



Aquaculture Interventions for Improving Food Security in NE Nigeria: An EU Supported Project Jointly implemented by FAO, WFP and UN Women



**A paper Presented
At
Food Security Sector Online Meeting
22nd April 2021**

Outline

1. Aquaculture Intervention Profile

2. Planned Activities (3 Years)

3. LGAs and Communities Targeted

4. The Case of Aquaculture Development Interventions

5. Implementation Strategies

6. Achievements

7. Some pictures from the field

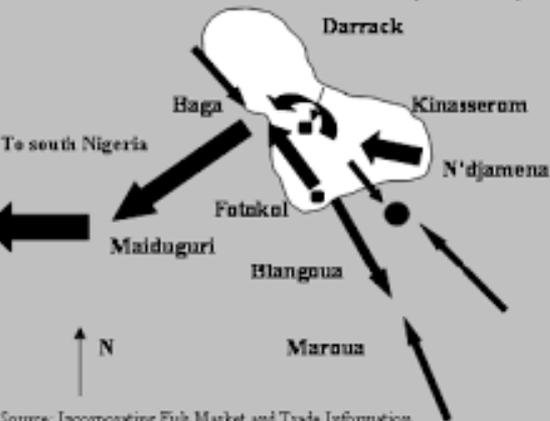
Background (FAO Aquaculture Interventions Profile)

The offshoot of the long-drawn conflict in northeastern Nigeria is a humanitarian emergency, which has been reported as among the worst globally.

Smallholder agricultural practices, the mainstay of the region's economy, have been adversely affected as productive assets were depleted and access to farmland, fishing areas and markets became limited and restricted.

Background (FAO Aquaculture Interventions Profile) Cont'd

Box: Sketch map of fish markets & trade routes in the Lake Chad Basin, centred on Lake Chad (2002-2003)



Contiguous to Lake Chad, the North-East region has lengthy history of traditional fish production for subsistence. Fish and fish products from the region were marketed across the country and beyond.



Background (FAO Aquaculture Interventions Profile) cont'd



Due to the crisis, the security situation around the Lake Chad has become volatile and led to a halt in fishing activities. Today, many youth and women can no longer rely on fishing, making them vulnerable to food insecurity and unemployment, increasing their dependency on food aid

Background (FAO Aquaculture Interventions Profile) (cont'd)

It was against this background that, FAO, WFP and UN Women keyed into 2017 Humanitarian Response Plan led by Presidential Committee for the Northeast Initiative to bring peace, stability/social cohesion and economic recovery among the affected populace. This led to the birth of joint resilience and response project funded by EUTF targeting 13 LGAs in Borno State for 3 years. One of the component of this project is provision of aquaculture starter kits and fish processing kits to the affected communities.

Objectives

Main Objective:



To build the resilience of conflict affected people and public sector institutions in Borno State in an environment-friendly way.

Objectives

Specific Objective:



To enhance social protection, through creation of employment and the promotion of environment and climate-friendly livelihood opportunities (with a specific focus on women, youth and vulnerable households) with the aim of increasing access to basic needs, significantly reducing malnutrition and strengthening resilience in communities affected by the insecurity.

FAO's Emergency Response Interventions



FAO in collaboration with partners has responded in many ways, with the aim of protecting agricultural-based livelihoods, improving the availability of safe nutritious foods and resilience building through provision of agriculture support to affected people.



Notable areas of support include provision of inputs to households in need for wet-season and dry-season planting, climate-smart agriculture, aquaculture development, micro-gardening, livestock restoration, Irrigation, safe access to fuel and energy and support to SMEs.

Planned Activities (3 Years)



Training of identified 300 fish farming beneficiaries on good fish farming practices (fingerling production, fish feed formulation, fish rearing, fish processing)



Provision of 200 fish farm starter kits for aquaculture production (tank, fingerlings and start up feed) and technical training



Support the establishment/restart of 100 women fish processing and marketing enterprises

Implementation Strategies

Direct Implementation

Communities/Beneficiaries Targeting (FAO, State Fisheries, LGA officials, Traditional/community leaders)
Cluster Approach (fish/vegetable farming) (FAO)
Ownership: land (LGAs/Communities); platform (Beneficiaries);
Inputs/training (FAO)

Partnership

Training/On-farm Demonstration & Fisheries Extension Services (FCFFT Baga & FAO)

LGAs and Communities

Biu- Tum Community

Gwoza- Gwoza Town

Jere – Dusman,
Gongulong and Zabarmari

Konduga- Konduga Town

Monguno – Monguno
Town

Ngala – Gamboru, Ngala
and Wulgo

The Case of Aquaculture Development Interventions



This unique intervention is carried out under circumstances in which many farmers, youth and women fisher folks can no longer rely on fishing, making them more vulnerable to food insecurity, malnutrition and unemployment, increasing their dependency on food aid

The Case of Aquaculture Development Interventions Cont'd

As part of its emergency response in the region, FAO is supporting affected fisher folks rebuild their livelihoods through capacity building on safe and sustainable aquaculture practices, and the provision of related inputs, and complementary micro-gardening kits.

In summary, FAO mobilizes the youth and trains them in good aquaculture practices. About 200 households have been assisted with 200 units of aquaculture starter kits and 350 micro-gardening kits. (Biu, Gwoza, Jere, Konduga, Ngala and Monguno)

The kits include 3,000 liters capacity of fiberglass fish tanks were stocked with 5,000 catfish fingerings, and assorted fish feeds were provided per HH.

With the conducive warm temperatures in the northeast, the results of catfish tank-farming are overwhelming.

The Case of Aquaculture Development Interventions Cont'd

Fish and vegetables are a unique combination of highly nutritious foods needed by children and women.

The fertile wastewater from the fish tanks is used to irrigate (and fertilize) nearby vegetable farms.

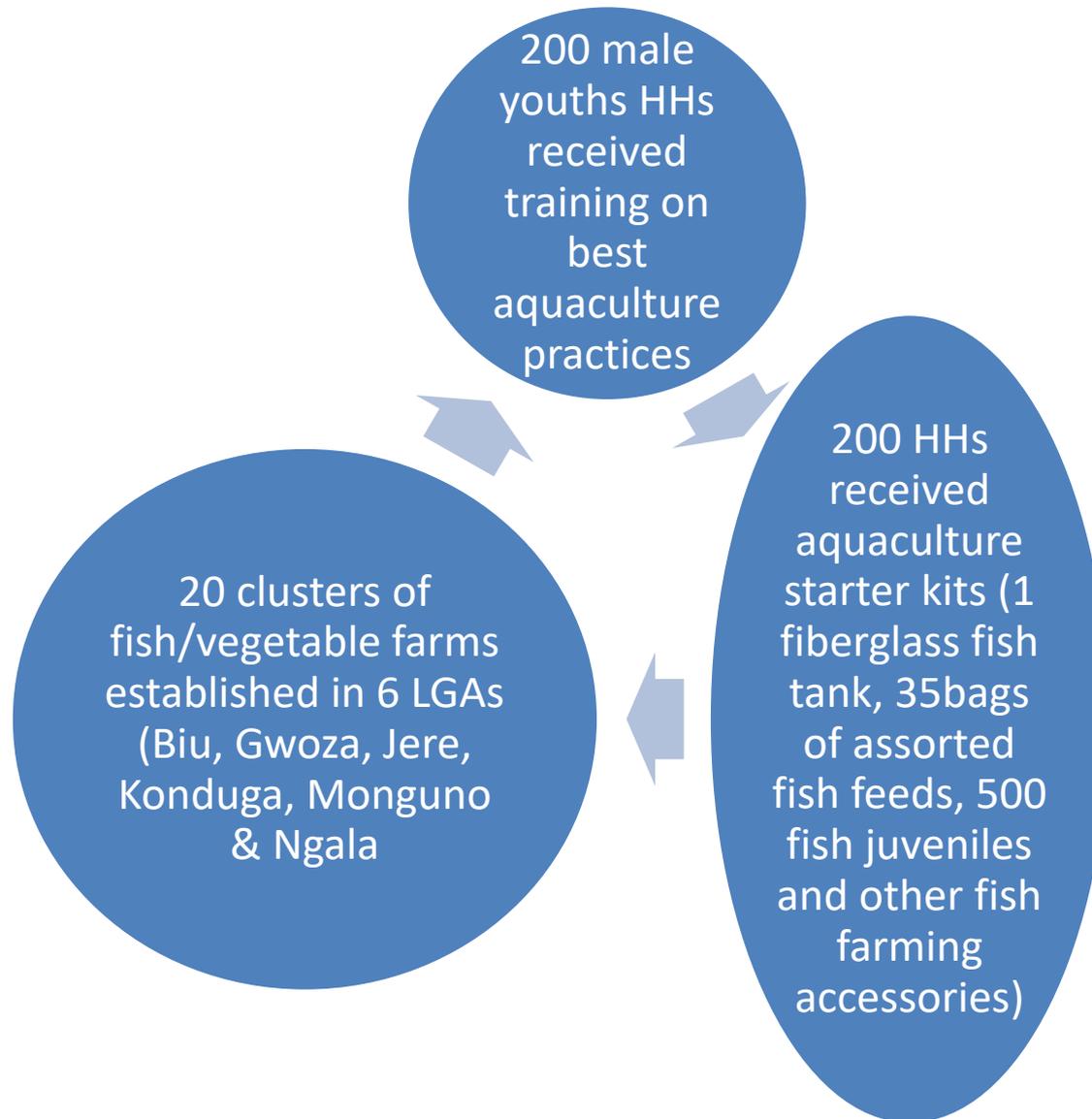
This approach promotes and ensures sustainable water use water investment put into the fish-culture and micro-gardening clusters

The Case of Aquaculture Development Interventions Cont'd



wastewater from the fish tanks is not wasted; it is used to irrigate (and fertilize) nearby vegetable farms.

Achievements



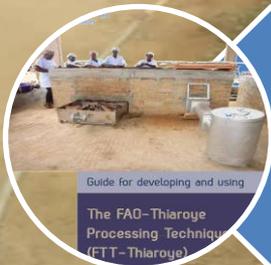
Promoting Youth Employment and Income Generation



FAO's aquaculture initiative is creating employment and income-generating opportunities for direct beneficiaries and other actors along the fishery value-chain.



A total of 200 direct jobs and much more indirect jobs in the aquaculture value chain have been created in the past one year,



while 100 or more direct jobs will be created in 2021.

Mitigating protection risks for vulnerable fisher-folks

Before this intervention:

- Fisherfolks who used to go on fishing in the Lake Chad risked arrest by the military
- They also risked being attacked by insurgents who prowl the area.

The FAO aquaculture intervention therefore mitigates:

- Occupational risks for fish actors
- Hunger since it complements in providing nutritious foods and income

In each targeted community:

- Beneficiaries are grouped into a cluster of ten households.
- Each cluster's tanks are installed on land donated by the LGA's authority and traditional leaders in safe and secure locations within the communities.
- Beneficiaries are trained in better fish ways of fish preservation using the FAO's Thiaroye Technology (FTT) smoking fish processing technique.

FAO's Thiaroye Technology (FTT) smoking fish processing technique

How it works:

- It is an innovative fish smoking technique that contributes to safe smoking conditions and ensures less heat, burn and smoke exposure, making it a major efficient smoking system for a large majority of operators.

Advantages over ordinary fish preservation techniques:

- It is very **energy/fuel efficient**;
- It **adds flavor** and **extends fish shelf life**, so that farmers can preserve and market their catch when profitable market is available.
- In comparison with other traditional methods of fish preservation such as salting and roasting/frying/cooking that preserve fish for just a few days or weeks, the **FAO FTT smoking kiln extends the shelf life of fish by 6 months.**



Challenges with Addressing Food Availability in Northeastern Nigeria

- Persistent humanitarian shocks due to conflict and insecurity.
- Protracted economic impacts of COVID-19 pandemic.
- Macro-economic slowdowns
- Impacts of climate change and variability and
- Compounding protracted impact of past shocks

All these continuously deter significant achievement of sustainable food and livelihood systems among rural households.

Some pictures from the field



Fish/Vegetable Cluster farm in
Gongulong Community in Jere LGA

Practical Demonstration on Earthen Pond Construction in Monguno with Beneficiaries



Fish/Vegetable Cluster farm in Gongulong Community in Jere LGA



Harvest and Sales of Fish in Zabarmari, Jere LGA



Aquaculture/Vegetable Cluster in Gwoza



A photograph of four men in a traditional dugout canoe on a wide river. The men are dressed in simple, light-colored clothing. Two men stand at the ends of the canoe, using long wooden poles to navigate. Two men are seated in the middle. The water is calm, and the background shows a distant shoreline with some vegetation. The text "THANK YOU FOR LISTENING" is overlaid in green, bold, capital letters across the center of the image.

THANK YOU FOR LISTENING