

**Marine Aquaculture Development in Egypt
Italian Egyptian Debt SWAP Program**



**The Italian Egyptian Cooperation
Marine hatchery construction.
The Italian system and know how**

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Bleu Growth in the Mediterranean and in the Black Sea
Developing Sustainable Aquaculture for Food Security
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DEBT SWAP/ MADE PROJECT APPROACH

APPROACH

Technical actions for offering technology, productive capacity, and know-how, for consolidating the partnership between the two Countries and drawing a model of mutual interest in the Mediterranean area.

MARINE HATCHERY

Executive project/technical drawings for a marine hatchery according to the last advanced Mediterranean technologies for sea bass and sea bream for supporting the private sector in term of high quality fingerlings offer.



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ANALYSIS ON ITALIAN MARINE HATCHERIES

TARGET :

Best model to propose to Egyptian stakeholders, both public and private sector:

Technical mission to Italy for technology analysis and experts group for the executive project/cost estimation



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TECHNOLOGIES

Broodstock management thermo-photoperiod, filtration units, liquid oxygen;

Larval rearing, high density tanks (3/7 cubic meters),

Prefattening, high density tanks 15 cubic meters),

Weaning and raceways

Recirculation systems, filtrations units, oxygen





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TECHNOLOGIES

Algae production with 6bioreactors for high density management;
Rotifer and artemia high density production using artificial diet (enrichments)



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MARINE HATHERY PROJECT

Egyptians and Italians group of experts
Italian model analysis
Egyptian context analyses
Final decision
Technical drawing and BOQ
Construction phase





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MARINE HATCHERY PROJECT

**Light and water temperature control
for extending the reproduction period
from October to May**



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MARINE HATCHERYS LOCATION

GAFRD HATCHERY PLANNING/EFFORT

- Alex/Agami k21 (MADE 1 fund)
- Port Fouad (MADE 2 fund)
- North Sinai area (GAFRD fund)
- Suez Canal Project (Egyptian Fund)

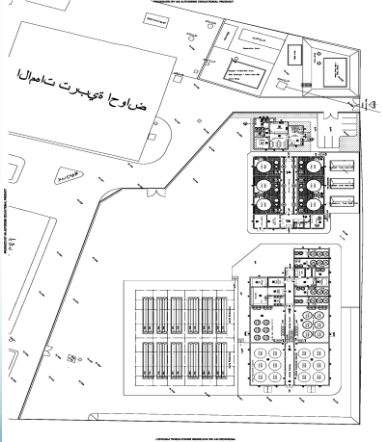




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MARINE HATHERYS LAY OUT



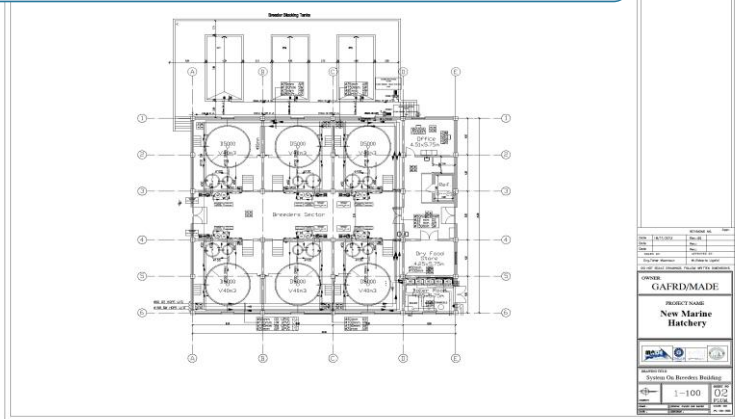
Productive target 5/7 millions of fingerlings 2/5 gr.



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MARINE HATHERYS LAY OUT BREEDERS SECTION

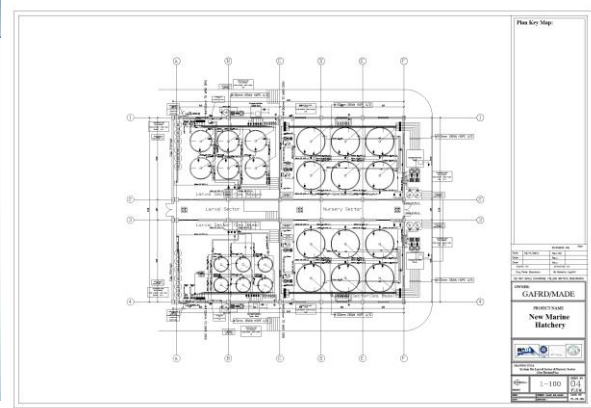




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MARINE HATHERYS LAY OUT LARVAL AND WEANING SECTORS



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MARINE HATHERY CONSTRUCTION



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SINTHESYS
MAIN INDICATIONS FOR MARINE
AQUACULTURE DEVELOPMENT IN EGYPT

- Marine hatcheries for producing high quality fingerlings
- Productive units linked to the allocated zone/districts approach for reducing risks of transport/stress/disease

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THANK YOU FOR YOUR
KIND ATTENTION

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