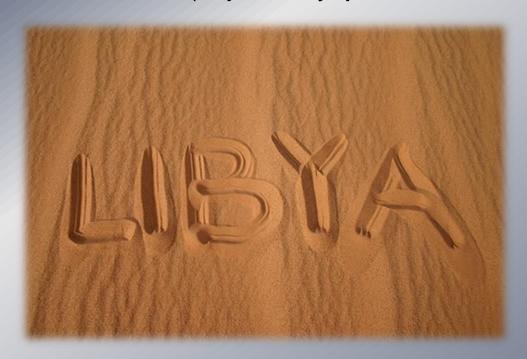
Aquaculture Sector in Libya



Abdallah Elmgawshi
Aquaculture Department-Marin Biology Research Center
(Tajura-Libya)



Aquaculture in Libya

General information

Libya covers about 1,750,000 km² with a total population of about 6.7 million most of them in the coastal area of Libya.



Tripoli is the capital and the largest city and benghazi is the second largest city



Libya is not just a desert.



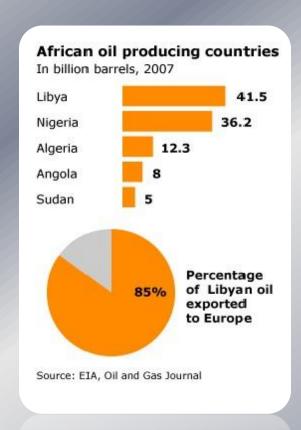


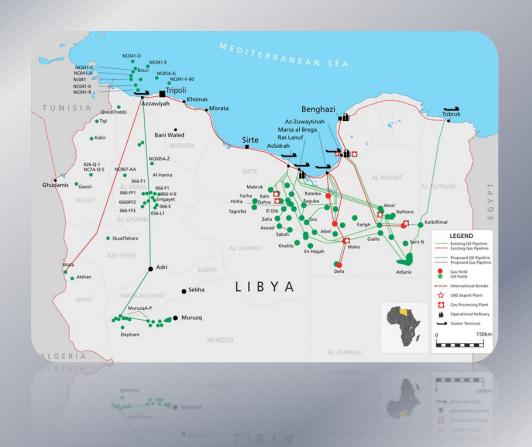




Natural resources: Petroleum, natural gas

Oil reserves in Libya are the largest in Africa and among the ten largest globally Oil production was 2 million barrels per day.





Libya is rich in the Greco-Roman heritage





Libya is rich in the Greco-Roman heritage





Aquaculture Sector

The Marine Wealth Ministry was established in 1988 to administer the aquaculture sector, this evolved into an independent aquaculture authority which, in turn, was replaced in 2001 by the National Marine Investment Institute. Within this institute a new administration was formed in 2005 called:



Aquaculture Development Administration.

Marine Biology Research Center

The most important and efficient of all the bodies related to Aquaculture is the MBRC, which is now under the ministry of Agriculture, Livestock and Marine Wealth.

The MBRC consist of (52) researcher and specialist in the field of:

- •Aquaculture.
- Fish biology and fisheries
- Microbiology
- Benthos
- Planktons
- •Chemistry, pollution and environment



Marine Biology Research Center

Aquaculture Department









Aquaculture history and general Overview

Aquaculture does not have long history in Libya, it started in the early seventies of the last century.

Fresh water is limited in Libya, therefore dams and small lakes were used for culturing several species of carp imported from China (common carp, grass carp, bighead carp and silver carp), and cat fish as a semi intensive culture.



Even though freshwater aquaculture was very successful in regard to growth rate and production for most freshwater species, produced fish was not accepted by the local consumers and hence the freshwater aquaculture did not develop.



Tilapia aquaculture

In the early nineties, Tilapia sp (Nile Tilapia and Red Tilapia) were introduced and farmed. Tilapia was accepted by local consumers because of its physical appearance and its good taste. Based on that, tilapia culture developed very quickly and was cultured in irrigation ponds in agriculture

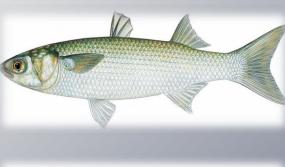
farms.



Marine aquaculture

Marine culture started at the early nineties at a Ein Elgazala farm, a government projects. Fingerling of seabass, seabream and Mugil spp. were collected from the wild and reared in small cages in Ein Elgazala lagoon.







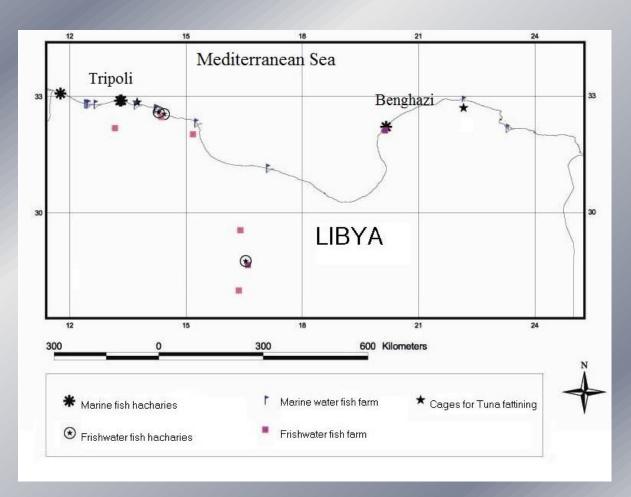
Tuna culture

The tuna culture was introduced in Libya at 2003 through two private companies; namely Ras Alhilal and Noor Elhaya.

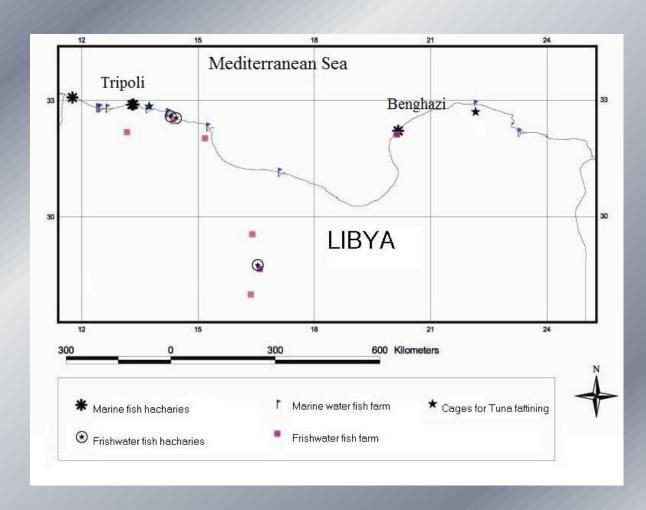




Fish farms, hatcheries for freshwater and Marin culture species are distributed along the coast.



Freshwater fish (tilapia) rearing in the irrigation ponds of agriculture farms is widely distributed along the coast, rural areas and in the south of Libya. Some governmental Agriculture projects are also used for freshwater fish rearing.



Earth and concrete ponds and net cages are used for rearing species such as the European seabass, gilthead seabream and the bluefin tuna. While initially some problems were encountered especially with the operation of the earthen ponds as a result of a lack of experience



The mariculture sector initially relied on imported fry and fish feed from countries such as France, Italy, Portugal and Austria.

national marine investment institute's development of a complete fish hatchery complex in 2004 they have succeeded in hatching imported fertilized European seabass eggs which are distributed free to farmers.



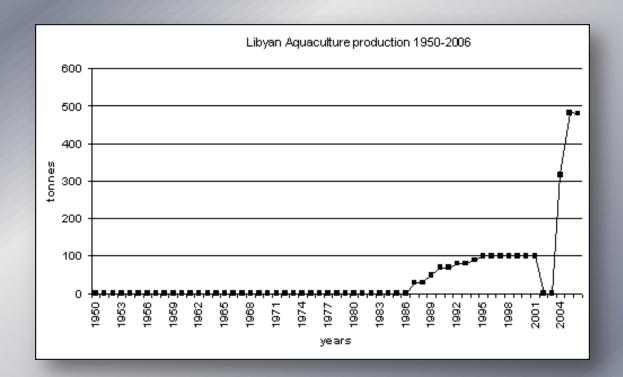
In 2005 fertilized eggs of the gilthead seabream were also supplied by the MBRC to Farwa Hatchery Complex and as a result approximately half a million fry were distributed to farmers.

In 2008 the Farwa Hatchery Complex produced seabass and gilthead seabream fry and distributed to farmers with low price.



Production

In 2004 the first survey was carried out on aquaculture farming, which showed that the production of market size fish reached (391 ton) consisted mainly of seabass + sea bream (231 tons), (150 tons) of blue fin Tuna and (10 tons) of tilapia.



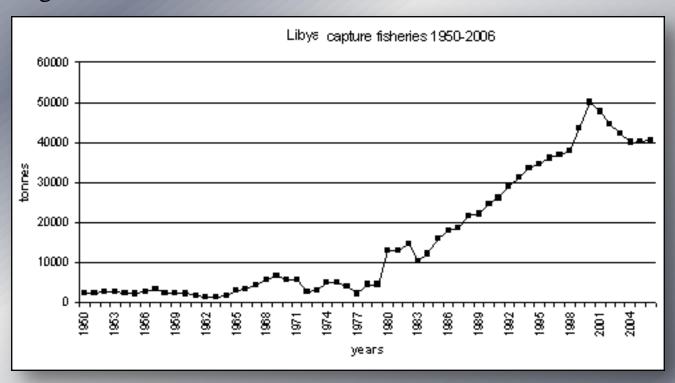
Four different types of fishing activities are normally carried out in Libya:

Artisanal coastal fishing.

Lampara fishing.

Coastal trawling

Tuna fishing.



Finally:

From 2011 until now (2015), the fish farming in Libya stopped completely.



But Bluefin tuna continue catch and farmed outside Libya according to Libyan quota (1300 ton).



Thank you for your attention

