

AQUACULTURE DEVELOPMENT IN GHANA



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OUTLINE OF PRESENTATION

- Introduction
- Importance of fisheries
- Brief Background Of Aquaculture Development In Ghana
- Current Status Of Aquaculture In Ghana
- Prospects for Aquaculture Development
- Challenges /Perspectives

INTRODUCTION



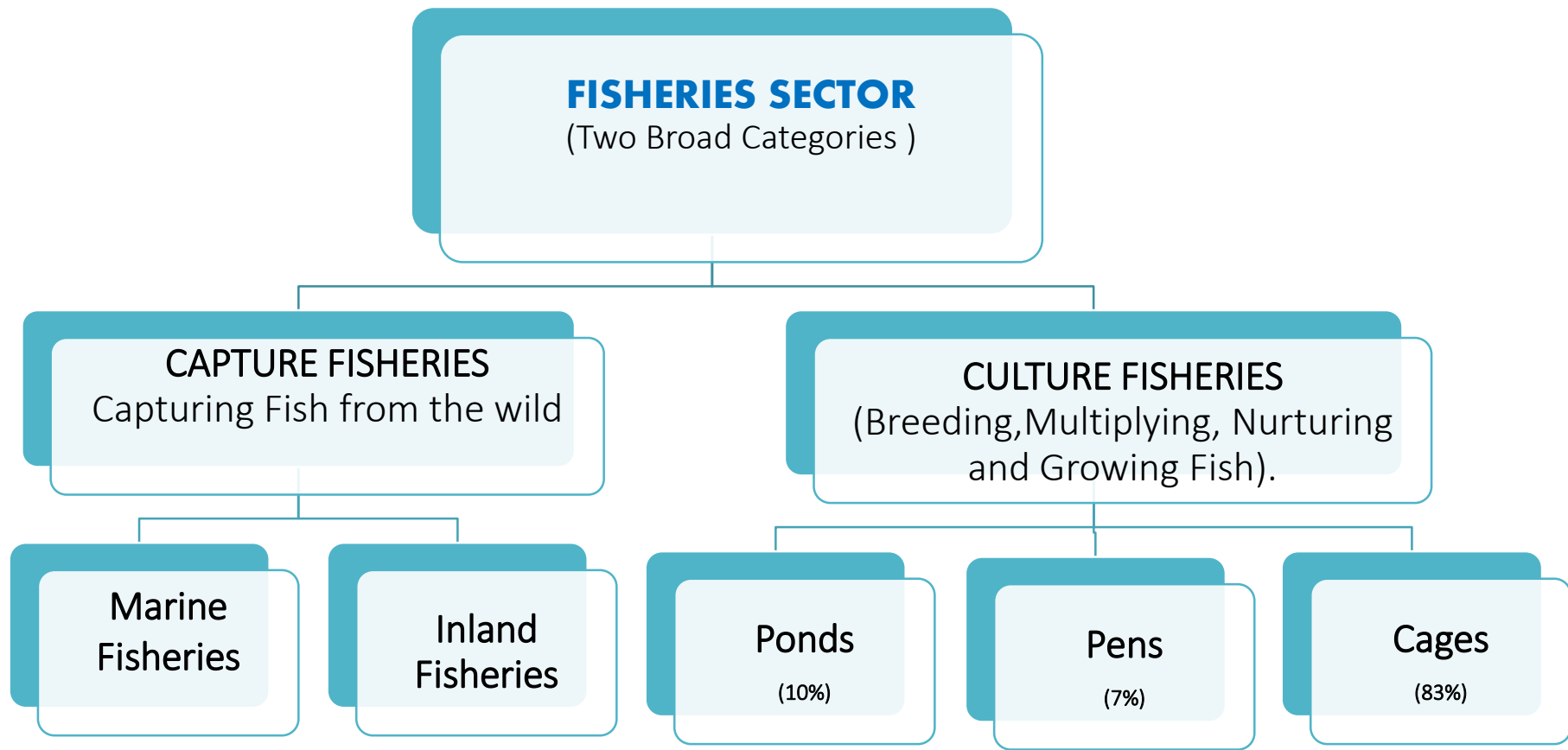
GHANA



Ghana is located on the west coast of Africa, about 750 km north of the equator between the latitudes of 4 and 11.50 north and longitude 3.11° West and 1.11° East.

It is bounded on the North by Burkina Faso, on the West by La Cote D'Ivoire, on the East by Togo and on the South by Gulf of Guinea (Atlantic Ocean).

Total land area = 238,537 km² (92,100 sq. miles) stretching 672 km north to south and 357 km east to west.



- 80% of marine fish production comes from the small-scale artisanal sector.
- In the recent past, there has been a sharp decline in the fish resources due to over exploitation and over capitalization of the fishery. This situation has been seen as very alarming as regards the economy and food security.

IMPORTANCE OF FISHERIES

The Fishery in Ghana contributes 1.1% of the Agricultural Gross Domestic Product (AGDP). (due to rebasing in 2007 –impact of oil & gas find).

It provides 60% of the national animal protein intake of Ghanaians. Per capital consumption is estimated to be about 25kg per annum.

Provides employment for about 2 million people (10% of pop) through fishing enterprises, processing and ancillary businesses such as boat building, input trade etc.

Fish requirement for our pop is estimated at 1,000,000mt while our production is 400,000mt from all sources

Provides foreign exchange earnings in terms of export

BRIEF BACKGROUND OF AQUACULTURE IN GHANA

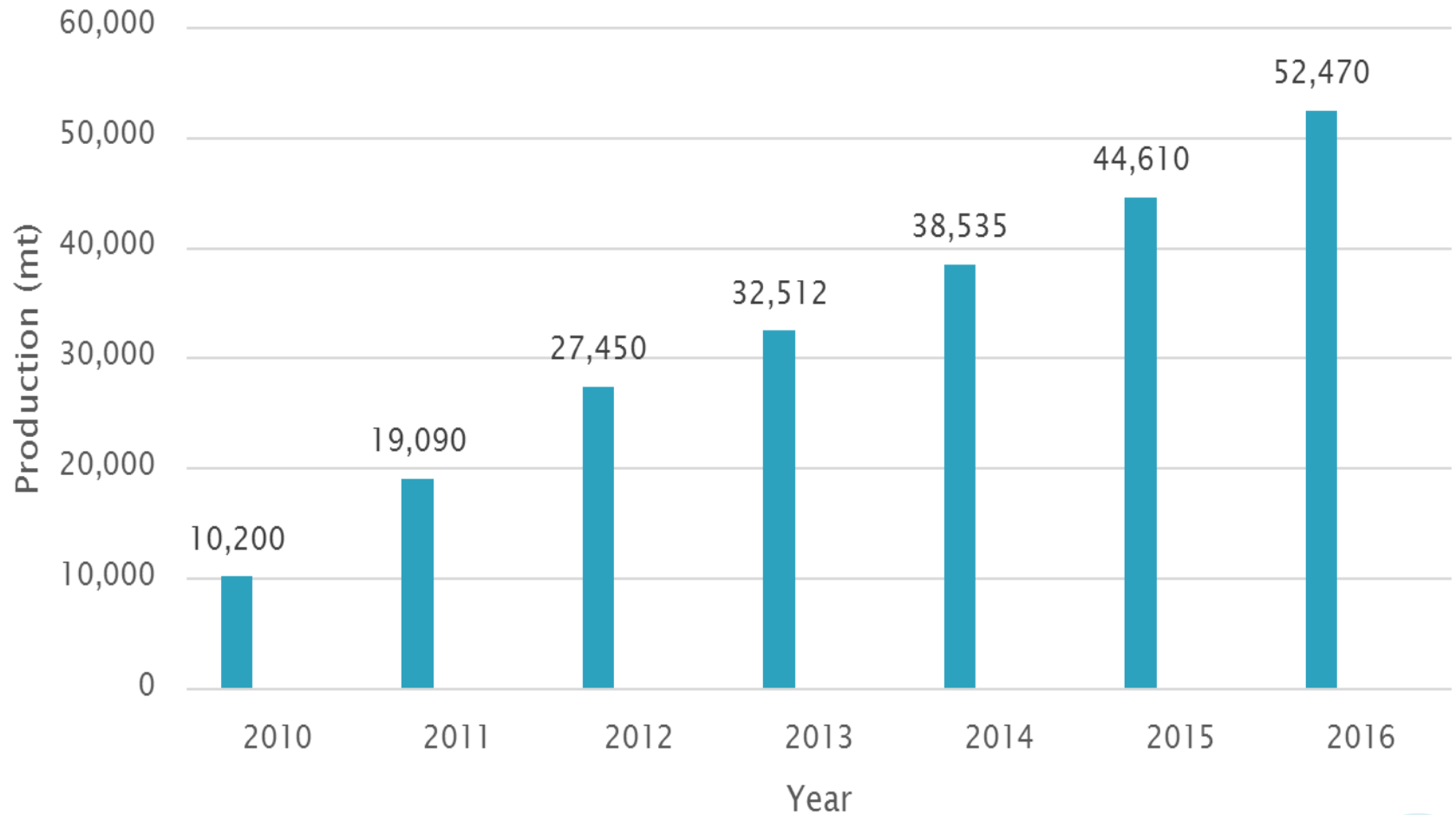
- Fish Farming started in Ghana, then Gold Coast in 1953 by former Fisheries Department in the Northern part of the country
- Ponds were built to serve as hatcheries to support the culture-based reservoir programme of the colonial administration as a way of supplementing the national demand for fish and increasing livelihood opportunities.
- After gaining independence, Government adopted a policy to develop fish farming in all irrigation schemes in the country.

BRIEF BACKGROUND OF AQUACULTURE CONT'D

- 5% of state-owned irrigated schemes in the country were to be developed into fish farms. **this policy is still in force.**
- From 1970 to date aquaculture has grown tremendously at an average rate of about 9%.
- This success of growth has encouraged most policy planners of the various governments of the nation to direct all energies to aquaculture.

AQUACULTURE PRODUCTION IN GHANA

AQUACULTURE PRODUCTION, 2010 – 2016



PROSPECTS FOR AQUACULTURE DEVELOPMENT

- Ghana is naturally endowed with:
- Large tract of freshwater body – the Volta Lake (8,500 km²) and others
- Thousands of hectares of undeveloped estuarine, coastal and flood plains suitable for mariculture
- Good climatic conditions
- Good investment climate
- Soils with high water retention etc.
- High national fish requirement (> 1,000,000 mt)
- High deficit in fish supply (> 500,000 mt)
- Availability of quality fish feed and fish seed
- Capable labour force
- Availability of appropriate technology

CAGES ON THE VOLTA LAKE



SPECIES CULTURED



FISH FEED

Until 2011, all floating fish feed were imported into the country.

Importation of fish feed still goes on and is tax free.

Currently there are three fish feed factories



RESEARCH

Aquaculture Research and Development Centre (ARDEC) of the Water Research Institute of the Council for Scientific and Industrial Research (CSIR) of Ghana

They have developed a strain of *Oreochromis niloticus* called the “Akosombo strain” which grows at least 30% faster than the same species in the wild. It is this strain that is being promoted for use in the Ghanaian Aquaculture Industry.



TRAINING

- Five public universities in Ghana run both undergraduate and postgraduate training in one aspect of aquaculture or the other. Agricultural Training Institutions which produce extension officers also offer some courses in aquaculture.
- The Fisheries Commission also trains students, staff and fish farmers in aquaculture.

LEGAL AND POLICY FRAMEWORK

- Aquaculture Strategic Framework for Ghana, 2006 (GIZ, FAO/TCP)
- -looks at the strengths, weaknesses, opportunities and threats to aquaculture development
- -also assigned roles and responsibilities to various stakeholders in the industry
- National Fisheries and Aquaculture Policy 2008
- Fisheries Act of Ghana Act 625 of 2002
- Fisheries Regulations LI 1968 of 2010
- Ghana National Aquaculture Development Plan (GNADP) , 2012 (FAO TCP)

THE GHANA NATIONAL AQUACULTURE DEVELOPMENT PLAN (GNADP)

It is a blue print to guide aquaculture development in the country for the five years starting 2013

Estimated cost of activities in the plan is about Eighty Five Million Dollars (US\$85M)

Production target of 100,000 metric tonnes by 2017

The period for implementation of the plan coincides with the implementation of the West Africa Regional Fisheries Programme funded by the World Bank.

US\$8M is earmarked under the World Bank Project for Aquaculture Development

THE FOCUS OF AQUACULTURE DEVELOPMENT UNDER THE WORLD BANK PROJECT

Some specific activities proposed in the GNADP which will be covered by the World Bank Project are:

- zonation of high potential aquaculture areas on the Volta Lake
- provision of basic infrastructure to these high priority zones
- capacity development of Aquaculture Associations
- support for development of improved fish breeds to fish farmers
- value addition
- Funding for small scale aquaculture enterprises (startups)

MAJOR CHALLENGES

High cost of fish feed

Inadequate credit to existing and prospective fish farmers

Slower rate of growth of Akosombo strain of tilapia compared to other strains in the world.

Limited number of specialized professionals in the country. e.g. fish health

Lack of capital to fully implement GNADP(Additional \$77 million required)

Absence of an AQUATIC ANIMAL HEALTH INTERVENTIONS

Threat of disease

Perspectives

Ghana has now developed an Aquatic Animal Health Policy awaiting cabinet approval.

It has five components

- Improve biosecurity- on farm, national and international
- Improve emergency disease preparedness and response
- Strengthen disease detection, surveillance and diagnostic services
- Improve availability of appropriate and safe veterinary medicines and chemicals
- Create awareness of importance of diseases through education and training

<i>Objective</i>	Action
Improve biosecurity	Harmonisation of laws and regulations
	Strengthen permitting system and disease-status certification
	Implement protective biosecurity measures
	Strengthen stakeholder institutions and services
	Establish disease-free compartments and zones and align with principles of zonation for aquaculture development within an ecosystem approach
Improve emergency disease preparedness and response	Identify prioritized diseases (OIE-listed and others).
	Develop a national emergency response plan
	Develop a national emergency response team
	Promote regional and international collaboration on aquatic biosecurity
	Strengthen stakeholder institutions and services
	Establish a national emergency response fund

Objective	Action
Strengthen disease detection, surveillance and diagnostic services	Identify prioritized diseases (OIE-listed and others).
	Strengthen stakeholder institutions and services
	Develop passive and targeted surveillance programs
	Source funding to implement surveillance
	Establish a disease data base and communication network
	Identify relevant cost-effective and validated diagnostic tests
	Establish contact with relevant OIE reference laboratories
Improve availability of appropriate and safe veterinary medicines	Assess current aquatic veterinary medicine needs and availability
	Align needs and availability and use to the current regulatory framework
	Finalize and promulgate the Draft Veterinary Bill
	Align regulatory oversight with ECOWAS Directives
	Facilitate information brochure on prudent use of aquatic veterinary medicinal products

Objective	Action
Enhance education, training and awareness	Assess training requirements
	Review current training possibilities
	Facilitate short-course training
	Develop University curricula
	Facilitate field information guides
Facilitate domestic and international trade	Initiate specific-pathogen-free hatchery certification process
	Initiate high-health hatchery monitoring process
	Create a Ghana specific aquatic animal health certificate for live aquatic animal imports

**THANK YOU FOR YOUR
ATTENTION!**