

News

FishFORCE



DFFE Fisheries Control Officers with confiscated abalone/perlemoen

Billions lost through illegal abalone trade

Urgent national abalone strategy and action plan required

A considerable shift in thinking is required around the management of abalone/perlemoen to ensure a co-ordinated and enhanced enforcement programme of the coasts and oceans in a best practice approach to prevent and combat the illicit trade.

The impact of this trade has been severe, and it is estimated that South Africa is losing at least US\$60million a year, according to the wildlife trade-monitoring organisation TRAFFIC. This income could have been spent on uplifting South Africa's people and economy, and better protecting the resource.

The supply chain has exploited social, political, and economic vulnerabilities within South Africa, particularly in coastal areas where there are elevated levels of unemployment, widespread poverty and inadequate service delivery. The convergence of this trade with other crimes, including the trade in drugs, other wildlife products and gangsterism, and the involvement of crime syndicates, has added to this lucrative and violent criminal economy, with dire ramifications for the country's fiscus, its people and environment.

The Department of Forestry, Fisheries and the Environment (DFFE), academia, including FishFORCE, civil society and government agencies

proposed the need for the development of a national strategy and action plan for the prevention and combatting of trade in illegally harvested abalone. Such a strategy would need to explore economic opportunities of the fishery for the benefit of South Africa, its people and the resource. It would require the input and commitment from a variety of stakeholders within government, the private sector, academia, and civil society to ensure a more targeted, co-ordinated and enhanced enforcement strategy.

A similar approach to that of the 'Draft National Response Strategy to Address the Illegal Trade in South African Succulent Flora' was proposed for the trade in illegally harvested South African abalone. With support from TRAFFIC, FishFORCE and other stakeholders, the DFFE convened a multi-stakeholder workshop in Stellenbosch from 27 February – 3 March, with the aim of developing a National Strategy and Action Plan to Prevent and Combat the Trade in Illegally Harvested South African Abalone.

FishFORCE led the Regulatory Framework, Policy Development & Management Workstream and provided input and support to the Enforcement and Compliance Workstream, both of which will culminate in the establishment of a national strategy to curb abalone poaching.

Can the tide be turned?

SA Crime Quarterly, n.69, 2020 published Prof van As' article titled 'Poaching of marine living resources: Can the tide be turned?'

Van As writes: "Between 2006 and 2019, a total of 1 059 217 kilograms of abalone were confiscated and there is an upward trend. The failures in fisheries management, the allocation of insufficient resources, and the entrenchment of corruption and maladministration has led to a situation where fisheries crime has become entrenched."

The abstract reads:

Two of South Africa's high-value marine living resources, abalone (*Haliotis midae*) and West Coast rock lobster (*Jasus lalandii*) are under severe threat from international organised crime syndicates in conjunction with local fishers. These criminal activities erode respect for the rule of law and lead to socio-economic degradation and the proliferation of gangsterism.

The current government approach as custodians of the resources is to maximise the return from confiscations. SAPS are not using the full power of the law to address poaching of marine living resources, particularly abalone, as a priority crime and do not allocate their resources commensurate with the value of the commodity. As a country that is beleaguered by fisheries crime, overfishing and exploitation, South Africa must take a tough stance and should pursue criminal organisations with all the power that the state can muster. It must also ensure that national fisheries resource management is improved so that local communities can benefit.



Confiscated abalone/perlemoen

The underworld of abalone

Excerpt from 'The underworld of abalone' by Kimon de Greef, published on 29 October 2018 in Global Initiative Against Transnational Organised Crime – a global network including prominent law-enforcement, governance and development practitioners who are dedicated to seeking new and innovative strategies and responses to organised crime.

Kimon de Greef is a freelance journalist and researcher from South Africa with a particular focus on illicit trades. He writes:

"An illicit supply chain connecting marginalised South African coastal communities with wealthy Chinese consumers has all but depleted South Africa's stock of prized abalone.

It is among the world's stranger black-market industries, stretching from the shores of South Africa to China's luxury seafood market, and facilitated by drug barons, corrupt officials and neighbouring African states.

But the illicit trade in abalone has had profound environmental and social costs in South Africa, depleting stocks of the shellfish while drawing local fishing communities into the criminal underworld.

Since 2000, according to a new report by TRAFFIC, poaching syndicates have smuggled more than 96 million individual abalone to Hong Kong, the epicentre of the trade. This equates to nearly 15 000 of the shellfish illegally harvested each day.

Worth at least US\$60 million a year, the illegal trade in abalone now counts as South Africa's third most valuable fishery, wildlife trade-monitoring organisation TRAFFIC says. It is an industry controlled by local gangs and Chinese mafia groups.

Police officials say that syndicates barter shipments of abalone for methamphetamine or its precursor chemicals, embedding the trade within South Africa's drug economy. In the fishing communities that supply the syndicates, abalone middlemen are often closely linked to gangs and drug merchants.

'This is not just a fisheries problem,' said TRAFFIC's senior programme officer Markus Burgener. 'Many other agencies need to get involved to address the problem holistically.'

TRAFFIC is a non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

FishFORCE Training 2022 – 2023

Since Edition 5 of the FishFORCE newsletter, published in July 2022, FishFORCE has delivered several training workshops, described below. A report on FishFORCE’s activities during the 2022/23 period was sent to the Marine and Ocean Crime Priority Committee (Operation Phakisa Initiative 5).

Law for Fisheries Control Officials, Inspectors and other Enforcement Officials

Calendar Icon	Location Icon	People Icon
04 – 08 July 2022	Gqeberha	15 delegates attended
15 – 19 August 2022	Muizenberg	20 delegates attended

Fisheries Trade Monitoring and Compliance Training

Calendar Icon	Location Icon	People Icon
04 – 06 October 2022	Walvis Bay, Namibia	Fisheries and Customs officials
24 and 25 November 2022	Virtual sessions	Fisheries and Customs officials

United Nations Office on Drugs and Crime (UNODC) Courses

COURSE	Calendar Icon	Location Icon
Integrity & Ethics	12 – 16 September 2022	Cape Town
Crime Prevention & Criminal Justice	19 – 23 September 2022	
Anti-Corruption	10 – 14 October 2022	
Organised Crime	24 – 28 October 2022	
Wildlife & Fisheries Crime	31 October – 04 November 2022	

Forensic Course

FishFORCE presented a three-day **Introductory Forensics Course for Fisheries Control Officers (FCOs)** at the Wildlife Forensics Academy in Buffelsfontein, Western Cape, from 17 – 19 October 2022. FishFORCE sent twelve FCOs from DFFE to attend. The course was very practical in nature, focusing on the following aspects:

- Preservation of a crime scene
- Forensic trace awareness, detection and handover to police
- Criminal justice chain
- Moot court

The training was conducted by three FishFORCE facilitators, namely, Phil Snijman, Mongezi Nqoro and Petro van der Westhuizen.



Abalone crime scene investigation



Student FCOs preparing to investigate a crime scene

Port State Measures Agreement (PSMA) Workshops

Illegal, unreported and unregulated (IUU) Fishing: National inter-agency workshops on the implementation of the FAO Port State Measures Agreement (PSMA)

In order to continue to build and strengthen regional and international law enforcement expertise and cooperation, FishFORCE, together with Stop Illegal Fishing, delivered three training workshops on the implementation of the PSMA in late 2022 and early 2023, in Walvis Bay and Windhoek for Namibian participants and in Luanda for Angolan participants. Both were led by FishFORCE facilitator Johannes Dirk 'JD' Kotze and the coordinator of Stop Illegal Fishing, Per Erik Bergh.

FishFORCE facilitator, investigator and organised crime expert: JD Kotze

JD is an experienced criminal investigator and expert in the investigation of transnational organised crime. He has spent over 25 years in law enforcement, and a further 17 years as an investigative consultant. JD began his career in the South African Police Service and then joined the National Prosecuting Authority as the Acting Chief Investigator for the Directorate of Special Operations (Scorpions), before becoming a private consultant. He has vast experience investigating various criminal matters, including transnational organised fishery and environmental crimes, which he puts to good use by supporting various cases, as well as training investigators in how to deal with transnational organised environmental crime.



JD in Luanda training Angolan participants in real life inspections of fishing vehicles



JD in Luanda doing real life inspections of fishing vehicles as part of the training

Stop Illegal Fishing coordinator Per Erik Bergh



Per Erik doing live fisheries vessel inspections as part of the training in Luanda

For over 35 years, Per Erik Bergh has been working globally in the maritime and fisheries fields. His main focus is fighting illegal fishing and assisting operational monitoring, control and surveillance (MCS) staff to detect and bring perpetrators to justice.

He achieves this through an extensive network that has been built from his initial years in the Norwegian navy and coastguard, his extensive global travel and engagement in international fishery and maritime affairs – and from almost three decades of living and working in Africa.

Per Erik has worked in over 45 countries around the world, in Africa, Asia, Europe and America, where he's been involved in the development of the MCS element of fishery management plans, working in aspects ranging from training inspectors to supporting regional and international negotiations and implementation of fisheries instruments. He was one of the founding members of Stop Illegal Fishing and heads up the Stop Illegal Fishing Investigative Unit.

Training workshops in Walvis Bay and Windhoek, Namibia



31 October – 04 November 2022

24 delegates attended from multiple Namibian agencies such as the Namibian Ministry of Fisheries and Marine Resources, Namport, Namibian Fisheries Observer Agency, Namibian Police Force, Ministry of Home Affairs and Immigration and Ministry of Works and Transport.

08 – 10 November 2022

12 delegates (for managers) from the abovementioned agencies



01



02



03



04

- 01 Training in Walvis Bay on the Anna Kakurukaze Mungunda
- 02, 03 Namibian delegates
- 04 Facilitator JD (far right) discussing the vessel inspection in Namibia

Training workshop in Luanda, Angola



13 – 17 February 2023

30 delegates attended from multiple Angolan agencies such as the Angolan Navy, Angolan Customs and the Angolan National Fisheries and Aquaculture Inspection Service



01



02



03

- 01 *Angolan delegates who attended the training*
- 02 *Members of the Angolan navy who attended the training*
- 03 *Inspecting the catch from a fishing vessel in Luanda*

Coastal Monitoring Protection Programme

From mid-February 2023 to the end of June 2023, FishFORCE is running the Coastal Monitoring Protection Programme with two groups of ±25 Honorary Marine Conservation Officers (HMCOs) attending five five-day modules - one per month.

The first module, 'Introduction to the Principles of Law Enforcement by Peace Officers', was held in East London from 13 – 17 February and at Nelson Mandela University's Business School from 20 – 24 February.

The training for HMCOs will impart the necessary theoretical and practical skills and equip HMCOs to enforce municipal by-laws and to increase public safety. This will enable them to provide a professional service as qualified and competent Peace Officers and at the same time, enhance their employability.

The Honorary Marine Conservation Officers Programme is intended to provide further on-the ground assistance to the Department and its FCOs.

The need for the establishment of honorary marine conservation arose in 1987 as a result of widespread poaching along the South African coastline, particularly the Western Cape region. The public's interest in becoming custodians of the marine environment was overwhelming and appointments were made based on section 9 (2) of the Marine Living Resources Act, 18 of 1998 (MLRA) to enlist members of the public to become HMCOs. Any member of the public with an interest in the conservation of marine living resources could be appointed, provided they were suitable candidates who fitted the criteria for appointment and that there was no conflict of interest present.

The DFFE recognises the value of involving members of coastal communities to voluntarily assist in managing the coastline and the control over the exploitation of marine living resources to ensure that the objectives of the Act are attained and maintained.

The Department of Forestry, Fisheries and the Environment: Branch Fisheries Management is authorised under section 9(2) of the MLRA to appoint HMCOs from members of the public who wish to become involved in marine living resources conservation and compliance activities. The HMCOs programme is intended to provide further on-the ground assistance to DFFE and its FCOs in particular, and to give members of coastal communities the honour and privilege of being able to co-manage one of Africa's most diverse and beautiful coastlines.

The programme is being rolled out in the coastal municipalities of the Eastern Cape. Fifty HMCOs within the coastal municipalities in the Eastern Cape and surrounding areas such as Kwazulu-Natal have been and continue to be identified to attend the programme with the help of Fatima Savel from DFFE.



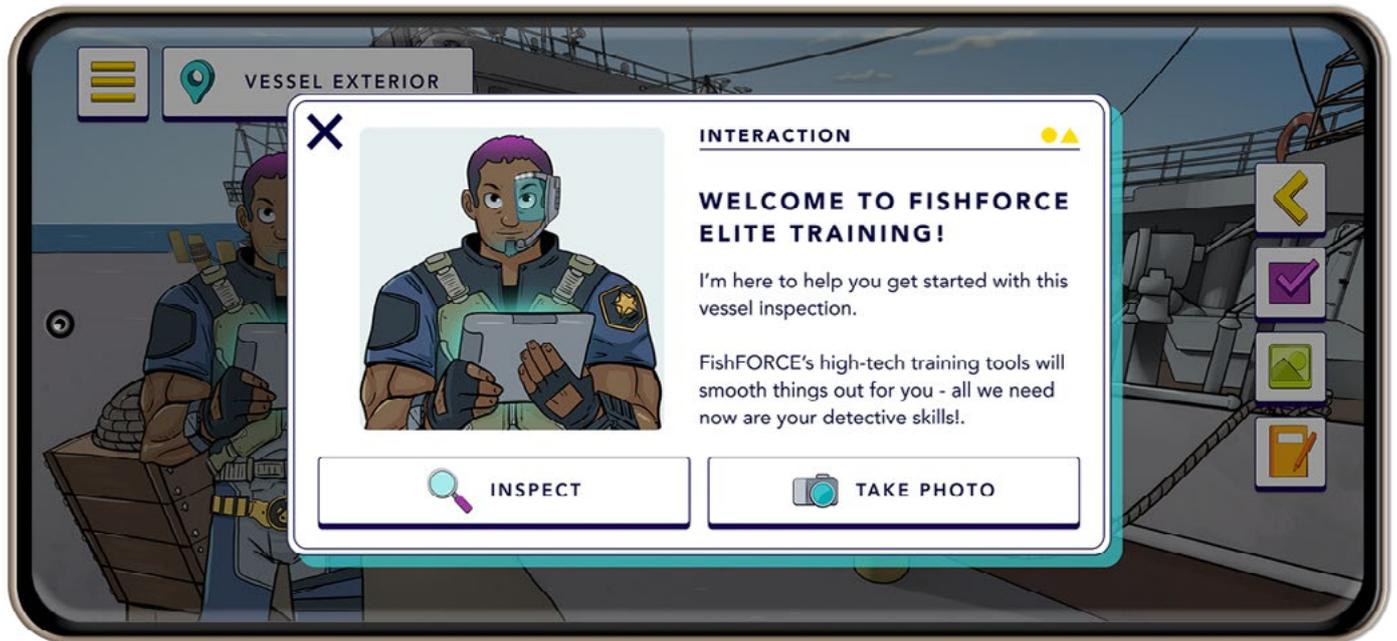
Introduction to the Principles of Law Enforcement by Peace Officers at Nelson Mandela University's Business School. FishFORCE facilitator: Petro van der Westhuizen. The delegates are HMCOs from the Eastern Cape (Gqerberha and Port Alfred) as well as Plettenberg Bay and Mossel Bay

The programme will consist of the following modules:

1. February 2023: **Introduction to the Principles of Law Enforcement by Peace Officers (for attendees who don't have matric).** The 5-day introductory course is aimed at employees who do not have matric/grade 12. Successful completion of this course is sufficient for the purposes of being appointed as a peace officer and for admission to course no 2, below. This is a non-credit bearing short course.
2. March 2023: **Law Enforcement by Peace Officers.** The 5-day course is pitched at NQF 5 and carries 12 credits onto the Higher Certificate: Law Enforcement and is also credit bearing onto the Diploma in Law Enforcement, which is offered by the University since 2019.

3. April 2023: **Taking of Statements.** The 5-day course is pitched at NQF 5 and carries 12 credits onto the Higher Certificate: Law Enforcement and is also credit bearing onto the Diploma in Law Enforcement.
4. May 2023: **Law for fisheries control officers, inspectors and other enforcement officials.** The 5-day course is credit bearing onto the Diploma in Law Enforcement.
5. June 2023: **Species Identification and Fisheries Technology.** The 5-day course is credit bearing onto the Diploma in Law Enforcement.

Note: Credits and access to the formal qualifications are subject to the candidate meeting the minimum entry requirements of the University.



FishFORCE Bridge Inspection Game

FishFORCE has completed the development of the 'FishFORCE Bridge Inspection Game', a virtual game specifically designed for law enforcement officers (LEOs) in the fisheries crime environment. Given that the game was designed for law enforcement officers in fisheries crime, it is not freely available.

"We have thus requested that the Department of Forestry, Fisheries and the Environment and the Marine and Ocean Crime Priority Committee (Operation Phakisa) provide access to relevant users only within the department, thus ensuring targeted access to derive proper data

"FishFORCE is honing in on the game-based education model termed 'gamification', which allows users to learn through experience and through the use of a virtual environment, while leading them to approach problem-solving through critical thinking."

analytics and to monitor the users' performance and their learning journey," says FishFORCE's Chief Operating Officer, Michael de Lange.

"We are able to report on the game through data analytics to determine the level of user engagement, where users are struggling, what level they are at and their problem-solving ability. This information will be evaluated over several months."

The game is desktop- and mobile-based and available on smartphones, and players log in via Google. It was developed by FishFORCE together with SeaMonster, a company in Cape Town. The music for the game was created by a Nelson Mandela University Bachelor of Music

alumnus, Ngasiirwe Katushabe, who is now the technical manager of the University's radio station, Madibaz Radio.

"FishFORCE is honing in on the game-based education model termed 'gamification', which allows users to learn through experience and through the use of a virtual environment, while leading them to approach problem-solving through critical thinking. The need really came to the fore due to COVID-19," De Lange explains.

The game includes ten levels of increasing difficulty, each with its own scenario, characters, story and challenge. It presents various scenarios, which the target groups of LEOs navigate through in an entertaining way, gaining awareness, knowledge and practical tips. The game features a virtual simulation environment of inspecting a fishing vessel to ensure it is compliant with the Port State Measures Agreement (PSMA).

The PSMA entered into force in June 2016 and is the first binding international agreement which specifically targets Illegal, Unreported and Unregulated (IUU) fishing. The objective of the PSMA is to prevent, deter and eliminate IUU fishing by preventing vessels engaged in IUU fishing from using ports and landing their catches.

The PSMA applies to fishing and fisheries related activities, including transshipment in areas within and beyond national jurisdiction and to vessels used for fishing or fishing related activities. The PSMA has a minimum set of standards which applies to fishing vessels wanting to enter a designated port of a country/state which is different to their flag state.

De Lange says: "These minimum set of standards regulate a sequence of events; a vessel requesting entry into a port, the actual entry into port, inspections (this is where the game comes into play) and follow-up actions by the port state. Under certain circumstances, states are entitled to deny a vessel entry into port and the use thereof without inspection. The PSMA also identifies the role of flag States and assistance to developing states.

"The game was user-tested in June 2022 with a focus group made up of FCOs from the Department of Forestry, Fisheries and the Environment and other law enforcement officials."

The game was designed to mainly focus on bridge inspections, especially the effort and skills required to thoroughly inspect key documents such as permits, logs, registrations, and transshipments. The game also includes a wider range of focus areas that the FCO player must address.



SELECTION

Each view within an area of the game scene contains interactive elements that can be clicked or tapped to be selected for further investigation. This promotes a sense of curiosity and encourages exploration of the scene.

- Selectable elements of the scene include:
 - Vessel identification markers (e.g. Vessel name, IMO number, IRCS)
 - Characters (e.g. Instructor, Captain, Crew members)
 - Objects (e.g. radios, computers, boxes, equipment etc.)
 - Documents (e.g. Permits, Registration, Catch log, Freezer log, Transhipment etc.)
 Once an element is selected, a popup window appears with further interaction functions listed, such as:
- **Take scan:** Take a photo of an object or document for use as evidence or later inspection. All scans are stored in the player's scan gallery.
- **Inspect:** Look at the selected element in greater detail, inspecting an object's particular properties or a document's key entries.
- **Chat:** Characters can be interviewed or otherwise engaged in conversation.
- **Make a note:** Add an entry into the player's notebook. Notes can be taken on:
 - An element description (e.g. vessel condition)
 - Object detail (e.g. box contents)
 - Document entry (e.g. permit expiry date)
 - Character dialogue (e.g. "I seem to have misplaced my passport")



LEVEL SCORE

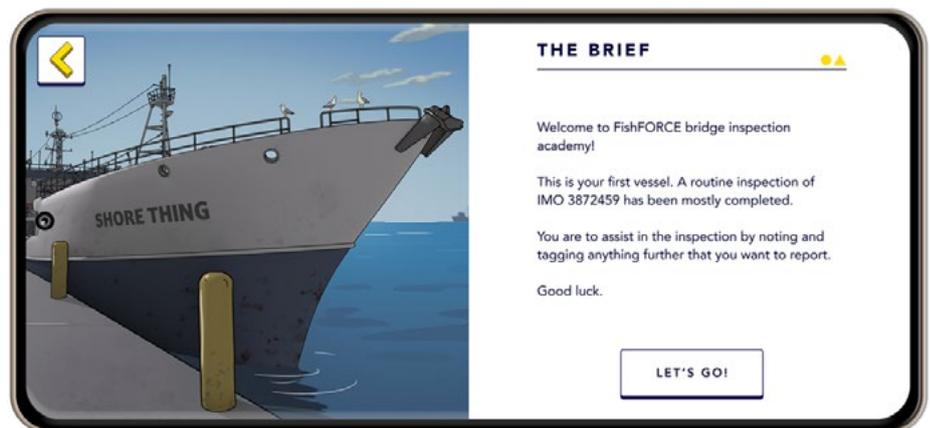
After completing a case, the player is presented with their score for the level. For each level, the player is scored on 3 key skills which the game has been designed to test:

- **Critical thinking:** Score awarded for correctly noting and flagging key issues pertaining to the main violation for the level. (i.e. Did the player collect key evidence in the case?)
- **Diligence:** Score awarded for correctly noting and flagging ancillary issues found within the scene. (i.e. Did the player collect supporting evidence to strengthen the case, and or identify select health & safety risks found onboard the vessel?)
- **Curiosity:** Score awarded for discovering selected objects or information hidden in the level. (i.e. Did the player explore the inspect the vessel fully and explore further than the minimum required to identify any violations)



OFFLINE ACCESS

Even though the game does initially require an internet connection to be downloaded to the player's device, it is stored on the device after initial download so that it may be accessed without an internet connection (offline access) during subsequent gameplay.



These include:

- Bridge inspection (especially finding and inspecting key documents)
- Crew Interviews (included simulation of various temperaments, moods and attitudes)
- Basic gear inspection (visual identification of hooks used in shark fishing)
- Basic hold inspection (checking the freezers and eyeballing the catch)
- Blast fishing (including identifying ingredients of homemade explosives)
- Shark fishing (shark fins hidden in hold)
- Evading of satellite tracking (missing data in VMS)
- Drones (used to support crew log in game in lieu of access to crew quarters)
- Human trafficking (Confiscated passports, and general ill treatment of crew)
- Identification fraud (IMO number repainted on ship and falsified vessel registration documents)
- Eyeballing the catch (Player must cross reference a rough estimation of the catch quantity with the vessel hold's net capacity as per registration document and then check against catch log and freezer log)
- Drugs (multiple vessels are transporting drugs)
- Weapons (one vessel is transporting rifles and one has explosives)
- Syndicates (The overarching story includes a conspiracy between a group of pirates)

In the Media

Daily Maverick, 26 July 2022

- Fisheries crime is a huge parallel economic system – FishFORCE is harnessing tech to fight it. Opinion piece by Prof Hennie van As.
- The above article was also added to the International Fisheries News (IFN) weekly newsletter on the Pew Charitable Trust website. IFN is Pew’s weekly newsletter on illegal fishing and fisheries.

Associated Press News, 10 Feb 2023

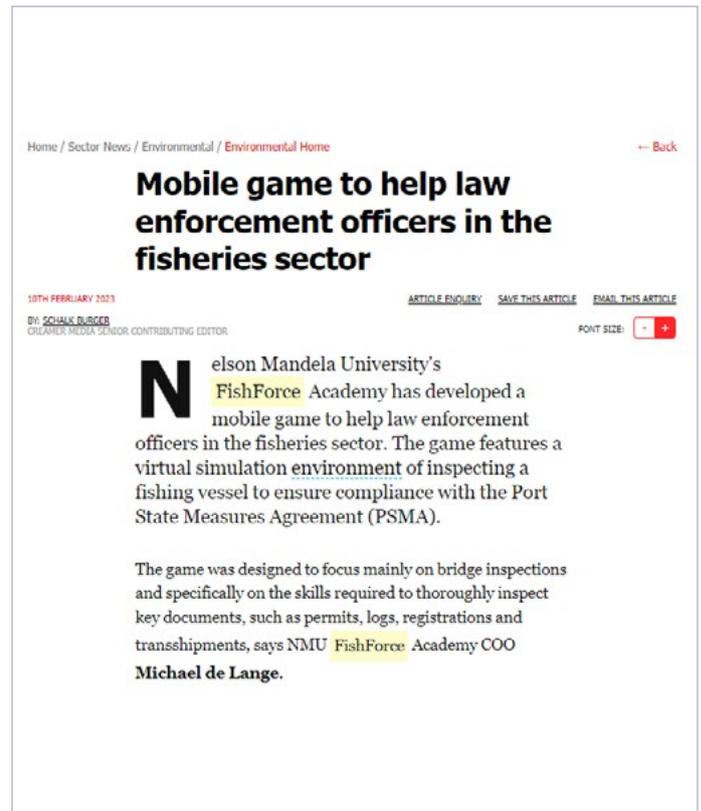
- Corruption endangers world’s shrinking fisheries
Helen Wieffering of Associated Press, Washington DC wrote to Prof Hennie van As and said: “Thank you for sharing your knowledge and perspective for this. We didn’t have room to dig deep into South Africa in the end, but the cases and patterns we spoke about formed a big part of my research and findings.”

Engineering News, 10 Feb 2023

- Mobile game to help law enforcement officers in the fisheries sector

Environmental Law and Justice Watch, 14 Feb 2023

- Content from the Engineering News article was also published in Environmental Law and Justice Watch



NELSON MANDELA UNIVERSITY

*Fish*FORCE

In Partnership with:



Norwegian Ministry
of Foreign Affairs



FishFORCE Academy, Nelson Mandela University, Ocean Sciences Campus,
Summerstrand, Port Elizabeth.

T +27 41 504 4706

E info@mandela.ac.za fishforce.mandela.ac.za

Change the World