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Case Studies



Lessons and best practices for effective engagement of Women and Youth in Fisheries and Aquaculture value chains -

Policy Orientation Paper on Enhancing PPP in Fisheries and Aquaculture Value Chains.

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I. Introduction and Background

In 2017, Africa produced almost 11.9 million metric tonnes of fish representing 7% of world global production estimated at 173 million metric tonnes. This production includes : 3.0 million metric tonnes from inland fisheries, 2.2 million metric tonnes from aquaculture and 6.7 million metric tonnes from marine capture fisheries (FAO, 2019). Africa, plays an important role in international fish trade in terms of export and import. As a result, the continent contributed at about 3.4 % (USD, 5.0 billion) to the total value of world global fish imports (USD 146.3 billion) and 4.6% (USD 7.2 billion) of global fish exports (USD 156.5 billion). Trade plays a major role in the fishery industry in terms of employment, food supply, income generation and contribution to economic growth and development in many African countries. Domestic and intra-regional trade in fish and fish products (both marine and inland waters) is important with well developed, informal, national and regional trade networks. Many member States still face several constraints in improving their fish trade and marketing sector. The challenges include : lack of limited access to fish marketing information ; limited guidelines on best practices, procedures for trade facilitation ; lack of organized institutions in the small scale fisheries sector and service providers to disseminate information on cross border trade requirements, rights and responsibilities of small scale traders ; weak communication strategy that will promote robust policy responses to fish trade issues and challenges at both Regional Economic Communities (RECs) and Partners States levels ; and also policies dissemination, agreements and protocols to users.

Within this context, the African Union Inter-African Bureau for Animal Resources (AU-IBAR), Policy Framework and Reform Strategy (PFRS) policy objective, relating to the fish trade is aiming at improving the fisheries sector governance for increased sustainable contribution to food security, livelihoods and wealth generation. Also within the framework of the African Union 2063 agenda, the Africa Blue Economy strategy, envisioned an inclusive and sustainable blue economy that significantly contributes to Africa's transformation and growth.

The role of women is crucial in maintaining fish supplies in AU Member States. The fisheries and aquaculture sector employs about 12.3 million people with women constituting 27 % of the total employed. Fishery and aquaculture production activities around the world provide direct employment and revenue to an estimated 155 million people of which half of them are women ; 96% of female employment is in post-harvest activities ; 3.1 % are employed as fishers and 0.7 % are employed in the aquaculture sector. Details by region show important differences and a much higher participation of women in West and Central African fisheries. The total contribution of fisheries and aquaculture to Agriculture Gross Domestic Product (GDP) is estimated at 9.2%

(26.6 billion USD) of which an important share is generated by women. The sector contributes 1.39% to the GDP with 0.63% from fishing and 0.61% from processing, highlighting the importance of the post-harvest sector in which women are the major workforce. Africa is also the 'youngest' continent, with approximately 60 percent of the African population being 35 or younger. Youth account for 60% of all African unemployed. The EU funded fisheries Governance project (Fishgov 2), implemented by AU-IBAR, with support from AUDANEPAD, facilitated the establishment of the African Women Fish Processors and Traders Network (AWFishNet) with the objective to contribute to improving the welfare, working conditions and income of women in the fisheries sector (and especially women in the post-harvest sector) within the African union member states. Follow-up activities have been implemented to strengthen the capacity of AWFishNet members in small-medium enterprises development in the fisheries and aquaculture sector. The Fisheries Governance project also initiated the creation of a web platform for AWFishNet to facilitate communication and dissemination of information among women.

Although gender has been on the international development agenda for a long time, many inequalities remain and the role of women in fisheries and aquaculture is often not documented and hence undervalued. This has led to lost development opportunities and undermines the contribution of the sector to food and nutrition security, poverty eradication, equitable development and the sustainable use of resources. To make gender equality a long-term and bottom-up process, adequate funding is required. While consideration of age is important in gender analysis, youth also needs specific attention as they are disproportionately affected by unemployment and limited access to resources and services. Gender equality and equity are fundamental human rights and at the heart of development. There is a direct link between economic growth, poverty alleviation and gender equality. Thus, if women access the job market, they will not only have a direct impact on their communities but on their nation as a whole.

Problem statement

Women make up over one third of Africa's workforce in fisheries and aquaculture and their contribution to Agriculture GDP, and role post-harvest and capture activities provides a strong case for including a gender perspective. Africa's youth are the continent's future and need to be fully engaged. In fishing and fish farming communities – as elsewhere in the world – youth need to be given appropriate support, education and skills to be able to engage in decent employment and pursue sustainable livelihood options. Statistics on youth employment in fishing and fish farming communities in Africa are generally not available and there is a limited number of youth employment initiatives targeting this sector. Studies initiated on the fish trade, mainly from artisanal fisheries

in Africa, reveal that the value chain of smoked fish contributes significantly to the food and nutritional security of local populations. However, smoking as a fish processing technique poses many problems such as: degradation of mangroves and forests for cutting firewood; important CO₂ emissions (greenhouse gases) and climate impacts; respiratory disorders for smokers.

Unfortunately many young and /or women-led associations or forms of regrouping are still informal, which do not accommodate the requirements of financial institutions or governments that can provide support. Many of these associations do not have business plans that can allow a clear reading of the profitability of companies. Moreover, since 07 July 2019 in Niamey, African Union (AU) member countries have symbolically launched the “operational phase” of the African Continental Free Trade Area (ACTA), functional since January 2021, which must be a step towards “Peace and prosperity in Africa” and become “the largest commercial space in the world”. According to FAO, (2014), a fisheries/aquaculture value chain (VC) consists of the full range of actors from capture/production to consumption and their coordinated value adding activities that transform raw materials into food products. Under these conditions, for AU-IBAR, whose mandate is to support and coordinate the utilization of Livestocks, fisheries, aquaculture and wildlife as resources both for human wellbeing and economic development of its member states, and since all the countries are not at the same level of fish resources endowment and subsequent policies, there is a need to document best practices, lesson learnt as well as PPP policy orientation paper to allow member States to reap the fruits from all these developments and especially in the fisheries and aquaculture value chains.

Methodological approach

To document best practices, lessons learnt and propose PPP policy orientation paper on women and youth engagement in fisheries and aquaculture value chain, both primary and secondary data were used. -Secondary data were collected from desktop work and include all relevant studies and reports, publications related to this topic ; -Primary data were collected from online survey within African member states from Directors of Fisheries and Aquaculture, and RECS to allow : -assessment of existence of national, regional policies related to women and youth in fisheries and aquaculture value chains ; -the existence of special programmes and the level of their implementation ; the existence of PPP policies with regard to the fisheries and aquaculture sector ; -Collection of available documents. The survey was administered under AU-IBAR supervision.

II. Case studies

1.1 Gender Empowerment programmes and initiatives in coastal zone management in West Africa.

The Regional Partnership for Coastal and Marine Conservation (PRCM) is a coalition of actors working on the problems of the West African coastline and covering seven countries: Cape Verde, Gambia, Guinea Conakry, Guinea-Bissau, Mauritania, Senegal and Sierra Leone. The programme was established to curb trends and impacts on the coastal zone resulting from human activities. These include :-Decline / vulnerability of pelagic and demersal resources;- Habitat degradation / destruction of mangroves;- Acceleration of the exploitation of the coastal zone; -Loss of socio-economic options and opportunities ; - Non-optimal use of resources ; -Food insecurity ; -Progressive erosion of profits;-Loss of sources of income (food resources and tourism) ; -Loss of landscape, cultural and heritage values ; -Coastal erosion- Worsening of poverty;-Navigation difficulties. Women were the most affected with Scarcity of fishing products to be processed ; Sale of handicrafts ; -Decrease in seafood harvests (oyster farms) ; -Lower income for women, but above all with greater impacts on households and children. As a result, the programme developed the following activities for women and youth.

1.1.1 Strengthening the technical capacities of women in the conservation of mangroves and the sustainable management of their products;

- Restoration of mangroves and income-generating activities ; • Replanting of mangroves
- Support to the women's group for alternative means of fish smoking ; - Energy charcoal briquette production technique ; Salt production technique by solar evaporation ; -Improvement of oyster farming

1.1.2 Support for the promotion of fishery products for the benefit of young processors (fish deli meats)

- Training of young processors in fish delicy meats and derived products: fish croquettes, fish spread, fish toast, fish sausage, fish nems, fish terrine, leek quiches; • new skills in enhancing the value of fishery products in line with the sustainability of fishery resources.



1.1.3 Installation of fish handling equipment, handling tanks and revolving credits;

Women benefited from equipment and credits :these include -women processors from Téménétaye (Guinea), fishmongers and micro fishmongers (Banjul), and the Dakar central fish market (ASFEM).

- Credits varying between 3 to 4 million CfaF per boat unit were allocated to ease women's access to credit suitable to their activities ;
 - Acquisition of public facilities generating user fees ;-establishment of a stock of basic foodstuffs.
 - Boat acquisition : Equipment of boats to women processors of fish products in Boulbinet and Dubreka (Guinea) to enable them to source fish for the development of their activities. The boats were also used in participatory surveillance.

1.1.4 Support for the establishment of basic social infrastructure and smoking for women

This activity consisted of the building of sanitary blocks for women processors and fishmongers. The

aim was to improve working and living conditions of women in their workplaces. The development of User fees for regular maintenance (self-management).

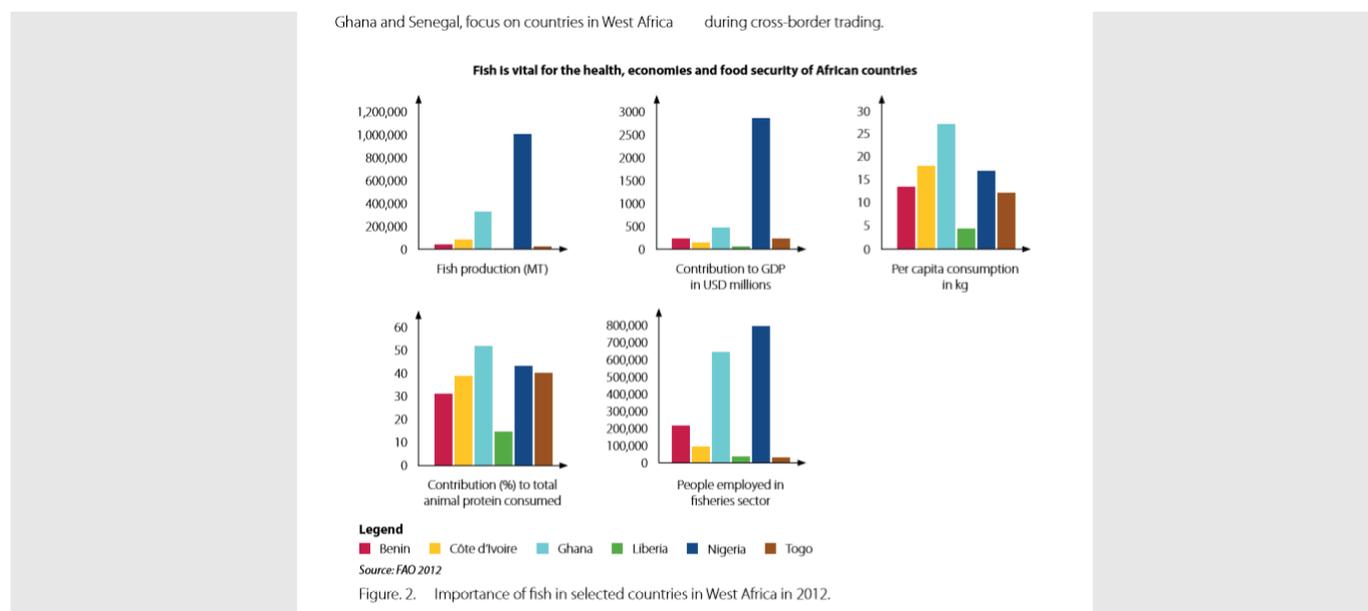
1.1.5 Capacity building for climate change mitigation and adaptation of women processors of fishery products in Cayar (Senegal);

This activity consisted in : the creation of 3 pilot fish basins ; -training of women in fish farming ; initiate fish farming training ; capacity buiding on of Clarias spp artificial reproduction ; -Training in the manufacture of fish feed utilizing local products ; - reforestation of the filao strip ; Women were provided with new fish farming skills.

11.2 The Fisheries committee for Western gulf of Guinea (FCWC) programmes and initiatives aiming at Business skill Development in Fisheries and Aquaculture for women

The FCWC was established by Cotonou Convention in 2007 by six member States under FAO support with the mission to promote cooperation among Member-States and to ensure through appropriate management, the conservation and optimum utilization of living marine resources in the waters under Member States jurisdiction, and encouraging sustainable development of fisheries based on such resources.

1.2.1 Importance of fishing activities in the region



1.2.2 Activities conducted in support of women

1. Connecting with women associations

Organizing Regular meetings with women associations across the region to identify their needs and proffer solution to most of their pressing challenges. These include: -First-hand information from the direct actors;- Good relationship and having joint activities together.

2. Exchange of experience among women

- Exchange of experiences and enhancing networking among women fish processors and traders associations from FCWC member countries.
- Platform for interaction among various Women processors/Associations in the region.
- Workshops of exchange of experience on trade and smoking practices in fishing communities in WA.

3. Way forward

- Improving access and conditions at major fish processing and smoking facilities
 - Promote sanitary conditions and storage facilities
 - Train fishmongers on new improved technology
 - Technical training on the handling, processing and marketing of fish products with a view to improving food security and quality;
 - Improve dialogue between traders and government agents involved in facilitating cross border trade and intense exchange and cooperation between actors to better support each other and build partnership;
 - Provide training, guide fish traders to organize and register their trade organizations;
 - Foster regional cooperation and increase networking among fish trade associations.
- Improve market information
 - Improve the collection and dissemination of trade data on fishery products in the region
 - To organize an exchange study and network program for member's states Association for experience and information sharing.
 - Build a formidable association to strengthen advocacy of women in the fisheries value chain.
 - Improve and facilitate smooth entry and exit at border checkpoints.

11.3 Technologies for African Agricultural Transformation (TAAT) capacity building for trainer of trainers on fish product diversification in Ghana.

The Council for Scientific and Industrial Research – Food Research Institute (CSIR-FRI) in collaboration with the Ministry of Fisheries and Aquaculture Development and the Fisheries Commission organized and conducted training for selected small-scale women fish processors in Ghana as part of the Technologies for African Agricultural Transformation (TAAT) programme in support of the Feed Africa Programme. TAAT is funded by the African Development Bank and is being implemented in Ghana by the Fisheries Commission in collaboration with WorldFish. This training workshop was organized between 6th and 10th July 2020 at the CSIR-FRI to demonstrate and promote technologies envisaged through the implementation of the TAAT Aquaculture

Component, that is, improved post-harvest technologies, product development and diversification. Training topics for the workshop include Fish processes, Post-harvest utilization of fish, Hygienic fishing practices, Fish selling, Fish processing methods, Equipment needs, Food safety and hygiene, Value addition and Value added fish products. Traditional fish processing involves smoking, salting, drying, freezing, icing and cold storage. The processing method and type of fish determines the price of fish e.g. salted tilapia ('koobi') and grilled tilapia. The fish and ice must be arranged in a ratio of 1kg of ice to 2kg of fish so as to prevent spoilage. Fish spoils quickly within 12 hours after harvest due to high temperatures. Proper hygiene must be ensured to prevent fish contamination. Contamination can come from people, soil, dust, sewage, surface water, manure or spoiled foods. Advantages and disadvantages of traditional processing methods are described below:

1. Salting: an inexpensive method when salt is cheap and its storage can be at room temperature. Also its quality and nutritional value are reasonable and longer storage life
2. Drying: inexpensive method, no electricity required, little equipment needed, airtight storage is required, quality and nutritional value are reasonable
3. Smoking: the most common method of fish processing, 80% of fish is consumed smoked. Smoking is inexpensive, little equipment and energy needed but fuel must be available.
4. Fermentation: inexpensive, but the fish taste and odor are radically changed. Storage life varies depending on the product.
5. Canning: Fairly expensive method. Labor intensive and requires plenty of energy, water and equipment such as tins or jars with lids, sterilizers and canning machines. Packaging is expensive. Storage is easy and possible for long periods
6. Cooling and Freezing: Very expensive method, involves high use of energy and large investments in equipment.

In terms of fish trade, fish could be sold as a fresh commodity, semi-processed or processed product. Fish selling could be conducted as a small-scale activity such as the type of selling that is normally done by women fishmongers at the landing beaches or small fish markets, medium- or large-scale activity in an auction house. This means that fish selling can occur at different levels with associated political, economic, sociological (sourcing and customer care), technological (cleaning, preservation and packaging), legal (Metropolitan Authority, Food and Drugs Authority, Ghana Standards Authority) and environmental (good hygienic practices) dimensions. Poor hygienic practices along fish value chains occur as a result of the irresponsible behavior and attitude exhibited by beneficiaries (fisher-folk, processors, transporters and fish traders/retailers) in their workplace. Good hygienic practices come about as a result of the good behavior and desired attitudes displayed by the practitioners. The causes of poor sanitation practices associated with fish selling include fish that are sold in dirty places, pets that are kept on the market, improper use

of toilet facilities, poor solid and liquid waste management, storing of fish in dirty places, flies on improperly covered fish, and selling fish in areas that are full of litter or rubbish dump.

The consequences of poor sanitation conditions when selling fish may lead to the spread of high risk diseases and health issues such as chronic diarrhea, intestinal worms, bilharzia, hepatitis and scabies. In order to ensure best fish selling practices, fish processors and traders must clean and sell the good parts of fish that are desirable, practice first-in-first-out system of trade, sell or display fish products on clean tables, arrange fish with bellies down to allow melting ice to drain away from the fish in order to reduce the chances of spoilage.

II Best practices and lessons learnt

To improve the socio-economic benefits derived from the fisheries and Aquaculture sector, the African Union has developed a Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS) and identified among others, policy arenas on strengthening the role of women and youth in fisheries and aquaculture. This led to the establishment of The African Women Fish Processors and Traders Network (AWFISHNET) in 2016 in Tanzania, facilitated by AU-IBAR, with the objective to contribute to improving the welfare, working conditions and income of women in the fisheries sector (and especially women in the post-harvest sector) within the member states of the African Union. Despite this network and various combined efforts, women and youth continue to face some challenges along the fisheries and aquaculture value chain. These include:

- Poor level of structuration and organization of women into formal, legally recognized entities such as SMEs;
 - Difficulty to access to credit for financing their activities;
 - Poor fish processing techniques leading to Hazardous, unhealthy and unfair working conditions;
 - Low level of literacy;
 - The multiplication of barriers (taxes, taxes etc.) to the marketing;
 - In the fishing industry, women are poorly represented in decision making spaces and management positions:
 - Poor road infrastructures linking production sites to markets does not favor the distribution of national production;
 - Poor landing and storage infrastructure;
- Poor data on women and youth involved in the fisheries aquaculture value chain;
- Non-popularization of new processing techniques such as FTT (The FAO-Thiaroye Technique which is a new fish smoking technology pioneered by FAO and has greatly enhanced fish operators' livelihoods. The existing and traditional fish smoking involves substantial burning of

wood as well as environmental pollution and has negative food safety impact), gas and solar energy;

- Lack of capacity building in training on networking, lobbying, new information and communication techniques to reinvigorate the network and cooperative societies. This part examines some best practices in the fisheries and aquaculture value chain.

II.1 Opportunities and mechanisms for enhancing capacity of women for effective participation in small-medium size enterprises development in fisheries and aquaculture value chain

Studies initiated on the fish trade, mainly from artisanal fisheries in Africa, revealed that the value chain of smoked fish contributes significantly to the food and nutritional security of local populations. However, smoking as a fish processing technique poses many problems such as: -degradation of mangroves and forests for cutting firewood; -important CO₂ emissions (greenhouse gases) and climate impacts; - respiratory disorders for smokers. Trade allows the meeting between sellers and buyers. If at the national level, the trade procedures are simple, at the regional level, several actors intervene including the customs, making complex the free movement of goods and services. To improve the framework of trade, the OHADA (ORGANIZATION FOR THE HARMONIZATION OF BUSINESS LAW IN AFRICA) adopted on January 30, 2014, the Uniform Act which regulates the various forms of commercial companies: general partnership (SNC), limited partnership (SCS), society with responsibilities limited company (SARL), public limited company (SA), joint-stock company, de facto company, economic interest group (GIE) and, major innovation, simplified joint stock company (SAS). It must be noted, however, that many women-led associations or forms of regrouping are still informal and which do not accommodate the requirements of financial institutions that can provide support. Many of these associations do not have business plans that can allow a clear reading of the profitability of companies in creation or developer. Moreover, since Sunday 07 July 2019 in Niamey, African Union (AU) member countries have symbolically launched the “operational phase” of the African Continental Free Trade Area (ACFTA), which must be a step towards “Peace and prosperity in Africa” and become “the largest commercial space in the world”. To fully benefit from opportunities in the fisheries and aquaculture value chain, for youth and women there is a need both for governments, NGOs to engage these groups in structuring into OHADA uniform act (Annex 2).

II.2 Enhancing Knowledge amongst women on the best practices for fish processing technologies, trade and market development

II.2.1 fish processing technologies

For many decades, fish smoking has been the sole technology for fish processing both among

women and youth, using rudimentary equipments, leading to huge consumption of firewoods, health problems, etc.

II.2.1.1 Curing technologies

I. Types of smoked fish

- **Smoked Fish** - prepared from fish that has undergone a hot or cold smoking process. Smoked fish is kept refrigerated or frozen to assure product quality and safety



- **Smoke-flavoured** - Prepared from fish that has been treated with smoke flavours, without undergoing a smoking process. The smoke flavour is applied by any technology (e.g. dipping, spraying, injecting, soaking). It is kept refrigerated or frozen to assure product quality and safety
- **Smoke-dried Fish** - combined smoking and drying steps to such an extent that the final product can be stored and transported without refrigeration and to achieve a water activity of 0.75 or less (10% moisture content or less), as necessary to control bacterial pathogens and fungal spoilage. Typically kept at ambient temperature.

2. Salting methodologies of fish

- Dry Salting (kench curing) is the process of mixing fish with suitable food grade salt and stacking the fish in such a manner that the excess of the resulting brine drains away.



Hot air circulating commercial dried, salted smoke fish drying machine.



Front Controller Electric Smoker with window and RF Controller, 30-Inch

- Brine Injection is the process for directly injecting brine into the fish flesh and is permitted as a part of the heavy salting process
- Wet Salting (pickling) is the process whereby fish is mixed with suitable food grade salt and stored in watertight containers under the resultant brine (pickle) which forms by solution of salt in the water extracted from the fish tissue. Brine may be added to the container. The fish is subsequently removed from the container and stacked so that the brine drains away. The market recognizes salted fish under HS code 03056.

3. Drying methodologies of fish

- Natural Drying - the fish is dried by exposure to the open air
- Artificial Drying - the fish is dried in mechanically circulated air, the temperature and humidity are controlled.



Fish brine injector machine/automatic injection machine for fish/fish salting machine.

- Dry Salting (kench curing) is the process of mixing fish with suitable food grade salt and stacking the fish in such a manner that the excess of the resulting brine drains away.
- Freeze drying. The market recognizes dried fish under HS code 03055.

4. Chilling and freezing technologies.

- Freezing of Fishes/Coding; -Packing and storage;-Freezing of fish;-Freezing of prawns (shrimps); -Freezing of lobsters, lobster meat;-Freezing of crab meat ; -Freezing of cuttlefish and squid; -Methods of fish thawing.



Solar fish dryer/solar drying machine



Fish drying and smoking kiln made in Nigeria.

5. Fish product development for value addition

- Value addition - Market-driven/Values-driven /Health-driven/Resource-driven/Technology-driven. Final Fish products: Traditional-Finfish, or parts of finfish, are typically presented physically for marketing in one of the following forms:



Small fish freezer



60C super freezer for tuna, deep ocean fish 208L ultra cold freezer for sashimi storage



Drawn fish: A whole fish which has been eviscerated, that is, had its internal organs removed



Pan dressed fish: A dressed fish which has had its head, tail, and fins removed, so it will fit in a pan.



The "fleshy sides of the fish, cut lengthwise from the fish along the backbone. They are usually boneless, although in some fish, small bones called "pins" may be present. Skin may be present on one side too.



Fish steak : Large dressed fish can be cut into cross section slices, usually half to one inch thick, and usually with a cross section of the backbone

Cooked or dressed fish



Fish steaks or fish fingers Pieces of fish cut from blocks of frozen fillets into portions at least 3/8-inch thick. Sticks are available in fried form ready to heat or frozen raw, coated with batter and breaded, ready to be cooked.



Fish cake: Prepared from flaked fish, potatoes, and seasonings, and shaped into cakes, kebab, balls, burgers, coated with batter, breaded, and then packaged and frozen, ready-to-be-cooked.



Fish sausage



Fig.Fish crackers: These are deep fried crackers made from fish and spices. Ingredients include: Tapioca flour and/or sago flour; Salt; Sugar, MSG as seasonings.

III. Lessons learnt: Results from the online survey

After almost 53 questionnaires admonished, only three countries responded; these include Ghana, Niger and Malawi. Findings of the study indicate that: apart from Ghana, fishing and aquaculture activities are not located in a specific ministry of Fisheries and Aquaculture. This situation will impact in terms of policy and budget allocations on fisheries activities. Nonetheless the three countries have carried out specific programmes dedicated to women and youth: Small-scale Fisheries Project with support from FAO and Sustainable Fisheries, Aquaculture Development and Watershed Management Project by AfDB, since 2020, in the case of Tanzania, Aquaculture PPP in the case of Niger.

The technologies above show that knowledge exist ,but there is poor dissemination of technologies among women and youth and thus the need of policies, mass training centers to engage more young and women.

III.1 The PPP and policy orientation paper

III.1.1 The PPP in eastern African countries and Nigeria

Case of a project in four East African countries – Burundi, Kenya, Rwanda and Uganda – focusing on youth and their agribusinesses.

With few opportunities for formal employment in manufacturing and services, agribusinesses offer young people the opportunity to earn income in rural areas. One institutional innovation that enables young people to mitigate financial and knowledge handicaps is contract farming. By supplying their produce to a third party (such as an agri-processor or retail outlet), which in return guarantees markets and often inputs, young workers are able to access credit, markets and technology. This can be a “win-win” solution because young workers gain access to markets, while the private company has access to produce without having to either acquire land or supervise labour. Fiscally constrained governments also benefit because private sector involvement obviates expenditure and reduces risks, and may also provide expertise unavailable in the public sector. In Kenya and Uganda where the focus was on fish farming, raising finfish in cages and selling fingerlings, partnering with private companies enabled young people to obtain business and technical knowledge in addition to a market for their produce.

In the case of Nigeria, AGRIC-YES (Agriculture Youth Empowerment Scheme) is a PPP between the Lagos state government and the Israeli company Dizengoff. The overall aim is to encourage

a new generation of agro-entrepreneurs. The government's role is to fund the scheme, while the Israeli company manages the food production and processing facilities for the government. The agreement was formalized as a joint-venture partnership that targeted young graduate farmers as beneficiaries. Dizengoff is paid a management fee by the government and returns modest profits. A management service arrangement obliges Dizengoff to set up training, food production and processing facilities, supporting young agro-entrepreneurs for six months.

The PPP aims to tackle the major challenges facing young people in agriculture. Access to land is provided, thereby obviating a critical constraint for young people. A major obstacle to commercial farming is credit on manageable terms, and this was organized after the Lagos state government initiated long-term investment credit agreements with the Central Bank of Nigeria for agricultural development in the state. Another constraint is training, and the PPP ensured that students received up-to date guidance in farm management. With these tools, the students were encouraged to continue in agriculture, providing an example to other young people.

III.2 Policy orientation paper on Public-Private-Partnerships (PPP).

III.2.1 Definition and aim

As defined by the Canadian Council for Public-Private Partnerships, a PPP is “a cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs for services or infrastructure through the transfer between partners of resources, risks and rewards.” In this definition, two essential elements can be highlighted :- the arrangement to provide public services and that partners share risk.

The aim of PPPs is to structure the relationship between the public and private sectors to serve these two purposes: to allocate the risks to those best able to manage them and to add value to public services by using private sector skills and competencies. Importantly, PPPs are not incentives or subsidies given by the public sector to attract private investments. The most common goal for PPPs is to improve supply chain management and food safety to increase access to national and international markets.

In Africa, all the countries though similar issues on feeding and poverty alleviation in fisheries and aquaculture value chains are not at the same level of endowment in fishery resources, thus policies may vary from one country or another. But in general, the private sector demand and the structure of development assistance programs for developing countries are the main drivers for setting up PPP arrangements to support fisheries and aquaculture.

III.2.2 Opportunities to support the use of PPP in fisheries and Aquaculture

Enhancing access to national and international markets, Small and medium-sized enterprises often have limited contacts with the larger international food supply and marketing system. They need support to enter these global supply chains in terms of competitor analysis, export regulations, customs arrangements and logistics infrastructure.

Improving food safety and quality, Helping small-scale fishers and fish farmers to meet production standards and operating certification, as well as auditing or traceability requirements, may all be done more efficiently by the private sector with oversight and regulation by government partners. In the case of Cameroon, the shrimp market collapsed due to these sanitary barriers with the ban to exports to EU countries.

Improving sector-specific infrastructure services. In fisheries and aquaculture, the main infrastructural needs are improvements in seed-dissemination systems, feed production and supply networks, and the postharvest handling and transportation of products from fisheries and fish farms to processors or markets. Poor road infrastructure constitute also an hinderance to the smooth distribution of fish products.

Financial services, The lack of access to credit remains a problem for many small-scale enterprises, even medium size enterprises in the fisheries and aquaculture sector. Financial institutions find it risky to open loans scheme to the enterprises.

Improving physical and technical infrastructure. Building and managing infrastructure such as roads, power supplies, or potable or irrigation water systems are typical fields for public-private collaboration.

Improving information and communication. Market information systems, transaction platforms and information service provision are possible fields for PPP, as access to timely and reliable market information is increasingly important for small-scale entrepreneurs and fishers' and farmers' associations.

Improving capacity building and extension services ; Technology development and research. As mentioned above depending on the size of the fishery and aquaculture and problems encountered by the private sector and especially the youth, these PPP among others solutions can be used.

II.2.3 How to set up business-related PPPs

Though a key to PPP success is a real political will, commitment and a competent central government

PPP unit, the fundamental questions to ask of any PPP, relate to various partners' motivations, goals, expectations and appetite for risk. These include the followings :

- Is the proposed project economically viable?
- Will the project satisfy a significant public service need? -Is the project scale achievable by the partners?
- Are the financial contributions from each partner balanced?
- Will the project allow an effective allocation of risk to each partner?
- Can the project boundaries be clearly defined?
- Will the project guarantee measurable service improvement for customers?

Conclusion

This document has examined both case studies, best practices and lessons learnt in the involvement of women and youth in the fisheries and aquaculture value chains. Findings confirm evidence that, though women and youth operate in that sector, activities are most of the conducted informally. In so doing these two groups are already vulnerable in terms of lack of proper land to benefit from opportunities offered by partners and governments. They also face challenges such as lack of funding scheme to support their initiatives due to poor organization of SMEs. Since the end result of fisheries and aquaculture is trade, there is a need for joint effort to upgrade these two groups. PPP constitute opportunities among other to support them as examined in the policy orientation paper.

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Annex 1: Online Survey

I. Online survey.

AU-IBAR has hired the services of a Consultant to conduct case studies, document lessons and best practices as knowledge products to support evidence based inter and intra-regional fish trade development in Africa ; consolidating mechanisms to enhance the capacity of and empower women and youth for effective and productive engagement along fisheries and aquaculture value chains. AU-IBAR will be grateful if you would kindly answer the following questions online within 72 hours.

Country :.....; Name of the RECs

- Are you member of a regional Fisheries organization ?...Yes.....No..... ; name of the RFO ?..... ;
- Are you aware of the AU-IBAR Policy framework and reform Strategy for fisheries and aquaculture (PFRS) ?..... ;
- Are your national and / or regional fisheries policies aligned to the PFRS ?.....
- In your country, is there a Ministry of Fisheries and Aquaculture ?.....or under which institution are managed fisheries and aquaculture activities ?.....
- Are there specific programmes dedicated to women and youth in fisheries and Aquaculture sector or value chain ?.....
- How long have these programmes been operational ?.....Is there any partnership with international funding or organization ?.....Can you say more about it ?.....
- How many women and youth are involved ?.....
- What kind of support have they benefited from ?.....In kind.....or money ?.....Technical assistance ?.....
- What kind of target group can or have benefited from these support ? please indicate the social structure or status ?Association ?..... SMEs.....Cooperatives ?.....-If there are some success stories, would you please attach the reports ?.....
- Public-Private-Partnership (PPP) is one way of boosting private initiatives for economic development : are there any experience of operational PPP in the fisheries and aquaculture sector in your country ?
- Is it operational or for how long has it been operating ?What is the aim or policy behind this PPP in your country ?.....

- Please attach any supporting document.

Thanks for your cooperation.

Sondage en ligne.

L'UA-BIRA a embauché les services d'un consultant pour mener des études de cas, documenter les leçons et les meilleures pratiques en tant que supports de connaissances pour soutenir le développement du commerce du poisson inter et intra-régional basé sur des évidences en Afrique; consolider les mécanismes pour renforcer la capacité et l'autonomisation des femmes et des jeunes pour un engagement efficace et productif le long des chaînes de valeur dans la pêche et l'aquaculture. L'UA-BIRA vous serait reconnaissant de bien vouloir répondre en ligne dans les 72 heures aux questions suivantes.

Pays :; Nom de la CER

- Etes-vous membre d'une organisation régionale de gestion des pêches? ... Oui Non; nom de l'ORP?
- Connaissez-vous le cadre de politique et la stratégie de réforme pour la pêche et l'aquaculture (PFRS) de l'UA-BIRA ?.....;
- Vos politiques nationales et / ou régionales de la pêche sont-elles alignées sur le PFRS?
- Dans votre pays, existe-t-il un ministère de la pêche et de l'aquaculture? ou sous quelle institution sont activités de pêche et d'aquaculture gérées?
- Existe-t-il des programmes spécifiques dédiés aux femmes et aux jeunes dans le secteur ou la chaîne de valeur de la pêche et de l'aquaculture?
- Depuis combien de temps ces programmes sont-ils opérationnels? Existe-t-il un partenariat avec un financement ou une organisation internationale? Pouvez-vous en dire plus?
- Combien de femmes et de jeunes sont impliqués?
- De quel type de soutien ont-ils bénéficié? En natureou de l'argent?Assistance technique ?.....
- Quel type de groupe cible peut-il ou a-t-il pu bénéficier de ce soutien?Veuillez indiquer la structure ou le statut social?Association? PMECoopératives?- S'il y a des exemples de réussite, pourriez-vous s'il vous plaît joindre les rapports?
- Le partenariat public-privé (PPP) est un moyen de dynamiser les initiatives privées de développement économique: existe-t-il une expérience de PPP opérationnel dans le secteur de la pêche et de l'aquaculture dans votre pays?

- Est-il opérationnel ou depuis combien de temps fonctionne-t-il?
 Quel est le but ou la politique qui sous-tend ce PPP dans
 votre pays?.....
- Veuillez joindre tout document justificatif.

Merci de votre coopération.

Online Survey

Consolidating Mechanisms to enhance the capacity of and empower Women and Youth along Fisheries & Aquaculture Value Chains

AU-IBAR has hired the services of a Consultant to conduct case studies, document lessons and best practices as knowledge products to support evidence based inter and intra-regional fish trade development in Africa ; consolidating mechanisms to enhance the capacity of and empower women and youth for effective and productive engagement along fisheries and aquaculture value chains. AU-IBAR will be grateful in you would kindly answer the followings questions online within 72 hours.

Country:

Name of the REC:

1. Are you member of a regional Fisheries organization? Yes No.....
 name of the RFO?
2. Are you aware of the AU-IBAR Policy framework and reform Strategy for fisheries and aquaculture (PFRS)? Yes No
3. Are your national and / or regional fisheries policies aligned to the PFRS? partially.....
4. In your country, is there a Ministry of Fisheries and Aquaculture? Yes.....or under which institution are fisheries and aquaculture activities managed? Ministry of Forestry and Natural Resources.....
5. Are there specific programmes dedicated to women and youth in fisheries and aquaculture sector or value chain? Yes, Small-scale Fisheries Project with support from FAO and Sustainable Fisheries, Aquaculture Development and Watershed Management Project by AfDB.....
6. How long have these programmes been operational? Since 2020..... Is there any partnership with international funding or organization? Yes, FAO and AfDB.... Please give us some more information Implementing the Small-Scale Fisheries Guidelines for gender equitable and climate resilient food systems and livelihoods
7. How many women and youth are involved? Over 500 in cooperatives.....

8. What kind of support have they benefited from? In kind Monetary Technical
9. What kind of target group can or have benefited from this support? Women and the youth engaged in fish value chain
10. Please indicate the social structure or status of the target group: -
 - a. Association?
 - b. SMEs Involved in aquaculture and fisheries.....
 - c. Cooperatives Involved in aquaculture and fisheries.....
11. Are there any success stories? Would you please attach the reports? Not yet just started...
12. Public-Private-Partnership (PPP) is one way of boosting private initiatives for economic development: are there any experience of operational PPP in the fisheries and aquaculture sector in your country? NO.....
13. Is it operational or for how long has it been operating?
14. What is the aim or policy behind this PPP in your country?

Please attach any supporting document.

Thank You for your cooperation.

I. Background		
Programme Title:	Climate Change and Agriculture	SO it contributes to: SO1, SO2, SO5 Lead Unit: NFI
Sub-Programme Title	Implementing the Small-Scale Fisheries Guidelines for gender equitable and climate resilient food systems and livelihoods	Collaborating TD/RI: NFIP, NFIM, ESN, CBD
Problems to be addressed [In 2-3 paragraphs, describe key contextual elements, the problem(s) that the Sub-programme will be addressing and the Sub-programme objectives]	<p>Small-scale fisheries are a major source of livelihoods and nutritious food for millions of people. In many least developed countries of Africa and Asia, fish accounts for more than 50 percent of the total animal protein intake. Fish is also a unique source of essential fatty acids, and an important source of micronutrients often deficient in the diets of vulnerable populations. Poverty in small-scale fishing communities is of a multidimensional nature and is not only caused by dwindling fishery resources and low incomes but also due to factors that impede full enjoyment of human rights including civil, political, economic, social and cultural rights. Small-scale fisheries tend to be inadequately addressed, both with regard to resource management and from a broader social and economic development perspective. The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), endorsed by the FAO Committee on Fisheries (COFI) in 2014, were developed to address this situation and the Sub-programme has been designed within this framework.</p>	
	<p>The small-scale fisheries post-harvest subsector constitutes the critical link between producers and consumers, and a well-functioning post-harvest sector is a fundamental part of a sustainable food system. It is key to reducing post-harvest loss, increase value and ensure that safe and nutritious products reach the consumer. In most low-income countries, women predominate the post-harvest sector and play a key role in ensuring that their families and consumers more broadly have access to food, but they face many obstacles and frequently do not have the same rights and opportunities as men. They often have unequal access to productive and energy efficient resources, assets, technology, finance, and services such as education, water and health. Unequal power relations often exist between different actors along the value chain, and as a result, women can be vulnerable to disadvantageous contracts, and unfair conditions and practices with regard to access to raw materials and market access. The compound effect is that women have limited influence over decisions that are critical to their livelihoods and to the way they contribute to food security, nutrition and sustainable food systems. They are also particularly vulnerable to impacts of climate change and natural disasters.</p> <p>The focus of the subprogramme will be to support small-scale fisheries and the implementation of the SSF Guidelines with a particular focus on women, particularly in the post-harvest sector in selected countries in sub-Saharan Africa (in particular Ghana, Namibia, Madagascar, Malawi, Sierra Leone, the United Republic of Tanzania and Uganda) and in Asia (Myanmar and the Philippines). In particular, the following gaps will be addressed:</p>	

	<p>Inadequate recognition and understanding of the importance of small-scale fisheries in livelihoods and food security and nutrition in national policies and programming;</p> <p>Sub-optimal working conditions – particularly for women – and use of unsustainable practices in the post-harvest sector leading both to suboptimal energy efficiency and vulnerability to climate change impacts;</p> <p>Weak participation and representation of small-scale fisheries actors, in particular women, in decision-making on small-scale fisheries governance and development matters;</p> <p>Insufficient sharing of experiences between countries and regions on existing good practices and on results by projects and development initiatives.</p>
<p>I.2 Rationale (Pls provide a compelling but concise justification for the programme. Pls see FMM criteria)</p>	<p>The Sub-programme is designed as a continuation of activities funded by Norway, in particular those started in 2020 under an extension of the project GCP/GLO/645/NOR (amendment No 2) “Enhancing the contribution of small-scale fisheries to food security and sustainable livelihoods through better policies, strategies and initiatives”. It will also build on achievements and ongoing activities under the Sida-funded SSF project “Creating an enabling environment for securing sustainable small-scale fisheries” (GCP/GLO/9765/SWE).</p> <p>The Sub-programme will work to empower small-scale fisheries communities with a view to contribute to more sustainable and climate resilient livelihoods and food systems. It will use an innovative approach to transformative change combining the communication of evidence-based information on the contribution of fish and small-scale fisheries – in particular the post-harvest sector and women actors – to livelihoods and food security and nutrition with capacity building and promotion of best practices, including climate smart solutions and technologies, in particular in the postharvest sector. It will address critical gaps with regard to working conditions, fish loss and waste, poor and lacking infrastructures, deficient social protection systems, insecure access to fish/fishery resources, the need for improved nutrition, in particular among school children, and work to strengthen small-scale fisheries and women representation in decision-making processes. Accordingly, major beneficiary groups will include small-scale fisheries actors, men and women, and their organizations in marine and inland small-scale fisheries, their families and communities – including school children who will benefit from school feeding programmes. The Sub-programme will support national authorities responsible for fisheries and the post-harvest sector in Sub-programme recipient countries and beyond, as well as academia/research and other stakeholders. These stakeholders will be both beneficiaries of training and support and partners in Sub-programme implementation, as appropriate. It also aims to support regional institutional structures both at government and small-scale fisheries actor level with a view to promote their engagement in sustainable livelihoods, food systems and climate resilience action, creating nutritional benefits and improving gender equality more broadly. The Sub-programme will primarily focus on six Low Income Food Deficit (LIFDs) countries in Sub-Saharan Africa: Ghana, Madagascar, Malawi, Sierra Leone, the United Republic of Tanzania and Uganda. In addition, the Sub-programme will build on ongoing activities in support to the small-scale fisheries sector in Namibia and in a limited number of countries in Asia (Myanmar and the Philippines).</p>

With regard to scalability and sustainability of results, the development of Sub-programme activities has been done in close collaboration with country representatives including government officials and representatives of small-scale fisheries actors. This is considered essential for local and national ownership, which will support longer-term results and impact beyond the Sub-programme duration. The Sub-programme will also engage strongly in communicating good practices nationally, regionally and globally. Partnerships with regional and global organizations is part of the Sub-programme design and will be further strengthened during the life of the Sub-programme so that experiences and lessons learned are documented and shared through these networks for up-scaling and replication beyond the Sub-programme's geographical scope. All of these aspects – participation, skills development, local ownership and partnerships – will contribute to the sustainability of Sub-programme impact and form the ingredients of its exit strategy.

The Sub-programme has been designed within the framework of the SSF Guidelines that promote cross-sectoral and integrated work. The SSF Guidelines include a specific thematic chapter on value chains, post-harvest and trade and also on gender equality and disaster risks and climate change, with the latter two also being cross-cutting areas. The SSF Guidelines are founded on a Human Rights Based Approach (HRBA) and integrated and participatory approaches will be key to the Sub-programme as well as working across different government agencies and with stakeholders representing different disciplines and sectors. Within FAO, the Sub-programme will work within FAO's overall strategic framework and involve different divisions as well as close collaboration with regional and national offices.

Partnership/collaboration and joining efforts will be key to the Sub-programme's success. Collaboration foreseen and planned includes, for example, with WorldFish on food security and nutrition, with World Food Programme and/or relevant NGOs on school feeding, and with national and regional human rights institutions. The Sub-programme will also communicate its results at the global level to development partners and through existing policy processes (e.g., in the context of COFI and the Committee on World Food Security – CFS, SDG 14.b). The International Year of Artisanal Fisheries and Aquaculture (IYAFA) in 2022 constitutes an important milestone for promoting good practices demonstrated by the Sub-programme.

Sondage en ligne

Consolider les mécanismes pour renforcer la capacité et l'autonomisation des femmes et des jeunes pour le long des chaînes de valeur dans la pêche et l'aquaculture

L'UA-BIRA a embauché les services d'un consultant pour mener des études de cas, documenter les leçons et les meilleures pratiques en tant que supports de connaissances pour soutenir le développement du commerce du poisson inter et intra-régional basé sur des évidences en Afrique; consolider les mécanismes pour renforcer la capacité et l'autonomisation des femmes et des jeunes pour un engagement efficace et productif le long des chaînes de valeur dans la pêche et l'aquaculture. L'UA-BIRA vous serait reconnaissant de bien vouloir répondre en ligne dans les 72 heures aux questions suivantes.

Pays :Niger

Nom de la CER : CEDEAO

1. Etes-vous membre d'une organisation régionale de gestion des pêches?
 - Oui.
Nom de l'ORP?
 - Union Economique et Monétaire Ouest Africaine (UEMOA) ;
2. Connaissez-vous le cadre de politique et la stratégie de réforme pour la pêche et l'aquaculture (PFRS) de l'UA-BIRA ?
 - Oui ;
3. Vos politiques nationales et / ou régionales de la pêche sont-elles alignées sur le PFRS?
 - Oui ;
4. Dans votre pays, existe-t-il un ministère de la pêche et de l'aquaculture?
 - Non
ou sous quelle institution sont activités de pêche et d'aquaculture gérées?
 - Ministère de l'Environnement de la Salubrité Urbaine et du Développement Durable (MESU/DD)
5. Existe-t-il des programmes spécifiques dédiés aux femmes et aux jeunes dans le secteur ou la chaîne de valeur de la pêche et de l'aquaculture?
 - Non

6. Depuis combien de temps ces programmes sont-ils opérationnels?
Existe-t-il un partenariat avec un financement ou une organisation internationale?
Pouvez-vous en dire plus?
7. Combien de femmes et de jeunes sont impliqués?
8. De quel type de soutien ont-ils bénéficié? En nature de l'argent
Assistance technique
9. Quel type de groupe cible peut-il ou a-t-il pu bénéficier de ce soutien?
- les pêcheurs, aquaculteurs, les mareyeuses/mareyeurs, commerçants des intrants de la pêche et de l'aquaculture et les cadres techniques.
10. Veuillez indiquer la structure ou le statut social?
- a. Association?
- Oui
- b. PME ?
- Oui
- c. Coopératives?
- Oui
11. S'il y a des exemples de réussite, pourriez-vous s'il vous plaît joindre les rapports?
- ONG Association Des Aquaculteurs (ADA), Fédération Nationale des Groupement des Pêcheurs du Niger?
12. Le partenariat public-privé (PPP) est un moyen de dynamiser les initiatives privées de développement économique: existe-t-il une expérience de PPP opérationnel dans le secteur de la pêche et de l'aquaculture dans votre pays?
- Oui
13. Est-il opérationnel ou depuis combien de temps fonctionne-t-il?
- Débutant, juste un an (Ferme Nabi Pisciculture), les preuves vous seront communiquées

14. Quel est le but ou la politique qui sous-tend ce PPP dans votre pays?

- Faire des facilités aux privés du secteur de l'aquaculture pour développer la pisciculture commerciale en vue d'accroître la production piscicole pour lutter contre la pauvreté, l'insécurité alimentaire et la résilience des populations et des écosystèmes aquatiques.

Veillez joindre tout document justificatif

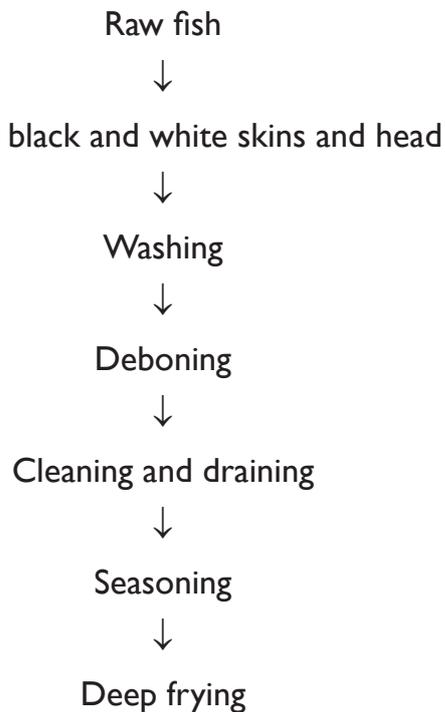
Voir sur le site google : RECA Pisciculture au Niger, Nabi Pisciculture (exemple de PPP)

Merci de votre coopération

Annex 2: Ingredient and Procedures of Fish Value added product

I. Fried fish in batter (a'lory)

Flow chart:



Ingredients	Percentage/quantity
Sole fish	4kg
Lemon	4 tablespoons
Chopped parsley	2 tablespoons
Flour	400g
Fish seasoning	2 tablespoon
Ginger	4 tablespoons
Garlic	2 tablespoons
Eggs	2
Salt	to taste

Preparation

1. Remove the black skin and scales from sole fish
2. Remove the head and side bones, clean well and debone
3. Wash well and drain. Cut or divide fish into four parts
4. Season, marinate the fillets in a little oil, lemon and chopped parsley for a few minutes at least for 5 minutes
5. Pass through batter

6. Deep fry at 175oC, drain well and serve with fried or pickled parsley

7. Serve with tomato sauce

Preparation of frying batter

Recipe	Quantity
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Flour	400g
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Salt	to taste
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Eggs	2
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Water	500 ml
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