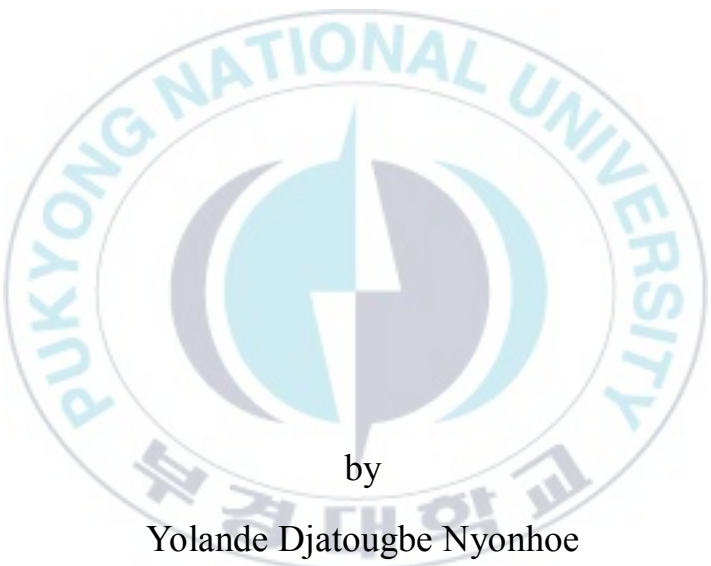
Thesis for the Degree of Master of Fisheries Science

Women Empowerment for Improved Small-Scale Fisheries Development in Togo



by

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August, 2021

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토고 소규모 어업개발을 위한 여성 어업인의 역할 강화에 대한 연구

Advisor: Prof. Andrew C.M. Baio

by

Yolande Djatougbe Nyonhoe

A thesis submitted in partial fulfillment of the requirements

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List of Abbreviations

AP/ PA	The Autonomous Port
CCRF	Code of Conduct for Responsible Fisheries
CS	Chief of staff
DCP	Directorate of Coastal Protection
DFA	Directorate of Fisheries and Aquaculture
DMA	The Directorate of Maritime Affairs
EEZ	Economic Exclusive Zone
EU	European Union
FAO	United Nations Food and Agriculture Organization
FCWC	Fisheries Committee for the West Central Gulf of Guinea
FVC	Fish Value Chain
GCLME	Guinea Current Large Marine Ecosystem
GDP	Gross Domestic Product
GDSNA	General Directorate of Statistics and National Accounts
INSEED	National Institute for Statistics, Economic and Demographics
LCD	Least Developed Country
LIFDC	Low Income Food Deficit Country
MCS	Monitoring Control and Surveillance
MEMPPC	Ministry of Maritime Economy, Fisheries and Coastal Protection
MICS	Multi Indicator Cluster Survey
NORAD	Norwegian Agency for Development Cooperation
PASA	The Agricultural Sector Support Project
PESCAO	The Program for Improved Regional Fisheries Governance in Western Africa
PND/ NDP	National Development Plan

PNIASA	National Agricultural Investment and Food and Nutritional Security Program
PSMA	Port State Measures Agreement
QUIBB	Unified Core Well-being Indicators Questionnaire
SDG	Sustainable Development Goal
SG	Secretary General
SPSS	Statistical Package for Social Sciences
SSF	Small-scale Fisheries
TFTC	Tropical Forestry Technical Centre
ToC	Theory of Change
UCOOFEM	Women Wholesalers Cooperatives Union of Togo
UCOOTP	Fish Processors Cooperatives Union
UNCLOS	United Nations Convention on the Law of the Sea
USD	United States Dollars
VMS	Vessel Monitoring System
WAEMU	West African Economic Monetary Union
WATF	West African Task Force
WFP	World Food Program

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Abstract

Women dominates (60%) the Small-Scale Fisheries (SSF) of Togo which would serve as a valid conduit to empower them and reduce poverty. However, their participation across the small-scale fisheries value chain is disadvantaged by social barriers which generates many challenges and inequalities in access to material, financial and natural resources as also witnessed in other part of the world. Thus, women are consigned to the post-harvest segment of the fish value chain where they continue to experience challenges including, but not limited to acute lack of financial resources to acquire catch and for the subsequent disposal by marketing to eke-out a living. It is against this context that the goal of the study is to propose a logical pathway to empowering Togolese womenfolk in small-scale fisheries for strong participation to meet the full potential of the sub-sector (especially significant poverty reduction and households wellbeing). Concrete steps or objectives towards the goal include; to develop modalities for building the capacity of women in order to instill a sense of confidence for negotiation and management decision making; and to provide a contextualised framework for building an empowered and resilient women groups with reliable access to finance. In doing so, we used the expanded definition of the fish value chain (ranging from participation in access to resource negotiations onto disposal of the fish product by marketing) to assess women's participation and socio-economic performance as well as the challenges and opportunities for empowerment therein. The participatory field study defined women's current status and the status to which they aspire as buttressed by international good

practices such as; the code of conduct of responsible fisheries; the small-scale fisheries guidelines and the sustainable development goals as they relate to women. The “Theory of Change” conceptual framework was then applied to determine the needed logical processes to empower Togolese women in the small-scale fisheries value chain for poverty reduction. Some 71% of the sample confirmed an ineffective inclusion of women in access to fisheries resource decision making. Results also confirmed that women face many challenges such as limited access to finance, social restrictions, limited ownership of fishing equipment and inadequate post-harvest infrastructure. For example, 90% of women do not participate in any form of capture operations owing to social restrictions such as cultural norms and taboos. Consequently, the hypothesis that Togolese women have the required means to fully participate in SSF and wholly contribute to poverty reduction and household wellbeing is rejected. It is critical that strong participation of women is ensured facilitated by an official co-management plan and projects dedicate to women issues. Deconstructing taboos and barriers to participation will reduce male dominance in the value chain and allow ample space for women’s participation

Chapter 1. Introduction

1.0. Background

The introductory Chapter 1 is divided into six sections - describing the general economic and social realities of Togo - the country where the study has been done. It also outlines the goal and objectives, research questions, the hypotheses, the rationale of study and provides an outline of the study structure. Accordingly, Section 1.1 and the following subsections, throws light on the geographic location of Togo; the economic situation; demographic and socio-economic parameters and presents the poverty situation so as to show the wellbeing of society. Sections 1.2, 1.3, and 1.4 articulates the research goal, questions and hypothesis respectively. Attending to the goal of proposing a logical pathway to empowered Togolese womenfolk in small-scale fisheries who are confidently contributing to the full potential of the sub-sector; requires a number of concrete steps or objectives. The principal research question is aligned to the goal which is buttressed by four sub-questions. The research hypothesis is posed to test the extent of women empowerment to fully participate in achieving the potentials of small-scale fisheries in Togo. The significance of the study is given in section 1.5 whereas; the final section 1.6 outlines the structure of the entire thesis depicting the basis for the arrangement of the Chapters.

1.1. Country Economic and Social Context

1.1.1. Geographic Location

Togo is a small Sub-Saharan state located in West Africa, which was settled by various ethnics groups from 11th to 16th centuries. With a geographic coordinate of 8° latitude North and 1°10′ longitude East, the country has a 651km border with the Bight of Benin in the East; a 1098km border with Ghana in the West; a 131km with Burkina-Faso in the North and Togo has a 131 km long coastline in the South on the Atlantic Ocean in the Gulf of Guinea (CIA 2020). The country has a total area of 56,785 km^2 (comprising of 54,385 km^2 of terrestrial ecosystem and 2,400 km^2 of aquatic ecosystem) - stretching 579 km (360 miles) north from the Gulf of Guinea baseline but, it is only 160 km (99 miles) wide at the broadest point. Togo has a short coastline of about 56 km long, and a continental shelf of about 1 500 km^2. The country ratified the 1982 United Nations Convention on the Law of the Sea (UNCLOS) on 16th April 1985 claiming an Economic Exclusive Zone (EEZ) of 15,375 Km^2.

Figure 1: Map of Togo

1.1.2. Economic Environment

Togo has an agrarian economy with agriculture responsible for the employment of nearly 65% of the population workforce and contributes 28.8% to the GDP (ILOSTAT 2017). Cocoa, Coffee, Cotton, Yams, Cassava (Tapioca), Corn, Beans, Rice, Pearl Millet, Sorghum and Livestock including fish amongst other cash crops generate about 20% of export earnings with Cotton being the most important cash crop, accounting for 127.000 tons in 2018 (ITC Trade Map 2018).

The industrial sector is not well developed, with a growth rate of 5%, accounting for only 21.8% of GDP Togo is among the world's largest producers of phosphate which provide more than 20% of export earnings (CIA 2017). With an estimate of 60 million metric tons of reserve, phosphate is Togo's most important export commodity, rendering mining the main industrial sub-sector followed by agricultural processing, cement production, handicrafts, textiles & beverages. The country also has clinker deposits which fuels a dynamic cement industry.

The service sector (Banking, Insurance, Transport, Trade etc.) is contributing 49.8% to the GDP employing 46% of the active population, with Trade being the biggest contributor. The Lomé Port is a major asset, being one of the largest ports in the region. In fact, it is the only port on the West African coast with a depth of 16 m thereby accommodating very large ships (Autonomous Port of Lomé 2018). It was reported by UNCTAD (2019) review on maritime transport that it is the leading hub port in Western Africa with the highest container traffic in the Gulf of Guinea. The container traffic was estimated at 311,500 TEU in 2013 which grew to 1.4 million TEU in 2018, and 1.5 million TEU in 2019. In addition, the port enjoys an ideal geographical location, allowing quick access to many African countries by sea. Exports of some cash crops (Cotton, Cocoa, & Coffee) account for $1.05 billion to destinations such as: Benin 16.7%, Burkina Faso 15.2%, Niger 8.9%, India 7.3%, Mali 6.7%, Ghana 5.5%, Cote d'Ivoire 5.4% and Nigeria 4.1%. From 2017 estimates, imports of machinery equipment, foodstuffs, and petroleum

products was to the tune of $2 billion from origins such as China 27.5%, France 9.1%, Netherlands 4.4%, Japan 4.3% (CIA 2017). The Togolese economy grew in recent years by 5.3% in 2019 from 4.9% in 2018 (The World Bank 2019) due to reform initiatives which broadened fiscal space, improved the business climate, supported the energy development, agroindustry, logistics, and digital sectors - thereby improving the population's living standards. Its nominal gross domestic product (GDP) was estimated at $4.767 billion in 2017, giving a $1,700 per capita income, compared to $1,600 per capita in 2016 (CIA 2020). According to the updated IMF forecast, the GDP growth is expected to slow down by 1% in 2020, but it will grow by 4% in 2021, subject to the post-pandemic global economic recovery. The country recorded a low inflation rate of 0.7% in 2019 and fiscal consolidation efforts in 2017, resulted in an overall deficit estimated at 2.9%, slightly below the West African Economic Monetary Union (WAEMU) criterion of 3%. Togo was ranked in 2019 at 167th place in a list of the 189 countries, with an HDI of about 0.513 (Human Development Report 2019).

Fisheries plays an important role in Togo and brings in 5 billion F CFA (USD 8,954,475) and directly provides employment for about 150 000 people, contributing 4.5 % to the agriculture GDP equivalent to 0.9% of national GDP. About 70% of the domestic fish demand is imported with an import value in 2017 of US$ 32 million, whereas; exports value was only $ 4 million (FAO 2019). This renders Togo a net importer of fish, which suggest that fisheries and aquaculture

must be sustainably developed to cover the deficit. One important resource that is underutilized in the fisheries of Togo is the female segment of the population (ACPFish II 2011).

1.1.3. Demographic and Socio-economic Indicators

Togo's population is estimated at 8,608,444 million people (CIA 2020) comprising of 37 ethnic groups, with the most important including; Adja-Ewe/Mina, Kabye/Tem, Para-Gourma, Akposso/Akebou, Ana Ife. French is the official language for business and education in Togo; Ewe and Mina are the two major languages in the South whereas; Kabye and Dagomba are the two major languages in the North.

The socioeconomic status still remains precarious, although it improved considerably over the past decades. Togo is one of the most densely populated African nations with most of the population residing in rural communities. Density is highest in the south, near the Atlantic coast (42.8% urban population, with 1.828 million living in Lomé). The average annual population growth rate of 2.56 %, with women constituting 51.4 % of the population and life expectancy at birth is 60 years (females 61 years, males 59 years). The population growth rate varies from one region to the, recording a relatively moderate rate of 2.58% in the Plateaux and 2.04% in the Kara regions (**Op. Cit.**). Much higher rates are observed in the Savanes (3.18 %) and in the Maritime regions (3.16%).

Migration in search of economic opportunities is common with a net internal rural=urban migration. The greatest urbanization has occurred in the Greater Lomé Metropolitan Area, where 23.9 % of the population resides. Due to rural exodus, a significant proportion of the rural population is over 60 years of age (INSEED 2015). The population is largely youthful with 75% under the age of 35 years. This population structure underscores the urgent need to invest in education, health care, professional training, and job creation, and to implement the reforms needed to ensure maximum return on investment in these areas. Life expectancy at birth is low at 66.6 years coupled with high infant mortality of 38.5% deaths/1000,000 live births, whereas probability of dying between birth and age 1, expressed per 1,000 live births for infants is 49.2%; the physician/population ratio is only 0.03 physicians/1,000 population in 2017; number of state midwives is at 1.22/1000hbts (QUIBB 2015).

The population that engages actively in the labor market, either by working or looking for work is estimated at 77.7%. The main cause hampering employment in Togo lies in the mismatch between the skills of the youths and the available jobs, as well as the lack of economic opportunities. Urban population with access to improved drinking water is estimated at 92.3% against 56% in rural areas. About 41.6% of the urban population lived in houses with improved sanitation facilities, against 57.4% in rural areas (CIA 2020) and only 51.35% of the population have access to electricity in 2018, with a high representation in the urban areas (The

World Bank 2021). Some 63.7% of Togolese population in 2015 are literate (UNESCO 2021) apparently, due to Togo's elimination of the primary school fees in 2008 which may have induced increased enrollment (77.3% male and 41.2% female) in, 2018. Precisely, there was an enrollment of 23% at pre-primary, 124% in primary, 62% in secondary school and 13% in tertiary school (UNDP 2021). However, such increases have put amplified pressure on limited classroom space, teachers, materials with resulting into mediocre educational quality, the underrepresentation of girls and the low rate of enrollment in secondary and tertiary schools (UNESCO 2021).

1.1.4. Poverty Situation

Togo is classified as a Least Developed Country (LCD); Low Income Food Deficit Country (LIFDC), and remains among the poorest countries in sub-Saharan Africa with an overall poverty rate of 57.8% (WFP. 2020). According to the National Institute for Statistics, Economic and Demographic Studies (INSEED 2015), the poverty rate has been decreasing steadily. The World Food Program survey in July 2020, reported 15.2% poor household with limited food consumption score at a national level peaking in the Savanes region (33% households), followed by the Kara region (17.8%) in the northern part of the country. About 55.1% of the population live below the poverty line of $US1, 25/ day with a GINI index, showing an increase of 1.35% from 42.2% in 2006 to 43.1% in 2015 (The Word

Bank 2015). Some 69% of the households are living below the poverty line in rural areas.

The 10% population with the highest household income or consumption share was 27%, in 2006, which dropped to 3.3% in 2020 (CIA 2020). About half of the population is affected by food insecurity with rural area accounting for 71% against 38.4% in urban areas (WFP 2020).

About half of the population is affected by food insecurity with rural area accounting for 71% against 38.4% in urban areas (WFP 2020). This situation is said to be caused by low productivity, soil degradation, irregular rains, post-harvest losses and cyclical climate shocks such as flooding and droughts and specifically lack of economic diversification (Op. Cit.) According to the Togo Multi Indicator Cluster Survey (MICS) conducted in 2017, 5.7% of children aged 6-59 months were suffering from acute malnutrition and are stunted with low height for their age (UNICEF 2017). Again, 30% of children under 5 years old are chronically malnourished with peaks of 43% in the Savanes region, in the northern part of the country, where poverty rate still remains high.

Despite its weak performance, the small-scale fisheries sub-sector remains important for food security and poverty reduction. The subsector serves as a safety net for employment of vulnerable groups such as women and youths. It is the main source of animal protein and income.

The 2015 frame survey recorded about 3,000 artisanal maritime fishers and 5,000 fisherwomen (Togo Artisanal Maritime Fisheries Frame survey 2014). Consequently, the Togolese National Development Plan 2018-2022, provides that the Government intends to take up the challenge of economic diversification by developing activities along the fish value chain including value addition to create jobs, and promote artisanal fishers' capacity to sustainably exploit fisheries resources and develop underexploited stock (NDP 2018-2022). However, government policy has not considered the empowerment of women who make up for more that ½ of the population working in fisheries.

1.2. Research Goal and Objectives

1.2.1. Research Goal

The research goal is to propose a logical pathway to empowered Togolese womenfolk in small-scale fisheries, participating fully in resource management and confidently contributing to the full potential of the sub-sector including poverty reduction and households wellbeing.

1.2.2. Research Objectives

In pursuing the stated goal, the study sets a number of objectives which once met, will lead to the goal. These include:

A. Develop modalities for building the capacity of women in order to instill a sense of confidence for negotiation and management decision making.
B. Provide a contextualised framework for building an empowered and resilient groups of women with reliable access to finance.

1.3. Research Questions

1.3.1. Principal Question

In order to achieve the aforementioned objectives, key questions should be answered. Principal among them is:

What does Togolese women who engaged in SSF need to participate fully in SSF resource management and contribute significantly to poverty reduction and household wellbeing?

1.3.2. Sub-questions

Other objectives include:

a- What is the level of women participation in SSF resource management including the various segments of the fish value chain and what are the underlining factor?

b- What are the challenges to overcome in order to empower women and what are the strategic interventions required to achieve improved women participation in the small-scale fisheries value chain?

c- What type of support do Togolese women need to sustain and improve upon their socio-economic performance across the fish value chain?

1.4. Hypothesis

It is hypothesized that:

Togolese women have the required means to fully participate and enhance their socio-economic performance in the SSF value chain.

1.5. Significance of Study

This study will build upon the body of contemporary studies, and advocacies for the empowerment of women who account for more than 50% of the global population. Specifically, the study uses fisheries – an important resource on which the livelihoods of poor women depend to showcase women's potential and how they can use both the existing and prospective pathways to fully attain their capabilities. By so doing, the study shows that a change process that instils a sense of confidence in women to negotiate and fully participate in decision-making, builds resilient and empower women groups. As Jentoft and Chuenpagdee (2019) argued, such women groups with a reliable access to finance, significantly

contribute to food fish security, poverty reduction and achievement of the SDGs. The Sustainable Development Goals (SDGs) advocates the inclusion of women in actions towards ending poverty, protecting the planet and ensuring prosperity and peace for all (UN, 2015). SDG 5 specifically aims to achieve gender equality and to empower all women and girls. Similarly, the Voluntary Guidelines for Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (FAO 2015), sees gender equity and equality as one of the core objectives of this human-rights based approach to fisheries development. The study takes these international best practices on-board in an amalgam with local assumptions and strategies in the configuration of a pathway for a change process that will capacitate women to achieve the goal of fully participating and enhancing their socio-economic performance in the small-scale fisheries value chain.

1.5.1. Justification

Despite the increasing recognition of women contribution in fisheries and the broader implication this has on society; these actors are rarely considered as important stakeholder's vis-a-vis their contribution (Harris 2006; FAO 2017). Consequently, data on their activities are hardly collected, causing paucity of data, which limits gender analysis as a tool to identify inequalities in policies and programs. Thus, as Porter (2014) argued, has resulted into differences between men and women in terms of access to resources and employment opportunities.

Moreover, women and youths are recognized as marginalized vulnerable groups and their continued unrecognition can only reinforce such notion. Importantly, women account for more than one half of the Togolese population and 60% of the SSF population. Consequently, empowering them to fully attain their capabilities particularly in Small-Scale Fisheries, will contribute to the economic development, societal stability and wellbeing (cf. Allison and Ellis 2001; Weeratunge et al. 2010, 2014). This is so because, a change process that will culminate into empowering women in SSF, will increase value/unit output in Togo fisheries value chain; provide sustainable access to finance for women businesses; and help put robust legal instruments in place to facilitate and support the participation of women.

1.6. Thesis Structure

The thesis is structured in 5 Chapters. Chapter 1, provides an introductory background to the country and the study area in terms of the socio-economic context whereas; Chapter 2 gives an overview of the Fisheries and Aquaculture Sector of Togo. In Chapter 3, the methods employed are described followed by Chapter 4, where the study findings are specified. In the final Chapter 5, the results are discussed, recommendations proffered before providing concluding remarks.

Chapter 2. An Overview of the Fisheries and Aquaculture Sector of Togo.

The second chapter (Chapter 2) is divided into four sections. It describes the general fisheries sector of Togo; provides a description of the ecosystem; outlines the institutional frameworks; describes the fisheries governance framework; specifies the types of fisheries in the country before articulating the importance of the sector to the Togolese national economy and its contribution to the Agricultural and National GDP.

2.1. Description of the ecosystems

Togo have a total land area of 56 785 km^2, divided into five Administrative Regions, namely (from the north to the south): Savannah, Kara, Central, the Plateaux, and the Maritime Regions. It is important to note that the Maritime Region is the most active fishing region. The Country is endowed with resources such as seawater bodies, fish ponds, dams, lagoons, rivers, where fishing takes place all year round. The maritime water body, which falls under the Guinea Current Large Marine Ecosystem (GCLME), has a continental shelf covering an area of 1500 km^2 with an Economic Exclusive Zone (EEZ) of 15,375 Km^2. The Togolese coast is only 56 km long and comparatively offers limited fisheries potential with respect to other coastal nations in the sub-region. The Lagoon water body has a surface area of 64

km² whereas; theriver water bodies constitute a 1,300 km long network (FAO 2007).

On this hydrographic network, there are several dams, water reservoirs and flood zones, including the Nangbeto hydroelectric dam with an area of 180 km², the Karsome dam of more than 3 km² and the flood zone of the Oti river of more than 600 km² (FAO 2007). Located on various water bodies, are many artisanal and industrial fishing, fish processing and trading enterprises.

2.2. Institutional Framework and Fisheries Governance

2.2.1. Fisheries Institutions

The fisheries sector is under the supervision of the Ministry of Maritime Economy, Fisheries and Coastal Protection (MEMPPC) or (MMEFCP). However, The Directorate of Fisheries and Aquaculture (DFA) is mandated with the responsibility of fisheries and aquaculture stewardship bestowed by several decrees proclaimed in recent years (see Section 2.2).

Including, the definition of fisheries and aquaculture policy and the development and implementation of fisheries management measures. To achieve its mission, the DFA works in collaboration with other technical directorates such as: The Directorate of Maritime Affairs (DMA), the Directorate of Coastal Protection (DCP), and the Directorate of the Autonomous Port (PA). The DFA is divided

into the Marine Fisheries Department and the Aquaculture Department as depicted in Figure 2.

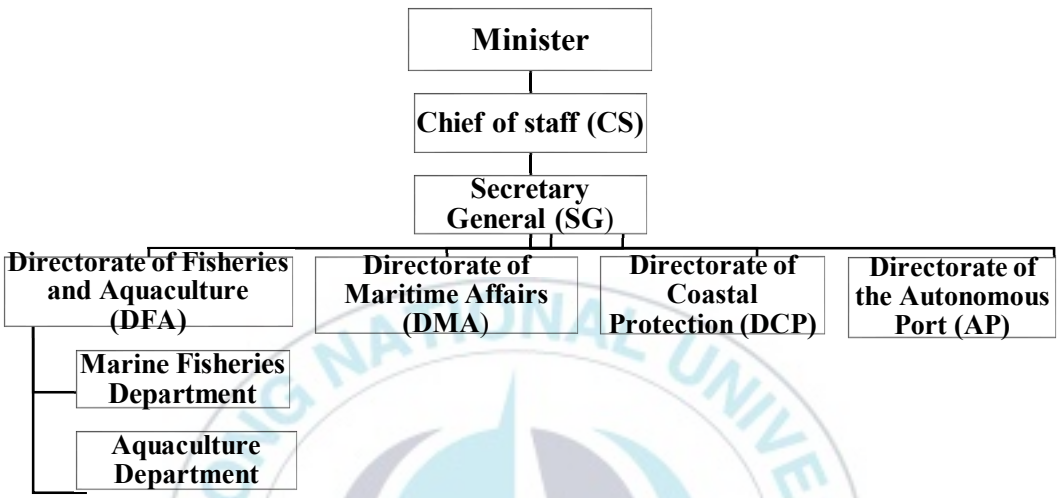


Figure 2: Togo Fisheries Governance Organogram

2.2.2. The Legal Framework

The fisheries sector legal framework is mainly based on the Act N° 012 of 11 June 1998, - a replacement to the 1964 Fisheries Code Act. However, in recent years, the State has drawn up a number of ministerial decrees in the form of regulations to ensure the implementation of prescribed principles. These decrees are categorized as follow:

- Law N°026 of October 11, 2016 - Regulation of fishing and aquaculture in Togo

- Law Nº028 of October 11, 2016 - The Merchant Navy Code;
- Law Nº027 of October 11, 2016 amending Law Nº10 of November 24, 2015 on the new Penal Code;
- Law N°007 of March 30, 2016 - Relating to maritime areas under national jurisdiction
- Law Nº004 of March 11, 2016 - On the fight against piracy, other illegal acts and the exercise of State policing powers at sea;
- Order N°006/MAEP/Cab/SG/DPA of January 28, 2015 – Regulation of fishing on the artificial lake of the Namgbéto dam;
- Order N°68/10/MAEP/Cab/SG/DPA of 04 August 2010 - Modalities for the exploitation of fishery resources in marine waters under Togolese jurisdiction.
- Law Nº005 of May 30, 2008 - Established the Legal framework on the environment;
- Decree N°067 /PR of March 09, 2001 - The sanitary rules governing the production and the marketing of the fishery products.

2.2.3. Policy Instruments (Programs, Strategies, Management Plans)

In Togo, the fishing (maritime, lagoon, continental) and aquaculture sector is important to societal wellbeing. The sector provides for the livelihoods of coastal populations and the food security of the country. Consequently, policy instruments,

and management plans have been put in place for the use and conservation of the fisheries and aquaculture resources. The following are the key management instruments in the fisheries of Togo.

- The Sectoral Policy on Fisheries and Aquaculture 2011 (ACP fish II), with six objectives: (Objective 1: Control of access to fisheries resources; Objective 2: Management of fishing capacity; Objective 3: Legal framework Revision; Objective 4: Strengthening institutional and administrative capacities; Objective 5: Strengthening a consultative process; Objective 6: Increasing international cooperation)

- The agricultural policy with the strategic plan for the transformation of agriculture in Togo by 2030 (PA-STAT 2030) of 2017.
- The National Development Plan (NDP-2018-2022), strategic axis 2: developing poles of agricultural processing, manufacturing and extractive industries.
- The National Agricultural Investment and Food and Nutritional Security Program (PNIASA; 2017-2026).
- The National Strategy for the Sea and Coast (2016-2020), strategic axis 2: develop a blue economy (priority action 2: promote sustainable management of fishery resources).

- The Strategic Framework for the Development of the Maritime and Coastal Economy
- The Beach Seine Fishery Management Plan adopted in 2012
- The Lake Nangbeto Fisheries Management Plan adopted in 2013
- The Koumfab Dam Fisheries Management Plan adopted in 2014
- The Lagoon system fisheries management plan adopted in 2015

2.2.4. Accession to International Instruments

Togo ratified the 1982 United Nations Convention on the Law of the Sea (UNCLOS) on 16th April 1985. The country acceded to the 2009 FAO Agreement on Port State Measures (PSMA) on 13th September 2016 and it is currently in the process of acceding to the 1995 Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA 1995), as well as to the 1969 International Commission for the Conservation of Atlantic Tunas (ICCAT 1969).

2.2.5. Membership in Regional Fisheries Organizations

Togo is a member of the following regional organization:

- Fisheries Committee for the West Central Gulf of Guinea (FCWC)
- Ministerial Conference on Fisheries Cooperation among the African States bordering the Atlantic (COMHAFAT- ATLAFCO)

- Intergovernmental Organization for Information and Cooperation for the Commercialization of Fishery Products in Africa (INFOPECHE)
- International Whaling Commission (IWC)
- Committee on Inland Fisheries and Aquaculture of Africa (CIFAA)
- Fishery Committee for the Eastern Central Atlantic (CECAF)

2.2.6. Projects in Progress

The Agricultural Sector Support Project (PASA), financed by the World Bank, supports the Togolese State in its efforts to sustainably manage fisheries and add value to fishery products. Fisheries management plans are developed and implemented and improved fish smoking techniques and ovens are used. The WAEMU Regional Fisheries Statistical Program of WAEMU has been supporting Togo since 2012 in fisheries statistical data collection. The ECOWAS MESA-Marine Project implemented, since 2015 provides hydrographic and other environmental messages on the state of the sea. The Project on "Fisheries Intelligence and Support to MCS Systems in West Africa" implemented since 2015 strengthens the capacities of the Fisheries Committee for the West Central Gulf of Guinea (FCWC) six (06) Member States, including Togo in terms of fisheries Monitoring, Control and Surveillance, with its West African Task Force (WATF) meetings and its information and communication platform called Basecamp. The PESCAO Project "Improvement of Fisheries Governance in West Africa"

implemented since 2018, reinforces the capacities of FCWC's six (06) Member States in terms of fisheries Monitoring, Control and Surveillance. Within the framework of this project, a regional VMS is set up in order to strengthen the fishing vessels monitoring activities. The following table portrays these more appropriately:

Table 1: Togo Fisheries Projects in Progress

Project Title	**Date of Implementation**	**Short Objectives**	**Cost**	**Donors**
The Agricultural Sector Support Project (PASA)	April 12, 2011-December 15, 2020	Rehabilitate and reinforce productive capacities among targeted beneficiaries across Selected Value Chains; & foster an enabling institutional environment for the development of the agricultural sector, in the Recipients' territory.	US$ 44.90 million	The World Bank
The Program for Improved Regional Fisheries Governance in Western Africa (**PESCAO**)	2018 to 2023	Enhance the contribution of fisheries resources to sustainable development, food security, and poverty alleviation in West Africa	EUR 15 million	European Union (EU)
Fisheries Intelligence and MCS Support in West Africa	2014 to 2022	Strengthening regional information sharing and cooperation between countries, agencies at the national level & Monitoring, Control and Surveillance (MCS) cooperation	33,722,539.00 NOK	Norwegian Agency for Development Cooperation (NORAD)

The ECOWAS-Monitoring for Environment and Security in Africa (MESA)	2013 to 2017.	Enhancing coastal monitoring to help improve fishery management and reduce illegal, unreported and unregulated fishing practices; by providing information to relevant agencies.	37 million Euros	The European Union (EU)

2.3. Types of Fisheries

The Togolese fisheries sector is dominated by artisanal fisheries, limited industrial fishing is conducted in Togo and lack of data on operations does not allow any accurate analysis. Consequently, the focus is on three types of fisheries namely: Marine Artisanal Fishing, the Inland Fishing and the Lagoon Fishing.

2.3.1. Marine Small Scale fishing

With a small continental shelf and located on the edge of the Ivoirian-Ghanian upwelling, Togolese waters have a moderate natural biological productivity. Additionally, the commissioning of the Akosombo dam in 1964 resulted in a terrigenous inputs reduction and the construction of Lomé harbor caused an aggravated barrier beach erosion, (ACPFish II 2011). These changes to the coastline had a disruptive impact on the fishing activities and riparian populations (Op. Cit.).

Various assessment campaigns carried out in Togolese waters by Dr. Fridtjof Nansen estimated the coastal pelagic species potential at 19 000 tonnes/year and the demersal species at 800 tonnes/year (Dr. Fridtjof Nansen 1999, 2000, 2002, 2004, 2005 and 2006).

Marine stocks are exploited mainly by Small-Scale fishing, largely dominated by foreign (Ghanaian) fishermen living in some 23 fishing camps spread along the coast and organized in various groups and cooperatives. Fishing is carried out using a diversity of gear: bottom and surface gillnets, handline, shark net, purse seine, beach seine**,** etc. Production is relatively stable from one year to the next with an average of 20 000 tonnes, of which at least 80% are coastal pelagics (Togo Artisanal Maritime Fisheries Frame survey 2014).

The data generated by the fisheries administration do not allow monitoring the state of the resources. However, interviews with fishermen indicate that there is a decrease in the number of fishermen in terms of diversity, abundance and an increase in conflicts with industrial vessels. The latest Togo frame survey indicate 371 canoes (concentrated in the fishing port of Lomé); a population of 2,640 fishermen, with an average of 7 fishermen per fishing unit. The size of canoes varies from 7 to 13 m in length and the motorization rate is 64.6%. There are mainly two types of canoes: The Ghanaian type improved monoxyl canoes is dominant

(360 canoes) and the largest in size and the simple monoxyl canoes (Togo Artisanal Maritime Fisheries Frame survey 2014).

Fish produced by the Small-Scale marine fisheries is marketed fresh directly to several markets in Lomé (fishing port, large market, abattoir market) and in some coastal towns and villages. Ice is used only in exceptional cases for species of high value, and often in insufficient quantity to guarantee the quality of the products. Approximately 80% of fisheries production is consumed in processed form, either smoked, dried or salted (especially small pelagics). An unspecified proportion of freshwater fish is exported to neighboring countries, for example smoked clarias to Nigeria.

2.3.2. Marine Industrial Fishing

The catches from industrial vessels are rarely landed in Lomé as catches are exported or transshipped at sea. Little is known about marine industrial fishing effort in the absence of any Monitoring Control and Surveillance systems. Presently, twelve (12) vessels are flying the Togolese flag; only one trawler has a fishing license and lands in Lomé. Data on catches and fishing effort from this boat are regularly collected. Two other fishing vessels flying the Guinean flag are also authorized to fish in waters under Togolese jurisdiction. These two vessels do not land their products in Togo, the Directorate of Fisheries and Aquaculture (DFA) does not have data on their catches.

2.3.3. Lagoon fishing

Lagoon fisheries has an area of 64 km², made up of Lake Togo, Togoville lagoon, Aného lagoon and Vogan lagoon. The lagoon environment has a high biological productivity, but fish resources are now subject to a high level of anthropogenic pressure and overexploitation (ACPFish II 2011). The fishing population is estimated at 1,000 individuals for a fleet of 510 canoes. Unlike sea fishing, Togolese fishermen largely dominate lagoon fishing. Beninese and Ghanaian fishermen are also present, but remain in minority. The fishermen are grouped in about thirty communities organized in various groups. Their main activity is concentrated on fishing although some of them have a secondary subsistence economic activity such as poultry, pig farming, cultivation of cereals and tubers. Fishing gear used on the lagoon system comprises of; traps, longlines, handlines, pots and shrimp seines, cast net (FAO 2007).

2.3.4. Inland fisheries

Togo has a 1,300 km long hydrographic network. Limited data is available on potential fishing rivers and streams, as well as on fishing activities. The most productive fishing area is the Oti upriver from Mango (North) with about 200 fishermen operating in the area There are six (6) categories of fishing gears commonly used in inland fisheries: gillnet, cast net, longline, pot, single line and shore seine. Fishing activities in this sector is regularly updated with a consistent

production, estimated at 5000 tonnes. A production time series of the various subsectors is given in Table 2.

Table 2: Small Scale Fisheries and Aquaculture Production

	Years								
Subsectors	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Artisanal Marine Fisheries	22 150	14 180	14 862	14 714	16 372	25 772	20 545	18 142	18 960
Industrial Marine Fisheries	102	140	153	148	125	76	75	118	149
Inland Fisheries	5 000	5 000	5 000	5 000	5 000	6243	6 248	6360	6417
Aquaculture	20	20	23	25	68	110	132	290	1000
TOTAL (Tons)	**27 272**	**19 340**	**20 038**	**19 887**	**21 565**	**32 201**	**27 000**	**24 910**	**26 526**

Source: (DFA 2020)**.**

In terms of commercially exploited species, more than twenty oceanographic research cruises have been carried out in Togolese waters since 1963 for the prospection and evaluation of demersal species stocks with research vessels M/V Ombango, Thierry, Lomé, Humburg, Fiolent, André Nizery, Susainah, Dr. Fridtjof Nansen and M/V Lassana Conté. The surveys have led to the discovery of 200 species, 24 of which are marketable with an estimated biomass of 2,460 tons and an exploitable potential of 800 to 1,200 tons per year. This stock of demersal species showed a declining trend in the early 2000s; from 1159 tons in 2000 to 343

tons in 2004 and to 372 tons in 2006 (FAO 2002). However, a recovery was noticed with stock size estimated at 1511 tons in 2015 (PNIASAN 2015). However, an assessment of small-scale fisheries stock has not been undertaken.

2.3.5. Aquaculture

Initiated as early as 1954 with the creation of the Aledjo-Kadara rearing centre by the Tropical Forestry Technical Centre (TFTC), the fish farming was a real craze at first. In 1960, there were nearly 500 ponds in the area. But very quickly the results were disappointing and the numerous projects that subsequent attempts to revive this activity all failed, due to the absence of a sustained national program (lack of budget, extension, supervision, training, lack of specific credit for a specific development private, etc.) and, the restrictions linked to the economic and human context (the farmer considers the fish farming as a secondary activity) (ACPFish II 2011).

Today, there is no operational rearing centre in Togo and most of the ponds and reservoirs have not been maintained for a long time. A few attempts at private commercial fish farming are currently being made, but with little success, fish production in the country remains subjective. The production figure of 20 tons is renewed from year to year, due to aquaculture limited potential known and seems to be partial for pond fish farming (lack of water supply, soils that do not retain water) but does exist for extensive aquaculture in reservoirs.

The 2011 sectoral policy document, took into account the recommendations of the Code of Conduct for Responsible Fisheries (CCRF) in aquaculture section[13], and limited itself to recalling the national and international legal and regulatory provisions and considers that the way to promote the development of the sub-sector remains a political choice. This led to the implementation of certain program, such as the National Agricultural Investment Program (PNIASA), which helped with developments such as the Agricultural Support Project (PASA) to provide fries for fish farming and increased production.

Then, Aquaculture represented a small percentage (0.3%) of the national fisheries production, but then a rapid increase in production (e.g., from 25 tons in 2014 to 68 tons in 2015) have been observed due to the efforts made by the government (PNIASA 2015). Thus, in 2019, the DFA reported the sector to represent 3% of the total fisheries production (DFA 2020).

2.4. Importance of Fisheries in the Economy

The fisheries and aquaculture sector employs 22,000 workers, disaggregated into 12,000 traders, processors and wholesalers working in the handling and processing and marketing segments of the value chain; and 10,000 fishermen (Fisheries Policy and Action Plan, FAO 1996). The number of artisanal maritime fishers is about 3,000, whereas, the number of women is 5,000 (Togo Artisanal Maritime Fisheries Frame survey 2014) .

The population's demand for fish is estimated at 70,000 tonnes/year, to give a per capita consumption index of 13 kg per capita/year (DFA 2019a). The national fish production is estimated at 25,000 tonnes from marine fisheries and about 5,000 tonnes from freshwater fisheries to give a total national production of 30,000 tons. The deficit of about 40,000 to 50,000 tonnes which is imported comprise of mainly marine fisheries products. However, as reported (FAO 2016), a 5 year average annual capture fisheries production (2013-2017) was about 24 000 tonnes (marine fisheries 18 600 tonnes, inland fisheries: 5 400 tonnes) while consumption is around 80,000 tonnes per year, with an average annual per capita consumption of about 11.9 kg per person (FAO 2019).

The fishing activity in Togo is rather modest and is very much practiced by the people living along the coast (Aného, Baguida, Togoville). It however, brings in 5 billion F CFA (7 652 532 €), directly supports about 150 000 people, generates 4.5 % of the agriculture GDP and 0.9% of the national GDP (DFA 2019a). About 70% of the domestic demand is supplied through imports valued at USD 32 million in

2017 whereas; exports generated only USD 4 million (FAO 2019).

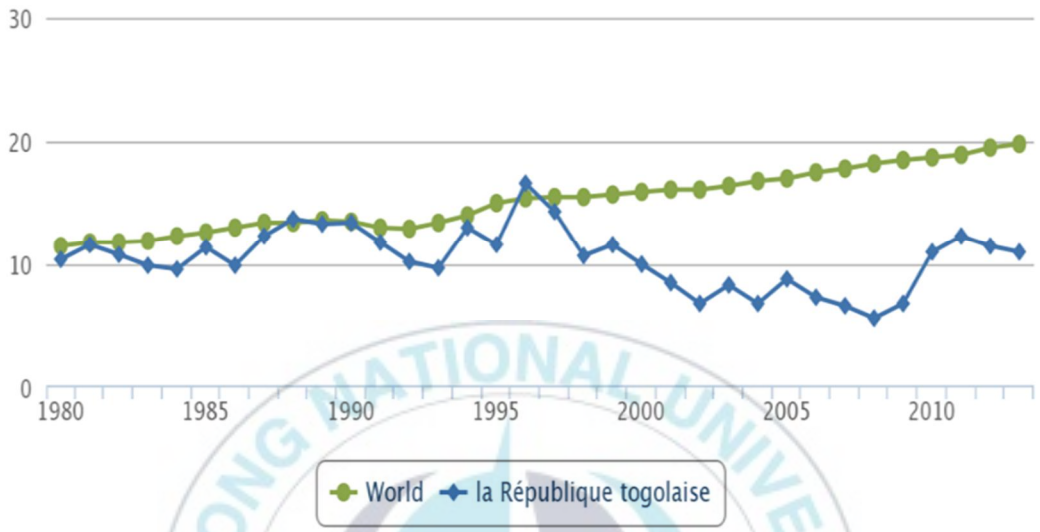


Figure 3: Availability of fish and fishery products by habitat in Togo (FAO 2019)

Figure 4: Total imports and exports of fish and fishery products (FAO 2019)

The fisheries and aquaculture sub-sector remains important for the development of a blue economy. Its socio-economic role as a safety net for vulnerable groups; as a source of enhancing food security (affordable animal proteins) and as a means of economic diversification is crucial for the poor and marginalize coastal population. The high cost of fishing materials and equipment; limited access to credit; weak MCS systems; coastal erosion; the effects of climate change; disorganized actors; and lack of empowerment (financial, material) and lack of capacity building of the womenfolk to fully participate in the fish value chain, are among the challenges the sector should overcome in order to achieve its full potential. It is therefore not surprising that the Togolese National Development Plan 2018-2022, reported the Government plans to take up the challenge of diversifying economic activities in the fisheries sector, such as value addition; job creation and capacity development to target underexploited resources (NDP. 2018-2022).

Women dominate the product value addition segment of the value chain and they also support fishing operations. The intervention of the Togo public sector in women empowerment for the realisation of their full economic potentials in the fisheries sector has been conspicuously lacking - a situation which motivated the ACP Fish II (2011) to suggest that, the public sector's choice to engage in the improvement of the post-harvest sector remains a political choice.

It is against this context that this study aims at developing modalities to ‘empower Togolese womenfolk in small-scale fisheries value chain for their full participation in resource management and the improvement of their economic performance for poverty reduction and household wellbeing.

Chapter 3. Methodology

Chapter 3 describes the study area, specifies the sampling methods and defines the approach to the study**.**

3.1. Study Area

The study was conducted from September to December 2020 in the Maritime region of Togo – a coastal West African country. Togo is bordered by the Atlantic Ocean (AO) in the South, Burkina Faso (BF) in the North and she is sandwiched by Ghana and Benin in the West and East respectively (Figure 4). Specifically, field study took place at the fishing harbour in Baguida (Lomé) in the Golfe prefecture and at Aného - a city in the easternmost Lacs Prefecture (Figure 4). The Maritime region is located in the south of the country, on the edge of the Atlantic Ocean extending between latitude 6º 0’ and 6º 50’ North and longitude 0º 25’ and 2º 0’ East, with a capital at Tsévié (Wathi 2020).

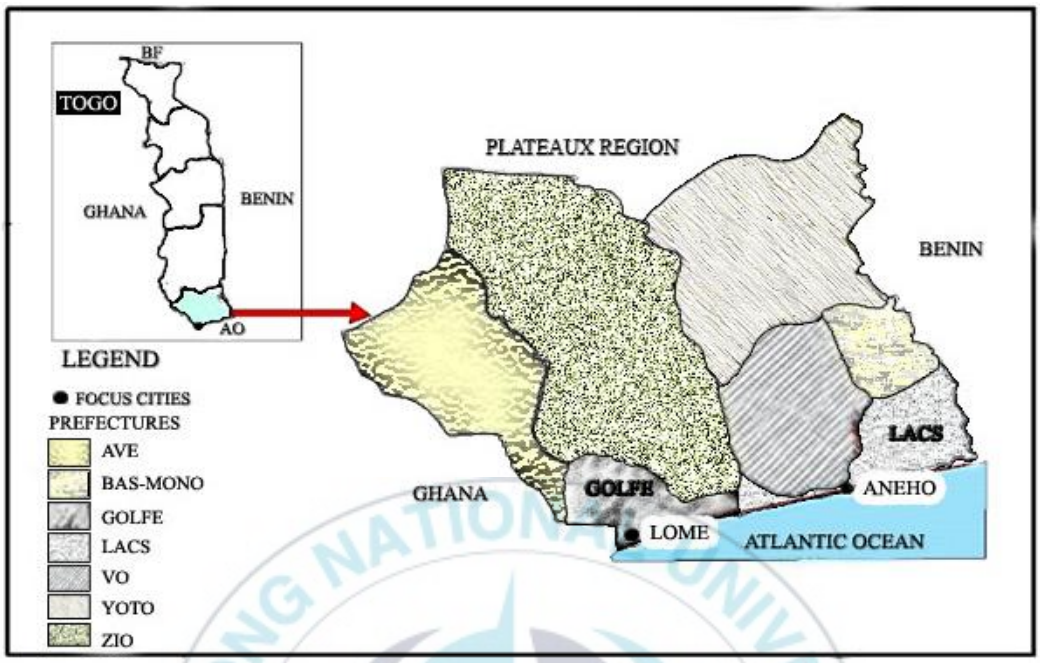


Figure 5: An Illustration of the Map of Togo Indicating the Study Area in the Maritime Region *(Source: Directorate of Fisheries & Aquaculture (DFA).)*

3.1.1. Brief Description of Communities

The small-scale maritime fisheries in Togo is carried out at twenty-three (23) landing sites, with seventeen (17) of those being in the Lacs prefecture and the other six (6) in the Golfe prefecture used by fishermen in the region. The sites in the Golfe prefecture start from Kodjoviakopé and ends at Baguida; while the sites in the Lacs prefecture start from Avepozo to Payémé (Figure 5). These sites are accessible all year round especially the fishing port in the Golfe prefecture which has developed infrastructure such as Jetty. However, fishermen at the other sites, especially in the Lacs prefecture have difficulties from time to time in making

fishing trips due to violent tides, currents, winds and sandstones (Togo Artisanal Maritime Fisheries Frame survey 2014).

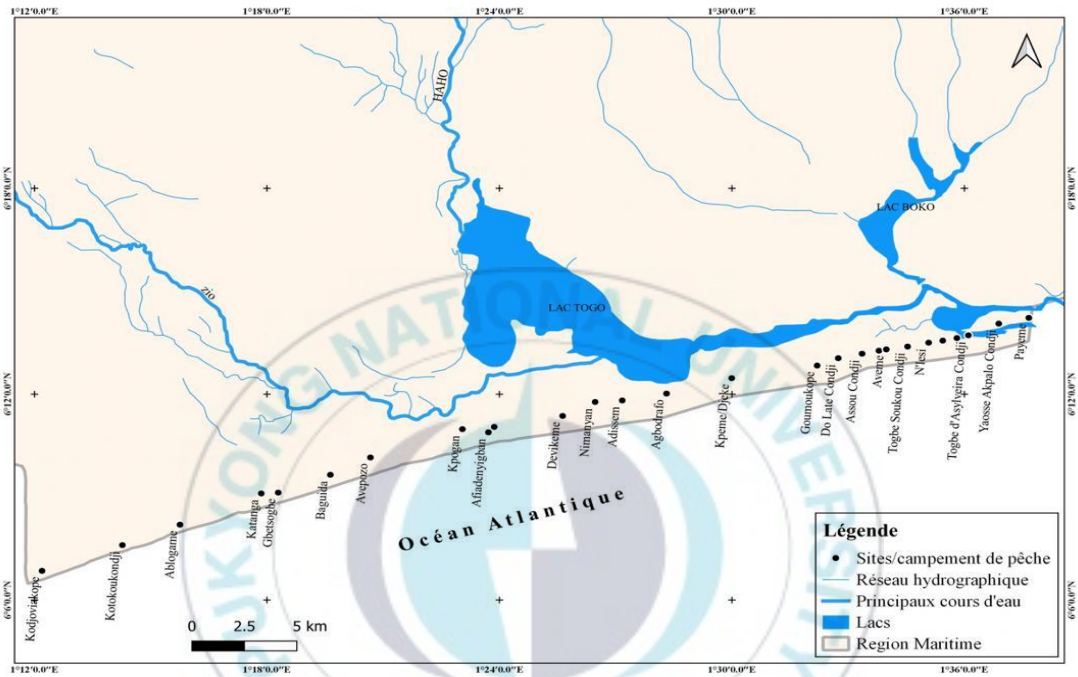


Figure 6: The Fishing Communities

3.2. Study Approach

The value chain analytical framework (e.g. Porter 1985; Womack and Jones 1996; Kaplinsky 2000; Kaplinsky and Morris 2001, 2008; Bjørndal et al. 2014) is the basis of assessing women's participation and economic performance. Additionally, the theory of change (ToC) planning framework (e.g. Weiss 1972; Chen 1994; Connell et al. 1995; Brickmayer and Weiss 2000; Taplin and Clark 2012; Vogel 2012a, 2012b; Prinsen and Nijhof 2015) guided the configuration of a logical path-

way towards empowering women for a full and gainful participation in the small-scale fisheries value chain of Togo.

3.2.1. Value Chain Analytical Framework

Table 3: Nodes of the Small-Scale Fisheries Value Chain

Node of the Fish Value Chain	Description of Value Chain Nodes and Questionnaire Focus
Access to Fisheries Resources Arrangements	Investigate the extent of women's participation and inclusion in the decision making and policy implementation process on access to fisheries resources
Productive Capital Input Supply	Examine degree of women's ownership of productive capital inputs as well as the challenges encountered in doing so and possible ways of improving the situation.
Fish Capture	Look into women's participation in the fish capture process with respect to desire, barriers/challenges to fishing using crafts and gears in the open sea and ways of improving the status quo.
Catch Acquisition	Examine the various arrangements/typology of catch acquisition, challenges and how they could be resolved to improve conditions.
Fish Handling and Processing	Examine fish handling measures and the various forms, shapes and sizes into which catch is processed and the challenges faced in doing so as well as path-ways of improving situation.
Disposal of Product by Marketing	Investigate activities involved in getting finished products to consumer and the interactions therein including problems encountered and possible ways of improving the situation.

3.2.1.1. Questionnaire Development and Primary Data Collection

3.2.1.1.1. Questionnaire Development

A semi-structured questionnaire categorized according to the aforementioned nodes of the small-scale fisheries value chain was developed. This was for firstly, the elicitation of women's standpoint on their current state status in terms of participation and socio-economic performance in each of the nodes of the chain and secondly, for the development of an image of their goal as well as pathways of piloting from the *status quo* to the goal. The questionnaire focused on the issues in each node of the value chain as described in Table 3.

3.2.1.1.2. Expert Consultation

Fisheries development practitioners working with Government Ministries, Departments and Agencies (MDAs); Academia and Non-Governmental Organisations (NGOs) were consulted in person where possible or via telephone calls; electronic mails and social media. Our enquiry focused on two key issues. Firstly, we solicited the challenges or opportunities in the small-scale of Togo which women have to address for strong participation and enhancement of their socio-economic performance. Secondly, suggestions were requested for potential remedial actions as well as underlying conditions or assumptions for success. A

total of 10 experts provided suggestions on our enquiries including 4 government ministry officials; 3 academics and 3 from NGOs.

3.2.1.1.3. Observational Research (OR)

The basic task of the OR in the field was to observe the selected sample while being involved with them (cf. Robson 2002; Robson and McCartan 2016). The major aim was to observe the nature of the interactions across the small-scale fisheries value chain directly. Information and observation were recorded on activities/daily engagements; on goals or what actors want to accomplish; and on feelings or emotions in a particular context including the current status of women. Field notes from OR supplemented results from questionnaires responses and buttressed the arguments in the discussions Chapter 5.

3.2.1.1.4. Sampling Procedure in the Field

Two sets of representative sub-samples of women practioners in the small-scale fisheries value chain were taken from two sub-populations (according to their availability) in the study area. The two sub-sample constituted the study sample. The first set of sub-sample comprised of thirty–one (31) elements out of a sub-population of fifty (50) women taken from the Women Wholesalers Cooperatives Union of Togo (UCOOFEM) based at the Baguida fishing harbour in Lomé (Golfe prefecture). The second set of sub-sample was taken from Aného comprising of

sixty-nine (69) elements taken from a sub-population of a hundred and twenty-eight (128) from the Fish Processors Cooperatives Union (UCOOTP) in the Lacs prefecture. Together a sample of 100 women was taken from a population of one hundred and seventy-eight (178) women as depicted in Table 4. At least 46% of the women in each cooperative were represented and a minimum of 53.9% of each sub-population were sampled to give a study sample of about 56.2% of the total population (Table 4).

3.2.1.2. Sampling

Table 4 depicts the sample proportion taken and location of cooperatives sampled.

Table 4: Women Cooperatives & Sample Selection

Locations	Cooperatives	Total Number of Women in Cooperative	Number of Women Sampled	Sample Size
Fishing Harbour (Golfe Prefecture)	Névamé	18	10	**31**
	Ahedada	11	9	
	Volonté	12	7	
	Milonmianowo	9	5	
Total	**04**	**50**	**31**	
From Dévikemé to Payémé (Lacs Prefecture)	la Grace	28	15	**69**
	la Volonté	20	12	
	Mokpokpo	10	6	
	Amenouveve	20	10	
	Dieu Merci	15	8	
	Kekeli	15	7	
	Jesus est vivant	10	5	
	Vevedonou	10	6	
Total	**08**	**128**	**69**	
Grand Total	**12**	**178**	**100**	**100**

As sampling was based on women's availability, a large sample size of 56. 2% of the population was taken in an effort to represent the wide range of variabilities in women's characteristics. For example, from a total of one hundred (100) women who formed the sample, 7% were between 18-30 years; 40% between 31-50 years; 44% were 51+ years and 9% did not respond due to personal reasons. Some 7 women did not indicate the number of children they have but, the 83 who responded, have children ranging from 1-8 in number amounting to a total of 355 children between them. The age distribution of the children is 125 aged 0-5 years; 108 aged 6-12; 62 aged 13-20 and 60 children aged 21+ years. The average working experience ranged from 4 to 50 years with a mean of 27.4 years. Again, 50% of the women trade in fresh fish whereas; 42% sell smoked fish; 7% market fried fish and 1% sell fish cakes. Whilst 78% sold their fish in the domestic market, 22% exported their products to neighbouring countries. However, only 10% of the women attained secondary school education whereas; 20% attended primary school and the majority 70% have never being to formal school.

3.2.1.2.1. Secondary Data Collection

Secondary sources of information on the fisheries of Togo as well as country fisheries (and development) laws, policies and strategies were collected from MDAs and analysed for gaps in relation to women's empowerment for improved small-scale fisheries in Togo. Supplementary information was obtained from the

responses elicited from expert consultations along with reviews of laws, policies and developmental strategies. These information, couple with prescriptions of international best practices such as the code of conduct for responsible fisheries (CCRF) (FAO 1995); voluntary guidelines for small-scale fisheries (VGSSF) (FAO 2015) and the sustainable development goals (SDGs) (UN 2017) – augmented field study results in informing the intermediate steps between the *status quo* and the desired goal presented in Theory of Change (ToC) schematics (Figure 6).

3.2.2. The Theory of Change Planning and Evaluation Process

The 'Management by Objectives' perspective to program planning wherein, an advanced goal is set and minor objectives determined which, if accomplished, are expected to result into the goal (cf. Drucker 1954), is credited with pioneering the 'theory of change' (ToC). However, Carol Weiss's works since the early 1970s (e.g. Weiss 1972a; 1972b; 1993; 1995) popularized the application of theory-driven approaches to program evaluation. The ToC is a reverse planning process beginning with the long-term outcome and working backwards to activities required to activate and initiate change from a current state of affairs. The process is part of the program theory planning and evaluation paradigm including logic models, outcome chains and impact pathways (Rajala et al. 2021; Ellis et al. 2011; Chen 1994; Weiss 1995). As Taplin and Clark (2012, 3) submitted, its distinct

reverse planning characteristic is the opposite of how the planning process is usually constructed because, it starts with asking "What preconditions must exist for the long-term outcome to be reached?" rather than with "What activities can we be doing to advance our goals?" The process can be both a planning and evaluation tool (ibid.) and as Weiss (1995, 66) maintained, 'the concept of grounding evaluation in theories of change assumes that social programs are based on theories about how and why the program will work'. Thus, the author insisted that evaluation should then critically examines those theories and identify all the assumptions built into the program so as to construct methods of tracking the manifestations of such assumptions. The essence as Rajala et al (2021) is to pin down the underlying theories and cause-effect pathways that underpin initiatives working to promote social and economic change The versatility of the ToC planning and evaluation process has engendered its application to diverse cases such as; theory-based evaluation (Weiss, 1972; Chen 1994); comprehensive community initiatives (Connell et al. 1995); planning and evaluation development (Ellis et al. 2011); international development (Vogel 2012a); environmental research projects (Vogel 2012b); linking social change practices with how and why initiatives work (e.g. Taplin and Clark 2012) or strengthening smallholder production systems (Rajala 2021). As Rajala (2021, 2) concluded, 'ToC remains a non-standardized approach, offering flexibility to potential users to adapt the

approach for their purposes and context'. For our purpose, we adopted and adapted the ToC process suggested by Taplin and Clark (2012) as depicted in Figure 6.

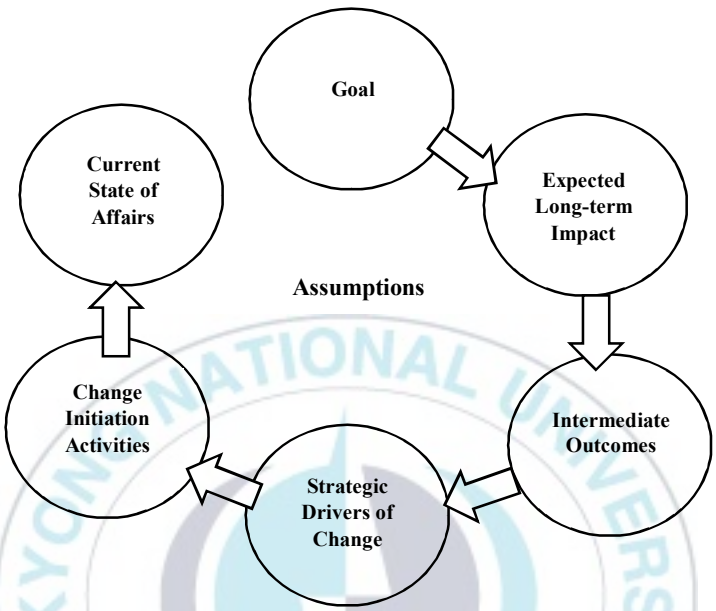


Figure 7: Theory of Change Schematics (Adapted from Taplin and Clark)

In our presentation of the results in Section 4, a narrative of the ToC planning process summarizing the theories that explains the pathways of change and highlighting the assumptions, rationales, and interventions; accompany the configured framework presented in Figure 7. Women painted an image of the conditions they want for themselves which was adopted as the goal. They seek a circumstance that supports full participation in fisheries resource management for an enhanced socio-economic performance across the value chain in contributing to poverty reduction and household wellbeing. The field study results established the current state of affairs, women's expected long term impact and the goal. The

current state of affairs is defined evidences or information proving the *status quo* of the stakeholder's participation and socio-economic performance whereas, the expected long-term impacts are a set of final outcomes from the change process that culminates into the ultimate goal. In addition to field study results, expert consultations, observational research, prescriptions of international best practices, reviews of policy documents and scholarly articles enabled the development of the intermediate outcomes, drivers, and change initiation activities as well as the underlying assumptions. The intermediate outcomes are indices of beneficial changes achieved from short term objective activities whereas; the strategic drivers of change are enablers or cross-cutting issues needed to propel the change process from the earliest change activation activities towards the realisation of the intermediate outcomes. The change activation/initiation activities are the earliest interventions taken to initiate change from the *status quo* towards the shared image. Assumptions are central to the ToC process because they articulate the underlying factors for success.

Chapter 4. Results

The results from each segment of the value chain, depicts the goal, *status quo* and women's long-term outcomes for achieving the goal of an enhanced participation and socio-economic performance as buttressed by the other sources of information described in Section 2.

In portraying the nature of their participations in access to resource arrangements and decision making, a very weak participation was indicated. Participation range on a continuum from no formal contact with fisheries authorities to full participation with the majority of women (71%) indicating that they got wind of decision making meetings from informal or unofficial sources but they were not invited to participate (Table 5). Another 9% of the women indicated that they were consulted but insisted that it was just a matter of eliciting their views on issues but they were not invited to participate in deliberations. Those who fully participated in terms of being consulted, given information about activities and fully participating in decision making accounted for 6% of the sample. Women who indicated that they have neither had contact with fisheries authorities nor any information about decision making meetings at all amounted to 14% of the respondents. With respect to the most important factor hindering participation, lack of finance is largely deemed (40%) as the main hindrance to strong participation (Table 5). Consequently, the majority (35%) of the sample sees access to financial

and material resources as the most viable pathway to improving socio-economic standing and thus, facilitating strong participation (Figure 8).

Table 5: Extent of Women's Participation in Access Arrangements and Management Decision Making along with Challenges

Extent of Participation			**Challenges Hindering Participation**	
Category	**Frequency**	**%**	**Category**	**%**
No contact with authorities about participation	14	14	Lack of information	14
Consulted	9	9	Poor extension services	32
Informed from unofficial sources without participation	71	71	Limited inclusivity	14
Informed and participate fully in decision making	6	6	Lack of finance	40

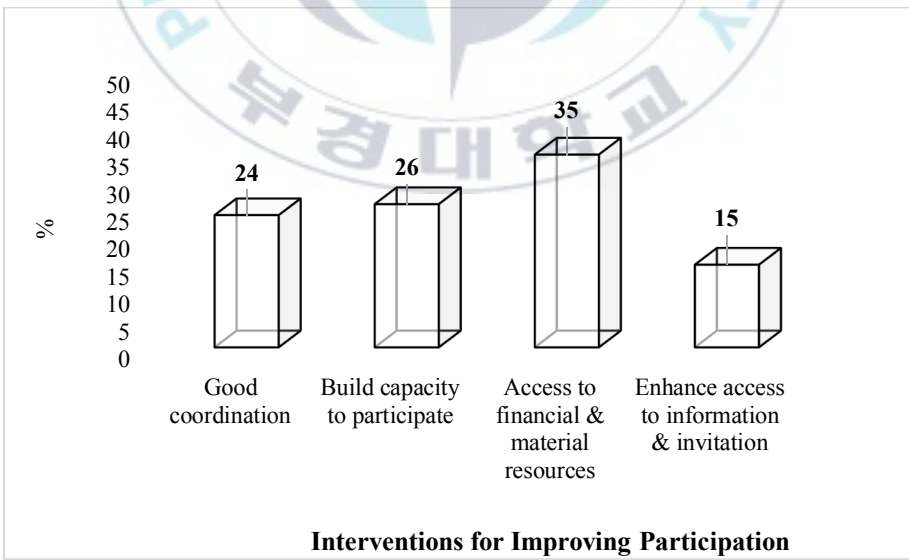


Figure 8: Suggestions for Strong Participation in Access Arrangements and Management Decision Making

The supply and ownership of productive inputs such as fuel, boats, engines and nets is crucial as it influences the power balance across the value chain. Women do participate in supply/ownership of productive capital inputs with about 26% of the sample owing nets and another 21% indicating that they provide fuels for boats (Table 6). However, issues of lack of finance (47%) and social restrictions (35%) in a patriarchy are important limiting factor among others (Table 6). Access to finance (77%) as well as policy reform (12%) to address social restriction emanating from patriarchy were the key suggested required interventions for improving women's participation in the supply/ownership of productive resources (Figure 9).

Table 6: Women's Participation in Supply/Ownership of Production Capital Inputs along with Range of Challenges

Supply/Ownership of Productive Inputs			**Range of Challenges**	
Category of Production Inputs	**% Participation**	**% Non-Participation**	**Category**	**%**
Boats	14	86	Social restriction (Patriarchy)	35
Nets	26	74	Lack of access to finance	47
Engine	19	81	High cost of input	12
Fuel	21	79	Non-availability of inputs in local market	6

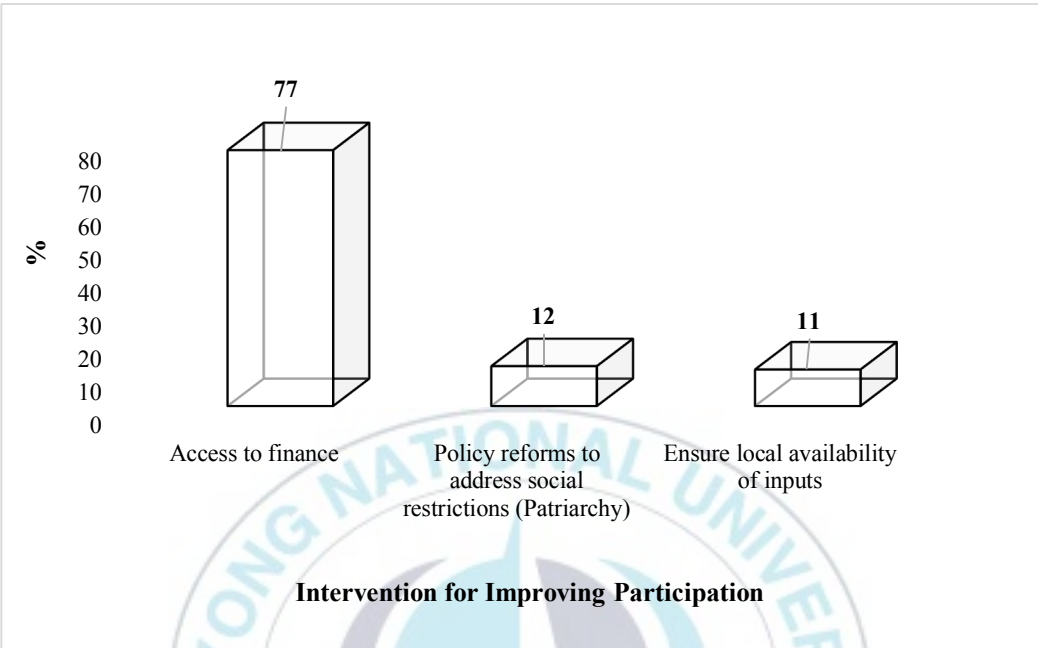


Figure 9: Suggested Intervention for Improving Participation in Supply/ Ownership of Production Inputs

Our field study probed into various aspects of women participation in fishing operation especially using nets and crafts as well as means of financing their participation. As indicated in Table 7, gathering of bivalve mollusks (e.g., clams, oysters, mussels, scallops) in the intertidal zone; is the only capture operation in which the vast majority of women (90%) engage. Although many women expressed interest (74%) in fish capture using crafts and net at sea, none of them have ever dared largely because of socio-cultural restrictions (35%). Accordingly, 34% of the respondents suggested awareness raising to address taboos/norms barriers to engage in fish capture at sea, as one of the key interventions to facilitate

full participation in the fish capture node of the value chain. This is in addition to the need to forge women's groups for fish capture (20%); capacity building in fishing operations (15%) amongst other actions. Petty trading (29%), rotating credit associations (25%) and family (20%) are the main sources of finances to invest in the value chain and lack of access to such finances and the high interest rate of formal financial institutions, are the key limiting factors to acquisition of financial resources. The issue of facilitating ready access to finance (81%) and direct public investment in women developmental activities in fisheries (12%), are the key interventions suggested for improving financial resource acquisition (Figure 10).

Table 7: Issues in Women's Participation in Fishing Operations and Range of Challenges

Type of Capture Operations in Which Women Participate		**Willingness to Participate in Fishing Operation with Net and Craft**	
Category	**% Participation**	**Category**	**%**
Gathering	90	Yes	74
None	10	Not Interested	25
Suggested Interventions to Empower Women to Participate in Fish Capture		**Challenges to Participation in Capture Operations with Net and Craft**	
Category	**%**	**Category**	**%**
Facilitate access to finance	6	Fear to venture at sea	12
Awareness raising to address barriers from taboos/norms	34	Lack of training	20

Capacity building in fishing operations	15	Socio-cultural restrictions	35
Organisation of women groups	20	Not Interested	25
No interest in fishing operations	25	Lack of Finance	8
Key Source of Financial Capital to Invest in the Fish Value Change		**Challenges to Acquisition of Finance**	
Category	**%**	**Category**	**%**
Micro finance	15	High interest rate	31
Bank	11	Limited access to finance	46
Family	20	Limited alternative livelihoods	11
Petty trading	29	High default rates	10
Rotating credit associations	25	Limited social capital (networks)	2

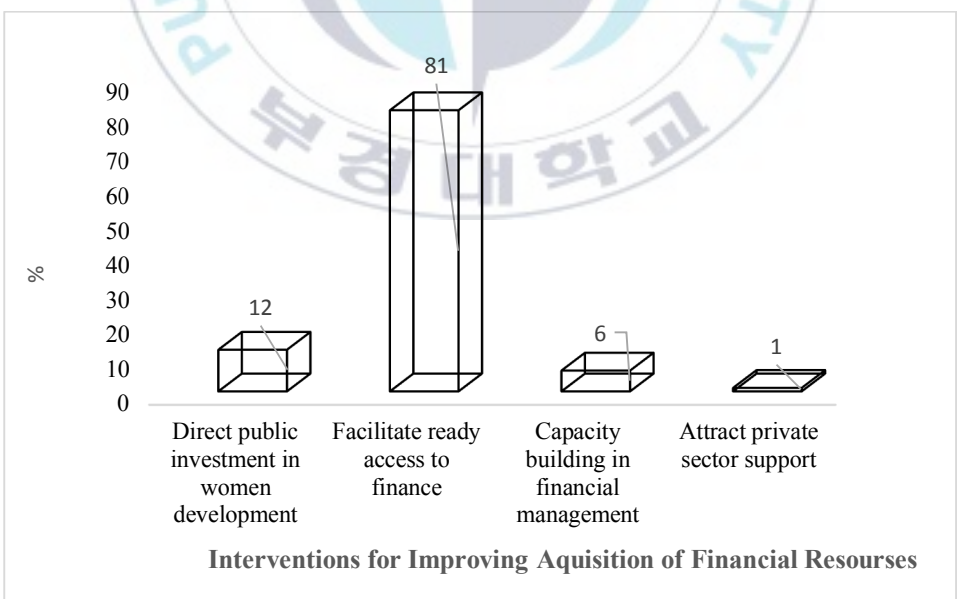


Figure 10: Suggestions for Improving on Acquisition of Financial Resources

Women are generally consigned to the post-harvest segments of the value chain (e.g. Overa˚ 1998; Weeratunge et al. 2010; Thorpe et al. 2014; Harper 2019; The Conservation 2021) which as Harper (2019) insisted, has contributed to undervaluing their contribution to fisheries economies around the world. As depicted in Table 8, deferred payment (a sort of interest free short term catch credit), is the dominant mode (45%) of catch acquisition. However, the lack of trust generated by default on timely cash payments for such catch credits, is one of the pronounced difficulties (38%) in catch acquisition. It is therefore not surprising that enhanced access to finance (46%) is largely deemed as the most important means of improving on the challenges to catch acquisition (Figure 11). The issues of forging catch acquisition trustee council to guarantee catch acquisition transactions was suggested by 26% of the women. Noteworthy is the fact an appreciable proportion (28%) of women sees stock restoration programs as a way of rebuilding stocks and thus, increasing available catch. This is an indication of interest in environmental conservation which could be seized upon to involve women in environmental restoration and conservation programs.

Table 8: Modes of Catch Acquisition and Range of Challenges

Modes of Catch Acquisition		**Range of Challenges**	
Category	**%**	**Category**	**%**
Purchase	30	Lack of finance	40
Extended Family	5	Declining stocks	22

Husband	15	Default on deferred payment and lack of trust	38
Deferred payment arrangement	45		
Salaried seller	5		

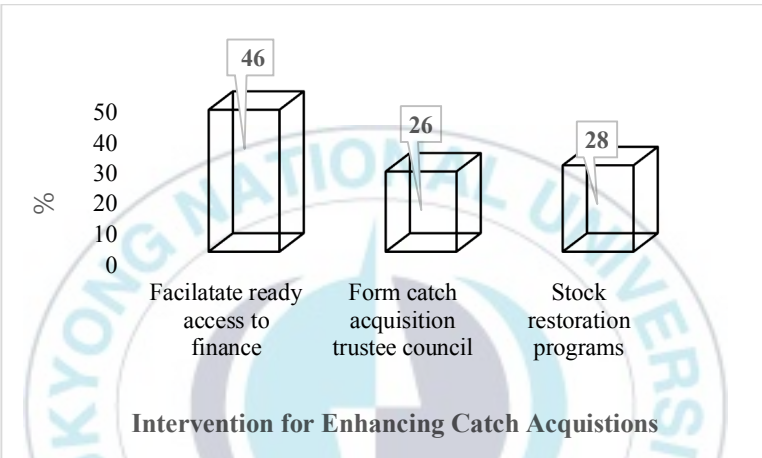


Figure 11: Suggestions for Enhancing Catch Acquisition

Fish handling and processing as well as the marketing segments at the tail end of value chain, are both very sensitive and central to revenue generation. Together, the lack of handling and processing as well as storage facilities was deemed by 66% of the respondents as the most important challenge to fish handling and processing. It was therefore not surprising that the product is mostly sold fresh (50%) or smoke dried (42%) to avert deterioration. Consequently, together, 70% of the women sees the provision of handling/ processing and storage facilities as an important intervention to improve on the situation. Equally, in the marketing segment, the

prominent challenges are; weak marketing and storage infrastructure (26%), lack of capacity building especially in value addition (25%) and post-harvest losses resulting into poor product quality (21%). Accordingly, women see the provision of marketing and storage infrastructure (28%), capacity building in value addition (25%) and the assurance of quality standards (20%) as key ways of improving on the fishing marketing conditions. The bulk of the fish product (78%) is sold in the domestic market which serves as the main source of animal protein.

Table 9: Issues in Fish Handling, Processing & Marketing and Range of Challenges

Suggestions for Improving on Fish Handling and Processing		**Challenges in Fish Handling and Processing**	
Category	**%**	**Category**	**%**
Provision of handling and processing facilities	40	Limited handling and processing facilities	39
Capacity building	24	Lack of training	24
Provision of storage facilities	30	Lack of storage facilities	27
Improve sanitation conditions	6	Poor sanitation	8
Forms in which Product is Marketed		**Market Destination**	
Category	**%**	**Category**	**%**
Fresh	50	Domestic Market	78
Smoked	42	Export Market	22
Fried	7		
Fish cake	1		
Suggestions for Improving on Marketing Conditions		**Challenges to Product Marketing**	

Category	%	Category	%
Assure quality standards	20	Limited transportation facilities	12
Provide marketing and storage infrastructure	28	Weak marketing and storage infrastructure	26
Capacity building in value addition techniques	26	Lack of capacity building especially value addition	25
Ensure sustainable fish supply via stock rebuilding programmes	15	Declining catches and fish supply	16
Improve transportation	11	Post-harvested losses (poor product quality)	21

Women also engage in other economic activities as a way of diversifying livelihoods. Most women (52%) are only engaged in fisheries but, some 39% are also engaged in petty trading whereas, 5% also do cattle rearing and 4% engage in backyard gardening (Figure 12). However, difficulties such as limited access to finance (67%) and limited alternative livelihoods (28%) are the key factors holding women back from diversifying their economic activities (Figure 13). Thus, women suggested access to finance (41%), economic diversification skills (25%) and financial management (23%) as the important means of improving on women's capacity to diversify their economic activities (Figure 15).

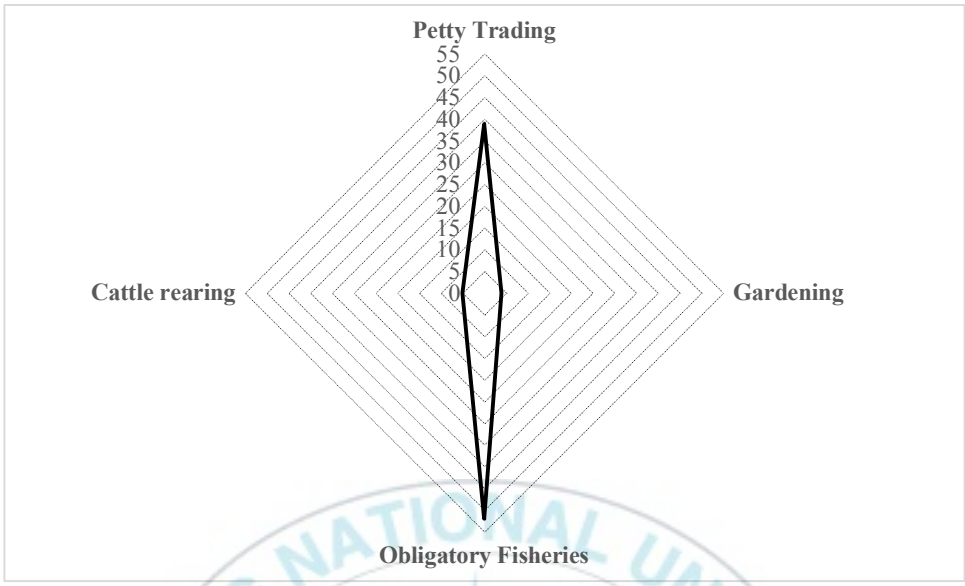


Figure 12: Web Diagram of Women Economic Activities

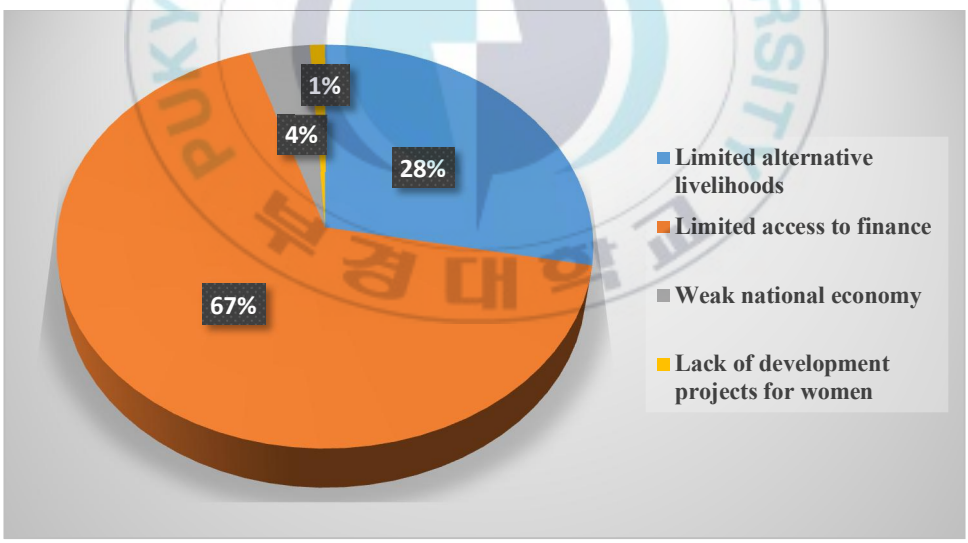


Figure 13: Challenges to Economic Diversification

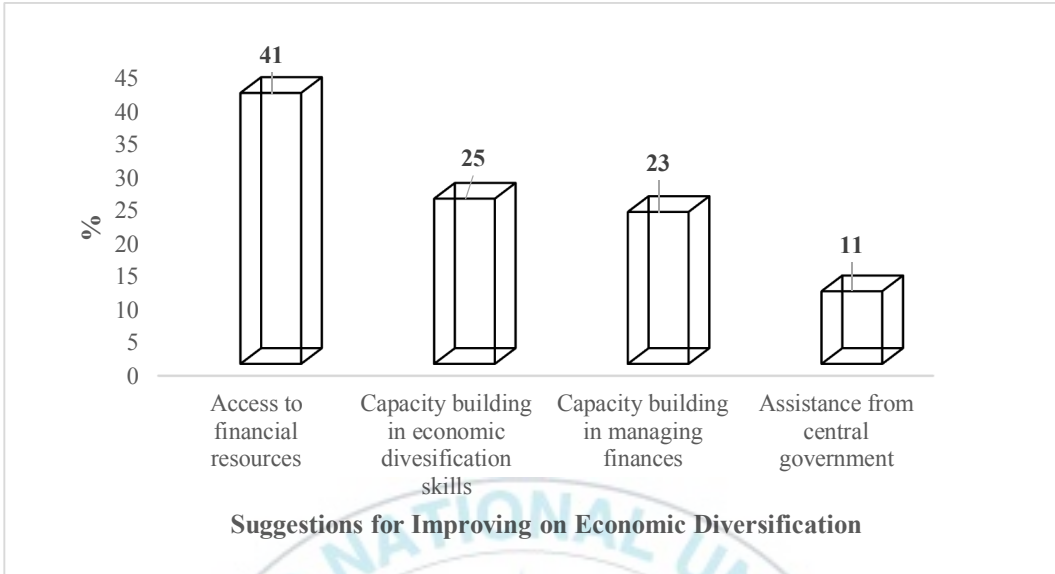


Figure 14: Suggestions for Improving Economic Diversification

4.1. Fish Value chain in the Small-Scale Fisheries of Togo

As illustrated in Figure 15, the landed fresh fish is generally sold to the fishmongers. Some of the fishmongers may own the fishing equipment or finance fishing activities as a way of having priority in acquiring catch (DFA 2019b). Once the catch is acquired, the fishmongers disposed of the catch by selling to fish processors and retailers of fresh fish, and the retailers in turn, resells the fresh fish. Processors sell their products to wholesalers, retailers and consumers at the processing site, the fish market in Lomé, other towns in Togo or neighbouring countries, such as Benin and Burkina Faso. Wholesalers also come from neighbouring countries to buy smoked fish from processors at the processing sites

and either take fish back to their countries or sell smoked fish at the Lomé smoked fish market. They also sell to retailers and consumers in the markets. The following diagram portrays the above statements.

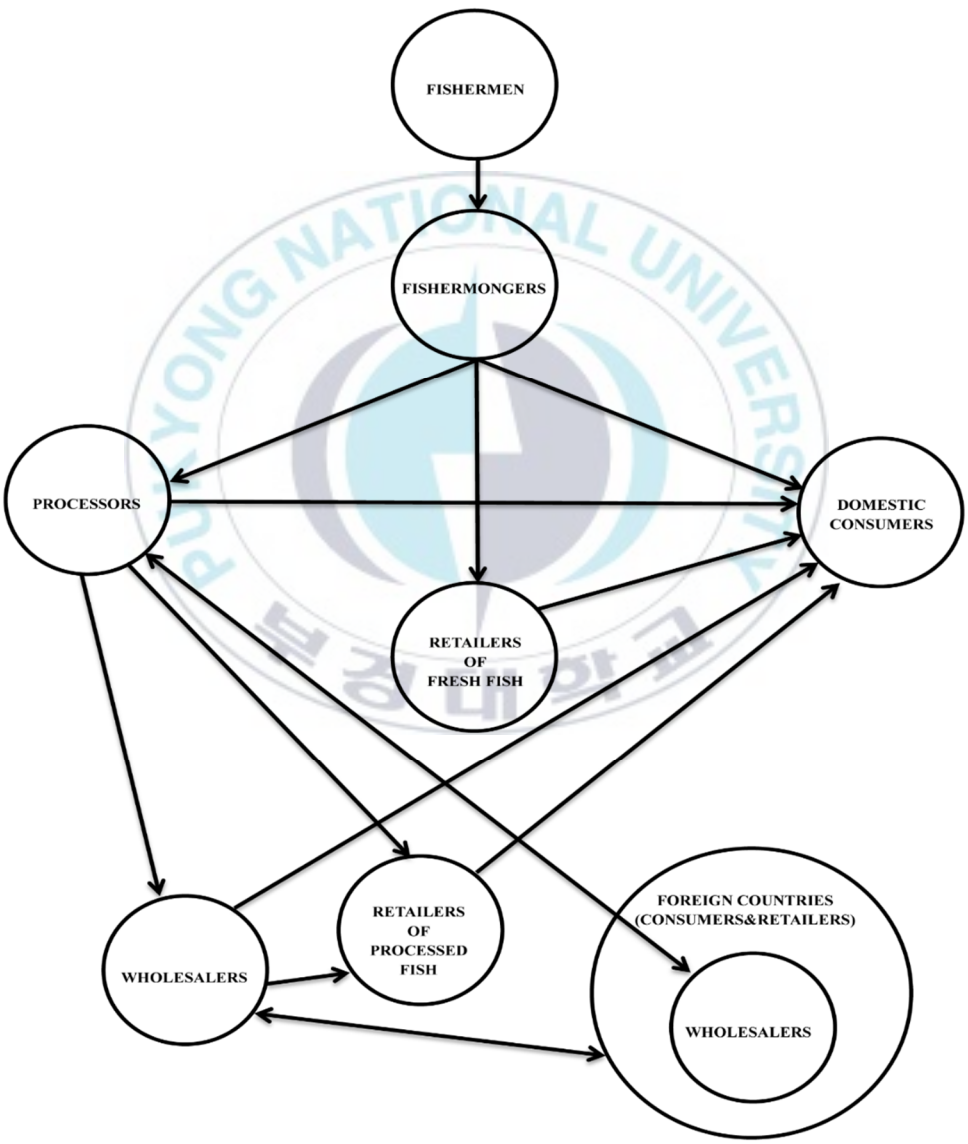


Figure 15: Fish Commodity Flow Diagram in the Post-Harvest Segment of the Small-Scale Fisheries Value Chain of Togo

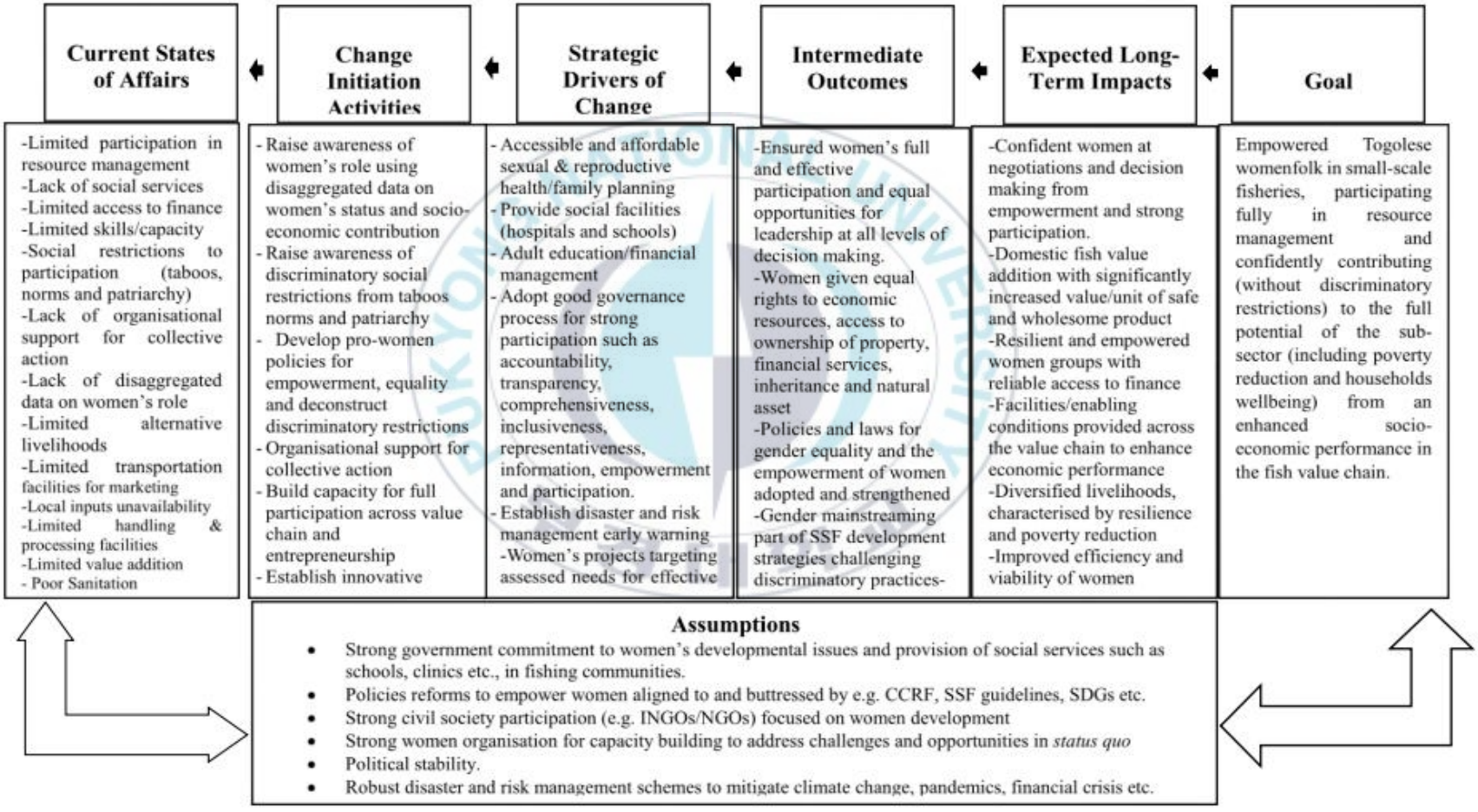
4.2. Narrative of the Theory of Change Field Study Framework

As mentioned in Sections, the field study was designed to; elicit and establish the overarching goal of women in SSF with respect to an image of the best circumstance for participation in resource management and enhancement of their socio-economic performance; to determine women's current status in terms of challenges and opportunities and finally; to discern the expected long-term impacts given the challenges in the current state of affairs. From Figure, the remaining task was to determine the assumptions, intermediate outcomes; strategic drivers of change and change initiation action from element of the field study results in Section 4, observational research, expert consultations, international best practices and reviews of related literature.

The theory of change theoretical framework was now drawn upon to fill in the gaps to the final goal. The Theory of change portrays a subject final goal and maps the backward processes onto the current state of affairs of the subject. First we have the final goal, which describes the long term objective or desired long term image needed from the shareholder's perspective. Following level 2 depicts long term impacts, which are expected influences or effects we wish to acquire once the goal is achieved. Level 3 shows intermediate outcomes, which are transitional results, changes, benefits, learnings occasioned from knowledge, skills, attitudes and behaviors achieved from short term objectives set. These are short term changes

that link logically to the final goal. Level 4 shows the drivers, which are internal or external enablers, conditions or cross cutting issues needed to be present for the realisation of the work or activities of the women in their full participation and enhancement of their socio-economic performance in the SSF value chain. The change initiation activities portrayed at level 5 are inputs or resources needed to be carried out to initiate change. These are actions or events needed to be put in place, which take the change process off the ground to be further propelled by the drivers. The Level 6 defines evidences or information collected proving the status quo and the challenges of the women participation & economic performance in the Togolese small-scale fisheries. The proposed assumptions are hypotheses or suppositions that expose underlying beliefs or factors for the success of the processes mentioned above coupled with international instruments already in place. With these factors putting in place we implicitly assume and believe Togolese women to be fully enhanced and empowered in a longer term.

Figure 16. A Theory of Change Framework for Women's Full Participation and Enhanced Socio-Economic Performance in the Small-Scale Fisheries Value Chain of Togo.



Chapter 5: Discussions and Recommendations

5.1. Discussions

The fisheries sector is reported to serves as the safety net for many vulnerable groups such as women and youths in terms of employment and income generation (NDP 2018-2022). The small-scale fisheries sector of Togo where 60% of the actors are women, is a potential conduit through which women could be empowered to enhance their social and economic performance and contribute significantly to both household and societal wellbeing. Consequently, it is important to analyse women's participation and socio-economic performance in the small-scale fisheries to discern the challenges and the opportunities across the value change as a way of developing pathways to empowerment in order to achieve their full potential. Majority of the women in the study combined their household and family responsibility with their fishing business - which shows women's ability to engage in multi-tasking and be responsible mothers as well as supporting wives to their husbands in income generations. Majority of these women (70%) enter the fishing business at an early age by learning from their parents which shows that family fisheries business tradition is important in the Togolese settings. Our analysis of women's participation and socio-economic performance at each of the nodes of the small-scale value chain depicted the nature, challenges and

opportunities which could be addressed or seized upon to improve the conditions of women in fisheries.

5.1.1. Participation in Access to Resource Decision Making

Our analysis of data with respect to this node indicated an ineffective inclusion of women in access to fisheries resource decision making. Although women obtained information about management decisions from official or unofficial sources, they were not consulted with the objective ensuring their full participation as also observed around the world (Bennett 2005; Koralagama et al. 2017; Mutimukuru-Maravanyika et al. 2017; and Harper et al. 2013, 2017). Weak inclusivity, poor extensive services, and lack of information and invitation to participate in the management process are concerns they want resolved. The Ministry of fisheries of Togo should implement the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF, 1995) and UN affirmative action plan (UNESCO 2014-2021) to include women in the decision making processes or develop policies for integration of women actors in the decision making processes to improve their livelihoods (Torell et al. 2019). Our study also showed the women have in depth knowledge of the issues in the small-scale fisheries sector of Togo and thus, proffered means of improving the situation. These include; enhancing access to information, invitation and ensuring full participation, provision access to financial and material resources and building their capacity to participate in

resource management. Women's participation will be facilitated by procedural principle, that strengthen governance system and pave the way for interactive governance (e.g. Hobley and Shields 2000; Bavinck. et al. 2005; Baio 2010) .

5.1.2. Participation in Input Supply

Togolese women are faced with many challenges such as limited access to finance, social restrictions, high inputs costs and lack of availability of inputs to acquire or invest in fishing equipment, even though some women actually own fishing equipment and finance fishing activities. As DFA (2019) reported about participation in the small-scale value chain, some women fishmongers finance the fishing equipments and activities, thus have monopoly over the acquisition of fresh fish catch. This is consistent with observation in neighbouring countries with the dominance of the so-called 'fish mammies' [1] who as the financiers, wield significant power in the small-scale fisheries (cf. Overa 1992; Britwum 2009; Weeratunge et al. 2010; Torell et al. 2019; . However, contrary to the dominance of women in the ownership of input in other parts of the sub-region, Togolese women's participation in the ownership of inputs is limited citing lack of finance

[1] In the West African small-scale fisheries parlance, women with good financial stature from enterprise in (especially) small-scale fisheries are known as "Fish Mammies" (e.g. Overä 1993; Baio 2009; Thorpe et al. 2013). These "Mammies" consolidate their collective power through the formation of economic organisations and institutions such as rotating savings/credit and labour organisation, acting to share labour and profits, regulate market prices for fish/inputs, and mobilise to protest against activities that might diminish their incomes.

and loan amongst other factors as the key factors holding them back from in investing in input acquisition and in the fishing enterprise in general. Empowering the women fishers with capacity building and financial resource, will help them to contribute effectively in Togo fisheries sector. As Cheston and Kuhn (2002); INSEED (2015) suggested, microfinance should be accessible and banking interest rate regulated to help women acquire the investment needed to expand their businesses. It was instructive that women mentioned declining catches as one of the causes of catch acquisition challenges they were facing. This suggests sensitivity to environmental degradation which would be helpful in environmental restoration programs. As Lam (2012, 7) insisted, "the public right to fish can only be protected if the sustainability of the living resources themselves is not harmed".

5.1.3. Participation in Fish Capture

Women do not participate in fishing at open sea in West Africa which is a completely male dominated affair (e.g. Harper ; Olufemi 2019). Likewise, in Togo, women only in gathering of shellfishes in the intertidal zones. The norms and taboos in the fisheries sector preventing women from participating in capture fisheries at sea have been found to be complex (FAO 2017). For example, Koranteng (2000) reported that in Ghana, the women are prevented from going to sea to fish because of the belief that the sea spirits do not want blood as women

menstruation will anger the Gods whereas; in Sierra Leone, it is believed that bad luck will befall the crew at sea resulting in little or no catch should women join the crew (Thorpe 2013; 2014). These beliefs and taboos which are passed on to generations should be socially deconstructed by awarennes and education championed by male leaders. There is an inclination for women to break the barrier to go fishing at sea as recently observed by Moroccan women fishing activities (Seeing on internet). This tendency is consistent with results from the study wherein 78% of Togolese women are willing to go fishing with boats and gears, if given the opportunity to do so (See figure 8). Although fishing is generally considered to be a man's business, because of physical strength and know-how of equipment use, women are willing to exercise their fishing skills especially when organized in groups (cf. Chapman 1987; Maschner et al. 2010; Harper et al. 2017; Branch and Kleiber 2017).

5.1.4. Participation in Acquisition of Catch

Catch acquisition modes ranged from receiving catch from husbands, relatives, deferred payment, or as salaried fish seller. As wives of fishermen, these women play a vital role in the household wellbeing from their dominance in the postharvest segments where they have strong social network and exert influence on their male counterpart and the fishing activities as creditors (Lwenya and Yongo 2012). Since many women in fishing communities depend on selling fish for their family

survival, transactional sex practices have been reported (cf. Béné and Merten 2008) - whereby women get involved in fish-for-sex relationships with fishermen as a catch acquisition strategy with serious health consequences such as HIV/AIDS (Kwena et al. 2012). More than half of the respondents (60%) acquire financial capital to invest in fishing enterprises from microfinances (FUCEC & WAGES) due to high default and interest rates they encounter when seeking loan from Banks in Togo. However, those with strong social capital do succeed in getting loans from the Banks Microfinance is an important source of financial resources for many women which significantly contribute to their empowerment (Cheston and Kuhn 2002). As Teye et al. (2016) argued, women tend to spend their income on their families and households wellbeing. Thus, strengthening their finance and economic activities through microfinance is viable pathway to their empowerment. From the suggestions of the women interviewed, facilitating access to finance via direct public investment in women development, and building their capacity in financial management are avenues of improvements in their circumstance. Investment by international institutions in the Togolese fisheries sector with regards to women project is also sought.

5.1.5. Participation in Handling and Processing

Literature abound with examples of women dominance in the post-harvest sector of SSF in many countries around the world especially in the fishing handling,

processing and marketing segments where they wield control over prices (Lentisco and Lee 2015; Calhoun et al. 2016; Harper et al. 2017; Ameyaw et al. 2020; Gopal et al. 2020). Togolese women are also dominant in the post-harvest segments of the small-scale fisheries. The SSF catch in Togo are sold fresh or processed in the form of smoked and dried products by the women. However, smoking facilities and techniques are generally inadequate and lack of investment in women projects means that these facilities remain dilapidated. Thus, most of the women at the fishing harbour prefer selling their products fresh at the fish markets in Lomé. Most of the women processor who smoke or dry their products are located at Aného. These women need quality control training to boost their skill in adding value to their products in accordance with Fish Handling, Quality and Processing standards (cf. Ward 2012) - a capacity building which as Nayak and Cornelie (2000) argued, will contribute significantly to enhancing their income generation efforts.

5.1.6. Participation in disposal by Marketing

Most of the products are sold locally due to lack of value addition facilities and techniques to process and package. Only a minority from the processors respondents (22%) actually export their smoked or dried salted fish to the neighbouring countries, such as Burkina-Faso, Benin and Ghana (DFA 2019b). The result also revealed that 91% of the women profit margin was less than or equal to 25%, which is very insignificant compared to what other women make at other

vocation in terms of revenue generation (Overä 1993 and Baio 2009). This confirms the pervasive poverty observed amongst women in small-scale fisheries in many parts of the world (e.g. Harper et al. 2020; Appiah et al. 2020; FAO 2015) depicting women vulnerability, despite their contribution to the fisheries sector. Petty trading, gardening, and cattle rearing are sources of alternative livelihoods in which women in the Togolese SSF are engaged notwithstanding the fact that the majority of the women only have fisheries as the source of income. A weak national economy, limited access to finances and limited development projects dedicated to women are the challenges to the diversification of economic activities. Nevertheless, economic diversification skills, capacity development in financial management, public assistance in enhancing the fisheries sector and facilitation of access to financial resources are pathways suggested by women for the improvement in fish marketing conditions (Harper et al. 2020; Appiah et al. 2020; FAO 2015).

5.2. Recommendation

Women contribute significantly to the small-scale fisheries sector of Togo, because of their participation in economic activities throughout the fish value chain - providing labour in both commercial and artisanal fisheries and also as small-scale fisheries entrepreneurs. The study on 'Women Empowerment for Improved Small-Scale Fisheries Development in Togo' focused on the enhancement of women's

participation and socio-economic performance along the entire fisheries value chain. Results threw light on the required policy interventions and institutional support for women across the chain. Fresh and smoked fish vending is the major source of livelihood for the majority of women suggesting that they will benefit immensely from capacity building, material and financial support in fish product value addition.

Our findings and discussions as well the proposals from the populated theory of change conceptual framework, with the full participation of Togolese women, enabled the recommendation of a number of measures. This is to ensure the implementation of the complete change process from the current state of affairs to the level of women's aspirations established as long term impact of the required changes. Eventually, the goal is an empowered womenfolk, participating fully in decision making with an enhanced socio-economic performance across the SSF value chain.

In access arrangement arena:

- Strong participation of women in fisheries management should be ensured by the formal invitation of dedicated practitioners to fully participate in resource management deliberations as provide by an official co-management plan.

- Build the capacity of women in negotiation and leadership skills as a way of cultivating their self-esteem and self-confidence for a full participation in decision-making.
- Establish operational policies required for a deep understanding of the historical, cultural, economic and environmental contexts affecting gender roles, relationships and dynamics. National policies should be tackling or addressing social issues with the involvement of local authorities for an effective implementation of the policies at the community level.
- Collect and disseminate sex-disaggregated data on the fish value chain and mainstream women's contribution to the sectoral and the national economy as a way of improving the visibility of all actors especially women.
- Align the Togolese policy environment with international instruments with respect to gender and fisheries, empowering women across the value chain, and engaging women practitioners in fisheries co-management.
- Consider an affirmative action plan to empower the women and socially deconstruct taboos and barriers to participation whilst reducing male dominance in the value chain.
- Organise women for collective action and security marginalised groups to effectively participate in decision making processes.

In Input acquisition node:

- Provide business development schemes and accessible microfinance/credit facilities.
- Ensure women issues are deliberately catered for in all fishing project ensuring access to all educational, physical material and financial inputs across the fish value chain.

In fish capture area:

- Continue to strengthen the organizational capacity of women's organizations and existing self-help groups who represent a broad constituency at the national and decentralized level.
- Increase the involvement of traditional fisheries leadership structures, including the chief fishmonger/processor. These leaders may have untapped potentials to lead, manage, and mobilize their communities.
- Provide men and women with access to formal and informal education in improved technologies, bookkeeping, entrepreneurial skills, health practices, sanitation and nutrition, adult literacy, and training and extension services.
- Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of

property, financial services, inheritance and natural resources, in accordance with national laws.

- Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women; adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women at all levels (UN 2015).
- Involve women in stock restoration programmes as overexploitation leads to the tragedy of the commons which would impact them adversely

In acquisition of catch domain:

- Raise awareness about the dangers of fish-for-sex transactions and identify/support alternative sources of income and raise awareness about the risks of HIV transmission in fisheries-based livelihood systems
- Ensure ready access to reproductive health programmes and establish nursery institution for children.
- Implement the 1995 Code of Conduct for Responsible Fisheries principles guidelines in addition to the Sustainable Fisheries Livelihoods participatory approaches to ensure equity.
- Conduct poverty profiling and gender analysis to ascertain the underlying causes of vulnerability and evaluate participatory strategies.

- Facilitate access to financial support to enhance income-generating activities.

In Handling and Processing Segment:

- Introduce improved technologies, facilities and methods, transportation infrastructure/facilities to alleviate women drudgery and increase their productivity, for improved marketing and distribution of fishery products.
- Introduce new fish-smoking ovens to helps fish processors meet the highest international safety and quality standards, and therefore enables them to access wider and more remunerative markets.
- Introduce sustainability measures in women's projects to reduce reliance on project-based funding.
- Encourage women's participation in national and regional networks of community management practitioners exchange programs for cooperation, information and skills sharing to give them a voice and develop their capacity in a changing fisheries sector

In disposal by Marketing segment:

- Provide participatory training in marketing, finance, quality control and enterprise planning for fishmongers and processors
- Ensure that women and men have access to know-how, material, productive resources, services and institutions.

- Support women's associations, communal banks (for participation in the fish value chain), and gender-sensitive local institutions.
- Support women's entry into new markets and profitable enterprises/ businesses, through tailor-made and affordable financial services and capacity development in numeracy to help with record keeping.
- The private sector and NGOs should work with fishing communities to improve on their condition
- Existing women groups and associations need leadership development, financial and business management skills, vocational training in activities across the value chain.

5.3. Conclusion

Women are key actors in the small-scale fisher fisheries sub sector of Togo which is consistent with other findings around the world (Weeratunge et al. 2010; Harper et al. 2013; Calhoun 2016; Harper et al. 2017; FAO 2019). However, women face many difficulties along the fish value chain of Togo including exclusive practices for which remedial measure have been proffered in preceding sections. It was hypothesized that Togolese women have the required means to fully participate in SSF and wholly contribute to poverty reduction and household wellbeing. But the finding eloquently demonstrated that that to the contrary, these women actors are held back by myriads of challenges from having access to the

required inputs to fully participate in the SSF value chain. Consequently, the hypothesis is roundly rejected. In order to achieve the goal of an "empowered Togolese womenfolk in small-scale fisheries, participating fully in resource management and confidently contributing to the full potential of the sub-sector including poverty reduction and households wellbeing"; policy makers should consider the logical steps provided in the Theory of Change framework whilst acting on the recommendation above. The fisheries sector of Togo should strive to have a thorough contextual understanding of specific fisheries actors and fishing communities (guided by gender-disaggregated data collection, capacity building, contextualized governance framework, collective action platform promotion and direct support to women economic activities) to help achieve the proposed change processes as portrayed in Figure 31. A SSF system where women are fully engaged and operating at their full potentials would have the ripple effect of instilling a sense of confidence in them to negotiate and make decision; significantly increasing value/unit output; forging a resilient and empowered women groups, instituting a reliable access to finance; sustaining food and nutrition security for improved women and children wellbeing; diversifying livelihoods; reinforcing local resilience, and increasing contribution to poverty reduction. Importantly, the drivers of the Theory of Change process for enhancing women's strong participation and socio-economic performance in the SSF value chain of Togo; and

the underlying assumptions therein, are critical for any sustainable improvement in their circumstance.

References

ACPFish II 2011. 'Togo Fisheries & Aquaculture Sectoral Policy', 58. Technical report, DFA, Lome, Togo.

Allison, E. H. and F. Ellis 2001. 'The Livelihoods Approach and Management of Small-Scale Fisheries'. *Marine Policy* 25 (5). Elsevier: 377–388. https://ideas.repec.org/a/eee/marpol/v25y2001i5p377-388.html.

Ameyaw, A.B., A. Breckwoldt, H. Reuter and D.W. Aheto 2020. 'From Fish to Cash: Analyzing the Role of Women in Fisheries in the Western Region of Ghana'. *Marine Policy* 113 (March). Elsevier Ltd: 103790. doi:10.1016/j.marpol.2019.103790.

Appiah, S., T. Antwi-Asare, F. Agyire-Tettey, E. Abbey, J. Kuwornu, S. Cole and S. Chimatiro 2020. 'Livelihood Vulnerabilities Among Women in Small-Scale Fisheries in Ghana'. *European Journal of Development Research*, October. Palgrave Macmillan, 1–29. doi:10.1057/s41287-020-00307-7.

APL 2018. The Autonomous Port of Lomé 2018. The Advantages of the Port of Lome. https://www.togo-port.net. Accessed on 17th March, 2021.

Baio, A. 2009. Governance of the Marine Capture Artisanal Fisheries of Post-War Sierra Leone. PhD Thesis, University of Portsmouth, United Kingdom.

Baio, A. 2010. 'Show Me the Way: Inclination towards Governance Attributes in the Artisanal Fisheries of Sierra Leone'. *Fisheries Research* 102 (3). Elsevier: 311–322. doi:10.1016/j.fishres.2010.01.003.

Bavinck, M., R. Chuenpagdee, M. Diallo, P. van der Heijden, J. Kooiman, R. Mahon and S. Williams 2005. *Interactive Fisheries Governance: A Guide to Better Practice*. Delft, The Netherlands: Centre for Eburon Academic Publishers.

Béné C. and S. Merten 2008. 'Women and Fish-for-Sex: Transactional Sex, HIV/AIDS and Gender in African Fisheries'. *World Development* 36 (5). Pergamon: 875–899. doi:10.1016/j.worlddev.2007.05.010.

Bennett E. 2005.Gender, fisheries and development. *Marine Policy* 29 (5): 451-459. https://doi.org/10.1016/j.marpol.2004.07.003.

Bjørndal, T., A. Child, and A. Lem, ed(s). 2014. Value Chain Dynamics and the Small-Scale Sector: Policy Recommendations for Small-Scale Fisheries and Aquaculture Trade. FAO Fisheries and Aquaculture Technical Paper No. 581. Rome, FAO. 112 pp.

Branch, T. and D. Kleiber 2017. 'Should We Call Them Fishers or Fishermen?' *Fish and Fisheries* 18 (1). Blackwell Publishing Ltd: 114–127. doi:10.1111/faf.12130.

Birckmayer, J. D and C. H. Weiss. 2000. Theory-Based Evaluation in Practice: What Do We Learn? *Evaluation Review,* 24(4):407-431.

Britwum, A. O. 2009. The Gendered Dynamics of Production Relations in Ghanaian Coastal Fishing, *Feminist Africa*. Volume 12, Issue 2, Pages 69-8517. https://scholar.google.com/ Accessed on 2021-03-29

Calhoun, S., F. Conway and S. Russell 2016. Acknowledging the Voice of Women: Implications for Fisheries Management and Policy. *Marine Policy* 74 (December). Elsevier Ltd: 292–299. doi:10.1016/j.marpol.2016.04.033.

Chapman, M. 1987. 'Women's Fishing in Oceania'. *Human Ecology* 15 (3). Kluwer Academic Publishers-Plenum Publishers: 267–288. doi:10.1007/BF00888026.

Chen, H. 1994. Theory-driven Evaluation: Needs, Difficulties and Options. *Evaluation Practice*, 15: 79-92.

Cheston, S. and, and L. Kuhn 2002. Empowering Women through Microfinance. *I*n: Harris SD, ed. *Pathways Out of Poverty: Innovations in Microfinance for the Poorest Families.* Bloomfield, Conn: Kumarian Press; 2002:167–228.

CIA 2020. 'The World Fact Book'. *https://www.cia.gov/the-world-factbook/countries/togo/*. CIA.org. Accessed on 14 January 2021.

Connell, J. P., A. C. Kublsch, L. B. Schorr, C. H. Weiss, ed(s). 1995. *New Approaches to Evaluating Community Initiatives: Concepts, Methods and Contexts*. Washington DC: Aspen Institute.

de Graaf G. and L. Garibaldi 2014. *The Value of African Fisheries*. Vol. FAO Fisher. FAO Fisheries and Aquaculture Circular No. 1093. http://www.fao.org/

DFA 2019a. Fisheries Performance Report. DFA, Lome, Togo.

DFA 2019b. Chaîne de Valeur Des Petits Pélagiques : Anchois (Engraulis Encrasicolus), Sardinelle (Sardinella Aurita) et Hareng (Sardinella Maderensis) Sur Le Littoral Togolais. DFA, Lome, Togo.

DFA 2020. Togo Fisheries Background. DFA, Lome, Togo.

DGSCN 2010. 'Togo Population and Housing Census 2010'. DGSCN, Lome, Togo. http://ghdx.healthdata.org/organizations/directorate-general-statistics-and-national-accounts-togo.

Du, M. L. 2018. Policy Briefing 173 Gender and Small-Scale Fisheries in Africa. Accessed on April 7th, 2021. https://media.africaportal.org/documents/saia_spb_173_du-preez_20180601.pdf.

Ellis, E. D. Parkingson and A. Wadia. 2011. Making Connections: Using a Theory of Change to Develop Planning and Evaluation. London: Charities Evaluation Services. https://www.salfordsocialvalue.org.uk/wp-

FAO. 1995. Code of Conduct for Responsible Fisheries Rome, FAO. 1995. 41 p.

FAO. 2015. Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. 2015. FAO, Rome.

FAO 2002. Report of the Pre-Survey Meeting to Plan the Year 2000 Survey with the R/V DR. FRIDTJOF NANSEN in the Western Gulf of Guinea. Rome, Italy. http://www.fao.org/3/Y2986B/y2986b01.htm.

FAO 2007. 'Togolese Republic Country Profiles of Fisheries and Aquaculture', 34. Lome, Togo. http://www.fao.org/tempref/FI/DOCUMENT/fcp/fr/FI_CP_TG.pdf.

FAO 2017. *Towards Gender-Equitable Small-Scale Fisheries. Proceedings of the Expert Workshop on Gender-Equitable Small-Scale Fisheries in the Context of the Implementation of the SSF Guidelines, 28–30 November 2016,*. No. 54. Rome, Italy. doi:ISBN 978-92-5-109688-8.

FAO 2019. 'Country Profiles of Fisheries and Aquaculture Togolese Republic'. Lome, Togo. http://www.fao.org/fishery/facp/TGO/fr.

Frangoudes, K., S. Gerrard and D. Kleiber 2019. 'Situated Transformations of Women and Gender Relations in Small-Scale Fisheries and Communities in a Globalized World'. *Maritime Studies*. doi:10.1007/s40152-019-00159-w.

Franz, N., H. Smith, and L. Westlund 2019. *Towards the Implementation of the SSF Guidelines in West and Central Africa No. 62.* No. 62. Rome, FAO. doi:978-92-5-131452-4.

Gereffi, G. 1994, "The Organization of Buyer-Driven Global Commodity Chains: How U. S. Retailers Shape Overseas Production Networks". In *Commodity Chains and Global Capitalism*, ed. G. Gereffi and M. Korzeniewicz. 1994. London: Praeger.

Gerrard, S. 2018. 'A Book-Essay and Reflections on Margaret Willson's Book: Seawomen of Iceland: Survival on the Edge'. *Maritime Studies* 17 (2). doi:10.1007/s40152-018-0103-y.

Gopal, N., H.M. Hapke, K. Kusakabe, S. Rajaratnam and M.J. Williams 2020. 'Gender, Technology and Development Expanding the Horizons for Women in Fisheries and Aquaculture'. doi:10.1080/09718524.2020.1736353.

Harper, S., C. Grubb, M. Stiles and U. R. Sumaila 2017. 'Contributions by Women to Fisheries Economies: Insights from Five Maritime Countries'. *Coastal Management* 45 (2). doi:10.1080/08920753.2017.1278143.

Harper, S., D. Zeller, M. Hauzer, D. Pauly and U.R. Sumaila 2013. 'Women and Fisheries: Contribution to Food Security and Local Economies'. *Marine Policy* 39 (1). doi:10.1016/j.marpol.2012.10.018.

Harper, S., M. Adshade, V. Lam, D. Pauly and U.R. Sumaila 2020. 'Valuing Invisible Catches: Estimating the Global Contribution by Women to Small-Scale Marine Capture Fisheries Production'. *PLoS ONE* 15 (3). doi:10.1371/journal.pone.0228912.

Harper, S. J. 2019. The Contribution by Women to Fisheries Economies Worldwide. PhD. Thesis University of British Columbia. https://open.library.ubc.ca/cIRcle/collections/ubctheses/24/items/1.0378694. Last Accessed 10th May 2021.

Harries E., L. Hodgson and J. Noble 2014. 'Creating Your Theory of Change: NPC's Practical Guide'. https://www.thinknpc.org/wp-content/uploads/2018/07/Creating-your-theory-of-change1.pdf.

Harris, L. M. 2006. 'Irrigation, Gender, and Social Geographies of the Changing Waterscapes of Southeastern Anatolia'. *Environment and Planning D: Society and Space* 24 (2). SAGE PublicationsSage UK: London, England: 187–213. doi:10.1068/d03k.

Hobley, M. and D. Shields 2000. *The Reality of Trying to Transform Structures and Processes: Forestry in Rural Livelihoods*. www.livelihoods.org.

INSEED 2015. 'National Institute of Statistics and Economic and Demographic Studies INSEED (2015)', Lome, Togo.

ITC Trade Map, Togo 2018. 'Trade Map Trade Statistics for International Business Development Monthly, Quarterly and Yearly Trade Data. Import & Export Values, Volumes, Growth Rates, Market Shares, Etc.' Accessed on 27th November, 2020. https://www.trademap.org/Product_SelCountry_TS.aspx?nvpm.

Jentoft, S. and R. Chuenpagdee 2019. 'The Quest for Transdisciplinarity in Small-Scale Fisheries Governance'. In , 3–14. doi:10.1007/978-3-319-94938-3_1.

Kaplinsky R. (2000), Globalisation and Inequalities: What Can Be Learned from Value Chain Analysis?". *Journal of Development Studies*, 37(2): 117-146.

Kaplinsky, R. and M. Morris. 2001. A Handbook for Value Chain Research. Ottawa: International Development Research Centre.

Kaplinsky, R and M. Morris. 2008. 'Value Chain Analysis: A Tool for Enhancing Export Supply Policies.' *International Journal of Technological Learning, Innovation and Development*, 1(3): doi:10.1504/IJTLID.2008.019975.

Kleiber, D., L. Harris and A. Vincent 2015. 'Gender and Small-Scale Fisheries: A Case for Counting Women and Beyond'. *Fish and Fisheries*. doi:10.1111/faf.12075.

Kooiman, J. 2008. 'Exploring the Concept of Governability.' *Journal of Comparative Policy Analysis* 10 (2): 171–190. https://doi.org/10.1080/13876980802028107.

Koralagama,D., J.Gupta, N. Pouw 2017. Inclusive development from a gender perspective in small scale fisheries. *Current Opinion in Environmental Sustainability* 24:1-6. ISSN 1877-3435. https://doi.org/10.1016/j.cosust.2016.09.002.

Koranteng, K., P. Ofori-Danson and M. Entsua-Mensah 2000. Fish and Fisheries of the Muni Lagoon in Ghana, West Africa. *Biodiversity and Conservation*. Vol. 9.

Kwena, Z. A., E. Bukusi, E. Omondi, M. Ng'Ayo, and K. Holmes 2012. 'Transactional Sex in the Fishing Communities along Lake Victoria, Kenya: A Catalyst for the Spread of HIV'. *African Journal of AIDS Research* 11 (1). Taylor & Francis Group : 9–15. doi:10.2989/16085906.2012.671267.

Lam, M. E. 2012. Of Fish and Fishermen: Shifting Societal Baselines to Reduce Environmental Harm in Fisheries. *Ecology and Society* 17(4): 18. http://dx.doi.org/10.5751/ES-05113-170418

Lentisco and Lee 2015. A Review of Women Access to Fish in Small-Scale Fisheries. Food and Agriculture Organisation (2015). Fisheries and Aquaculture Circular No. 1098.

Lwenya, C. and E. Yongo 2012. 'The Fisherman's Wife: Vulnerabilities and Strategies in the Local Economy; The Case of Lake Victoria, Kenya'. *Signs* 37 (3). University of Chicago PressChicago, IL: 566–573. doi:10.1086/662703.

Maschner, H., M. Betts, J. Cornell, J. Dunne, B. Finney and N. Huntly 2010. An Introduction to the Biocomplexity of Sanak Island, Western Gulf of Alaska 1. *Alaska Journal of Anthropology*. Vol. 7. Pacific Science.

Mutimukuru-Maravanyika, T., D. J. Mills, C. Asare, and G. A. Asiedu 2017. 'Enhancing Women's Participation in Decision-Making in Artisanal Fisheries in the Anlo Beach Fishing Community, Ghana'. *Water Resources and Rural Development* 10 (December). Elsevier B.V.: 58–75. doi:10.1016/j.wrr.2016.04.001.

Nayak, N. and C. Quist 2000. 'Gender, Globalisation and Fisheries: The Indian Response. Gender, Globalization and Fisheries Workshop.' *6-12 May 2000, St. John's NF.* http://www.genderaquafish.org/wp-content/uploads/2019/01/Special-workshop-IV_Nalini-Cornelie.pdf.

NDP 2018. 'Togo National Development Plan (NDP) 2018-2022', 160. Lome, Togo. https://www.republiquetogolaise.com/pnd.

Olapade O. J. and F. D. Sesay 2019. 'Women Involvement in the Fishery Activities of Two Coastal Communities in Sierra Leone'. *African Journal of Agricultural Research* 14 (5). Academic Journals: 279–286. doi:10.5897/ajar2018.13574.

Overå, R. 1993. Wives and traders: women's careers in Ghanaian canoe fisheries. *Maritime Anthropological Studies,* (6):110–135.

Overa˚, R. 1998. Partners and Competitors: Gendered Entrepreneurship in Ghanaian Canoe Fisheries. Unpublished PhD Thesis, University of Bergen, Norway

Drucker, P.F. 1954. *The Practice of Management*. https://www.goodreads.com/

PNIASA 2015. Programme National d'Investissement Agricole et de Sécurité Alimentaire 2015: Plan d'investissement 2010-2015. Lome, Togo.

Porter M. E. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. New. York: The Free Press.

Porter, M. 2014. 'What Does Feminist Methodology Contribute to Gender and Fisheries Science?'

Prinsen, G and S. Nijhof. 2015. Between Logframe and Theory of Change: Reviewing Debates and a Practical Experience. *Development in Practice*, 25(2):234-246.

QUIBB 2015. 'Questionnaire Unifié Des Indicateurs de Base Du Bien-Être.' Lome, Togo.

Rajala, E. I. Vogel, A. Sundin, D. Kongmanila, M. G. Nassuna-Musoke, R. Musundire, M. N. Mulangala, L. Chiwona-Karltun, U. Magnusson and S. Bo qvist. 2021. How can agricultural research translation projects targeting small holder production systems be strengthened by using Theory of Change? *Glob al Food Security* 28.
https://doi.org/10.1016/j.gfs.2020.100475

Robson, C. (2002). *Real world research: a resource for social scientists and practitioner-researcher*. 2nd Edition. Oxford, United Kingdom: Blackwell Pub lishing.

Robson, C and McCartan, K. 2016. *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*. 4th Edition. Chichester, United Kingdom: Willey.

RGPH4 2010. 'The Large Agglomeration of Lomé Refers to the Municipality of Lomé and the Urban Part of the Prefecture of the Gulf'. file:///C:/Users/djato/Downloads/RGPH4 2010_Résultats définitifs.pdf. Lome, Togo.

Soejima, K. and K. Frangoudes 2019. 'Fisheries Women Groups in Japan: A Shift from Well-Being to Entrepreneurship'. *Maritime Studies* 18 (3). doi:10.1007/s40152-019-00160-3.

Taplin, D. H and H. Clark. 2012. Theory of Change Basics: A Primer on Theory of Change.
https://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/ToCBasics.pdf.Last Accessed 4th April 2021.

The Conservation. 2021. Women are a mainstay of fishing in West Africa. But they get a raw deal. https://theconversation.com/women-are-a-mainstay-of-fishing-in-west-africa-but-they-get-a-raw-deal-159283. Last Accessed 5th May 2021.

Teye, B., M. Coleman and D.O. Okyere 2016. Empowering Women through Microfinance in Some Selected Microfinance Institution and Small Scale Business Women in Takoradi Business Area. *Research Journal of Finance and Accounting* Www.Iiste.Org ISSN. Vol. 7. Online. www.iiste.org.

Thorpe, A. D. Whitmarsh R. Sandi, A. Baio, E. Ndomahina, T. Lebbie and R. Curiazi. 2013. Pathways out of poverty: women – the 'forgotten gender' – and the Artisanal Fisheries Sector of Sierra Leone. *African Historical Review*, 45(1):46-61

Thorpe, A., N. Pouw, A. Baio, R. Sandi, E. Ndomahina and T. Lebbie 2014. "Fishing Na Everybody Business": Women Work and Gender Relations in Sierra Leone's Fisheries, *Feminist Economics*, 20(3):53-77

The Word Bank. 2015. 'Gini Index & Income Share (World Bank Estimate) - Togo'. Accessed on 27th November, 2020. https://data.worldbank.org/indicator/.

The World Bank 2021. 'Togo - Access To Electricity (% Of Population)'. Accessed on 27th November, 2020. https://data.worldbank.org/indicator/.

Togo Artisanal Maritime Fisheries Frame survey 2014. 'WAEMU'. Lome, Togo. http://atlas.statpeche-uemoa.org/atlas_ecpma/DOCS/tog.pdf.

Torell, E., D. Bilecki, A. Owusu, B. Crawford, K. Beran, and K. Kent 2019. 'Assessing the Impacts of Gender Integration in Ghana's Fisheries Sector'. *Coastal Management* 47 (6): 507–526. doi:10.1080/08920753.2019.1669098.

UN 2015. 'Sustainanble Development Goals (SDG 5): Achieve Gender Equality and Empower All Women and Girls.' *UN Economic and Social Council (2017)*.

Accessed on the 17th March, 2021. https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-5-gender-equality.

UN. 2017. Global indicator framework for the Sustainable Development Goals and targets of the 2030 agenda for Sustainable Development. Annex to Resolution adopted by the General Assembly on 6 July 2017. http://ggim.un.org/meetings/2017-4th_Mtg_IAEG-SDG-NY/documents/A_RES_71_313.pdf Last accessed April 2021.

UNDP 2021. 'Togo- Gross Enrolment to School Ratio'. *Human Development Reports*. Accessed on 27th November, 2021. http://hdr.undp.org/en/countries/profiles/TGO.

UNESCO 2014. United Nations Educational Scientific and Cultural Organosation 2014. Priority Gender Equality Action Plan. Accessed on 7th April, 2021.

UNESCO 2021. United Nation Educational, Scientific and Cultural Organisation 2021. 'Togo - Adult (15+) Literacy Rate 63.7 (%) in 2015'. Accessed on 27th November, 2020. http://uis.unesco.org/en/country/tg.

UNICEF 2017. United Nation International Children Emergency 2017.'Togo-Multi Indicator Cluster Survey'. Accessed on 27th November, 2020.

https://mics-surveys-prod.s3.amazonaws.com/MICS6/West and Central Africa/Togo/2017/Survey findings/Togo 2017 MICS SFR-v2_French.pdf.

Uwe T. 2016. Technical and Socio-Economic Characteristics of Small-Scale Coastal Fishing Communities, and Opportunities for Poverty Alleviation and Empowerment. Circular No. 1111. Rome, Italy. http://www.fao.org/3/i5651e/i5651e.pdf.

Vogel, I., 2012a. Review of the use of 'theory of change' in international development.https://assets.publishing.service.gov.uk/media/57a08a5ded915d3cfd00071a/DFID_ToC_Review_VogelV7.pdf.

Vogel, I., 2012b. ESPA guide to working with theory of change for research projects. Ecosystem Services for Alleviation of Poverty. www.espa.ac.uk/files/espa/ESPATheory-of-Change-Manual-FINAL.pdf. Last accessed April 2021.

Ward, A. and Y. Beyens 2012. Fish Handling, Quality and Processing : Training and Community Trainers Manual. No 001. Rome (Italy). http://www.fao.org/

Wathi 2020. Presentation of the Maritime Region. https://togopolitique.org/presentation-de-la-region-maritime/ . Last accessed April 2021.

Weeratunge, N., C. Béné, R. Siriwardane, C. Anthony, D. Johnson, E. H. Allison, P. K. Nayak, and M. C. Badjeck 2014. 'Small-Scale Fisheries through the Wellbeing Lens'. *Fish and Fisheries* 15 (2). Blackwell Publishing Ltd: 255–279. doi:10.1111/faf.12016.

Weeratunge, N., K. A. Snyder, and C. Poh Sze 2010. 'Gleaner, Fisher, Trader, Processor: Understanding Gendered Employment in Fisheries and Aquaculture'. *Fish and Fisheries* 11 (4). John Wiley & Sons, Ltd: 405–420. doi:10.1111/j.1467-2979.2010.00368.x.

Weiss, C. H. 1972a. *Evaluation Research: Methods for Assessing Program Effectiveness*. New Jersey: Prentice-Hall.

Weiss, C. H. 1972b. ed. *Evaluating Action Programs*. Boston: Allyn and Bacon.

Weiss, C. H. 1993. "Where Politics and Evaluation Research Meet." *Evaluation Practice,* 14(1): 93-106.

Weiss, C. H. 1995. Nothing as Practical as Good Theory: Exploring Theory-Based Evaluation for Comprehensive Community Initiatives for Children and Families. In *New Approaches to Evaluating Community Initiatives: Concepts, Methods and Contexts*, ed. J. P. Connell, A. C. Kublsch, L. B. Schorr, C. H. Weiss. Washington DC: Aspen Institute.

Womack, J. P. and D. T Jones. 1996. *Lean Thinking: Banish Waste and Create*

Wealth in Your Corporation. New York: Simon & Schuster.

WFP 2020. World Food Program 2020. 'Togo Transitional ICSP (January 2018 - June 2019) | World Food Programme'. Accessed on 27th November, 2020. https://www.wfp.org.

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Bibliography

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Candidate for

Masters' of Science Degree

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I received my bachelor degree in Arts, Social Sciences, in 2015 at the University of Lome, in Togo. I am now working towards achieving my Masters' degree, with a keen interest in Women Empowerment for Improved Small-Scale Fisheries in Togo at the World Fisheries University (WFU) Graduate School, Pukyong National University (PKNU), Busan, South Korea. Upon completion I will serve in the fisheries sector.

Appendix: Questionnaires

PUKYONG NATIONAL UNIVERSITY

FAO WFU Graduate School 2020

Field Survey Questionnaire

I. Personal Profile

Name of contact: ----------

Sex: ---------- Age: ---------- Marital Status: ----------

Religion: ---------- Region: ---------- Number of Children: ----------

Tribe: ---------- Duration in Fisheries: ----------

Internal Migration: ---------- External Migration: ----------

II. Participation in Fisheries Value Chain

1. Access Arrangements

A. What is the extent of participation in the Fisheries?

a. Non

b. Are you consulted in any decision making?

c. Are you informed of any activities going on?

d. Full participation in decision making

e. What are the challenges hindering your full participation?

f. Which ways would you suggest to improve your participation in fisheries management decisions?

2. Input Supply:

2.1. What is your ownership % of inputs?

Boats: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

a. Nets: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

b. Engine: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

c. Hook and Line: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

d. Fuel: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

e. Life Jackets: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

f. Bait: Non ☐ 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

2.2. What are the challenges hindering owning and supplying inputs?

g. What ways do you propose to support your ownership of inputs?

3. Harvesting

a. Do you go to fishing? Yes? ☐ or NO? ☐

b. If Yes, what type of fishing activities do you practice?

- Gathering? ☐ - Hook and Line? ☐ - Traps/Pots ☐ Boat and Nets? ☐

c. If not, Why not?

d. Are you willing to participate in fish harvesting using crafts and gears?

e. What are the challenges hindering participation in harvesting using crafts and gears?

f. What ways of improvement do you propose for your empowerment to participate in fishing with crafts and gears?

4. Acquisition of Catch

A. How do you Acquire the products?

a. Buy? ☐ c. Relative? ☐ e. Barter/Exchange? ☐

b. Husband? ☐ d. Loan? ☐ f. Friends? ☐ Others ☐

B. What are the challenges hindering acquisition of products?

C. What ways would you propose to improve your ability to acquire products?

5. Source of Income:

A. How do you get your financial capital to invest into fisheries?

a. Bank? ☐ c. Family? ☐ e. A business? ☐ g. Fishermen? ☐

b. Husband? ☐ d. Relatives? ☐ f. Friends? ☐ h. Others? ☐

B. What are the challenges hindering acquisition of financial resources?

C. What ways would you propose to improve your ability to acquire financial resources? (

6. Handling and Processing

A. Into what form do you process your fish?

a. Fresh ☐ c. Smoked? ☐ e. Sun dried? ☐ f. frozen? ☐

b. Fried? ☐ d. Salted? ☐ g. Others? ☐

B. What are the challenges hindering handling and processing?

C. What ways would you propose to improve handling and processing capabilities and procedures?

7. Marketing

A. What value addition activities do you undertake?

a. i. Non ☐ ii. filleting ☐ iii. Smoke drying ☐ iv. Mincing ☐

b. Fish Cakes ☐ c. Fish flour ☐ Others ☐

B. What % of the product is exported 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

C. What % of product is sold locally 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

D. What is your Profit margin? 25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

E. What are the challenges hindering product marketing?

F. What ways would you propose to improve product marketing?

III. Economic Diversity

A. What other economic activities do you engage in?

a. Petty trading? ☐ c. Credit business? ☐

b. Real Estate? ☐ d. Others? ☐

B. What % of the financial capital was initially obtain from Fisheries

25% ☐ 50% ☐ 75% ☐ 100% ☐ Others ☐

C. What are the challenges hindering economic diversification?

D. What ways would you propose to improve economic diversification?

IV. What else about fisheries do you want to share?