

**EXPRESSION OF INTEREST (EOI) INVITED JOINTLY BY MPEDA - RGCA & NFDB  
FOR ESTABLISHING HATCHERIES FOR DIVERSIFIED AQUACULTURE SPECIES  
(SEABASS, MUD CRAB, GIFT TILAPIA, COBIA AND SILVER POMPANO) IN INDIA  
BY THE PRIVATE AQUACULTURE ENTREPRENEURS**

**Objectives of MPEDA:**

1. The Marine Products Export Development Authority (MPEDA) established by an act of Parliament in 1972 is the nodal agency for promotion of seafood export from India. MPEDA is an autonomous institution under the Ministry of Commerce & Industry. The role envisaged for the MPEDA under the statute is comprehensive covering all works relating to promotion of raw material production by capture and culture fisheries, processing, marketing, extension, research and development in various aspects of the industry. MPEDA has been actively promoting seafood exports and facilitating infrastructure development for production of quality seafood. MPEDA operates several financial schemes for the benefit of processors, exporters, farmers, fishermen, hatchery operators etc.

**Scope of RGCA:**

2. The Rajiv Gandhi Centre for Aquaculture (RGCA), a society of MPEDA and the R&D arm, has successfully developed technology for production of year round quality seeds of Seabass, Mud crab, GIFT Tilapia, Cobia and Silver Pompano in the hatcheries. The processes are standardized and can be replicated by following the SOPs with necessary infrastructure.
3. In India many of the coastal states required alternative species for shrimps for which the above said species are highly suitable.
4. RGCA has developed a technology transfer package to provide all necessary technical assistance to the entrepreneurs.
5. For an example, five districts with 4,00 ha in Andhra Pradesh and seven districts with 300 ha in Tamil Nadu are practicing aquaculture of seabass in a traditional manner (by stocking wild seed and lesser number of seeds from RGCA/CIBA Hatcheries) or intend to do scientific culture of seabass with proven technology such as cage culture in pond or nursery based open pond culture.
6. Like-wise, five districts with 400 ha in Andhra Pradesh and seven districts with 200 ha in Tamil Nadu are practising tilapia culture or intend to do scientific culture of Tilapia in a commercial way. The Government of Andhra Pradesh and Tamil Nadu have issued Govt. Orders permitting tilapia farming and register hatcheries willing to produce Tilapia seeds.
7. In order to do scientific aquaculture of Seabass, Mud crab, GIFT Tilapia, Cobia and Silver pompano, it is essential to have steady supply of quality seeds of the species from a hatchery close by to farming area.

8. It is observed that there is no hatchery of mud crab and seabass in the private sector in any of the states apart from the full-fledged hatchery of RGCA in Thoduvai, Sirkali Taluk, Nagapattinam Dist. and Seabass hatchery in CIBA at Muttukadu, Chennai. The current infrastructure in these institutions is grossly insufficient for supplying of seeds as per the present demand and from farmers who intend to practise the culture of these species.
9. For in-land aquaculture, the GIFT tilapia is an ideal species. It is observed that one hatchery in Andhra Pradesh operated by RGCA and one hatchery run by Government of Tamil Nadu and the full-fledged Broodstock Multiplication Centre and hatchery of RGCA at Manikonda village, Vijayawada, Andhra Pradesh, there are no other hatchery facilities available for production of quality seeds of GIFT Tilapia. There is an increased awareness about growing of GIFT Tilapia and it is potential for the export purpose. In the coming days, several other state governments including North-East regions are expected to promote Tilapia culture by farmers which can result in huge demand for quality seeds of GIFT Tilapia from hatchery.
10. Due to the pioneering work of TASPARG & OSSPARG, scientific shrimp culture has proliferated in India. Most of the hatcheries in India have developed their infrastructure on the SOP and technical guidance provided from the above mentioned facilities. India, today, boasts of a robust hatchery infrastructure having proper biosecurity facilities for handling SPF brood stock for production of quality seeds of Black Tiger and *L.vannamei* shrimps, resulting in about 6.5 lakhs MT of shrimp production in India.
11. It may take certain time for establishing a new hatchery from scratch (1 - 2 years) for the production of above mentioned diversified species. Prior to construction of hatcheries there should be sufficient amount of Broodstock Multiplication Centre (BMC) for the desired species needed to be cultured.
12. It is also noticed that some of the existing hatcheries with suitable infrastructure are willing to modify their infrastructure in order to produce the above mentioned species. However, they are unable to take up such exercise despite the demand due to lack of capital and technological support and also support from respective state governments mainly for allotting of the land. Above all financial assistance also required for jump start of the projects.
13. MPEDA is mandated to increase the export of seafood from India by increasing the raw material production through aquaculture of shrimp and other diversified species like Seabass, Mud crab, GIFT Tilapia, Cobia and Silver pompano etc.

### **Role of NFDB:**

#### **Objectives of NFDB:**

There is a huge untapped potential in fisheries and aquaculture, which can contribute considerably to improve the livelihoods as also women empowerment. The future development of aquaculture depends on adoption of new and innovative production technologies, management and utilization of less utilized water resources and proper market tie-ups. Reservoir fisheries offers a major opportunity to enhance fish production in the country. In the marine sector, while the coastal fisheries have been fully exploited,

deep-sea fisheries resources are yet to be harnessed. Diversification and high value produce will add new dimensions to this sector. Proper post-harvest handling, reduction of losses and hygienic primary processing are important to realize full potentials of the sector. Simultaneously, effective marketing arrangements are to be made to ensure adequate returns to the fishers and the farmers and also make available of good quality fish at affordable prices to the consumers. With these in view, an end-to-end approach from ensuring proper input availability to efficient marketing is contemplated, for a 'win-win' situation for both the fish producer and the consumer. Set in this background, the National Fisheries Development Board (NFDB) would seek to realize the full potentials of Indian fisheries through coordination of different agencies and public-private partnerships.

### **Financial assistance by NFDB**

14. While MPEDA provides technical service for the new and existing hatcheries for the production of export-oriented species as mentioned above, NFDB can support the interested entrepreneurs financially so as to promote the diversified aquaculture for sustainability and leading our country towards blue revolution.
15. In order to kick start private sector participation in the development/establishment of hatcheries for the production of quality seeds of Seabass, Mud crab, GIFT Tilapia, Cobia and Silver pompano, it is suggested to provide an additional financial assistance equivalent to the same amount of maximum financial assistance for a particular category of hatchery from other organizations / departments by NFDB.
16. This would joint effort that RGCA would be providing technology transfer for the selected hatcheries with the funding of NFDB.
17. NFDB can consider to provide enhanced financial assistance for the suitable hatcheries having necessary infrastructure or willing to procure or develop the necessary infrastructure and machineries required on a first-come-first-served basis and as per the technological suitability of the hatchery recommended by MPEDA-RGCA.
18. A maximum 2-3 hatcheries per state per species i.e. mud crab, seabass and tilapia, may be supported under this initiative of MPEDA-NFDB.
19. It is also proposed to additionally develop 1-2 hatcheries of each of the above mentioned schemes operated by a society under the guidance of National Centre for Sustainable Aquaculture (NaCSA), a society of MPEDA involved in promotion of cluster based aquaculture farming and extension activities for spreading awareness about Good Management Practices in aquaculture with the financial assistance of NFDB.
20. The intending hatcheries may provide a suitable project proposal indicating their willingness by specifying a particular species, details on the existing infrastructure and necessary documents especially the ownership or lease details of the facility. The proposal may be submitted to the concern officer of the MPEDA and NFDB.

1. The Chairman,  
The Marine Products Export Development Authority,  
MPEDA House, PB No.4272,  
Panampilly Nagar,  
KOCHI - 682 036 - INDIA

2. Chief Executive,  
National Fisheries Development Board,  
Fish Building, Pillar No: 235, PVNR Expressway,  
SVPNPA, Hyderabad, Telangana 500052

The last date for submission of EOI is 22<sup>nd</sup> of January,2019.

**Targets:** The assisted hatcheries by MPEDA-RGCA & NFDB under this initiative are required to provide quality seeds to the willing farmers at a reasonable cost in our country to boost the production and achieve the goal of **Blue Revolution**.

**Conditions:** MPEDA & NFDB reserve the right to reject any proposal received without assigning any reason.

**Draft Proposed Financial Assistance to Hatcheries by NFDB**

<b>SI No.</b>	<b>Component</b>	<b>Assistance</b>
1	Fin Fish Hatchery (GIFT Tilapia, Seabass, Cobia, Silver pompano etc.) and Mangrove Crab hatchery of 1 million capacity annual production	40% of the admissible cost incurred (to be decided by a technical committee)
2	Assistance for acquiring additional infrastructure facilities and equipment for the existing hatcheries	40% of the admissible cost incurred (to be decided by a technical committee)

**DRAFT**

**Proforma for establishing Seabass, Mud Crab, Cobia, Pompano and GIFT Tilapia Hatchery (Proposed new construction/modifying existing hatchery) under the financial assistance of NFDB and technical consultancy of MPEDA - RGCA**

1.	Name & Address of the Applicant(s)/registered company/establishment/Institution in full (in BLOCK LETTERS).	
	PIN Code	
	Telephone No. (Office)	
	Residence No.	
	Mobile No.	
	Fax No.	
	E-mail address	
2.	Status of the Hatchery	
	Year of Establishment	
3.	Purpose of setting up the hatchery (commercial seed production)	
4.	Location of the Hatchery and total area	
	(Complete postal address with Village, Taluk, district and State)	
	PIN Code	
	Telephone No. (Office)	
	Mobile No.	
	Fax No.	
	E-mail address	
5.	Whether owned or leased (single/Pvt/ Ltd./Cooperative	
6.	If on lease, specify the lease period and also attach copy of the lease deed	
7.	Distance from the High Tide Line	
8.	Species proposed to be produced in the hatchery	
9.	Whether the hatchery has already been registered for production of shrimp seed; if so, the details,	

10.	Installed capacity and proposed (fry/fingerlings)	
11.	Source of brood stock	
12.	Date of starting production	
13.	Statement of annual production (fry/fingerlings)	
14.	List of machinery and facilities available in the hatchery	
15.	No. of qualified technical personnel employed, their names and qualifications.	
16.	Details of approval from MPEDA, CAA, Dept. of Fisheries of the concerned State for establishing/established unit	
17.	Details of knowledge on the above species (Training, Workshop, Research, Experience in the same field)	
18.	Any financial commitment to financial institutions (Banks, Private Finance, Pledging the proposed property)	
19.	Encumbrance Certificate for the land and facility	

(Signature of the Applicant)

Place:

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Date:

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Name:-----

Address: -----

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Note: (1) A layout of the facilities and necessary approvals of local bodies such as the Village Panchayat/ Municipality etc. to set up the proposed hatchery in the particular location owned/leased out of the applicant should be submitted along with this application.

(2) Details of the infrastructure available at the hatchery should be furnished in the Proforma given in Annexure-I.

**Proforma for furnishing details of infrastructure available at the Hatchery  
(New/Old)**

	<b>Physical Facilities</b>	<b>Capacity</b>
	<p><b>A. Seawater Intake system</b>  Seawater required/day:   No. and capacity of the pump(s):   Filtration system and number of pressure sand filter installed:  UV sterilization:   Ozone Sterilization :  No. of storage tanks:   Capacity of each storage tank:   No. of chlorination tanks and capacity:   No. of sedimentation tanks and capacity:</p> <p><b>B. Freshwater intake System</b>  Well/borewell/local body supply/river system/tank   Pumps:   HDPE/Cement overhead tank:</p>	
	<p><b>C. Brood stock holding/Maturation / spawning</b>   No. of brood stock holding/maturation tanks:   Capacity of each tank:   No. of spawning/hatching tanks or aquaria:   Capacity of each tank:</p>	
	<p><b>D. Larval Rearing Facilities</b>   No. of larval rearing tanks:</p>	



	<p>(i) Early larval rearing (Hatchlings to fry)</p> <p>(ii) Post-larval rearing (fry to fingerlings)-No of tanks)</p> <p>(iii) Capacity of each tank</p>	
	<p><b>E. Live Feed culture systems</b></p> <p>Indoor micro algal culture tanks(FRP)</p> <p>Outdoor algal culture tanks (Nos and capacity)</p> <p>Artemia hatching tanks(No. and capacity)</p> <p>Rotifer culture tanks (Nos and capacity)</p> <p>Copepod culture tanks (Nos and capacity)</p>	
	<p><b>F. Feed/storage facility for brood stock and PL</b></p> <p>(1) Pellet feed (storage capacity)</p> <p>(2) Wet feed (storage capacity)</p>	
	<p><b>G. Common Facilities</b></p> <p>Generators</p> <p>Air blower/compressor</p> <p>Staff quarters</p> <p>Office buildings</p>	
	<p><b>H. Hatchery Laboratory</b></p> <p>Lab equipments:</p> <p>PCR and its related accessories</p> <p>Balance:</p> <p>Air-conditioning:</p> <p>Deep freezer:</p> <p>Other items:</p> <p>Incinerator/oven</p> <p>Microscope</p> <p>Microbiological laboratory</p>	
	<p><b>I. Effluent Treatment System</b></p> <p>Capacity of chlorination and de-chlorination tanks:</p> <p>Whether any antibiotics are used in the hatchery ? If so, the details of such usage</p> <p>Ozone Treatment System</p>	

