

FISHERY ASSESSMENT REPORT

IFFO GLOBAL STANDARD FOR RESPONSIBLE SUPPLY OF FISHMEAL AND FISH OIL



FISHERY:	Chilean Anchovy (Engraulis ringens) Regions XV-IV
LOCATION:	Chile
DATE OF REPORT:	Jan 2013
ASSESSOR:	Sam Peacock

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Issue No; 2; Issue Date; Nov 09	Report Ref: Chile Anchovy 15 to 4	CCM Code:

1. Application Details and Summary of the Assessment Outcome				
Name: Corp	Corpesca S.A; Camanchaca; Orizon S.A; Lota Protein S.A.; Blumar S.A.			
Address:				
Country: Chile		Zip:		
Tel. No.		Fax. No.		
Email address:		Applicant Loge	FO 125; IFFO 126; IFFO 28; IFFO 130; IFFO 132	
Key Contact:		Title:		
Certification Body Details				
Name of Certification Body:	Global Tru	Global Trust Certification Ltd		
Assessor Name:	Peer Reviewer:	Assessment Days:	Initial/Surveillance/Recertification:	
Sam Peacock	Mike Platt	1	Surveillance	
Assessment Period		Jan 2013		
Scope Details				
1. Scope of Assessment:	IFFO Global	Standard for Responsible Su	pply – Issue 1	
2. Fishery	Chilean Anc	hovy (<i>Engraulis ringens</i>) Reg	ions XV-IV	
3. Fishery Location	Chile region	s XV-IV		
4. Fishery Method	Purse seine			
Outcome of Assessment				
5. Overall Fishery Compliance	e Rating	Medium/Hig	;h	
6. Sub Components of Low Co	ompliance	e None		
7. Information deficiency		None		
8. Peer Review Evaluation		Agree with review		
9. Recommendation		Maintain approval		

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2. Quality of Information

Good; primarily governmental publications & reports.

3. Compliance Level Achieved	
Medium/High	
Recommendation	
Maintain approval	

4. Guidance for On-site Assessment
Based on High Compliance Findings
Continue with the requirements imposed at the initial approval
Based on Medium Compliance Findings
Key Stakeholders of the Fishery

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5. Assessment Determination

The Chilean anchovy fisheries in regions XV-IV have seen no substantial management changes since the time of the initial assessment. Chile has a robust legal and administrative framework for fisheries, where decisions are informed by annual surveys and fishery-dependent data. The available evidence continues to suggest that the fishery is well monitored and enforced and that the stock is not currently subject to overfishing. However, as at the time of the initial assessment, limited data are collected on levels of bycatch in the fishery, and there is a lack of transparency in the way that quota recommendations, both initial and mid-year, are calculated.

As there have been no significant changes in the management of the fishery since the initial assessment, compliance ratings are largely unchanged. Section D1 has been downgraded from high to medium compliance to better reflect the lack of transparency in the quota setting process, and to improve consistency with other IFFO RS fishery assessments.

HIGH COMPLIANCE

A1, A3, B2, D2, E1, E2

MEDIUM COMPLIANCE

A2, B1, C1, D1, D3

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SUMMARY OF LEVEL OF COMPLIANCE					
	The Management Framework and Procedures	Stock assessment procedures and management advice	Precautionary approach	Management measures	Implementation
legal and administrative basis					
Fisheries management should be concerned with the whole stock unit					
Management actions should be scientifically based					
Research in support of fisheries conservation and management should exist					
Best scientific evidence available should be taken into account when designing conservation and management measures					
The precautionary approach is applied in the formulation of management plans					
The level of fishing permitted should be set according to management advice given by research organisations					
Where excess fishing capacity exist, mechanisms should be in established to reduced capacity					
Management measures should ensure that fishing gear and fishing practices do not have a significant impact on non-target species and the physical environment					
A management system for fisheries control and enforcement should be established					
A framework for sanctions of violation of laws and regulations should be efficiently exists					
KEY: Low Compliance	Medium Compliand	e	High Compliance:		

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6. Rationale of the Assessment Outcome

a. The Management Framework and Procedure

LEVEL OF COMPLIANCE	a.i. The management of the fishery must include a legal and administrative basis for the implementation of measures and controls to support the conservation of the fishery.	References	Rating
MEDIUM HIGH	Determination: The initial fishery assessment described a robust legal and administrative framework for the management of the fishery, and awarded a high compliance rating for this clause. There have been no significant changes in the framework or fishery management organisations in Chile since that time. The Chilean institutional structure governing the fisheries and aquaculture sector centers around three key organizations: The Subsecretariat de Pesca (Undersecretariat of Fisheries, SUBPESCA or SSP) within the Chilean Ministry of Economy, which manages policy and the regulatory framework; the Servicio Nacional de Pesca (National Fisheries Service, SERNAPESCA), also within the Ministry of Economy, responsible for executing policy and ensuring enforcement; and the Instituto de Fomento Pesquero (Fisheries Development Institute, IFOP), the research arm of the institutional framework which acts as the primary source of scientific advice to the SSP on fisheries and aquaculture agreement issues. For more details on these three main components of fisheries management in Chile, and information on other relevant fishery management organisations, please refer to the initial fishery assessment.	R1	HIGH

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	a.ii. Fisheries management should be concerned with the whole stock unit over its entire area of	References	Rating
	distribution and take into account fishery removals and the biology of the species		
LOW	Determination: The small pelagic fishery continues to be managed using the approach described in	R1-R3	MEDIUM
NAEDIUNA.	the initial fishery assessment. As there have been no significant changes in the approach, including		
MEDIUM	no improvement in bycatch assessment, the fishery retains a medium compliance level under this		
HIGH	clause.		
	Chilean anchovy fisheries are divided into three management units:		
	Regions XV-I-II		
	Regions III-IV		
	Regions V-X		
	This assessment is concerned only with the stocks in regions XV-I-II and III-IV; the region V-X stock is assessed in a separate report. Stock assessment is conducted separately for each management unit, reflecting the current scientific understanding that each stock is an independent biological population. Quotas are then issued at the Regional level, initially as a preliminary quota and then updated during the fishing season to reflect the results of acoustic surveys.		
	There is a no discard policy in place for Chilean fisheries, meaning all bycatch is landed, but only target species appear to be sampled by SERNAPESCA. Information on the species composition and volume of bycatch is therefore likely to be unavailable for management and research organisations, preventing the ecosystem-wide impacts of fisheries from being factored into management regimes.		

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	a.iii .Management actions should be based on long-term conservation objectives	References	Rating
LOW	Determination: There have been no significant changes to the management objectives of the	R1-R3	HIGH
	Chilean anchovy fisheries specifically, nor Chilean fisheries in general, since the initial assessment. A		
MEDIUM	high compliance rating remains appropriate.		
HIGH	Management actions generally aim at keeping spawning biomass at 60% of unfished levels to sustain		
	the reproductive viability of the stock, according to SUBPESCA technical reports. Under the Chilean		
	General Law for Fisheries and Aquaculture, "the provisions of the Act shall subject the preservation of		
	aquatic resources, and all extractive fishing, aquaculture, research and sport activities, which takes		
	place in inland waters, internal waters, territorial sea or exclusive economic zone of Chile in		
	accordance to Chilean laws and its signed international treaties". The Fisheries Research Fund under		
	the Ministry of Economy is to finance research projects in aquaculture and fisheries, providing for the		
	adoption of management measures of fisheries and aquaculture activities, which aim at the		
	conservation of aquatic resources, considering both the biological and socio-economic aspects of		
	fisheries.		
	For more information on the long-term management objectives for this and other Chilean fisheries, please refer to the initial assessment.		

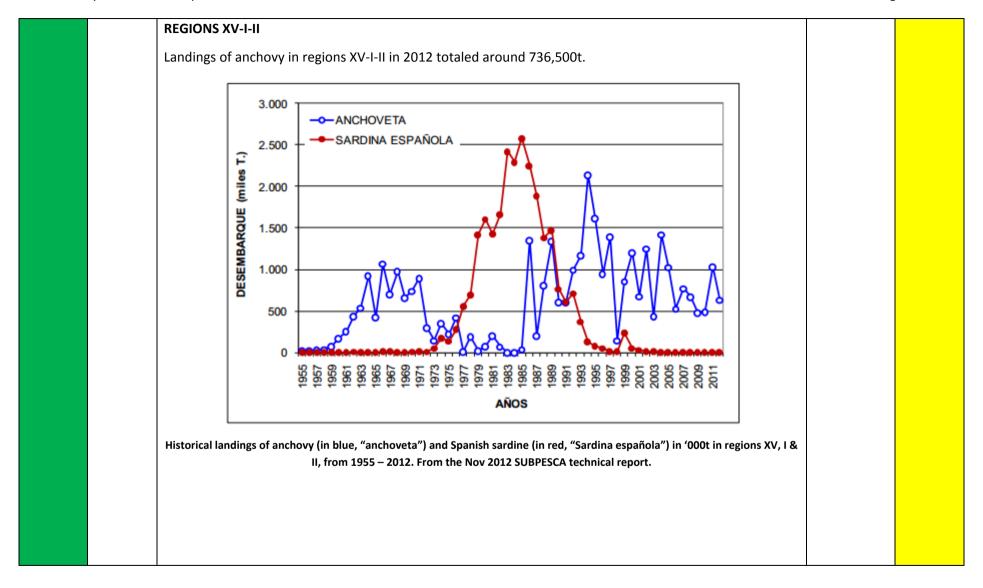
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b. Stock Assessment Procedures and Management Advice

LEVEL OF COMPLIANCE	bi. Research in support of fisheries conservation and management should exist.	References	Rating
MEDIUM	Determination: The research identified in the initial assessment continues to be carried out in support of the management of Chilean anchovy stocks. The continuing lack of bycatch data collection and analysis leads the assessment team to consider a medium compliance rating to remain appropriate.	R1-R3	MEDIUM
HIGH	Spawning biomass of both stocks is estimated annually using the egg production method and acoustic survey data; managers also use fishery dependent data collected at landing. In both management areas, preliminary quotas are set at the beginning of the year and then updated if necessary in response to the analysis of the in-season acoustic surveys; in recent years quotas have been substantially increased midseason as a result of such analyses. No data is collected on bycatch of non-commercial species. Final landings data for 2012 were not available at the time of this assessment, and the figures quoted below and under section D1 reflect total landings as of 2 nd December.		

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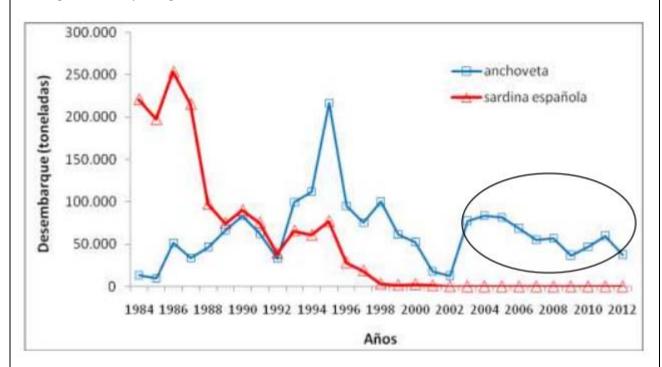


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Landings of anchovy in regions III & IV in 2012 totaled around 41,600t.



Historical landings of anchovy (in blue, "anchoveta") and Spanish sardine (in red, "Sardina española") in '000t in regions III & IV, from 1984 – 2012. From the Nov 2012 SUBPESCA technical report.

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LEVEL OF	b.ii Best scientific evidence available should be taken into account when designing conservation and	References	Rating
COMPLIANCE	management measures		
LOW	Determination: Scientific advice continues to be taken into account when designing conservation and management measures, including a system by which future research is prioritised according to the	R1-R3	HIGH
MEDIUM	information needs of management organisations. There have been no significant changes since the initial assessment.		
HIGH	Fisheries research is largely funded by the Fishery Research Fund (FIP), although money is also available from other non-specific Government funds. Research results from the FIP form the basis of regulations developed by the administration. Also involved in the process are the National Fisheries Council, the National Oceanographic Council, experts in the fishing field (including 2 from the university sector), and representatives of producers' associations.		
	Each year, the Zonal and Regional Fisheries Councils give their suggestions for the annual programme of fishery and aquaculture research, including their priorities. With this information SUBPESCA proposes the annual programme of Fishery Research to the National Fisheries Council which gives the final approval. Research is sometimes constrained by funding, and importance is given to economic utility when competing research proposals are evaluated.		

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c. The Precautionary Approach

LEVEL OF COMP	LIANCE c.i The precautionary approach is applied in the formulation of management plans.	References	Rating
MEDIUM	Determination: The initial assessment concluded that the precautionary approach is applied in management plans for the target stock; however not all uncertainties are taken into account. There have been no significant changes in the management of the fishery since that time.	R1-R3	MEDIUM
HIGH	The biological equilibrium reference point for both stocks has been set to prevent the spawning stock from decreasing to less than 60% of that which would exist in the absence of fishing. In other words, it means that the stock should be exploited keeping at least 60% of the egg production in the long term (10-year period).	ſ	
	In addition, given the different sources of uncertainty and high fluctuations due to environmental conditions, management measures aim to ensure that the risk of failing to reach the resource conservation objective in the long term should not exceed 10%.		

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d. Management Measures

LEVEL OF COMPLIANCE	d.i The level of fishing permitted should be set according to management advice given by research organisations.	References	Rating
HIGH .	Determination: As at the time of the initial report, the management advice provided by the primary scientific advisory organisation, IFOP, is not publically available. Although awarded high compliance in the initial assessment, the score has here been downgraded to medium to better reflect the lack of transparency in the quota-setting process and improve consistency with other IFFO RS fishery assessments. Once SUBPESCA receives IFOP's scientific reports, it writes its own technical report, summarising the status of the fishery and issuing its own TAC recommendation to the National Fisheries Council, along with a recommendation for the distribution of the quota. SUBPESCA's reports, along with economic and social considerations, are discussed by the National Fisheries Council, where a final decision is made regarding the quota level and its distribution. Finally, the Minister of Economy, Development and Reconstruction proceeds to sign the TACs for each fishery unit and its distribution, in accordance with the Fisheries and Aquaculture Law. The initial IFOP reports are not made available to the public or assessors, although the remainder of the quota-setting process is fully reported upon. Although the initial assessment of this fishery awarded a score of high compliance under this section, the assessment team considers it appropriate to downgrade that score to medium compliance to improve consistency with other IFFO RS assessments where this same lack of transparency is an issue. The initial TACs allocated to both management areas for 2012 were in line with the scientific advice provided by SUBPESCA, as follows:	R1-R5	MEDIUM

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LEVEL OF COMPLIANCE	 Regions XV, I, II: 800,000t. Final landings were approximately 736,500t. Regions III-IV: 60,000t. Final landings were approximately 41,600t. The 2013 initial TACs are also in line with the SUBPESCA advice, as follows: Regions XV,I,II: 800,000t. Regions III-IV: 60,000t. d.ii Where excess fishing capacity exist, mechanisms should be in established to reduced capacity 	References	Rating
	to allow for the recovery of the stock to sustainable levels.		
MEDIUM HIGH .	Determination: Mechanisms to reduce excess fishing capacity are in place and have not changed significantly since the time of the initial assessment. In 1985, all pelagic fisheries were declared to be fully exploited, and applications for new fishing permits were refused. In 2001 a new management scheme named Maximum Catch Limit per Firm (MCLF) was established, under which a high proportion of the most important Chilean fisheries became subject to a form of Individual Transferable Quota (ITQ) system. The MCLF regime caused a major reduction in fishing capacity in all regulated fisheries (without State intervention) and increased the profitability of the industrial sector. There have been no significant changes since the time of the initial assessment; for more detail on the capacity-reducing mechanisms applied in Chilean fisheries management please refer to the initial assessment report.	R1-R3	HIGH

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LEVEL OF (COMPLIANCE	d.iii Management measures should ensure that fishing gear and fishing practices do not have a significant impact on non-target species and the physical environment.	References	Rating
LOW MEDIUM		Determination: The initial assessment awarded the fishery medium compliance under this clause due to a lack of bycatch data. At this time there have been no significant changes and so the scoring remains appropriate.	R1-R3	MEDIUM
HIGH		Usually deployed in the upper levels of the water column, purse seine gear has virtually no impact on the benthic habitat.		
		The National Action Plan for the Conservation of Sharks, approved by the Government of Chile in 2006, includes among its objectives to seek full utilization of sharks caught and detained. For compliance with that order, Chile set a target to abolish the "finning" of sharks, leading to the landing of the entire animal. A 1993 Regulation protects sea turtles, and reports suggest that marine mammals are rarely caught in Chilean nets.		
		SERNAPESCA holds the landing records of each fishing vessel but these reports are not publicly available, and so it is difficult to verify how frequently large marine animals are captured. As previously noted, the lack of information on by-catch represents a considerable gap in knowledge, and severely limits what conclusions can be reached about the impact of this fishery on the marine ecosystem as a whole.		
		For more information on the indirect impacts of the fishery please refer to the initial assessment.		

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e. Implementation

LEVEL OF COMPLIANCE	e.i There should be a framework for sanctions of violation of Laws and regulations.	References	Rating
MEDIUM HIGH	Determination: The initial fishery assessment found an effective framework for sanctions and there have been no major changes since that time. Fishery sanctions, crimes and expirations were codified in December 1989. The law resulted in the creation of the dual structure of SUBPESCA and SERNAPESCA. Formerly, sanctions were dealt with by local Police judges at a communal level. Under the new law, these matters go before Civil Judges in normal Civil courts, a fact that assigns higher importance to these issues. In regards to discards and overfishing the assigned quotas, Law 19.713 states that any owner or group of owners who land and do not report their catches will be subjected to a 30% reduction on their maximum catch limit during that fishery calendar year. If the owner or group of owners has exhausted their maximum catch limit for that year, they will be deducted the following year. Owners of vessels which fish without a license, or fish in unauthorised areas, are subject to a quota reduction of 10%. Crimes are penalized with proportional pecuniary payments and can be imposed by Police, Marine personnel and SERNAPESCA. In 2005 a national action plan was approved with the aim of preventing, deterring and eliminating illegal, unreported and unregulated fishing.	R1	HIGH

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LEVEL OF COMPLIANCE	e.ii A management system for fisheries control and enforcement should be established.	References	Rating
MEDIUM	Determination: The management system for fishery control and enforcement remains in place and effective.	R1	HIGH
HIGH	Fisheries control and enforcement in Chile is the responsibility of SERNAPESCA, and in practice compliance is monitored by Intertek Caleb Brett Chile SA on SERNAPESCA's behalf. Control and enforcement measures include 100% vessel monitoring in the industrial fleet, plus data on landings per vessel, species and fishing ground. SERNAPESCA recruited 250 staff in 2009 to further improve monitoring and surveillance of catches, accompanied by a 22% budget increase.		

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References

R1 – IFFO RS scheme initial assessment: Chile, anchovy regions XV-IV, Jan 2012: http://www.iffo.net/downloads/IFFO%20RS/Whole%20Fish/Region%20XV%20to%20IV%20IFFO_Chilean Anchovy Fishery Assess. Report 2012.pdf

R2 – SUBPESCA technical report on anchovy and Spanish sardine in regions XV, I & II, Nov 2012: http://www.subpesca.cl/transparencia/documentos/RPESQ_N%C2%B0198-2012_Cuota_Anch-Sard_XV%2c_I_y_II_2013.pdf

R3 – SUBPESCA technical report on anchovy and Spanish sardine in regions III & IV, Nov 2012: http://www.subpesca.cl/transparencia/documentos/RPESQ_204-2012 Cuota anchoveta y sardina espa%C3%B1ola Regs III-IV 2013.pdf

R4 – Landings data, Chilean small pelagic fishery regions XV-IV to mid-December 2012: http://www.ifop.cl/wp-content/uploads/INF-SEM B-P-PPN N%C2%B048-2012.pdf

R5 – 2013 Chilean TACs: http://www.fis.com/fis/worldnews/worldnews.asp?monthyear=12-2012&day=17&id=57628&l=e&country=&special=&ndb=1&df=1