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Abstract

Project of fish resources compensation in Tana lake, Ethiopia

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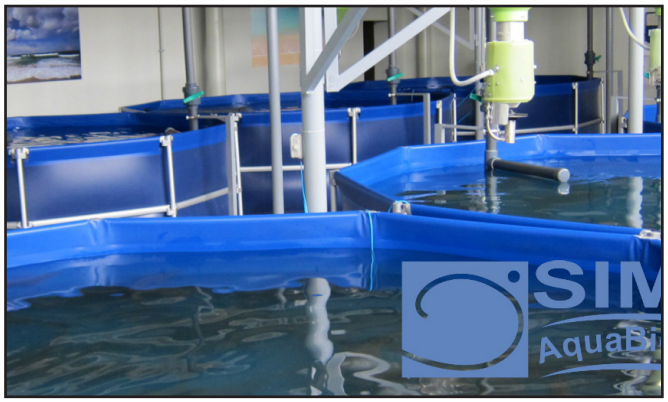
Abstract:
According to the UNIDO project "Fishery And Aquaculture Business Development Center (FABDC) in Ethiopia" Technological Concept of plant for tilapia and African catfish was developed. Preliminary was studied how many fish can the Tana lake hold. This study included benthos analyses, water quality study, bottom topography and how it have changed during years. The next step was observation of potential sites for placing the plant for reproduction and releasing tilapia and African catfish fry. The main factors were site proximity to Tana lake; the lowest level difference between site and water level, herewith place must be safe from flooding. Along with the key factors were logistics, electricity resources availability and possibilities to guard the territory.Based on these collected data, capacities of the plant for release into lake Tana 2 million fry of African catfish and 3 million fry of Tilapia were calculated. Concept of the plant consists of the flow-through system with water consumption from the Tana lake and discharging to the remote point in the Tana lake. The model of the plant biological loads to the lake is similar to natural fish stock. The plant includes Brood stock, hatchery and fry departments. The project was carried out by the main contractor Astrakhan State Technical University collaborating with Institute of Ecology and Evolution and Simeon AquaBioTechnologies in 2019-2020 years.

Biography:

Simeon AquaBioTechnologies company was established in 2010, as a result of successful cooperation of experienced water supply system design engineers from the Simeon group of companies and world-famous ichthyologists from the Southern Scientific Center of the Russian Academy of Sciences. In the process of the team's



work, together with European partners, we developed our own recycling water purification technology in the RAS, which became the basis of our design regulations. Starting with the implementation of small systems, the company has been actively developing, accumulating experience and knowledge. From 2013 to 2015, we implemented the first full-fledged complex for the commercial cultivation and reproduction of sturgeon, which is considered to be unique in its region. Further, larger objects followed: The sturgeon cultivation plant, with a productivity of 250 t / g for fish and 1.5 t / g for caviar; Plant for reproduction and production of 11 million per year sturgeon fry.

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