

# Unlocking the Potential Contribution of Fisheries and Aquaculture to Agricultural Transformation in Africa

**A Contribution to Mainstreaming Fisheries and Aquaculture into CAADP for Implementation of the Malabo Commitments**

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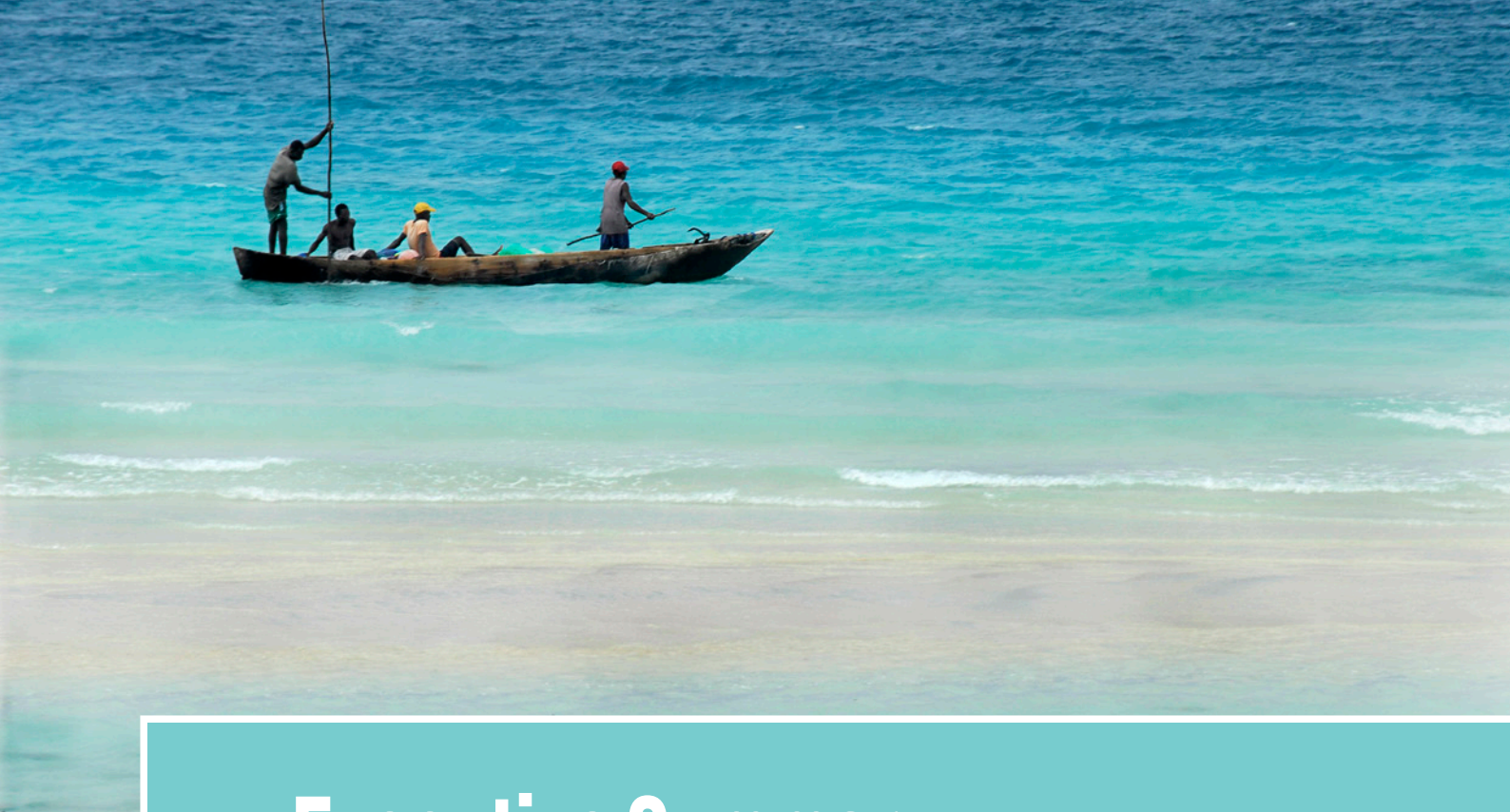
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# Executive Summary

Fisheries and aquaculture is a crucial sector with a role in contributing to the implementation of the Malabo Declaration commitments through the Comprehensive Africa Agricultural Development Programme (CAADP). The realization of this role has however, yet to be fully realised. In an attempt to address this, the African Union Development Agency-NEPAD (AUDA-NEPAD), constituted a team of fisheries and aquaculture experts to examine areas in which the sector can contribute to the ongoing agricultural reform process.

The team has identified priority areas that are aligned to the seven Malabo Commitments and can be measured, along with those of agriculture, in the quest to achieve a prosperous Africa based on inclusive growth and sustainable development. Implementation of these priority areas will help to accelerate the contribution of fisheries and aquaculture to improving food and nutrition security, and to grow the incomes in Africa's largely farming-based economies. They will also support an increased productivity of fisheries and aquaculture and lobbying for an increase in public investment in this sector.

Use The use of this fisheries framework recognizes the importance of evidence-based planning and implementation in the pursuit of making fisheries and aquaculture contribute to the agricultural transformation agenda. The proposed areas presented in this document form a foundation for developing a fisheries and aquaculture performance assessment. This is also directly linked to the Biennial Reporting on progress towards meeting the Malabo Commitments and facilitates CAADP implementation.

This document is divided into five main chapters:

- a. Chapter one briefly provides the context upon which this document is founded. The chapter presents the general economic value of the sector in terms of food security, employment, livelihoods sustenance, and overall GDP. The Chapter presents the potential of Africa's rich and diverse aquatic resources, the opportunities available in the sector, and some of the challenges addressed by the sector.
- b. The second chapter discusses the role of the African Union in mainstreaming fisheries and aquaculture into CAADP. This chapter highlights the history on how fisheries and aquaculture have been domesticated in CAADP through the various AU institutions as well as existing continental frameworks, strategies, and policies for implementation of the Commitments of the Malabo Declaration.
- c. Chapter three briefly examines the Regional Agricultural Investment Plans (RAIPs) and National Agricultural Investment Plans (NAIPs) and discusses how fisheries and aquaculture have been mainstreamed. Results from the examination of six Regional Economic Communities (RECs) indicate that fisheries and aquaculture are partially mainstreamed in all RAIPs except in the IGAD region where they are fully mainstreamed.
- d. Chapter four examines fisheries and aquaculture with respect to the CAADP Results Framework. The chapter identifies appropriate fisheries and aquaculture targets and goals relevant to the CAADP thematic areas as well as indicators to be measured from the sector in line to the Malabo Declaration Commitments.
- e. The fifth chapter proposes a set of tools that can be used to collect information and score the performance of fisheries and aquaculture in relation to its contribution to the reform process

The document concludes by outlining selected strategic recommendations for the AU to focus on to unlock the potential of fisheries and aquaculture in implementing the Malabo Declaration. These include but are not limited to:

- a. Facilitate knowledge generation and dissemination on unlocking the potential of fisheries and aquaculture for the implementation of Malabo Declaration
- b. Develop a Blue Economy programme at AUDA-NEPAD that will provide technical support for RECs and MS to meet the Malabo Commitments in the fisheries and aquaculture sector
- c. Develop capacity for value chain development and post-harvest loss reduction at various levels for RECs, MS, and other primary stakeholders
- d. Ensure that the indicators relevant to the fisheries and aquaculture sector are developed and captured in the CAADP Biennial Review
- e. Develop a capacity building programme across the fish value chain, including boosting inter and intra-regional fish trade through a value chain technology
- f. Ensure that the value of fisheries and aquaculture sector is fully considered in the emerging Blue Economy development process.



## Foreword

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Almost two decades have passed since AU Member States undertook to meet the broad targets of the 2003 Maputo Declaration on CAADP, including 6% of annual growth in agricultural GDP and allocating at least 10% of public expenditures to the agricultural sector. At the time, the continent's leaders signaled their intentions to achieve these targets through collective action to improve agricultural planning and policies, scale up investment to implement these policies, and harmonise external support for African-owned plans.

The subsequent adoption of the Malabo Declaration in 2014 cemented the commitment of Africa's leaders to mutual accountability to actions and results. This was to be achieved through a biennial Agricultural Review Process involving tracking, monitoring, and reporting on implementation progress using a multisectoral platform that supported evidence-based planning, implementation, monitoring, and evaluation. The Biennial Review Process has gained traction of late and provides essential insights into the progress towards meeting the Malabo Commitments.

Within this context, it is important to emphasise that the accurate collection of data for information production, analysis and informed strategic planning is critical to determine appropriate development policy and investment choices for driving Africa's successful agricultural reforms in a multisectoral way, to meet her ever-expanding development agenda and the needs of her people.

The important role and value of fisheries and aquaculture to the agricultural sector and, further, to the continent's economic development, should not be underestimated. Fisheries and aquaculture is recognized as an essential commodity sector for the African continent but inadequately recognized in the CAADP Results Framework and other strategic frameworks for the continent.

The AUDA-NEPAD, with our mandate to catalyse the implementation and delivery of transformational economic growth and development results, has prepared this report on Unlocking the Potential Contribution of Fisheries and Aquaculture to Agricultural Transformation in Africa. This document presents evidence and insights on Mainstreaming Fisheries and Aquaculture into CAADP for Implementation of the Malabo Commitments.

This report proposes targeted tools and methods for including fisheries and aquaculture data into the Biennial Review process. The report also provides a set of key strategic recommendations that could feed directly into integrated development planning in pursuit of Agenda 2063 goals and targets.



# Acknowledgements

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# List of Abbreviations

<b>AGDP</b>	Agricultural GDP
<b>AU</b>	African Union
<b>AUC</b>	African Union Commission
<b>AUDA-NEPAD</b>	African Union Development Agency-NEPAD
<b>AU-IBAR</b>	Inter-African Bureau for Animal Resources
<b>BR</b>	Biannual Review
<b>CAADP</b>	Comprehensive Africa Agricultural Development Programme
<b>CAMFA</b>	Conference of African Ministers for Fisheries and Aquaculture
<b>CCRF</b>	Code of Conduct for Responsible Fisheries
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>DWFN</b>	Distant Water Fishing Nations
<b>EAC</b>	East African Community
<b>ECCAS</b>	Economic Community of Central African States
<b>ECOWAS</b>	Economic Community of West African States
<b>EEZ</b>	Exclusive Economic Zone
<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization
<b>GDP</b>	Gross Domestic Product
<b>HS&amp;G</b>	Heads of State and Government
<b>IFPRI</b>	International Food Policy Research Institute
<b>IGAD</b>	Intergovernmental Authority on Development
<b>ILO</b>	International Labour Organization

<b>INFOSAMAK</b>	Center for Marketing Information and Advisory Services for Fishery Products in the Arab Region
<b>INFOPECHE</b>	Fish Marketing Information Portal and Services
<b>IUU</b>	Illegal, Unreported and Unregulated (fishing)
<b>KMIS</b>	Knowledge Management and Information Sharing
<b>LME</b>	Large Marine Ecosystem
<b>MEY</b>	Maximum Economic Yield
<b>MS</b>	Member States
<b>MT</b>	Metric Tonnes
<b>NAIP</b>	National Agricultural Investment Plan
<b>NEPAD</b>	New Partnership for Africa's Development
<b>NPCA</b>	NEPAD Planning and Coordinating Agency
<b>PFRS</b>	Policy Framework and Reform Strategy for Fisheries and Aquaculture
<b>RAIP</b>	Regional Agricultural Investment Plan
<b>REC</b>	Regional Economic Community
<b>ReSAKSS</b>	Regional Strategic Analysis and Knowledge Support System
<b>RFB</b>	Regional Fisheries Body
<b>SADC</b>	South African Development Community
<b>SD</b>	Sustainable Development
<b>SDG</b>	Sustainable Development Goal
<b>SME</b>	Small, Medium Enterprise
<b>UN</b>	United Nations
<b>USA</b>	United States of America
<b>WHO</b>	World Health Organization
<b>WTO</b>	World Trade Organization



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## Context and Justification

It is widely recognized that the continuation of the benefits from fisheries and aquaculture depends on the health of oceans and inland water bodies and the sustainability and resilience of the living resources. Fish stocks, particularly, are facing unprecedented sustainability risks due to anthropogenic pressures such as overfishing due to overcapacity of fishing fleets, illegal, unreported and unregulated (IUU) fishing, certain fisheries subsidies destructive fishing practices, climate change and ecosystem degradation. According to the Food and Agriculture Organization (FAO), approximately 59.9 percent of global marine fish stocks were maximally sustainably fished, and 33.1 percent of stocks were fished at biologically unsustainable levels (FAO, 2015 and 2018). Thus, more than 90 per cent of global marine fish stocks show signs of being either fully exploited or overexploited. Africa has equally experienced declining marine and inland fisheries resources mainly due to ever-increasing demands, leading to overfishing, destructive fishing methods, and environmental degradation (AUC and NPCA, 2014).

Coastal and island African countries are bestowed with rich and diverse marine resources. In many of these countries, the fisheries and aquaculture sector are a source of employment, livelihoods, and foreign currency earnings. A study completed in 2014 by the NEPAD Agency and the FAO on African fisheries' value revealed that the fisheries and aquaculture sector contribute significantly more to Africa's overall economy than commonly assumed. The value added by the capture fisheries sector as a whole, which includes both inland and marine fisheries, post-harvest processing, licensing of local fleets, and aquaculture, was estimated at more than US\$ 24 billion in 2011 (de Graaf and Garibaldi, 2014). This

represents 1.26 percent of the total gross domestic product (GDP) and 6 percent of the Agricultural GDP (AGDP) of all African countries.

The study also estimated that the sector employed 12.3 million people, representing 2 percent of Africa's population between 15 and 64 years old working as full-time fishers or full-time and part-time processors. About 27 percent of the people engaged in fisheries and aquaculture are women, with marked differences in their share among fishers (3.6 percent), processors (58 percent), and aquaculture workers (4 percent) (de Graaf and Garibaldi, 2014).


Additionally, fish and fishery products are a key source of animal protein for about over 400 million Africans, supplied mainly by the small-scale artisanal marine and inland fisheries. Fish demand projections for the growing African population will require an additional 1.6 to 2.6 million tons/ year of fish by 2030 (de Graaf and Garibaldi, 2014).

Given the fact that Africa's fisheries are largely small-scale, providing one third of the annual catches of the continent's total fish landings, the key role of small-scale fisheries cannot be overemphasized. However, the Aquaculture sector is still developing and is mostly concentrated in a few countries, namely Egypt, Nigeria, Uganda, Ghana,, and Kenya. The aquaculture sector is valued at around US\$3 billion/year (de Graaf and Garibaldi, 2014).

The revenues generated from fisheries access agreements are yet another source of substantial income for member states, but these are yet to be accurately determined. Over two decades ago, most coastal and island African states signed fishing agreements with heavily subsidized fishing countries. These agreements and the lack of capacity by countries to adequately manage fisheries have resulted in overcapacity, overfishing, destructive fishing, and IUU fishing, with the resultant direct threats to the livelihoods of many coastal communities of the continent.

Although data on license fees paid by foreign fleets and subsidies allocated to the small-scale sector were not readily available at the time of researching, de Graaf and Garibaldi did attempt to estimate the value of these fisheries agreements with Distant Water Fishing Nations (DWFNs) fishing in the exclusive economic zones (EEZs) of African States. They argue that foreign vessel owners are responsible for 25 percent of all marine catches around Africa. Thus, in theory, if African states were responsible for all these catches, they could have generated an additional value of US\$3.3 billion or eight times more than the current US\$0.4 billion that African countries earn from fisheries agreements.

Globally fishing subsidies are estimated at approximately US\$35 billion, of which US\$20 billion directly contributes to overfishing (Sumaila et al, 2016). The capacity-enhancing subsidies increase profits artificially and are stimulating this "race to fish" within the industry. The subsidies are predominately capacity enhancing and are the highest in subsidy least subsidized fisheries, only 2% of the total amount, compared to other world regions.



On the other hand, the international community admits that IUU fishing is a serious and increasing concern globally. IUU fishing undermines efforts to conserve and manage sustainable fishery resources. It generates problems for coastal and island countries, particularly where fish are important sources of employment and foreign exchange earnings. Global economic loss from IUU fishing is estimated at between US\$ 10 billion to US\$ 25 billion annually (Agnew, 2009), representing 18% across all fisheries. IUU fishing is endemic in Africa, particularly the Gulf of Guinea, where the loss in value is estimated at between US\$ 1.5 and US\$ 2 billion.

Sustainability of fish stocks presents a major challenge. Current FAO data show that the share of fish stocks within biologically sustainable levels continues to decline, falling from 90 percent under sustainable levels in 1974 to 69 percent in 2013 (UN, 2018). After the decline of global fish catches, world leaders committed to a new Sustainable Development Goal (SDG) on fisheries. Goal 14 of the 2030 Agenda for Sustainable Development, sets the unambiguous target of 2020 for the elimination of certain forms of fisheries subsidies contributing to overcapacity, overfishing, and IUU. In the same vein, the work of world leaders towards the establishment of international norms and best practices on fisheries subsidies sustained an increasing interest and effort at the World Trade Organisation (WTO), to agree on disciplines on fisheries subsidies. Many African states have participated in or agreed to expand a raft of international measures to reduce harmful fisheries subsidies.

Conscious of the challenges of the aquatic animals' sector, the African Heads of State and Governments (HS&G) endorsed the blueprint for governance reforms of the sector during the Malabo Summit in 2014. This continental blueprint is entitled the African

Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS) (AUC and NEPAD, 2014). It is reassuring that the seven main goals and three cross-cutting

goals of the PFRS are consistent with both key continental and global goals and targets.

The PFRS is an important framework for implementing the aspirations of the AU Agenda 2063: The Africa We Want. Agenda 2063 is a shared strategic framework for inclusive growth and sustainable development and a global strategy to optimize the use of Africa's resources for the benefit of all Africans. The PFRS is particularly important in terms of Aspiration 1 of Agenda 2063, under which the Goal for the Blue Economy is located. The PFRS is also strongly aligned with the Malabo Declaration commitments and provides an essential framework for mainstreaming fisheries into the Comprehensive African Agricultural Development Programme (CAADP) processes and tools such as the National Agricultural Investment Plans (NAIPs) and Regional Agricultural Investment Plans (RAIPs). The PFRS is also consistent with the Sustainable Development Goals (SDGs) of the Agenda 2030 for Sustainable Development, specifically SDG 14 on Life Below Water.

The CAADP new generation is expected to include fisheries and aquaculture related indicators to facilitate the Biennial Review process at the country level, regional and continental levels to inform NAIPs and RAIPs development and implementation. On this basis, this document identifies the indicators to unlock the potential of fisheries and aquaculture contribution to agricultural transformation in Africa.



# The Role Of The African Union In Mainstreaming Fisheries And Aquaculture Into CAADP Processes And Tools

## The Maputo Declaration and the introduction of the CAADP in 2003

A broad range of risks from climate and other natural hazards threaten the livelihoods of millions of African food producers. This results in price volatility and unpredictable markets and policies. These risk factors are significant impediments to expanding financial services, investments, and hence to the productivity in agriculture.

Agriculture Risk Management is designed through AUDA-NEPAD to foster a shift in mindset from managing crises to managing risks. This is done by providing support to Regional Economic Communities (RECs) and African countries to mainstream agriculture and food security risk management in implementing their national and regional policies, thereby boosting productivity and profitability.

To address these challenges, the Heads of States and Governments of the African Union adopted the Declaration on Agriculture and Food Security in Africa - the Maputo Declaration (NEPAD, 2003) at the Second Session of the AU Summit in 2003.

Through the Maputo Declaration, the Heads of States and Governments called for a coordinated effort to increase food security and economic development and growth in the form of economic development and growth in a Comprehensive African Agriculture Development Programme (CAADP). The Maputo Declaration also calls for countries to commit themselves to allocate at least 10% of their national budgets and resources for the CAADP implementation within five years.

## Implementation of CAADP at AU and REC levels

The Maputo Declaration is part of a larger initiative to renew African Agriculture set in motion by the African Union's formation of the New Partnership for African Development (NEPAD) in 2001 and continued through CAADP and other Declarations.

A key goal of CAADP is to achieve 6% annual agricultural productivity growth and early in the process, CAADP consisted of four pillars:

1. Land and water management- extending the area under sustainable land management;
2. Market access- improving rural infrastructure and market access;
3. Food supply and hunger – increasing food and reducing hunger; and
4. Agricultural research – research and technology dissemination (AU, 2015b).

Each of these pillars was organized by one or more organizations (<https://www.nepad.org/caadp/overview>). Implementing the Maputo goals began at the national level with an inventory followed by a roundtable process to prepare a “Compact”. The CAADP Compact is a document outlining a country's priority areas for agricultural investment signed by all the key players. These include public and private sectors representatives specifically government officials, agro-industrial representatives, small-scale producers, civil society, and consumers. Each CAADP Compact is unique for a specific country. For example, in Uganda, the CAADP Framework and Process strengthens the quality of agricultural sector development and investment plan (RU 2010).

## Sustainable Fisheries and Aquaculture in Africa “Fish for All Summit”

At the “Fish for All Summit”, held in 2005 in Abuja, Nigeria, AU MS highlighted the importance of sustainably harnessing the benefits from fisheries and aquaculture and opportunities to meet the ever-increasing demand for food fish in MS countries, in the region, and globally. The MS also voiced their concerns about the depletion of fisheries resources, the degradation of aquatic environments, and the threats to sustainable fisheries and aquaculture on the continent. As a result, MS committed themselves to facilitating the transformation of Africa's fisheries and aquaculture sector for food and wealth. They undertook to implement such a resolution as soon as possible. This led to the formulation of a Plan

of Action, which was adopted as a part of the NEPAD-Fish for All Summit process. The Plan of Action was to be used as a guideline for formulating and implementing policies, programmes, projects, and strategies at the national, regional, and continental levels. Box 1 below outlines details of the elements agreed by the HS&G agreement.

### **BOX 1: Agreement of the HS&G**

1. Support regional cooperation in fisheries and aquaculture through NEPAD, Regional Economic Bodies and Regional Fisheries Management Organizations, including in the management of transboundary and shared aquatic resources and ecosystems
2. Support national actions to accede to, to ratify, and to implement international conventions for the sustainable use and protection of the living aquatic resources and the aquatic environment of the region
3. Implement the provisions of the FAO CCRF, in particular through improved governance of fisheries; ensuring the environmental sustainability of fisheries; examining means to replace progressively "open access" to fisheries resources with "limited access regimes" and introduction of rights-based fisheries; taking steps to control fleet and fishing capacity; and ensuring an equitable balance of resource allocation between small-scale and industrial fishers
4. Empower fishing and fish farming communities, civil society and stakeholder organizations to effectively participate in policymaking, planning and implementation processes, with particular reference to the equitable allocation of resources, and the rights of the poor and disadvantaged
5. Ensure that fisheries and aquaculture are adequately reflected in the national and regional economic policies, strategies, plans and investment portfolios, including poverty reduction and food security strategies
6. Foster the development of an appropriate investment climate for fisheries and aquaculture, including legal and institutional reform and enforcement where required, improved incentives and access to capital for private investors, and strategic public sector investments
7. Direct particular attention to harnessing the potential and entrepreneurship of small-scale fishers, fish farmers, fish traders and service providers and their associations, including women entrepreneurs who have been leading the development of fish processing and trade in much of the continent
8. Foster small, medium and large-scale aquaculture production in a sustainable and environment-friendly manner compatible with the rational use of land and water resources and evolving market opportunities;
9. Build human and institutional capacity at the national and regional level with particular emphasis on training institutions, transferring appropriate technologies and knowledge to small producers and ensuring a rational and scientific basis for management decisions and design of programmes
10. Conserve and rehabilitate aquatic environments and habitats essential to living aquatic resources and aquatic biodiversity; and take measures to prevent or mitigate adverse impacts of aquaculture on the aquatic and coastal environment and communities
11. Promote trade in artisanal and industrial fish products to respond to regional and global market opportunities for African fish products, including by removal of intraregional trade barriers, developing common approaches and positions on international trade in fish and fishery products, and on harmonizing standards on products traded in the region
12. Pursue these objectives through NEPAD and Regional Economic Communities, in collaboration with international partners in science and development;
13. Contribute to the creation of an enabling environment for sustainable fisheries and aquaculture development by facilitating the adaptation of existing regional, national, and local institutions and regulations to the changing requirements of the sector and its challenges and opportunities
14. Call upon the international community to provide the financial and technical support required to implement sustainable African fisheries and aquaculture through aligned and harmonized partnership arrangements and in pursuance of NEPAD's vision and principles for action

Source: Fish for All Summit resolutions



The resolutions from the Fish for All Summit also saw increased support for aquaculture development in Sub-Saharan Africa. Aquaculture expansion has the potential to create new jobs and improve food security among poor households. For example, an exercise undertaken to estimate the effects of aquaculture expansion and increased input productivity on poverty reduction in Ghana, Kenya, and Tanzania used three computable general equilibrium models. The results suggested potential positive effects on the per capita income for all households in Ghana and Kenya, while in Tanzania, some rich households were expected to experience income loss, due to resource shifts from other sectors to aquaculture. A reduction in poverty associated with price reductions, and increases in minimum income associated with income expansion, predicted a decrease in the poverty gap in all household groups. Furthermore, due to high sectoral linkages, aquaculture development was identified as a potential candidate for sector-specific policy support to address poverty reduction in Sub-Saharan Africa (Kaliba et al., 2007; Mnembuka et al., 2007).

## The Malabo Declaration

The Malabo Declaration of 2014 brought in new dimensions from its predecessor, the Maputo Declaration in terms of focus, scope, content, and delivery of CAADP. The Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, expanded the CAADP agenda and scope while reaffirming the principles and targets of the Maputo Declaration, adding commitments on ending hunger, reducing child malnutrition, halving poverty by 2025, tripling intra-African trade, enhancing resilience in livelihoods and production systems to climate variability and other shocks, and mutual accountability to actions and results (AU, 2017).

The vision of the Malabo Declaration (AUC, 2014) is focused on promoting and achieving accelerated African agricultural growth and transformation for shared prosperity and improved livelihoods (AU, 2017). The 2014

Malabo Declaration outlined eight main commitments:

1. Recommitment to the Principles and Values of the CAADP Process;
2. Commitment to Enhancing Investment Finance in Agriculture;
3. Commitment to Ending Hunger in Africa by 2025;
4. Commitment to Halving Poverty by the year 2025, through Inclusive Agricultural Growth and Transformation;
5. Commitment to Boosting Intra- African Trade in Agricultural commodities and services;
6. Commitment to Enhancing Resilience of Livelihoods and Production Systems to Climate Variability and other related risks;
7. Commitment to Mutual Accountability to Actions and Results; and
8. Strengthening the African Union Commission to support delivery on these commitments.

Since 2004, reviews and coordination of the efforts of different countries, through the CAADP Partnership Platform (CAADP PP) meetings, have enabled member states to meet, share experiences and evaluate their progress. Some Regional Economic Communities (RECs), such as the Economic Community for West African States (ECOWAS) and the Common Market for Eastern and Southern Africa (COMESA) were very active. RECs and countries have also received support from Regional Strategic Analysis and Knowledge Support System (ReSAKSS) and International Food Policy Research Institute (IFPRI), to promote evidence and outcome-based policy planning and implementation as part of the CAADP agenda with indicators tracked by CAADP.

The first Phase of the CAADP Programme (2003-2014), focused on setting up the framework of the process and its milestones such as compacts, investment plans, business meetings, and guidelines. In Phase 2 of the CAADP framework/agenda, the emphasis is now on implementation, results and impact

and while CAADP continues to focus on agriculture, it now needs to address areas required for agricultural growth to happen such as infrastructure, trade, energy, rural development, and ICT (AU, 2017). The NAIPs and RAIPs remain as the main mechanisms for achieving the CAADP-Malabo targets while recognizing the role of complementary instruments.

Under Malabo, the Heads of State agreed to a process to measure each country's progress towards the implementation of the commitments of the Malabo Declaration through a Biennial Review. This is supported by the AU-CAADP Business Plan (BP: 2017-2021), which aims to provide a strategic framework to outline priority programme areas that guide the implementation and delivery of the commitments outlined in the CAADP-Malabo Declaration. The BP comprises seven core drivers which are aligned with the CAADP-Malabo Result Areas (C-MRAs), and their corresponding seven programmes and 36 sub-programmes.



## **The Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS), 2014**

With an increased understanding of the importance of fisheries and aquaculture within the agricultural sector and the challenges and opportunities in managing fisheries and aquatic resources in Africa over the past two decades, the AU has taken steps to improve performance in the sector. The establishment of the CAADP framework by NEPAD in 2003 was followed by the Sirte Declaration on the Challenges of Implementing Integrated and Sustainable Development on Agriculture and Water in Africa in 2004. The Sirte Declaration promoted the development of African fisheries resources and urged regional cooperation in fisheries management. The following year, in 2005, at the NEPAD Fish

for All Summit in Abuja, Nigeria, Member States adopted the Abuja Declaration on Sustainable Fisheries and Aquaculture in Africa, thereby committing to the Strategic Partnership for African Fisheries.

In 2009, African countries initiated a dialogue to strengthen the African Voice in international policy and negotiating platforms. The first Conference of African Ministers of Fisheries and Aquaculture (CAMFA 1) was convened in September 2010 in Banjul, the Gambia. The African Ministers in that conference responded to the challenges and opportunities in the sector. They made far-reaching recommendations aimed at unlocking the full potential of the fisheries and aquaculture for food security, livelihoods, and wealth creation.

The CAMFA 1 eloquently recommended, inter alia, African Union Member States to consider

options for fisheries reforms and strengthen institutional arrangements to improve the productivity of fisheries and aquaculture and enhance the contribution of fish to sustainable food and nutritional security and economic growth within the CAADP framework. The recommendations by CAMFA 1 were endorsed at the African Union 18th Ordinary Session of the AU Heads of States and Governments in 2011 (Doc. EX. CL /627(XVIII)) (AU, 2011). These were taken up during the process to develop the Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS).

In 2014, the HS&G adopted the Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa at a gathering in Malabo, Equatorial Guinea. The PFRS is a blueprint for governance reforms of the sector and is the product of a broad and inclusive, participatory and transparent, interactive process. The PFRS comprises seven main goals and three cross-cutting goals consistent with the Malabo Declaration commitments, goals, and targets and critical to Africa's fisheries development.

### Main Goals:

1. Enhancing conservation and sustainable use of fisheries resources through the establishment of national and sub-national governance and institutional arrangements that ensure the societal contribution generated by Africa's sectors have the greatest impacts at the most appropriate level
2. Development of sustainable small-scale fisheries by improving and strengthening the contribution of small-scale fisheries to poverty alleviation, food and nutrition security and socio-economic benefits of fishing communities and beyond
3. Realizing the full potential of the aquaculture sector to generate wealth, social benefits and contribute to the development of the African economy by jumpstarting market-led sustainable development strategies
4. Promoting responsible and equitable fish trade and marketing by significantly harnessing the benefits of Africa's fisheries and aquaculture endowments through accelerated trade and marketing
5. Strengthening South-South (bilateral and regional) cooperation, and developing coordinated mechanisms among RECs, RFBs and LME-based commissions to ensure coherence of fisheries policies and aquaculture development and their adoption and adaptation
6. Creating awareness on the potential and importance of the sector, based on current and emerging trends, challenges and needs as well as enhancing the capacity of governments and institutions in order to ensure sustainable development of the sector
7. Increasing and consolidating the "African Voice" in the governance and management of high seas fisheries to substantially enhance the benefits accruing to the Member States associated with exploitation of high seas resources

### Cross cutting Issues:

- a. Strengthening Resilience and Reducing Vulnerabilities to Climate Change in African Fisheries and Aquaculture in an integrated and holistic manner
- b. Including knowledge-based gender and youth considerations in policies, laws and plans
- c. Improving the financial services offered to SMEs in the fisheries and aquaculture value chains

The PFRS has provided an essential framework for mainstreaming fisheries into the processes and tools for implementing the Malabo Commitments such as the NAIPs and RAIPs. The PFRS is also strongly aligned to the Sustainable Development Goals of the 2030 Agenda for Sustainable Development (particularly SDG 14) and as a key component of the Blue Economy under Aspiration 1 of the AU Agenda 2063. The rational implementation of the PFRS involves identifying appropriate user-friendly strategies facilitating alignment of national and regional fisheries and aquaculture policies to the PFRS. A complementary document, the Guide for the Implementation of the Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa, was developed to support member states in implementing the PFRS (AUC-NEPAD, 2015). It describes the criteria/parameters for the alignment of national and regional policies and strategies to the provisions of the PFRS.

Programme activities within the AU implementing organs have further facilitated the implementation of the PFRS towards meeting the Malabo commitments. From 2015-2018 the NEPAD Agency with AU-IBAR, jointly implemented the Fisheries Governance 1 Project, funded by the EU, and supported RECs and MSs to mainstream fisheries and aquaculture into the comprehensive and integrated planning of the agriculture investment plans. This was undertaken through the following activities:

- a. A network of fisheries and aquaculture experts from all regions of the continent were trained in the CAADP frameworks and processes and provided technical support in the NAIP/RAIP development process, and contributed, where needed, to the CAADP technical network and review teams.
- b. The specialist fisheries and aquaculture expert network also reviewed the inclusion of fisheries and aquaculture in the CAADP Biennial Review process and recommended targeted indicators

for the sector for CAADP monitoring and evaluation, which could be used to inform and strengthen future BR processes;

## Review of Fisheries and Aquaculture in the CAADP Biennial Review

In accordance with the seventh Malabo Commitment on mutual accountability to actions and results, a Biennial Agricultural Review Process was initiated in 2017 and resulted in the release of the Inaugural Biennial Review (BR) Report. The BR process is a reporting exercise to the Heads of State and Government Summit and a learning exercise for countries in using the findings of the report to adjust and improve their NAIP implementation. The Inaugural Biennial Review Report highlighted the need to mobilise more resources for technical and financial support from public and private sectors to achieve the goals and targets of the Malabo Declaration by 2025 through the implementation of CAADP. The need was also identified to improve data collection, data analysis and data management systems for agricultural statistics in order to strengthen M&E systems and to improve evidence-based planning and accuracy of implementation.



As part of the ongoing initiatives to mainstream fisheries and aquaculture into CAADP processes and tools to achieve the relevant Malabo Commitments, the NEPAD Agency undertook to contribute to the BR process through some targeted activities with the support of the Fisheries Governance Project funded by the EU. With the support of members of the network of fisheries and aquaculture experts, the NEPAD Agency held a Side Event at the 14th CAADP in Gabon in April 2018 to:

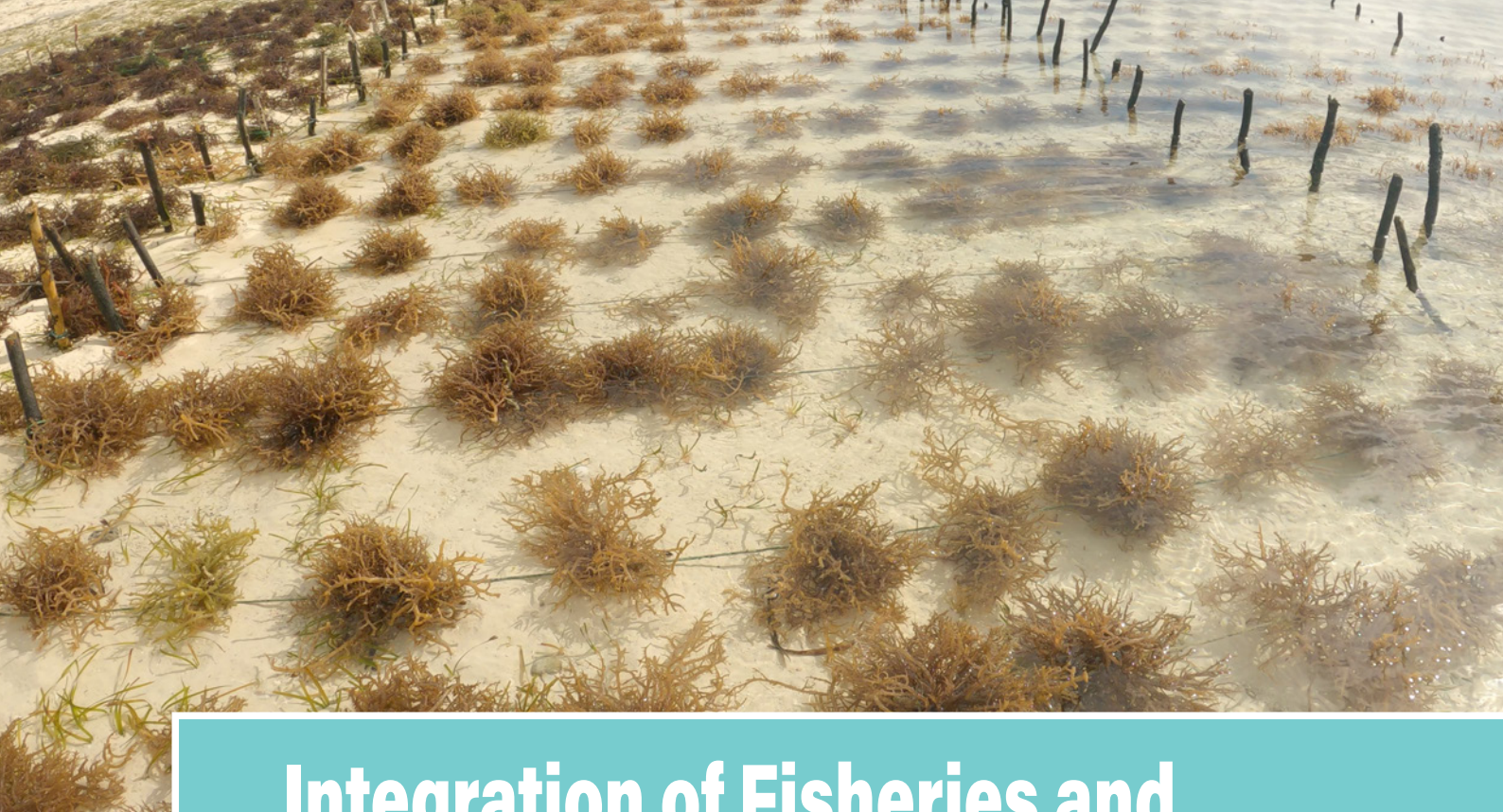
- i. Increase awareness of the value of African Fisheries and Aquaculture and the contribution of these sectors to achieving the Malabo Goals and Targets.
- ii. Provide a platform for discussion of the fisheries and aquaculture sector within the key themes of the CAADP PP to ensure inclusion of fisheries and aquaculture within the Malabo compliant National Investment Plans (NAIPs) and Regional Investments Plans (RAIPs) as foundation of adequate and more accurate planning for delivering on the Malabo targets; and
- iii. Deliberate on an outline of a report on efforts towards the mainstreaming of fisheries and aquaculture into CAADP tools.

This side event led to the drafting of this report. At the 15th CAADP Partnership Platform meeting held in Nairobi in June 2019, participants from the network of fisheries and aquaculture experts deliberated further to finalise the document and provide recommendations on how to better incorporate fisheries and aquaculture into the CAADP processes and tools, including the BR process.

Some key findings emerging from the initiative are outlined in Box 1 following. These arguments illustrate the need to unlock the potential of fisheries and aquaculture to agricultural transformation on the continent and for financing, effective, and efficient implementation of the NAIPs and RAIPs.

### **Box 1: Key points on the integrating fisheries and aquaculture into CAADP processes and strengthening NAIP/RAIP development, financing and implementation**

- a. Fisheries and aquaculture is recognized as an essential commodity sector for the African continent (Abuja Declaration 2006) but is inadequately recognised as such in the CAADP Results Framework and other strategic frameworks for the continent
- b. The estimated total value added of the Fisheries and Aquaculture sector in Africa, including fish processing, amounts to US\$ 24.0 billion, which accounts for 1.26% of total GDP and 6.06% of Agriculture GDP. (de Graaf, 2014)
- c. Fish remains the most highly traded commodity contributing to intra- and inter-regional fish trade in Africa. Much of this trade is informal and needs to be captured within the framework of intra-Africa regional trade
- d. Fisheries and aquaculture is also one of the most genderised sectors with extensive and active participation of women and youth, particularly in the fish production and trade value chain
- e. Agricultural growth poles known as agropoles, if adopted as integrated centers of excellence, could boost the transformation of agriculture, livestock, fisheries and aquaculture sectors.



# Integration of Fisheries and Aquaculture into CAADP at the REC level

The CAADP process has attracted broad ownership from the AU-MS, indicating that the first decade of CAADP implementation created the enabling environment for industrial-led agricultural transformation. However, fish and aquatic products have been largely lumped with other commodities with insufficient recognition of their significant value to the agricultural sector. This is despite the endorsement of the continental PFRS by AU MS. In the CAADP process, fisheries and aquaculture is not afforded sufficient attention, and there is a need to revisit the CAADP investment plans at the National and Regional level.

This report has examined the RAIPs and NAIPs and has reviewed the extent to which fisheries and aquaculture is mainstreamed. The results indicate that, on the whole, fisheries and aquaculture is only partially mainstreamed in the majority of RAIPs. A summary of the mainstreaming level is given in Table 3.1 below, with a detailed analysis included in the annexes.

S/N	RAIPs and NAIPs	Level of integration	Detailed annex
1	COMESA	Partially integrated	Annex 1
2	EAC	Partially integrated	Annex 2
3	ECCAS	Partially integrated	Annex 3
4	ECOWAS	Partially integrated	Annex 4
5	IGAD	Integrated	Annex 5
6	SADC	Partially integrated	Annex 6



# Proposed Thematic Areas for Integrating Fisheries and Aquaculture into CAADP

The thematic area of the CAADP Results Framework was queried with respect to the applicability to fisheries and aquaculture and the adequacy of the accompanying targets and goals. For example, regarding Thematic Area 1: Increased agricultural production and productivity, a critical examination suggests that the focus may not be on increased production – but rather on the sustainable catch. This is so because, production should be limited to surplus production to ensure sustainability.

Based on this review, the relevant thematic areas are proposed with respect to fisheries and aquaculture based on the Malabo goals and targets (See Table 1 below). In addition, appropriate targets and goals were developed (See Table 2 below).

**Table 1: Proposed Fisheries and Aquaculture Thematic Areas in Alignment with Malabo**

S/N	Thematic Area	Malabo Targets and Goals	Thematic Areas related to Fisheries & Aquaculture	Fisheries & Aquaculture (Malabo targets & goals)	Continental Frameworks
1	Increased agricultural production and productivity	<ul style="list-style-type: none"> <li>a. Agricultural value added (absolute values)</li> <li>b. Agricultural production Index</li> <li>c. Agricultural value added per agricultural worker</li> <li>d. Agricultural value added per hectare of arable land</li> <li>e. Yields for the five AU priority commodities</li> </ul>	Sustainable fisheries & aquaculture production & productivity	<ul style="list-style-type: none"> <li>▪ Increase aquaculture production</li> <li>▪ Maintain fishing at MEY</li> <li>▪ Enhance value chains in fisheries &amp; aquaculture</li> <li>▪ Increase aquaculture productivity per m<sup>2</sup></li> <li>▪ Minimize post-harvest losses</li> <li>▪ Reduce or eliminate IUU fishing</li> </ul>	<p>Consistent with</p> <ul style="list-style-type: none"> <li>▪ Comprehensive African Agricultural Development Programme (CAADP)</li> <li>▪ Policy Framework and Reform Strategy (PFRS) for Fisheries and Aquaculture in Africa</li> <li>▪ The 2050 integrated Africa Integrated Maritime Strategy (AIMS)</li> <li>▪ African Charter on Maritime Security and Safety and Development in Africa</li> </ul>
2	Increased intra-African regional trade and better functioning of national and regional markets	<ul style="list-style-type: none"> <li>a. Value of intra-Africa trade (Constant 2005 USD)</li> </ul>	Increased intra-African regional trade and better functioning of national and regional markets	<ul style="list-style-type: none"> <li>▪ Fish trade volumes</li> <li>▪ Fish product value</li> <li>▪ Market outlets</li> <li>▪ Processing units</li> <li>▪ Volume and value of competitive products in the market (value addition/value chain)</li> <li>▪ Harmonized official control standards</li> <li>▪ Harmonized and reduced tariffs and trade barriers</li> <li>▪ Provision of market information through INFOSAMAK, INFOPECHE, KMIS and other Fish Market Observatory Organizations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Boosting Intra regional Africa Trade (BIAT)</li> </ul>



S/N	Thematic Area	Malabo Targets and Goals	Thematic Areas related to Fisheries & Aquaculture	Fisheries & Aquaculture (Malabo targets & goals)	Continental Frameworks
		b. Domestic food price index			
3	Expanded local agro-industry and value chain development inclusive of women and youth	a. Percentage of agricultural five priority products that is lost post-harvest b. Activity of social assistance c. Social protection d. Social insurance and labour programmes	Expanded local agro-industry and value chain development inclusive of women and youth	<ul style="list-style-type: none"> <li>Improved competitiveness of fish and aquaculture products</li> <li>Levels of fish post-harvest loss</li> <li>Increased percentage of landings that are value-added</li> <li>Modernized quality infrastructure (landing sites, processing facilities meeting global sanitation standards)</li> <li>Access to health services for fishers, processors</li> <li>Compliance to international instruments and standards</li> <li>Access to extension service</li> </ul>	<ul style="list-style-type: none"> <li>PFRS, NAIPs, RAIPs</li> </ul>
4	Increased resilience of livelihoods and improved adaptation and risks management in the fisheries and aquaculture sector.	a. Coverage of social assistance, social protection, social insurance and labour programmes b. Existence of food reserves, local purchases for relief programmes, early warning systems and food feeding programmes	Increased resilience of livelihoods and improved adaptation and risks management in the fisheries and aquaculture sector	<ul style="list-style-type: none"> <li>Established early warning and preparedness mechanisms</li> <li>Preventive and productive social safety nets</li> <li>Developed and implemented strategies for the inclusion of women in fisheries</li> <li>Access to attractive credit and finance schemes to reach the most vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>PFRS, NAIPs, RAIPs</li> </ul>

S/N	Thematic Area	Malabo Targets and Goals	Thematic Areas related to Fisheries & Aquaculture	Fisheries & Aquaculture (Malabo targets & goals)	Continental Frameworks
5	Improved natural resource management for sustainable agriculture	Share of agriculture under sustainable land management practices	Improved natural resource management for sustainable fisheries and aquaculture	<ul style="list-style-type: none"> <li>▪ Mapping of suitable fisheries and aquaculture zones in land and at sea</li> <li>▪ Operationalized fisheries and aquaculture management plans including: Marine Protected Areas and maritime clusters</li> <li>▪ Research for sustainable management</li> <li>▪ Environmental management plans</li> <li>▪ Climate smart fisheries and aquaculture</li> </ul>	<ul style="list-style-type: none"> <li>▪ PFRS, NAIPs, RAIPs</li> </ul>

**Table 2: Fisheries & Aquaculture Indicators in Alignment with Malabo**

S/N	Thematic Areas related to Fisheries & Aquaculture	Fisheries & Aquaculture (Malabo targets & goals)	Fisheries & Aquaculture Indicators
1	Sustainable fisheries & aquaculture production & productivity	<ol style="list-style-type: none"> <li>a. Double annual increase in aquaculture production from the 10% of 2016</li> <li>b. Maintain fishing at MEY</li> <li>c. Enhance value addition in fisheries &amp; aquaculture</li> <li>d. Increase aquaculture productivity</li> <li>e. Minimize post-harvest losses</li> <li>f. Minimizing IUU fishing</li> </ol>	<ol style="list-style-type: none"> <li>a. Volume of production (mt)</li> <li>b. Total Yield for fisheries and aquaculture (mt)</li> <li>c. Fisheries and aquaculture Value added product per fish</li> <li>d. Aquaculture Yield per unit area</li> <li>e. Percentage reduction of post-harvest loss</li> <li>f. Percentage reduction of IUU fishing</li> </ol>
2	Increased intra-African regional trade and better functioning of national and regional markets	<ol style="list-style-type: none"> <li>a. Increasing fish trade volumes</li> <li>b. Increasing fish product value</li> <li>c. Increased market outlets</li> <li>d. Provision of market information system (Portal)</li> </ol>	<ol style="list-style-type: none"> <li>a. Percentage increase in fish trade volumes</li> <li>b. Percentage increase in product value</li> <li>c. Number of market outlets</li> <li>d. Number of hits at the market information portal</li> </ol>

S/N	Thematic Areas related to Fisheries & Aquaculture	Fisheries & Aquaculture (Malabo targets & goals)	Fisheries & Aquaculture Indicators
		<ul style="list-style-type: none"> <li>e. Increased Processing units</li> <li>f. Harmonized official control standards</li> <li>g. Harmonized and reduced tariffs and trade barriers</li> </ul>	<ul style="list-style-type: none"> <li>h. Number of processing units</li> <li>i. Number of compliant businesses to standards</li> <li>j. Volume and value of competitive products in the market (value addition/value chain)</li> <li>k. One regional harmonized tariff</li> </ul>
3	Expanded local agro-industry and value chain development inclusive of women and youth	<ul style="list-style-type: none"> <li>a. Fish products that are value-added</li> <li>b. Landing sites, processing facilities meeting global sanitation standards</li> <li>c. Access to health services by fishers, processors etc.</li> <li>d. Compliance to international requirements (WTO-Codex FAO-WHO)</li> <li>e. Extension service</li> </ul>	<ul style="list-style-type: none"> <li>a. Percentage of landings that are value-added</li> <li>b. Number of landing sites consistent with international sanitation standards (WTO-Codex)</li> <li>c. Percentage fishers and processors accessing health services</li> <li>d. Number of national/regional legislation adopted complying with international requirements (WTO, Codex FAO-WHO, ILO)</li> <li>e. Percentage of extension service coverage</li> </ul>
4	Increased resilience of livelihoods and improved management of risks in the fisheries and aquaculture sector	<ul style="list-style-type: none"> <li>a. Established early warning system and preparedness mechanism</li> <li>b. Reduce costs, manage liabilities and build resilience to climate change impacts by addressing climate risks throughout their operations and value chains, while increasing community resilience.</li> <li>c. Expanding market share and create wealth in communities by developing and deploying new products and services that help people adapt.</li> </ul>	<ul style="list-style-type: none"> <li>a. Number and frequency of early warning information disseminated</li> <li>b. Proportion of Value chains products</li> <li>c. Percentage of alternative energy</li> <li>d. Proportion of fishers taking action based on early warning information</li> <li>e. Percentage coverage of social safety nets</li> </ul>

S/N	Thematic Areas related to Fisheries & Aquaculture	Fisheries & Aquaculture (Malabo targets & goals)	Fisheries & Aquaculture Indicators
		<ul style="list-style-type: none"> <li>d. Facilitating access new opportunities to collaborate with the public sector, as developing country governments seek corporate partners who can effectively deliver goods and services that support high-priority to climate change adaptation efforts.</li> <li>e. Build corporate reputation and exercise good corporate citizenship by showing commitment to decreasing climate vulnerability and promoting long-term resilience in places where it is needed most Preventive and productive social safety nets</li> <li>f. Develop and implement strategies for the inclusion of women in fisheries</li> <li>g. Access to finance to reach the most vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>f. Percentage of women and youth engaged in job opportunities in fisheries and aquaculture value chain as well as programmes and projects</li> <li>g. Percentage coverage of loan beneficiaries</li> <li>h. Number of mitigation measures instituted</li> </ul>
5	Improved natural resource management for sustainable fisheries and aquaculture	<ul style="list-style-type: none"> <li>a. Develop and operationalize fisheries and aquaculture management plans</li> <li>b. Research for sustainable fisheries and aquaculture management</li> <li>c. Environmental management plans</li> <li>d. Climate smart fisheries and aquaculture</li> </ul>	<ul style="list-style-type: none"> <li>a. Percentage of fisheries covered by management plans</li> <li>b. Percentage IUU</li> <li>c. Implementation of environmental plans</li> <li>d. Number of technological packages developed on climate smart fisheries and aquaculture</li> </ul>

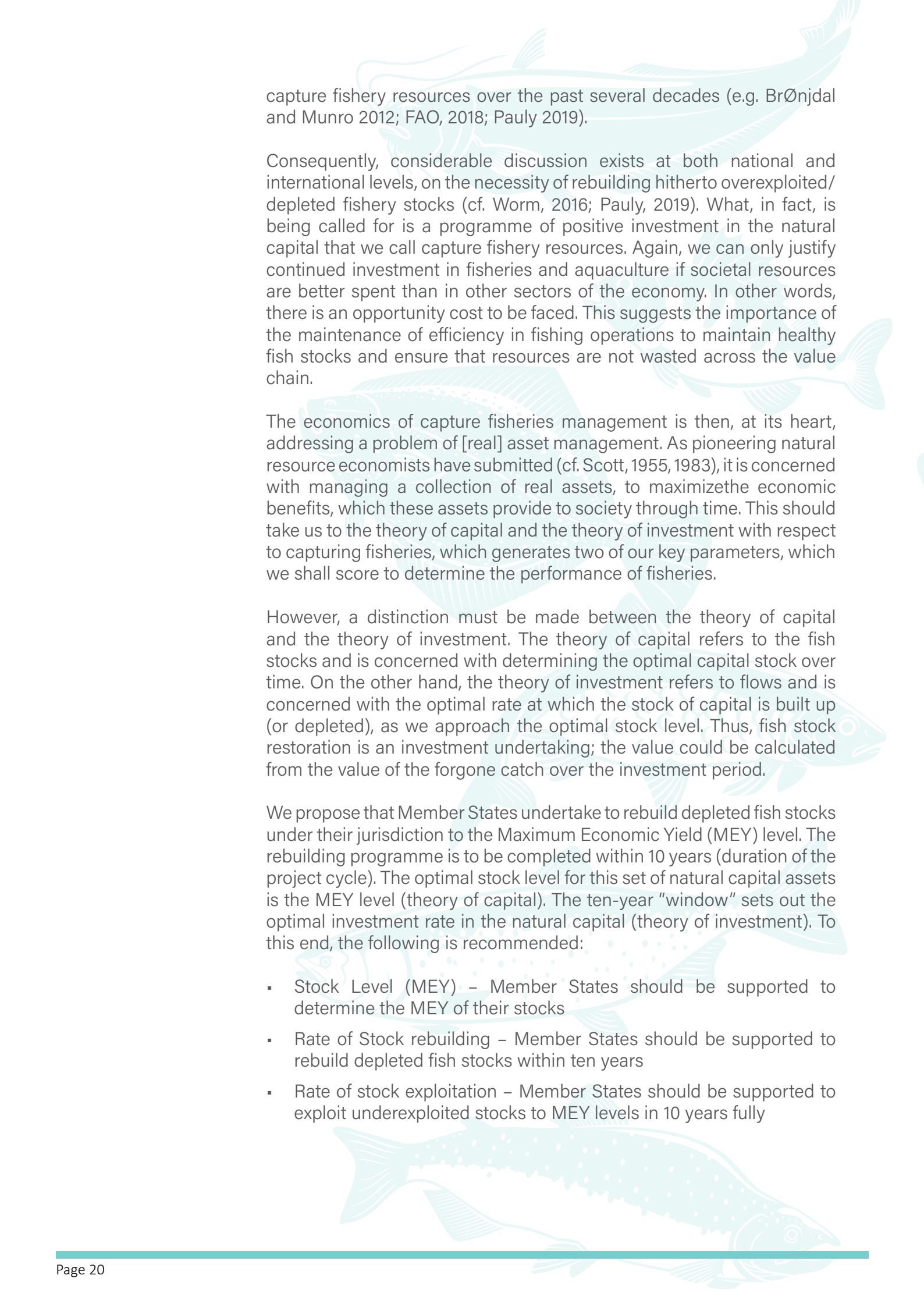


# A Tool for Collecting Information and Scoring Performance on Fisheries and Aquaculture for the Biennial Reports

The process of implementing the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods in Africa requires African Union member states to provide Biennial Reports (BR) on the progress in achieving the Malabo targets and goals. Production of country reports is intended as a platform for mutual accountability, peer review, and learning, aimed at inspiring MS to deliver on the set targets and goals. To quantify the contribution of fisheries and aquaculture to agricultural transformation, this section proposes a tool for collecting information for fisheries at the country level. This could serve as a reporting template on fisheries and aquaculture-related indicators for the BR as listed in the previous section of this report.

## Developing Indicators for Measuring Fisheries Performance

To quantify the Maximum Economic Yield (MEY) proposed for measuring fisheries in Table 2, it is suggested that bio-economic models be applied. Such models consider how to quantify yield, rent, and effort levels in fisheries. Other indicators refer primarily to percentages based on simple calculations. From a bio-economic standpoint, it is argued that the status quo approach is based on an extensive overexploitation of



capture fishery resources over the past several decades (e.g. BrØnjdal and Munro 2012; FAO, 2018; Pauly 2019).

Consequently, considerable discussion exists at both national and international levels, on the necessity of rebuilding hitherto overexploited/depleted fishery stocks (cf. Worm, 2016; Pauly, 2019). What, in fact, is being called for is a programme of positive investment in the natural capital that we call capture fishery resources. Again, we can only justify continued investment in fisheries and aquaculture if societal resources are better spent than in other sectors of the economy. In other words, there is an opportunity cost to be faced. This suggests the importance of the maintenance of efficiency in fishing operations to maintain healthy fish stocks and ensure that resources are not wasted across the value chain.

The economics of capture fisheries management is then, at its heart, addressing a problem of [real] asset management. As pioneering natural resource economists have submitted (cf. Scott, 1955, 1983), it is concerned with managing a collection of real assets, to maximize the economic benefits, which these assets provide to society through time. This should take us to the theory of capital and the theory of investment with respect to capturing fisheries, which generates two of our key parameters, which we shall score to determine the performance of fisheries.

However, a distinction must be made between the theory of capital and the theory of investment. The theory of capital refers to the fish stocks and is concerned with determining the optimal capital stock over time. On the other hand, the theory of investment refers to flows and is concerned with the optimal rate at which the stock of capital is built up (or depleted), as we approach the optimal stock level. Thus, fish stock restoration is an investment undertaking; the value could be calculated from the value of the forgone catch over the investment period.

We propose that Member States undertake to rebuild depleted fish stocks under their jurisdiction to the Maximum Economic Yield (MEY) level. The rebuilding programme is to be completed within 10 years (duration of the project cycle). The optimal stock level for this set of natural capital assets is the MEY level (theory of capital). The ten-year "window" sets out the optimal investment rate in the natural capital (theory of investment). To this end, the following is recommended:

- Stock Level (MEY) – Member States should be supported to determine the MEY of their stocks
- Rate of Stock rebuilding – Member States should be supported to rebuild depleted fish stocks within ten years
- Rate of stock exploitation – Member States should be supported to exploit underexploited stocks to MEY levels in 10 years fully

The key indicator of production is the Maximum Economic Yield. Performance will be measured by the rate of rebuilding depleted stocks to MEY and the rate of exploitation of unexploited stocks to MEY.

For the social asset manager confronting a very broad asset portfolio, to have achieved an optimal portfolio mix, one condition to be satisfied is that all assets (of a common risk class) are found to be yielding the same rate of return. If this condition is not met, then a portfolio reallocation is in order. We shall refer to this common rate of return as the social interest, or discount rate. Thus, if the rate of return on a marginal investment in a fishery resource exceeds the social rate of discount (interest), then additional investment in the resource is clearly warranted. Hence, essentially our rule will be to invest (positively or negatively) in the fishery resource up to the point that the rate of return on the investment in this form of natural capital is equal to the social rate of discount.

## Tools for Scoring Fisheries and Aquaculture Performance

To score the contribution of fisheries and aquaculture, it is proposed that the AU NAIP Toolkit for Malabo Domestication be used as well as the Technical Guidelines for preparing country Biennial Review report on progress made for achieving the Malabo Declaration Goals and Targets. This toolkit presents three broad parts to identify a common set of analytical tools, matrices and approaches useful to inform the development of NAIPs but also relevant for help in their appraisal once they are being implemented. These parts include

### Part I:

A set of matrices for key goals and targets to be met, commitments to be achieved, milestones to be tracked, and actions to be covered by the investment plans;

### Part II:

Analytical questions that are addressed during the NAIP appraisal process; and

### Part III:

Tools useful for country profiling, status assessment, and programme design.

Using this toolkit for Malabo domestication, the key method relevant for the use of fisheries and aquaculture indicators listed in Table 2 is proposed below.

## Status Assessment and Country Profiling

To assess the status of fisheries and aquaculture in a country, it is proposed that the Monitoring and Analysing Food and Agricultural Policies (MAFAP) method be used. The use of this method would require collecting information on public expenditure in Fisheries. To measure expenditure, it is important to document the following:

- The total level of fisheries and aquaculture public expenditure
- Share of fisheries and aquaculture public expenditure within the total agricultural public expenditure. One can also determine fisheries and aquaculture public expenditure to the total national public expenditure
- Budgeted and actual amounts spent on fisheries and aquaculture
- Budget support for fisheries and aquaculture
- Value chain development: Marketing channels for fish and aquatic products from production to consumption, focusing on actors and their competitive relationships with each other. A useful tool here is the Value chain analysis (VCA).
- Regional trade: Fish and aquatic products remain one of the most traded commodities in Africa. Trade occurs not only within the country but also across border. To capture this cross-border trade, the Gravity model (Tinbergen, 1962) is proposed. The gravity model of trade flows is based on the idea that exports (fish and aquatic products) are positively affected by the income of the trading countries, and that distance can be expected to

affect trade flows negatively. The data required for this model include distances between one trade country and another, GDPs, tariffs, and other determinants of bilateral trade flows

- Gender: Fisheries and aquaculture is one sector where gender plays an important role. To measure gender in fisheries and aquaculture, the Women's Empowerment in Agriculture Index is a relevant method. WEAI is an aggregate index that shows how women are empowered in their households and communities and the degree of inequality.

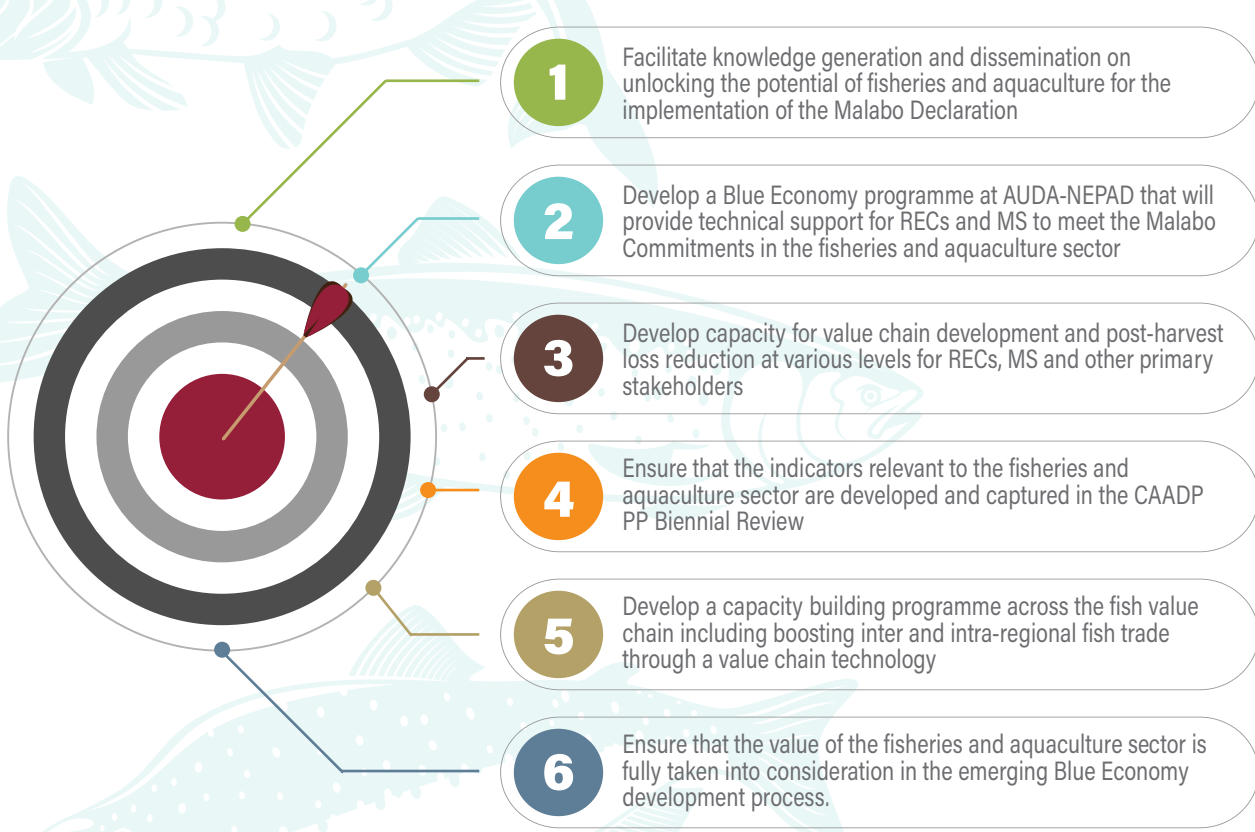






# Recommendations

Based on this report's findings above, a few strategic recommendations are proposed to strengthen the inclusion of fisheries and aquaculture within the Biennial Review and other CAADP-related tools and processes to better achieve the Malabo Commitments. These include:





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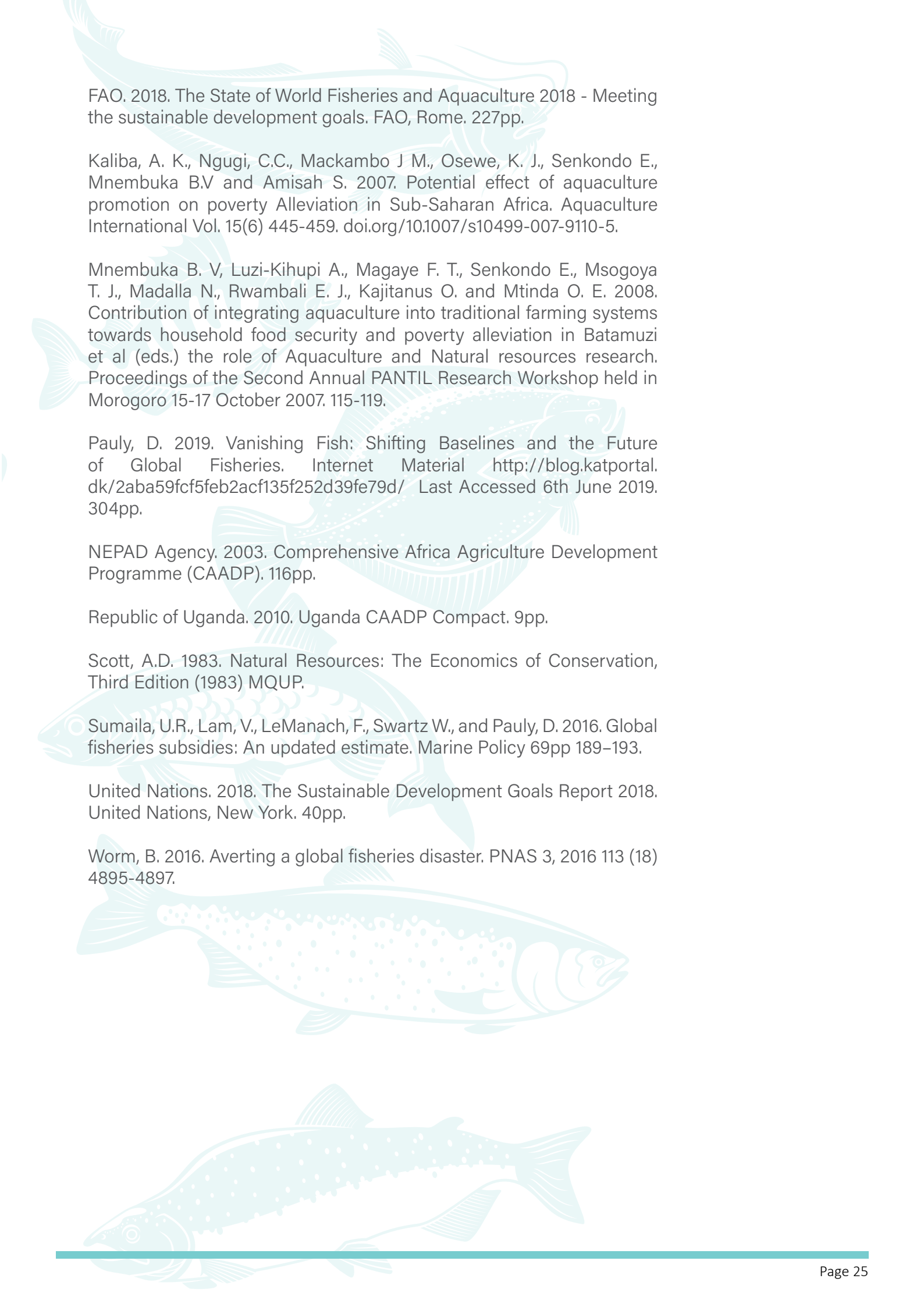
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# Annexes

## ANNEX 1: The COMESA RAIP - Fisheries & Aquaculture

S/N	Thematic Area	Malabo Targets and Goals	COMESA Fisheries & Aquaculture activities
1	Increased agricultural production and productivity	<ul style="list-style-type: none"> <li>a. Agricultural value added (absolute values)</li> <li>b. Agricultural production Index</li> <li>c. Agricultural value added per agricultural worker</li> <li>d. Agricultural value added per hectare of arable land</li> <li>e. Yields for the five AU priority commodities</li> </ul>	<ul style="list-style-type: none"> <li>a. Increased investment to boost production in fisheries (aquaculture)</li> <li>b. Adoption of productivity enhancing technologies</li> <li>c. Enabling a policy environment for increased production and productivity</li> </ul>
2	Increased intra-African regional trade and better functioning of national and regional markets	<ul style="list-style-type: none"> <li>a. Value of intra-Africa trade (Constant 2005 USD)</li> <li>b. Domestic food price index</li> </ul>	<ul style="list-style-type: none"> <li>a. Facilitation of enhanced trade in agricultural products, specifically food staples, including livestock and fisheries, at local, regional and international levels</li> <li>b. Facilitate efficient markets</li> <li>c. Enhancement of regional trade in fisheries products</li> </ul>
3	Expanded local agro-industry and value chain development inclusive of women and youth	<ul style="list-style-type: none"> <li>a. Percentage of agricultural five priority products that is lost post-harvest</li> <li>b. Activity of social assistance,</li> <li>c. Social protection</li> <li>d. social insurance and labour programmes</li> </ul>	Adoption of productivity-enhancing technologies

S/N	Thematic Area	Malabo Targets and Goals	COMESA Fisheries & Aquaculture activities
4	Increased resilience of livelihoods and improved management of risks in the agriculture sector	a. Coverage of social assistance, social protection, social insurance and labour programmes b. Existence of food reserves, local purchases for relief programmes, early warning systems and food feeding programmes	Adoption of a climate change adaptation strategies
5	Improved natural resource management for sustainable agriculture	Share of agriculture under sustainable land management practices	<ul style="list-style-type: none"> <li>• Acceleration and expansion of sustainable aquaculture;</li> <li>• Regional collaboration in managing shared fisheries resources</li> </ul>

## ANNEX 2: The EAC RAIP - Fisheries & Aquaculture

S/N	Thematic Area	Malabo Targets and Goals	EAC Fisheries & Aquaculture activities
1	Increased agricultural production and productivity	<ul style="list-style-type: none"> <li>a. Agricultural value added (absolute values)</li> <li>b. Agricultural production Index</li> <li>c. Agricultural value added per agricultural worker</li> <li>d. Agricultural value added per hectare of arable land</li> <li>e. Yields for the five AU priority commodities</li> </ul>	<ul style="list-style-type: none"> <li>a. Number of key value chains</li> <li>b. Cost of inputs especially seed and feed for aquaculture</li> </ul>
2	Increased intra-African regional trade and better functioning of national and regional markets	<ul style="list-style-type: none"> <li>a. Value of intra-Africa trade (Constant 2005 USD)</li> <li>a. Domestic food price index</li> </ul>	<ul style="list-style-type: none"> <li>a. Harmonized trade policies</li> <li>a. Status of Non-Tariff barriers</li> </ul>
3	Expanded local agro-industry and value chain development inclusive of women and youth	<ul style="list-style-type: none"> <li>a. Percentage of agricultural five priority products that is lost post-harvest</li> <li>b. Activity of social assistance,</li> <li>c. Social protection</li> <li>d. social insurance and labour programmes</li> </ul>	<ul style="list-style-type: none"> <li>a. Reduction in Post-harvest losses in fisheries</li> <li>b. Network for dissemination of marketing information</li> </ul>
4	Increased resilience of livelihoods and improved management of risks in the agriculture sector	<ul style="list-style-type: none"> <li>a. Coverage of social assistance, social protection, social insurance and labour programmes</li> <li>b. Existence of food reserves, local purchases for relief programmes, early warning systems and food feeding programmes</li> </ul>	Number of producers and traders accessing market information
5	Improved natural resource management for sustainable agriculture	Share of agriculture under sustainable land management practices	

## ANNEX 3: The ECCAS RAIP - Fisheries & Aquaculture

No	Priority Intervention Areas	7 Commitments of Malabo Goals and Targets	ECCAS Fisheries & Aquaculture activities
1	Sustainable fisheries & aquaculture production & productivity	<ul style="list-style-type: none"> <li>a. Recombitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Investment Finance in Agriculture</li> <li>c. We commit to ending hunger in Africa by 2025</li> <li>d. Commitment to Halving Poverty by the year 2025, through Inclusive Agricultural Growth and Transformation</li> </ul>	<ul style="list-style-type: none"> <li>a. Strengthen the institutional and regulatory applied to agriculture products</li> <li>b. Strengthen the capacity of the Institutions</li> </ul>
2	Increased intra-African regional trade and better functioning of national and regional markets	<ul style="list-style-type: none"> <li>a. Recombitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Investment Finance in Agriculture</li> <li>c. Commitment to Boosting Intra-African Trade in Agricultural commodities and services</li> </ul>	<ul style="list-style-type: none"> <li>a. Support tariff elimination to boost intra-regional trade for agriculture products</li> <li>b. Design a mechanism to identify, monitor and eliminate Non-Tariff Barriers for food trade</li> <li>c. Preparation of commercial standards for the agro-industry</li> <li>d. Develop infrastructures appropriate for markets</li> <li>e. Promote trans-border markets and equipment</li> <li>f. Identify needs for the strengthening of road transport for agriculture products</li> <li>g. Minimize risks related to transborder transactions through concertation.</li> </ul>
3	Expanded local agro-industry and value chain development inclusive of women and youth	<ul style="list-style-type: none"> <li>a. Recombitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Boosting Intra-African Trade in Agricultural commodities and services</li> </ul>	<ul style="list-style-type: none"> <li>a. Support the existing Regional specialized Institutions</li> <li>b. strengthening the professional organizations</li> <li>c. development of a capacity building training programme for the stakeholders</li> <li>d. development of a value chain pilot plants for fishery and aquaculture products</li> <li>e. facilitating participation oat trade fairs, buyers and sellers met and fish and fishery products exhibitions</li> </ul>
4	Increased resilience of livelihoods and improved management of risks in the fisheries and aquaculture sector	<ul style="list-style-type: none"> <li>a. Recombitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Resilience of Livelihoods and Production Systems to Climate Variability and other related risks</li> </ul>	<ul style="list-style-type: none"> <li>a. Policymakers measures</li> <li>b. Demonstrate policy and finance commitment to adaptation.</li> <li>c. Engage businesses as stakeholders in planning and implementation.</li> <li>d. Stimulate the market for adaptation through financial and risk-reduction incentives.</li> <li>e. Develop policy and regulatory frameworks to guide corporate practices.</li> <li>f. Provide businesses with the information and tools they need to make investments that support climate resilience in vulnerable communities.</li> </ul>

No	Priority Intervention Areas	7 Commitments of Malabo Goals and Targets	ECCAS Fisheries & Aquaculture activities
			<ul style="list-style-type: none"> <li>g. Consider new forms of public-private partnerships to tackle the most complex challenges to sustainable development and climate resilience.</li> <li>h. Business Measures</li> <li>i. Connect climate “adaptation” and “resilience” to the company and corporate culture, building on existing mitigation initiatives.</li> <li>j. Integrate climate adaptation into core strategic business planning processes.</li> <li>k. Align business objectives with adaptation priorities.</li> <li>l. Build a portfolio of climate-resilient goods and services.</li> <li>m. Build mutually beneficial strategies with stakeholders,</li> <li>n. Build communication channels.</li> <li>o. Collaborate with internal and external decision-makers.</li> </ul>
5	Improved natural resource management for sustainable fisheries and aquaculture	<ul style="list-style-type: none"> <li>a. Recommitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Investment Finance in Agriculture</li> <li>c. We commit to ending hunger in Africa by 2025</li> <li>d. Commitment to Halving Poverty by the year 2025, through Inclusive Agricultural Growth and Transformation II. Commitment to Enhancing Investment Finance in Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>a. Mapping of suitable aquaculture zones</li> <li>b. Development of sustainable management plans for fisheries and aquaculture and adoption of ecolabeling schemes</li> <li>a. Introduction of Marine Protected areas as well as maritime clusters</li> <li>a. Development of a water resource sustainable and inclusive management scheme</li> </ul>



## ANNEX 4: The ECOWAS RAIP-Fisheries & Aquaculture

No	Priority Intervention Areas	Malabo Commitments, Goals and Targets	ECOWAS Fisheries & Aquaculture activities
1	Sustainable fisheries & aquaculture production & productivity	<ul style="list-style-type: none"> <li>a. Recommitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Investment Finance in Agriculture</li> <li>c. We commit to ending hunger in Africa by 2025, and to this end we resolve:</li> <li>d. Commitment to Halving Poverty by the year 2025, through Inclusive Agricultural Growth and Transformation</li> </ul>	<ul style="list-style-type: none"> <li>a. Strengthen the institutional and regulatory applied to agriculture products</li> <li>b. Strengthen the capacity of the Institutions</li> </ul>
2	Increased intra-African regional trade and better functioning of national and regional markets	<ul style="list-style-type: none"> <li>a. Recommitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Investment Finance in Agriculture</li> <li>c. Commitment to Boosting Intra- African Trade in Agricultural commodities and services</li> </ul>	<ul style="list-style-type: none"> <li>a. Support tariff elimination to boost intra regional trade for agriculture products</li> <li>b. Design a mechanism to identify, monitor and eliminate Non-Tariff Barriers for food trade</li> <li>c. Preparation of commercial standards for the agro-industries</li> <li>d. Develop infrastructures appropriate for markets</li> <li>e. Promote transborder markets and equipment</li> <li>f. Identify needs for the strengthening of road transport for agriculture products</li> <li>g. Minimize risks related to transborder transactions through concertation.</li> </ul>
3	Expanded local agro-industry and value chain development inclusive of women and youth	<ul style="list-style-type: none"> <li>a. Recommitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Boosting Intra- African Trade in Agricultural commodities and services</li> </ul>	Support existing regional specialized Institutions
4	Increased resilience of livelihoods and improved management of risks in the fisheries and aquaculture sector	<ul style="list-style-type: none"> <li>a. Recommitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Resilience of Livelihoods and Production Systems to Climate Variability and other related risks</li> </ul>	
5	Improved natural resource management for sustainable fisheries and aquaculture	<ul style="list-style-type: none"> <li>a. Recommitment to the Principles and Values of the CAADP Process</li> <li>b. Commitment to Enhancing Investment Finance in Agriculture</li> <li>c. We commit to ending hunger in Africa by 2025, and to this end, we resolve:</li> <li>d. Commitment to Halving Poverty by the year 2025, through Inclusive Agricultural Growth and Transformation II. Commitment to Enhancing Investment Finance in Agriculture</li> </ul>	

## ANNEX 5: The IGAD RAIP-Fisheries & Aquaculture

No	Priority Intervention Areas	Malabo Commitments Goals & Targets	IGAD-RAIP Fisheries & Aquaculture activities	Indicators
1	IPA 1. Sustainable Natural Resource Use and Management	<ul style="list-style-type: none"> <li>a. Sustain Annual sector growth in Agricultural GDP at least 6</li> <li>b. Commitment to Zero hunger – Ending Hunger by 2025</li> <li>c. Commitment to Halving Poverty, by 2025, through inclusive Agricultural Growth and Transformation</li> </ul>	<ul style="list-style-type: none"> <li>a. Promote regional knowledge management initiatives on fisheries resources management</li> <li>b. Improve governance of transboundary land and water resources, rangelands, and fisheries by enhancing institutional capacity and the development of appropriate policies and legislation.</li> <li>c. Improve management of fisheries resources by harnessing innovative, demand-driven technologies that are gender sensitive including those focusing captures fisheries in trans-boundary fisheries resources.</li> </ul>	<ul style="list-style-type: none"> <li>a. Number of knowledge products</li> <li>b. Number of trans-boundary co-management plans</li> <li>c. Number of technologies adopted</li> </ul>
2	IPA 2. Improving rural infrastructure and trade –related capacities for market access	<ul style="list-style-type: none"> <li>a. Establish and/or strengthen inclusive public-private partnerships for at least 5 priority agriculture commodity value chains with strong linkage to smallholder agriculture</li> <li>b. Triple intra-Africa trade in agricultural commodities</li> <li>c. Fast track continental free trade area &amp; transition to a continental Common External tariff scheme</li> </ul>	<ul style="list-style-type: none"> <li>a. Harmonization phyto/zoo-sanitary and food safety standards in IGAD with international norms, and strengthening of regional and national capacity in related fields;</li> <li>b. Strengthening the private sector by developing a regional strategy to involve the private- partnerships and entrepreneurships in the agriculture sector;</li> <li>c. Improving macroeconomic and trade policies, and removing administrative bottlenecks for enhanced intra-IGAD agricultural trade</li> </ul>	<ul style="list-style-type: none"> <li>a. Number of regional harmonized frame works and strategies</li> <li>b. Number of entrepreneurs (SMEs) and amount of investment</li> <li>c. Number of Trade facilitation protocols</li> </ul>
3	IPA 3. Increasing food production and reducing hunger	<ul style="list-style-type: none"> <li>a. At least double productivity (focusing on Inputs, irrigation, mechanization)</li> <li>b. Reduce PHL at least by half</li> <li>c. Nutrition: reduce stunting to 10%</li> <li>d. Create job opportunities for at least 30% of the youth in agricultural value chains.</li> <li>e. Preferential entry &amp; participation by women and youth in gainful and attractive agribusiness</li> <li>f. Ensure that by 2025, at least 30% of farm/pastoral households are resilient to shocks</li> </ul>	<ul style="list-style-type: none"> <li>a. Harmonization of policies and regulatory frameworks in relation to (i) seed/plant material multiplication and distribution; (ii) input subsidy policies and standards; (iii) prevention and control of plant pests and diseases; (iv) land tenure; (v) trade on crop, livestock and fish products;</li> <li>b. Promote aquaculture production by developing a regional strategy and enhancing access to fingerlings and feeds, and adoption of modern aquaculture production systems and technologies</li> <li>c. Promote knowledge sharing among member states on appropriate production technologies, production systems and natural resources management;</li> </ul>	<ul style="list-style-type: none"> <li>a. Number of harmonized policies</li> <li>b. Validated and adopted Regional aquaculture strategy document</li> <li>c. Number of Knowledge products</li> <li>d. Established Regional Centre of Excellence Programme</li> <li>e. Number of education programmes and number of women trained</li> </ul>

No	Priority Intervention Areas	Malabo Commitments Goals & Targets	IGAD-RAIP Fisheries & Aquaculture activities	Indicators
			<ul style="list-style-type: none"> <li>f. Design and implementation of a regional training programme on disaster risk management and mitigation supported by lessons of successful experiences from within and outside the continent, and traditional coping mechanisms</li> <li>g. Promote gender-sensitive nutrition education and facilitate an exchange of lessons and best practices among member countries and mainstreaming of gender and youth development issues in all IGAD CAADP activities.</li> </ul>	
4	IPA 4. Agriculture research, regional knowledge and information management	<ul style="list-style-type: none"> <li>a. At least double productivity (focusing on Inputs, irrigation, mechanization)</li> <li>b. Commitment to Halving Poverty, by 2025, through inclusive Agricultural Growth and Transformation</li> <li>c. Reduce PHL at least by half</li> <li>d. Nutrition: reduce stunting to 10%</li> </ul>	<ul style="list-style-type: none"> <li>a. Improve governance of regional fisheries research system and of networking by harmonizing regional fisheries research frameworks and strengthening capacity for improving the management of inland fisheries resources</li> <li>b. Strengthening governance of research, extension, technology dissemination and training institutions in the region by harmonizing research policy and quality and establishing/strengthening platforms and networks.</li> <li>c. Improve management of research, extension, training and technology dissemination by developing adaptive research programmes and promoting investment and mechanisms for access to existing technologies, respecting the gender dimension</li> <li>d. Improve regional knowledge management systems, networking, access to information and coordination mechanisms among all entities in the region</li> </ul>	<ul style="list-style-type: none"> <li>a. Number of platform meetings,</li> <li>b. Number of annual research-extension-fisher's meetings/dialogues</li> <li>c. Number of Fish Farmers Field School</li> <li>d. Number of knowledge management dissemination tools and frequency of information sharing</li> </ul>

## ANNEX 6: The SADC RAIP-Fisheries & Aquaculture

S/N	Thematic Area	Malabo Targets and Goals	SADC Fisheries & Aquaculture activities
1	Increased agricultural production and productivity	<p>Agricultural value added (absolute values)</p> <p>Agricultural production Index</p> <p>Agricultural value added per agricultural worker</p> <p>Agricultural value added per hectare of arable land</p> <p>a. Yields for the five AU priority commodities</p> <p>b. To advance commercial aquaculture to transform small-scale, community-based aquaculture rapidly throughout the region</p>	<p>a. Increase aquaculture production</p> <p>b. Food fish</p> <p>c. Non-food fish</p> <p>d. Maintain fishing at MEY</p> <p>e. Enhance value addition in fisheries &amp; aquaculture</p> <p>f. Increase aquaculture productivity per m2</p> <p>g. Minimize post-harvest losses</p> <p>h. Minimizing IUU fishing</p> <p>i. Fisheries Import / Export Ratio</p> <p>j. Number of reported incidences/infractions (e.g. illegal fishing, fish diseases)</p> <p>k. Number of incidences of transboundary aquatic animal diseases (TADS) reduced</p> <p>l. Number of innovations, technologies and management practices adopted</p>
2	Increased intra-African regional trade and better functioning of national and regional markets	<p>a. Value of intra-Africa trade (Constant 2005 USD)</p> <p>b. Domestic food price index</p> <p>c. Competitiveness</p> <p>d. Agricultural Information Management System (AIMS)</p>	<p>a. Fish trade volumes</p> <p>b. Fish product value</p> <p>c. Market outlets</p> <p>d. Processing units</p> <p>e. Volume and value of competitive products in the market (value addition/value chain)</p> <p>f. Harmonized official control standards</p> <p>g. Harmonized and reduced tariffs and trade barriers</p> <p>h. Provision of market information</p> <p>i. Number of reported incidences of Non-Tariff Barrier impeding intra-regional trade</p>
3	Expanded local agro-industry and value chain development inclusive of women and youth	<p>a. Percentage of agricultural five priority products that is lost post-harvest</p> <p>b. Activity of social assistance,</p> <p>c. social protection,</p> <p>d. social insurance and labour programmes</p> <p>e. promote private, public and international partnerships</p> <p>f. provision of incentives to producers</p>	<p>a. Levels of fish post-harvest loss</p> <p>b. Percentage of landings that are value-added</p> <p>c. Landing sites, processing facilities meeting global sanitation standards</p> <p>d. Access to health services by fishers, processors</p> <p>e. Compliance to international instruments and standards</p> <p>f. Extension service</p> <p>g. Foreign Direct Investment into Aquaculture (Value)</p> <p>h. Number of Farmer/fisher Organizations that participate in regional fishery/aquaculture value chains - clusters</p> <p>i. increased adoption rates of appropriate technologies by fish farmers, such as through research</p>

S/N	Thematic Area	Malabo Targets and Goals	SADC Fisheries & Aquaculture activities
4	Increased resilience of livelihoods and improved management of risks in the agriculture sector	<ul style="list-style-type: none"> <li>a. Coverage of social assistance, social protection, social insurance and labour programmes</li> <li>b. Existence of food reserves, local purchases for relief programmes, early warning systems and food feeding programmes</li> <li>c. Climate Change mitigation and adaptation Strategy</li> <li>d. Promotion of low carbon and efficient (green economy) agricultural production systems - provide incentives for green production and agribusiness processes</li> </ul>	<ul style="list-style-type: none"> <li>a. Number and frequency of early warning information disseminated</li> <li>b. Proportion of fishers taking action based on early warning information</li> <li>c. Percentage coverage of social safety nets</li> <li>d. Percentage of women and youth engaged in job opportunities in fisheries and aquaculture value chain as well as programmes and projects</li> <li>e. Percentage coverage of loan beneficiaries</li> <li>f. Number of mitigation measures instituted</li> <li>g. Number of farmers adopting climate-smart aquaculture</li> <li>h. Number of reported incidences of disease outbreaks</li> <li>i. Established early warning and preparedness mechanism</li> <li>j. Preventive and productive social safety nets</li> <li>k. Develop and implement strategies for the inclusion of women in fisheries</li> <li>l. Access to finance to reach the most vulnerable</li> </ul>
5	Improved natural resource management for sustainable agriculture	<ul style="list-style-type: none"> <li>a. Share of agriculture under sustainable land management practices</li> <li>b. developing and implementing Co-management systems for shared fisheries resource</li> <li>c. implementing guidelines on governance and management of small-scale fisheries</li> <li>d. MCS systems shared water bodies</li> <li>e. strategies for managing alien invasive species/conservation and utilization of genetic resources</li> <li>f. improve cooperation in the management of trans-boundary fisheries resources.</li> </ul>	<ul style="list-style-type: none"> <li>a. Develop and operationalize fisheries and aquaculture management plans</li> <li>b. Research for sustainable fisheries and aquaculture management</li> <li>c. Environmental management plans</li> <li>d. Climate-smart fisheries and aquaculture</li> </ul>

