Presentation on Ghana's experience in freshwater fish farming: Infrastructure, production, processing and marketing



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Outline

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Background

- Ghana has long experience in freshwater fish farming, mainly tilapia and African catfish. The aquaculture sector grew from government demonstration farms in the 1950s-80s into today's commercial industry of pond farms, Lake Volta cage farms, hatcheries, and feed businesses. While tilapia has always been dominant, catfish farming has expanded in recent years.

Infrastructure

Ghana's freshwater aquaculture is primarily practiced in ponds and cages, particularly around Lake Volta, rivers, and inland water bodies, with tanks and other intensive systems used to a lesser extent.





Infrastructure Cont'd

- **Hatcheries:** Over 30 commercial hatcheries in Ghana produce tilapia fingerlings, mainly the Akosombo strain developed by CSIR-WRI.
- **Feed Mills:** Ghana currently has six local extruded fish-feed producers, including Raanan Fish Feed, Enam Pa, Beacon Hill Industries, Kofi Kanta Feeds, R&B Farms, and China Fujian Fish Farm. Despite growing local production, about 40% of fish feed is still imported, indicating continued dependence on external supply.
- Feed takes about 60-70% of production cost.

Current Status



4,200
small-scale
operators



83
medium-scale
operators



22
large-scale
operators

Fisheries Commission, 2025

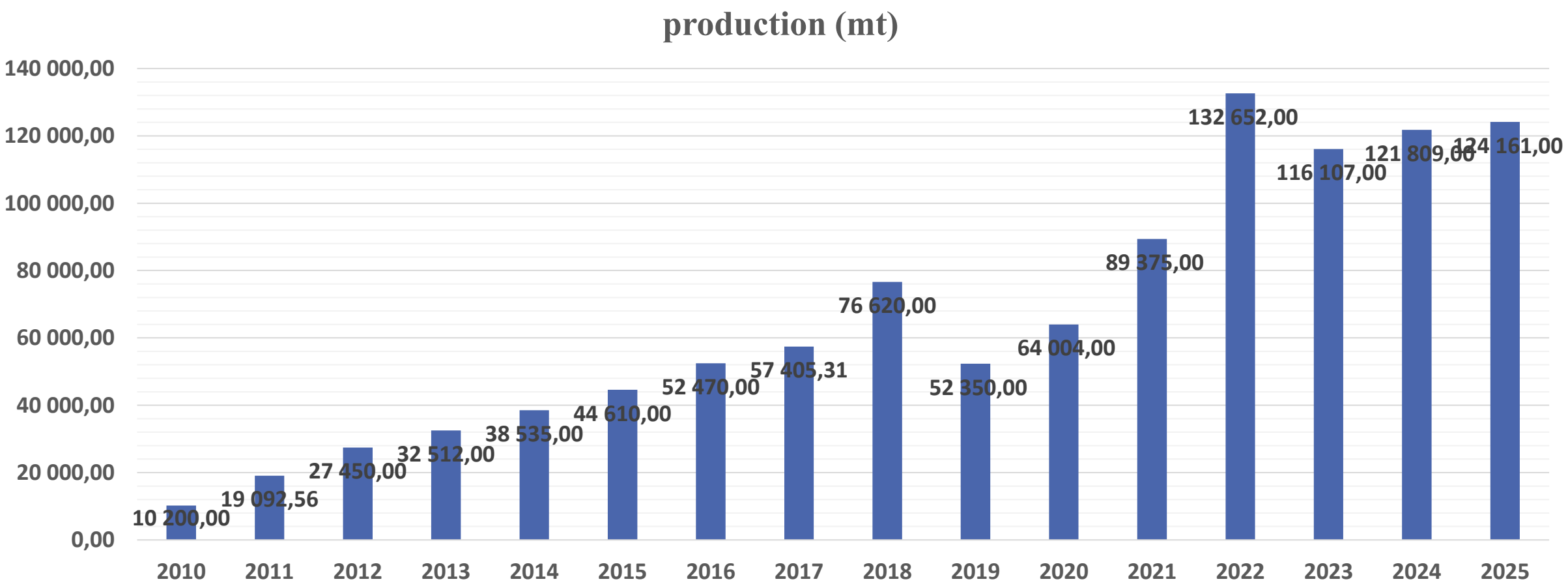
Production

Ghana's aquaculture production has increased substantially over the long term. Official 2025 agricultural statistics report **124,161mt** of aquaculture production, compared with **10,199 mt** in 2010.

This is due to the fact that, the sector has subsequently evolved toward more commercial production, particularly through:

- Improved Nile tilapia strains;
- Monosex/all-male tilapia production;
- Improved catfish hatchery techniques;
- Commercial feed;
- Better pond management;
- Cage culture;
- Private-sector investment;
- Improved extension and technical service delivery.

Production: 2010 - 2025



Policies for Aquaculture Promotion

- Free Extension Service delivery
- Support for capacity building and enhancement
- Aquaculture Infrastructure Development
- Fish Disease Containment and Prevention
- Creation of Aquaculture Zones – Lake and Land
- No importation of brood stocks or fingerlings
- Promote local fish feed production
- Aquaculture input support - Aquaculture for Food and Jobs
- Currently, the government is rolling out Aquaculture Community Commercialization program which seeks boost aquaculture production and also create employment for the youth and women.

Processing and Value Addition

Freshwater fish in Ghana has traditionally been marketed predominantly as **fresh whole fish**, but processing and value addition have considerable potential.

- **Fresh fish**

The most common product is whole fresh fish, sold:

At the farm gate; At landing/harvesting sites; Through wholesalers; Through market women/traders; To restaurants and hotels; At urban markets; Directly to consumers.

- **Smoked fish**

Smoking is particularly important for **catfish** and remains an important traditional preservation method.

- **Salted and dried fish**

Tilapia has traditionally been processed into products such as "**koobi**", a salted and dried fish product.

Processing and Value Addition Cont'd

Commercial aquaculture creates opportunities for:

- Tilapia fillets
- Smoked fillets
- Frozen portions
- Fish sausages/burgers
- Institutional packs for hotels and restaurants.

Marketing

- Fish demand is very huge: Ghana consumes over 1 million tonnes fish/year, produces only ~400k (farm + wild). Deficit filled by imports ($300M+ mackerel, etc.).

- Per Capita Consumption is 24kg. (*2025 Fisheries Commission Annual Report*)

Marketing Cont'd

Marketing has historically been one of the weakest components of Ghana's aquaculture value chain.

- **Traditional marketing structure:**

Farmer → Farm-gate buyer → Wholesaler → Retailer/Market woman → Consumer

Alternatively:

- **Commercial farmers increasingly use:**

Farmer → Hotel/Restaurant/Supermarket/Institutions → Consumer

Overall experience from Ghana

Ghana's experience shows that fish production alone does not ensure profitability; farmers also need;

- reliable markets,
- suitable fish sizes,
- consistent quality,
- and efficient distribution systems.

Conclusion

Ghana has transitioned from small-scale, government-led pond farming to a growing commercial freshwater aquaculture industry dominated by tilapia and catfish, with production reaching 124,161mt in 2025. However, sustained growth requires more than increased production; infrastructure, productivity, processing, cold chains, markets, value addition, quality assurance and profitability must develop together to strengthen aquaculture's contribution to **food security, employment, livelihoods and the blue economy**.



Thanks for your audience