not wish or are not able to be interviewed at the site visit may send written information to the team. [CAR, 17.6.6.1]

Chain of Custody information

Identify if the following risks are currently or potentially applicable	Description of risk factor if present.	Describe any traceability, segregation, or other systems in place to manage the risk.
<p>a. The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, produced within the same UoA.</p> <p>동일한 UoA 내에서 생산된 동일하거나 외관이 비슷한 종 또는 수산물을 포함하여, 인증품과 비인증품이 혼합 또는 대체 가능성</p>	<p>11 farmers are included in the UoA. NO non-certified farmers within same UoA</p> <p>UoA 내에는 13개 양식장만이 포함됨. UoA내에 비인증 양식장은 포함되어 있지 않음</p>	<p>Only certified algae is to be produced within the UoA.</p> <p>UoA 내에서는 인증 해조류만 생산됨</p>
<p>b. The possibility of mixing or substitution of certified and non-certified product, type of production/harvest, including product of the same or similar appearance or species, present during production, harvest, transport, storage, or processing activities.</p> <p>양식, 수확, 운송, 저장 또는 가공 활동 과정에서 동일한 또는 비슷한 외관의 제품 또는 종을 포함하여, 인증 품과 비인증품이 혼합 또는 대체 가능성</p>	<p>There is no risk of mixing of certified and non-certified product during production, harvest, transport, or primary processing activities (sun-drying or mix with salt).</p> <p>양식, 생산, 운송, 저장 및 가공 활동 과정 중에 인증품과 비인증 품의 혼합 리스크가 없음.</p>	<p>The farmers are to produce only certified seaweed at their own farms and drying and mixing with salt seaweed at their own area on land. The sold seaweed are directly picked up at the farmers' facility and transported to buyers.</p> <p>양식장대표들은 본인의 양식장에서 인증 해조류만 생산하고, 육상의 본인 소유 장소에서 건조 및/또는 염장 작업을 실시함. 판매된 해조류는 해당 장소에서 구매자 장소로 운송됨.</p>
<p>c. The possibility of subcontractors being used to handle, transport, store, or process certified products. 인증품을 취급, 운송, 저장 또는 가공하는 과정에서 하청업체 사용 가능성</p>	<p>No risk identified using subcontractors during handle, transport, store and processing.</p> <p>제품 취급, 운송, 보관 및 가공 과정에서 하청업체 사용에 따른 리스크는 없음</p>	<p>Subcontractor is not used to handle, transport, store or primary process certified products. 인증품을 취급, 운송, 저장 또는 1차 가공시에 하청업체를 사용하지 않음.</p>
<p>d. Any other opportunities where certified product could potentially be mixed, substituted, or mislabeled with non-certified product before the point where product enters the Chain of Custody. 인증 제품이 비인증품과 COC 추적성 관리 포인트에 진입하기 전에 혼합, 대체 또는 잘못 라벨링될 가능성</p>	<p>No other risk identified.</p>	<p>The certified product is transported and delivered by famers when purchase order is received.</p> <p>양식장 대표들이 주문을 받게 되면 인증품을 직접 운송하여 배달함.</p>

Attach full CVs of assessment team

DNV·GL

CURRICULUM VITAE

Che King Lee

Qualification

- ASC Farm Auditor (Bivalve, Salmon, Shrimp, Tilapia)
- ASC-MSC Seaweed Auditor
- MSC ~~CoC~~ Auditor, ASC ~~CoC~~ Auditor

Education

Field of expertise	University/School	Year
Master Business Administration	Open University Malaysia	2011
Diploma in Fisheries	Agriculture University of Malaysia	1984

Summary of professional experience

Che King Lee has more than 30 years of ~~aquafarming~~ experience and he has worked in relevant industries such as consultancy, feed manufacturing, seafood processing, etc. He has completed ASC-MSC Seaweed auditor courses, Bivalve, Salmon, Shrimp and Tilapia. He is a qualified food safety and ASC, ASC ~~CoC~~ Auditor.

Employment

1. Independent Food Safety Certification Auditor: (July 2015 till now)
 - Sub-contractor auditor for NSF Food Safety Certification LLC for Best Aquaculture Practices (BAP) Certification audit on aquaculture farm, hatchery, seafood processing plant and feed mill, retail restaurant and supplier audit.
 - Sub-contractor auditor for SGS for Best Aquaculture Practices (BAP) Certification audit on aquaculture farm, hatchery, seafood processing plant and feed mill
 - Sub-contractor auditor for DNV GL for ASC, ASC CoC, FOS and FOS CoC.
2. Arca Biru Sdn Bhd., Malaysia (Nov 2014 to May 2015)
Position: R&D Senior Manager
Responsibilities:
 - Research and Development on nursery system, nursery transfer using fish pump, live feed culture, probiotic culture, probiotic up-scaling, bioassay to study the efficiency and efficacy to mitigate EMS disease.

3. Blue Archipelago Berhad, Malaysia. (Feb 2009 to Oct 2014)

Position: Shrimp Processing Plant Manager / Hatchery Manager

Responsibilities:

- As Company Management Representative for HACCP, BRC, IFS, Food Safety Certification and Hatchery Fish Quality Certification.
- As Plant Manager for shrimp processing plant with HACCP, HALAL Certification, EU Approved Plant, GMP, SSOP, BRC-Food and IFS-Food certified.
- Lead the processing team to process 10-15MT/day capacity with full food safety and traceability.
- Lead processing team to explore high value products, e.g. HOSO SIQF; Food Products (Shrimp Nugget; Breaded PD; Breaded PDTO; Wonton etc.), HLSO Deveined & PD BF Japan.
- Responsible for capital & operational budgeting.
- Responsible for job description and position qualification in processing plant organization structure.
- Responsible for production planning, monitoring and decision making.
- Coordinate with all departments to ensure that HACCP (Hazard Analysis Critical Control Point), GMP (Good Manufacturer Practice) and SSOP (Standard Sanitation Operation Procedure) are strictly implemented and documented.
- Coordinate with marketing pertaining to marketing order and export arrangement.
- Responsible in production cost monitoring and control.
- Motivation and improvement on productivity.
- Key Performance Index (KPI) setting and monitoring.
- Critical thinking to turn around processing plant.
- As Shrimp Hatchery Manager (From July 2013) in producing vannamei fry for the farm, production capacity 40 Million per month with Malaysia Good Aquaculture Practice Certified Hatchery

4. PT Central Proteinaprima, Indonesia. (June 2007 to May 2008)

Position: Shrimp Processing General Manager

Responsibilities:

- Coordinate with all departments in day to day operation and decision making in 100MT/day shrimp processing plant.
- Monitoring processing capacity versus harvest tonnage.
- Responsible in production cost to achieve targeted EBIT.
- Coordinate with marketing to fulfil marketing order, production planning and scheduling to fulfil customer requirement.
- Work closely with grow out department on harvest projection and planning.
- Take the lead in production data and finished goods data monitoring and reports.
- Responsible for the production team to strictly adhere to HACCP, GMP & SSOP in production and documentation.

5. PT Dipasena Citra Darmaja, Indonesia (Jan 2004 to May 2007)

Position: Shrimp Processing Plant Assistant General Manager

- Coordinate with all departments (Processing, QA, Engineering, Water Treatment, PPIC, General Service and General Admin) in a 100MT/day shrimp processing day to day operation and decision making.
- Liaise with marketing to fulfil marketing delivery order, products planning and scheduling.
- Liaise with shrimp farm operation on their harvest projection and planning.

- Work closely with procurement to schedule the delivery of spare parts, packaging materials, machineries and construction contracts.
- Responsible for production data and finished goods data reports.
- Responsible for the production team to strictly follow HACCP, GMP & SSOP in production and documentations.

6. Comfeed Marine Resources Sdn. Bhd., Malaysia (Oct 1999 to Dec 2001)

Position: Shrimp Farm Manager

Responsibilities:

- Responsible for the farm daily operation including production planning, inventory control, marketing, human resource, purchasing and financial control.
- Specialize in black tiger farming.
- Work closely with team member to increase the shrimp value by growing to market preference sizes.

7. Bestari Indo Prima, Indonesia (July 1994 to Sept 1999)

Position: Shrimp Feed Plant Manager

Responsibilities:

- Work closely with various departments (administration & finance, engineering & maintenance, inventory supply & control, formulation and production & quality control) for the production of 450MT/day shrimp feed with 8 production lines.
- Responsible in overall production planning and scheduling according to farm demand.

- Responsible in forecasting demand and tackle urgent production volume during irregular peak seasons.
- Work closely with customers on problem solving.

8. PT Dipasena Citra Darmaja, Indonesia (Oct 1990 to June 1994)

Position: Technical Manager

Responsibilities:

- Liaise with various block supervisors in shrimp farming in the world largest integrated shrimp company, total area 16 000 ha, total employees 20 000.
- Responsible for training pond care taker in technical aspects as well as in day to day shrimp farm management.
- Work closely with the Trainers to train supervisor and managers.
- Responsible in forecasting and planning harvest tonnage; fry, feed; fertilizer and spare-parts requirement.
- Responsible in growth data and production cost.

9. Ting Tai International Co Ltd., Thailand (Jan 1990 to Sept 1990)

Position: Farm Manager

Responsibilities:

- Responsible for the production and management of shrimp farm.
- Liaise with various departments in production planning, harvest and marketing.
- Responsible for daily water quality monitoring and control.
- Responsible for daily feeding quantity for each of the pond.
- Reporting to management on the farm performance.

10. Oceanographer Aquaculture International Pte. Ltd., Taiwan (Sept 1988 to Dec 1989)

Position: Aquaculture Consultant

Responsibilities:

- Work closely with team member in carry out feasibility and design for aquaculture projects in Indonesia, The Philippines and India.
- Responsible for water and soil monitoring.
- Responsible to train local staff on shrimp farming techniques.
- Responsible for production planning and control.

11. Aquabio (Sabah) Sdn. Bhd., Malaysia (Dec 1984 to Aug 1988)

Position: Technician (Senior Executive)

Responsibility:

- Responsible for water quality monitoring and feeding tray checking.
- Responsible for water pumping and water exchange.
- Work closely with a team of pond aid for daily ponds management.
- Responsible for algae culture in shrimp hatchery.
- Responsible for daily monitoring on algae growth density and fertilization.
- Responsible for recommending healthy algae for larvae rearing.
- Responsible for pure algae selection and multiplication.

12. Ternakan Marine Sdn. Bhd., Malaysia (May 1984 to Nov 1984)

Position: Technician (Junior Executive)

Responsibility:

- Shrimp farming technician.
- Water quality monitoring before sun rise and in the afternoon to determine the fluctuation of oxygen and pH against other water quality parameters such as salinity and transparency.
- Alert management on any water quality deviations.
- Weekly shrimp sampling to determine the growth.
- Assist in partial and full harvest activities.

CURRICULUM VITAE

Seung Hyun Kwak

Qualification

- ASC Farm Auditor (Abalone, Bivalve)
- ASC-MSC Seaweed Auditor
- MSC CoC Auditor, ASC CoC Auditor
- GHG Auditor, DNV GL GHG Verifier, Korea Ministry of Industry, Trad and Resource Economy
- GHG and Energy Auditor, Korea Ministry of Environment,
- ACA Auditor (GHG Verifier, ACA (Airport Carbon Accreditation) Program)
- Sustainability Report Verifier/Project Manager/Technical Reviewer,
- DNV GL, CR Assessment and Rating Assessor,
- DNV GL Environmental Performance Labelling (Type 3 Label) Auditor, Korea Ministry of Environment
- Carbon Footprint Labelling (Type 3 Label) Auditor, Korea Ministry of Environment
- SA8000 Auditor, SEDX Auditor
- RBA Auditor
- Registered Environmental Engineer (Air Quality), Human Resources Development Service of Korea
- Registered Environmental Engineer (Water Quality), Human Resources Development Service of Korea

Languages		
Language	Native	
English		
Korean	✓	

Education		
Field of expertise	University/School	Year
Master Business Administration, Business administration	Korea University Business School	Feb 2008
Bachelor of Engineering, Environmental Engineering	Kookuk University	Feb 1996

Summary of professional experience

Seung Hyun Kwak has B. Eng in Environmental Engineering and MBA. He possesses work experience in Environment, Health & Safety management for 8 years. He has audit experiences for more than 13 years in social compliance audit and Environment and Health & Safety audit, ASC-MSC Seaweed certification audit, ASC farm audit and the assurance on GHG emissions, Sustainability report. He also conducts trainings in the Health & Safety, Environment, Human Rights and social compliance and management system. He has successfully completed lead auditor training courses based on ISO 19011 principles, including ISO 14001 lead auditor course, OHSAS 18001 course, SA 8000 basic course and advanced course. He also completed EICC Labor & Ethics Lead auditor course. His core competence includes audit, assurance and training on EHS, GHG, Sustainability, and social compliance. Seung Hyun Kwak is a qualified RBA (previously EICC) lead auditor. He has conducted more than 100 social compliance audits including 15 RBA audits. Recently he conducted ASC-MSC Seaweed certification audit and ASC Abalone certification audit.

Employment

DNV GL	Feb 2008 – to date
Position:	Sustainability and Supply Chain Management Service Manager
Description:	- ASC Farm audit, ASC-MSC Seaweeds audit, Social compliance audits including RBA audit, SEDEX audit. CDM Validation and Verification - Corporate GHG Inventory Verification (More than 50 projects in Oil refinery, Power, Cement, Petrochemicals, Chemicals, Cement, Electronics, General manufacturing industries, Construction, Airport, Shipping industries) - Corporate Sustainability Report Assurance (More than 50 projects in Power, Financial institutions, State-owned organizations, Electronics, General manufacturing industries, Construction, Airport, Consumer goods) - Social audits (More than 100 audits) - Water Footprint Verification - ISO 26000 Assessment - EICC Training/Gap Analysis - Safety Culture Assessment
LRQA	Feb 2004 - Jan 2008
Position:	Marketing & Sales Manager
Description:	Marketing, sales and business development activities> - Marketing and sales planning, Quotation, Development of proposal - Market research - Publicity - Business development of new products (GHGs including CDM Project, ISO 14064, CSR Report verification, ISO 28000, ISO/IEC 20000, ISO 20000 etc) - Development of new accounts - Analysis of sales performance Technical activities > - CDM Validation (Daegu Daegu Landfill gas CDM Project) - Assistant tutor for CSR training - Tutor of GHG Training for Marketing & Sales Managers in Asia - Development GHG Course materials for Marketing & Sales Managers
Hyundai Engineering & Construction Co., Ltd	Apr 1996 - Jan 2004
Position:	HSE Manager
Description:	Company Profile> General contractor of Engineering and Construction. Project management, Research and Development, Design, Procurement, Commissioning, construction activities relating to Civil and Architectural works, Oil, Chemical and Petrochemical plant, Hydraulic, Thermal and Nuclear power plant and Industrial facilities. - General HSE management of overseas projects - Implementation of HSE (Health, Safety and Environment) Management System in accordance with ISO 14001, OHSAS 18001 - Development of KOSHA 18001 System (Korea Occupational Safety and Health Management System) - Development of Integrated Management System (Health, Safety and Environment) - Carrying out HSE audits on Domestic and Overseas Projects - Development of Project Business Continuity plans, Corporate Business Continuity Plan - Designing and Conducting Emergency response and recovery exercise - Provision of HSE training to local staff in overseas projects

