MINI-PRawn HATCHERY FOR FISHERMEN FAMILIES

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Fishermen families living on the shore can make use of the limited facilities available in their houses to produce prawn seed and earn additional income in their leisure time. The fisherman who goes out for fishing everyday can help in bringing the spawners and the women and children in the family can take care of the larvae in their leisure hours. The procedures are so simple that the family members can learn them by attending short training courses at the Krishi Vigyan Kendra of the CMFRI at Narakkal.

INVESTMENTS AND RETURNS
The total investment is only Rs.3000 which could be easily obtained as a loan from nationalised banks. The equipment used are only plastic bins, basins and buckets and small aquarium aerators for aerating the water. These containers can be kept on the varanda of the fisherman's house. There should be electricity available in the house to operate the aerators. Clear seawater with salinity of 28-34 ppt should be available on the beach for at least 8 months in a year. The seawater for rearing the larvae can be collected in plastic buckets from the beach by the family members. The chemicals used for developing diatom cultures for feeding the larvae are cheap and easily available.

Table-1

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<th>a) PRODUCTION CAPACITY OF A MINI-PRawn HATCHERY</th>
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<tr>
<td>1. Nauplii stocked in 4 bins (each 100 litre capacity) @ 7500 nauplii per bin</td>
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<td>2. PL5 obtained after 13-15 days per run (av. survival rate 50%)</td>
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<td>3. In 8 months of operation 15 runs can be made (15,000 x 15)</td>
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<td>Capacity of the hatchery per year.....</td>
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FEBRUARY 1989
v. Aeration tube (1/2 roll), Aeration stones bolting silk - 2 m, sieve for water changing - siphoning tube (3 m)

\[ \text{Total} = 200 + 350 = 2350 \]

II. Operational: (Spread over 3 years)

vi. Chemicals

\[ \text{Total} = 200 \]

vii. Artificial feed

\[ \text{Total} = 30 \]

viii. Electricity and other miscellaneous items

\[ \text{Total} = 420 + 650 = 670 \]

III. Total investment - Rs. 2350 + 650

\[ \text{Total} = 3000 \]

IV. Annual recurring expenditure

i. Depreciation

\[ \text{Total} = 1000 \]

ii. Interest @ 12%

\[ \text{Total} = 360 \]

\[ \text{Total} = 1360 \]

V. i. Income

\[ \text{Income} = 15,000 \text{ seed} \times Rs. 15/- \text{ per 1000 seed} = 225.00 \]

\[ \text{Income from 15 runs in 8 months} = 3375 \]

ii. Net profit per year 3375-1360

\[ \text{Total} = 2015 \]

iii. Profit in percentage on capital investment (Rs.2015/3000):

\[ \text{Total} = 68\% \]

iv. Net income for 3 years: 2015 x 3

\[ \text{Total} = 6345 \]

The hatchery phase ends at postlarva-5 stage and the fishermen should sell them at this stage. The fishermen cannot keep the postlarvae for a longer period in the small containers. They need more space for good survival.

The fishermen can sell the PL5 to the seed banks being set up by MPEDA in all the maritime states. These seed banks can rear them in their facilities for about 15 days before selling them to the prawn farmers for stocking in ponds.

Alternatively, the fishermen can sell the postlarvae to marginal farmers with small brackishwater pond holdings (less than one acre) where they can be directly stocked. If the ponds are cleared of all unwanted organisms by application of mahua oil cake, crushed seeds of Croton twiglium (Neervalam) or ammonia. The PL5 are quite sturdy and can withstand an abrupt change of salinity from 30 to 20 ppt.

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of the case, grant a duplicate certificate.

(2) Every such application shall be accompanied by a fee as laid down in Part B of Schedule I:

(3) If the original certificate stated to be mislaid, lost or destroyed, shall at any time after the issue of a duplicate thereof be found, it shall forthwith be delivered to the issuing authority.

11. Returns: Every Registrar shall submit to the Director General of Shipping on or before 15 January and 15 of July of each year a return showing the particulars of certificates issued during the previous half year in form FBIC IV.

12. Production of certificate — The owner, agent or skipper of every Indian fishing boat shall produce the certificate on demand by a Surveyor, any officer of the Customs, or of the Merchantile Marine Department.