

# FISHERY ASSESSMENT REPORT

## IFFO GLOBAL STANDARD FOR RESPONSIBLE SUPPLY OF FISHMEAL AND FISH OIL



R1

<b>FISHERY:</b>	<b>Anchovy (<i>Engraulis sp.</i>)</b>
<b>LOCATION:</b>	<b>South Africa</b>
<b>DATE OF REPORT:</b>	<b>September 2016</b>
<b>ASSESSOR:</b>	<b>Sam Peacock</b>

Global Trust Certification Ltd, 3 <sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864			
Form No: 9	Report Ref:	Page 1 of 14	CCM Code:

**This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.**

1. APPLICATION DETAILS AND SUMMARY OF THE ASSESSMENT OUTCOME			
Name:			
Address:			
Country: South Africa		Zip:	
Tel. No.		Fax. No.	
Email address:		Applicant Code	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification Ltd.	
Assessor Name	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-certification
Sam Peacock	Deirdre Hoare	2	Surveillance
Assessment Period	2015-2016		
Scope Details			
1. Scope of Assessment		IFFO Global Standard for Responsible Supply – Issue 1	
2. Fishery		Anchovy ( <i>Engraulis encrasicolus</i> , <i>Engraulis capensis</i> )	
3. Fishery Location		South Africa	
4. Fishery Method		Purse seine	
Outcome of Assessment			
5. Overall Fishery Compliance Rating		High	
6. Sub Components of Low Compliance		None	
7. Information deficiency		None	
8. Peer Review Evaluation		Approve fishery	
9. Recommendation		Approve fishery	

## 2. QUALITY OF INFORMATION

Global Trust Certification Ltd, 3<sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Form No: 9	Report Ref:	Page 2 of 14	CCM Code:
------------	-------------	--------------	-----------

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

Good; primarily government reports and websites.
<b>3. COMPLIANCE LEVEL ACHIEVED</b>
High.
<b>Recommendation</b>
Approve fishery
<b>4. GUIDANCE FOR ONSITE ASSESSMENT</b>
Confirm that only the species listed in the Species Characterisation section are used in the manufacture of fishmeal and fish oil covered by this assessment.
<b>Based on HIGH compliance findings</b>
<b>Based on MEDIUM compliance findings</b>
<b>Based on LOW compliance findings</b>
<b>5. ASSESSMENT DETERMINATION</b>
The components of the South African small pelagic fishery which operate for reduction purposes meet the requirements of the raw material sourcing section of the IFFO RS Standard. There is a management, control and enforcement framework in place which has a robust legal basis. Data collection activities are sufficient to provide a scientific basis for the management of the main target species. Anchovy is the main reduction target, and the stock is currently estimated to be substantially larger than the informal target and limit reference points. Round herring, also known as redeye herring, makes up around 10-20% of the reduction catch but is poorly understood; however it is currently estimated to be under-utilised and landings are consistently below the precautionary catch limit. There is no evidence of any substantial interactions between the fishery and ETP species or the physical environment.
<b>HIGH Compliance</b>
A1, A2, A3, B1, B2, C1, D1,D2, D3, E1, E2
<b>MEDIUM Compliance</b>
<b>LOW Compliance</b>

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	A1				
Fisheries management should be concerned with the whole stock unit	A2				
Management actions should be scientifically based	A3				
Research in support of fisheries conservation and management should exist		B1			
Best scientific evidence available should be taken into account when designing conservation and management measures		B2			
The precautionary approach is applied in the formulation of management plans			C1		
The level of fishing permitted should be set according to management advice given by research organisations				D1	
Where excess fishing capacity exist, mechanisms should be in established to reduced capacity				D2	
Management measures should ensure that fishing gear and fishing practices do not have a significant impact on non-target species and the physical environment				D3	
A framework for sanctions of violation of laws and regulations should be efficiently exists					E1
A management system for fisheries control and enforcement should be established					E2

**KEY:** Low Compliance:            Medium Compliance:            High Compliance:           

Global Trust Certification Ltd, 3 <sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864			
Form No: 9	Report Ref:	Page 4 of 14	CCM Code:

**This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.**

6. RATIONALE OF THE ASSESSMENT OUTCOME	
A. THE MANAGEMENT FRAMEWORK AND PROCEDURE	
LEVEL OF COMPLIANCE	
A1. <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.</i>	
<b>LOW</b>	An administrative framework that ensures an efficient management of the fishery for its conservation is not established.
<b>MEDIUM</b>	An administrative framework that ensures an efficient management of the fishery for its conservation is somehow established, but there is evidence of not being efficient to ensure the conservation of the stock.
<b>HIGH</b>	A legal and administrative framework that ensures an efficient management of the fishery for its conservation is established and works efficiently toward the conservation of the stock.
<p><b><i>Determination: South Africa has in place a robust legal and administrative framework for the determination and implementation of fishery management measures and controls. This framework is applied to the anchovy fishery.</i></b></p> <p>Fisheries management in South Africa falls under the jurisdiction of the Department of Agriculture, Forestry and Fisheries (DAFF). Within this Ministry, several Directorates play key roles, including the Chief Directorate of Marine Resources Management (encompassing the Directorates of Offshore &amp; High Seas Fisheries, Small-Scale Fisheries, and Inshore Fisheries Management); the Chief Directorate of Fisheries Research and Development (encompassing the Directorates of Research Support, Aquaculture Research, and Resources Research); the Chief Directorate of Monitoring, Control and Surveillance (encompassing the Directorates of Compliance, Fisheries Protection Vessels, and Monitoring and Surveillance); the Chief Directorate of Fisheries Partnerships Management (encompassing both internal stakeholder engagement and international and intergovernmental relations); and a number of Directorates which provide general support, monitoring and evaluation functions to the entire Department.</p> <p>The stated roles of the Directorate of Resources Research include the undertaking of research to promote the sustainable and optimal management of fisheries resources, and to provide scientific advice to support resources research. Additional analytical and advisory support is provided by the Marine Resource Assessment and Management Group (MARAM) at the University of Cape Town. The MARAM group is primarily funded by DAFF, and aims to provide a scientific basis for the assessment and management of renewable marine resources. The MARAM group produces the Operational Management Procedures (OMPs) used as the basis for many management decisions in the small pelagic fishery (see section A).</p> <p>The operation of DAFF follows six Strategic Goals, each further broken down into Strategic Objectives. Strategic Goal 2 is “Sustained Management of Natural Resources”, the Strategic Objectives for which include “Ensure the sustainable management and efficient use of natural resources” and “Ensure protection of indigenous genetic resources”.</p> <p>The primary legal basis for fisheries management in South Africa is the Marine Living Resources Act, 1998, as amended in 2000, 2014 and 2016. The Act states that the Minister and any other component of government exercising the power within the Act should bear in mind a series of over-arching objectives. These include the need to achieve optimum utilisation and ecologically sustainable development of marine living resources; the need to conserve marine living resources; the need to apply precautionary approaches to fisheries management; the need to protect the ecosystem as a whole, the need to preserve marine biodiversity; and the need to engage stakeholders in the decision-making process.</p>	

H

Global Trust Certification Ltd, 3 <sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864			
Form No: 9	Report Ref:	Page 5 of 14	CCM Code:

**This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.**

R2 -4	
<b>LEVEL OF COMPLIANCE</b>	
<i>A2. Fisheries management should be concerned with the whole stock unit over its entire area of distribution and take into account fishery removals and the biology of the species.</i>	
<b>LOW</b>	Fisheries management is not concerned with the whole stock unit over its entire area of distribution and do not take into account any of the matters listed in 'A1'.
<b>MEDIUM</b>	Fisheries management is concerned with matters listed in 'A1' but not entirely. Fisheries, in relation to 'A1' statement, should improve to ensure the long term conservation of the marine resource.
<b>HIGH</b>	Fisheries management should be concerned with the whole stock unit over its entire area of distribution and take into account: <ul style="list-style-type: none"> <li>• All fishery removals</li> <li>• The biology of the species</li> </ul>
<p><b>Determination: The information provided to the assessment team suggests that the South African anchovy fishery is considered by scientists to constitute a distinct population, largely separate from the more northern <i>E. encrasicolus</i> distribution, justifying its management as a distinct stock.</b></p> <p><i>E. capensis</i> hardly differs from the European anchovy (<i>Engraulis encrasicolus</i>) and can be identified from that description. Therefore, they are considered as inseparable. Sardine, anchovy, horse mackerel, round herring, lanternfish, and lightfish occur in the Benguela Ecosystem, which can be loose loosely considered to cover the continental shelf between the Angola-Benguela frontal zone off northern Namibia/southern Angola and the Agulhas retrolection area, typically between 36 °S and 37 °S. As such, it covers the west coast of South Africa, the entire Namibian coast, and part of southern Angola, depending on the position of the Angola-Benguela front, which moves seasonally typically between 14°S and 17°S. Thus although <i>E. encrasicolus</i> is phenotypically almost indistinguishable across its entire distribution from Scandinavia to South Africa, there is considered to be little or no mixing of the South African and Namibian stocks of anchovy, and the Namibian and South African stocks of the various Low Trophic Fishery species are managed entirely separately.</p> <p>The two primary target species in the small pelagic fishery, sardine and anchovy, have to be managed jointly because the two stocks interact. Sardine and anchovy shoal together as juveniles, so any catch of juvenile anchovy is unavoidably accompanied by a bycatch of juvenile sardine. A larger anchovy TAC in one year could therefore have a negative effect on the potential (directed) catch of adult sardine some years later and the industry is faced with a choice between the anchovy catch and the directed sardine catch. For this reason, the two fisheries are considered jointly to allow more effective management of this trade-off.</p> <p>Since June 2008, South Africa has been a member of the South East Atlantic Fisheries Organisation (SEAFO). The objective of the organisation is to ensure the long-term conservation and sustainable use of the fishery resources in the Convention Area through the effective implementation of the Convention. The Convention Area excludes the exclusive economic zones of the coastal states in the region, and so is largely not applicable to the anchovy fishery.</p>	
R3-5	
<b>LEVEL OF COMPLIANCE</b>	
<i>A3. Management actions should be based on long-term conservation objectives</i>	
<b>LOW</b>	Management actions are not based on long term management objectives.
<b>MEDIUM</b>	Management actions are based on long term management objectives. However the actions are not scientifically formulated.

**HIGH** Management actions are based on long term management objectives, and actions are science based.

**Determination: The Operation Management Procedure sets out a probability-based, specific, and long-term objective for maintaining anchovy spawning stock biomass.** **H**

The stated roles of the Directorate of Resources Research include the undertaking of research to promote the sustainable and optimal management of fisheries resources, and to provide scientific advice to support resources research. Additional analytical and advisory support is provided by the Marine Resource Assessment and Management Group (MARAM) at the University of Cape Town. The MARAM group is primarily funded by DAFF, and aims to provide a scientific basis for the assessment and management of renewable marine resources. The MARAM group produces the Operational Management Procedures (OMPs) used as the basis for many management decisions in the small pelagic fishery.

R2,3

**B. STOCK ASSESSMENT PROCEDURES AND MANAGEMENT ADVICE**

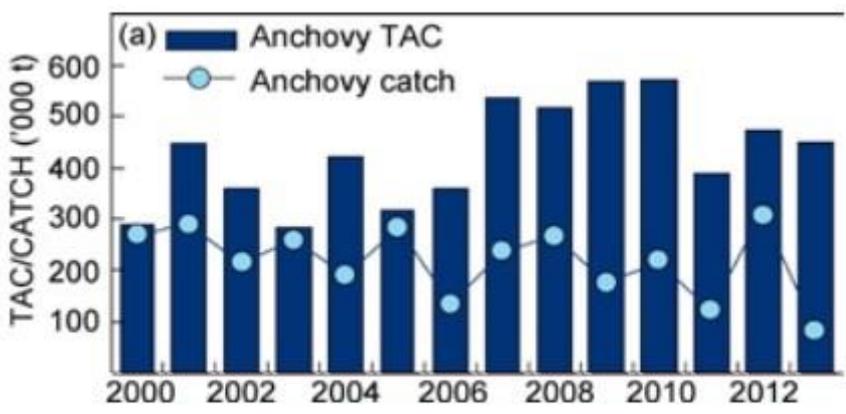
**LEVEL OF COMPLIANCE**

*B1. Research in support of fisheries conservation and management should exist.*

<b>LOW</b>	Research to support the conservation and management of the stock, non-target species and physical environment does not exist
<b>MEDIUM</b>	Research to support the conservation and the management of the stock, non-target species and physical environment exists, however research programmes could be significantly improved to decrease scientific advice uncertainty.
<b>HIGH</b>	Research to support the conservation and the management of the stock, non-target species and physical environment exist, and existent research is considered most adequate for the long term conservation of the target, non-target and physical environment

**Determination: Management of the South African small pelagic fishery is supported by ongoing fishery dependent and annual fishery independent research.** **H**

Fishery dependent data collected for the South Africa small pelagic fishery include landed weight, species composition, catch location and date. Additionally, sampling is used to obtain length frequency data, age estimates, sex, maturity stage, and fish condition. Landings data for anchovy are collected in the directed fishery, but also in the components of the small pelagic fishery which target sardine and redeye herring.



**Anchovy TAC and total catch in South Africa, 2000-2013. From the 2014 DAFF Fishery Resource Status report.**

In addition to landings records, the biomass and distribution of anchovy is assessed biannually via hydro-acoustic surveys, which have been conducted uninterrupted for the past 30 years. These surveys also collect a range of other data required for the Operational Management Procedure (OMP, see A2 & A3). The biological characteristics of anchovy mean that stock size can fluctuate rapidly, and that environmental factors often influence the stock more substantially than fishery removals. For these reasons, conducting

fishery-independent surveys twice per year is seen as an essential mechanism for generating stock status estimates with sufficient frequency and accuracy to enable informed management of the fishery. Additional surveys and analyses are conducted as deemed necessary, such as to determine aggregation rates, proportions of shoals made up of recruits, to measure the impacts of the fishery on penguin abundance, and to determine the reasons for the substantial under-utilisation of the anchovy TAC in recent years.

Observers have been deployed on vessels in the fishery since 1999, although observer coverage is estimated to be around 8% by number of trips covered. Observer data is used to validate other data sources, in particular catch location, date and gear type. Observer data has also been used to compare the results of data collection at landing from vessels which are observed and those which are not.

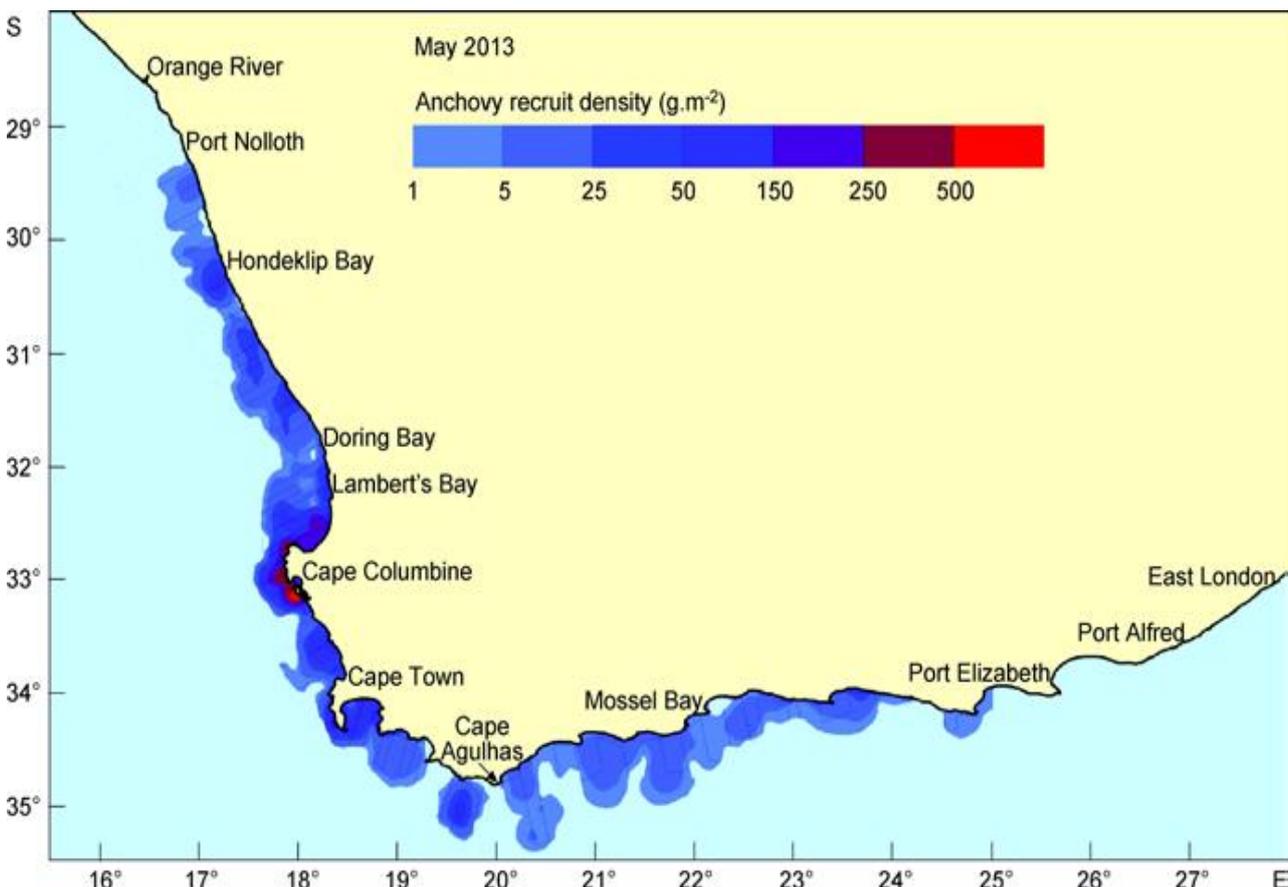


Figure 1. The distribution and relative density of anchovy recruits observed during the May 2013 recruitment survey. From the 2014 DAFF Fishery Resource Status report.

R6

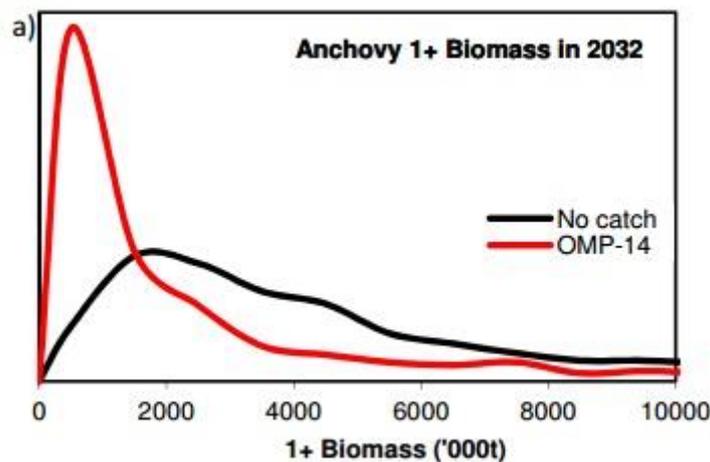
LEVEL OF COMPLIANCE	
<i>B2. Best scientific evidence available should be taken into account when designing conservation and management measures.</i>	
<b>LOW</b>	Scientific advice is not taken into account when designing conservation and management measures.
<b>MEDIUM</b>	Scientific advice is taken into account, when designing conservation and management measures. However some areas of discrepancy are identified that could have a significant impact in the long term conservation of the marine environment.
<b>HIGH</b>	Scientific advice is taken into account, when designing conservation and management measures, in a comprehensively manner.

**Determination: Several scientific working groups are involved throughout the fishery management process, and in the opinion of the assessment team the recommendations of these groups are heavily**

**relied upon for the development of management actions.**

The main management instrument applied to the small pelagic fishery is the Operational Management Plan (OMP). The OMP provides a combined management approach for both sardine and anchovy, which is necessary due to their schooling together as juveniles and thus being impossible to catch independently of one another. The current OMP is OMP-14, which was created by the MARAM group to define the procedure by which the TACs and TABs for sardine and anchovy should be calculated between 2015 and 2018. Prior to OMP-14, OMP-08 was used, although OMPs are generally updated every three to five years. The OMP contains harvest control rules for both species based on the results of the November hydro-acoustic surveys. The anchovy TAC is based on the relationship between the November biomass estimate and the historical average biomass between 1984 and 1999. Initially this TAC assumes average recruitment, but this factor (and therefore the TAC) is updated to reflect the results of the May acoustic cruise. The model used to generate the initial TAC takes this uncertainty into account and scales down the recommendation. OMP-14 also includes a fixed anchovy TAB for anchovy caught in the directed sardine fishery.

The MARAM group uses the calculations and harvest control rules defined by the OMP to publish initial and mid-season TACs and TABs for sardine and anchovy. Both these published papers and the OMP itself contain considerable detail on the mathematical process behind the TAC recommendations. The OMP seeks to ensure with high probability that the biomass of both sardine and anchovy remains above an 'Exceptional Circumstances' level, which is defined as 600,000t for anchovy (at the time of the November survey). There is also a maximum possible level at which the model can set the TAC, which is currently 450,000t for anchovy.



Projected probability (y-axis) of total biomass of 1+ anchovy (x-axis) in 2032 under OMP-14 and with no catch. From OMP-14.

R6-7

**C. THE PRECAUTIONARY APPROACH**

**LEVEL OF COMPLIANCE**

*C1. The precautionary approach is applied in the formulation of management plans.*

<b>LOW</b>	The precautionary approach is not applied in the formulation of management plans.
<b>MEDIUM</b>	The precautionary approach is applied, however not all uncertainties are taken into account.
<b>HIGH</b>	The precautionary approach is applied, taking into account uncertainties relating to the dynamic of fish population (recruitment, mortality, growth and fecundity), and the impact of the fishing activities, such as discards and by-catch of non-

Global Trust Certification Ltd, 3<sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Form No: 9	Report Ref:	Page 9 of 14	CCM Code:
------------	-------------	--------------	-----------

**This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.**

target species as well as on the physical environment (Habitats).

**Determination: South African fisheries policy states the application of the precautionary approach as one of the primary aims. The small pelagic OMP utilises a risk-based approach to setting annual quotas, factoring in a large number of research variables.**

The Marine Living Resources Act, 1998 includes as one of its recognised principals “the need to apply precautionary approaches in respect of the management and development of marine living resources”. OMPs are aimed at quantifying risks and benefits of alternative short- and long-term management options, in terms that resource managers and decision-makers can understand and relate to. OMPs perform a risk analysis, which allows results to be expressed as the probability that a defined event will occur (e.g. the biomass falling below a specified threshold level or the fishery collapsing) within a fixed period. Commonly used risk statistics include the probability of depleting the (spawning-stock) biomass below some threshold or the median biomass expected at the end of the simulation period (compared with the biomass at the onset of this period).

R8

D. MANAGEMENT MEASURES	
LEVEL OF COMPLIANCE	
<i>D1. The level of fishing permitted should be set according to management advice given by research organisations.</i>	
<b>LOW</b>	The level of fishing permitted is not set according to management advice given by research organisations.
<b>MEDIUM</b>	The level of fishing permitted is higher than management advice given by research organisations. However, the difference is not considered to have a significant impact of the sustainability of the stock
<b>HIGH</b>	The level of fishing permitted is set according to management advice given by research organisations.

**Determination: The level of fishing permitted is set according to management advice given by research organisations.**

Total removals are limited through the use of a quota system, with the Total Allowable Catch (TAC) and Total Allowable Bycatch (TAB) of anchovy defined according to the rules in the OMP. The Marine Living Resources Act (1998) empowers the Minister to apportion the TAC between rights holders, regions, components of the fishery, and however else is deemed necessary. In practice, TACs are apportioned between holders of commercial fishing permits for anchovy and/or sardine. The TAC is set at the level defined by the OMP and as calculated by subsequent initial and mid-season MARAM recommendation papers.

In recent years there has been a substantial under-catch of anchovy, with total landings considerably below the TAC (see graph in section A1). Pelagic rights holders appear to be finding it difficult to catch their annual allocations, an issue which has had some examination by government researchers. A number of explanations are believed to contribute to the under-utilisation of the resource, including reduced processing capacity arising from strict environmental regulation applied to factories, severe weather conditions, and industry efforts to minimise juvenile horse mackerel and sardine bycatch by localised voluntary fishery closure.

The OMP does not include an explicit limit reference point, although where anchovy biomass is estimated to be below 600,000t ‘Exceptional Circumstances’ are invoked and the TAC is substantially reduced. OMP-14 includes a list of constraints to the TAC calculation process, one of which states that “Minimum anchovy TAC” is 120,000t. However, the details of the mathematical model indicate that where the November biomass estimate is below 25% of the Exceptional Circumstances threshold (i.e. 25% of 600,000t: 150,000t),

the anchovy TAC will be set at 0t. Thus an SSB of 150,000t is used as an informal limit reference point.

2016

<b>INITIAL Anchovy TAC</b>	254,483 t
Juvenile Sardine by-catch allowance (associated with anchovy directed catches)	25866t

R

**LEVEL OF COMPLIANCE**

*D2. Where excess fishing capacity exist, mechanisms should be in established to reduced capacity to allow for the recovery of the stock to sustainable levels.*

<b>LOW</b>	Mechanisms to allow for recovery of the stock to sustainable levels are not established.
<b>MEDIUM</b>	Mechanisms to allow for recovery of the stock to sustainable levels are somehow established. However there is no evidence of the efficiency of the methods used.
<b>HIGH</b>	Mechanisms are established to reduce capacity to allow for the recovery of the stock to sustainable levels and there are evidences of recovery.

***Determination: South Africa has several mechanisms in place to reduce excess fishing capacity, including the setting of strict, enforced quotas, vessel registering and commercial fishing licenses.***

There is currently not considered to be excess fishing capacity in this fishery. Any commercial fishing in South Africa requires an annually-renewed license. Commercial fishers are considered to be exercising a fishing right. The right must first be applied for and granted, to exploit, harvest fish or engage in a fishing related activity for trade purposes. It also includes engagement in fishing related and non-consumptive activities. Commercial fishing permits are granted by the Minister of Department of Agriculture, Forestry and Fisheries (or the delegated authority). Full or limited commercial fishing rights are granted in selected fishing sectors based on a Total Allowable Catch or Effort (TAC/E) which is determined annually by the Minister of the Department of Agriculture, Forestry and Fisheries. It is illegal to engage in commercial fishing without a permit. In addition, any vessel which is “used for, or equipped for the management, harvesting and exploitation of living marine resources, or in support of related activities” must be registered with and approved by the DAFF and African Maritime Safety Authority (AMSA).

Historically, when anchovy and sardine biomass levels have been low, TACs and TABs have been adjusted accordingly to allow stock recovery, extending as far as the closure of the anchovy fishery in 1997.

R9, R10

**LEVEL OF COMPLIANCE**

*D3. Management measures should ensure that fishing gear and fishing practices do not have a significant impact on non-target species and the physical environment.*

<b>LOW</b>	There are no management measures to prevent the impact of the fishing methods and fishing practices on non-target species and the physical environment.
<b>MEDIUM</b>	There are management measures to prevent the impact of the fishing methods and fishing practices on non-target species and the physical environment. However it is not science based.
<b>HIGH</b>	There are management measures to prevent the impact of the fishing methods and fishing practices on non-target species and the physical environment. Measures are based on scientific information.

**Determination: Purse-seine nets are not considered to have a major impact on the physical environment. The major bycatch species in the small pelagic fishery are subject to quotas, and in any case the fishery is considered highly targeted (within the four main species caught). DAFF scientists have stated that there is no ETP bycatch in the fishery.**

H

Pelagic gears are known to rarely interact with physical habitats.

Government officials report that there is no ETP species bycatch in the fishery – the reliability of this statement is improved by the admission in the DAFF annual report that, for example, longline and demersal trawl fisheries catch significant numbers of vulnerable sharks. Landings are observed by government officials and so any landings of ETP species would be recorded; however due to low rates of observer coverage (around 8%), there is a possibility of ETP capture and disposal at sea. The main potential ETP impact of the fishery is indirect, via the removal of prey species for the African Penguin (*Spheniscus demersus*). St Croix Island near Port Elizabeth is home to the world’s largest colony of African Penguins, which are categorised as Endangered by the IUCN Red List, and has been used as the basis for several studies into the potential impacts of the fishery on the species. A recent analysis by MARAM concluded that the current reference points may be appropriate in this regard.

R11, R12

**E. IMPLEMENTATION**

**LEVEL OF COMPLIANCE**

*E1. There should be a framework for sanctions of violation of Laws and regulations.*

<b>LOW</b>	A framework for sanctions of violation of Laws and regulations do not efficiently exist.
<b>MEDIUM</b>	A framework for sanctions of violation of Laws and regulations do exist but do not work efficiently.
<b>HIGH</b>	A framework for sanctions of violation of Laws and regulations exists and is proven to be efficient.

**Determination: There is a detailed legal framework for sanctions of violations of laws and regulations by South African fishers**

H

Chapter 6 of the Marine Living Resources Act (1998) sets out the law enforcement legislation. This includes empowering fishery control officers to enter and search any vessel or premises, and seize any property considered to be used in or related to an offence. The chapter also empowers the Director-General to designate observers to monitor vessel activity during fishing operations.

Chapter 7 of the Act sets out the judicial components of fisheries management, including penalties for non-compliance. Breaches of the regulations set out in the Act, of the conditions of right of access, or of any authorisation to fish, are punishable by a fine of up to 2 million rand or imprisonment of up to five years. Contravention of international conservation or management measures or the conditions imposed by a high seas fishing permit or licence is punishable by a fine of up to 3 million rand. Punishments for other transgressions include fines and/or imprisonment.

R5

**LEVEL OF COMPLIANCE**

*E2. A management system for fisheries control and enforcement should be established.*

<b>LOW</b>	A management system for fisheries control and enforcement is not established.
<b>MEDIUM</b>	A management system for fisheries control and enforcement is established but do not work efficiently.

Global Trust Certification Ltd, 3<sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Form No: 9	Report Ref:	Page 12 of 14	CCM Code:
------------	-------------	---------------	-----------

<b>HIGH</b>	A management system for fisheries control and enforcement is established and work efficiently.	H
<p><b>Determination: A management system for fisheries control and enforcement is established.</b></p> <p>Fisheries enforcement in South Africa is the responsibility of the Chief Directorate of Monitoring, Control and Surveillance (MCS). The MCS works alongside other governmental departments and law enforcement agencies to improve its ability to monitor and enforce fisheries laws and regulations. The MCS is further broken down into three Directorates. The Directorate of Compliance is tasked with conducting inspections, managing patrols, monitoring potential areas of risk within fisheries, and developing the necessary networks to maintain and manage stakeholder engagement in the enforcement process. The Directorate of Fisheries Protection Vessels manages enforcement vessels, and enforces compliance with international and regional agreements. Finally, the Directorate of Monitoring and Surveillance enforces compliance through monitoring and surveillance, and manages the accompanying regulatory framework.</p> <p>R13,14</p>		

<b>7. KEY STAKEHOLDERS</b>

**8. REFERENCES**

- R1 – Image of *Engraulis encrasicolus* by Henk Heessen  
<http://www.marinespecies.org/photogallery.php?album=4487&pic=2320>
- R2 -DAFF organisational structure: <http://www.daff.gov.za/daffweb3/About-Us/Structure-and-Functions>
- R3 -MARAM overview: <http://www.mth.uct.ac.za/maram/>
- R4- DAFF vision and mission: <http://www.daff.gov.za/daffweb3/About-Us/Vision-and-Mission>
- R5- South Africa Marine Living Resources Act, 1998: [http://www.saflii.org/za/legis/consol\\_act/mlra1998256/](http://www.saflii.org/za/legis/consol_act/mlra1998256/)
- R6 -Status of the South African Marine Fishery Resources, 2014. DAFF, Cape Town, SA.  
[http://www.nda.agric.za/daaDev/sideMenu/fisheries/03\\_areasofwork/Resources%20Research/STATUS%20OF%20THE%20SOUTH%20AFRICAN%20MARINE%20FISHERY%20RESOURCES%202014%20WEB.pdf](http://www.nda.agric.za/daaDev/sideMenu/fisheries/03_areasofwork/Resources%20Research/STATUS%20OF%20THE%20SOUTH%20AFRICAN%20MARINE%20FISHERY%20RESOURCES%202014%20WEB.pdf)
- R7- de Moor, CL & Butterworth, DS (2014). OMP-14.  
[http://www.mth.uct.ac.za/maram/pub/2014/FISHERIES\\_2014\\_NOV\\_SWG-PEL\\_60.pdf](http://www.mth.uct.ac.za/maram/pub/2014/FISHERIES_2014_NOV_SWG-PEL_60.pdf)
- R8 – IFFO RS South Africa Anchovy reassessment 2015 <http://www.iffo.net/files/iffoweb/approved-raw-materials/whole-fish/south-africa-anchovy-reassessment-2015.pdf>
- R9 – South Africa Government services, Applying for a fishing licence:  
[http://www.services.gov.za/services/content/Home/OrganisationServices/permitslicencesrights/fishingpermit/ApplytoundertakeCommercialFishing/en\\_ZA](http://www.services.gov.za/services/content/Home/OrganisationServices/permitslicencesrights/fishingpermit/ApplytoundertakeCommercialFishing/en_ZA)

Global Trust Certification Ltd, 3 <sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864			
Form No: 9	Report Ref:	Page 13 of 14	CCM Code:

**This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.**

R10 – FAO fisheries country profiles, South Africa: [ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI\\_CP\\_ZA.pdf](ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_ZA.pdf)

R11 - IUCN Red List. <http://www.iucnredlist.org/search>

R12 - de Moor, CL (2015), “Third for the Birds” for South African Sardine and Anchovy?  
[http://www.mth.uct.ac.za/maram/pub/2015/FISHERIES\\_2015\\_JUL\\_SWG-PEL\\_21.pdf](http://www.mth.uct.ac.za/maram/pub/2015/FISHERIES_2015_JUL_SWG-PEL_21.pdf)

R13 -DAFF MCS, About. <http://www.daff.gov.za/daffweb3/Branches/Fisheries-Management/Monitoring-Control-and-Surveillance>

R14 - DAFF organisational structure: <http://www.daff.gov.za/daffweb3/About-Us/Structure-and-Functions>

R15- de Moor, CL (2015). Initial Directed Sardine and Anchovy TACs and TABs for 2016, Using OMP-14.  
[https://drupalupload.uct.ac.za/maram/Documents/pub/2015/FISHERIES\\_2015\\_DEC\\_SWG-PEL\\_48.pdf](https://drupalupload.uct.ac.za/maram/Documents/pub/2015/FISHERIES_2015_DEC_SWG-PEL_48.pdf)

Global Trust Certification Ltd, 3 <sup>rd</sup> Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864			
Form No: 9	Report Ref:	Page 14 of 14	CCM Code:

**This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.**