



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Progress by innovation



Improving Blue Economy Trade Corridors in the SADC Region

TOWARDS THE ADOPTION OF A REGIONAL STRATEGY FOR ONE-STOP BORDER POSTS ON FISHERIES PRODUCTS UNDER *PROFISHBLUE*

ACKNOWLEDGMENTS

This publication has been developed under the African Development Fund (ADF) funded project titled Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in the SADC Region (PROFISHBLUE).

Special thanks for their insightful contributions go to **Dr. Ahmed Khan**, Chief Fisheries Officer at the African Development Bank (AfDB), **Dr. Oswald S. Chinyamakobvu**, Senior Technical Advisor – Standards & Quality at the Pan African Quality Infrastructure (PAQI), **Ms. Poonam D. Mohun**, Head of Non-Tariff Measures Division - Directorate of Trade in Goods and Competition at the African Continental Free Trade Area (AfCFTA) Secretariat, **Dr. Motseki Hlatshwayo**, PROFISHBLUE Project Manager and **Ms. Liliane Kamanzi**, Project Coordinator at African Organization for Standardization (ARSO), as well as to all the National Focal Points of the PROFISHBLUE project.

This report has been prepared by UNIDO's Directorate of Technical Cooperation and Sustainable Industrial Development, Division of MSME Competitiveness, Quality and Job Creation/MSME Development and Job Creation Unit (TCS/SME/MJ) under the overall guidance of **Mr. Alejandro Rivera Rojas**, Industrial Development Officer at the United Nations Industrial Development Organization (UNIDO), with inputs provided by **Mr. Francois Denner**, UNIDO Chief Technical Advisor; **Ms. Margarida dos Santos Correia**, UNIDO Technical Expert in Fisheries, Aquaculture and SPS and **Ms. Mikaela Arnstein**, UNIDO Project Administrator.

The Trade Law Centre (TRALAC) contributed Chapter 1: Analysis of the SADC Fisheries trade.



www.unido.org



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

© UNIDO 2024. All rights reserved

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitation of its frontiers or boundaries or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of company names or commercial products does not constitute an endorsement by UNIDO.

Although great care has been taken to maintain the accuracy of information herein, neither UNIDO nor its Member States assume any responsibility for the consequences which may arise from the use of the material.

Copyright ©2024 - United Nations Industrial Development Organization - www.unido.org
Images ©2024 - www.unido.org, <https://stock.adobe.com>

Improving Blue Economy Trade Corridors in the SADC Region

TOWARDS THE ADOPTION OF A REGIONAL STRATEGY
FOR ONE-STOP BORDER POSTS ON FISHERIES PRODUCTS
UNDER *PROFISHBLUE*

Vienna, Austria
October 2024



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

TABLE OF CONTENTS

List of figures, tables and boxes	6
Abbreviations	9
Forewords	13
Executive summary	20
The PROFISHBLUE Programme	22
1. Introduction	24
2. Importance of the Blue Economy, fisheries and blue trade corridors in the SADC region	28
3. Situational analysis of the SADC fisheries trade in the target countries	32
3.1 INTRODUCTION	34
3.2 TRADE POLICIES AND REGULATIONS	37
3.2.1 National regulations	37
3.2.2 Trade agreements impacting fisheries trade	40
3.3 ONE-STOP BORDER POSTS: AN OVERVIEW	45
3.4 FISHERIES PRODUCTION AND DOMESTIC CONSUMPTION IN THE SADC	49
3.4.1 Production and consumption in the countries under review	50
3.5 TRADE IN FISH AND FISHERIES PRODUCTS	51
3.5.1 Market access issues	51
3.5.2 Global trade	52
3.5.3 Africa trade	53
3.5.4 SADC trade	55
3.5.5 SADC target country analysis	57
3.6 FISH AND FISHERIES PRODUCTS COUNTRY EXPORT ANALYSIS	61
3.6.1 The Democratic Republic of Congo	61
3.6.2 Madagascar	61
3.6.3 Malawi	63
3.6.4 Mozambique	64
3.6.5 The United Republic of Tanzania	66
3.6.6 Zambia	67
3.6.7 Zimbabwe	69
3.6.8 Value chain analysis	71
3.7 INFORMAL TRADE OF FISHERIES PRODUCTS IN THE SADC	72
3.8 CONCLUSIONS	74
3.9 RECOMMENDATIONS	74

4. Critical review of previous One-Stop Border Post interventions	76
4.1 INTRODUCTION	78
4.2 METHODOLOGY	79
4.3 CONTINENTAL AND REGIONAL CONTEXT OF TECHNICAL AND SANITARY MEASURES	80
4.3.1 Sanitary and phytosanitary measures	80
4.3.2 Technical barriers to trade	80
4.3.3 Trade agreements in the continental and regional context	81
4.3.4 Regional fisheries overview and impact of SPS and TBT measures on the trade in fisheries products	82
4.4 THE OSBP CONCEPT	84
4.5 OSBP MODELS AND EXISTING OSBPs IN SOUTHERN AFRICA	87
4.5.1 Overview of OSBP models	87
4.5.2 OSBP in Southern Africa and Identified Pilots under PROFISHBLUE	87
4.6 BORDER CONTROL AGENCIES	92
4.7 GENERAL REQUIREMENTS FOR CROSS-BORDER FISHERIES TRADE	93
4.8 TRADE BARRIERS FOR FISH PRODUCTS	94
4.9 PROPOSED PROCESS FLOW OF OSBP APPLICABLE TO FISHERIES PRODUCTS	94
4.10 CHALLENGES OF TRADING UNDER OSBPs	96
4.10.1 Challenges to OSBPs: A survey of traders and border officials	96
4.10.2 Challenges affecting operations	98
4.10.3 Challenges specific to trade of fisheries products for human consumption	100
4.10.4 Other regional trade challenges	101
4.11 CONCLUSIONS AND RECOMMENDATIONS	102
5. Mapping of quality infrastructure	104
5.1 INTRODUCTION	106
5.2 METHODOLOGY	107
5.3 QUALITY INFRASTRUCTURE MAPPING	107
5.3.1 Quality Infrastructure for Sustainable Development (QI4SD) Index	110
5.3.2 TBT/QI Stocktaking Document, Pan-African Quality Infrastructure, 2023 Edition	113
5.4 SUMMARY AND RECOMMENDATIONS	114
6. Key summaries and recommendations	116
7. Opportunity for the adoption of a regional strategy for OSBPs on fisheries products	120
Annexes	126

LIST OF FIGURES, TABLES AND BOXES

Figure 1	REC membership of African countries	35
Figure 2	Status of One-Stop Border Posts in Africa	46
Figure 3	Capture fish trends in the SADC (2017-2021)	49
Figure 4	Aquaculture production trends in the SADC (2017-2021)	50
Figure 5	Capture production: 5-year average (2017-2021) Unit (000 tonnes)	50
Figure 6	Aquaculture production: 5-year average (2017-2021) Unit (000 tonnes)	50
Figure 7	Top 10 global importers (2022)	52
Figure 8	Top 10 global exporters (2022)	52
Figure 9	Global share of trade in selected fish and fish products (2022)	53
Figure 10	Africa's fish and fisheries product trade performance (2018-2022)	53
Figure 11	Africa's trade composition in fish and fisheries products (2022)	54
Figure 12	Africa fish and fisheries products imports map (2022)	55
Figure 13	Africa's fish and fisheries products exports map (2022)	55
Figure 14	The SADC's trade composition in fish and fisheries products (2022)	56
Figure 15	Trade balance in fish and fisheries products in the SADC (2022)	56
Figure 16	The SADC's fish and fisheries product trade performance (2018-2022)	57
Figure 17	Madagascar's trade performance with the SADC (2018-2022)	61
Figure 18	Madagascar's exports of fish and fisheries products to the SADC (2018-2022)	62
Figure 19	Madagascar's top export destinations in the SADC	62
Figure 20	Malawi's trade performance with the SADC (2018-2022)	63
Figure 21	Malawi's exports of fish and fisheries products to the SADC (2018-2022)	63
Figure 22	Malawi's top export destinations in the SADC	64
Figure 23	Mozambique's trade performance with the SADC (2018-2022)	64
Figure 24	Mozambique's exports of fish and fisheries products to the SADC (2018-2022)	65
Figure 25	Mozambique's top export destinations in the SADC	65
Figure 26	United Republic of Tanzania's trade performance with the SADC (2018-2022)	66
Figure 27	United Republic of Tanzania's exports of fish and fisheries products to the SADC (2018-2022)	66
Figure 28	United Republic of Tanzania's top export destinations in the SADC	67
Figure 29	Zambia's trade performance with the SADC (2018-2022)	67
Figure 30	Zambia's exports of fish and fisheries products to the SADC (2018-2022)	68
Figure 31	Zambia's top export destinations in the SADC	68

Figure 32	Zimbabwe's trade performance with the SADC (2018-2022)	69
Figure 33	Zimbabwe's exports of fish and fisheries products to the SADC (2018-2022)	69
Figure 34	Zimbabwe's top export destinations in the SADC	70
Figure 35	Graphical representation of the OSBP concept	85
Figure 36	Relevant Southern Africa Border Posts	88
Figure 37	Chirundu location	89
Figure 38	Tunduma location	90
Figure 39	Mchinji location	90
Figure 40	Kasumbalesa location	91
Figure 41	Simplified flowchart of the process required to trade fisheries products through the OSBP concept	95
Figure 42	Border Post challenges experienced by traders	98
Figure 43	UNIDO's systemic approach for promoting standards and quality	106
Figure 44	Conceptual framework of the QI4SD index	111
Figure 45	QI4SD scores for countries in Africa (SADC Member States Involved in PROFISHBLUE project outline in red)	112
Figure 46	Stocktaking map of quality infrastructure in Africa	113
Figure 47	PAQI Index comparison and trend	114
Figure 48	Core components of the regional strategy for OSBPs on fisheries products	124
Table 1	Completed One-Stop Border Posts in the SADC	47
Table 2	Borders under consideration for One-Stop Border Post construction in the SADC	48
Table 3	Summary of intra-REC average tariffs applied (2021)	52
Table 4	Major exported fish and fisheries products	58
Table 5	Major imported fish and fisheries products	59
Table 6	Examples of difference between SPS and TBT risks and measures	81
Table 7	Overview of OSBP pillars	86
Table 8	Relevant border control agencies in the target countries	92
Box 1	Factors influencing traders to use informal trade routes	73
Box 2	Quality infrastructure definition	110
Box 3	Summary and implications from situational analysis of the SADC fisheries trade in the target countries	118
Box 4	Summary and implications from critical review of previous OSBP interventions	119
Box 5	Summary and implications from mapping of quality infrastructure in the target countries	119

ABBREVIATIONS

ACTReFA	African Continental Technical Regulation Framework
ADF	African Development Fund
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AFRAC	African Accreditation Cooperation
AFRIMETS	Intra-African Metrology System
AFSEC	African Electrotechnical Standardization Commission
AMU	Arab Maghreb Union
ARSO	African Organisation for Standardization
ASYCUDA	Automated System for Customs Data
AU	African Union
AUC	African Union Commission
AU DREA	African Union Department of Rural Development and Agriculture
AU-IBAR	Specialized Technical Offices AU-Inter-African Bureau for Animal Resources
BDS	Business Development Services
BIPM	Bureau International des Poids et Mesures
CA	Competent Authority
CAC	Codex Alimentarius Commission
CAMFA	Conference of African Ministers of Fisheries & Aquaculture
CBM	Coordinated Border Management
CEMAC	Central African Economic and Monetary Community
CEN-SAD	Community of Sahel-Saharan States
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for Eastern and Southern Africa
CU	Customs Union
DARBE	Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment
DRC	Democratic Republic of Congo
e-CoO	electronic Certificate of Origin
EAC	East African Community

ECCAS	Economic Community of Central African States	REC	Regional Economic Community
ECOWAS	Economic Community of West African States	RoO	Rules of Origin
EEZ	Exclusive Economic Zone	RVC	Regional Value Chain
EU	European Union	SADC	Southern Africa Development Community
FAO	Food and Agriculture Organization of the United Nations	SADCA	SADC Cooperation in Accreditation
FTA	Free Trade Agreement	SADCAS	SADC Accreditation Services
GDP	Gross Domestic Product	SADCMEL	SADC Cooperation in Legal Metrology
GVC	Global Value Chain	SADCMET	SADC Cooperation in Measurement Traceability
IAF	International Accreditation Forum	SADCSTAN	SADC Cooperation in Standardization
IAPSC	Inter-African Phytosanitary Council	SADCTBTSC	SADC Technical Barriers to Trade Stakeholders Committee
ICBT	Informal cross-border trade	SADCTRLC	SADC Technical Regulations Liaison Committee
IEC	International Electrotechnical Commission	SANAS	South African National Accreditation System
IGAD	Intergovernmental Authority on Development	SCOO	Simplified Certificate of Origin
ILAC	International Laboratory Accreditation Cooperation	SDGs	Sustainable Development Goals
INetQI	International Network on Quality Infrastructure	SISR	SADC Industrialization Strategy and Roadmap
IPPC	International Plant Protection Convention	SME	Small and Medium-Sized Enterprise
IQNET	International Certification Network	SPS	Sanitary and Phytosanitary
ITC	International Trade Centre	SQAM	Standardization, Quality Assurance, Accreditation and Quality Assurance
ITU	International Telecommunications Union	STR	Simplified Trade Regime
IUU	Illegal, Unreported and Unregulated	TBT	Technical Barriers to Trade
JRC	Joint Research Centre	TFA	Trade Facilitation Agreement
ISO	International Organization for Standardization	TFP	Trade Facilitation Programme
LDC	Least Developed Country	TRALAC	Trade Law Centre
NTB	Non-Tariff Barriers	VC	Value Chain
OECD	Organisation for Economic Cooperation and Development	UN	United Nations
OIML	Organization Internationale de Métrologie Légale	UNCLOS	UN Convention on the Laws of the Sea
OSBP	One-Stop Border Post	UNECE	United Nations Economic Commission for Europe
PAQI	Pan African Quality Infrastructure	UNIDO	United Nations Industrial Development Organization
PIDA	Programme for Infrastructure Development in Africa	URT	United Republic of Tanzania
PROFISHBLUE	Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in the SADC Region	WBG	World Bank Group
PSMA	Agreement on Port State Measures	WHO	World Health Organization
QI	Quality Infrastructure	WTO	World Trade Organization
QI4SD	Quality Infrastructure for Sustainable Development Index	WWF	World Wide Fund for Nature
RASAP	Regional Aquaculture Strategy and Action Plan	ZPWMA	Zimbabwe Parks and Wildlife Management Authority



FOREWORD BY THE UNIDO DIRECTOR GENERAL, MR. GERD MÜLLER



Africa is home to vast coastlines and some of the world's largest lakes and rivers. Increasing fisheries' production and regional trade has huge potential for economic growth. While challenges remain to Africa realizing the full potential of fisheries' formal trade across borders, we recognize the continent's commitment to regional integration and are also committed to removing bottlenecks and advancing the development of blue trade corridors across the region.

This publication is a result of UNIDO's ongoing work under the Programme for Improving Fisheries Governance and Blue Trade Corridors in the SADC Region (PROFISHBLUE). It provides a critical analysis and data related to the core characteristics of the SADC fisheries trade within target countries, the status of One-Stop Border Posts (OSBPs) in the SADC region and the need to further develop quality infrastructure and conformity assessment services for fisheries trade.

The conclusions will be used by the SADC with the support of UNIDO to advance a regional strategy for fisheries trade through OSBPs under PROFISHBLUE. The PROFISHBLUE project is a further milestone in UNIDO's work in blue trade corridor and fair and sustainable value chain development. With this project we are making a critical contribution to enhancing livelihoods, reducing hunger and strengthening the viability of blue supply chains across the SADC region.

Gerd Müller
UNIDO Director General

Sustainable and thriving blue ecosystems are critical to the livelihoods, food security and climate resilience of coastal communities. Supporting developing countries to leverage their blue resources responsibly for economic development and environmental protection is a top priority for UNIDO.

Our contribution to the Blue Economy is 'Blue Industry' which encompasses all water-based productive activities which enhance sustainable livelihoods, which strengthen industrial value chains and which protect the environment and facilitate innovation, thus supporting the overarching goals of sustainability: people, planet and prosperity.

While UNIDO's portfolio of Blue Industry projects span many cross-cutting sectors, we focus particularly on the trade of blue foods. The fisheries sector plays a critical role providing both diets and livelihoods for countless millions of people. Expanding fisheries trade is a massive contribution to the Sustainable Development Goal 2 (SDG 2) on ending hunger, malnutrition and food insecurity. The fisheries trade at the same time strengthens countries' own economic independence.

FOREWORD BY THE AFDB SOUTHERN AFRICA DIRECTOR GENERAL, MRS. LEILA MOKADDEM



As the Director General of the Southern Africa Regional Office, I am honoured to support this vital publication that highlights the crucial role of the blue economy in our region. The Southern African Development Community (SADC) is rich in fisheries resources and vibrant maritime enterprises essential for economic growth and community livelihoods. Our historic trade routes connecting the Atlantic and Indian Oceans provide unique opportunities to harness these resources sustainably.

Fisheries are not just economic drivers; they are lifelines for countless communities across SADC, supporting food security and providing employment. For instance, tuna catches in the Indian Ocean are valued at approximately US\$2.3 billion annually, accounting for about 25% of the global market supply. However, we face significant challenges, including climate change and illegal, unreported, and unregulated (IUU) fishing, which threaten the sustainability of our marine resources.

In response, the African Development Bank (AfDB) has launched the Programme for Improving Fisheries Governance and Blue Economy Trade Corridors (ProFishBlue). Supported by a US\$10 million grant

over four years (2022-2025), this initiative promotes sustainable fisheries management practices, enhances food security, creates jobs through value chains, and facilitates intra-regional trade.

Our commitment to the blue economy is exemplified by our focus on aquaculture development. Investing in aquaculture allows us to meet growing fish and protein demands while alleviating pressure on wild stocks. Additionally, we are dedicated to combating IUU fishing through regional cooperation and improved governance frameworks.

The AfDB's strategic goals align closely with our blue economy initiatives. Our new Ten-Year Strategy (2024–2033) emphasizes fostering inclusive green growth and building resilient economies across Africa. Central to this vision are our High 5 priorities: Light up and power Africa, Feed Africa, Industrialise Africa, Integrate Africa, and Improve the quality of life. These priorities guide our efforts to ensure that marine resources contribute to sustainable development while addressing critical issues such as climate change and economic inequality.

Collaboration is key to our success. We proudly partner with organizations like UNIDO to implement Africa's first regional quality infrastructure for intra-regional fish trade. This partnership will help harmonize policies across SADC member states, making it easier for stakeholders to engage in sustainable trade practices.

Despite recent progress—where intra-African fish exports have risen from 10% to 18%—we know there is much more work ahead. We must continue strengthening our governance frameworks and tackling IUU fishing to ensure that future generations can benefit from our marine resources.

This publication provides insights and tools to enhance intra-regional agri-commodity trade among AfDB member countries and development partners. By prioritizing

sustainable fisheries, aquaculture, marine tourism, renewable ocean energy, and education initiatives, we can unlock the full potential of SADC's blue economy.

ProFishBlue interventions and expected outcomes are consistent with the Bank's Feed Africa Strategy (2016-2025) and the Regional Integration Strategy Paper for Southern Africa (2020-2025). The strategic direction of the Blue Economy Flagship under Feed Africa is to improve nutrition security and reduce malnourishment, provide inclusive and resilient livelihoods along the fish value chain, and promote competitive fish value chains for intra-regional and international exports. These strategic directions are also aligned with the SADC Regional Indicative Strategic Development Plan (2020-2030), SADC Protocol on Fisheries (2001), and the SADC Protocol on Trade (1996). This publication is timely as it provides vital information and decision support tools towards intra-region agri-commodity trade to the AfDB and its Regional Member Countries and to other development partners and regional economic communities.

This publication is a key resource for everyone involved in the blue economy domain. It provides insights that will drive effective decision-making and collaborative efforts as we work together to achieve our shared goals.

I wholeheartedly endorse this significant contribution to the blue economy in Southern Africa. Together, let us commit to responsible stewardship of our marine resources, ensuring they contribute meaningfully to sustainable livelihoods and food security for generations to come.

Leila F. Mokaddem

*Director General
Southern Africa Regional Office, Pretoria*

FOREWORD BY SADC EXECUTIVE SECRETARY, HIS EXCELLENCY MR. ELIAS M. MAGOSI



Fishing and aquaculture enterprises play a crucial role in enhancing people's livelihoods and contributing to the economic development of the sixteen (16) members of the Southern African Development Community (SADC). The fishing and aquaculture sector directly employs an estimated 3.1 million people in the SADC region, and the region is estimated to consume an average of 12.9 kilogrammes of fish and fishery products per capita. At a macroeconomic level, the fisheries and aquaculture sector accounts for an estimated 3.5% of the SADC region's Gross Domestic Product (GDP) and 9% of the region's agriculture GDP. With the on-going increase in aquaculture production, these figures are expected to rise.

In the SADC region, fishing and aquaculture enterprises are interconnected by trade corridors which are supported by two Large Marine Ecosystems (LMEs), namely the Benguela Current LME in the Atlantic Ocean, and the Agulhas LME in the Indian Ocean. These are complemented by several transboundary lakes and rivers

including Malawi/Nyassa/Niassa, Tanganyika and Kariba, Okavango and Zambezi River Basins, and other inland water bodies. The Mozambique Channel, which connects the two large marine ecosystems, has historically been a trade corridor within the blue economy space in the region.

SADC recognises the importance of sustaining viable intra-regional trade of fish and fishery products. Currently, this trade is largely informal and requires significant improvement, especially in the flow of fish products across regional borders. To navigate these complexities, SADC Secretariat is implementing the Multinational Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in SADC Region, or PROFISHBLUE Project, funded by the African Development Bank (AfDB) under the African Development Fund 16 Regional Operations financing window.

The PROFISHBLUE project aims to: respond to the SADC Vision 2050 and the SADC Regional Indicative Strategic Development Plan (RISDP) (2020–2030), and complement implementation of the Regional Agricultural Policy, the SADC Protocol on Fisheries (2001) and the SADC Blue Economy Strategy and Action Plan (2023-2032). These strategic documents prioritise the fisheries and aquaculture sector and envisage interconnected, integrated competitive blue economies that will sustainably contribute to the development of the region. Substantially, the implementation of this project provides an opportunity to strengthen collaboration with development partners, including the AfDB, on the Feed Africa development priority under the Bank's High-Fives.

This publication draws immensely from the significant work done by the United Nations Industrial Development Organisation (UNIDO) as an implementing partner of the SADC PROFISHBLUE Project, specifically Component

2 on "Policy harmonization and trade facilitation towards intra-regional trade". The work aims to foster regional harmonisation, capacity building, efficient trade facilitation and border processes by optimising the One Stop Border Posts (OSBPs). This is done through the African Organisation for Standardization (ARSO), another PROFISHBLUE project implementing partner under the same component, with guidance from the SADC trade facilitation structures.

In an era of increased globalisation and technology, we are optimistic that this publication will not only enhance trade efficiency, but also stimulate socio-economic livelihoods, foster regional readiness for the implementation of the African Continental Free Trade Area (AfCFTA) and greater cooperation among Member States. It will serve as a guide to multi-stakeholders and

implementers of the OSBPs on facilitating the growing fishing and aquaculture trade across the Region. We are confident that, based on lessons learnt and best practices from the pilot OSBPs programme for fisheries across six bordering countries, we can collectively yield tangible results which can be replicated in future across the SADC region and beyond. The pilot countries are the Democratic Republic of Congo, Malawi, Mozambique, United Republic of Tanzania, Zambia, and Zimbabwe.

H.E. Mr. Elias M. Magosi
SADC Executive Secretary

FOREWORD BY THE ARSO SECRETARY GENERAL, DR. HERMOGENE NSENGIMANA



The African Organisation for Standardisation (ARSO) is mandated to harmonize standards and develop conformity assessment procedures that foster trade, industrial growth, and sustainable development. Harmonised Standards are essential for establishing the foundation of safe, traceable, and high-quality fisheries and aquaculture products. They define best practices across the value chain, from sustainable fishing methods and aquaculture practices to the safe processing and transportation of products. Similarly, conformity assessment ensures these standards are effectively implemented through testing, certification, and inspection procedures, ensuring alignment with National, Regional, and International requirements.

ARSO and the Southern African Development Community (SADC) have been working on the Harmonization of Fish Value Chain Standards, Quality Assurance, Packaging, Sanitary and Phytosanitary, and Eco-Certification for Improving Fisheries Governance and Blue Economy Trade Corridors in SADC under the PROFISHBLUE framework since August 2022. To implement this framework, ARSO collaborates with other relevant organizations, particularly the United Nations Industrial Development Organization (UNIDO), in supporting the quality infrastructure necessary for the fisheries and aquaculture

sectors. These joint efforts focus on harmonizing standards across the SADC region, streamlining conformity assessment processes, and facilitating the development of One-Stop Border Posts (OSBPs) to enable smoother, more efficient trade of fisheries products.

This collaboration will not only reduce non-tariff barriers but also promote the mutual recognition of standards and conformity assessments between countries, enhancing the efficiency of cross-border trade while ensuring that African fisheries products meet the set health, safety, and environmental and most importantly empower the industry with tools to compete on the global market.

The purpose of this publication is to highlight the collaborative efforts of ARSO, UNIDO, and other stakeholders under the PROFISHBLUE program. It also emphasizes the significant importance of quality infrastructure and harmonised African standards in promoting sustainable fisheries trade across the SADC region. Together, we are paving the way for enhanced regional integration, economic growth, and the long-term sustainability of Africa's Blue Economy.

ARSO is committed to collaborate with UNIDO and other stakeholders under the PROFISHBLUE initiative, and working towards enhanced regional integration, economic growth, and the long-term sustainability of Africa's Blue Economy for the benefit of the entire continent.

Dr. Hermogene Nsengimana
Secretary General
African Organisation for Standardisation (ARSO)

Executive summary

This publication provides an overview of the inception phase technical reports prepared by UNIDO under the Programme for Improving Fisheries Governance and Blue Trade Corridors in the SADC Region (PROFISHBLUE). The overall objective of PROFISHBLUE is to promote the sustainable management of fisheries resources while UNIDO's specific contribution relates to policy harmonization and trade facilitation through optimizing the One Stop Border Post (OSBP) initiative and supporting Business Development Institutions (BDIs) across targeted PROFISHBLUE countries. The primary purpose of the information presented herein is to lay the groundwork for UNIDO to develop a regional strategy on OSBPs for fisheries trade.

These technical reports are the result of a collaborative effort between UNIDO technical experts, PROFISHBLUE National Focal Points, SADC technical experts, and core PROFISHBLUE stakeholders, including officials based at OSBPs, testing laboratories responsible for fisheries, and private sector fish traders and entrepreneurs.

Based on these relevant consultations under PROFISHBLUE, there is evidence that while the SADC region maintains vast water resources and fisheries trade has the significant potential create jobs and advance livelihoods, critical inefficiencies persist across borders. Although many SADC countries have been making strides towards the use of OSBPs, the benefits of such blue trade corridors are yet to be realized in the case of fisheries products. Time-consuming border procedures, inadequate infrastructure, a lack of harmonized standards and challenging conformity assessment requirements are some of the main constraints. This has a negative impact on sensitive actors such as small-scale fish traders, who are unable to trade efficiently through formal channels,

as well as on the potential for SADC fisheries trade to contribute to national Gross Domestic Product (GDP) and respond to food security challenges. The development of a regional strategy to improve the efficiency of trade under OSBPs is therefore of great importance.

This OSBP strategy, now under development based on the findings of this report, aims to serve as a guide for the pre-selected PROFISHBLUE Member States to enhance formal fisheries trade through outlining the core requirements for overcoming barriers and avoiding disruption between Member States with operational OSBPs. Drawing on the research presented here, it is evident that the strategy should focus on fish for human consumption and products with substantive trade flows. It should also pilot the efficient use of the proposed simplified and harmonized procedures for the fish trade integrated in the OSBP approach using 4 operational border posts (Chirundu, Mwami/Mchinji, Tunduma/Nakonde and Kasumbalesa). There is also an indication that the concept of sanitary compliance and trade conformity assessment implementation framework for OSBPs should not only address checks at borders, but also the application of the process control model for fisheries.

The section on Quality Infrastructure (QI) shows that the SADC region in general is in a good position, with almost all Member States having a reasonably well-developed QI system within the context of each Member State's economic position. However, it also shows that the conformity assessment pillar for each Member State is not very strong, which supports the requirement for technical assistance in the PROFISHBLUE project in this regard.



OBJECTIVE

The overall objective of PROFISHBLUE is to promote the sustainable management of fisheries resources.



UNIDO'S CONTRIBUTION

UNIDO's specific contribution relates to policy harmonization and trade facilitation.



PURPOSE OF THIS REPORT

The primary purpose of this report is to lay the groundwork for UNIDO to develop a regional strategy on OSBPs for the fisheries trade.



OUTCOME

Such a strategy will provide a guide for the pre-selected PROFISHBLUE Member States to enhance the formal fisheries trade.

1) National Focal Points from the targeted countries under PROFISHBLUE: the DRC, Madagascar, Malawi, Mozambique, United Republic of Tanzania, Zambia and Zimbabwe.

2) Prepared by the Trade Law Centre (TRALAC), a subcontractor to UNIDO under PROFISHBLUE.

The PROFISHBLUE Programme

The African Development Fund (ADF) is currently funding the 4-year PROFISHBLUE project³ with the objective to promote the sustainable management of fisheries resources within the Blue Economy context in order to improve food and nutritional security, create employment through value chain activities, facilitate intraregional trade and build adaptive capacity against climate change and other external shocks. The project is being implemented by the SADC Secretariat which has agreements with 5 other implementation partners, including UNIDO, the African Organization for Standardisation (ARSO), the Food and Agriculture

Organization (FAO), the World Wide Fund for Nature (WWF) and WorldFish.

Within PROFISHBLUE, UNIDO has been assigned to component 2: 'Policy harmonization and trade facilitation towards intraregional trade'. In particular, UNIDO has been entrusted with the two sub-components listed below.

Component 2A

Replicate the pilot of the “One-Stop Border Post” programme for fisheries across 6 bordering countries (the Democratic Republic of Congo (DRC), Malawi, Mozambique, the United Republic of Tanzania (URT), Zambia and Zimbabwe).⁴

Under this component, UNIDO will be responsible for supporting the adoption by SADC partners states of a conformity assessment framework for mutual recognition and trade regulator instruments through the development of a regional strategy for OSBP for fisheries products; enhancing the capacity of inspection services through technical assistance, including laboratory, barcoding, inspection equipment and facilities; ensuring mutual recognition of services through accreditation support and quality assurance programmes; and enhancing the capacity of technicians, clusters of small and medium-sized enterprises (SMEs) and stakeholders on fish quality and sanitary and phytosanitary (SPS) measures.

3) AfDB. GPN - Multinational - Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in SADC Region (PROFISHBLUE). [online]. <https://www.afdb.org/en/documents/gpn-multinational-programme-improving-fisheries-governance-and-blue-economy-trade-corridors-sadc-region-profishblue>

4) It should be noted that while this component officially covers only six African countries (excluding Madagascar due to the lack of a physical land border), the technical reports below include Madagascar in the analysis, as it was initially considered for inclusion in component 2A

Component 2C

Provide business development services, accelerator and incubation/investment support for women and youth SMEs in the fisheries trade (in the DRC, Madagascar, Malawi, Mozambique, the URT, Zambia and Zimbabwe).

Under this component, UNIDO will be responsible for training business development service providers to enhance their technical skills in entrepreneurship, environmental management and other areas related to supporting SMEs involved in sustainable fisheries production. Following these training programmes, BDI's should become better equipped to support SME's on many aspects related to the fisheries trade.

During UNIDO's Inception Phase (June 2023–January 2024) of PROFISHBLUE, the team undertook a number of preparatory technical activities, including conducting an in-depth situational and trade analysis of the fisheries trade in targeted Southern African countries, critically reviewing previous OSBP interventions and mapping quality infrastructure across the target countries.

UNIDO then prepared a regional validation workshop and OSBP visit, which took place from 6 to 7 February 2024 in Lilongwe, Malawi. The purpose of the workshop and OSBP visit was to allow UNIDO to get feedback on the key findings and suggested pilot activities under PROFISHBLUE, to allow stakeholders to share their past experiences and lessons learned from varying approaches related to OSBP interventions and give to stakeholders a first-hand experience visiting a fully operational OSBP at the Mwami/Mchinji border.

The validation workshop was attended by SADC Member States focal points, PROFISHBLUE Implementation Partners, the SADC secretariat, PROFISHBLUE Focal Points, fisheries associations, private-sector representatives, Malawi and Zambia border officials, representatives of competent authorities and national standards bureaus and UNIDO experts. Following the validation workshop, UNIDO updated the technical reports to reflect the stakeholders' feedback.

The present publication is a collection of these technical reports. The publication was drafted by a core of UNIDO experts, reviewed by experts from the AfDB, the Pan African Quality Infrastructure (PAQI), the African Continental Free Trade Area (AfCFTA), SADC Secretariat and ARSO, and is presented here.



1

Introduction

This publication aims to present the initial findings from the UNIDO-implemented portion of the PROFISHBLUE project so as to allow external stakeholders with an interest in the SADC Blue Economy and fisheries trade to have public access to this data and analysis. UNIDO recognizes that the valuable information collected extends beyond project interventions and can be used by future stakeholders to continue improving regional trade dynamics between Member States.



The United Nations Industrial Development Organization (UNIDO) has a long-standing commitment to supporting Blue Economy initiatives globally and across Africa, including in areas such as fisheries, aquaculture, marine biotechnology, ocean energy and ocean-based commerce and trade. In recognition of the Blue Economy's continued importance in improving livelihoods, alleviating poverty, advancing food security and protecting the environment, UNIDO is now placing renewed emphasis on promoting sustainable "blue industries" in water-rich developing countries.

In the Southern Africa Development Community (SADC), UNIDO is supporting the SADC Secretariat to implement the African Development Fund (ADF) financed project titled *Programme for Improving Fisheries Governance and Blue Economy Trade Corridors in the SADC Region (PROFISHBLUE)*. The objective of the PROFISHBLUE project is to promote sustainable management of fisheries resources within the Blue Economy context.

A core component of the UNIDO-implemented assignment is focused on policy harmonization and trade facilitation towards intraregional trade through optimizing the pilot "One-Stop Border Post (OSBP)" and targets pre-selected bordering SADC countries.⁵ Among other objectives, the UNIDO component will lead to the development of a regional strategy on OSBPs for fisheries products piloted under specific border posts within the target countries. In preparation for the development of this strategy, UNIDO undertook several technical analyses, including conducting a trade analysis of targeted Southern Africa fisheries trade, critically reviewing previous OSBP interventions and mapping quality infrastructure across the target countries.

This publication aims to present the initial findings from these reports, allowing external stakeholders with an interest in the SADC Blue Economy and fisheries trade to have public access to this data and analysis. UNIDO recognizes that the valuable information collected extends beyond project interventions and can be used by future stakeholders to continue improving regional trade dynamics between Member States.

5) The Project's target countries are the Democratic Republic of Congo (the DRC), Malawi, Mozambique, the United Republic of Tanzania (the URT), Zambia and Zimbabwe.

The report begins by highlighting the importance of the Blue Economy and fisheries sector to the SADC region, before delving into the technical reports prepared by UNIDO. Taken together, these reports provide the background and analysis required to advance regional harmonization and overall increase the efficiency of the fisheries trade through OSBPs.

The first core chapter (Chapter 3) provides an analysis of available trade data related to the pre-selected countries targeted under UNIDO's work in the PROFISHBLUE project. Chapter 4 highlights the specific non-tariff barriers that hinder regional trade of fisheries products and provide clear recommendations for future OSBP pilot activity under PROFISHBLUE. Chapter 5 maps the Quality Infrastructure (QI) across the participating countries and leads to further work with the SADC Standardization, Quality Assurance, Accreditation and Quality Assurance (SQAM) structures at the SADC secretariat to implement trade measures for fish and fisheries products.

These core chapters are followed by key conclusions and recommendations, as well as a final section highlighting the opportunity presented by the development and adoption of a regional strategy for OSBPs on fisheries products under PROFISHBLUE.

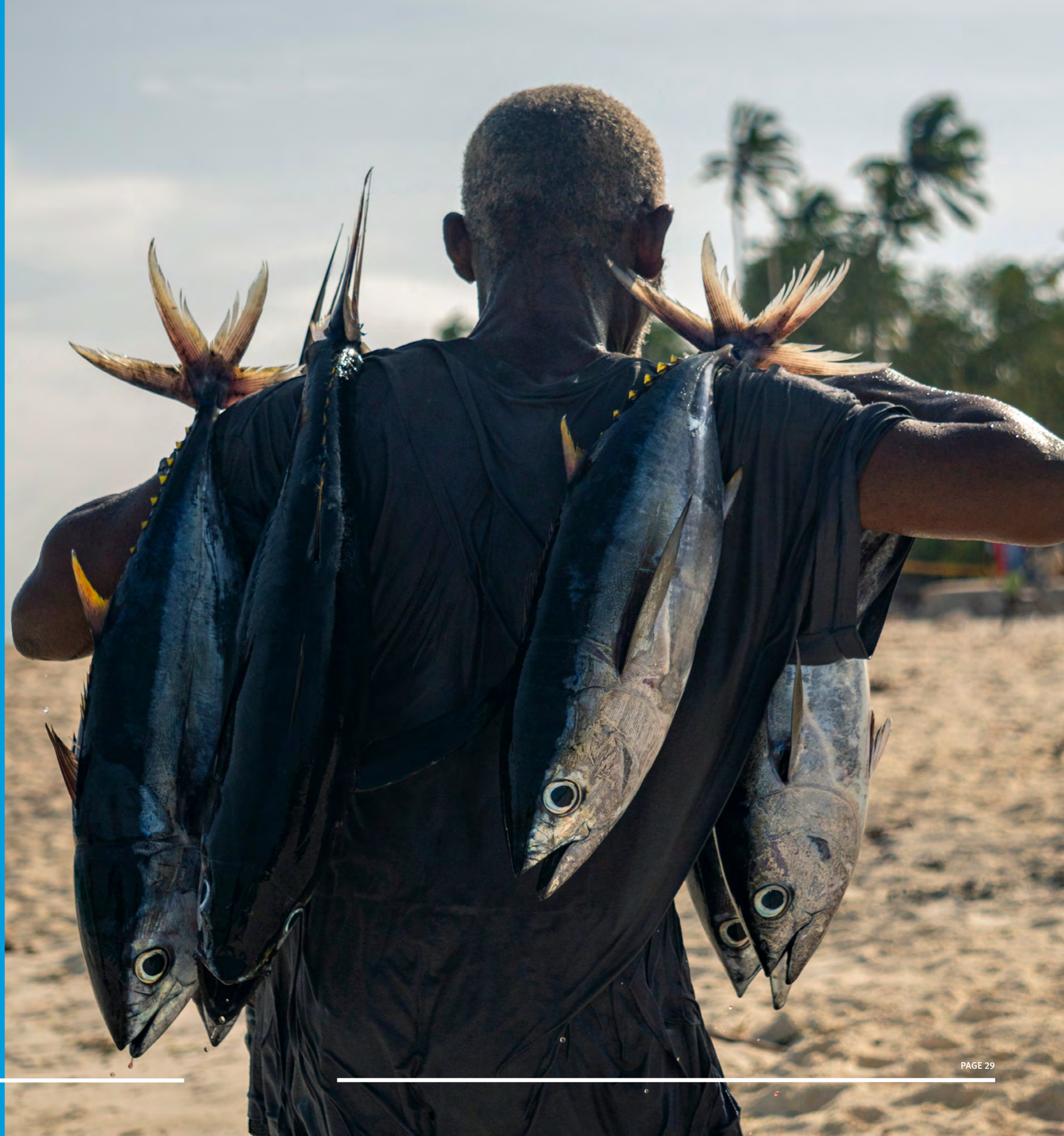
The main report is complemented by *Annex 1: Snapshot of the Fisheries and Aquaculture Sector in the Target Countries*, which showcases six short country profiles compiled for each of the SADC Member States targeted by PROFISHBLUE.



2

Importance of the Blue Economy, fisheries and blue trade corridors in the SADC region

The Blue Economy is a significant driver of sustainable development, particularly in the SADC region. Leveraging 6 coastal mainland states, 4 island states and multiple states with vast inland water sources, the Blue Economy sector currently employs millions of people across the region.



The Blue Economy, recognized globally for its critical role in the sustainable use, management and conservation of water resources, encompasses economic activities related to oceans, seas, lakes, wetlands and rivers. Its primary goals are to ensure the sustainable utilization of these resources to foster economic growth and improve livelihoods, while maintaining the environmental and ecological sustainability of the world's waters, especially oceans.

This economic framework includes both traditional sectors like fishing, aquaculture and marine tourism, as well as emerging sectors such as ocean energy, desalination and marine biotechnology. UNIDO further defines the contribution of Blue Industry within the Blue Economy as encompassing all water-based production activities that enhance sustainable livelihoods, strengthen industrial value chains, protect the environment and facilitate innovation, thus supporting the overarching goals of sustainability: people, planet and prosperity.

The economic potential of the Blue Economy is immense. According to the United Nations (UN), the ocean economy generates an annual turnover of US\$3-6 trillion, with potential to be developed even further. In Africa, the African Union (AU) reports that the Blue Economy contributes approximately US\$300 billion to the continent's economy and supports 49 million jobs. This sector is a significant driver of sustainable development, particularly in the SADC region. Leveraging 6 coastal mainland states, 4 island states and multiple states with vast inland water sources, the Blue Economy sector currently employs millions of people across the region.

One sector of importance and priority for the SADC region is fisheries and aquaculture, both in terms of consumption and food security, as well as trade potential. Currently, the SADC estimates that the fisheries sector contributes around 3.5% to the SADC Gross Domestic Product (GDP)⁶, with total average exports estimated to be worth US\$152 million, while average imports are estimated at US\$100 million. The fisheries and aquaculture sectors employ a total of about 3.5 million people, with a million estimated to benefit indirectly.⁷ Per-capita fish consumption in the region is about 12.5kg,⁸ which constitutes an average of over 16% of the total animal protein intake.

Despite the sector's current contributions to economic growth and the abundance of SADC fish resources, critical border bottlenecks restrict the cross-border flow of blue products, thus limiting formal livelihood opportunities for fish traders. As such, the SADC focuses on preparing Blue Economy strategies, such as the *SADC Blue Economy Strategy and Action Plan*,⁹ as well as implementing existing plans such as the *Regional Aquaculture Strategy and Action Plan (2016-2026)*,¹⁰ to emphasize the relevance of the sector and increase the local, national and regional economic growth and effective trade of fisheries and aquaculture products. Moreover, the Blue Economy and fisheries is an important sector referenced throughout the SADC's Regional Indicative Strategic Development Plan 2020-2030 and the SADC Industrialization Strategy and Roadmap (SISR), 2015-2063.¹¹

One way in which the SADC is targeting the development of fisheries trade is via the strengthening of Blue Trade Corridors or routes through which blue products (such as fish and aquaculture) are traded. These corridors

are essential for countries wanting to advance the economic benefits associated with their Blue Economy resources, as they connect markets and foster regional integration, thus promoting greater trade and investment across blue value chains. Productive and compliant Blue Trade Corridors require the presence of both physical infrastructure, such as airports, ports, roads and railways, as well as soft infrastructure, including harmonized regulations and standards, logistics services and customs procedures.

OSBPs, defined as physically co-located land borders which place officials of two countries in each other's border so that outward and inward clearance is performed in one place sequentially, is one way to strengthen the development of Blue Trade Corridors. Functioning OSBP's with the relevant infrastructure, equipment and procedures allow for efficient and effective trading of blue products between border countries.

In addition to the required agreements, infrastructure and enabling environments, countries must also have adequate QI and conformity assessment procedures in place to ensure that products can comply with export and import requirements at OSBPs. As testing, inspection and certification are often time-consuming, ineffective or non-existing in the SADC region, fisheries actors continue to face barriers to trading compliant products (even if the necessary trade corridors exist). As such, the SADC region has recognized the need for additional capacity building of both public-sector officials who are involved in conformity assessments, as well as private-sector fish traders and SMEs, which are required to obtain health and sanitary certifications before exporting.

In the SADC, the development of operational OSBPs – and the ambitions for such OSBPs to be optimized and strengthened through harmonized standards and advanced conformity assessments – has been growing and many development projects (including PROFISHBLUE) are aimed at developing these corridors further.

6) SADC, FAO join hands to strengthen development and management of fisheries and aquaculture. FAO Regional Office for Agriculture. [online]. <https://www.fao.org/africa/news/detail-news/en/c/1195772/>

7) SADC – Fisheries. [online]. <https://www.sadc.int/pillars/fisheries>

8) SADC, FAO join hands to strengthen development and management of fisheries and aquaculture (2024). FAO Regional Office for Agriculture. [online]. <https://www.fao.org/africa/news/detail-news/en/c/1195772/>

9) SADC Fisheries Technical Committee Meeting

10) FAO. SADC Regional Aquaculture Strategy and Action Plan (2016-2026). FAO. [online]. <https://faolex.fao.org/docs/pdf/sad212466.pdf>

11) SADC. SADC Industrialization Strategy and Roadmap (SISR), 2015-2063. [online]. <https://sadc-eu.sardc.net/sadc-industrialization-strategy-roadmap-2015-2063/>

3

Situational analysis of the SADC fisheries trade in the target countries

This chapter examines trade in fish and fisheries products specifically for human consumption in seven southern African countries, namely the DRC, Madagascar, Malawi, Mozambique, the URT, Zambia and Zimbabwe.



3.1 INTRODUCTION

This chapter examines trade in fish and fisheries products specifically for human consumption in seven southern

African countries, namely the DRC, Madagascar, Malawi, Mozambique, the URT, Zambia and Zimbabwe.

The following can be noted about the regional economic community (REC) membership of each country in the analysis:

- ▶ All countries except Mozambique belong to more than one REC.
- ▶ All countries are members of the SADC, which is a Free Trade Agreement (FTA). The DRC and Angola are yet to implement the SADC Trade Protocol.
- ▶ The DRC, Madagascar, Malawi, Zambia and Zimbabwe belong to the Common Market for East and Southern Africa (COMESA), which is also an FTA and is in the process of attaining customs union status.
- ▶ The United Republic of Tanzania and the DRC also belong to a fully established customs union, the East African Community (EAC).
- ▶ The DRC belongs to the Economic Community of Central African States (ECCAS). The former (CEN-SAD) currently has no trade agreement in place to provide for preferential treatment of Member States, while the latter (ECCAS) is a customs union because all members are part of the Central African Economic and Monetary Community (CEMAC).

This chapter first provides an overview of the fisheries sector in Africa and the SADC region. It then presents a review of the production and consumption patterns of fish and fish products among the seven countries under review. Market access issues, including rules of origin and one-stop border posts, are briefly highlighted. The trade analysis of fish and fisheries products provides the global perspective, which is then narrowed down to the continental level and finally to the SADC region. The chapter also discusses informal cross-border trade in fish

and fisheries products and value chains. Annex 1 outlines the tariff lines and their respective descriptions.

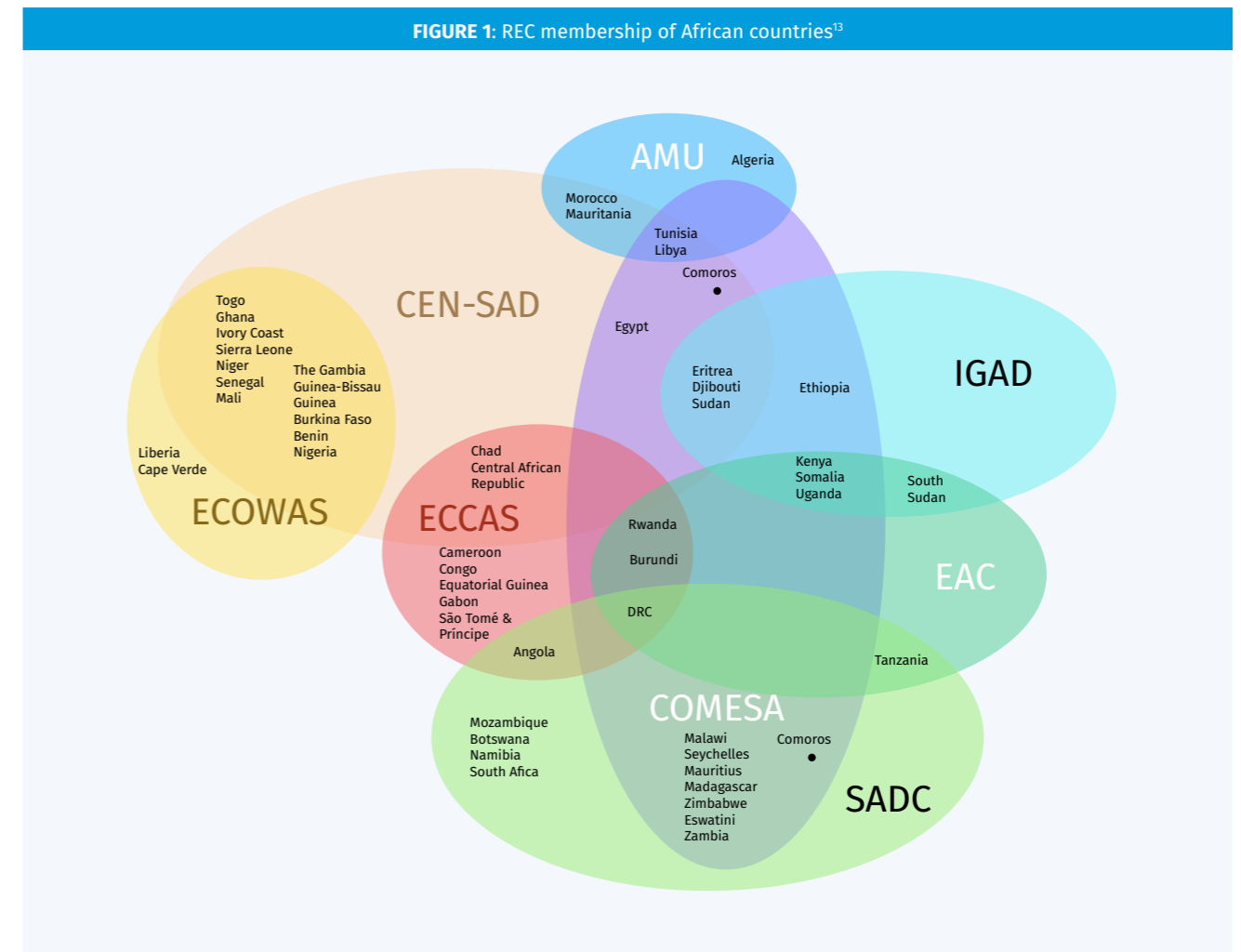
Historically, there have been various attempts to integrate economic activity in Africa through regional, multilateral and bilateral cooperation agreements. At the continental level, there are eight official RECs recognized by the African Union: the Arab Maghreb Union (AMU), the CEN-SAD, COMESA, the EAC, the Economic Community of Central African States (ECCAS), the Economic Community

of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD) and the SADC.

Figure 1 summarizes the REC membership of African countries within the eight official REC's. Note that the issue of multiple memberships remains perverse. The African Continental Free Trade Area (AfCFTA) aims to "resolve the challenges of multiple and overlapping memberships and expedite the regional and continental integration processes."¹² Within these RECs, five have

attained FTA status. The EAC, ECCAS and ECOWAS have gone further and attained customs union (CU) status, while COMESA has a partial CU in force. IGAD, AMU and CEN-SAD have no trade agreements in force after stalling. The REC FTAs are building blocks of the AfCFTA and the AfCFTA has renewed efforts to establish preferential trade agreements among the Member States of the latter three REC's.

FIGURE 1: REC membership of African countries¹³



12) Erasmus, G. 2021. *Regional Economic Communities and the AfCFTA Investment Protocol*, Blog, tralac, Stellenbosch. [online]: <https://www.tralac.org/blog/article/15173-regional-economic-communities-and-the-afcfta-investment-protocol.html>

13) tralac AfCFTA Handbook (2023).

A common objective of most RECs highlighted above is the elimination of tariffs, non-tariff barriers and the free movement of goods and persons. To this end, trade facilitation becomes key. Trade facilitation involves simplifying and harmonizing cross-border trade procedures, which includes collecting, presenting, communicating and processing data for the movement of goods across borders. Trade facilitation is essential for boosting intra-African trade by making cross-border trade

more seamless, faster, cheaper, inclusive, transparent and predictable. Improved trade facilitation can lead to greater intra-African trade compared to just removing tariffs.¹⁴ Trade facilitation will be a game changer for the fisheries sector and beneficial to small-scale traders, given the post-harvest losses incurred in this sector.



14) tralac, 2023. *Trade Facilitation Agenda in the AfCFTA: Factsheet*, Infographic, Trade Law Centre, Stellenbosch. [online]: <https://www.tralac.org/resources/infographic/16188-trade-facilitation-agenda-in-the-afcfta-factsheet.html#:~:text=Trade%20facilitation%20includes%20simplifying%20and,movement%20of%20goods%20across%20borders>

3.2 TRADE POLICIES AND REGULATIONS

3.2.1 National regulations

The countries under review in this chapter have established legal frameworks to manage their fisheries and aquatic ecosystems. A summary of each country's

domestic legal instruments on fish and fisheries products is provided below.



THE DEMOCRATIC REPUBLIC OF CONGO¹⁵

The DRC has two main laws that regulate fisheries: The Decree on Exclusive Fishing Rights of 1932 and the Hunting and Fishing Act of 1937. Along with these laws, various regulations and ordinances are associated with them. However, the 1937 Act was established before most international agreements related to fisheries came into existence. Therefore, it needs to be revised to consider the more recent regional and international obligations. Briefly, the legal framework in the DRC can be summarized as follows:

- ▶ The 1932 Decree on Exclusive Fishing Rights outlines the general terms and conditions governing fishing practices, alongside the rights and obligations of each contracting party.
- ▶ Ordinance No. 432/Agri. of 26 December 1947, amended in 1952 and 1954, mandates Fisheries Officers to regulate fishing activities.
- ▶ Throughout the country, the use of electro-fishing, explosives and toxic substances is prohibited by 1981 regulations and illegal fishing gear and catches are subject to seizure.
- ▶ The 1979 Ordinance (amended in 1983) outlines the various fishing permits and their fees. There are four categories: industrial, artisanal, traditional and sport fishing.

The government of the DRC has been working on the process of revising its laws for almost 30 years now. A first draft of the Fisheries Bill, which focused on inland fisheries, was prepared in 1985 with the support of an FAO regional project. Subsequently, a second draft of the Fisheries Bill, entitled 'Draft Law on the Fisheries and Aquaculture Code', was prepared in 2008, but it has not yet been passed to the Parliament.

15) Cacaud, P. 1999. *Review of Institutional and Legal Aspects Relating to the Management of Lake Tanganyika Fisheries*, Page 31-37. [online]: <https://www.fao.org/fishery/static/LTR/FTP/TD95.PDF>



MADAGASCAR¹⁶

In Madagascar, the Fisheries Act of 1993 and the Fisheries and Aquaculture Code of 2015 are key domestic laws that regulate fisheries production and trade. These laws aim to ensure the sustainable governance and management of fishery resources, preserve aquatic ecosystems, protect the biological diversity of Malagasy waters and in high seas for straddling stocks, increase the contribution of the fishing and aquaculture sector to food and nutritional security and promote the economic and social development of Madagascar for the well-being of current and future generations.



MALAWI

The Fisheries Conservation and Management Act, 1997 provides rules relative to the conservation and management of Malawian fisheries,¹⁷ which are managed according to the National Fisheries and Aquaculture Policy. The aim is to improve the quality of life for fishing communities by increasing harvests within safe, sustainable yields. To ensure the sustainable management of fisheries resources, the Department of Fisheries has established regulations including closed seasons or areas, gear limitations, fish size limits and licensing of fish gear. These measures are applied to various water bodies in Malawi, including Lake Malawi. There are three fisheries governance systems used in Malawi: traditional, government-centred and co-managed, with the traditional system relying on traditional chieftaincy as guides.¹⁸



MOZAMBIQUE

The Fisheries Act No. 3/90 applies to Mozambican fishing vessels in international waters or third countries' waters. It defines six types of fisheries and sets general principles for management and administration. The Council of Ministers manages and develops the sector, negotiates agreements and ensures plans are implemented. The Secretariat of State for Fisheries creates policies. The law also prioritizes small-scale fisheries, creates a development fund, develops aquaculture, resolves conflicts and promotes recreational fishing and processing plants.



THE UNITED REPUBLIC OF TANZANIA¹⁹

The URT's fisheries are regulated by the Fisheries Act 2003 (No. 22 of 2003) and the Deep-Sea Fishing Authority Act 1998. The Fisheries Act (2003) replaced the Fisheries Act of 1970 to make provisions for sustainable development, protection, conservation, aquaculture development, regulation and control of fish, fish products, aquatic flora and its products and for related matters. Key regulations include the Fisheries Regulations, 2009 (G.N. No. 308 of 2009) and several others. Other related legislation includes the Territorial Sea and Exclusive Economic Zone Act 1989, as well as the Marine Parks and Reserves Act 1994.



ZAMBIA

The Fisheries Department manages the Fisheries sector in Zambia, which is regulated by the Ministry of Agriculture and Livestock. The Fisheries Act of 1974 is responsible for governing the sector. The government passed the Fisheries Act No. 22 of 2011 to promote community involvement in fisheries management and the development of the aquaculture sector. As per the Act, the Ministry is mandated to implement an annual fishing ban from 1st December to 28th February to protect the breeding of commercially preferred Tilapia species. This helps to regulate the fish population in water bodies and ensure that fish can breed during this period.²⁰



ZIMBABWE²¹

In Zimbabwe, the management of fish falls under the jurisdiction of natural resource legislation, namely the Parks and Wildlife Act (Chapter 20:14) of 1996. The responsibility for enforcing this legislation lies with the Ministry of Environment, Tourism and Hospitality Industry, through the Zimbabwe Parks and Wildlife Management Authority (ZPWMA). However, there is currently no fisheries management policy in place. The government's objective is to promote the sustainable utilization of fish resources while preserving biodiversity. The government aims to increase production from both capture fisheries and aquaculture to strengthen the rural economy, create employment opportunities and enhance household food security.

16) Nairobi Convention, "n.d." *Madagascar Marine and Coastal Resources Governance*. [online]: <https://www.nairobiconvention.org/madagascar-country-profile/madagascar-marine-and-coastal-resources-governance/>

17) Malawi Fisheries Conservation and Management Act – Chapter 66:05. [online]: <https://malawilii.org/akn/mw/act/1997/25/eng@2014-12-31>

18) Ghambi C, Mzengereza K. Compliance and Enforcement of the Fisheries Regulations on Lake Malawi in Nkhatabay District. *Fish & Ocean Opj.* 2016; 1(2): 555557. [online]: <https://juniperpublishers.com/foaj/pdf/OFOAJ.MS.ID.555557.pdf>

19) FAOLEX Database, 2024. Tanzania Fisheries Act 2003 (No. 22 of 2003), Food and Agricultural Organization (FAO). [online]: <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC053024>

20) Bwalya, M. Chaunga, C. 2015. *Effective Management of Fisheries in Zambia*, Policy Monitoring and Research Centre (PMRC), Zambia. [online]: <https://www.pmrzambia.com/wp-content/uploads/2017/08/Effective-Management-of-Fisheries-Research-Report.pdf>

21) Lake Kariba Fisheries Institute, "n.d." *Fishing Regulations* [online]: <https://www.lkfri.org.zw/fishing-regulations/>

3.2.2 Trade agreements impacting fisheries trade



INTERNATIONAL TRADE AGREEMENTS

The following international agreements impact the fisheries trade:

1 World Trade Organization Agreement on Fisheries Subsidies

The **World Trade Organization (WTO) Agreement on Fisheries Subsidies** is the first WTO agreement to focus on environmental sustainability and mainly applies to marine fisheries. It is therefore of interest to coastal countries. It establishes a set of binding prohibitions and rules that seek to ensure that the support provided by governments to their fisheries sector does not undermine the sustainability of marine resources.

The Agreement was adopted at the 12th Ministerial Conference in June 2022. It promotes sustainable fishing practices by prohibiting harmful fishing subsidies that encourage overfishing, thus leading to the depletion of fish stocks. Specifically, the Agreement prohibits the following subsidies:

- Subsidies that incentivize IUU fishing activities.
- Subsidies on activities related to overfished stocks.
- Subsidies provided to fishing and fishing-related activities in unregulated waters.

Other provisions require that members take “special care and exercise due restraint” when granting subsidies to vessels not flying their national flag and when granting subsidies to fishing stocks where the status of the stock is unknown.

Members also agree to “exercise due restraint” in raising concerns involving Least Developed Country (LDC) members. It should be noted that, within the target countries for PROFISHBLUE, the DRC, Madagascar, Malawi, Mozambique, the URT and Zambia are all classified as Least Developed Countries, while Zimbabwe is not (although it should be noted that this is because Zimbabwe chose not to be classified as such).²²

None of the seven states targeted under PROFISHBLUE have yet completed their domestic acceptance of the Agreement and deposited their “instruments of acceptance” to the WTO. A second round of negotiations on the Agreement occurred at the 13th Ministerial Conference, although it ended without an agreement.

2 WTO Sanitary and Phytosanitary Measures and Technical Barriers to Trade Agreements

The **WTO Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT) Agreements**:

- The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) came into effect on 1 January 1995, when the WTO was established. This agreement deals with the implementation of regulations related to food safety, animal health and plant health.²³ Fisheries are impacted by this Agreement and exporters need to comply with each Member State’s SPS requirements before a product enters the country’s market.

22) Committee for Development Policy & United Nations Department of Economic and Social Affairs: <https://www.un.org/development/desa/dpad/least-developed-country-category/lcds-at-a-glance.html>

23) WTO, 2010. Sanitary and Phytosanitary Measures, World Trade Organization, Geneva. [online]: https://www.wto.org/english/res_e/publications_e/sps_agreement_series_e.htm

- The WTO Agreement on Technical Barriers to Trade (TBT Agreement) lays down rules and procedures related to the development, approval and implementation of voluntary product standards, mandatory technical regulations and the corresponding procedures (such as testing or certification) used to determine whether a particular product meets those standards or regulations. The rules of the TBT Agreement are designed to differentiate genuine standards and technical regulations from those intended to protect domestic industries. Standards, technical regulations and conformity assessment procedures should be developed and enforced in a manner that is impartial, transparent and based on relevant international standards and guidelines, whenever applicable.²⁴

3 Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

The **Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA)** was adopted under the auspices of the FAO in 2009 and came into force in 2016. The PSMA is concerned with marine fisheries. It is applicable to foreign fishing vessels that catch fish and foreign carrier vessels that transport fish, but not to container vessels. In early 2021, there were 68 parties to the PSMA, including six of the ten SADC coastal States: Madagascar, Mauritius, Mozambique, Namibia, the Seychelles and South Africa.²⁵

Other initiatives to combat IUU fishing include the African Development Bank’s work with the World Wide Fund for Nature (WWF) and the SADC, which involves the establishment of the SADC Regional Fisheries Monitoring, Control and Surveillance Coordination Centre (MCSCC).²⁶

4 United Nations Convention on the Law of the Sea

United Nations Convention on the Law of the Sea (1982): popularly known as UNCLOS, the Law of the Sea Convention or the Law of the Sea treaty, this is an international agreement defining the rights and responsibilities of nations with respect to their use of the world’s oceans. It also establishes guidelines for businesses, the environment and the management of marine living resources.

Other notable international Agreements include the United Nations Framework Convention on Climate Change (1992), the Paris Agreement, the Convention on Biological Biodiversity (1992), the 2030 Agenda for Sustainable Development, the Ramsar Convention and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), among others.

24) USTR, “n.d.” Technical Barriers to Trade, Office of the United States Trade Representative, Washington. [online]: <https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/technical-barriers-trade#:~:text=The%20WTO%20Agreement%20on%20Technical,to%20determine%20whether%20a%20particular>

25) SADC, 2021. Port State Measures - Keeping Illegally Caught Fish Out Of SADC Markets, SADC Fisheries Policy Brief, SADC Secretariat, Gaborone. [online]: https://stopillegalifishing.com/wp-content/uploads/2021/09/SADC-Fisheries-Policy-Brief_2021_English.pdf

26) Stop Illegal Fishing, 2024. *President of the Republic of Mozambique oversees the Groundbreaking Ceremony for the SADC’s new MCS Centre*, TradePress, Stop Illegal Fishing. [online]: <https://stopillegalifishing.com/news-articles/president-of-the-republic-of-mozambique-oversees-the-groundbreaking-ceremony-for-the-sadcs-new-mcs-centre-2/>



REGIONAL TRADE AGREEMENTS

The following Agreements impact the fisheries trade at the regional level:

1 The SADC Protocol on Fisheries

The SADC Protocol on Fisheries lays the foundations for cooperation in respect to fisheries within the region and requires cooperation between Member States in enforcing international conservation and management measures. The objective of this Protocol is to promote the responsible and sustainable use of the living aquatic resources and aquatic ecosystems of interest to State Parties to:

- Promote and enhance food security and human health.
- Safeguard the livelihood of fishing communities.
- Generate economic opportunities for nationals in the region.
- Ensure that future generations benefit from these renewable resources.
- Alleviate poverty with the ultimate objective of its eradication.

The SADC Fisheries Protocol binds all Member States to adopt common positions and undertake coordinated and complementary actions concerning international forums and bodies.²⁷

The SADC Heads of State endorsed the SADC Protocol on Fisheries in 2001 to promote responsible and sustainable use of aquatic resources for food security, livelihood protection, economic opportunities and poverty alleviation. The commitment focuses on regional cooperation, governance strengthening, action plans against IUU fishing development and surveillance capacity. The Protocol's implementation, guided by the 2010 Implementation Strategy, addresses aquaculture, shared fisheries management, suppression of IUU fishing, small-scale fisheries and the fish trade. This Programme is facilitated by the SADC Technical Committee on Fisheries, with backing from the SADC Working Group on Aquaculture and the SADC Task Force on IUU fishing.²⁸

At the national level, State Parties commit to harmonizing laws, policies, plans and programmes on fisheries to achieve the protocol's objectives, emphasizing compliance with conservation measures to prevent over-exploitation of aquatic resources. Internationally, State Parties undertake coordinated actions and establish common positions in relevant forums, conventions and agreements. The protocol encourages cooperation in fisheries surveillance, law enforcement and sharing information on fishing activities. Special provisions address penalties, extradition procedures and joint actions against illegal fishing.

The Protocol emphasizes the importance of harmonizing legislation for the management of shared resources. It criminalizes illegal fishing and facilitates cooperation on the pursuit of vessels violating laws across jurisdictions. It encourages coordination on penalties for illegal fishing, joint actions against vessels undermining the Protocol's provisions and the registration of fishing vessels.

Specific provisions focus on artisanal, subsistence and small-scale commercial fisheries. State Parties commit to balancing

social and economic objectives, protecting fishing rights and optimizing economic benefits. They agree to facilitate infrastructure development, support services and structured programmes for these fisheries. Additionally, they aim to promote education, empowerment and the involvement of fishermen in the control and management of their activities. The Protocol recognizes the importance of traditional resource management systems and indigenous knowledge.

It is important to make special reference to Article 16 of the Protocol, which is on "Trade & Investments". Article 16 (1a), states that Parties shall promote trade by: "reducing barriers to trade and investment". Other sections that are critical to the fisheries trade are: Article 16 (4c); Article 16 (9). For a list of protected fish stocks, see the Southern African Sustainable Seafood Initiative website.²⁹

Madagascar has not signed the Protocol, but is bound to do so, given that the Protocol has already come into effect.

2 Rules of Origin (RoO)

Origin status can be bestowed on a product in one of two ways: either the product is wholly produced within a country's border or it has been produced using imported materials but the production within state borders meets some minimum processing or value-added requirement. The EAC, COMESA and the SADC are all aligned in terms of rules of origin for fish and aquaculture products;³⁰ they all fall under wholly originating requirements. This means that origin status is only conferred upon fisheries products that have been fished or farmed within a Member State's borders or waters (such as lakes, rivers and ocean territory).

3 Sanitary and Phytosanitary Measures

The SADC introduced the SPS Annex in 2008 as part of its Protocol on Trade, establishing a regional policy framework for SPS measures. However, like the WTO SPS Agreement, the SADC SPS Annex lacks explicit references to key concepts like non-discrimination and non-arbitrariness. Specific articles within the SPS Annex deviate from the WTO SPS Agreement, addressing changes in relevant international organizations, transparency requirements and the burden of proof for adopting provisional SPS measures. The SADC's strategy focuses on harmonization, emphasizing compliance with the SPS Annex, the use of international standards and the active participation in international standard-setting organizations. Instead of developing regional standards, the SADC creates regional guidelines and collaborates with partners for capacity building in SPS matters.

The SADC (the EAC and COMESA) all have their Protocols on SPS measures, but each country differs in what has been mandated in domestic law, some failing to implement requirements as per the Annex on SPS (or the WTO Agreement). Annex 3 summarized the national SPS measures for the countries under review.

Other notable regional trade agreements include the Nairobi Convention and the Abidjan Convention.

27) SADC, 2001. SADC Fisheries Protocol. SADC Secretariat, Gaborone. [online]: https://www.sadc.int/sites/default/files/2021-08/SADC_Protocol_on_Fisheries.pdf

28) SADC, 2019. Status of Integration in the Southern African Development Community (SADC), SADC Secretariat, Gaborone. [online]: https://www.sadc.int/sites/default/files/2021-08/Status_of_Integration_in_the_SADC_Region_Report.pdf

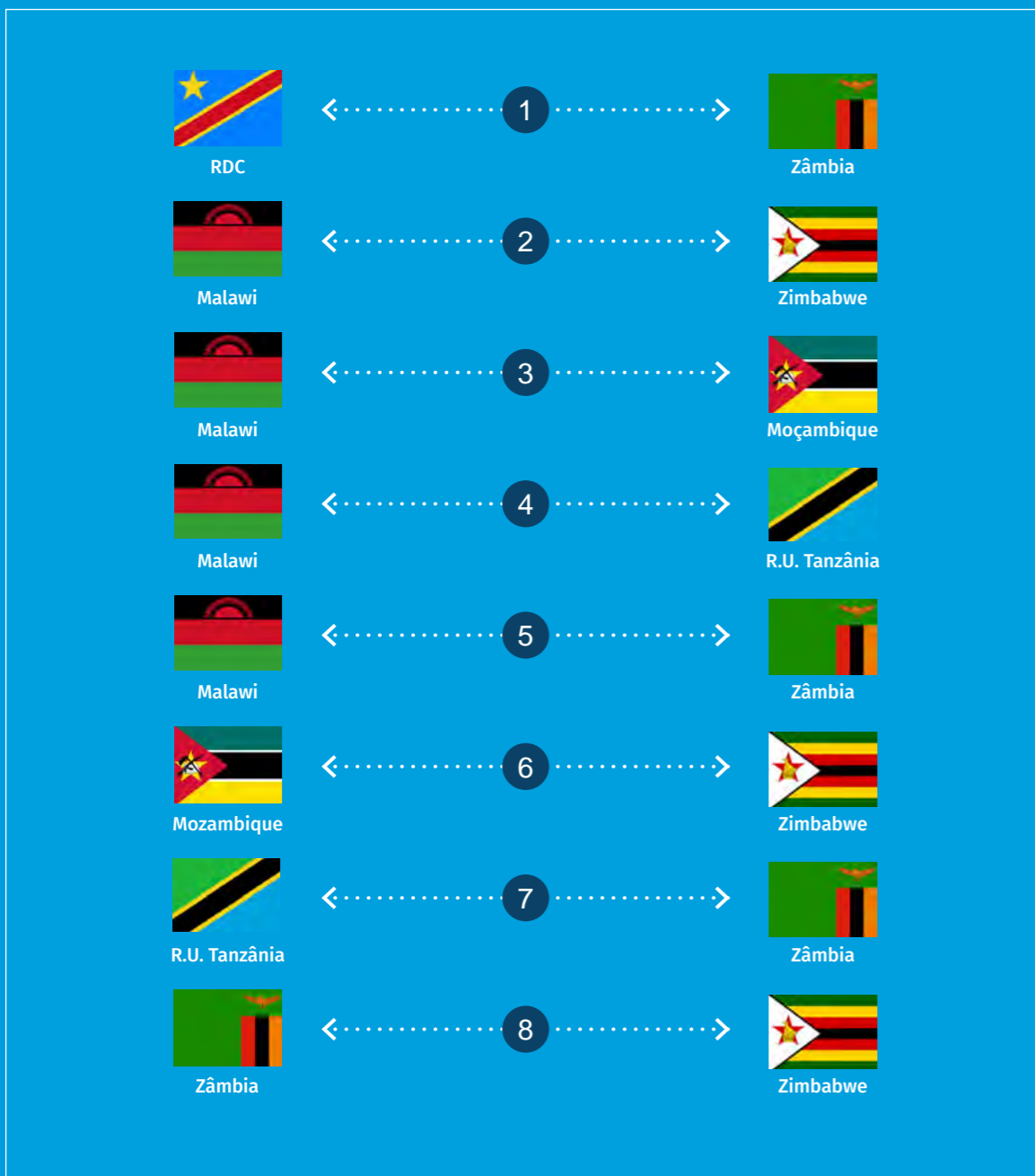
29) WWF, "n.d." The Southern African Sustainable Seafood Initiative. [online]: <https://wwfsassi.co.za/>

30) This information can be found in Annex I (Concerning Rules of Origin) to the SADC Protocol on Trade, the COMESA Protocol on the Rules of Origin and the EAC Customs Union Rules of Origin. See the appendices on origin requirements by goods category (citations here).



BILATERAL TRADE AGREEMENTS

Six of the seven SADC countries under review have at least one bilateral trade agreement with a partner country. Some of the bilateral agreements are comprehensive and allow for preferential treatment of goods originating from the respective countries. In other circumstances, the bilateral agreements are only for cooperation and the establishment of OSBP. The countries listed below have bilateral trade agreements.



SUMMARY

The debate on the benefits of trade has dominated discussions globally and more specifically in Africa, where there is consensus that trade is the key to long-term, sustainable economic growth and development. Therefore, it is critical that Africa increase intra-African trade.³¹ Much of the low intra-African trade experienced in the past two decades has been attributed to protectionist trade policies and high non-tariff trade costs, which curtail cross-border trade among African countries. The advent of the AfCFTA is set to change the trading landscape in Africa and, if implemented successfully, will boost intra-African trade.

Cross-border fisheries trade can benefit from liberalizing markets through regional integration and improving the seamless movement of goods and people across borders. This can significantly boost the intraregional fisheries trade. Additionally, trade facilitation can enable countries to expand their range of traded products, offering consumers more choices, including chilled, frozen and canned fisheries products, as well as fresh, salted, sun-dried, smoked and deep-fried products. UNIDO is working on the PROFISHBLUE project to support traders and facilitate increased cross-border trade among neighbouring countries in Southern and East Africa.

3.3 ONE-STOP BORDER POSTS: AN OVERVIEW

OSBPs are specialized border crossing points that aim to simplify and expedite the trade and movement of goods and people between neighbouring countries. OSBPs are designed to centralize border control procedures and services in a single location, thus reducing duplication and inefficiencies. The concept of OSBPs involves integrating various border agencies, such as customs, immigration and quarantine in a coordinated and harmonized approach. This allows for synchronized processes and procedures, resulting in faster and more efficient clearance of goods and travellers.³²

Africa has identified 76 OSBP sites, 10 of which are completed and fully operational in East, West and Southern Africa. 12 OSBPs are still under construction, 5 are in planning and 49 are pending design and construction. Figure 2 highlights the status of OSBPs in Africa.

31) Songwe, V. 2019. Intra-African trade: A path to economic diversification and inclusion, Brookings, [online]: <https://www.brookings.edu/articles/intra-african-trade-a-path-to-economic-diversification-and-inclusion/>

32) NEPAD, 2022. *One-Stop Border Post Sourcebook*, African Union. [online]: <https://www.nepad.org/publication/one-stop-border-post-sourcebook>

FIGURE 2: Status of One-Stop Border Posts in Africa³³



In Southern Africa, there are 15 OSBP sites that service six of the seven target countries under PROFISHBLUE (the DRC, Malawi, Mozambique, the URT, Zambia and Zimbabwe). Two of the OSBPs are completed and fully operational OSBPs, of which the Chirundu OSBP was the first to be opened and the Mchinji/ Mwami OSBP the latest to be completed and commissioned (Table 1).

Both these OSBPs service countries that are part of the countries under the PROFISHBLUE project. The third, the Beitbridge OSBP, which services Zimbabwe and South Africa, is not yet fully operational. Furthermore, South Africa is not part of the beneficiary countries of the PROFISHBLUE project.

33) PIDA, "n.d.' One-Stop Border Posts Progress in Africa, Programme for Infrastructure Development in Africa. [online]: [https://www.au-pida.org/one-stop-boarder-posts-osbp/#:~:text=One%2DStop%20Border%20Posts%20\(OSBPs,location%2C%20reducing%20duplication%20and%20inefficiencies.](https://www.au-pida.org/one-stop-boarder-posts-osbp/#:~:text=One%2DStop%20Border%20Posts%20(OSBPs,location%2C%20reducing%20duplication%20and%20inefficiencies.)

TABLE 1: Completed One-Stop Border Posts in the SADC³⁴

Border crossing	Location (countries)	REC(s)	Lead agencies	Legal basis for the OSBP
Mchinji/Mwami	Malawi/Zambia	COMESA	<ul style="list-style-type: none"> Malawi: Customs (MACRA) Zambia: Customs (ZRA) 	Bilateral Agreement (2004)
Chirundu	Zambia/Zimbabwe	SADC	<ul style="list-style-type: none"> Zambia: ZRA Customs (AT) Zimbabwe: ZIMRA Customs 	Bilateral Agreement (2009)
Beitbridge	Zimbabwe/South Africa	SADC	<ul style="list-style-type: none"> Zimbabwe: ZIMRA Customs South Africa: SARS Customs 	Bilateral Agreement (2009)



34) Source: 2022 edition of the AUDA-NEPAD One-Stop Border Post Source book.

Table 2 lists 13 border posts that are also OSBP sites which are currently under consideration for construction under the Programme for Infrastructure Development in Africa (PIDA). It is important to note that the bulk of OSBP

sites listed below are already operating as OSBPs. Of interest to this project are the DRC-Zambia Kasumbalesa OSBP and the URT-Zambia Nakonde/Tunduma OSBP. These two OSBPs are operational.

TABLE 2: Borders under consideration for One-Stop Border Post Construction in the SADC³⁵

Border crossing	Location (countries)	REC(s)	Lead agencies	Legal basis for the OSBP
Songwe/Kasumululu	Malawi/the URT	EAC	▪ Malawi: Customs (MRA)	EAC OSBP Act (2016), EAC OSBP Regulations (2017), Bilateral Agreement (2005)
Mandiba/ Chiponde	Malawi/Mozambique	COMESA	▪ The URT: Customs (TRA)	Bilateral Agreement (2006)
Mwanza/Milanje	Malawi/Mozambique	COMESA	▪ Malawi: Customs (MRA) ▪ Mozambique: Customs (AT)	Bilateral Agreement (2006)
Colomue/Dedza	Malawi/Mozambique	COMESA	▪ Malawi: Customs (MRA) ▪ Mozambique: Customs (AT)	Bilateral Agreement (2006)
Mwanza/Zobue	Mozambique/Malawi	COMESA	▪ Malawi: Customs (MRA) ▪ Mozambique: Customs (AT)	Bilateral Agreement (2006)
Machipanda/Forbes	Mozambique/Zimbabwe	SADC	▪ Mozambique: Customs (AT) ▪ Malawi: Customs (MRA)	Bilateral Agreement (2004)
Namoto/Chanida	Mozambique/Malawi	COMESA	▪ Mozambique: Customs (AT) ▪ Zimbabwe: Customs (ZIMRA)	Bilateral Agreement (2006)
Nakonde/Tunduma	Zambia/the URT	EAC	▪ Mozambique: Customs (AT) ▪ Malawi: Customs (MRA)	Bilateral Agreement (2004)
Chanida/Mwami	Zambia/Malawi	COMESA	▪ Zambia: ZRA Customs (AT) ▪ Malawi: MRA Customs	Bilateral Agreement (2010)
Kasumbalesa	Zambia/the DRC	SADC	▪ Zambia: ZRA Customs (AT) ▪ The DRC: DGDA Customs	OSBP Bilateral Agreement (2023)
Mwami/Mchinji	Zambia/Malawi	COMESA	▪ Zambia: ZRA Customs (AT) ▪ Malawi: MRA Customs	Bilateral Agreement (2006)
Forbes/Machipanda	Zimbabwe/Mozambique	SADC	▪ Zimbabwe: ZIMRA Customs ▪ Mozambique: AT Customs	Bilateral Agreement (2005)
Nyamapanda/Cuchamamano	Zimbabwe/Mozambique	SADC	▪ Zimbabwe: ZIMRA Customs ▪ Mozambique: AT Customs	Bilateral Agreement (1994)

OSBPs are a crucial part of the trade facilitation agenda of the AfCFTA. They play a critical role in reducing time and costs at the border. In the fisheries trade, ensuring seamless movement of fish and limited transit times is essential for maintaining product quality and reducing

post-harvest losses. It is important to have a single quality inspection at OSBPs, which requires partner countries to have common standards of sanitation, handling methods and time/temperature for holding fish. UNIDO can play a role in addressing these issues.

35) Source: 2022 edition of the AUDA-NEPAD One-Stop Border Post Source book.

3.4 FISHERIES PRODUCTION AND DOMESTIC CONSUMPTION IN THE SADC

Fisheries play a significant role in Africa, both socially and nutritionally. The sector contributes to food and nutrition security and provides jobs for coastal populations, who are often among the poorest and most vulnerable. Globally, fish and fish products account for an average of 18% of animal protein intake. Due to the growing population and per-capita income, demand for fish is expected to increase by 30% by 2030.³⁶

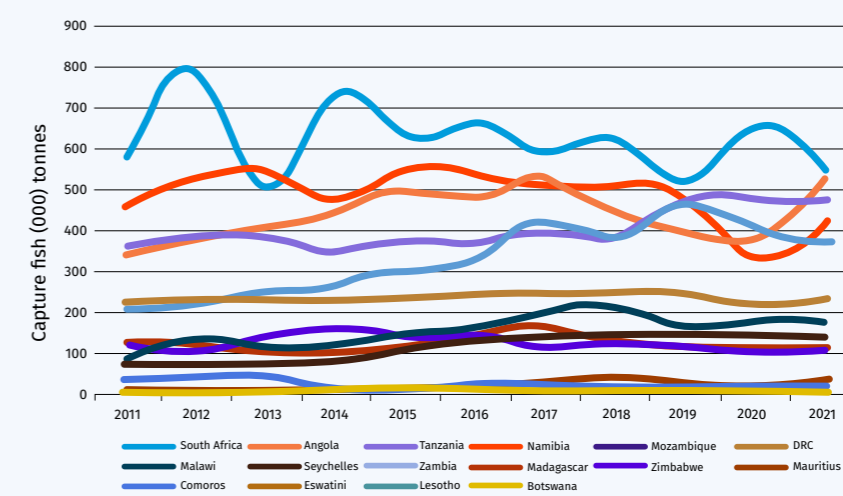
been stagnating around 3 million tonnes in the last 5 years. Although aquaculture's contribution to total fish production is relatively small, it is growing at an exponential rate, albeit from a low base (in certain countries starting from zero).³⁸ The subsector has recently increased from 135,000 tonnes in 2020 to 150,000 tonnes in 2021 (latest available data), an 11% annual growth rate.

In the SADC, fisheries and aquaculture remain important, as fish is an affordable source of dietary animal protein and is therefore of overwhelming importance for food and nutrition security. On average, each person in the SADC region consumes 12.5kg of fish per year, which accounts for 16% of animal protein and 5% of total protein intake. This makes the contribution of fisheries to food and nutrition security in the region significant.³⁷

Figure 3 and Figure 4 highlight the trends in fish production in the SADC for both capture fish and aquaculture by country. South Africa, Angola, the United Republic of Tanzania, Namibia and Mozambique are the top producers and accounted for 71% of total capture fish in 2021. Zambia, the United Republic of Tanzania and Madagascar were the top aquaculture fish producers in 2021. It should be noted that Zimbabwe's production declined significantly in 2021 to 5,000 tonnes after having averaged about 18,000 tonnes over the past decade.³⁹

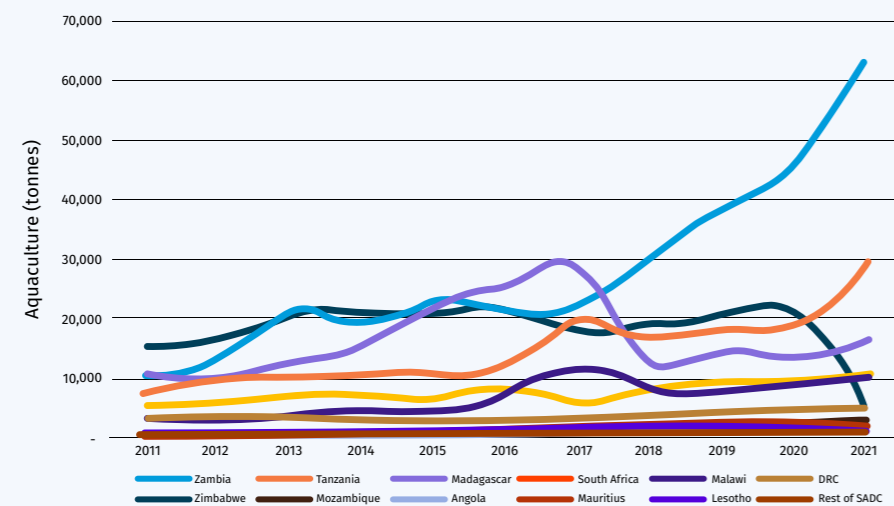
More than 95% of the region's production comes from a diversified capture fisheries subsector, which has

FIGURE 3: Capture fish trends in the SADC (2017-2021)⁴⁰



36) World Bank, "n.d." Africa Program for Fisheries, the World Bank Group. [online]: <https://www.worldbank.org/en/programs/africa-program-for-fisheries>
 37) Kaunda, E. Chimatiro, S. 2019. Contribution of Fisheries to Food and Nutrition Security in the SADC Region, SADC Secretariat, Gaborone. [online]: <https://reliefweb.int/report/angola/contribution-fisheries-food-and-nutrition-security-sadc-region-april-2019>
 38) ibid
 39) FAO FishStatJ database (2023)
 40) FAO FishStatJ database (2023)

FIGURE 4: Aquaculture production trends in the SADC (2017-2021)⁴¹



3.4.1 Production and consumption in the countries under review

Figure 5 and Figure 6 illustrate the 5-year average production data for capture and aquaculture fisheries respectively for the seven countries targeted in this chapter.⁴² As coastal countries, the United Republic of Tanzania and Mozambique dominate capture production, averaging 439,000 and 407,000 tonnes respectively. The seven countries under review account for about 50% of the SADC’s total capture production. Aquaculture, on the

other hand, is dominated by Zambia, which accounts for almost 36% of total aquaculture production for the countries under review. Aquaculture industries are also relatively developed in the United Republic of Tanzania, Madagascar and Zimbabwe. The seven countries under review account for 88% of the SADC’s aquaculture production.

FIGURE 5: Capture production: 5-Year average (2017-2021) units (000 tonnes)⁴³

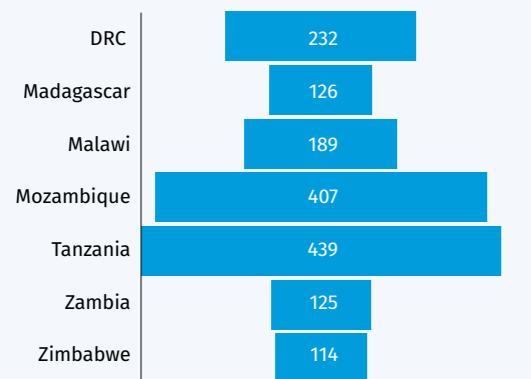
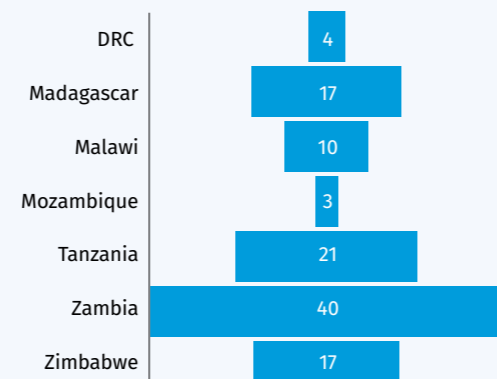


FIGURE 6: Aquaculture production: 5-Year average (2017-2021) units (000 tonnes)⁴⁴



41), 42), 43), 44) FAO FishStatJ database (2023)

Climate change will affect production volumes, especially of capture fisheries as fish migrate away from African shorelines to cooler waters. As climate change becomes more severe, extreme weather events are predicted to occur more frequently and with greater intensity. This will exacerbate the already existing challenges faced by fishing communities. Although climate change has also led to some positive effects, such as increased precipitation resulting in the expansion of certain fish habitats and better connectivity between them, it is necessary to take deliberate action to capitalize on these benefits. This involves making new investments, being more flexible with policies, laws and regulations and improving post-harvest processes.⁴⁵

To support future demand, capture fisheries will need to be sustained and where possible enhanced, while investment in aquaculture production should be prioritized. In the SADC, the Regional Aquaculture Strategy and Action Plan (RASAP) proposes an annual average growth of aquaculture production of more than 8.3% by 2026 to ensure sustainable value chains and consumption.

3.5 TRADE IN FISH AND FISHERIES PRODUCTS

The analysis undertaken in this section focuses purely on tariffs and trade in goods. Tariff data is sourced from MacMap (latest available data), while trade data is sourced from TradeMap for the review period 2018–2022. It is important to note that trade data in Africa is not always accurate due to some countries not reporting. Therefore, the analysis provided here should be considered as indicative of trading patterns. It is worth

noting that there is an issue of overlapping membership within RECs, which can result in double counting when analyzing REC-level data. However, this analysis provides valuable insights and estimates of official trade for the selected products (Annex 1) among the seven countries under review.

3.5.1 Market access issues

Tariff liberalization has made progress in Africa and tariff data reveals that applied tariffs have been reduced to about 10% in roughly half of the African countries. However, they remain high in sensitive sectors, such as

agriculture, automotive, textiles and clothing. Average applied tariffs by REC are shown in Table 3. The SADC applies the lowest tariffs, followed by COMESA and CEN-SAD.

45) Chimatiro S., Simmance F.A., Wesana J., Cohen P.J., Westlund L., Linton J. 2021. The African Great Lakes Regional Food System. *The African Great Lakes Regional Food System; the contribution of fisheries - the case of small pelagic fishes*. Penang, Malaysia: WorldFish. A Discussion Paper. [online]: <https://digitalarchive.worldfishcenter.org/bitstream/handle/20.500.12348/4957/0d7fac68bd3ee4595f05af0ab1df122.pdf?sequence2=>

TABLE 3: Summary of intra-REC average tariffs applied (2021)⁴⁶

REC	Average tariff (%)
AMU	10
CEN-SAD	8
COMESA	8
EAC	9
ECCAS	9
ECOWAS	11
IGAD	11
SADC	7

Under the SADC FTA, fish products attract zero tariffs for goods originating in the SADC and this applies to the seven SADC countries under review in this report. Therefore, the tariff should not be viewed as a trade barrier.

However, other non-tariff trade barriers exist that can impede the fisheries trade and these need to be addressed. These include cumbersome border procedures and SPS measures, as well as corruption, bribery and sexual harassment of female traders. Transport costs can also become a trade barrier, as these may be high and render products uncompetitive in the target market.

3.5.2 Global trade

The global trade in fish and fisheries products reached about US\$177 billion in 2022 from US\$164 billion in 2021. Global importers included the US, China, Japan, Spain and France, which together accounted for 47% of the share of global imports (Figure 7). Top exporters for 2022 included

China, Norway, Ecuador, Vietnam and Russia, with a combined share of 37% (Figure 8). Most traded goods included crustaceans, fish fillets and frozen fish, with a combined share of 54% in 2022 (Figure 9).

FIGURE 7: Top 10 global importers (2022)⁴⁷

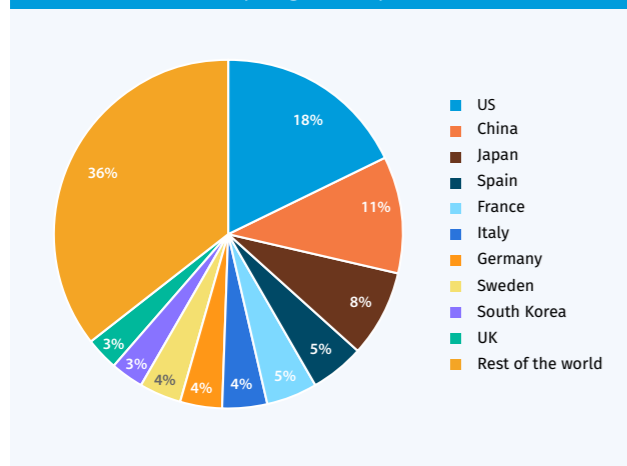
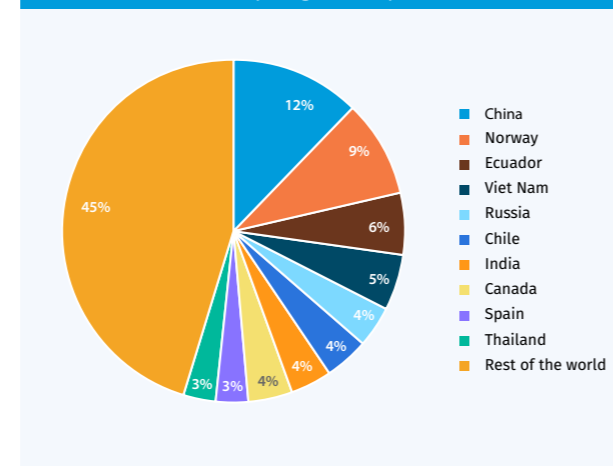


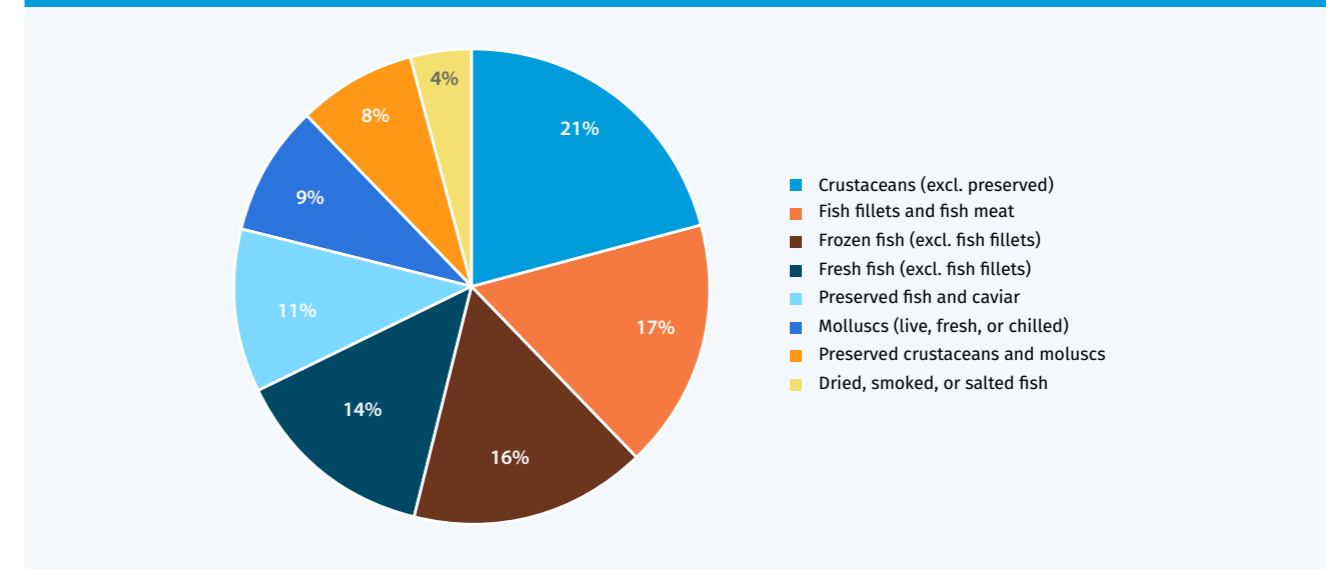
FIGURE 8: Top 10 global exporters (2022)⁴⁸



46) World Integrated Trade Solutions (WITS) Database.

47), 48) ITC TradeMap Database (accessed 24 November 2023).

FIGURE 9: Global share of trade in selected fish and fish products (2022)⁴⁹

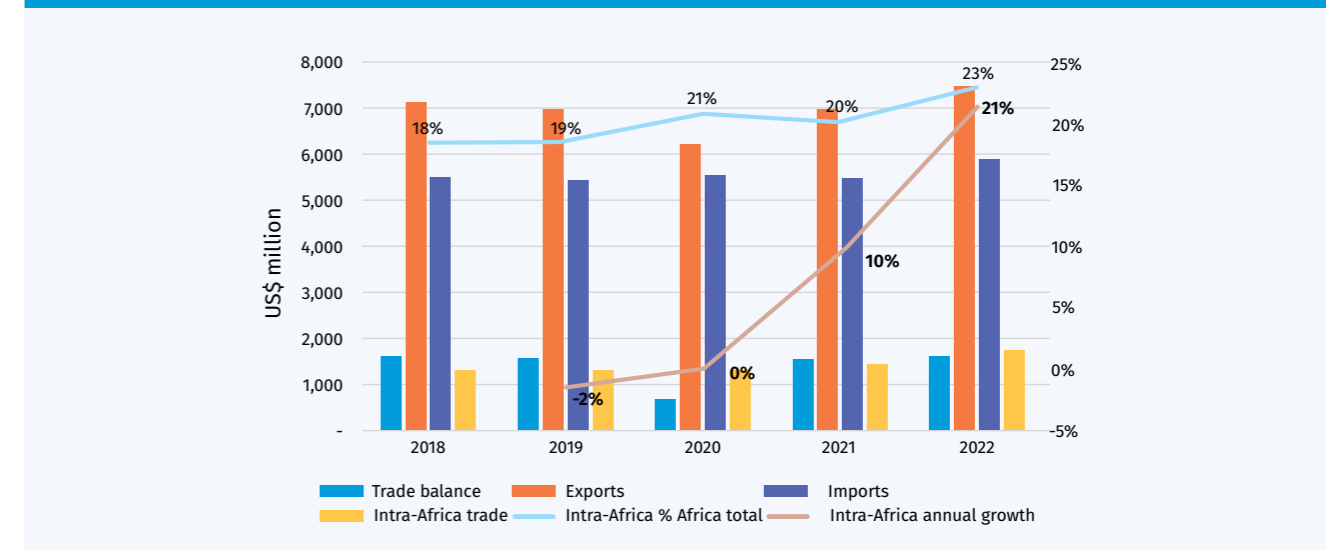


3.5.3 Africa trade

The fish and fisheries products under review had a total trade (imports and exports) of US\$13 billion, of which 56% were exports (US\$7.5 billion). Africa as a group has a positive trade balance, although it is important to highlight that not all African countries are net exporters of fish, as will be further elaborated in the below sections. Intra-regional African trade of fish products was

23% in 2022, which is higher than average intra-African trade, which was around 15% during the same period. Over the past 5 years, intra-African trade has increased exponentially, albeit from a low base, partly attributed to the deepening of trade within RECs and the drive towards boosting intra-African trade under the AfCFTA (Figure 10).

FIGURE 10: Africa's fish and fisheries product trade performance (2018-2022)⁵⁰



49), 50) ITC TradeMap Database (accessed 24 November 2023).

A look at Africa's global trade in fish and fisheries products composition reveals the following (Figure 11):

- Imports and exports of fish and fisheries products each account for about 3% and 4% of global trade respectively in 2022.
- It is important to note that Africa enjoys a trade surplus in the trade of fish and fisheries products with the rest of the world, although in some products the continent has a trade deficit.

- Africa imports frozen fish the most from the global market.
- The frozen fisheries trade is where the highest trade deficit exists followed by dried, smoked or salted fish.
- Exports of molluscs are the highest by value.
- Preserved fish and caviar were also top exports, as well as fish fillets and fish meat.
- The least traded products were preserved crustaceans and molluscs.

FIGURE 11: Africa's trade composition in fish and fisheries products (2022)⁵¹

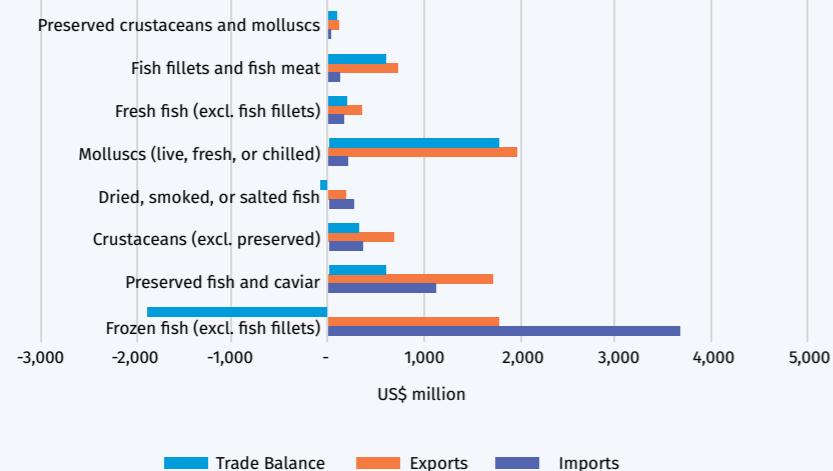


Figure 12 and Figure 13 depict Africa's main players in fish and fisheries products for both imports and exports in 2022. The range of products under analysis have already been highlighted and is illustrated in Figure 11. The top 10 African importers account for 74% of total imports, while the top 10 African exporters account for 87% share of total exports in 2022. Nigeria, Egypt, Côte d'Ivoire and South Africa are the top importers, while Morocco, Mauritania, Namibia and Senegal are the top exporters.

High non-trade costs, including transport and costs of compliance, are major factors impacting trade and partly explain the few players who dominate exports, while most imports are destined for large economies that cannot meet demand through local supplies. The AfCFTA aims to increase the number of players in the market through the reduction of non-tariff barriers and the AfCFTA's trade facilitation agenda.

51) ITC TradeMap Database (accessed 24 November 2023).

FIGURE 12: Africa fish and fisheries products imports map (2022)⁵²

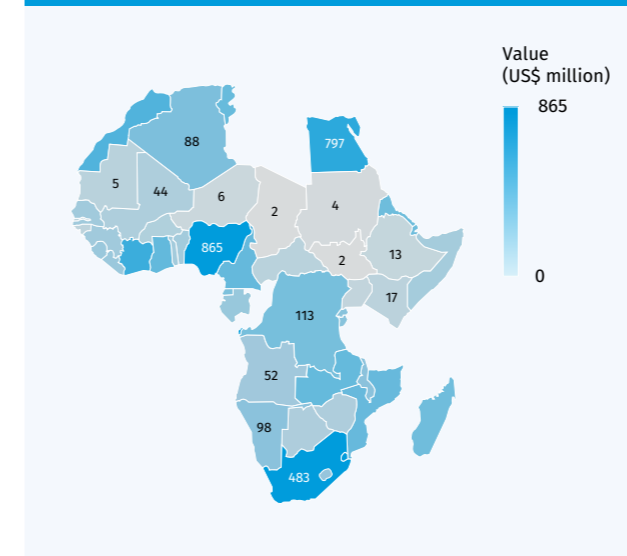
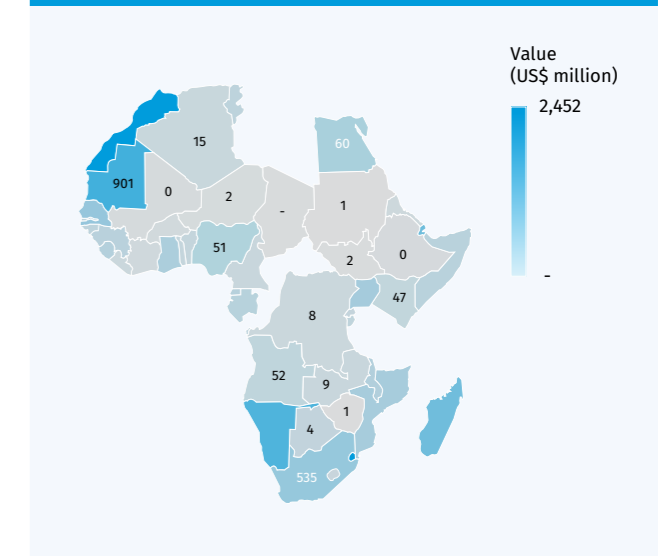


FIGURE 13: Africa fish and fisheries products exports map (2022)⁵³



3.5.4 SADC trade

At the regional level, the SADC is a net exporter of fish and fisheries products. Over the past 5 years, both imports and exports have been relatively stable. In 2022, the SADC imported fish and fisheries products worth US\$1.5 billion, accounting for 26% of Africa's total imports of fish and fisheries products. SADC exports of fish and fisheries products were relatively higher at US\$2.3 billion, accounting for 31% of Africa's total exports of fish and fisheries products in 2022. Between 2021 and 2022, imports and exports recorded an annual growth of 23% and 0% respectively. This is mainly a result of high demand, which the region cannot fulfil and therefore must rely on imports. Exports were stagnant, partly due to high non-tariff trade costs prevalent in the region, which makes SADC fish exports uncompetitive relative to other countries and or regions.

Boosting intraregional trade is one of the key objectives of the SADC Trade Protocol and there is scope for increased intraregional trade provided the high non-tariff trade costs and other non-tariff barriers are reduced and/or eliminated. Increasing efficiency in production and technology adaptation will go a long way to enhancing competitiveness, thus providing an opportunity to reduce imports from third-party low-cost producers of fisheries products.

Figure 14 highlights the SADC's trade composition and, like Africa's import profile, the bulk of imports were frozen fish, accounting for 64% of the SADC's total import bill for fish and fisheries products. Like the Africa export profile, preserved fish and caviar, as well as fish fillets, dominated exports.

52), 53) ITC TradeMap Database (accessed 24 November 2023).

FIGURE 14: The SADC's trade composition in fish and fisheries products (2022)⁵⁴

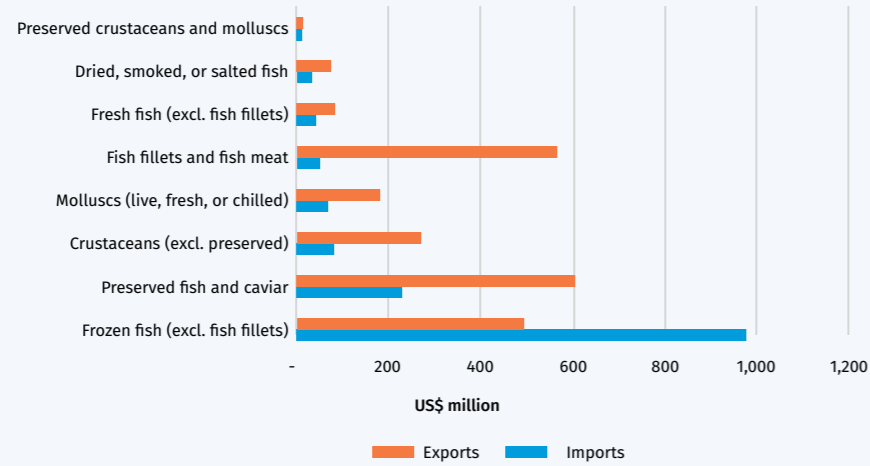
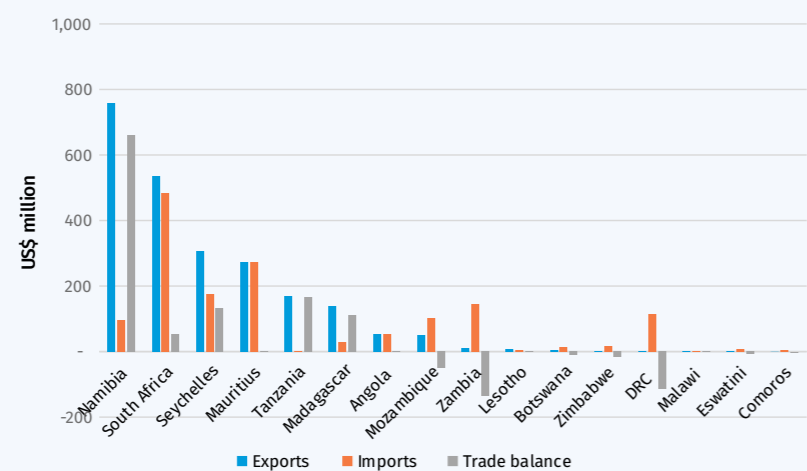


Figure 15 provides an overview of the SADC's Member States' trade profile for 2022 and the following can be highlighted:

- The top exporters from the SADC in 2022 included Namibia, South Africa, Seychelles and Mauritius. These are all coastal countries which are not part of the seven countries under review in this chapter. The United Republic of Tanzania ranks as the 5th top exporter and is part of the countries under analysis. Most exports are destined for the EU and are mostly capture fisheries.

- The top importers from the SADC in 2022 included South Africa, Mauritius, the Seychelles and Zambia.
- The DRC virtually does not export any fish and is a net importer.
- Malawi, the Comoros and Eswatini are not major players in the global trading of fish and fisheries products. This also includes Lesotho, Botswana and Zimbabwe, whose trade is relatively negligible.

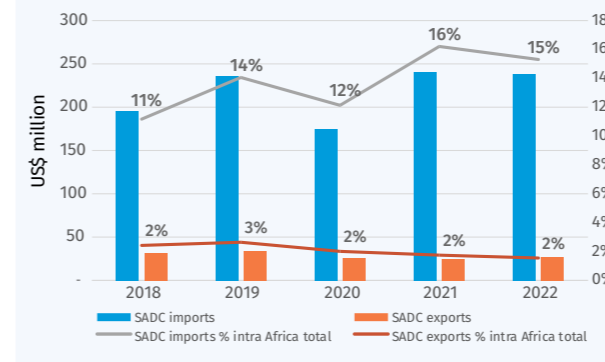
FIGURE 15: Trade balance in fish and fisheries products in the SADC (2022)⁵⁵



54), 55) ITC TradeMap Database (accessed 24 November 2023).

3.5.5 SADC target country analysis

FIGURE 16: The SADC's fish and fisheries product trade performance (2018-2022)⁵⁶



As already highlighted, the seven countries under review are the DRC, Madagascar, Malawi, Mozambique, the URT, Zambia and Zimbabwe, referred to here as the "SADC 7". Based on production data, coastal countries rely mostly on marine resources, while landlocked countries rely on inland resources and to a greater extent are also the leaders in aquaculture production. Intra-Africa trade data reveals that the SADC 7 as a group are net importers of fish and fisheries products, except for the United Republic of Tanzania. The SADC 7's intra-African imports and intra-African exports accounted for 16% (US\$329 million) and 2% (US\$27 million) total intra-African trade respectively in 2022. Both intra-African imports and intra-African exports were relatively constant over the 5 years 2018-2022 (Figure 16).



56) ITC TradeMap Database (accessed 24 November 2023).

Table 4 summarizes, the SADC 7's global exports of fish and fisheries products and the following can be noted:

- Exports were worth US\$369 million in 2022, representing a 16% share of the SADC's global exports of fish and fisheries products.
- Crustaceans (excluding preserved) accounted for over 40% of total exports. Madagascar accounted for two-thirds of the exports and the top destinations were France, China and Spain.
- Dried, smoked or salted fish experienced the highest compound annual growth rate (CAGR) of 12% over the 2018-2022 period.
- Except for the DRC and South Africa, there are no other African countries in the top 3 export destinations.
- Unsurprisingly, coastal countries, including Madagascar, Mozambique and the URT, dominated exports. In the URT's case, it should be noted that inland fisheries are also an important source of fish, especially from Lake Victoria, a major source of Nile perch.

TABLE 4: Major exported fish and fisheries products ⁵⁷						
Product description	2018	2022	% share (2022)	% CAGR (2018-2022)	Top 3 exporters (% share)	Top 3 destinations (% share)
Crustaceans (excl. preserved)	165	159	43%	-1%	<ul style="list-style-type: none"> Madagascar (67%) Mozambique (27%) URT (6%) 	<ul style="list-style-type: none"> France (56%) China (17%) Spain (14%)
Fish fillets and fish meat	101	81	22%	-5%	<ul style="list-style-type: none"> URT (97%) Madagascar (2%) Mozambique (1%) 	<ul style="list-style-type: none"> Netherlands (23%) Italy (10%) Spain (8%)
Dried, smoked or salted fish	41	65	18%	12%	<ul style="list-style-type: none"> URT (96%) Zambia (2%) Mozambique (1%) 	<ul style="list-style-type: none"> Hong Kong (79%) Netherlands (3%) Canada (2%)
Molluscs (live, fresh or chilled)	18	20	5%	2%	<ul style="list-style-type: none"> Madagascar (49%) URT (31%) Mozambique (20%) 	<ul style="list-style-type: none"> Portugal (39%) France (34%) South Korea (9%)
Preserved fish and caviar	32	18	5%	-13%	<ul style="list-style-type: none"> Madagascar (91%) Zambia (9%) 	<ul style="list-style-type: none"> France (32%) Germany (29%) The DRC (9%)
Frozen fish (excl. fish fillets)	14	18	5%	6%	<ul style="list-style-type: none"> URT (46%) Zambia (26%) Madagascar (20%) 	<ul style="list-style-type: none"> The DRC (22%) Portugal (19%) China (13%)
Fresh fish (excl. fish fillets)	5	6	2%	6%	<ul style="list-style-type: none"> URT (31%) Mozambique (28%) Zambia (24%) 	<ul style="list-style-type: none"> France (19%) South Africa (19%) Netherlands (14%)
Preserved crustaceans and molluscs	2	1	0%	-14%	<ul style="list-style-type: none"> URT (52%) Mozambique (36%) Madagascar (12%) 	<ul style="list-style-type: none"> China (25%) Turkey (24%) Australia (12%)

57) ITC TradeMap Database (accessed 24 November 2023).

Table 5 summarizes the SADC 7's global imports of fish and fisheries products and the following can be noted:

- Imports were worth US\$413 million in 2022, representing a 27% share of the SADC's global imports of fish and fisheries products.
- Frozen fish (excl. fish fillets) accounted for 87% of total imports. Zambia, Mozambique, the DRC and Madagascar accounted for 97% of the imports and the top sources were Equatorial Guinea, Namibia and South Africa.
- Fresh fish experienced the highest decline in compound annual growth rate of -17% (CAGR) over the 2018-2022 period.
- The bulk of imports originated from within the SADC and the greater African continent, with South Africa, Mozambique, Namibia and Equatorial Guinea featuring prominently in the top import sources. It is, however, important to note that, before 2022, Equatorial Guinea did not feature prominently in the SADC 7's trade profile and that most of its exports were destined for Zambia (and most likely the final destination was the DRC as re-exports).
- The DRC, Zambia and Zimbabwe dominated imports. Trade data reveals that Zambia re-exported over US\$4 million of imported fisheries products, mainly to the DRC, which partly explains the high imports, especially of frozen fish.

TABLE 5: Major imported fish and fisheries products ⁵⁸						
Product description	2018	2022	% share (2022)	% CAGR (2018-2022)	Top 3 importers (% share)	Top 3 sources (% share)
Frozen fish (excl. fish fillets)	259	360	87%	9%	<ul style="list-style-type: none"> Zambia (39%) Mozambique (27%) the DRC (25%) 	<ul style="list-style-type: none"> Equatorial Guinea (35%) Namibia (26%) South Africa (10%)
Preserved fish and caviar	22	24	6%	2%	<ul style="list-style-type: none"> The DRC (44%) Mozambique (13%) Madagascar (13%) 	<ul style="list-style-type: none"> Morocco (40%) Thailand (15%) Indonesia (7%)
Dried, smoked or salted fish	32	17	4%	-15%	<ul style="list-style-type: none"> The DRC (70%) Zimbabwe (22%) Mozambique (4%) 	<ul style="list-style-type: none"> Norway (43%) Mozambique (22%) Angola (12%)
Fresh fish (excl. fish fillets)	12	6	1%	-17%	<ul style="list-style-type: none"> The DRC (44%) Zambia (25%) Malawi (20%) 	<ul style="list-style-type: none"> Mauritania (33%) China (16%) Equatorial Guinea (10%)
Fish fillets and fish meat	3	3	1%	8%	<ul style="list-style-type: none"> Zimbabwe (32%) Mozambique (24%) Zambia (20%) 	<ul style="list-style-type: none"> South Africa (32%) Namibia (18%) China (11%)
Crustaceans (excl. preserved)	1	1	0%	0%	<ul style="list-style-type: none"> Zambia (41%) Zimbabwe (32%) Mozambique (9%) 	<ul style="list-style-type: none"> South Africa (51%) Equatorial Guinea (25%) France (3%)
Molluscs (live, fresh or chilled)	1	1	0%	6%	<ul style="list-style-type: none"> Madagascar (34%) Zambia (26%) Mozambique (24%) 	<ul style="list-style-type: none"> South Africa (42%) Netherlands (17%) Spain (14%)
Preserved crustaceans and molluscs	0	0	0%	9%	<ul style="list-style-type: none"> Mozambique (24%) Madagascar (21%) Zambia (18%) 	<ul style="list-style-type: none"> South Africa (32%) China (17%) Portugal (11%)

58) ITC TradeMap Database (accessed 24 November 2023).

Another aspect of trade which was analyzed in this chapter is how the SADC FTA and proximity to the market are the main factors for the high levels of intra-SADC trade as a share of intra-African trade witnessed over the review period 2018–2022. Countries like Mozambique, Zimbabwe, Botswana, the Seychelles and Malawi imported all their intra-African fish and fisheries products from the SADC. Despite the high levels of intra-SADC trade, the bulk of SADC Member States recorded a

trade deficit, implying that the region cannot meet its demand as the region’s demand slightly outweighs its local production. Imported fish originated from Europe (Spain and France), Africa (Namibia, Equatorial Guinea and Morocco) and Asia (Thailand and China). Therefore, for strategic reasons, it might be important for the region to attain some level of self-sufficiency and put in place strategies not only to enhance production, but also to increase local fish consumption.



3.6 FISH AND FISHERIES PRODUCTS COUNTRY EXPORT ANALYSIS

A snapshot overview of the target countries’ export trade with the SADC is provided, specifically looking at fish and fisheries products as outlined in Annex 1.

- As a group, they account for 22% of the SADC’s global share of trade (imports and exports) in fish and fisheries products.

From the previous analysis, the following can be highlighted about the SADC 7:

- All SADC 7 countries, except for the United Republic of Tanzania, are net importers of fish.
- The bulk of their trade in fish and fisheries is intraregional (i.e. they trade mostly within the SADC).

The following subsections provide country profiles of each country’s trade with the SADC, specifically focusing on export trade in fish and fish products. The information is sourced from the *ITC TradeMap Database* (accessed on 24 November 2023).

3.6.1 The Democratic Republic of Congo (DRC)



- The DRC is excluded from the SADC export analysis because trade data reveals no exports from the DRC to the SADC region.

3.6.2 Madagascar

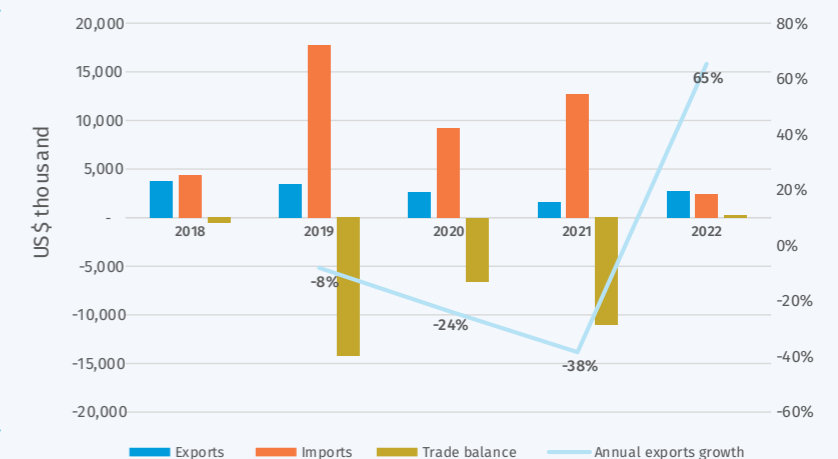


A) OVERALL TRADE PERFORMANCE WITH THE SADC

FIGURE 17: Madagascar trade performance with the SADC (2018–2022)

Key points:

- Net importer.
- Imports peaked over **US\$17 million** in 2019 before declining to US\$2.4 million in 2022.
- Exports have averaged about **US\$3 million** over the past 5 years (2018–2022).
- Exports are recovering after a **3-year decline** (2019–2021).

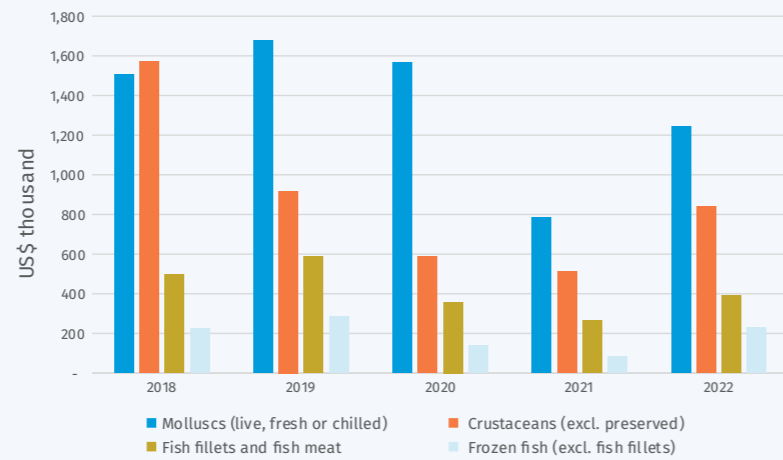


B) TOP EXPORTS OF FISH AND FISHERIES PRODUCTS TO THE SADC

FIGURE 18: Madagascar's exports of fish and fisheries products to the SADC (2018-2022)

Key points:

- Molluscs and crustaceans are the most traded. In 2022, combined exports were about **US\$2 million** (77% share of Mozambique's exports to the SADC).
- Exports of fish fillet account for a **14% share** (US\$400,000) in 2022.

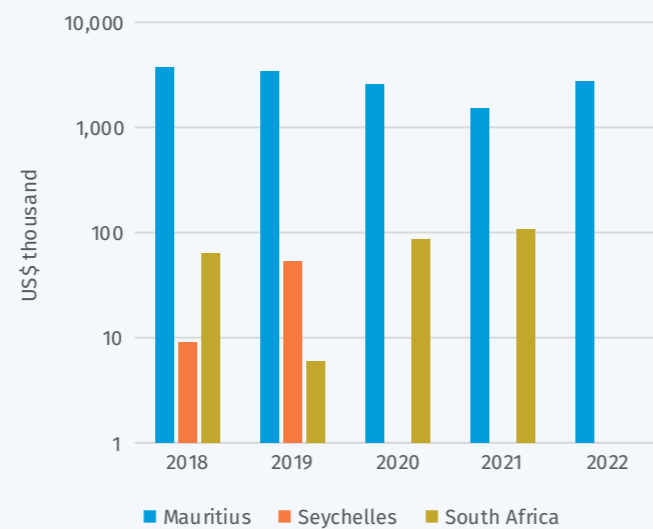


C) TOP EXPORT DESTINATIONS IN THE SADC

FIGURE 19: Madagascar's top export destinations in the SADC

Key points:

- SADC states (Mauritius) accounted for **88% of Madagascar's intra-African exports** in 2022. The remaining 12% were exports destined to Morocco (10%) and the Comoros (2%).⁵⁹
- **Mauritius and South Africa** are the main and only destinations of Madagascar's exports to the SADC. These countries are, however, not part of the SADC 7 target partners.
- Exports to the Seychelles ceased in 2019 and there is **need to explore** how these can be revived.
- Exports have remained **relatively stable over the 5 years** 2018-2022, especially from Mauritius.



59) Note that the Comoros, although a member of the SADC, it is currently not trading under the SADC regime.

3.6.3 Malawi

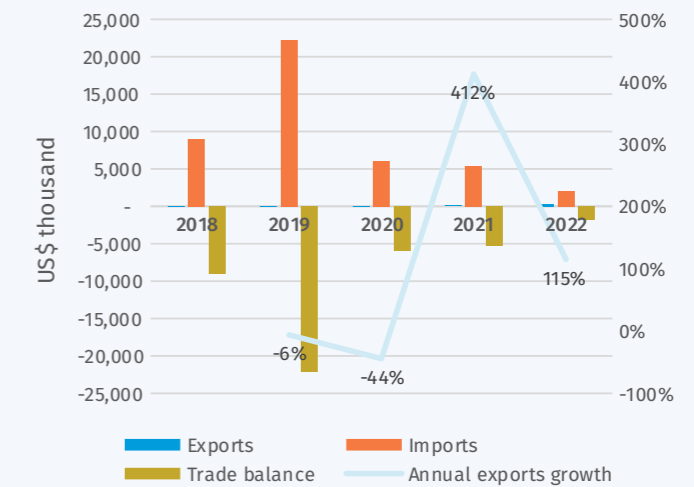


A) OVERALL TRADE PERFORMANCE WITH THE SADC

FIGURE 20: Malawi trade performance with the SADC (2018-2022)

Key points:

- Net importer.
- Imports peaked over **US\$22 million** in 2019 before declining to US\$2 million in 2022.
- Exports have averaged about **US\$104,000** over the past 5 years (2018-2022).
- Exports are negligible and only breached the US\$100,000 mark in 2021 and increased to **US\$274,000** in 2022.

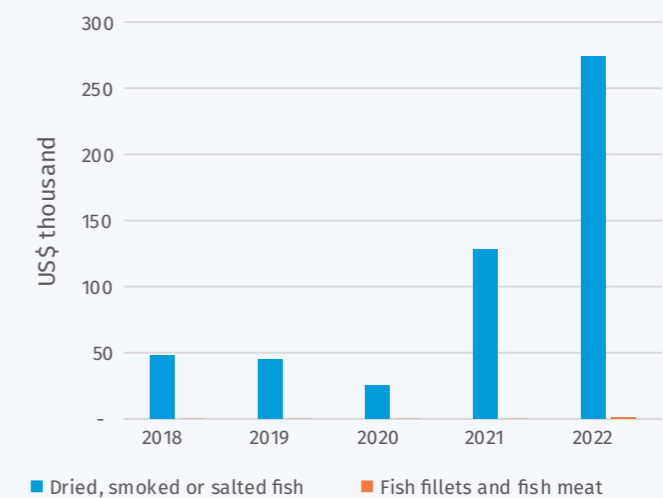


B) TOP EXPORTS OF FISH AND FISHERIES PRODUCTS TO THE SADC

FIGURE 21: Malawi's exports of fish and fisheries products to the SADC (2018-2022)

Key points:

- **Dried fish** is Malawi's main export to the SADC, accounting for virtually all its exports to the SADC.
- Exports of fish fillets are **negligible**.

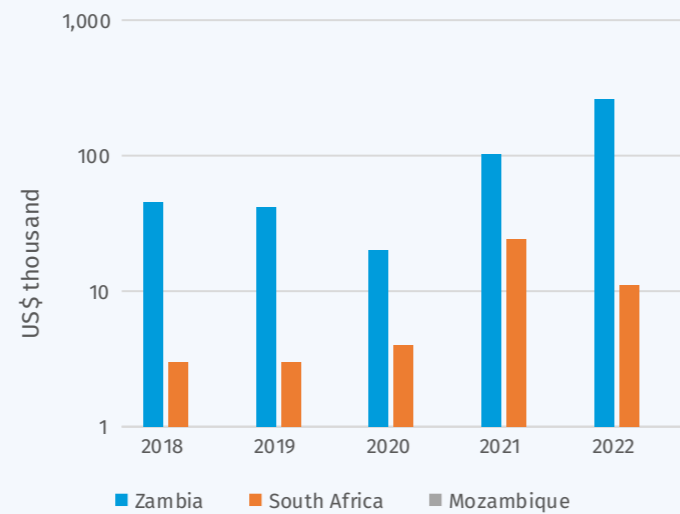


C) TOP EXPORT DESTINATIONS IN THE SADC

FIGURE 22: Malawi's top export destinations in the SADC

Key points:

- **Zambia and South Africa** are the main SADC destinations.
- Some exports are destined to **Mozambique**, but are negligible.
- Zambia and Mozambique are part of the SADC 7 partner countries and therefore constitute an **opportunity to increase exports**.
- SADC states account for **100%** of Malawi's intra-African exports.
- Exports to Zambia have been **increasing over the 3 years 2020-2022**.

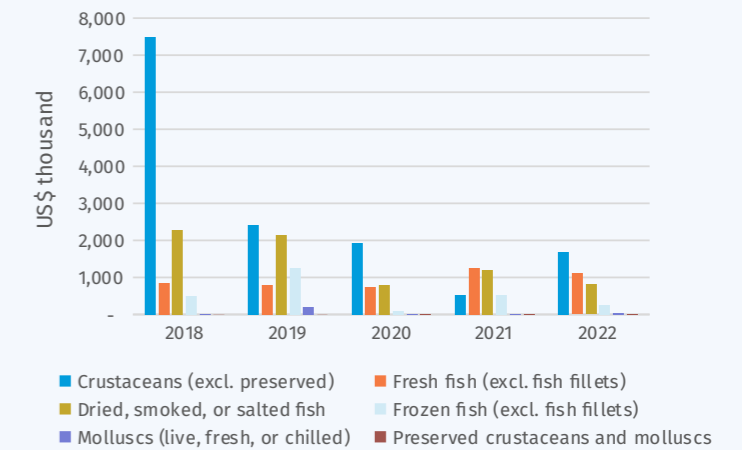


B) TOP EXPORTS OF FISH AND FISHERIES PRODUCTS TO THE SADC

FIGURE 24: Mozambique's exports of fish and fisheries products to the SADC (2018-2022)

Key points:

- Crustaceans are the most traded. In 2022, exports were about **US\$1.7 million** (43% share of Mozambique's exports to the SADC).
- Exports of fresh fish are on the rise, reaching a peak of US\$1.3 million in 2021 before declining to **US\$1.1 million** in 2022.



3.6.4 Mozambique



A) OVERALL TRADE PERFORMANCE WITH THE SADC

FIGURE 23: Mozambique's trade performance with the SADC (2018-2022)

Key points:

- Net importer.
- Imports peaked over US\$80 million in 2019 and 2021 before declining to **US\$76 million** in 2022.
- Exports have averaged about **US\$6 million annually** over the past 5 years (2018-2022).
- Exports have been on the **decline since 2018**.

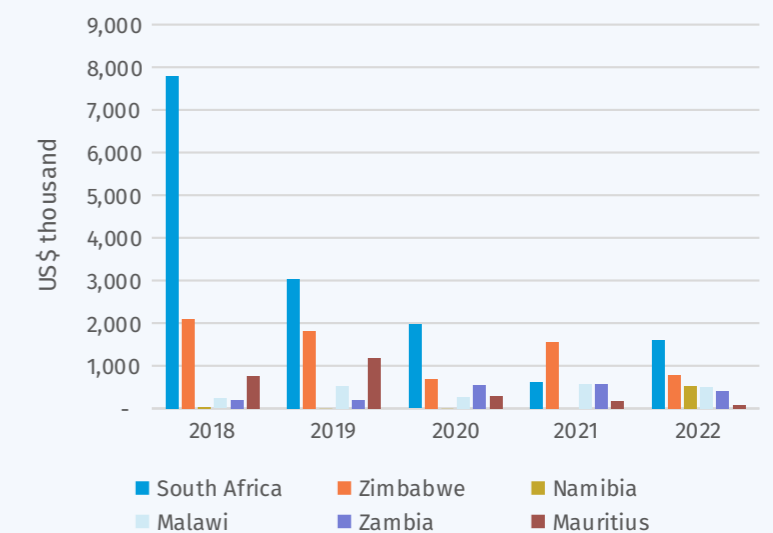


C) TOP EXPORT DESTINATIONS IN THE SADC

FIGURE 25: Mozambique's top export destinations in the SADC

Key points:

- **South Africa and Zimbabwe** are the main destinations.
- Given proximity to market, there is **need to explore** ways to increase trade between Zimbabwe and Mozambique.
- SADC states account for **100%** of Mozambique's intra-African exports, the bulk of which go to South Africa.
- Exports to South Africa have **declined significantly over the 5 years 2018-2022**.



3.6.5 The United Republic of Tanzania

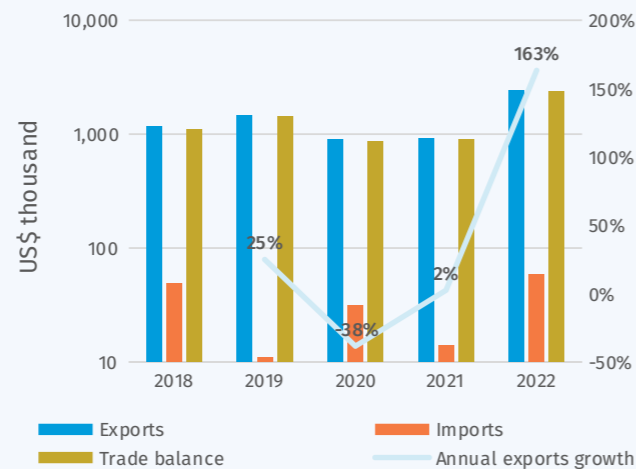


A) OVERALL TRADE PERFORMANCE WITH THE SADC

FIGURE 26: The United Republic of Tanzania's trade performance with the SADC (2018-2022)

Key points:

- Net exporter.
- Imports peaked to **US\$59 million** in 2022, the highest since 2018.
- Exports have averaged about **US\$1.3 million** over the past 5 years (2018-2022).
- Exports have remained relatively **stable over 5 years** (2018-2022).

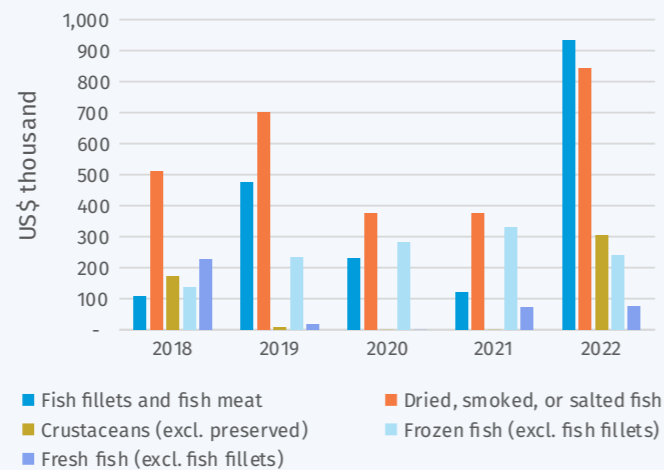


B) TOP EXPORTS OF FISH AND FISHERIES PRODUCTS TO THE SADC

FIGURE 27: The United Republic of Tanzania's exports of fish and fisheries products to the SADC (2018-2022)

Key points:

- Fish fillets** have become the most traded, after surpassing dried, smoked or salted fish.
- In 2022, combined exports were about **US\$1.8 million** (74% share of Mozambique's exports to the SADC).
- Exports of **frozen fish** have also been increasing over 5 years (2018-2022).

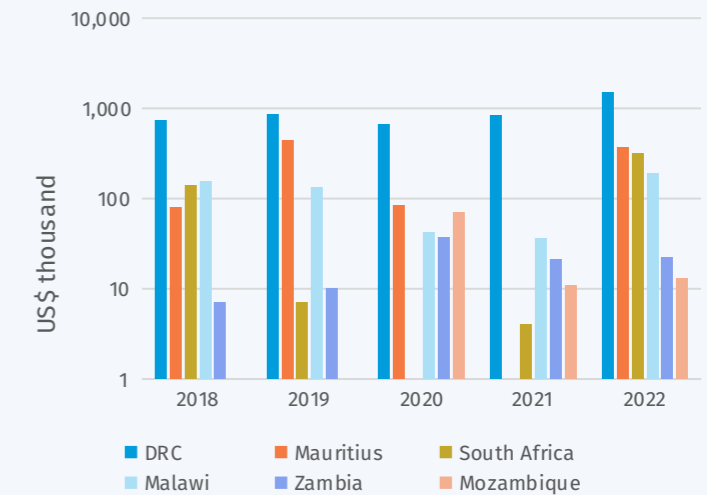


C) TOP EXPORT DESTINATIONS IN THE SADC

FIGURE 28: The United Republic of Tanzania's top export destinations in the SADC

Key points:

- The **DRC, Mauritius and South Africa** are the main destinations.
- The main destinations are not part of the SADC 7 trading partners, although the URT trade with the SADC 7's **Malawi, Zambia and Mozambique**.
- SADC states account for **27%** of the URT's intra-African exports, the bulk of which go to the DRC.
- Exports to South Africa have **rebounded significantly over 5 years** 2018-2022.
- There is scope to boost trade between the URT and Malawi and **trade facilitation** will be key for this to be achieved.



3.6.6 Zambia

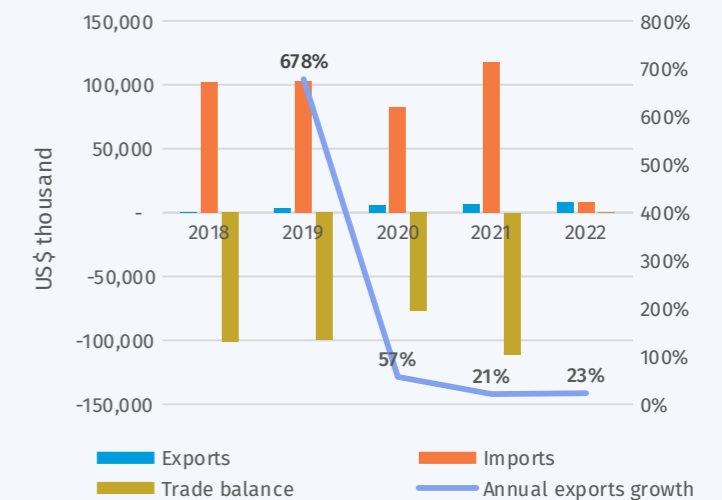


A) OVERALL TRADE PERFORMANCE WITH THE SADC

FIGURE 29: Zambia's trade performance with the SADC (2018-2022)

Key points:

- Net importer.
- Imports peaked over US\$117 million in 2021 before declining to **US\$8.2 million** in 2022.
- Exports have averaged about **US\$5 million** over the past 5 years (2018-2022).
- Exports are **on the rise based on the 5-year** review period (2018-2022).

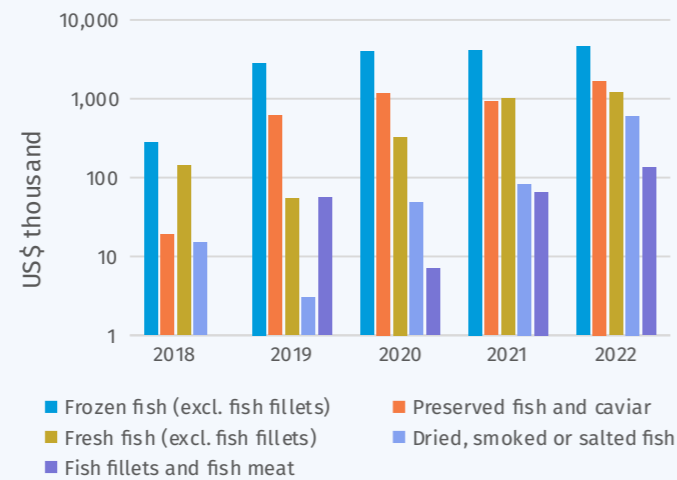


B) TOP EXPORTS OF FISH AND FISHERIES PRODUCTS TO THE SADC

FIGURE 30: Zambia's exports of fish and fisheries products to the SADC (2018-2022)

Key points:

- Frozen fish exports account for **56%** (US\$4.5 million) share of Zambia's exports to the SADC.
- Preserved fish and caviar account for an **additional 20% share** (US\$1.7 million). This was exports of prepared or preserved sardines.
- Exports of fresh fish are on the rise, reaching a peak of US\$1.3 million in 2021 before declining to **US\$1.1 million** in 2022.

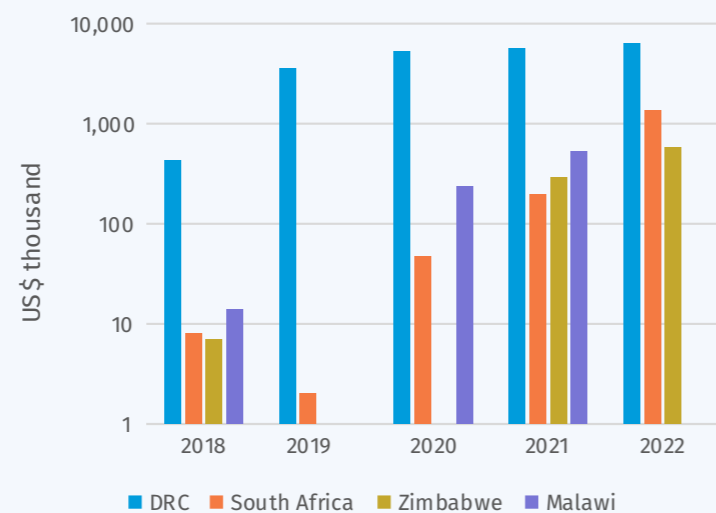


C) TOP EXPORT DESTINATIONS IN THE SADC

FIGURE 31: Zambia's top export destinations in the SADC

Key points:

- The **DRC and South Africa** are the main destinations.
- Proximity to market makes the DRC a **lucrative market** for Zambia's fish exports.
- Zimbabwe comes a distant **3rd top destination**.
- SADC states account for **90%** of Zambia's intra-African exports, the bulk of which go to the DRC.
- Exports to South Africa have **declined** significantly over the 5 years 2018-2022.
- Since 2018, exports to Malawi have been on the rise, partly attributed to the introduction of the simplified trade regime (STR) for small traders, as fish is on the list of **qualifying goods**. In addition, the general rising demand for fish as a result of dwindling catches from wild fisheries is also another factor.⁶⁰



60) Comments from Dr. Sloans Chimatiro.

3.6.7 Zimbabwe

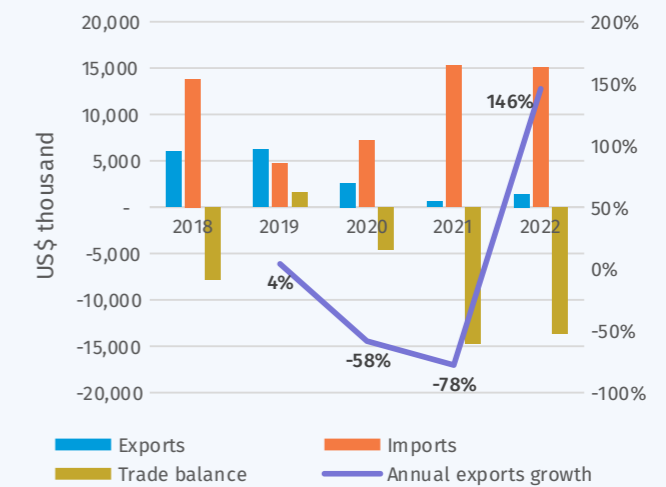


A) OVERALL TRADE PERFORMANCE WITH THE SADC

FIGURE 32: Zimbabwe's trade performance with the SADC (2018-2022)

Key points:

- Net importer.
- Imports peaked at **US\$15 million** in 2021 and 2022.
- Exports have averaged about **US\$3.3 million** over the past 5 years (2018-2022).
- Exports have been on a decline since 2019 and showed an annual increase of **146%** in 2022.

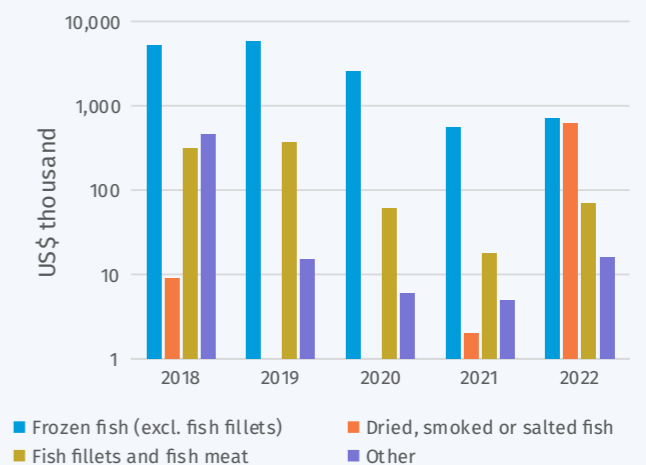


B) TOP EXPORTS OF FISH AND FISHERIES PRODUCTS TO THE SADC

FIGURE 33: Zimbabwe's exports of fish and fisheries products to the SADC (2018-2022)

Key points:

- Frozen fish accounts for **50%** (US\$711,000) share of Zimbabwe's exports to the SADC in 2022.
- Dried, smoked or salted exports have surged to become **second top export** to the SADC (44% share in 2022).
- Exports of fish fillets and other fish and fisheries products have been **declining**.

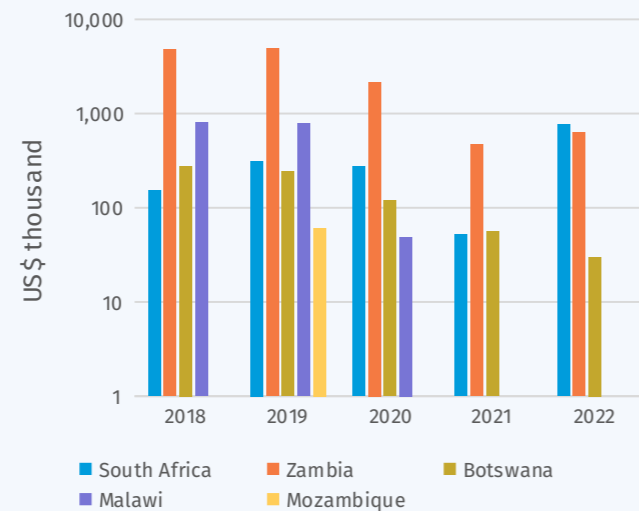


C) TOP EXPORT DESTINATIONS IN THE SADC

FIGURE 34: Zimbabwe's top export destinations in the SADC

Key points:

- **Zambia and South Africa** are the main destinations.
- SADC states account for **100%** of Zimbabwe's intra-African exports, the bulk of which go to Zambia.
- Exports to South Africa marginally **surpassed** Zambia in 2022.



3.6.8 Value Chain Analysis

Among the goals of the SADC Industrialization Strategy and Road Map (2015–2063) is the structural transformation of the SADC region by way of industrialization, modernization, upgrading and closer regional integration. Developing viable regional value chains has been identified as one of the ways to achieve these goals.⁶¹ The consideration of regional value chains (RVCs) is particularly important, because these chains may be more amenable to upgrading than global value chains (GVCs) due to all players in the regional value chains being located within the region. RVCs also have important dynamics which are not generally considered in GVC literature. These dynamics consist of the coexistence of regional trade, regional investment and regional corporate ownership.⁶² Therefore, the development of RVCs constitutes an opportunity to reinvigorate not only the SADC, but also the whole of Africa's industrial development, building the requisite industrial capacity for African integration, increasing manufacturing of value-added products and increasing the consumption of African products.

- Enhancing access to credit, especially for women, youth and small-scale fish enterprises with minimal interest.
- Improving market infrastructure in key fish markets exhibiting leadership in price formation.
- Increasing access to domestic and cross-border market information through the media and extension workers, as well as by improving communication links along fish trading routes.
- Prioritizing the SADC efforts to reduce non-tariff trade costs and other non-tariff barriers to trade.
- Developing and/or facilitating the adoption of appropriate fish processing technologies among the small-scale fish processors.
- Enhancing fish quality through the adoption of proper fish processing standards and techniques, as well as developing better fish processing infrastructure.

A comprehensive analysis of potential value chains in which the SADC 7 countries under review can participate has already been undertaken. In this report, we believe the value chains identified by Kaunda and Chimatiro (2019) remain valid and are worth considering. The species identified included: (i) small pelagics, both marine and freshwater; (ii) farmed tilapia; and (iii) demersal species. The success of developing the RVCs will depend on how countries will cooperate and address specific challenges that are common and affect fisheries products trade in the SADC. The interventions proposed include, among others:⁶³

61) Op. Cit. (Kaunda and Chimatiro, 2019).

62) UNDP/AfCFTA, 2021. *Which Value Chains For a Made in Africa Revolution*. Futures Report 2021. United Nations Development Programme. [online]: <https://www.undp.org/africa/publications/futures-report-2021>

63) Op. Cit. (Kaunda and Chimatiro, 2019)

3.7 INFORMAL TRADE OF FISHERIES PRODUCTS IN THE SADC

Informal cross-border trade (ICBT) happens daily between neighbouring countries. It offers a diverse range of products and services, including basic agricultural produce, processed foods, clothing, electronics and car parts. Vulnerable traders, including women and youth, perform the majority of ICBT. Additionally, artisanal work, hairdressing and vehicle repairs are also available. A study undertaken in Malawi revealed that both the youth and elders take part in the informal fisheries trade with the minimum reported age of 15 years old and maximum of 72 years old, which is a clear indication that the fisheries and aquaculture sectors play an important role as a source of livelihood for all age groups.⁶⁴

African policymakers have historically overlooked the potential of ICBT trading to bring positive change. The needs of ICBT in terms of trade facilitation are usually not taken into consideration during the development of trade policies. Furthermore, the lack of proper implementation of regional trading protocols and the absence of awareness-generating initiatives poses significant challenges to these traders.⁶⁵

In 2010, COMESA introduced the simplified trade regime (STR) to facilitate trade by small-scale traders operating in border areas where informal trade is common. A list of eligible products is now agreed between two countries (for example, Zambia and Zimbabwe). A threshold value limit for duty-free STR trade is also agreed on. Since the COMESA STR adoption, Malawi, Zambia and Zimbabwe have been participating and implementing the STR on a bilateral basis. Each arrangement has a specific list of goods that are eligible under the STR.

The STR is intended for small consignments, which are currently defined as exports of US\$1,000 or less destined for Zimbabwe and US\$2,000 or less destined for Malawi and Zambia from partner countries per consignment per crossing.

Other countries that have implemented the STR are members of the EAC, including Burundi, the DRC, Kenya, Rwanda and Uganda, all of which have a threshold value of US\$2,000 per consignment per crossing.⁶⁶ It is important to note that the SADC does not have an STR in place. However, recommendations for the development of a strategy for small and medium-sized enterprises (SMEs) that includes an STR have been made under the current SADC Industrialization Strategy and Roadmap 2015-2063.⁶⁷ Under the bilateral Zimbabwe-Zambia COMESA STR arrangement, the fish and fisheries products under review in this chapter are not included in the qualifying list, while under the bilateral Zambia-Malawi COMESA STR arrangement, only fresh fish (excl. live fish) and dried, salted or smoked fish qualify (Annex 2).

The STR does not exempt traders from compliance with other obligations and requirements at the border. These include obtaining the required travel documents for immigration and licences, as well as certificates such as export/import permits and SPS certificates according to the trade regulations.⁶⁸

Measuring ICBT has been a challenging task. This is because most of the trade does not pass through official border posts and even when it does, the official trade data does not indicate the specific trade regime under which the goods entered the countries. Smuggling remains rampant, as red tape at the border increases the cost of doing business. The prevalence of corruption and

bribery incentivizes informal cross-border traders to use informal channels to avoid the cost of compliance at the borders. Box 1 summarizes factors influencing the use of informal trade routes based on a survey undertaken in Malawi and Zambia.

BOX 1: Factors Influencing Traders to Use Informal Trade Routes⁶⁹



The **Zambia survey** highlighted the following:

- It was found that the knowledge of policy regarding informal trade and the number of people involved in the fish supply chain were significant factors influencing fish traders in Zambia to use informal fisheries trade routes.
- The study found that traders preferred to use informal trade routes due to a lack of awareness of the policies guiding cross-border trade. However, once fish traders are made aware of the policies regarding the cross-border fisheries trade, they are less likely to use informal border crossings.
- Additionally, the study found that traders are less likely to participate in the informal trade when the number of people involved in the fish supply chain increases.
- This could be due to an increase in operational costs, leading to reduced revenue generated. Overall, understanding these factors could help policymakers to create effective policies to promote formal trade and discourage informal trade in the region.



The **Malawi survey** highlighted the following:

- The gender of traders, types of fish being traded, transportation method for crossing borders, operational costs, time taken to gather the fish, the price of fish in cross-border markets, knowledge of policies regarding informal trade, political dynamics and trading between Malawi and Mozambique were identified as significant factors that influence fish traders to engage in informal trade routes.

64) Mussa, H. Kaunda, E. Chimatiro, S. Kakwasha, K. Banda, L. Nankwenya, B. Nyengere, J. 2017. Assessment of Informal Cross-Border Fish Trade in the Southern Africa Region: A Case of Malawi and Zambia, *Journal of Agricultural Science and Technology B 7* (2017) 358-366.

65) McCartan-Demie, K. Macleod, J. 2023. *How the Covid-19 crisis affected informal and digital trade*, in Luke, D. (ed). **How Africa Trades**, London: LSE Press, pp. 177-208. [online]: <https://doi.org/10.31389/lsepress.hat.g>

66) Gakunga, M. 2021. *Countries Implementing the Simplified Trade Regime Set to Rise*, TradePress, COMESA. [online]: <https://www.comesa.int/countries-implementing-the-simplified-trade-regime-set-to-rise/>

67) SADC, 2015. *SADC Industrialization Strategy and Roadmap*. SADC Secretariat. Gaborone. [online]: https://www.sadc.int/sites/default/files/2022-07/Reprinting_Final_Strategy_for_translation_051015.pdf

68) COMESA, "n.d." *STR Explained: Zimbabwe-Zambia-Malawi*. COMESA Cross Border Trade REFORM Project. Lusaka

69) Op. Cit. (Mussa, et al, 2017)

3.8 CONCLUSIONS

This chapter provided an overview of the fisheries sector in Africa, specifically in selected SADC member countries. Production and consumption patterns have revealed that the region relies on imports of certain fish products to meet the demand fully. Furthermore, the per-capita consumption of fish and fish products remains lower than the global average. Despite this, there are efforts at both the regional and national level to increase production and invest in aquaculture production. There are existing regulatory and policy frameworks in most SADC countries

to support the fisheries sector. However, implementation and enforcement remain key challenges. In conclusion, it is the authors' view that there are opportunities for the SADC to increase intraregional trade in fish and fisheries production, provided that cumbersome border procedures, unavailability of storage facilities at borders and non-tariff barriers are eliminated.

3.9 RECOMMENDATIONS

The following recommendations (while not exhaustive) should be considered:



1. FOCUS ON DEVELOPING THE AQUACULTURE SECTOR

Aquaculture has great potential for socio-economic development in the region, but it has not been fully utilized. The decline of wild fish and fish products, along with the growing global demand for fish and fish products, creates a strong incentive to increase the supply of sustainable aquaculture products in the region. Aquaculture has been successful worldwide, with an increase in the contribution of fish and fish products from aquaculture in recent years. Governments in the region have expressed interest in developing the sector and have created national aquaculture strategies in several countries. However, to fully realize the potential of the industry, there needs to be a commitment to provide financial resources, capacity building and policy consistency, as well as create an enabling environment for private-sector participation and investment.



2. INFRASTRUCTURE DEVELOPMENT

The highly perishable nature of fish and fisheries products highlights the need for the establishment of storage infrastructure at the border, especially for cold chain management. Small-scale fish traders often suffer significant post-harvest losses due to a lack of access to storage facilities and cold chain management systems. Investing in infrastructure development, particularly cold storage facilities at strategic points in the value chain that are accessible to small-scale fish traders, can help to minimize post-harvest losses.



3. ACCESS TO FINANCE

Small-scale fishermen often face the challenge of not having access to financial services to innovate and transition their fishing operations towards sustainability. By having access to financial services, small-scale fishermen will be able to adopt measures that provide social, economic and environmental benefits. This can be achieved by making lines of credit attractive to small-scale fish producers. Governments, financial institutions and other stakeholders need to collaborate to develop innovative solutions such as digital technology platforms and loan appraisal tools tailored to the fishermen's needs. These solutions can help financial institutions manage risks and increase their understanding of the fishing business.



4. TRAINING AND AWARENESS RAISING ON TRADE REGIMES

Many small-scale fish traders do not have access to information about customs procedures and are not familiar with trade regimes. This is a more common issue among women traders. It is important to undertake regular training and awareness raising initiatives to ensure that fish traders are aware of the preferential trading regime and the customs procedures under the SADC FTA. Furthermore, countries such as Malawi and Zambia should make use of the COMESA STR for small consignments of fish products. Coordination among government departments, trade associations, civil society and international organizations is critical to the success of such training and awareness raising initiatives. The creation of functional trade information desks at border posts can go a long way in effective information dissemination and awareness raising.



5. PROMOTE THE DEVELOPMENT OF CROSS-BORDER REGIONAL VALUE CHAINS

The development of RVCs constitutes an opportunity to increase the manufacturing of value-added fisheries products and increase the consumption of African products. Value chain work already undertaken identifies several products in which the SADC 7 countries can participate. It is important to note, however, that any success in developing the RVCs will depend on how countries will cooperate and address specific challenges that are common and affect fisheries products trade in the SADC. Among key success factors will be the ability of fish traders to enhance fish quality through the adoption of proper fish processing standards and techniques, as well as the development of fish processing infrastructure.

4

Critical review of previous One-Stop Border Post interventions

This technical section covers the specificities of the non-tariff barriers that hinder regional trade of fisheries products providing clear recommendations for a future pilot activity under the PROFISHBLUE programme. Moreover, it provides a detailed examination of how OSBP's operate, a proposal of export-import flow chart for operational OSBPs and concludes with the relevant border posts at which the proposed pilot work should be conducted.



4.1 INTRODUCTION

In Africa, many impediments to continental trade have been identified and intra-African trade has lagged behind, mostly due to low levels of trade facilitation and industrialization. Fish products are highly traded within African countries and, although most food fish consumption in Africa falls into the “low value” per-capita consumption group, fish is an important source of animal protein and a valuable source of income for communities. Although the last few decades have seen progressive work to improve trade liberalization (with multilateral and bilateral agreements) and harmonization, market access conditions for fisheries products (and agriproducts in general) are increasingly determined by a wide range of regulatory measures, thus often having both restrictive and trade-diverting effects. Until now, no research has been done focusing on the impact of all sanitary and phytosanitary (SPS) instruments on trade (and more importantly, on informal trade). However, the fact is that the documented intraregional fisheries trade remains low due to the persistence of informal channels and heterogeneity across countries in implementing diverse SPS requirements and a lack of capacity of developing countries causes ambiguous and often challenging, trade outcomes.

Non-tariff barriers include any regulations to trade (other than tariffs) that are restrictive. Examples are the sanitary (human and animal health) and phytosanitary (plant health) measures that address risks, collectively known as SPS risks. These risks can inadvertently be transported along with animals, plants and foods, thus affecting directly or indirectly trade and the production environment. SPS measures are meant to protect human, animal or plant life or health. Additionally, Technical Barriers to Trade (TBT), related with conformity assessment procedures, can also have the unintended consequence of adding additional burden and cost for compliance to the private sector, thus restricting trade.

Trade in fish and fisheries products within the SADC region is conditioned by a wide range of different TBT and SPS measures, each of which potentially requires specific control system features, both at the border and within the pre-export value chain. The concept of process control, in terms of SPS measures, provides a much more effective and efficient means of official control (from farm to fork) than random spot checks on samples taken from consignments presented at the border for export. Therefore, the currently applied “border post checks only” model of border control can be somewhat weakly effective in achieving the object of compliant trade, is less efficient and results in increased delays at the border.

This technical section is an output of the PROFISHBLUE project and covers the specificities of the non-tariff barriers that hinder regional trade of fisheries products providing clear recommendations for a future pilot activity under the programme. Moreover, it provides a detailed examination of how OSBP's operate, a proposal of export-import flow chart for operational OSBP's and concludes with the relevant border posts at which the proposed pilot work should be conducted.

4.2 METHODOLOGY

The methodology used to conduct this critical analysis of the OSBP (and to seek information on trade related aspects) involved desk research and the administration of a questionnaire to fish traders and border agencies. The questionnaires were developed by a collaboration between UNIDO technical experts and the Trade Law Centre (TRALAC), with inputs provided by the SADC secretariat and National focal points of the bordering countries. The questionnaire consisted of short answers and true/false questions to assess the cross-border

procedure/processes and specifically the steps to check and verify compliance through the existing OSBP's. The questionnaire was administered on selected individual stakeholders and aimed to determine the actual OSBP trade procedure, the process taken to obtain the necessary certifications (SPS/TBT) and the costs in relation to specific fisheries products.



4.3 CONTINENTAL AND REGIONAL CONTEXT OF TECHNICAL AND SANITARY MEASURES

A customs duty or tariff is a financial charge imposed on products during the importation process into the customs territory and these constitute the most common and widely used barrier to market access for goods. Other barriers, the so-called non-tariff barriers (NTBs), cover numerous rather different measures and actions that restrict to various degrees and in different ways, market access for goods and which are not administered in the form of a tariff. Some examples include SPS measures and TBT.

The World Trade Organization (WTO) is the only international organization dealing with the global rules of trade to provide assurance to consumers and stability to national economies. Its main function is to ensure, through WTO' agreements, that trade flows as smoothly, predictably and freely as possible.

4.3.1 Sanitary and phytosanitary measures

Sanitary (human and animal health) and phytosanitary (plant health) risks, collectively known as SPS risks, can inadvertently be transported along with animals, plants and foods, thus affecting directly or indirectly trade and the production environment. SPS measures are meant to protect human, animal or plant life or health. These measures include all relevant laws, decrees, regulations, requirements and procedures such as production methods, testing, inspection and certification among others and need to be sustained by rigorous risk assessment.

To facilitate safe trade, the SPS Agreement encourages WTO Members to establish national SPS measures consistent with international standards, guidelines and recommendations developed by:

- The joint FAO/World Health Organization (WHO) Codex Alimentarius Commission (Codex) for food safety.
- The World Organization for Animal Health.
- The International Plant Protection Convention (IPPC) for plant health.

The basic aim of the WTO SPS Agreement is to maintain the sovereign right of any government to provide the level of health protection it deems appropriate, while also ensuring that these rights are not misused for protectionist purposes and do not result in unnecessary barriers to international trade.

4.3.2 Technical barriers to trade

The TBT sets out the rules to ensure that regulations, standards, testing and certification procedures are genuinely useful and do not become discriminatory and

arbitrary obstacles to trade. Moreover, the agreement encourages countries to use international standards so that a country can recognize each other's procedures for

assessing whether a product conforms to requirements. Without conformity assessment recognition, products might have to be tested twice, first by the exporting country and then by the importing country.

The table below highlights the difference between SPS and TBT risks and measures.

Measure	Justification/risk	TBT/SPS
Requirement to be graded according to size and quality	Informs buyers and consumers of the quality and allows price transparency	TBT
Controls on plasticisers in packaging materials	Prevention of product contamination with materials harmful to consumer health	SPS
Requirement to be processed subject to HACCP rules	Ensure that food safety hazards are controlled	SPS
Requirement for labelling with country and region of origin and whether wild or farmed	Informs buyers and allows price transparency	TBT
Controls on residues of veterinary medicines	Prevention of exposure of consumers to a) prohibited substances b) permitted substances above safe levels	SPS

4.3.3 Trade agreements in the continental and regional context

At continental level, the Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment (DARBE), in partnership with Regional Economic Communities (RECs) and their Member States, plays an important role in strengthening the overall function and integrity of SPS systems on the continent. As the cornerstones of these systems, RECs⁷⁰ serve as key sources of SPS guidance and coordination in order to further harmonize standards and aid in their implementation at the regional level. Moreover, the AU has a number of specialized technical agencies, two of which deal with SPS issues, namely Specialized Technical Offices AU-Inter-African Bureau for Animal Resources (AU-IBAR) and the Inter-African Phytosanitary Council (IAPSC).

Recently and in the pursuit of improved SPS compliance, DARBE, jointly with an expert coalition (including the AfCFTA Secretariat), has developed an AU SPS policy Framework⁷¹ and implementation plan. This framework provides strategies as well as recommendations to all AU Member States, detailing necessary actions to implement a science-based SPS Policy Framework and describing the roles and responsibilities of different stakeholders. It seeks to complement and enhance (and not to duplicate) existing SPS strategies under implementation by RECs and Member States and to promote a strong national, regional and continental approach to SPS systems.

70) There are currently eight RECs recognized by the AU: the Arab Maghreb Union (UMA), the Common Market for Eastern and Southern Africa (COMESA), the Community of Sahel-Saharan States (CEN-SAD), the East African community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD) and the Southern African Development Community (SADC).

71) African Union Department of Rural Economy and Agriculture. Sanitary and Phytosanitary (SPS) Policy Framework for Africa, October 2019.

Moreover, the AU SPS Policy Framework aims at supporting the implementation of the AfCFTA's Annex 7 on SPS and enhance quality assurance for Africa's agricultural trade competitiveness. The AfCFTA Agreement covers the protocols and their annexes, with Annexes 6 and 7 covering TBT and SPS measures respectively.

The regional economic communities recognize the need for having frameworks for SPS implementation. Different RECs in Africa have developed their own frameworks and agreements to address SPS concerns among Member States. These frameworks aim to harmonize SPS standards, facilitate the exchange of information and promote cooperation in addressing SPS issues, thus facilitating trade while ensuring the safety of agricultural and food products.

4.3.4 Regional fisheries overview and impact of SPS and TBT measures on the trade in fisheries products

Many African countries are endowed with fish resources from oceans, seas, lakes, rivers, floodplains and fish farms, which generate a range of benefits including food and nutrition security, livelihood, exports and biodiversity. In order to optimize the benefits from fisheries and aquaculture, the second Conference of African Ministers of Fisheries & Aquaculture (CAMFA) in April/May 2014, endorsed the African Union Policy Framework & Reform Strategy for Fisheries & Aquaculture in Africa. This Policy Framework and Reform Strategy lays down the guiding principles for Africa to increase its fisheries and aquaculture productivity, as well as improving the profitability of fish enterprises. The key to achieving profitability is ensuring access to markets by fish-dependent communities. However, many fishermen and fish farmers in Africa face numerous challenges to accessing markets. It is for this reason that the Policy Framework & Reform Strategy has prioritized the fisheries trade, with the aim to: "Promote responsible and equitable fish trade and marketing by significantly harnessing the benefits of Africa's fisheries and aquaculture endowments through accelerated trade and marketing".

To reduce food safety risks and protect consumer health without unduly restricting regional or international trade in food and agriproducts, the SPS Annex to the SADC Protocol on Trade allows the SADC Member States to adopt harmonized or scientifically justified SPS measures.

The SADC TBT is based on legal instruments as Article 5 of the SADC Treaty and Annex IX to the SADC Protocol on Trade on TBT. The SADC TBT policy aims to (i) establish a Free Trade Area in the SADC Region; (ii) promote harmonized standards and appropriate quality assurance systems within the Community; and (iii) promote the compatibility of specific standards or conformity assessment procedures.

Producers are particularly affected and commonly confronted with sanitary measures imposed by importing countries, which can affect the opportunity to access export markets. Integrated management of sanitary risks along agrifood value chains (using a farm-to-fork approach) must be implemented by operators to fulfil international sanitary requirements. However, compliance with SPS measures established by importing countries presents considerable challenges, especially for small-scale producers and traders.

Intraregional African trade of fish products represents an important component of the region's imports. In 2022, the SADC imported fish and fisheries products worth US\$1.5 billion, accounting for 26% of Africa's total imports of fish and fisheries products. SADC exports of fish and fisheries products were relatively higher at US\$2.3 billion, accounting for 31% of Africa's total exports of fish and fisheries products in 2022. Intraregional African trade of fish products was 23% in 2022, which is higher than average intra-African trade, which was around 15% during the same period. Moreover, southern African countries have substantial opportunities for the fisheries and

aquaculture sector export-led growth in a wide range of products, exploiting the production capacities of the region's water resources quality, extension and climate. However, trade to regional and international markets can be unattainable due to lack of compliance and seriously

undermined by the offer of substandard products through rejections and more damagingly, discounted prices to compensate for risk of rejection.



4.4 THE OSBP CONCEPT

Many impediments to continental trade have been identified and intra-African trade has lagged behind, mostly due to low levels of trade facilitation and industrialization. Border crossing plays a critical role on intraregional trade and poor performance in this regard is attributable to a variety of systemic challenges that include inefficient border crossings. Within the framework of the AfCFTA, OSBPs are a first step in laying the foundation for a Continental Customs Union, as OSBPs are central to enhancing interconnectivity and deepening regional integration (RI) by allowing market integration to be realized through the unification of the border clearance process.⁷²

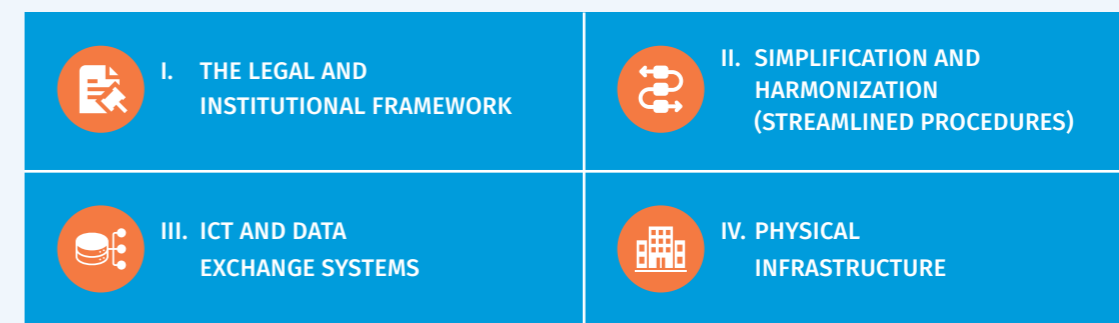
The concept of border control involves the application of spatial limits on the distribution of a product to help achieve a policy objective. Controls (implying a consequential action, not simply a measurement such as collection of statistical data or application of a tariff) at borders imply:

- Controls on exports by officials of the exporting country, e.g. prevention of export of non-permitted goods (e.g. trade in endangered species, undersized fish) or checks that exported goods will comply with the SPS and TBT requirements of the importing country (to avoid reputational risks to trade by rejection, food safety incidents, etc.).
- Controls on imports by officials of the importing country, specifically prevention of import of products which do not comply with the SPS and TBT requirements of the importing country.

There is a considerable overlap between export control and import control steps. Where the trade takes place across a land border at which functions can be physically co-located, this provides an opportunity for joint controls to minimize the routine clearance process by combining some or all the control steps applied. **The One-Stop Border Post involves placing officials of two countries in each other's border offices so that outward and inward clearance is carried out at one place sequentially.**⁷³

The OSBP concept is a modern and unique trade facilitation initiative created to improve efficiency at land border crossings by combining the stops required for processing exit and entry formalities of the adjoining states at a single border crossing point. Moreover, the OSBP approach promotes a coordinated and integrated strategy to facilitate trade, the movement of people and improving security as a trade facilitation tool applied at borders. The capacity of efficient OSBPs in contributing to economic growth by increasing trade volumes and reducing the time and costs associated with cross-border trade should be emphasized. The concept is aligned with broader goals of trade facilitation, such as those outlined in international agreements, namely the World Trade Organization's Trade Facilitation Agreement (WTO TFA). The WTO TFA specifically states that cooperation and coordination of MS should include the establishment of OSBPs (Article 8 on Border Agency Cooperation).⁷⁴

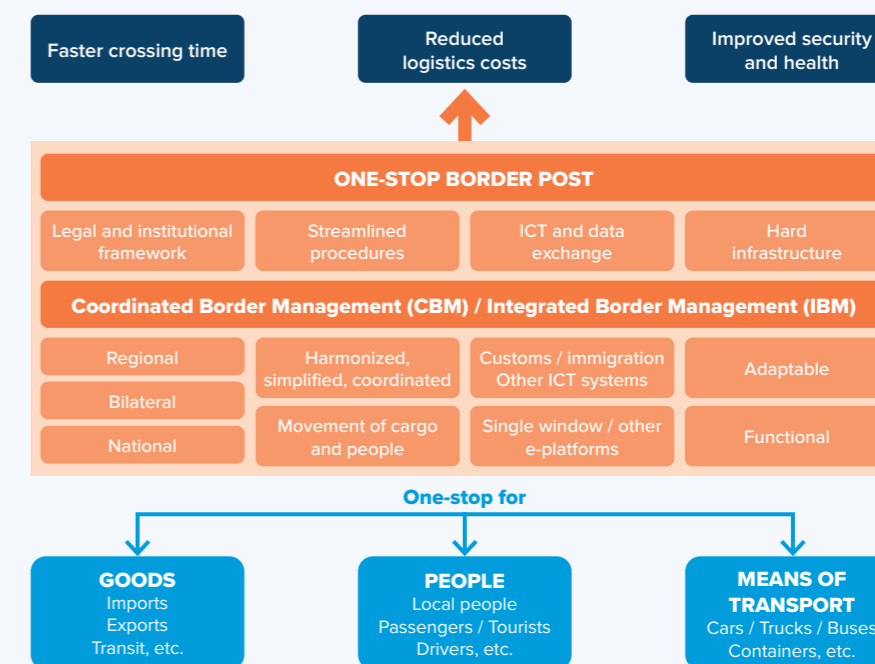
To meet trade requirements and be able to reduce the time and costs of border crossing (in a secure environment) requiring only one stop, OSBPs must apply joint controls to minimize routine activities and duplications. For this matter, OSBP strategies should integrate the following four pillars:



The successful implementation of OSBPs should also be enhanced by the use of complementary border management tools, such as coordinated and/or

integrated border management and risk management. Table 7 provides an overview of each OSBP pillar.

FIGURE 35: Graphical representation of the OSBP concept⁷⁵



72) African Union Development Agency - NEPAD and Japan International Cooperation Agency. One-Stop Border Post Sourcebook. June 2022. AUDA-NEPAD & JICA, Midrand, South Africa.

73) One-Stop Border Post Sourcebook, 2nd Edition May 2016, NEPAD Planning and Coordinating Agency.

74) Source: World Trade Organization, Trade Facilitation Agreement, 22 February 2017 (date of entry into force).

75) Extracted from African Union Development Agency - NEPAD and Japan International Cooperation Agency One-Stop Border Post Sourcebook. June 2022. AUDA-NEPAD & JICA, Midrand, South Africa.

TABLE 7: Overview of OSBP pillars

	<p>Legal and Institutional Framework</p> <p>The OSBP relies on the principles of extraterritorial application of laws. Therefore, it is imperative to develop an appropriate legal and institutional framework at the national and regional level, to support the application of single-stop border controls and operations. Moreover, the traditional border crossing involves multisectorial agencies that commonly operate in an uncoordinated manner. Consequently, the concept of OSBPs needs to integrate coordinated and integrated border management at the intra-agency, inter-agency and international level.</p>
	<p>Review and Alignment of Procedures (Simplification and harmonization)</p> <p>The efficiency of OSBPs must rely on alignment of procedures with simplification and harmonization of border crossing procedures. For this, countries should develop OSBP procedures and ensure training of the adjoining countries' border officials and agencies. Complementary awareness of various stakeholders from local community and private-sector providers, should be part of the OSBP development strategy.</p>
	<p>ICT and Data Exchange</p> <p>It is essential that agencies communicate efficiently with each other and ICT is a key driver for automation of manual processes, by reducing the submission of paper documents while storing and sharing such data in a more transparent manner. One example is the use of customs management software/single-window systems (e.g. ASYCUDA) where various government agencies and entities involved in trade facilitation, such as customs, port authorities, regulatory agencies and other relevant stakeholders, come together on a unified digital platform. This helps in the pre-clearance of goods and reduces the need for redundant data entry.</p>
	<p>Hard Infrastructure (Physical facilities and traffic flows)</p> <p>OSBPs may require significant investment in physical infrastructure, such as administration buildings (offices for each border control agency), parking, warehouses, inspection bays, passenger clearance halls, banking hall, laboratory, etc. Facilities need to be designed considering the trade concept and flows, in such a way that traffic flows through the OSBP are smooth and functional.</p>



4.5 OSBP MODELS AND EXISTING OSBPs IN SOUTHERN AFRICA

4.5.1 Overview of OSBP models

OSBPs involve the physical co-location of border control agencies and procedures from both the exporting and importing country at a single border crossing point. Alternative OSBP models can be applied, namely:

- **Juxtaposed**, where the facilities and infrastructure of border control agencies from two different countries are physically located adjacent to each other on either side of the border.
- **Straddling**, where a single facility is constructed across the border line. It involves sharing infrastructure and operational responsibilities across the border.

- **Single country (wholly located)**, involving the consolidation and coordination of various border control agencies within a single country to streamline procedures and improve efficiency. Under this model, one country will need the authority to carry out controls in the host country and the host country will need a legal framework that allows foreign officers to work on their soil.

4.5.2 OSBP in Southern Africa and Identified Pilots under PROFISHBLUE

The African continent has envisaged and worked for regional integration since early 1960. Regional integration aims to promote cooperation and coordination among countries across the continent to achieve common goals, enhance economic growth and improve the overall well-being of African nations. One-stop border posts are considered a critical component of regional integration efforts by improving the mobility and trade flows. Moreover, the development of OSBPs aligns with the broader goals of RECs to foster closer economic ties, cooperation and integration among African countries.

The OSBP concept in Africa dates to 2000. The Chirundu OSBP (serving Zambia and Zimbabwe) is considered the first fully operational functional OSBP in Africa and, following its launch, the development of others has also expanded rapidly. OSBP priorities were identified and approved in the Regional Infrastructure Development Master Plan (RIDMP) approved by the Summit of Heads of States in 2012. However, to date, the SADC has no OSBP-specific legal instruments and is yet to develop guidelines

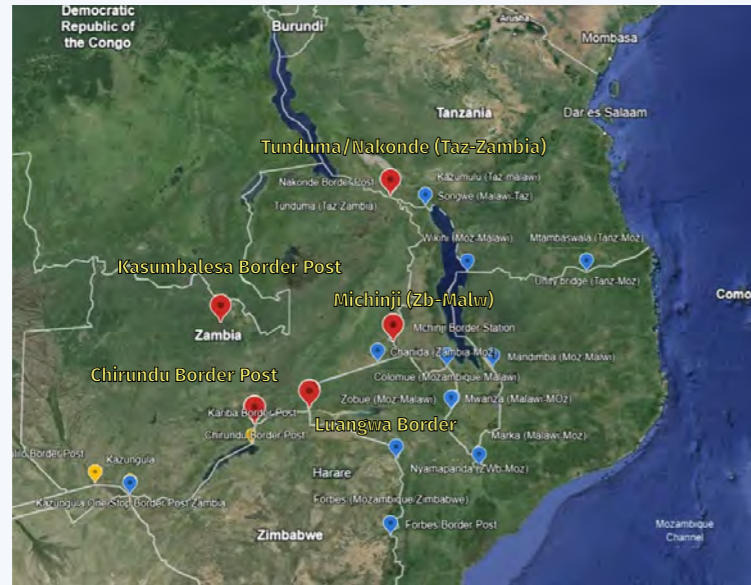
and model laws on OSBPs. Instead, the SADC relies on the SADC Sector Committees of Ministers responsible for Transport and the Committees of Ministers responsible for Trade, which oversees the development of OSBPs, supported by Committees of Sector Officials and Working Groups, which are established as when required (AUDA-NEPAD-JICA 2022). Therefore, in order to implement OSBPs, Member States in the SADC region rely on bilateral steering and joint border committees guided by multilateral arrangements, such as the Protocol on Trade and Treaties, to bind them once domesticated and ratified.

Physical infrastructure construction and operations are normally a responsibility of the Member States. Support of development partners played a key role in infrastructure development of the existing border posts, yet a lack of adequate infrastructure remains detrimental to OSBP expansion. Strengthening OSBPs has been considered a major tool to tackle impediments to trade growth in Africa.

Based on information received from PROFISHBLUE National focal points, the following figure demonstrates

the border posts and checkpoints considered relevant where fish products are primarily traded.

FIGURE 36: Relevant Southern Africa Border Posts⁷⁶



Based on the latest edition (2022) of the OSBP Sourcebook, the outcome of the in-depth consultations with stakeholders and considering the six bordering countries included in the specific PROFISHBLUE project component 2A, **the following border posts are operating under the OSBP initiative** and should be considered as potential OSBPs for the pilot on trade of fisheries products:

- **Chirundu** (Zambia/Zimbabwe)
- **Tunduma/Nakonde** (the URT/Zambia)
- **Mwami/Mchinji** (Zambia/Malawi)
- **Kasumbalesa** (the DRC/Zambia)

Ideally, as a prerequisite for being functional and sustainable, OSBPs should be rooted in a solid policy and legal framework and implementation strategy. It is worth mentioning that it is recognized that there are other relevant border posts where the fisheries trade is intense (e.g. Luangwa, Zobue, Kazungula and Katima Malilo). However, to pilot the proposed intervention under the OSBP concept, the selected border posts must have the OSBP requirements in place and be fully operational.

76) Extracted from Google Earth on 23 February 2024.

Chirundu (Zambia/Zimbabwe)

The Chirundu OSBP is located along the north-south corridor and connects the town of Chirundu in Zambia and the town of Chirundu in Zimbabwe. This border post is a significant transit point for goods travelling between Southern Africa and other regions and is one of the best-known OSBPs in the SADC region. It has been recognized for its successful implementation and contribution to reducing congestion and waiting times at the border. It is a juxtaposed model of OSBP and facilities are connected by a bridge across the Zambezi River. Traffic at this

border post currently exceeds 400 vehicles per day. The FishTrade Programme recorded a total of 780.3 MT valued at US\$1.83 million as having crossed the Chirundu border between September and October 2015 (Kakwasha 2016). The existence of bilateral agreements between Zimbabwe and Zambia (coming in force between 2007 and 2009) and an operations manual have been effective since 2011.

FIGURE 37: Chirundu location⁷⁷



Tunduma/Nakonde (the URT/Zambia)

The Nakonde-Tunduma OSBP is a trade facilitation initiative situated in the Dar es Salaam/North-South corridor, at the border crossing between the town of Nakonde in the URT and the town of Tunduma in Zambia. This border post serves as an important transit point for goods moving between the two countries and beyond. The FishTrade Programme estimated that fish exports at the Tunduma border, though informal, are valued at around US\$5.2 million annually (Uwamahoro et al., 2017). With an immense traffic flow of around 513 vehicles per

day (average), this juxtaposed OSBP was commissioned in 2019, but the cargo section is yet not operating as such due to inadequate facilities on the Zambian side. A bilateral agreement was signed in 2010 and both countries have enacted specific legal instruments for the post's operation (Zambia Border Management and Trade Facilitation Act, No. 12 of 2018; the United Republic of Tanzania One-Stop Border Posts Act No. 17 of 2015).

77) Extracted from Google Earth, visited on 22 August 2023.

FIGURE 38: Tunduma location⁷⁸



Mwami/Mchinji (Zambia/Malawi)

The Mwami/Mchinji juxtaposed OSBP was just recently commissioned (end of 2022) and is established in the Nacala transport corridor, located on the Great East Road (T4) in Zambia and the M12 in Malawi, connecting Zambia and Malawi to the port of Nacala in Mozambique. The initiative is considered a key facility in the growth and enhancement of the two countries' economies and other Member States. The FishTrade Programme estimated

annual informal fish exports from Malawi to Zambia between 2015 and 2016 to be 11,399.20 metric tonnes, valued at US\$21.6 million (Mussa et al., 2017). A bilateral agreement between the two governments concerning the establishment and implementation of a one-stop border post was recently signed and operational manuals are still under development.

FIGURE 39: Mchinji location⁷⁹



78), 79) Extracted from Google Earth, visited on 22 August 2023.

Kasumbalesa (Zambia/Democratic Republic of Congo)

Kasumbalesa is an OSBP between Zambia and the DRC and is classified as one of the busiest borders, with vehicles cleared at the border travelling from and destined to far away destinations such as South Africa, the URT, Namibia, Mozambique and other SADC countries. Kasumbalesa has a strategic position where five major ports dovetail (the ports of Durban, Dar es Salaam, Beira and Walvis Bay from the SADC and the port of Mombasa from East Africa).

estimated a total volume of 22.4MT per month of fish, valued at US\$23,010.56, to be crossing the Kasumbalesa border (Kakwasha 2016). Moreover, it was recognized the need for physical improvement of facilities and storage capacities to decongest the street market and reduce the number of streets vendors. This border was also used as part of an initiative- Green Pass Project- under the EU funded Small-Scale Cross-Border Trade Initiative.

Informal trade plays a major role at this border post and off-loading and transshipment occurs to overcome trade challenges. Moreover, the FishTrade Programme

FIGURE 40: Kasumbalesa location⁸⁰



The following enumerated OSBPs, also located in the target countries, are currently under construction phase or planning/feasibility study stage and should be assessed regarding the conditions to initiate operations as OSBPs:

- Mandimba/Chiponde (Mozambique/Malawi)
- Machipanda/Forbes (Mozambique/Zimbabwe)
- Nyampanda/Cuchimano (Zimbabwe/Mozambique)
- Zobue/Mwanza (Mozambique/Malawi)
- Colomue/Dedza (Mozambique/Malawi)
- Kasumulu/Songwe (Malawi/the URT)
- Unity Bridge (the URT/Mozambique)
- Marka (Malawi/Mozambique).






80) Extracted from Google Earth, visited on 26 December 2023.

4.6 BORDER CONTROL AGENCIES

The following table provides information on specific border control agencies for each of the selected

countries, where OSBPs are being considered as potential places for the pilot study.

TABLE 8: Relevant border control agencies in the target countries

Country	Border control agency
 Democratic Republic of the Congo	<ul style="list-style-type: none"> National Fisheries and Aquaculture Office (ONPA) Service National d'Aquaculture or National Service for Aquaculture (SENAQUA) Ministry of Foreign Trade Congolese Control Office (OCC) Ministry of Agriculture's Animal and Vegetable Quarantine Service (SQAV) Centre d'Expertise, d'Evaluation et de Certification (CEEC) Directorate General of Migration (DGM) Direction Générale des Douanes & Accises (DGDA)
 Malawi	<ul style="list-style-type: none"> Malawi Bureau of Standards (MBS) Malawi Revenue Authority (MRA) Department of Animal Health and Livestock Development (DAHLD) Department of Immigration
 Mozambique	<ul style="list-style-type: none"> Fish Inspection, INIP, IP. INNOQ INAE Mozambique Revenue Authority (AT)
 The United Republic of Tanzania	<ul style="list-style-type: none"> Ministry of Home Affairs (Migration, Police) Tanzania Revenue Authority (Customs) Tanzania Bureau of Standards (TBS) Ministry of Livestock and Fisheries (Fisheries and Livestock Officers) Ministry of Health (Health Personnel) Ministry of Agriculture and Cooperatives
 Zambia	<ul style="list-style-type: none"> Zambia Revenue Authority Zambia Bureau of Standards Cross-Border Road Transport Agency Zambia Police Immigration Department Phytosanitary Department
 Zimbabwe	<ul style="list-style-type: none"> Zimbabwe Revenue Authority Veterinary Public health Zimbabwe Republic Police

4.7 GENERAL REQUIREMENTS FOR CROSS-BORDER FISHERIES TRADE

Fish is one of the most traded commodities between African countries. However, the intraregional fisheries trade is constrained by the involvement of multiple agencies, a deficient institutional and legal framework and a lack of harmonization, alongside inadequate market and trade infrastructure. For traders of perishable commodities such as fish, these constraints lead to

high transport costs, lengthy processes due to complex trade rules and inadequate information and enormous losses. This prevents African operators from achieving the potential economic and social benefits available from the fisheries trade and existing trade facilitation agreements.

Requirements can vary depending on the countries involved and their respective regulatory frameworks. Some common requirements for cross-border trade include the following:

- ▶ Operators' licence/ registration
- ▶ Import and Export licences
- ▶ Traceability
- ▶ Sanitary/health and safety standard requirements (including laboratory testing and certificates)
- ▶ Sampling of consignments
- ▶ Labelling and packaging requirements
- ▶ Environmental regulations (if applicable for endangered species)
- ▶ Certification and inspection (conformity verifications for export/import)
- ▶ Movement permits and transport certifications.



4.8 TRADE BARRIERS FOR FISH PRODUCTS

The trade in fisheries products and its economic performance is commonly affected by various policy measures, whereby non-tariff measures such as SPS and TBT play a determining role, affecting the trade of products in the sector considerably. Although the SADC is committed to free trade, in practice fish products still face challenges in moving freely across borders. Using quantification of the level of informal cross-border fisheries trade as a proxy for the measure of the extent to which traders were unaware of the provisions of the Free Trade Area, the FishTrade Programme proved that non-tariff and regulatory barriers imposed unnecessary costs on fish imports and exporters. These costs raise prices for consumers, deter exports from taking advantage of the trade opportunities, undermine the predictability of the fisheries trade regime and reduce the development potential of the fisheries and aquaculture sector in Africa (WorldFish 2018).

The FishTrade Programme also revealed several challenges which cross-border fish traders between Zambia and neighbouring countries experience. These challenges include immigration restrictions (32%), harassment by Customs Authorities (24.6%), high tax charges (12%) and poor sanitation in the market (10.9%), to mention but a few (Kwakwasha 2017). The Green Pass model developed under the same project and piloted in Luangwa (traded across several borders, including the DRC through the Kasumbalesa border post) has much to commend it, not least that it does not address compliance with conditions at the point of production and along the supply chain. The concept of process control, in terms of SPS measures, provides a much more effective and efficient means of official control than random spot checks on samples taken from consignments presented at the border for export.

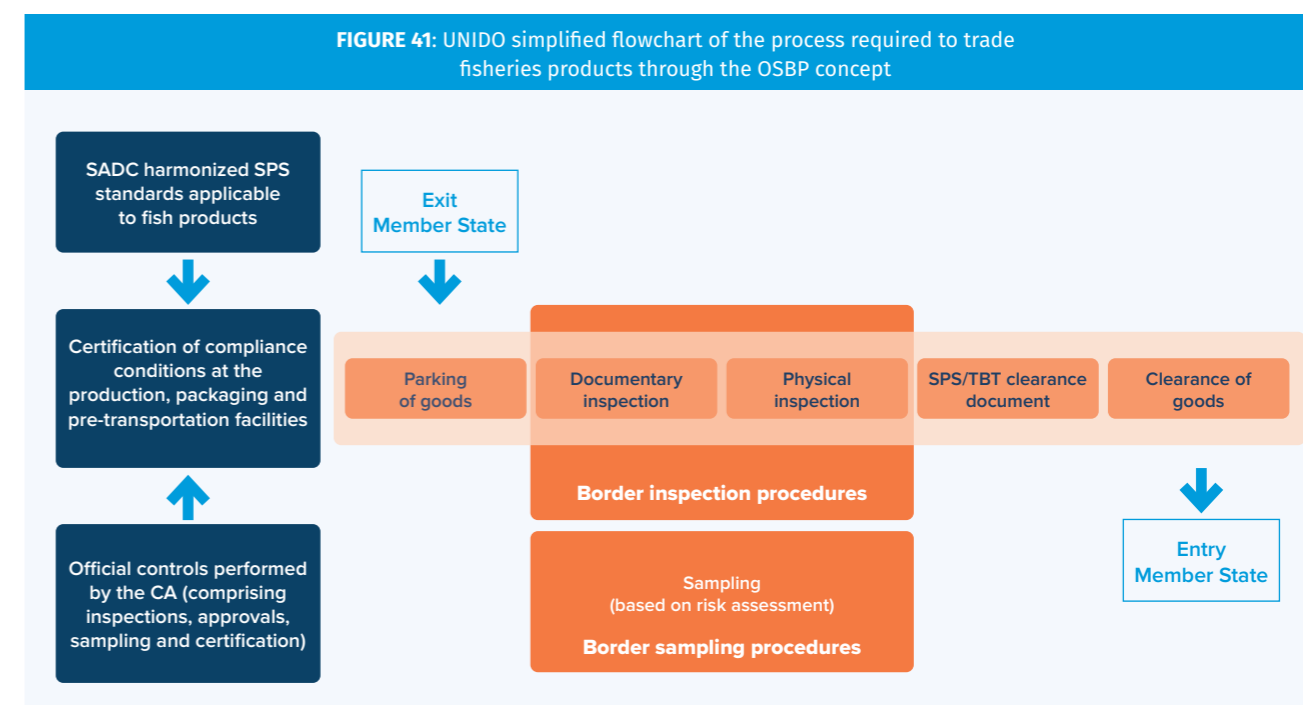
4.9 PROPOSED PROCESS FLOW OF OSBP APPLICABLE TO FISHERIES PRODUCTS

Experience gathered in the region showed that integrating fish into the OSBPs is the one of the most practical trade facilitation approaches. Overlaying fish on OSBPs was made possible with the development of a Conformity Assessment Framework (developed in partnership with ARSO), using harmonized safety standards (WorldFish 2018). Enhancing formal trade in fisheries and aquaculture products within the “One-Stop Border Post” concept foresees facilitation of the legally recognized trade in safe fish products. It also allows easier exploration of market access opportunities for value chain actors.

The successful implementation of such a concept is expected to make positive contributions towards food and nutrition security through improvements in compliance with production systems and will thus enhance the income and resilience of fish-dependent communities. However, there are risks which should be addressed, associated with the approach, which will inevitably apply strengthened non-tariff measures to trade flows known to be critical to food security and women’s livelihoods. Moreover, the impact of OSBP cross-border administration procedures (SPS procedures,

duration of process and charges applied) in informal trade, undertaken by the most disadvantaged people who are often women, needs to be the subject of in-depth analysis. Therefore, the strategy should address regulatory impact assessments on sensitive sectors and propose mitigating measures to help manage such impacts.

The concept of a sanitary compliance and conformity assessment implementation framework should not only address checks at borders, but also the application of the process control model for fisheries product quality and safety within the value chain and extended region. Below is a simplified flow chart developed by UNIDO that provides an overview of the process required to trade fisheries products in a safe manner through the OSBP concept.



As a first step, Member States need to be informed, encouraged and advised to adopt common elements of the regional standards into their national legislation (and to repeal conflicting measures), thus establishing an important step towards harmonization of relevant standards within the region. Furthermore, official controls (comprising licensing, inspections, approvals, sampling and official certification) need to be efficiently implemented by national competent authorities with a view of providing certification of compliance conditions from production to dispatch. Once harmonized and when reaching a common/combined control zone (OSBP), streamlined procedures that are simplified and synchronized need to be adopted.

Substantial work has already been undertaken by the SADC TRLC and ARSO in relation to approximation of trade measures and their implementation to facilitate trade in certain fish commodities. The role of these leading institutions in standards harmonization, trade facilitation and economic integration in the SADC Region is pivotal to supporting the adoption of harmonized standards, thus advancing the principle of “one standard, one test, one certificate, thus promoting uniform standards and procedures at OSBPs, to facilitate trade efficiency and reduce barriers to market access.

4.10 CHALLENGES OF TRADING UNDER OSBPs

The SADC Draft Guidelines (2011) on Coordinated Border Management (CBM) identifies six key management areas of border management where improvement would be essential for coordinated border management to succeed:

- Legal and regulatory framework (describes the necessary legal basis for cooperation and information exchange)
- Institutional framework (provides the recommended organizational setting for introducing CBM)
- Procedures for cooperation (bilaterally designed, transparent and harmonized)
- Human resources and training deals with recruitment and educational/training issues in the framework of coordination and cooperation
- Communication and information exchange (to provide guidance on how best to create standardized and efficient flows and exchanges of information)
- Infrastructure and equipment

Within coordinated border management, the core features of the systematization of the OSBP concept⁸¹ are considered to include:

- Extraterritorial application of laws, standards and hosting arrangements
- Institutionalizing interagency coordination (both local, national and international)
- Exchanging data (taking advantage of ICT solutions)
- Simplifying and harmonizing procedures
- Strengthening shared physical infrastructure (inspection sheds, testing facilities).

4.10.1 Challenges to OSBPs: A survey of traders and border officials

A short survey of traders, including informal traders, customs and other border officials was conducted by TRALAC and UNIDO to ascertain the functioning of the OSBPs. Respondents from the United Republic of Tanzania, South Africa, Malawi and Zambia took part in the survey. The survey aimed to understand the barriers or challenges faced by fish traders, especially women

traders at the borders. It is important to note that the sample size was small due to time constraints and low response rates. However, despite the shortcomings, the survey confirmed and reinforced the already known challenges that traders in general face at the borders.

81) One-Stop Border Post Sourcebook, ibid.

Survey Findings

The findings of the survey can be summarized as follows:

1

BUSINESS-RELATED CHALLENGES

Access to capital was the main challenge highlighted by virtually all traders interviewed. Other challenges included understanding contract drafting and contents, as well as business registration procedures.

2

TRADE-RELATED CHALLENGES

→ **TARIFFS:** Respondents noted that these were unpredictable and attributed to a lack of access to information at borders, especially for small traders.

→ **NON-TARIFF BARRIERS:** These were related to export permits. However, there was no additional information provided concerning the specific challenges associated with export permits.

→ **STANDARDS CONFORMITY AND CERTIFICATION:** SPS standards and certification processes, as well as TBT processes, were tied as the most inefficient processes. In contrast, RoO certification applications scored just a little less (meaning the process is seen as slightly more efficient).

→ **AWARENESS AND UTILIZATION OF PREFERENTIAL TRADE AGREEMENTS:** The responses were varied. 50% of respondents were aware of and utilized preferential trade agreements under the SADC and COMESA trade regimes. The other 50% indicated that they did not make use of preferential trade agreements. However, this question was likely interpreted as which agreements might they trade under or points to some greater lack of awareness and access to information.

3

BORDER POST CHALLENGES

These included time at the border, customs-related challenges, documentation and immigration, among others. Figure 42 provides a summary and the most prevalent challenges were associated with delays at the border and customs-related challenges, such as tariffs and RoO certification, among others.

4

MITIGATING FACTORS

When asked what traders had done to address these issues, half of the respondents noted that they had sold the product in the domestic market, while the other half said that they made attempts to address their respective issues, without mentioning specifics.

5

TRADE FACILITATION

When asked how trade facilitation and border processes might be improved, respondents suggested the following common areas:

→ Making the application process online.

→ Reducing or eliminating tariffs.

→ Harmonizing SPS procedures and rules.

→ Harmonizing RoO rules across COMESA and the SADC.

→ Expediting facilities and processes for the fisheries trade.

→ Improving access to cold storage facilities and warehouses or storage facilities at the borders.

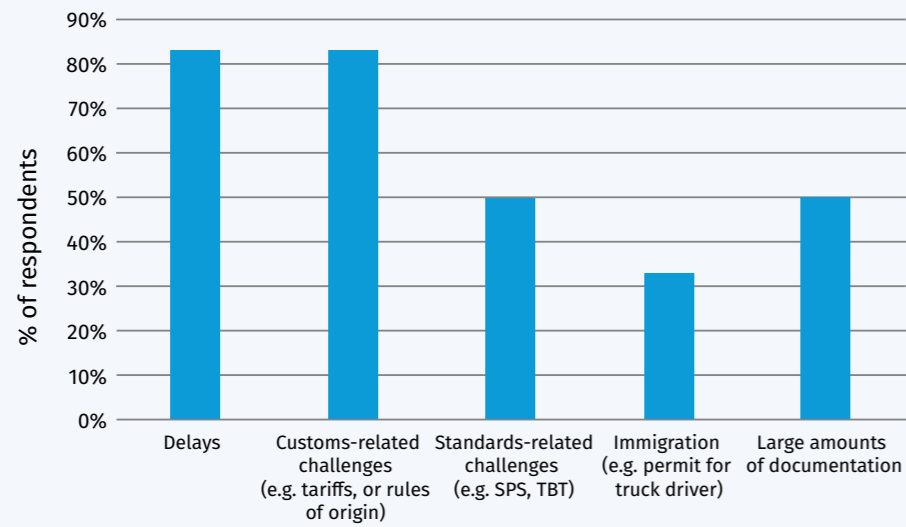
The response concerning tariffs is one worth noting, as tariffs may have been confused with other taxes or surtaxes that may be levied on products. This is because, under both the COMESA and SADC trade regimes, fish products enter the respective Member States' jurisdiction duty free. Awareness of this part and clarification of other charges is important for traders to understand the costs associated with exporting fish products to the SADC.

6

OTHER SUGGESTIONS

A final important suggestion was to ensure that requirements are made accessible to traders in "all local languages" to prevent or minimize exploitation by customs officers.

FIGURE 42: Border post challenges experienced by traders



4.10.2 Challenges affecting operations

The establishment of OSBPs is intended to contribute to economic development by facilitating regional integration through the improvement of mobility and trade

flows. However, multiple challenges are faced during implementation, including but not limited to:



LACK OF ALIGNMENT OF PROCEDURES AND FORMALITIES (INADEQUATE COOPERATION AND COORDINATION):

- Multiple agencies are involved in clearance procedures and discrepancies are commonly observed.
- Inadequate legal and regulatory instruments necessary for the smooth operation of OSBPs. For example, some countries have neither legal frameworks nor competent authorities to enable them to cooperate with their counterparts.
- Legal and regulatory challenges can be faced in the attempt to harmonize customs, technical measures and other regulatory procedures across different countries.
- Bilateral agreements with close cooperation between neighbouring countries, shared responsibilities and harmonization of regulations and procedures are usually hard to negotiate and implement.
- Reluctance of agencies and border personnel to change and evolve in different procedures can delay harmonization.



INSUFFICIENT INFRASTRUCTURE AND BORDER FACILITIES

- Inadequate and limited physical infrastructure and facilities. Equipment and low investment capacity tend to hinder efficient operations at OSBPs, leading to congestion and delays.



IT CONSTRAINTS

- Transitioning from manual to digital systems is challenging, requiring investment, training and technical support.
- Real-time information sharing between border control agencies and electronic data exchange is usually jeopardized by connectivity issues.



INSUFFICIENT HUMAN RESOURCES

- It is imperative that border control officials have proper and timely training to understand OSBPs' technical and operational requirements, procedures, standards and harmonized practices. Moreover, staff from different neighbouring countries should be trained jointly.
- Staffing shortages lead to delays and inefficiencies and the appointment of extra staff should be considered when facing peak seasons.



INSUFFICIENT POLITICAL WILL AND COMMITMENT

- Effective OSBP implementation requires strong political will, support from leadership and commitment to overcome challenges.
- Lack of prioritization of OSBPs implementation on political agendas and shifts can lead to delays or changes in funding and resources allocated to OSBP interventions.



SECURITY CONCERNS AND INSUFFICIENT RISK ASSESSMENT KNOWLEDGE

- Risk assessment and mitigation should ensure that trade processes do not compromise security measures and do not pose additional and unnecessary barriers to trade.
- Data sharing for trade facilitation and protection of sensitive data can be challenging.



INEFFICIENT STAKEHOLDERS' ENGAGEMENT, FUNDING AND SUSTAINABILITY

- OSBP operational planning should engage various stakeholders, including private-sector and small-scale operator' representatives.
- From planning to development and maintenance, OSBPs require funding for infrastructure, technology, capacity building and ongoing operational costs. Ensuring sustainable resources can be challenging, specifically if dependent on public-sector budgets.

4.10.3 Challenges specific to trade of fisheries products for human consumption

Sanitary and conformity conditions for fisheries products

Hygiene and food safety in fisheries and aquaculture products are a weak link in African fisheries marketing and often the reason for border rejection and specific ban introductions. Alongside sanitary requirements are the technical regulations and conformity assessment procedures, all factors potentially constituting technical barriers to trade of fisheries products in the African context.

The fisheries sector operates in an increasingly globalized environment, where fish may be produced in one country, processed in a second and consumed in a third and most African nations have inevitably upgraded their legal and regulatory framework to meet the constantly evolving international requirements. Moreover, regional initiatives to simplify and harmonize requirements and compliance assessment procedures are likely to be based on internationally recognized standards from the Codex Alimentarius Commission (CAC). This trade-driven change tends to marginalize the conditions set out for the domestic market, considering that most small-scale sector operators might not be able to respond to a strict application of anything other than the most basic requirements and many are often forced out of business when conditions are strictly enforced.

Challenges rely on both the operators (who have the primary responsibility for food safety) due to stringent compliance requirements and the competent authorities (CAs) who must ensure that producers are adequately informed about merging or changing risk patterns and that there are adequate official checks and controls available within the regulatory system to ensure that risks are managed in an efficient way. To this end, critical SPS parameters need to be monitored

by the mandated authorities along the fisheries value chain (from production to final sale to consumers) and quality assurance/conformity assessment needs to be assessed by the mandated institutions for the relevant documentation to be issued. Commonly, a wide range of government departments, authorities, agencies and boards are involved in TBT/SPS regulation, leading to duplication and sometimes to a conflicting inspection/certification procedure.

Inadequate border procedures and logistics services hamper countries' capacity to trade and lead to significant economic and product quality losses. A quick release of perishable goods such as fisheries products and appropriate storage for them pending their release is vital to enhance exports and linkages with regional markets. According to the WTO (Article 7), Members must allow the quick release of perishable goods, provided that all regulatory requirements have been met.

Studies conducted to assess trading costs related to the implementation of SPS measures at border crossings for fisheries products⁸² identified that rejections of fisheries consignments end up being traded informally, thus posing additional risk to consumers.

4.10.4 Other regional trade challenges

Intra-African trade data reveals that the SADC countries within this study are net importers of fish and fisheries products, except for the URT. The related intra-African exports and intra-African imports accounted for 2% and 15% of total intra-African trade respectively in 2022 and these values have been relatively constant over the past 5 years. The SADC FTA and proximity to the market are the main factors for the high levels of intra-SADC trade and some countries like Mozambique, Zimbabwe and Malawi imported all their intra-African fish and fisheries products from the SADC. However and despite the high levels of intra-SADC trade, the bulk of SADC Member States recorded a trade deficit (with imports mainly coming from Europe, West Africa and Asia), implying that the region cannot meet its demand, which slightly outweighs its local production.⁸³

Despite the efforts to boost intraregional trade and some apparent successes like Chirundu OSBP and others in East Africa, available references⁸⁴ on the current situation still report both border management challenges and infrastructure challenges, resulting in long queues and delayed clearance times. Unfortunately and for reasons not well documented, the trade of perishable products in Africa is more likely to occur informally. From trade costs (official taxes) to lack of knowledge regarding formal trade procedures, the studies conducted demonstrate that around 19%⁸⁵ of cross-border traders are not optimistic about switching border-crossing routes from informal to formal, despite any reduction of taxes or harmonized procedures.

Although not quantifiable specifically for the target countries involved in this study (some researchers

suggest that informal cross-border trade through official channels accounts for 30% - 40% of the bilateral trade in Simplified Trade Regime (STR)-qualifying products⁸⁶), the trade in fisheries products is most likely to occur, in large numbers, through an under-declared method. In addition to evading taxes, when trading informally, traders also try to avoid administrative formalities, which are perceived as unattainable, costly, complex and time-consuming. It should be noted that informal small-scale cross-border trade plays a very important role in generating income and ensuring food security in many African communities and any intervention should seek to accommodate the specific needs and target the right stakeholders, in order to make a significant rather than detrimental contribution to African livelihoods.

To address some of the specific trade barriers in the fisheries trade among African countries and based on other RECs' experiences, the use of STR should be considered valuable instruments to facilitate cross-border trade among Member States. The use of simplified origin certificates, such as the Simplified Certificate of Origin (SCOO) used in EAC countries and the more recently adopted SADC Electronic Certificate of Origin (e-CoO)⁸⁷, should play a major role in infusing efficiency in the trade process by providing a faster electronic format of the authorization and approval process and reducing fraud at border posts.

82) Assessment of Cross-Border Trade Costs Associated with SPS/TBT Requirements for Fish and Milk along the Kenya-Uganda Border.

83) Fisheries Trade in SADC region report.

84) Challenges at Chirundu One-Stop Border Post, TRALAC available <https://www.tralac.org/discussions/article/5338-challenges-at-chirundu-one-stop-border-post.html>
Ndonga, Dennis.; Addressing the Challenges Facing One-Stop Border Posts in Africa: Lessons from Chirundu

85) Policy brief 43435 | March 2019 International Growth Centre

86) Sommer and Nshimbi (2018), *op cit*.

87) Launched in September 2022 under Trade Facilitation Programme (TFP), supported by the European Union and GIZ under the "Cooperation for the Enhancement of SADC Regional Economic Integration" (CESARE).

4.11 CONCLUSIONS AND RECOMMENDATIONS

Through a series of analysis and experiences in many African countries and more specifically in the region, it is clear that inefficient and lengthy cross-border processes restrict trade, with a greater impact in trade of perishable products such as fish. Additionally, it seems appropriate

to conclude that past interventions have worked in trade facilitation and policy development, but the benefits are yet to be reaped. Therefore, for the specific objective of this pilot intervention, the following is recommended:

- 1 The intervention should be focused on trade of products for human consumption, which are of major importance to the region. According to the complementary trade analysis conducted, HS0303 (frozen), HS0302 (fresh) and HS0305 (dried) were all shown to be relevant traded commodities, with dried fish having a higher potential impact for smaller-scale operators and food security.
- 2 The targeted countries must implement/develop protocols for data collection to account for informal trade volumes of fisheries products.
- 3 For formal trade to occur in an OSBP approach, both infrastructure and an operational setup must be in place. At this stage and considering the targeted countries these are present at Chirundu (Zimbabwe/Zambia), Mchinji (Zambia/Malawi) Tunduma (Zambia/the URT) and Kasumbalesa (the DRC/Zambia).
- 4 The project should pilot the efficient use of the proposed simplified (and harmonized) procedures for the fisheries trade integrated in the OSBPs.
- 5 The intervention should assess potential financial/technical support to the inclusion of fisheries products in existing IT border data collection management systems (such as the Automated System for Customs Data (ASYCUDA)). This should include the development of a Fish Product Catalogue to assist border officials in identifying fish species accurately before entering the data in the system.
- 6 Existing regional conformity assessment procedures need to be disseminated and piloted in all countries to test, inspect and certify fish products for imports and exports. These are not specific to the OSBP approach and therefore should include all targeted countries.

7 A major component of this intervention should focus on capacity building of the stakeholders. This includes:

- **Public awareness campaigns (via radio, social media):** Due to the complexity of the cross-border trade rules, many cross-border fish traders, especially illiterate ones, are not aware of the free trade provisions and trade requirements. Therefore, it is critical to create awareness among both government border agencies and traders. This should include documentary requirements, trade procedures and the importance of traders' compliance in enhancing border inspections.
- **Training activities of various groups,** namely border control Agencies. Training border officials should include the following topics:
 - Manual for fish inspectors.
 - Use of checklist for import/export controls.
 - Hazards and applied risk assessment.
 - Practical aspects of implementation procedures (best practices) for import/transit control of products, improving knowledge and ensuring consistent and implementation of standards across the region (documentary checks, channelling, sampling of consignments, laboratory tests, reinforced checks, non-conforming assignments, etc.).
 - Legal requirements and procedures relating to official border controls, including a practical approach to ensure good understanding of the framework.
 - Cooperation with customs services and information exchange with other competent authorities.

The methodology should be based on the training-of-trainers approach, to provide participants with the necessary tools and materials to disseminate the knowledge gained through the training course to their colleagues. Furthermore, the training should be used to promote relationships between border control posts and delegates. Training of traders (via fish traders' associations) should cover the following topics:

- Safety and quality of fisheries products (accounting for most traded fish commodities).
- Cross-border trade procedures (specifically OSBPs).
- Business strategy and financial planning (using targeted business planning models).
- Food loss and waste at the farm and post-harvest stages.

In order to benefit from the trade opportunities created by the Free Trade Area in the SADC region, compliance with the applicable food safety regulations and quality standards is essential to provide farmers, fishermen, processors and traders alike with the opportunity to improve their productivity, production and market access, especially at the regional level, where sanitary

circumstances may be common to several countries. The strategy should accommodate the dissemination of training considering the low levels of digital literacy in some areas, especially among older operators and those in remote locations (e.g. using virtual extension services and short videos for dissemination).

5

Mapping of quality infrastructure

Strengthening QI at the national level is essential for SMEs to conform to the demanding standards, technical regulations and market requirements.



5.1 INTRODUCTION

For SMEs to be competitive in international markets, it is important to ensure that they: (i) have the technical capacities to produce quality and innovative products; (ii) comply with international market regulations and standards; (iii) promote their products and connect to potential markets. To achieve the above goals, access to services offered by QI, business development services, financing, sector coordination and dialogue between public and private stakeholders is pivotal. Strengthening QI at the national level is essential for SMEs to conform to the demanding standards, technical regulations and market requirements, so as to connect and compete in the global market. It contributes to increasing consumer confidence in product safety and quality, including respect for the environment.

Furthermore, having policies in place to promote a culture of quality is crucial to ensure an environment where SMEs, institutions and consumers consistently follow and apply quality guidelines and promote quality-focused actions. The value-added impact of standards compliance includes increased market access, increased speed at which goods cross the borders, acceptance of conformity assessment certificates on both sides of the border, reduced rejections of goods and reduced trading costs for the private sector, thus making SMEs and enterprises in general more competitive and sustainable.

The UNIDO value chain approach is based on the idea that many actors connected along a chain produce and bring goods to end-users through a complex and

sequenced set of activities in which value is added at every step. In each of the stages of the value chain, the required QI services can be mapped and technical assistance can be designed to provide such services effectively and efficiently; otherwise, the suppliers of products and services will not measure up to the minimum requirements in the world markets (i.e. remain in a suboptimal business environment). Worse, if a

country's QI does not meet international requirements, its producers may be unable to join international supply chains (e.g. entire ranges of fisheries products cannot be exported). Figure 43 highlights UNIDO's approach to promoting standards and quality.

5.2 METHODOLOGY

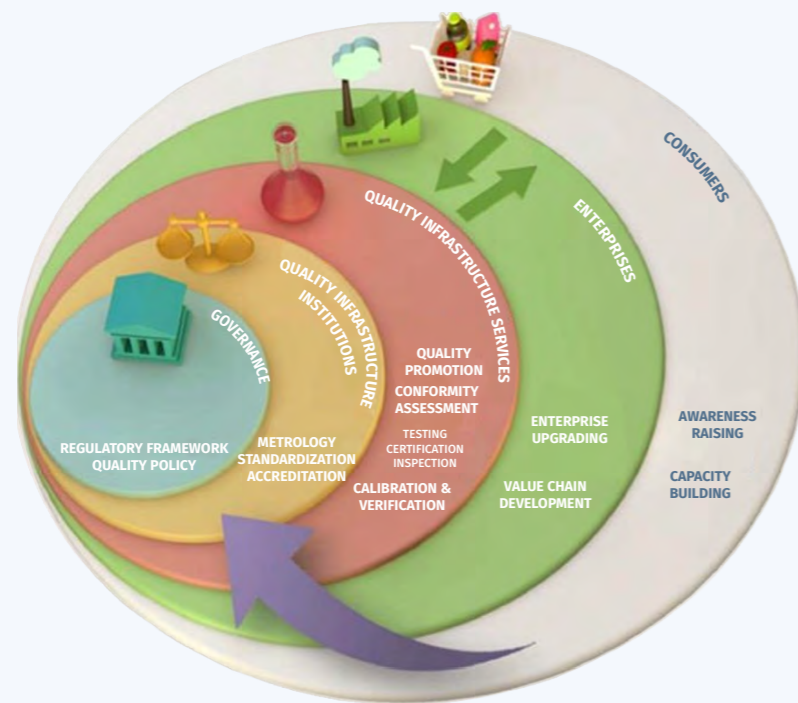
The methodology used to conduct this mapping process involved (i) desk research based on recent publications and (ii) the administration of a questionnaire to the Focal

Points of the respective Member States (the results of which can be seen in the Annexes).

The two main publications considered during the desk research process were:

- TBT/QI Stocktaking Document, Pan-African Quality Infrastructure, 2023 Edition.
- Quality Infrastructure for Sustainable Development Index (QI4SD), United Nations Industrial Development Organization, 2022.

FIGURE 43: UNIDO's systemic approach for promoting standards and quality⁸⁸



5.3 QUALITY INFRASTRUCTURE MAPPING

It is important from the onset to recognize the well-established system within the SADC to coordinate TBT and SPS activities and related matters among the Member States, as well as with other RECs and with the AU. The SADC, therefore, under its Directorate for Industry and Trade, has a unit responsible for TBT and SPS Measures. This SADC TBT unit works to enhance the quality and

competitiveness of goods and service produced by the SADC region, as well as ensuring that the goods and services imported for use in the region meet the requirements of international standards. This is done through the work of the regional quality infrastructure that consists of seven Technical Barriers to Trade (TBT) cooperation structures, namely:

88) Quality Infrastructure, UNIDO's Unique Approach, United Nations Industrial Development Organization.

- SADCSTAN (standardization)
- SADCMET (measurement traceability)
- SADCMEEL (legal metrology)
- SADCA (accreditation)
- SADCTRLC (technical regulations)
- SADCTBTSC (stakeholder liaison)
- The SADC TBT Expert Group

A structure in the SPS sphere is the SADC SPS Coordination with its three subcommittees (Animal Health, Food Safety and Plant Protection).

These structures are continually producing soft skills and instruments to strengthen the regulatory support frameworks for trade, industry and investment and for consumer and environment protection. The key areas of work of these structures can be summarized as listed below.



STANDARDIZATION

Standardization (ref. SADCSTAN) wherein agreement on the mutual recognition of each Member State requirements on the contents of a standard is facilitated between Member States. The harmonization of standards essentially means that the trading partners agree on the definition of whatever the good or service should be.



TECHNICAL REGULATIONS

Technical Regulations (ref. SADCTRLC) are normally set to protect a Member State's legitimate objective, e.g. in relation to environmental protection, public health and safety and protection of flora and fauna. The approximation of Technical Regulations recognizes that Member States regulate in different ways, hence the use of the word "approximation" which implies recognition of how close the regulations of the Member States may be at achieving the legitimate objective of each Member State.



TRACEABILITY OF MEASUREMENTS

Ensuring the traceability of measurements (ref. SADCMET) essentially seeks to ensure that a kilogramme (or any measurement) in one part of the world is equal to a kilogramme of the same substance in another part of the world. This is done through checking that the calibration of the measurement instruments around the world are referenced back to the same measurement standards defined internationally.



LEGAL METROLOGY

Legal Metrology (ref. SADCMEEL) is the measurement that is associated with trade or any legal requirement. It ensures that the measurement instruments used, e.g. fuel pumps or trade scales, are measuring the traded commodity accurately for the price charged. This is a form of consumer and public interest protection and it is important that all measurements are as defined in the internationally recognized standards.



ACCREDITATION

Accreditation (ref. SADCA) is the attestation by an authorized body that a body that conducts conformity assessment services, e.g. inspection, testing and quality certification, is competent to do what it does and that the test, inspection or certification certificate that it issues is believable. In the SADC region, there are three internationally recognized accreditation bodies, namely, MAURITAS, the Southern Africa National Accreditation System (SANAS) and SADC Accreditation Services (SADCAS). Unlike the two that are nationally owned by the states of Mauritius and South Africa, SADCAS is a multi-economy accreditation body operating as a subsidiary organization to the SADC Secretariat.



SPS MEASURES

SPS Measures are overseen by the SADC SPS Coordinating Committee that is established by Article 14 of the SADC SPS Annex to the SADC Protocol on Trade. This committee consists of three subcommittees responsible for Animal Health, Food Safety and Plant Protection. These subcommittees have the duty to ensure that the SADC Member States implement the appropriate SPS measures and that their collective understanding of their application is similar in order to facilitate trade.

The key documents, protocol, strategies and frameworks for further reference are:

- Technical Barriers to Trade (TBT) Annex to the SADC Protocol on Trade (1996)
- Sanitary and Phytosanitary (SPS) Annex to the SADC Protocol on Trade (1996)
- TBT and SPS Articles of the COMESA-EAC-SADC Tripartite Free Trade Area Agreement
- TBT and SPS Annexes of the AfCFTA.

5.3.1 Quality Infrastructure for Sustainable Development (QI4SD) Index

The Quality Infrastructure for Sustainable Development (QI4SD) Index was developed by UNIDO in collaboration with partner organizations of the International Network on Quality Infrastructure (INetQI).⁸⁹

The QI4SD Index is a tool to assess the overall state of the development of a country's QI readiness to support the Sustainable Development Goals (SDGs). It demonstrates the value of QI for sustainable development and the importance of investing in it. QI is an important enabler of sustainable development and the QI4SD Index aims to bridge an information gap by being the first tool to explicitly measure how fit for purpose QI is in terms of

meeting the sustainable development needs. Moreover, it is a comprehensive measurement of QI in its own right. Information on the fitness of QI to meet sustainable development needs will serve as a useful input to support policy processes and national implementation plans for achieving the SDGs, as well as the coordination of technical cooperation programmes, not just by UNIDO but also other implementing partners and development agencies worldwide.

BOX 2: Quality infrastructure Definition



Quality Infrastructure is defined by INetQI as:

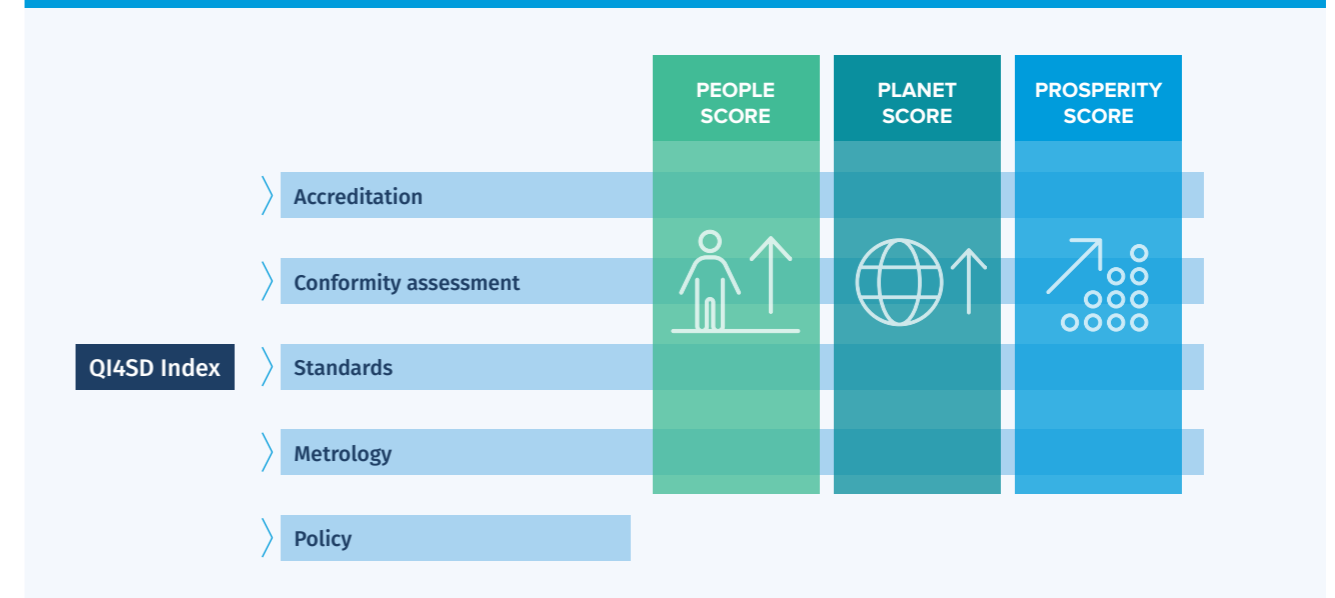
“The system comprising the organizations (public and private) together with the policies, relevant legal and regulatory framework and practices needed to support and enhance the quality, safety and environmental soundness of goods, services and processes. The QI is required for the effective operation of domestic markets and its international recognition is important to enable access to foreign markets. It is a critical element in promoting and sustaining economic development. It relies on metrology, standardization, accreditation, conformity assessment and market surveillance.”

89) Members of INetQI include the BIPM (Bureau International des Poids et Mesures), IAF (International Accreditation Forum), IEC (International Electrotechnical Commission), IIOA (Independent International Organization for Assurance), ILAC (International Laboratory Accreditation Cooperation), IQNET (International Certification Network), ISO (International Organization for Standardization), ITC (International Trade Centre), ITU (International Telecommunications Union), OIML (Organization Internationale de Métrologie Légale), UNECE (United Nations Economic Commission for Europe), UNIDO (United Nations International Development Organization), WBG (World Bank Group), WTO (World Trade Organization).

QI is a multidimensional concept that comprises several dimensions, such as Standards, Accreditation, Conformity Assessment, Market Surveillance, Metrology and Policy. The QI4SD Index aims to measure QI using indicators for five of these dimensions, which are aggregated into a composite indicator (i.e. a single aggregate score for each country). Moreover, the QI4SD Index gives scores for each

of the three main pillars of sustainable development: People, Planet and Prosperity. The scores aim to measure the contribution and readiness of a country to tackle sustainable development in terms of these specific pillars. Figure 44 illustrates the conceptual framework of the QI4SD Index.

FIGURE 44: Conceptual framework of the QI4SD Index⁹⁰



The QI4SD Index mostly follows the internationally recognized methodology for constructing composite indicators, as detailed in the Joint Research Centre (JRC) and the Organization for Economic Cooperation and Development (OECD) Handbook of Composite Indicators (JRC and OECD, 2008).

The next sections present a summary of the QI4SD index rating for each of the selected PROFISHBLUE Member States, with the exception of the DRC, as it was added to the list of target countries after the analysis had already begun. The reason for this is that, during the 2022 survey, raw indicator data for (all) 54 countries in Africa had

been collected; however, 40% of these countries had data gaps and were consequently excluded from the QI4SD index calculation. A detailed analysis of only the African countries was performed and summarized by UNIDO in a report⁹¹ providing a ranking and comparison of the quality infrastructure dimensions among the remaining 31 African countries from which adequate data sets were obtained. Figure 45 provides an overview of the relative ranking of these countries and a summary of their scores on each of the QI dimensions. The specific QI mapping for each of the target countries under PROFISHBLUE is showcased in the annexes.

90) Quality Infrastructure for Sustainable Development Index (QI4SD), United Nations Industrial Development Organization, 2022.

91) The Quality Infrastructure for Sustainable Development Index for Africa Summary Report, UNIDO, 2023.

FIGURE 45: QI4SD scores for countries in Africa (SADC Member States involved in the PROFISHBLUE project outlined in red)⁹²

Country	Africa rank	Overall rank	Index	Standards	Conformity	Metrology	Accreditation	Policy
South Africa	1	20	60	63	19	70	88	
Tunisia	2	39	50	43	4	35	75	93
Egypt	3	56	42	51	4	37	75	
Kenya	4	60	39	40	8	38	72	
Morocco	5	68	34	44	3	30	1	94
Zambia	6	73	31	28	1	27	1	100
Uganda	7	74	31	44	2	9	1	100
Ghana	8	76	30	44	2	15	1	88
Rwanda	9	78	29	41	1	14	1	89
Namibia	10	80	28	25	3	22	1	91
Mauritius	11	84	28	32	2	15	62	
Algeria	12	85	28	43	2	15	51	
Malawi	13	88	26	34	1	8	1	84
Togo	14	89	26	40	1	1	1	85
Mauritania	15	91	24	15	1	1	1	100
Eswatini	16	92	23	22	2	1	1	92
Mozambique	17	93	23	21	2	8	1	82
Niger	18	94	23	18	1	1	1	92
Seychelles	19	99	21	21	1	16	1	68
Tanzania	20	101	21	32	1	24	1	47
Ethiopia	21	102	21	36	2	8	38	
Burundi	22	108	18	22	1	1	1	66
Gabon	23	109	18	42	1	1	1	44
Senegal	24	112	17	24	2	1	1	55
Nigeria	25	118	15	41	8	9	1	
Côte d'Ivoire	26	124	13	42	8	1	1	
Botswana	27	128	12	29	1	16	1	
Sudan	28	129	12	30	1	15	1	
Zimbabwe	29	132	11	32	1	8	1	
Mali	30	134	9	24	1	8	1	
Magagascar	31	137	7	16	2	8	1	

92) Quality Infrastructure for Sustainable Development Index (QI4SD), United Nations Industrial Development Organization, 2022.

5.3.2 TBT/QI Stocktaking Document, Pan-African Quality Infrastructure, 2023 Edition

The Pan African Quality Infrastructure (PAQI) comprises four continental institutions, the African Accreditation Cooperation (AFRAC), the Intra-Africa Metrology System (AFRIMETS), the African Electrotechnical Standardization Commission (AFSEC) and ARSO.

The PAQI QI Stocktaking Report does not specifically address Technical Regulations and Conformity Assessment. Noting the significance of technical regulations as an important potential source of technical barriers to trade, however, the report introduces the subject of technical regulation in anticipation of the fact that future reports will have more to say on the topic as Africa implements its African Continental Technical Regulation Framework (ACTReF), which is at present under development.

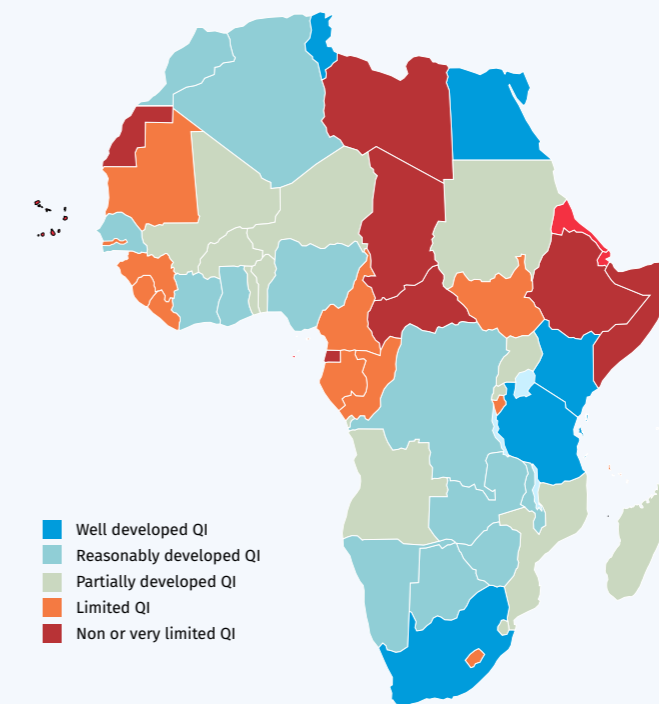
The information presented herein is extracted from the 2023 (fourth) edition of the PAQI TBT Stocktaking report, which is designed to provide a picture of the QI landscape across Africa.

Stocktaking Map of Quality Infrastructure in Africa

The PAQI survey provides a summary of the overall status of QI as illustrated in Figure 46.⁹³ This visual representation shows that Member States in the SADC

region in general have a partially to well-developed QI system and only Lesotho is still categorized as having limited QI.

FIGURE 46: Stocktaking map of quality Infrastructure in Africa



93) TBT/QI Stocktaking Document, Pan-African Quality Infrastructure, 2023 Edition.

PAQI Index Comparison 2014/2017/2020/2023

The evolution of QI in the African region is shown in the table in Figure 47, where the PAQI index is provided by country for each of the years 2014, 2017, 2020 and 2023. This data shows that there has been an improvement in five of the SADC Member States concerned with

the project (the DRC, Malawi, Mozambique, the United Republic of Tanzania), whilst the QI index rating has remained consistent for Madagascar, Zambia and Zimbabwe.

Whilst good collaboration was experienced between UNIDO and the various PROFISHBLUE Focal Points during the survey and UNIDO aimed to obtain specific information on the key players and related aspects of the national QI system in each participating Member State, the results are not yet complete in all instances and further work remains to be done to obtain the missing data.

It will be important throughout the project implementation phase for activities related to QI, as well as QI-related services (conformity assessment) to ensure good coordination with the SADC TBT unit and the various SADC expert groups representing the various pillars of QI and through the SADC TBT unit and participating Member States, as well as ARSO as an implementation partner to also foster good collaboration between the SADC region and the work programme of the AU through the PAQI structures.

FIGURE 47: PAQI index comparison and trend

NO	COUNTRY	ISO code	PAQI index 2014	PAQI index 2017	PAQI index 2020	PAQI index 2023	Trend	NO	COUNTRY	ISO code	PAQI index 2014	PAQI index 2017	PAQI index 2020	PAQI index 2023	Trend
1	ALGERIA	DZA	1.8	1.8	2.6	2.6	↑	31	MALAWI	MWI	2.0	2.2	2.8	2.8	↑
2	ANGOLA	AGO	1.2	1.6	2.2	2.2	↑	32	MALI	MLI	0.8	1.2	1.4	2.0	↑
3	BENIN	BEN	1.8	2.2	1.8	2.2	→	33	MAURITANIA	MRT	0.6	1.6	1.6	1.4	→
4	BOTSWANA	BWA	2.4	2.6	3.0	3.0	↔	34	MAURITIUS	MUS	2.4	2.4	3.0	3.0	↑
5	BURKINA FASO	BFA	1.6	1.8	2.0	2.4	↔	35	MOROCCO	MAR	2.2	2.0	2.8	2.6	↑
6	BURUNDI	BDI	1.0	1.0	1.2	1.4	↔	36	MOZAMBIQUE	MOZ	1.6	2.2	2.4	2.4	↔
7	CAMEROON	CMR	1.6	1.6	1.4	1.4	↔	37	NAMIBIA	NAM	2.4	2.8	3.2	3.2	↔
8	CAPE VERDE ISLANDS	CPV	0.0	0.2	0.4	0.8	↔	38	NIGER	NER	1.2	1.4	1.2	1.8	→
9	CENTRAL AFRICAN REPUBLIC	CAF	0.2	0.2	0.4	0.4	↔	39	NIGERIA	NGA	2.2	2.2	2.6	2.8	↔
10	CHAD	TCO	0.2	0.2	0.2	0.4	↔	40	RWANDA	RWA	1.8	2.0	2.2	2.4	↔
11	COMOROS	COM	0.0	0.0	1.2	1.0	↔	41	SAHRAWI REPUBLIC	ESH	0.0	0.0	0.0	0.0	→
12	CONGO	COG	0.4	0.4	0.8	1.0	↔	42	SAO TOME AND PRINCIPE	STP	0.0	0.0	0.6	0.4	↔
13	CÔTE D'IVOIRE	CIV	1.8	2.0	2.4	2.8	↑	43	SENEGAL	SEN	1.6	1.8	2.2	2.6	↑
14	DEM. REPUBLIC OF THE CONGO	COD	2.4	2.6	2.6	2.8	↔	44	SEYCHELLES	SYC	1.8	2.4	2.6	2.4	↔
15	DIJIBOUTI	DJI	0.0	0.0	0.2	0.6	↔	45	SIERRA LEONE	SLE	1.2	1.2	1.2	1.4	→
16	EGYPT	EGY	3.6	3.4	3.8	3.8	↔	46	SOMALIA	SOM	0.0	0.0	0.0	0.6	↔
17	EQUATORIAL GUINEA	GNQ	0.0	0.0	0.2	0.0	↔	47	SOUTH AFRICA	ZAF	3.3	4.0	4.0	4.0	→
18	ERITREA	ERI	0.4	0.6	0.4	0.4	↔	48	SOUTH SUDAN	SSD	0.2	0.4	0.6	1.0	↔
19	ESWATINI	SWZ	1.8	2.0	2.0	2.2	↔	49	SUDAN	SDN	1.6	1.8	2.2	2.0	↔
20	ETHIOPIA	ETH	2.4	2.4	3.2	3.4	↑	50	TANZANIA	TZA	2.2	3.0	3.0	3.4	↑
21	GABON	GAB	1.4	1.4	1.4	1.2	↔	51	TOGO	TGO	1.0	1.0	1.6	2.2	↑
22	GAMBIA	GMB	0.6	1.0	1.0	1.0	↔	52	TUNISIA	TUN	3.4	3.6	3.6	4.0	↔
23	GHANA	GHA	2.4	2.6	2.8	2.8	↔	53	UGANDA	UGA	1.8	2.0	2.4	2.4	↔
24	GUINEA	GIN	1.0	1.0	0.8	1.0	↔	54	ZAMBIA	ZMB	2.2	2.8	3.2	3.2	↑
25	GUINEA-BISSAU	GNB	0.8	1.0	1.0	1.6	↔	55	ZIMBABWE	ZWE	2.4	2.8	3.2	3.0	↔
26	KENYA	KEN	3.4	3.2	3.6	4.0	↔								
27	LESOTHO	LSO	1.2	1.4	1.2	1.6	↔								
28	LIBERIA	LBR	0.6	0.8	1.0	1.2	↔								
29	LIBYA	LBY	2.2	0.8	0.8	0.6	↓								
30	MADAGASCAR	MDG	1.8	2.2	2.2	2.2	↔								

5.4 SUMMARY AND RECOMMENDATIONS

The section provides comprehensive information on the status of QI in the PROFISHBLUE participating Member States. The PAQI index report data shows that the SADC region in general is in a good position, with almost all Member States having a reasonably well-developed QI system within the context of each Member State's economic position.

The Qi4SD index enables an in-depth understanding of the manner in which each of the QI pillars in the participating Member States is developed, while pointing out the strengths and weaknesses of each Member State. These results, however, do show that the conformity assessment pillar for each Member State is not very strong, which supports the requirement for technical assistance in the PROFISHBLUE project in this regard.

6

Key summaries and recommendations

The above chapters provide a critical insight into the fisheries trade across bordering SADC Member States, highlighting key fisheries trade statistics, identifying operational OSBPs to pilot enhancement and analyzing the current state of quality infrastructure in the pre-selected countries targeted under the PROFISHBLUE project.










The above chapters provide a critical insight into the fisheries trade across bordering SADC Member States, highlighting key fisheries trade statistics, identifying operational OSBPs to pilot enhancement and analyzing the current state of quality infrastructure in the pre-selected countries targeted under the PROFISHBLUE project.

The chapter *Situational Analysis of the SADC Fisheries Trade* starts with a review of the important trade policies and regulations currently governing the SADC fisheries trade, before going on to provide insight into the trade agreements currently impacting the fisheries

trade, including those agreements supporting trade across OSBPs. The analysis then highlights fisheries production, domestic consumption and trade in fish and fisheries products, starting with a global analysis before narrowing down to an Africa analysis, a SADC analysis and finally a PROFISHBLUE target country analysis. It also critically analyses the core statistics surrounding fish and fisheries products exports from the target countries under PROFISHBLUE. The box below highlights the core conclusions drawn from this analysis.

BOX 3: Summary and implications from situational analysis of the SADC fisheries trade in target countries

-  The DRC is an import dependent country for fisheries products mainly from Namibia, Mauritania, Mozambique and Zambia. Moreover, the DRC does not export fisheries products to the SADC region.
-  Madagascar trades mostly molluscs and crustaceans and exports primarily to Mauritius and South Africa (which are not part of the SADC target partners under PROFISHBLUE).
-  Malawi exports mostly dried fish to Zambia and South Africa, accounting for virtually all its exports to the SADC.
-  Mozambique trades mostly crustaceans with South Africa and Zimbabwe as major destinations. Exports of fish are on the rise and Malawi has been registering higher number of imports from Mozambique.
-  The United Republic of Tanzania exports account mostly for fish fillets and dried fish with the DRC, Mauritius and South Africa as the main destinations. The URT also trades with the pre-selected countries under PROFISHBLUE, namely Malawi, Zambia and Mozambique.
-  Zambia exports mostly frozen fish (56%) to the SADC, with the DRC and South Africa as the main destinations and Zimbabwe coming in as a distant 3rd top destination.
-  Zimbabwe exports mainly frozen fish (50%), with dried, smoked or salted fish becoming second with 44% share. Zambia and South Africa are by far the main destinations.

The *Critical Review of Previous OSBP Interventions* chapter provides an overview of the context surrounding SPS and TBT measures, as well as the impact of such measures on the trade of fish and fisheries products. The analysis then defines the OSBP concept, outlines existing OSBP models and identifies functioning OSBPs in Africa, before analyzing which OSBPs in the SADC will be selected for piloting under the PROFISHBLUE project. The report also

provides insight into the requirements and barriers to cross-border fisheries trade, as well as the challenges to trading under OSBPs. It importantly also highlights the proposed process flow of OSBPs for fisheries products. Box 4 highlights the core conclusions drawn from this analysis.

BOX 4: Summary and implications from the critical review of previous OSBP interventions

- ▶ The PROFISHBLUE project should pilot the efficient use of the proposed simplified and harmonized procedures for the fish trade integrated in the OSBP approach using 4 operational border posts (Chirundu, Mchinji, Tunduma and Kasumbalesa)
- ▶ The concept of sanitary compliance and trade conformity assessment implementation framework for OSBPs should not only address checks at borders, but also the application of the process control model for fisheries products quality and safety along the value chain.
- ▶ The survey revealed that fish exporters in general complain of inefficient trade processes. Border challenges included delays, customs and standards-related issues.
- ▶ Solutions proposed by survey respondents included online application processes, tariff reduction, harmonizing procedures and expedited facilities.
- ▶ The regional strategy under development should focus on fish products with substantive trade flows and those of major importance for the region's food security, such as frozen, fresh and dried fish and clear-cut mitigation measures must be reflected upon, to address regulatory impact assessments on sensitive sectors.
- ▶ Targeted countries must implement or develop protocol for data collection to account for informal trade volumes of fisheries products.

Finally, the *Mapping of Quality Infrastructure* chapter defines QI, highlights key QI information obtained from PROFISHBLUE stakeholders and showcases the ranking of countries based on UNIDO's Quality Infrastructure for

Sustainable Development (QI4SD) Index. The chapter also importantly showcases the PAQI index comparison. Box 5 below highlights the core conclusions drawn from this analysis.

BOX 5: Summary and implications from mapping of quality infrastructure in the target countries

- ▶ The PAQI index report data shows that the SADC region in general is in a good position, with almost all Member States having a reasonably well-developed QI system within the context of each such Member State's economic position.
- ▶ The QI4SD index provides an in-depth understanding of the manner in which each of the QI pillars in the participating Member States is developed and points out the strengths and weaknesses of each Member State. These results, however, do show that the conformity assessment pillar for each of the Member States is not very strong and this supports the requirement for technical assistance in the PROFISHBLUE project in this regard.
- ▶ Whilst good collaboration was experienced between UNIDO and the various PROFISHBLUE Focal Points during the survey and UNIDO aimed to obtain specific information on the key players and related aspects of the national QI system in each participating Member State, the results are not yet complete in all instances and further work remains to be done to obtain the missing data.
- ▶ It will be important throughout the project implementation phase for activities related to QI as well as QI related services (conformity assessment) to ensure good coordination with the SADC TBT unit and the various SADC expert groups representing the various pillars of QI and through the SADC TBT unit and participating Member States, as well as ARSO as an implementation partner to also foster good collaboration between the SADC region and the work programme of the AU through the PAQI structures.

7

Opportunity for the adoption of a regional strategy for OSBPs on fisheries products

Recognizing fish as a key natural resource, a major component of the environment and a key commodity for livelihoods, food security and trade, there have been growing calls for interventions at critical border bottlenecks to ensure that the cross-border flow of blue products occurs smoothly.



Recognizing fish as a key natural resource, a major component of the environment and a key commodity for livelihoods, food security and trade, there have been growing calls for interventions at critical border bottlenecks to ensure that the cross-border flow of blue products occurs smoothly. However, despite efforts to improve the efficiency of formal fisheries trade, including through the development of operational OSBPs, the benefits of establishing free trade areas and Blue Trade Corridors at the continental and regional level are yet to be revealed in the case of fisheries products. As a result, small-scale operators are constantly tested, intraregional fisheries trade remains largely informal, livelihood opportunities are restricted and many SADC countries remain dependent on international imports.

Based on relevant consultations and work conducted under the PROFISHBLUE project thus far, there is clear evidence that time-consuming and somewhat inefficient border procedures, including at OSBPs, pose major constraints for intraregional trade enhancement.

As a result, the next step for UNIDO under the PROFISHBLUE project will be to develop a regional strategy for optimized OSBPs for fisheries products in order to improve the efficiency of trade corridors in the SADC region. Such a strategy, which will be aligned with the ongoing AfCFTA work, will provide a guide for the pre-selected PROFISHBLUE Member States to enhance the formal and effective fisheries trade by defining the core components required to overcome barriers and avoid disruptions between Member States with operational OSBPs.

While still under development, the core components to be outlined and addressed in the regional strategy for OSBPs on fisheries products are depicted in Figure 32.

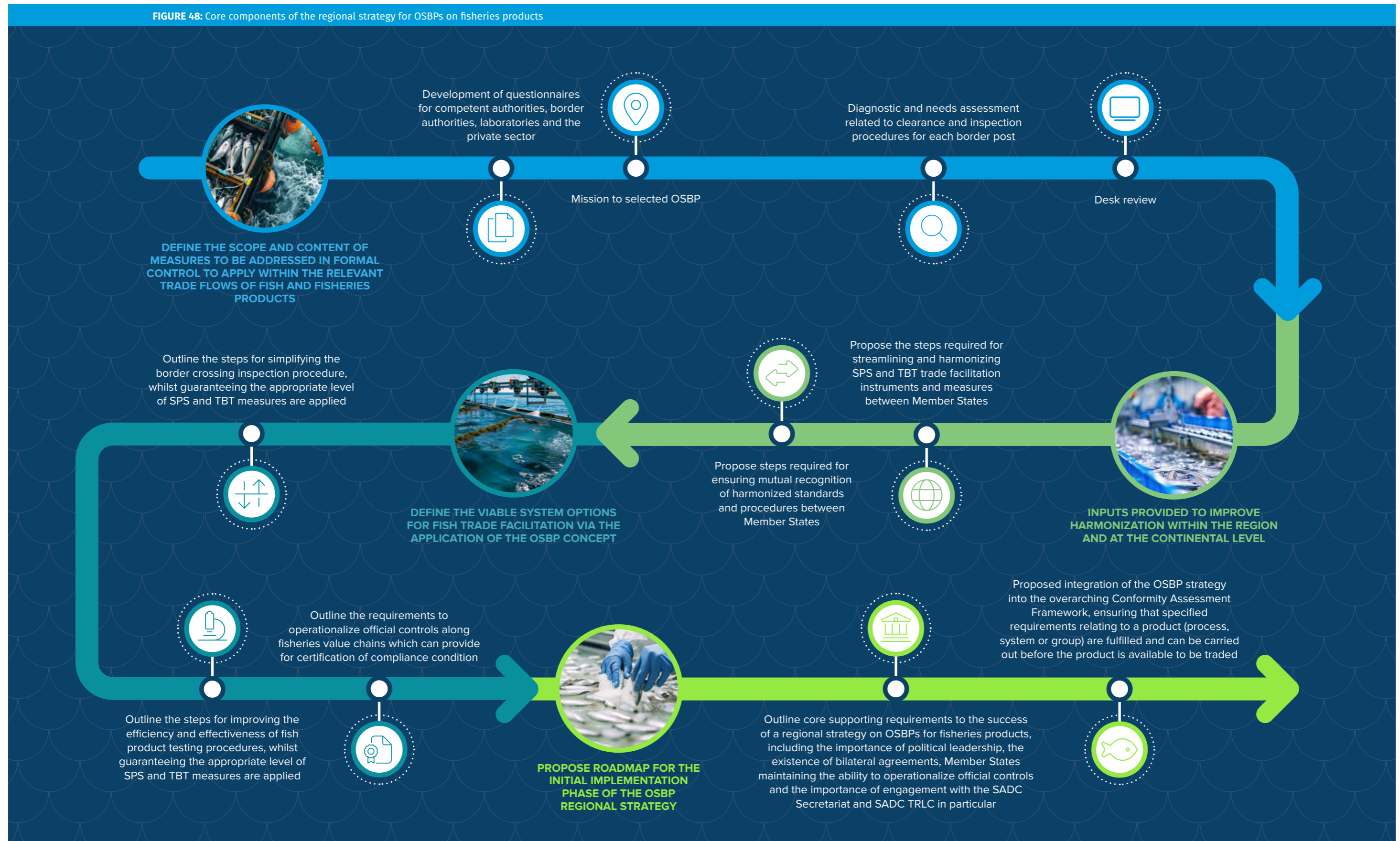
While the regional strategy will be developed based on the needs of the 4 pilot OSBPs (Chirundu, Mchinji/Mwami, Tunduma/Nakonde and Kasumbalesa), the strategy should provide valuable insight to all SADC Member States wishing to improve the efficiency of their fisheries trade through OSBPs.

It should be noted that the value of the proposed trade strategy can only be realized if it is integrated with broader interventions and cross-cutting agreements by bilateral governments. The expected end results rely on effective implementation of official controls of sanitary conditions of fisheries products under production, processing, packaging and storage while trade development rests on the overarching supporting umbrella of the mandated authorities' coordination, collaboration and Member State bilateral agreements.

In summary, while not a complete solution, a regional strategy for OSBPs on fisheries products – which incorporates the effective implementation of harmonized procedures and measures – is expected to be more than an exercise and should be seen rather as a unique opportunity to enhance trade with a simplified border crossing. The activities proposed in the regional strategy should reflect a strategic move towards shifting the continent's trading dynamics, enhancing trade between Member States and strengthening the region's economic independence, whilst also aiming to help secure fisheries supply chains.



FIGURE 48: Core components of the regional strategy for OSBPs on fisheries products



Annexes

A.1 SNAPSHOT OF THE FISHERIES AND AQUACULTURE SECTOR IN THE TARGET COUNTRIES

Fish is an important major food source that can be harvested from the wild (capture fish) or from fish farming (aquaculture). Fishing in Africa can be divided into two sectors: the large-scale sector and the small-scale sector. The small-scale sector, which is characterized largely by artisanal fishing methods, is largely undertaken by locals to supply local markets. However, some fish caught by local small-scale fishermen is traded regionally, such as dried or smoked fish. Small-scale fisheries support large numbers of Africans involved in fish processing and trading. In the subsections that follow, a brief overview of the fisheries sector is provided for each of the countries under review.

Short country profiles were compiled for the targeted SADC Member States based on focal point information, the surveys conducted and publicly available information. The information in the profiles was then used to responsibly inform future activities to be undertaken under the project intervention.

for 3,200 tonnes in 2018 and is almost totally consumed within the country to improve the diets of indigenous and rural people.

In the DRC, fisheries and aquaculture sectors constitute an essential source of economic activity, surpassing livestock and accounting for 12% of agricultural GDP. The fisheries sector plays a vital role in the country's economy, food security (contributing to 40% of total animal protein intake in the country) and employment generation, especially in rural areas. FAO Fish and seafood consumption per capita (2021) for the DRC is 4.02 kg.⁹⁵

The main challenges include the exploitation of natural resources and pollution, putting fish stocks under pressure. Moreover, a general lack of security is felt by fishermen in many Congolese lakes. There is a good long-term development opportunity for aquaculture in the DRC, which is however hindered by a lack of public and private technical and financial capacity, rudimentary management frameworks and insufficient sector capacity commitment to long-term investment across all parts of the value chain. Trade routes and elimination of trade barriers for feed and other inputs are key to the development of the sector.

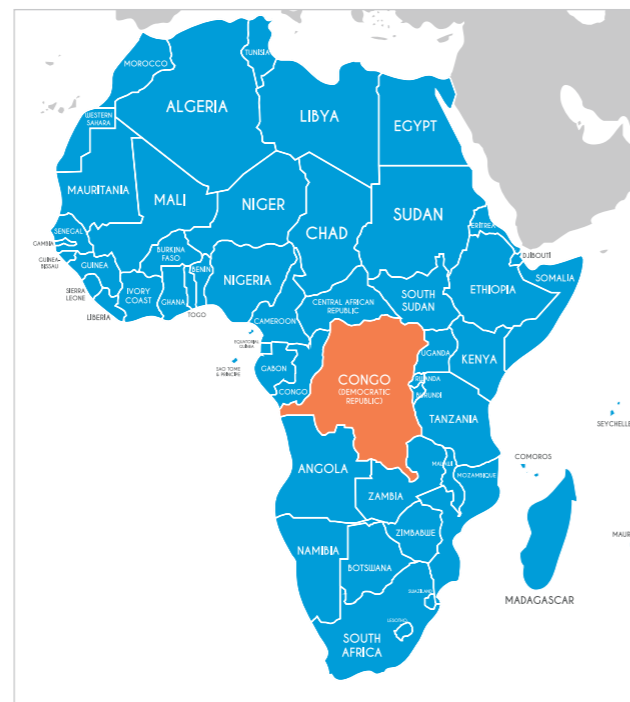
Fisheries and aquaculture production accounted in 2020 for 221,340 tonnes, whereby 98% was of wild fisheries origin. Exports of fish and fish products (2020) reached US\$762,720 in value, but most of the fish consumed in the country is imported from countries such as China, South Africa, Uganda and Burundi. Imports reached US\$58,215,920 in the same year and the country imports more than 100,000 tonnes of fish annually, the majority being frozen fish.

A.1.1 Democratic Republic of Congo (DRC)



The fisheries sector in the DRC is primarily associated with the Congo River and its tributaries, as well as other water resources, including Lake Tanganyika and Lake Kivu, rivers and swamps, which contribute to the potential for a significant fisheries sector. Lake Tanganyika is the second largest freshwater lake in the world and is located across four countries: the DRC, the URT, Burundi and Zambia.

The rampant use of illegal and indiscriminate fishing methods has led to a depletion of fish stocks in many Congolese lakes, compromising food security. Developing cages or pond aquaculture could present a promising alternative livelihood for artisanal fishermen in the area. The country does not have an aquaculture tradition and currently the sector is largely informal. Tilapia spp. (*Coptodon rendalli* and *Oreochromis macrochir*) are raised by the small farmers in earth ponds built in valleys and other wetlands, using extensive and semi-extensive household aquaculture systems. Production constitutes only a small fraction of total fish production, accounting



A.1.2 Madagascar



Madagascar possesses abundant marine and inland fisheries resources due to its extensive coastline and numerous rivers and lakes. The country is home to a diverse range of marine species, making it a promising location for fishing activities.

With more than 9,000 kilometres of coastline, Madagascar's is endowed with diverse marine ecosystems. Hundreds of thousands of hectares of mangroves, coral reefs and offshore waters harbour a great diversity of fish species and food resources.

Fisheries play a significant role in Madagascar's economy and the livelihoods of its people. The fisheries sector plays a leading role on the island's nation's economy, with an annual production capacity of US\$750 million, equivalent to more than 7% of the national gross domestic product (GDP) and a contribution of 6.6% to total exports.



95) Fish and seafood consumption per capita, 2021 (ourworldindata.org)

Aquaculture is practised in freshwater, brackish water and marine water and occupies an important place in Madagascar, being considered one of the key sectors providing foreign-exchange revenue, thanks to exports of farmed shrimp/prawns and seaweed and the important role played in improving the incomes of smallholder fish farmers and food security. The main freshwater species farmed are the common carp and Nile tilapia. Marine aquaculture is based mainly on the giant tiger prawn and tropical marine seaweed.

Fisheries activities span a range of scales, from subsistence to commercial and both domestic and foreign operators are active in the industry. The total economic value of the fisheries sector accounted for US\$112,157,456 in 2021 (COMTRADE), but numbers can be uncertain due to gaps in official statistics and the illegal or informal nature of much activity in the sector. Total fisheries production (metric tonnes) in Madagascar was reported as 136,199 tonnes in volume, with 95% coming from wild capture fisheries. The total volume of exports suffered a 5% decline from 2019 to 2022, with 24,161 tonnes exported in 2022. However, the total value of exports increased 23%

during the same period. Available information indicates that finfish is the most important market-based economic subsector, followed by shrimp (despite recent significant declines in the catch) and tuna (mostly canned).

Despite its potential, Madagascar’s fisheries sector faces challenges such as overfishing, illegal fishing, poor enforcement of regulations and unsustainable fishing practices. These issues can lead to stock depletion and negatively impact the long-term sustainability of the sector. Like many coastal nations, Madagascar’s fisheries are vulnerable to the impacts of climate change, including sea-level rise, ocean acidification and changes in marine ecosystems, which can affect the distribution and abundance of fish species.

since 2015, there has been a fluctuation and significant increase in the per-capita fish consumption, from 9.95kg/person/year to 12.63kg/person/year in 2018. FAO Fish and seafood consumption per capita (2021) for Malawi is 9.57 kg.

Aquaculture production in Malawi mainly consists of growing through extensive pond culture, which is often integrated into agricultural activities on farmsteads. More than 95% of the production is accounted for by three species of tilapia. Between 2005 and 2015, aquaculture contributed around 1–5% to the total fish production in Malawi and in 2020 accounted for about 9,399 tonnes. There is vast potential to further grow this sector and it is estimated that 10–20% of Malawi’s land area (1,165,000 ha) is suitable for aquaculture, while around 35,000 ha of under-utilized dambo land (wetlands) can also be used for aquaculture. Small-scale aquaculture in Malawi has the potential to contribute to economic growth and improve food and nutrition security, but many challenges hinder the development of the sector, such as lack of fishing equipment; poor environmental conditions for fish production; lack of access to well-structured markets; theft and predators; fish diseases; lack of access to credit

and low incomes; a high amount of labour required; lack of relevant extension services; lack of input markets; lack of access to quality feed; and poor quality of fingerlings.

Trade includes mostly the small pelagic fish species *Engraulicypris sardella*, *Diplotaxodon* spp. and *Oreochromis* spp. (Chambo). The Department of Fisheries issues sanitary certificates to fish exporters after assessment of the fish product quality. There are fish inspectors across borders at Songwe, Mchinji and Mwanza, who are responsible for inspecting fish quality either for fish being exported from or imported into the country. There are, however, some challenges in that some fish traders use illegal routes, which means they are engaged in the informal fisheries trade. The main reason given is that they take time to get their fish products assessed and there is no proper infrastructure to store their fish in case they are delayed at the borders.

The main challenges include overfishing in Lake Malawi, illegal fishing that threatens the long-term viability of native fisheries resources, weak enforcement of fisheries regulations and governance gaps.

A.1.3 Malawi



Malawi is known for its abundance of freshwater resources. Fishing in Malawi is primarily carried out by small-scale and artisanal fishermen, although some large-scale fishing also takes place in the southern part of Lake Malawi. The fishing grounds in Malawi consist of Lake Malawi, which is the largest lake in the country, Lake Chilwa, the second largest and other smaller water bodies such as Lakes Malombe, Chiuta and the Lower Shire River system.

Fisheries (comprising capture fisheries and aquaculture) form a key component of rural livelihoods in Malawi, contributing 4% to the country’s GDP and playing an important role in food and nutrition security and foreign-exchange earnings. Fish is a primary source of animal protein for many Malawians, making it vital for food security and nutrition in the country. For the past 5 years, total fish production increased from 157,268 metric tonnes in 2016 to 201,161,250.00 metric tonnes in 2019 and later decreased to 163,766,000 tonnes in 2021. Furthermore,



A.1.4 Mozambique



Mozambique remains as one of the best-endowed countries in Africa, with 2,470 km coastline and a continental shelf of 70,000 km². It is home to 31.6 million people represented in more than two-thirds by rural population and around 60% of people live along the coastline. The most productive fishing areas are near the main rivers that drain into the sea, including the Sofala Bank and Maputo Bay. Most fishing in Mozambique is done by small-scale fishermen along the coast. Industrial fishing is concentrated in the Sofala Bank, targeting shallow-water shrimp. Inland fishing is scattered, but there is a significant fishery at the Cahora Bassa dam for “Kapenta.” 1,400 motorized and 45,000 non-motorized vessels are used. Fish is sun-dried and traded regionally. The fisheries sector contributes 2.3% to GDP, with aquaculture contributing less than 1%. More than 350,000 people rely on the fisheries sector for their livelihood. In 2019, the annual consumption of fish per capita reached 16.8kg. However, the latest data reveals a decrease, with current values of 13.09kg.



Over the years, aquaculture development in Mozambique has been unstable but is recovering. Currently, the sector is characterized by the presence of two intensive production systems for shrimp and tilapia currently being exported to the European Union (EU) and the SADC respectively. Semi-intensive (culturing shellfish and tilapia) and extensive systems are spread across the whole country and mostly consist of artisanal fish farmers for subsistence purposes, domestic consumption and a very limited surplus for domestic marketing. Despite its recognized potential, the aquaculture subsector is still in its embryonic phase, mostly in a state of trial and error, and is thus developing rather slowly over the past years. The country is estimated to have potential production areas of approximately 258,000 ha for freshwater aquaculture and 120,000 ha for marine aquaculture.

Mozambique exports a variety of fisheries and aquaculture products including shrimp, fish fillets and whole fish. Major export markets include the European Union, China and neighbouring countries in southern Africa. Fisheries production amounts to more than 447,5 thousand tonnes per year and an average of US\$67.231 million in exports per year (equivalent to 10,567 exported tonnes).

While the fisheries and aquaculture sector in Mozambique offers significant potential, there are challenges that need to be addressed, such as limited infrastructure, including processing and cold storage facilities and lack of compliance capacity to meet international quality and safety standards. Specific challenges for the aquaculture sector include lack of inputs (feed and fingerlings), difficult access to financing and lack of intersectoral coordination.

Fisheries activities are dominated by small-scale operations undertaken by artisanal fishermen and subsistence aquafarmers, which are responsible for over 95% of fish production. The sector has been growing at an average annual rate of 1.5% and plays an important role in food security and socio-economic well-being. The current per-capita fish consumption is 6.7kg and contributes 30% of daily animal protein intake. It also contributes 1.7% to GDP and provides direct employment for 195,435 fishermen and 30,064 aquafarmers. In addition, about 4.5 million people (6.89% of the total population) are indirectly employed in various ancillary activities along the two value chains.

Other fisheries products that are exported include crabs, prawns, fish maws, octopus, seashells, live lobsters, squid, seaweed and ornamental fish. Relevant border posts and checkpoints where fish products are mostly traded include Namanga, Holili and Hororo – bordering Kenya, Mutukula – bordering Uganda, Rusumo – bordering Rwanda, Tunduma – bordering Zambia, Manyovu – bordering Burundi, Kasumulu – bordering Malawi and Mtambaswala – bordering Mozambique. Available trade data (2018-2022) exports in volume account for an average of 34,577.03 tonnes of fisheries products (excluding live ornamental fish). Aquarium finfish fresh/ sea water exports represent 5 times the exports of fisheries products.

Mainland Tanzania has enormous untapped potential for aquaculture development. It has water (both freshwater and marine), land, a legal framework that supports aquaculture and a favourable climate. Despite the availability of the huge aquaculture potential, the subsector does not make a major contribution to the nation’s economic development, mainly because of inadequate affordable quality seeds and feed, poor aquaculture management practices and unreliable financial capital. The current aquaculture production of 18,717 metric tonnes (less than 4% of the overall fish production) is considered negligent.

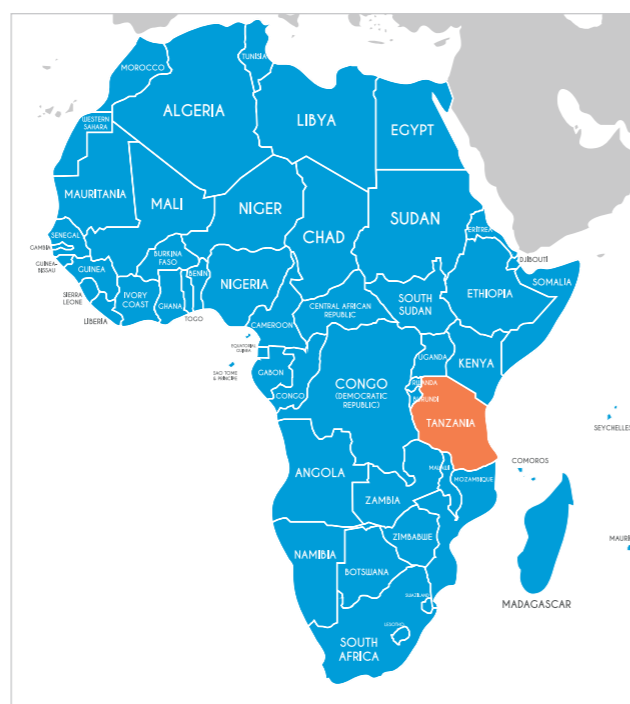
The sector faces several challenges that limit its contribution to the economy. These include limited extension services, limited access to finance, high post-harvest losses and limited value addition, limited access to appropriate fishing and aquaculture technologies, environmental degradation of aquatic ecosystems, illegal, unreported and unregulated fishing, illegal cross-border trade and low public- and private-sector investment.

A.1.5 The United Republic of Tanzania



The United Republic of Tanzania’s extensive coastline along the Indian Ocean and numerous lakes and rivers contribute to its diverse fisheries sector. Inland fisheries are the dominant source of fish production, contributing at least 85% to the national fish production. The country has three major internationally shared lakes: Lake Victoria, Lake Tanganyika and Lake Nyasa. Lake Victoria is the second largest freshwater body globally, with a surface area of 68,800 km², of which about 51% is in the URT.

The fisheries industry is dominated by small-scale fishermen and aquafarmers, contributing more than 95% of the country’s total catch. The fish catch from inland and marine waters ranged from 375,533 tonnes in 2005 to 473,592 tonnes in 2020, with an annual average of 395,006 tonnes. The increase in catch was due to a significant reduction in illegal harvesting methods, following various enforcement campaigns undertaken by the government and its counterparts and an improved recording system.



The URT is both an importer and exporter of fish and fisheries products, mainly Nile perch fillets that are exported to international markets (mainly to the European Union, Japan and the United States), but dried Lake Victoria sardines are exported to regional markets (mainly to the DRC, Zambia, Malawi and Burundi).

A.1.6 Zambia



Zambia is a landlocked country located in southern Africa with 20% of its land covered by water. Some of the major water bodies in Zambia include Lake Tanganyika, Lake Mweru, Lake Bangweulu and the Zambezi River. These water bodies support a diverse range of fish species, including various tilapia species, bream, catfish etc. Zambia’s total fish production is just over 100,000 metric tonnes, of which about 85,000 metric tonnes comes from fisheries. The aquaculture sector, which is still in its infancy, contributes around 30% of total fish production.

In Zambia, fisheries and aquaculture contribute about 2% to the country’s GDP and provide significant jobs in rural areas. Fishing is carried out by traditional (artisanal) and industrial operators. Artisanal fisheries dominate the country’s fisheries in terms of labour and production. Industrial operators (less than 100) are limited to Lakes Kariba and Tanganyika. The sector directly employed more than 128,000 people as estimated in 2019, with nearly 93,000 engaged in inland fisheries, with an estimated 20,600 small boats.

Fish farming is practised in ponds, cages, reservoirs and dams. Production increased recently and accounted for 45,670 tonnes in 2020 (the sixth highest in Africa). Five tilapia species are farmed in the country with 2.9 as the effective number of species (a measure of species diversity), which is higher than that of Sub-Saharan Africa. Total aquaculture employment was reported as 12,019 in 2016 and increased to almost 36,000 in 2019. The great majority of aquaculture products are consumed domestically.

Relevant OSBPs and checkpoints where fish products are mostly traded include Nakonde, Chirundu, Kasumbalesa, Mikambo, Kazungula, Katima Mulilo, Muchinji, Luangwa and Kariba. Available trade data (2018-2022) on exports and imports in volume account for 41,142.97 tonnes and per-capita consumption is 12.33kg. Zambia's exports of aquatic products increased from US\$0.5 million in 2000 to US\$1.2 million in 2019, which was the lowest among the top 10 largest aquaculture countries in Africa. Finfish accounted for over 99% of exports. Zambia's top-10 fish export products (2019; in terms of quantity) include sun-dried and smoked fish products, fish meals, fish heads and fishnei salted or in brine. Imports of aquatic commodities (marine fish accounting for more than 85%) increased from US\$1.7 million in 2000 to US\$118 million in 2019 and the 25% annual growth rate was one of the highest in the world. Zambia signed the AfCFTA agreement in 2021 and is currently engaged in trade-related projects such as the African Free Trade Area Project (Ministry of Commerce Trade and industry) in Kazungula, Mchinji and Nakonde, Chavuma, Chanida border post.

A.1.7 Zimbabwe



Zimbabwe, a landlocked country, is known for its major water bodies for fishing including Lake Kariba (shared with Zambia), Lake Chivero, Lake Mutirikwi and other smaller lakes and rivers. Zimbabwe's per-capita fish consumption of less than 3 kg is significantly below the average of 6 kg in other Southern African countries. The country hosts one of Africa's largest integrated tilapia producers, Lake Harvest Aquaculture, which employs hundreds of people and accounts for nearly 90% of the production of Nile tilapia in the country.

The fisheries sector plays a vital role in the country's economy, food security and employment generation,



Zambia's fisheries sector faces challenges such as overfishing, low fish production and productivity, lack of fish storage facilities, unclear objectives in fisheries management, limited access to finance, weak enforcement of regulations, habitat degradation, pollution and climate change. Specific challenges of the aquaculture sector include lack of inputs (feed and fingerlings) and difficult access to financing.

especially in rural areas. Zimbabwe's aquaculture sector has yet to take off, despite the country's abundant water resources and conducive warm water conditions. It is home to Lake Harvest Aquaculture, the largest vertically integrated tilapia farm in sub-Saharan Africa, which produces fresh and frozen fillets and whole fish that are sold in the domestic market or exported to markets in Southern Africa (50%) and Europe (13%). LHA complies with strict European production standards and is certified by GlobalGap.

Zimbabwe's fisheries sector primarily serves domestic consumption, providing a source of protein and nutrition

for the population, especially those living near water bodies. The country is not a significant exporter in the global context, although trade occurs regionally, mostly informally. Total fisheries production (metric tonnes) in Zimbabwe was reported at 27,792 metric tonnes in 2021 (WB) and aquaculture accounted for just over 10,000 tonnes. The latest (2021) values for the exports/imports balance of accounts were US\$553,129 and US\$10,575,085 respectively. The FAO Fish and seafood consumption per capita (2021) for Zimbabwe is as low as 1.94 kg. The fisheries products of higher interest for regional trade are tilapia (frozen and fillets) and trout, while the most relevant trade borders are Chirundu, Beitbridge, Nyamapanda and Forbes Border Post.

The main challenges encountered by the country are transversal to almost every neighbouring country and include overfishing, habitat degradation, pollution, inadequate infrastructure and enforcement of regulations. Climate change and drought are also impacting water availability and fish populations.



Summary and implications from country snapshots

- ▶ The main challenges identified are transversal to all SADC countries analyzed and include:
 - › Illegal fishing and over-exploitation of natural aquatic resources
 - › Weak enforcement of fisheries and sanitary regulations and governance gaps
- ▶ Most countries possess a high potential for the development of the aquaculture sector (e.g. Mozambique, Zambia, the DRC); however, lack of inputs and investment capacity is hindering the sector's growth.
- ▶ Fish contributes to protein intake; however, per-capita fish consumption is lower than average as shown in the below table:

Country	Per-capita Fish Consumption (kg)*
RC	4.02
Madagascar	3.79
Malawi	8.29
Mozambique	13.09
United Republic of Tanzania	8.5
Zambia	12.33
Zimbabwe	1.94

A.2 LIST OF FISH AND FISHERIES PRODUCTS ANALYZED UNDER THE SITUATIONAL AND TRADE ANALYSIS


HS Code	Full description	Short description
0306	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine...	Crustaceans (excl. preserved)
0304	Fish fillets and other fish meat, whether or not minced, fresh, chilled or frozen	Fish fillets and fish meat
0303	Frozen fish (excl. fish fillets and other fish meat of heading 0304)	Frozen fish (excl. fish fillets)
0302	Fish, fresh or chilled (excl. fish fillets and other fish meat of heading 0304)	Fresh fish (excl. fish fillets)
1604	Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs	Preserved fish and caviar
0307	Molluscs, fit for human consumption, even smoked, whether in shell or not, live, fresh, chilled, ...	Molluscs (live, fresh or chilled)
1605	Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved (excl. smoked)	Preserved crustaceans and molluscs
0305	Fish, fit for human consumption, dried, salted or in brine; smoked fish, fit for human consumption, ...	Dried, smoked or salted fish

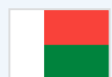
A.3 ZAMBIA – MALAWI SIMPLIFIED TRADE REGIME QUALIFYING PRODUCTS

HS code	Description
252329	Portland cement (excl. white, whether or not artificially coloured)
200912	Orange juice, unfermented, Brix value <= 20 at 20°C, whether or not containing added sugar ...
252390	Cement, whether or not coloured (excl. Portland cement and aluminous cement)
120220	Shelled groundnuts, whether or not broken (excluding roasted or otherwise cooked)
120100	Soya beans, whether or not broken
61	Articles of apparel and clothing accessories, knitted or crocheted
190531	Sweet biscuits
200990	Mixtures of fruit juices, incl. grape must and vegetable juices, unfermented, whether or not ...
230400	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting ...
4820	Registers, account books, notebooks, order books, receipt books, letter pads, memorandum pads, ...
4821	Paper or paperboard labels of all kinds, whether or not printed
010420	Live goats
010410	Live sheep
010690	Live animals (excl. mammals, reptiles, birds, insects, fish, crustaceans, molluscs and other ...
030269	Fresh or chilled freshwater and saltwater fish (excluding Salmonidae, flat fish, tunas, skipjack ...
030569	Fish, salted or in brine only (excl. fillets, offal, herring, cod, anchovies, tilapia, catfish, ...
040110	Milk and cream of a fat content by weight of <= 1%, not concentrated nor containing added sugar ...
040130	Milk and cream of a fat content by weight of > 6%, not concentrated nor containing added sugar ...
070110	Seed potatoes
070190	Fresh or chilled potatoes (excl. seed)
120210	Groundnuts in shell, not roasted or otherwise cooked
100610	Rice in the husk, "paddy" or rough
100640	Broken rice
070310	Fresh or chilled onions and shallots
080300	Bananas, incl. plantains, fresh or dried
070951	Fresh or chilled mushrooms of the genus "Agaricus"
070200	Tomatoes, fresh or chilled
120600	Sunflower seeds, whether or not broken
071310	Dried, shelled peas "Pisum sativum", whether or not skinned or split

071390	Dried, shelled leguminous vegetables, whether or not skinned or split (excl. peas, chickpeas, ...
441011	Particle board of wood, whether or not agglomerated with resins or other organic binding substances ...
4418	Builders' joinery and carpentry, of wood, incl. cellular wood panels, assembled flooring panels, ...
4602	Basketwork, wickerwork and other articles, made directly to shape from plaiting materials or ...
4707	Recovered "waste and scrap" paper or paperboard (excl. paper wool)
4901	Printed books, brochures and similar printed matter, whether or not in single sheets
5805	Hand-woven tapestries of the type Gobelin, Flanders, Aubusson, Beauvais and the like and needle-worked ...
5810	Embroidery on a textile fabric ground, in the piece, in strips or in motifs
5811	Quilted textile products in the piece, composed of one or more layers of textile materials ...
6001	Pile fabrics, incl. "long pile" fabrics and terry fabrics, knitted or crocheted
6002	Knitted or crocheted fabrics, of a width <= 30 cm, containing by weight >= 5% of elastomeric ...
62	Articles of apparel and clothing accessories, not knitted or crocheted
6301	Blankets and travelling rugs of all types of textile materials (excl. table covers, bedspreads ...
6302	Bedlinen, table linen, toilet linen and kitchen linen of all types of textile materials (excl. ...
6401	Waterproof footwear with outer soles and uppers of rubber or of plastics, the uppers of which ...
6404	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of ...
6405	Footwear with outer soles of rubber or plastics, with uppers other than rubber, plastics, leather ...
6703	Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair or other ...
071320	Dried, shelled chickpeas "garbanzos", whether or not skinned or split
090230	Black fermented tea and partly fermented tea, whether or not flavoured, in immediate packaging ...
090111	Coffee (excl. roasted and decaffeinated)
090190	Coffee husks and skins; coffee substitutes containing coffee in any proportion
170111	Raw cane sugar (excluding added flavouring or colouring)
442010	Statuettes and other ornaments, of wood (excluding wood marquetry and inlaid wood)
442090	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery and similar articles, ...
940190	Parts of seats, not otherwise specified
230800	Acorns, horse-chestnuts, marc and other vegetable materials and vegetable waste, vegetable ...
230910	Dog or cat food, put up for retail sale
210610	Protein concentrates and textured protein substances
252210	Quicklime

A.4 NATIONAL SANITARY AND PHYTOSANITARY LAWS AND REGULATIONS

State	Domestic Laws
 COMOROS	<p>Health and Safety</p> <ul style="list-style-type: none"> Décret N°15-05/PR. Portant création de l'Office National de Contrôle Qualité et de Certification des produits Halieutiques (ONCQCPH) (Date of text: 15 April 2015): Decree establishing the National Office for Quality Control and Certification of Fisheries Products (ONCQCPH) domestically. Décret n° 15-052/PR portant constatation des infractions sanitaires et les mesures administratives prises sur la vente et la salubrité des produits halieutiques (Date of text: 15 April 2015): Decree regarding the observation of health offenses and administrative measures taken on the sale and hygiene of fisheries products domestically. <p>Certificates</p> <ul style="list-style-type: none"> Note n°20-056/MFBSB/DGD du 3 avril 2020, du Directeur général des douanes, relative procédures à suivre pour les déclarations provisoires IM9100 (Date of text: 03 April 2020): Director General's Note outlining procedures for provisional declarations IM9100 domestically. <p>Animal Health and Plant Health</p> <ul style="list-style-type: none"> Arrêté N° 17 - 014 /VP-MAPEATU/CAB Relatif aux méthodes d'échantillonnage à appliquer pour l'analyse de certains contaminants dans les produits de la pêche (Date of text: 13 April 2017): Ministerial Order regarding sampling methods for the analysis of certain contaminants in fisheries products domestically. <p>Packaging</p> <ul style="list-style-type: none"> Arrêté N° 17 - 019/VP-MAPEATU/CAB Relatif aux eaux utilisées dans l'industrie de traitement des produits de la pêche et de l'aquaculture (Date of text: 13 April 2017): Ministerial Order concerning the waters used in the industry for processing fisheries products and aquaculture domestically. <p>Fisheries and Aquaculture:</p> <ul style="list-style-type: none"> Loi N°19-05/AU portant révision du Code des Pêches et de l'Aquaculture (Date of text: 01 April 2020): Legislation revising the Fisheries and Aquaculture Code domestically. Arrêté conjoint n°16-014/MPTPNTIC-TT/Cab portant création d'un Comité de Concertation et de Coordination entre l'Administration chargée des pêches et l'Autorité chargée des affaires maritimes (Date of text: 11 March 2016): Joint Order establishing a Consultation and Coordination Committee between the Fisheries Administration and the Authority responsible for maritime affairs domestically. Arrêté N° 14-029/MPTPNTCTT/CAB 18 décembre 2014 donnant mandat à la Société VRS Maritime Service JTL, de représentation pour l'enregistrement international des navires à l'Union des Comores (Date of text: 18 December 2014): Ministerial Order authorizing the representation for the international registration of vessels in the Union of the Comoros by the company VRS Maritime Service JTL domestically. Arrêté n° 93/MPDRPACAB fixant les attributions détaillées et le mode de fonctionnement des services de la Direction générale de la pêche (Date of text: 13 May 1993): Ministerial Order defining detailed attributions and the operating mode of services within the General Directorate of Fisheries domestically.



MADAGASCAR

- Decree of 24 September 1927 on the repression of fraud in the sale of goods and of falsifications of foodstuffs and agricultural products
- Law No. 86-017 ratifying Ordinance No. 86-013 of 17 September 1986 on phytosanitary legislation in Madagascar
- Decree No. 92-284 of 26 February 1992 regulating veterinary pharmacies
- Decree No. 92-285 of 26 February 1992 on animal health policy in Madagascar
- Decree No. 92-424 regulating merchandise imports and exports
- Decree No. 92-473 regulating agro-pharmaceutical products
- Decree No. 93-844 of 16 November 1993 on hygiene and quality of food and products of animal origin
- Order No. 2122/95 of 4 May 1995 on the functioning of the National Commission for the Examination of Applications for Marketing Authorization (AMM) for veterinary drugs in the territory of the Republic of Madagascar
- Order No. 7707/97 of 29 August 1997 prohibiting the use of certain veterinary drugs and products
- Decree No. 97-1109 of 4 September 1997 on the approval of the various establishments engaged in the slaughter of animals and the preservation, preparation, processing and transport of meat, offal and foodstuffs of animal origin for human consumption
- Order No. 7706/2000 11 July 2000 establishing the coding system of the national marketing authorization number (National AMM) for drugs and biological products for veterinary use in Madagascar
- Decree No. 2000-975 of 13 December 2000 prohibiting the importation of animal meal and of any food containing it, for use as animal feed
- Decree No. 2004-040° of 20 January 2004 authorizing the importation of female bovine animals into Madagascar
- Decree No. 2004-041 of 20 January 2004 establishing the regime applicable to the importation and exportation of animals, products and foods of animal origin and grain and fodder for use as animal feed
- Order No. 2088/2005 of 24 March 2005 on controls at importation of female bovine animals into Madagascar
- Decree No. 2005-375 establishing the Fisheries Health Authority
- Law No. 2006-030 of 24 November 2006 on livestock-breeding in Madagascar
- Order No. 4196/06 prohibiting the importation, sale and use of some pesticide active ingredients in agriculture
- Order No. 2908/2007 laying down specific hygiene rules for fisheries products for export
- Order No. 2910/2007 on the hygiene of foodstuffs of animal origin specific to fisheries products for export
- Order No. 6235/2009 laying down the official microbiological criteria and sampling plan applicable to fisheries and aquaculture products for human consumption intended for export
- Decree No. 2010-1009 regulating the production, control, certification and marketing of seed
- Law No. 2011-002 containing the Health Code
- Interministerial Order No. 45555/2011 prohibiting the importation, distribution, sale, use and production of some pesticide active ingredients in agriculture and of industrial chemicals
- Interministerial Order No. 28482/2011 on sanitary control measures for certain substances and residues in plants and plant products for human consumption intended for export
- Order No. 29179/2011 of 7 October 2011 designating the authority responsible for the phytosanitary inspection and certification of plants and plant products for human consumption intended for export
- Order No. 6814/2013-MSANP regulating food supplements
- Decree No. 2013-260 of 9 April 2013 on the organization and operation of the Food Safety and Quality Monitoring Agency (ACSSQDA)



MALAWI

- Iodization of Salt Act (Date of original text: 15 February 1999)
- Meat and Meat Products Act (Cap. 67:02) (Date of original text: 01 December 1975)
- Milk and Milk Products Act (Cap. 67:05) (Date of original text: 01 November 1972)
- Malawi Dairy Industries Corporation (Establishment) Order, 1987 (Date of original text: 27 March 1987)
- Agricultural Produce (Marketing) Regulations (Cap. 65:05) (Date of original text: 1987)
- Pig Grading Regulations (Cap. 67:02) (Date of original text: 1971)
- Meat Marketing Regulations (Date of original text: 1966)
- Public Health (Condensed Milk) Rules (Date of original text: 1940)
- Milk and Milk Products Regulations (Cap. 67:05) (Date of original text: 0000)
- Meat Inspection Regulations (Date of original text: 1976)
- Fisheries Conservation and Management Act, 1997 (Cap. 66:05) (Date of original text: 13 November 1997)
- Fisheries Conservation and Management Regulations, 2000 (Cap. 66:05) (Date of original text: 2000)
- Fisheries Conservation and Management (Local Comm. Participation) Rules, 2000 (Cap. 66:05) (Date of original text: 2000)
- Fisheries (Forms of Notice) Regulations (Date of original text: 1985)
- Fisheries (Aquarist Trade Fishing Licence) Regulations (Date of original text: 1980)
- Fisheries (Prohibition of Trawl Fishing) Order (Date of original text: 1976)
- Fisheries (Commercial Fishing) Regulations (Date of original text: 1976)
- Fisheries (Prohibited Methods of Fishing) Order (Date of original text: 1974)
- Fisheries (Trout) Rules (Date of original text: 1973)
- Consumer Protection Act (2003)
- Public Health Act (1948)



MOZAMBIQUE

- Decree No. 26/2009 of 17 August of 2009 (Animal Health Regulations)
- Decree No. 5/2009 of 01 June of 2009 (Regulation of Phytosanitary Inspection and Vegetal Quarantine)
- Decree No. 6/2009 of 31 March 2009 (Pesticide Management Regulation)
- Decree No. 11/2013 of 10 April 2013 (Regulation on Fertiliser Management)
- Decree No. 12/2013 of 10 April 2013 (Seed Regulation)
- Decree No. 15/2006 of 22 June of 2006 (Regulations on Hygienic-Sanitary Requirements of Production, Transport, Trade, Inspection and Surveillance of Food)

UNITED
REPUBLIC OF
TANZANIA

- Food, Drugs and Cosmetics Act, 2003
- Animal Disease Act, 2003
- Veterinary Act, 2003
- Plant Protection Act, 1997
- EAC rules such as the EAC SQMT Act, EAC SPS Protocol among others



ZAMBIA

- Food and Drugs Act of 1994
- Plant Pests and Diseases Act of 1994
- Noxious Weeds Act of 1994
- Public Health Act of 1933
- Control of Goods Act
- Animal Health Act of 2010



ZIMBABWE

- Food and Food Standards Act [Chapter 15:04] (Date of original text: 28 May 1971)
- Harmful Liquids Act [Chapter 9:10] (Date of original text: 05 August 1949)
- Produce Export Act [Chapter 18:17] (Date of original text: 10 June 1921)
- Food and Food Standards (Food Fortification) Regulations, No. 120 of 2016 (Date of text: 24 October 2016)
- Food and Food Standards (Import and Export) Regulations, 2015 (S.I. No. 8 of 2015) (Date of text: 2015)
- Food and Food Standards (Inspection and Certification) Regulations, 2015 (S.I. No. 5 of 2015) (Date of text: 2015)
- Food and Food Standards (Food Labelling) Regulations, 2002 (Date of original text: 04 October 2002)
- Food and Food Standards (Advisory Board) Regulations, 1995 (S.I. No. 322 of 1995) (Date of text: 1995)
- Food and Food Standards (Fish And Fish Products) Regulations, 1990 (S.I. No. 104 of 1990) (Date of text: 1990)
- Harare (Meat) By-laws, 2017 (S.I. 37 of 2017) (Date of text: 03 March 2017)
- Assignment of Functions (Minister of Industry and Commerce) Notice, 2014 (S.I. 10 of 2014) (Date of text: 2014)
- Food and Food Standards (Food Labelling) (Amendment) Regulations, No. 2 of 2019 (Date of text: 08 November 2019)
- Animal Health (Import) (Amendment) Regulations, 2016 (S.I. No. 56 of 2016) (Date of text: 2016)
- Animal Health Act (Chapter 19:01) (Date of original text: 01 January 1961)
- Parks and Wildlife Management Authority (Tariff of Fees) By-laws, 2019 (S.I. No. 108 of 2019) (Date of text: 10 May 2019)
- Parks and Wildlife (Payment for Hunting of Animals and Fish) Notice, 1987 (S.I. No. 101 of 1987) (Date of text: 1987)

A.5 GENERAL INFORMATION PROVIDED BY FOCAL POINTS OF PROFISHBLUE RELATED TO THE QUALITY INFRASTRUCTURE MAPPING

A questionnaire was prepared by UNIDO and through the support of the various Focal Points of the participating Member States' information was obtained regarding all the key players from a QI and Conformity Assessment perspective in the target Member States under PROFISHBLUE. A summary of this information is attached as Annex 5. The information will therefore be continuously updated as the project implementation continues.

It is important to note that, whilst the data collected included names of individuals, email addresses and contact numbers, this information is not included in this report to ensure confidentiality.

Note: The DRC was added to the list of countries to be included under UNIDO's work in PROFISHBLUE in March 2024. However, at the time of this report, the process of data collection for the DRC was still ongoing.

Madagascar

A) Key quality infrastructure institutions

(incl. National Standards Body, National Metrology Institution, Legal Metrology Authority, laboratories performing analysis of fish products)

- **Bureau des Normes de Madagascar (BNM)**
Lot 06 bis, Rue Rainandriamampandry, Soarano, 101 Antananarivo.
- **Service de la Métrologie Légale (SML)** auprès du Ministère de l'Industrialization, du Commerce et de la Consommation (MICC), Lot 06 bis, Rue Rainandriamampandry, Soarano, 101 Antananarivo.
- **Laboratoire d'Hygiène des Aliments et de l'Environnement (LHAE) auprès de l'Institut Pasteur de Madagascar (IPM)** (Laboratoire d'analyses microbiologiques de l'eau et des produits de la pêche et aquaculture, et Laboratoire épidémiologique des crustacés). BP 1274, Ambatofotsikely Avaradoha, 101 Antananarivo.
- **Laboratoires d'analyses des résidus des produits de la pêche et aquaculture se trouvant en France, Laboratoire d'analyses Physico chimique de l'Eau en Espagne.**

B) Competent authority for the fisheries sector (incl. certification, inspection and other regulatory aspects)

- **Autorité Sanitaire Halieutique, Ministère de la Pêche et de l'Économie Bleue**
Rue Farafaty Ampandrianomby, 101 Antananarivo.

C) Relevant border control agencies

- Les Directions des Douanes dans des postes frontaliers et un des aéroports internationaux (Ivato-Antananarivo).

D) Current projects being implemented related to trade of fisheries products / infrastructure of border posts / capacity building

- None.

Malawi

A) Key quality infrastructure institutions

(incl. Nationals Standards Body, National Metrology Institution, Legal Metrology Authority, laboratories performing analysis of fish products)

- **Malawi Bureau of Standards (MBS)** as a regulatory body, headquarters Blantyre and satellites at the Mwami border Mchinji, Mloza border Mulanje, Dedza border and Mwanza border.

B) Competent authority for the fisheries sector (incl. certification, inspection and other regulatory aspects)

- **Quality Assurance Division, Department of Fisheries.**
Through the focal point personnel, the Department conducts risk profile analysis by defining and developing risk management, risk assessment and risk communication so that the ISO standards and HACCP concept used for fish products is achieved by actors along the value chain. The department is also involved in the development of fish quality standards in collaboration with Malawi Bureau of Standards and enforcing them along the value chain; introduction of guidelines and procedures for certification of fish and fish products for domestic and export markets; and the Department monitors good hygiene practices in the handling, processing and transportation of fish and fish products and adequate refrigeration of fresh fish throughout, to reduce outbreaks of fish-borne illness.

C) Relevant border control agencies

- Malawi Bureau of Standards (MBS).
- Malawi Revenue Authority (MRA).
- Department of Immigration and Department of Animal Health and Livestock Development (DAHLD).

D) Current projects being implemented related to trade of fisheries products / infrastructure of border posts / capacity building

- Sustainable Fisheries, Aquaculture Development and Watershed Management (SFAD WM) which focuses on strengthening the fish value chain through cooperative formation, training, incubation and internship, supporting the cold chain and construction of fish landing centres.
- The SADC PROFISHBLUE project, which focuses on improving the fisheries governance and Blue Economy trade corridors replicating the SFAD intervention areas.

Mozambique

A) Key quality infrastructure institutions

(incl. Nationals Standards Body, National Metrology Institution, Legal Metrology Authority, laboratories performing analysis of fish products)

- Instituto Nacional de Normalização e Qualidade (National Institute for Standardization and Quality) (INNOQ), Maputo, Nampula, Beira.
- Instituto Nacional de Inspeção do Pescado (INIP), Laboratório de Inspeção de Pescado (LIP), Maputo, Beira, Quelimane.
- Laboratório Nacional de Higiene de Águas e Alimentos (LNHAA), Maputo.

B) Competent authority for the fisheries sector (incl. certification, inspection and other regulatory aspects)

- Ministério do Mar, Águas Interiores e Pescas (Ministry of Sea, Inland Waters and Fisheries) (MIMAIP).
- Instituto Nacional de Inspeção do Pescado (INIP), Laboratório de Inspeção de Pescado (LIP), Maputo, Beira, Quelimane.

C) Relevant border control agencies

- Ministério da Economia e Finanças (MEF).
- Autoridade Tributária de Moçambique (ATM).

D) Current projects being implemented related to trade of fisheries products / infrastructure of border posts / capacity building

- (TBD).

United Republic of Tanzania

A) Key quality infrastructure institutions

(incl. Nationals Standards Body, National Metrology Institution, Legal Metrology Authority, laboratories performing analysis of fish products)

- **Tanzania Bureau of Standards (TBS)**, Headquarters Office, P.O. Box 9524, Sam Nujoma Road/ Morogoro Road, Dar es Salaam.
- **Weight and Measure Agency (WMA)**, Headquarters Office, 7th floor, NSSF Mafao House, Uhuru Street, Ilala Boma, P.O. Box 313, Dar es Salaam. Website: <http://www.wma.go.tz>
- **National Fish Quality Control Laboratory**, P.O. Box 1213, Mwanza.

B) Competent authority for the fisheries sector (incl. certification, inspection and other regulatory aspects)

- The Competent Authority responsible for matters regarding fish and fisheries products is the Fisheries Department under the Ministry of Livestock and Fisheries, P.O. Box 2847, DODOMA.

C) Relevant border control agencies

- Ministry of Home Affairs (Migration, Police).
- Tanzania Revenue Authority (Customs).
- Tanzania Bureau of Standards (TBS), Weight and Measures.
- Ministry of Livestock and Fisheries (Fisheries and Livestock Officers).
- Ministry of Health (Health Personnel), Ministry of Agriculture and Cooperatives.

D) Current projects being implemented related to trade of fisheries products / infrastructure of border posts / capacity building

- None.

Zambia

A) Key quality infrastructure institutions

(incl. Nationals Standards Body, National Metrology Institution, Legal Metrology Authority, laboratories performing analysis of fish products)

- Zambia Bureau of Standards.
- The University of Zambia.
- Central Veterinary Research Institute.

B) Competent authority for the fisheries sector (incl. certification, inspection and other regulatory aspects)

- Ministry of Fisheries & Livestock through the Department of Fisheries and Veterinary Services.

C) Relevant border control agencies

- Zambia Revenue Authority.
- Zambia Police.
- Zambia Bureau of Standards.
- Immigration Department, Phytosanitary Dept.

D) Current projects being implemented related to trade of fisheries products / infrastructure of border posts / capacity building

- African Free Trade Area Project (Ministry of Commerce, Trade and Industry) in Kazungula, Mchinji and Nakonde, Chavuma, Chanida Border Post.

Zimbabwe

A) Key quality infrastructure institutions

(incl. National Standards Body, National Metrology Institution, Legal Metrology Authority, laboratories performing analysis of fish products)

- Standards Association of Zimbabwe.
- Department of Veterinary Public Health.
- National Metrology Institute (SIRDC-NMI).

B) Competent authority for the fisheries sector (incl. certification, inspection and other regulatory aspects)

- Department of Fisheries and Aquaculture.
- Department of Veterinary Services.
- Department of Strategic Policy Planning and Business Development.
- Zimbabwe Parks and Wildlife Management Authority.

C) Relevant border control agencies

- Zimbabwe Revenue Authority.
- Veterinary Public Health.
- Zimbabwe Republic Police.

D) Current projects being implemented related to trade of fisheries products / infrastructure of border posts / capacity building

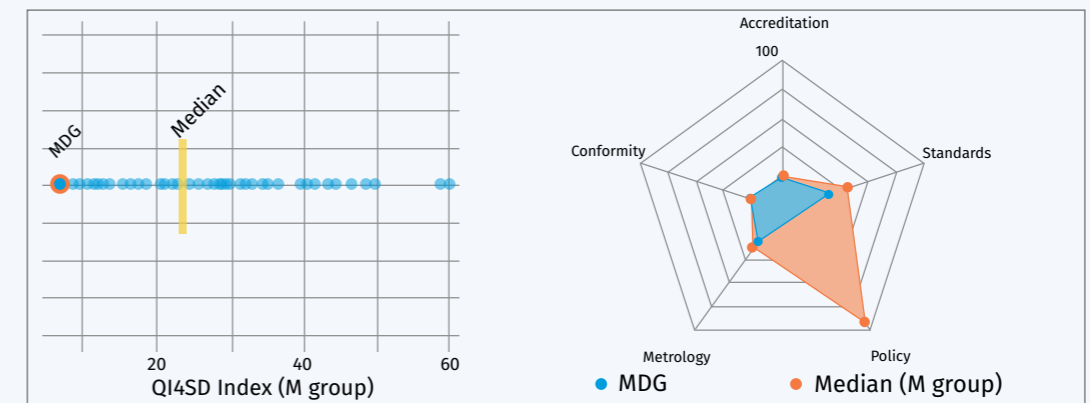
- Upgrading of Beitbridge Border Post.

A.6 QUALITY INFRASTRUCTURE FOR SUSTAINABLE DEVELOPMENT (QI4SD) INDEX – PROFISHBLUE COUNTRY PROFILES

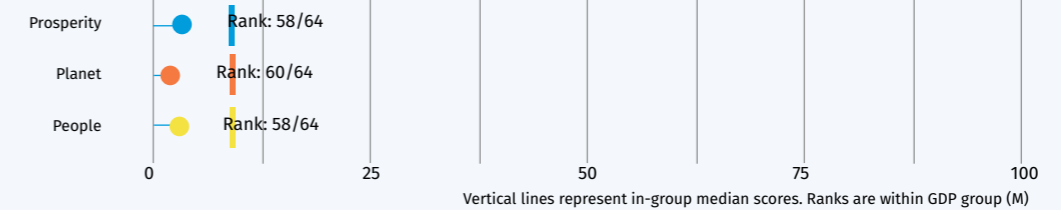
Madagascar

GDP group rank: 64/64 (M) | Overall rank: 137/137

Region	Income_Grp	GDP_Bn	GDP_pc	Population_thou
Sub-Saharan Africa	Low	14	495	27,691



P-Scores



Strengths and weaknesses

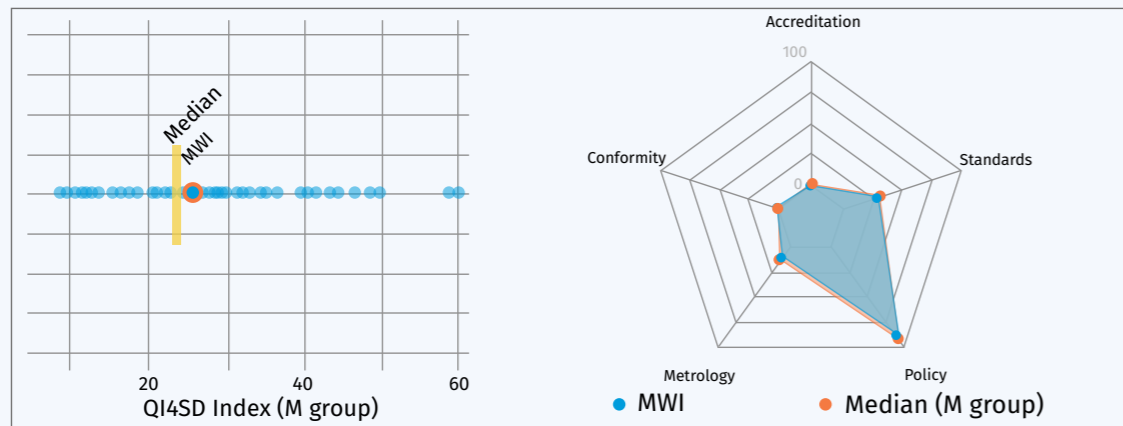
Strengths	Dimension	Rank	Value	Unit
Adopted IEC standards	Standards	36	46	Number
Membership of IQNet	Conformity	57	1	Composite score
Number of recognized certificates (ISO)	Conformity	77	1,210	Number

Weaknesses	Dimension	Rank	Value	Unit
Number of recognized certificates (ISO)	Conformity	77	1,210	Number
Number of recognized certificates (IQNet)	Conformity	124	1	Number
Participation in ISO technical committees	Standards	127	7	Number

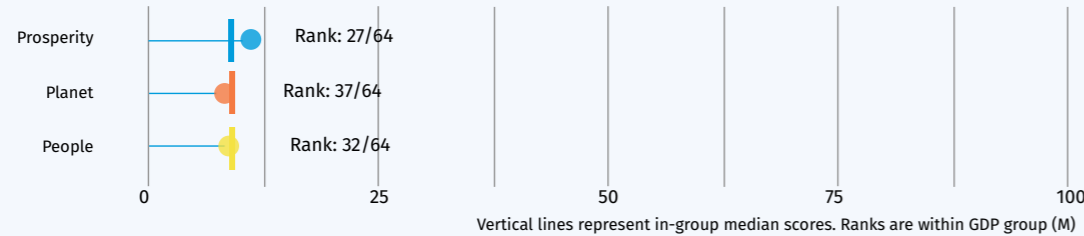
Malawi

GDP group rank: 31/64 (M) | Overall rank: 88/137

Region	Income_Grp	GDP_Bn	GDP_pc	Population_thou
Sub-Saharan Africa	Low	12	625	19,130



P-Scores



Strengths and weaknesses

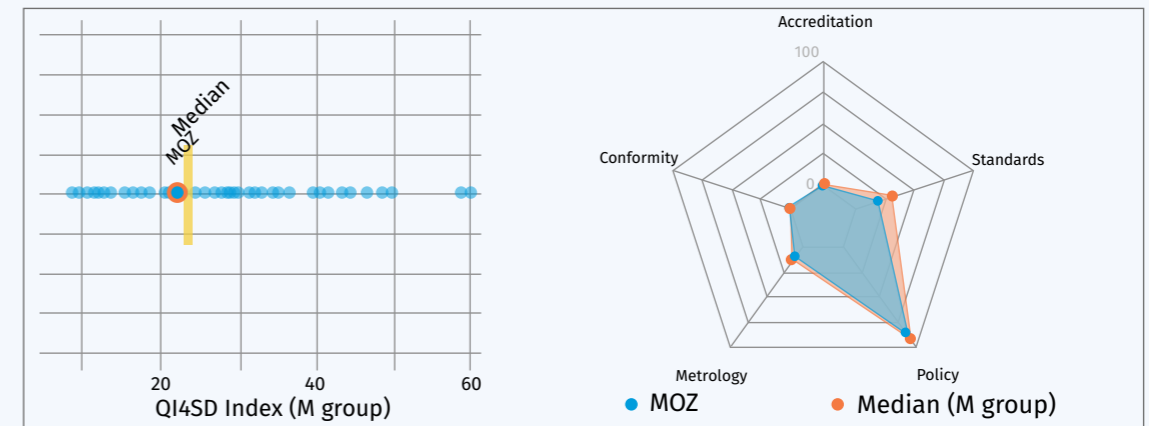
Strengths	Dimension	Rank	Value	Unit
Adopted IEC standards	Standards	10	276	Number
Adopted ISO standards	Standards	48	11	Number
Involvement in OIML project groups	Metrology	61	1	Composite score

Weaknesses	Dimension	Rank	Value	Unit
Number of recognized certificates (ISO)	Conformity	99	563	Number
Participation in ISO technical committees	Standards	109	23	Number
Number of recognized certificates (IQNet)	Conformity	120	2	Number

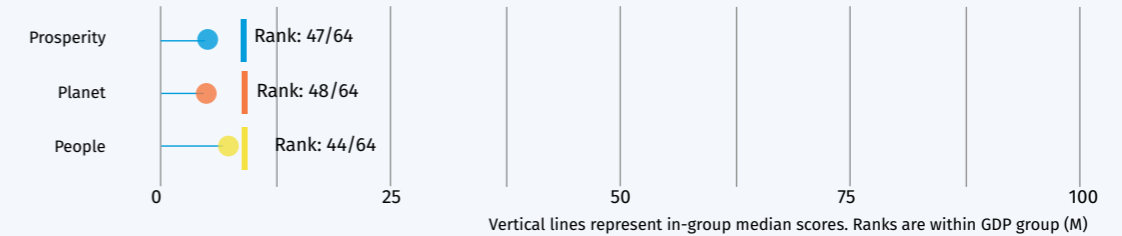
Mozambique

GDP group rank: 33/64 (M) | Overall rank: 93/137

Region	Income_Grp	GDP_Bn	GDP_pc	Population_thou
Sub-Saharan Africa	Low	14	449	31,255



P-Scores



Strengths and weaknesses

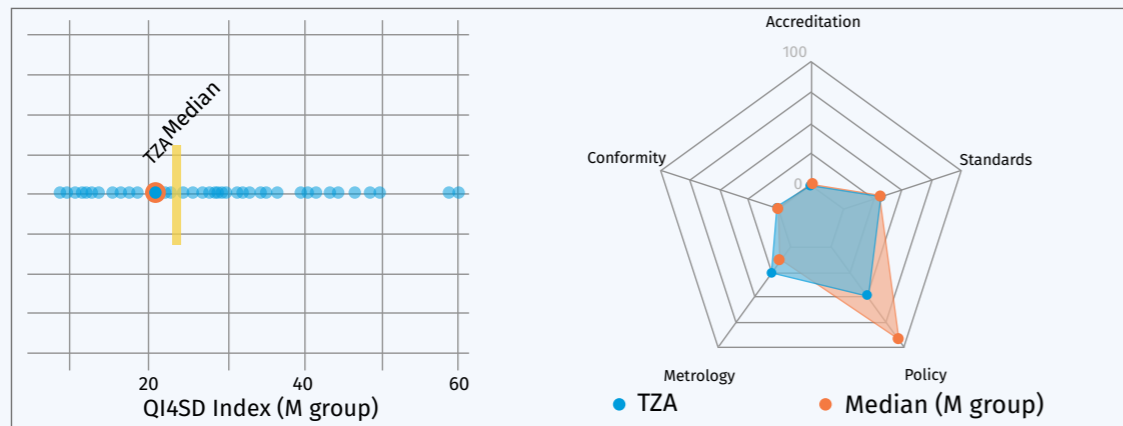
Strengths	Dimension	Rank	Value	Unit
Membership of IQNet	Conformity	57	1	Composite score
Adopted ISO standards	Standards	63	8	Number
Number of recognized certificates (IQNet)	Conformity	78	82	Number

Weaknesses	Dimension	Rank	Value	Unit
Membership of ITU	Standards	79	1	Composite score
Participation in ISO technical committees	Standards	125	9	Number
Number of recognized certificates (ISO)	Conformity	129	86	Number

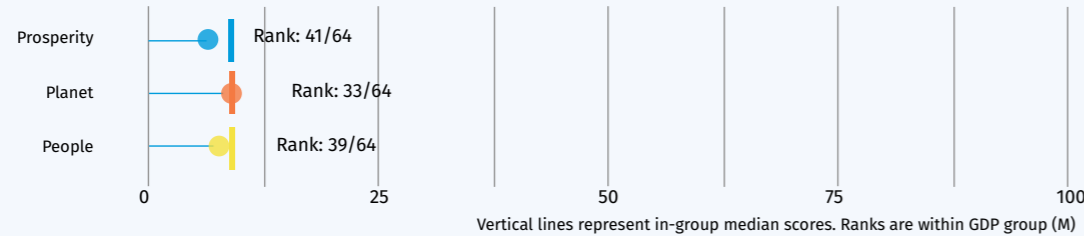
United Republic of Tanzania (URT)

GDP group rank: 40/64 (M) | Overall rank: 101/137

Region	Income_Grp	GDP_Bn	GDP_pc	Population_thou
Sub-Saharan Africa	Lower middle	62	1,076	59,734



P-Scores



Strengths and weaknesses

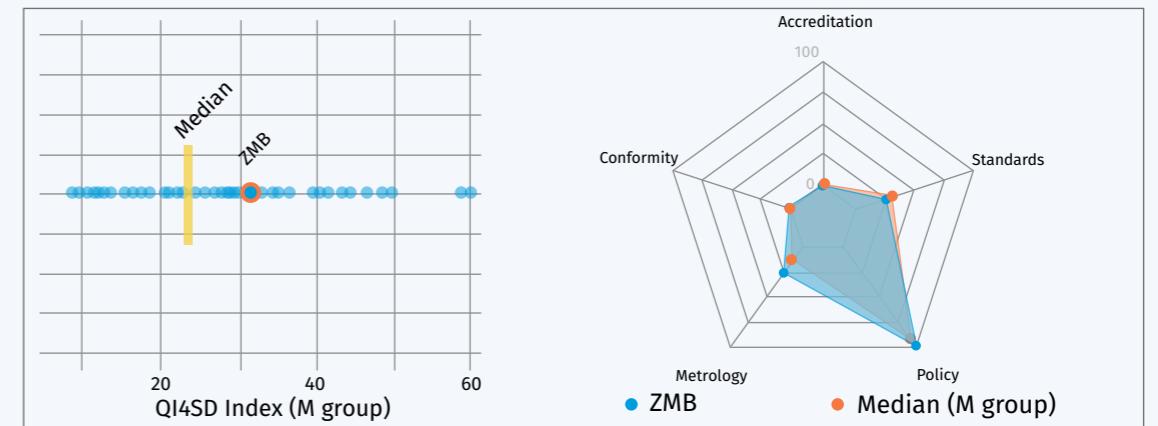
Strengths	Dimension	Rank	Value	Unit
Adopted IEC standards	Standards	28	71	Number
Adopted ISO standards	Standards	37	13	Number
Involvement in OIML project groups	Metrology	38	14	Composite Score

Weaknesses	Dimension	Rank	Value	Unit
Number of recognized certificates (ISO)	Conformity	85	831	Number
Participation in key and supplementary comparisons	Metrology	96	1	Number
Number of recognized certificates (IQNet)	Conformity	101	16	Number

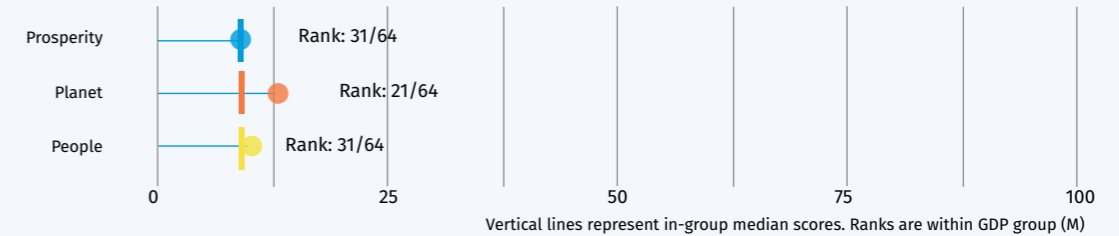
Zambia

GDP group rank: 18/64 (M) | Overall rank: 73/137

Region	Income_Grp	GDP_Bn	GDP_pc	Population_thou
Sub-Saharan Africa	Lower middle	19	1,051	18,384



P-Scores



Strengths and weaknesses

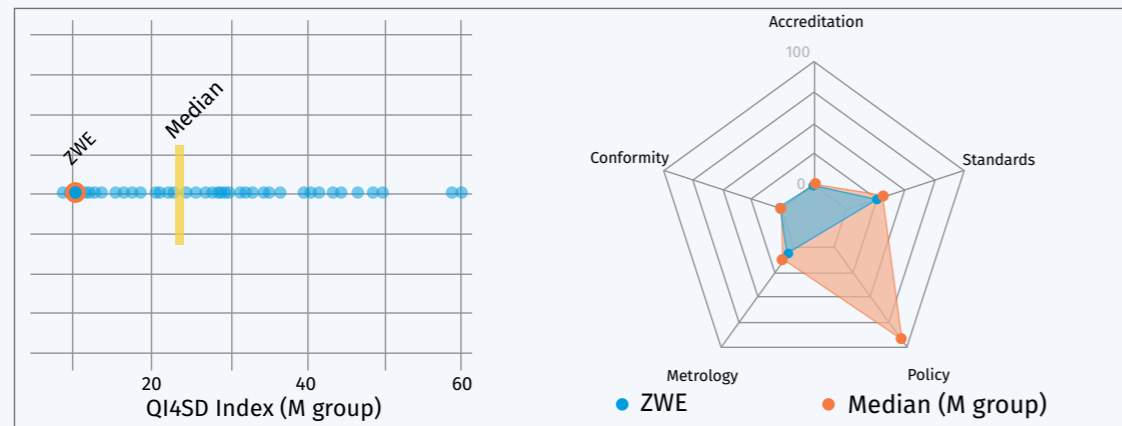
Strengths	Dimension	Rank	Value	Unit
OIML-CS - number of services recognized	Metrology	6	60	Number
Adopted IEC standards	Standards	8	293	Number
Adopted ISO standards	Standards	43	12	Number

Weaknesses	Dimension	Rank	Value	Unit
Number of recognized certificates (IQNet)	Conformity	94	30	Number
Participation in ISO technical committees	Standards	109	23	Number
Number of recognized certificates (ISO)	Conformity	131	63	Number

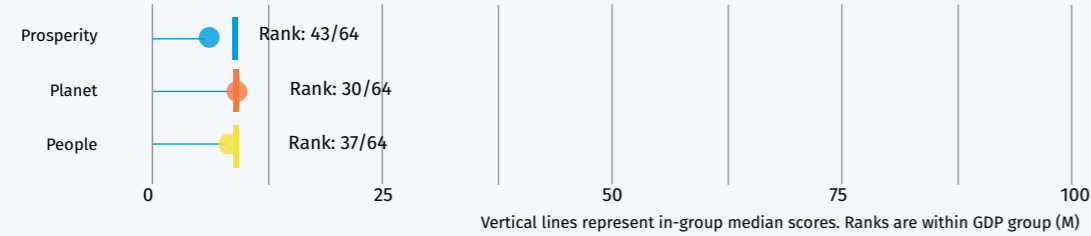
Zimbabwe

GDP group rank: 60/64 (M) | Overall rank: 132/137

Region	Income_Grp	GDP_Bn	GDP_pc	Population_thou
Sub-Saharan Africa	Lower middle	17	1,128	14,863



P-Scores



Strengths and weaknesses

Strengths	Dimension	Rank	Value	Unit
Adopted IEC standards	Standards	24	81	Number
Adopted ISO standards	Standards	32	14	Number
Membership of ITU	Standards	79	1	Composite score

Weaknesses	Dimension	Rank	Value	Unit
Number of recognized certificates (IQNet)	Conformity	86	58	Number
Participation in ISO technical committees	Standards	86	74	Number
Number of recognized certificates (ISO)	Conformity	119	208	Number



Vienna International Centre
Wagramerstr. 5, P.O. Box 300
A-1400 Vienna, Austria



+43 1 26026-0



www.unido.org



unido@unido.org



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

