Veterinary Involvement In Jamaican Aquaculture

By Dr. Robert Thomas

Aquaculture, also known as aqua farming, is the farming of aquatic species e.g. fish, crustaceans (crabs, shrimp, lobsters), mollusks (Conch) and aquatic plants.

Aquaculture involves cultivating freshwater and saltwater populations under controlled conditions and can be contrasted with commercial fishing which is the harvesting of wild fish. Mariculture refers to aquaculture practiced in marine (sea) environments and in underwater habitats.

Jamaica's aquaculture production is done by the Ministry of Agriculture –Fisheries Division, private companies and aquaculture farmers, in ponds of up to 1.8 acres in size. Stocking rates vary from 8,000 - 20,000 fingerlings (baby fish) per acre depending on use of aerators which increase the oxygen supply to the fish by agitating the pond surface.



Veterinarian performing a post mortem examination of a Tilapia fish in Hill Run, St. Catherine, Jamaica

Both government and private Veterinarians ensure pond health through post mortems on fish and analyzing pond water for potentially harmful parasites, disease organisms, harmful chemicals and heavy metal residues not suited for human consumption.

Jamaica was an early fore-runner in Tilapia production in this part of the world and at one stage accounted for significant exports of Tilapia to the USA.

Other countries (Costa Rica, Cuba, Ecuador, Trinidad & Tobago) have learned much about Tilapia production from Jamaica and are now major producers.

Over the years, Jamaica's Tilapia production (the main aquaculture species) has fallen from a high of approximately 5,000 MT to approximately 3,000MT -3,500 MT annually, with exports curtailed- though we still export ornamental fish. Industry expansion could be a reality with curtailment of Tilapia and other fish imports into Jamaica coupled with development of patented new fish products and a strong "buy Jamaica campaign" targeting the public, hotels and export niche markets.