

# GHANA

COUNTRY REPORT AQUATIC ANIMAL HEALTH

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O.I.E FOCAL POINT FOR GHANA

# INTRODUCTION

- Since the 50's all programs for aquaculture development were devoid of health management inputs or plans
- Thus the initial failure.
- In 1998, health was introduced as a management tool- today a farm in Ghana is the second largest producer of tilapia in Africa.

- . Creation of disease awareness in fish production
- Advise farmers on health management to enhance productivity
- Provide effective and efficient diagnostic services to the industry
- Provide effective treatment/nutritional regimes
- Advise practitioners on the proper use of drugs and chemicals
- Monitoring and surveillance of diseases

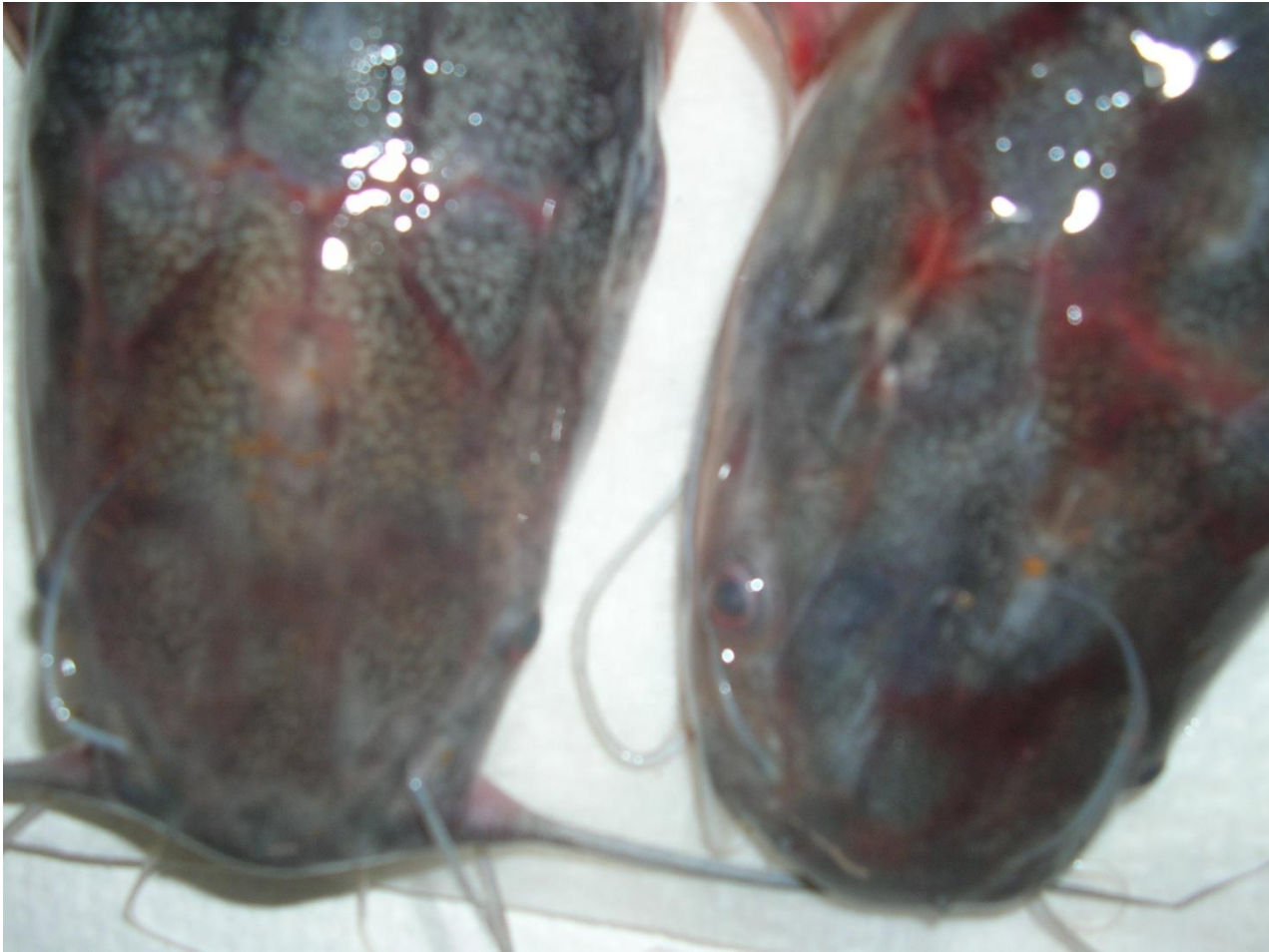


- As a first step, Fisheries Officers and farmers were trained in disease detection and signs of diseases
- Veterinary laboratory staff introduced to basics of fish disease detection methods
- Field sampling of ponds to determine diseases of economic importance

# What did we see in Ponds

- Parasites- White Spot Disease, Costia, Trichodina, Round worm, Argulus
- Bacteria- Streptococcus, Salmonella, E.coli, Pseudomonas, Edwardsiella, Micrococcus infections
- Fungal- Saprolegnia
- No Virus

# Bacteria Infection



# Liver of Catfish





# Bacteria and Fungal Infection



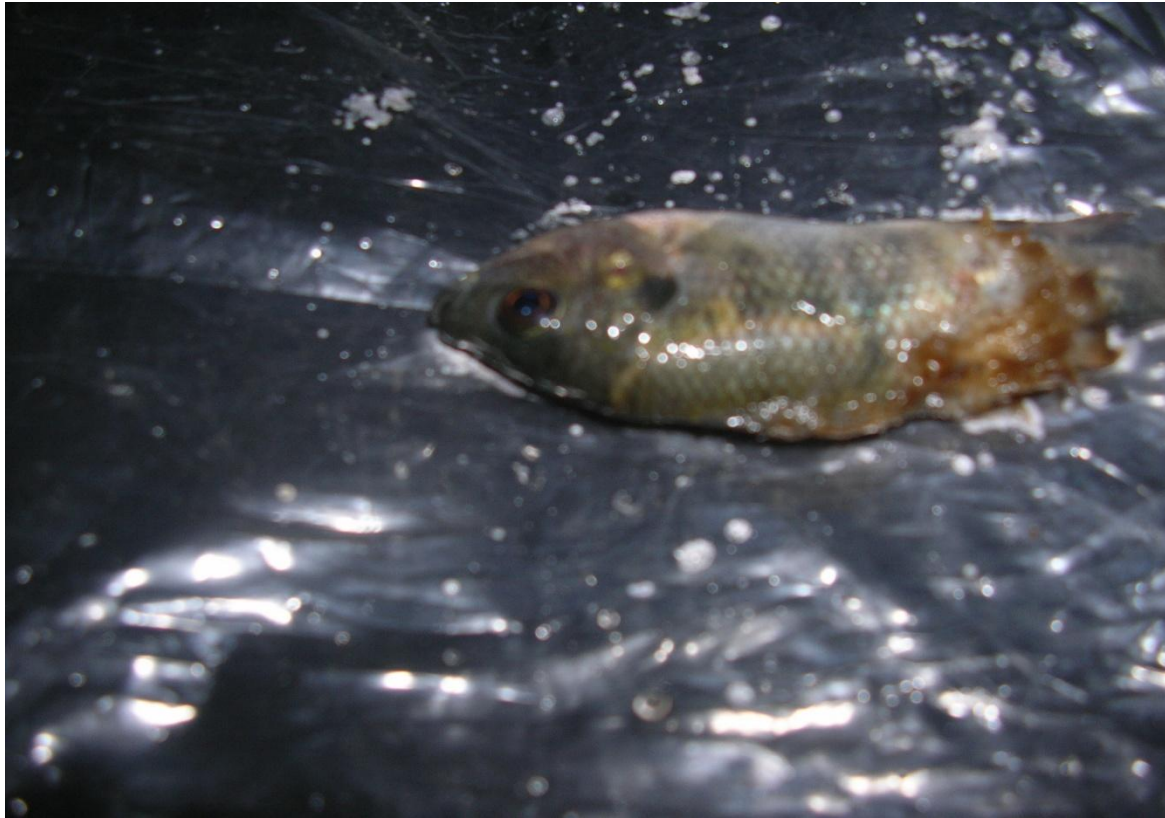
# Bacteria Infection



# Bacteria Infection



# Fungal Infection



# Fungal Infection



# Fish Kill on the Volta



# Colour of water During Kills



# Measures

- Enactment of the Fisheries and Aquaculture Regulations, L.I 1968,2010 (Regulations 57-78)-
  - measures on new introductions
  - certification and registration of hatcheries
  - measures for the transport and packaging of fingerlings
  - measures on sanitary inspections of hatcheries and farms
  - measures on drug usage



- control of hazards in feed
- measures on movement of fry/fingerlings
- It is mandatory that farmers submit regular reports on farm activities
- bio- security measures are mandatory

To support the Regulations we are developing Technical Guidelines. This needs to go before the stakeholders for inputs and acceptance

# FEED TRIALS



- Training of personnel, sub-professional and professional
- Establishment of Fish Disease Laboratories in High priority aquaculture zones
- Education of law enforcement agencies
- Registration of Feed Mills and enforcement of quality assurance

# TIVO Project( Tilapia Volta)

- Protection of the Volta Strain of *O.niloticus*
- Development and Harmonization of Movement of fry/fingerlings and Brood stocks in the Volta basin
- Development of Transportation procedures
- Development of Sanitary procedures