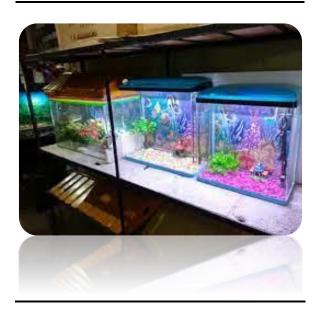
<u>ASSIGNMENT</u>

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ZOOLOGY(HONS.)- SEM-4

BUDGET FOR SETTING UP AN AQUARIUM FISH FARM AS A COTTAGE INDUSTRY.



Fish keeping has been started as a hobby in the beginning. But nowadays it has become a popular industry worldwide. Ornamental fish keeping and their propagation have been an attractive activity for many people in the world, which provide not only aesthetic beauty and pleasure but also financial benefits. This art or technique of ornamental fish breeding and trade has a tremendous scope as a cottage industry.

Aquarium fish can get about 100 times more price than the food fish. The fish keeping hobby is a million dollar industry throughout the world. In many developing countries, the local villagers collect specimen for the aquarium trade as their prime source of income.

More than 100 varieties of indigenous ornamental fishes are known like *Puntius sp.* and *Botia sp.* India's contribution to the global aquarium trade is worth more than 10 crore rupees annually. India is utilizing the natural ornamental fish sources along her coast, particularly in the Gulf of Kutch, Cape Comorin, Rameshwaram. If the valuable ornamental sources are taken up for proper use, it is possible to increase the level of export to about 110 crore rupees.

Like any other livestock farming, ornamental fish farming may attract financial losses because of poor management, and disease attack. So it is very important to handle the farm carefully. The basic requirements for successful breeding and rearing of ornamental fish are adequate space, quality water, and sufficient feed.

- <u>Investment:</u> Firstly, it requires very small investment only of a couple of thousand rupees initially. Later, the money automatically gets generated by the sale of the fish and aquarium accessories. Thus gererally the further expansion of the business does not require funding through loans etc from the financial institutions.
- <u>Select Farm Location-</u>First of all, one must fix the location. One can start in his/her backyard. One can also initiate the business from a rental location. However, they need to try to ensure a location near a market. So he/she can access easily the market and transportation facility both.
- **Prepare Fish Tank or Pond-**One can start ornamental fish farming with the tank. And can use plastic, cement or glass tank. If they want to offer retail sales from their farm, then it advisable to use a glass tank. However, they can also use the pond. They will need to procure small and big tanks. Generally, small tanks are used for growing fish fingerlings. And they can use a large tank or pond for rearing big fishes.
- <u>Select Fishes-According</u> to the local demand, one has to select the fishes carefully. However, one can also initiate a fully export-oriented fish farm. And for that, they must depend on the international market demand. However, some of the most popular aquarium fish species are Molly, Guppy, Platy, Swordtail, Blue Gourami, Pearl Gourami, Rosy Barb, Gold Fish, S Fighter, Angel, etc.
- Fish Rearing -In ornamental fish farming, one must manage the farm efficiently. Generally, they can use cement tanks. Cement tanks are easy to maintain and durable. They can sock one species in one tank. However, in the case of compatible species, two or three species can occupy the same tank. Groundwater from dug wells / deep tube wells/ borewells is the best for rearing fish. The fishes reach marketable size in around 4 to 6 months. They can harvest eight to ten crops in a year.
- **Feeding-**Young fish are fed mainly with Infusoria, Artemia, Daphnia, Mosquito larvae Tubifex, and Bloodworms. For rearing, one can use formulated artificial or prepared feed. However, try to develop a feed that has a low polluting effect, cheap to prepare, and easy to store.
- Aid from Government: As part of the poverty alleviation measures, the Government of India launched the Swarnjayanti Gram Swarozgar Yojana (SGSY) in 1999 where the major emphasis is on self help group (SHG) formation, social mobilization and economic activation through Microcredit finance. These groups use participatory processes to provide opportunities for people to share knowledge, common experiences and problems. Through their participation, members help themselves and others by gaining knowledge and information and by obtaining and providing emotional and practical support. Now, ornamental fish farming is included as one of the activities of SHGs and also plays an important role to maintain livelihood of the local people

TABLE: BUDGET FOR SETTING UP AQUARIUM AS COTTAGE INDUSTRY

| | CAPITAL COST(Rs) | |
|--|------------------|------|
| 2 glass aquarium (2.5x2x1)m each with lids and fittings. | 2x1400 | 2800 |
| 3 cement cisterns(5x3x2)m | 3x1200 | 3600 |
| 3 aerator | 3x200 | 600 |
| Other equipments like hand nets,buckets,pipes,etc. | | 1000 |

| Capital cost total | | 8000 | |
|------------------------------------|-------|--------|--|
| CULTURE COST(Rs.) | | | |
| 200 females | 200x3 | 600 | |
| 50 males | 50x5 | 250 | |
| Feed for one year | | 3600 | |
| Others | | 1000 | |
| TOTAL COST(including capital cost) | | 13,450 | |

PRODUCTION: MONTHLY PRODUCTION OF 5000 YOUNG. YEARLY PRODUCTION OF 60000 YOUNG.40% MALE=24000, 60% FEMALE= 36000.

| 24000 MALE | 24000X3 | 72000 | | |
|--|---------|----------|--|--|
| 36000 FEMALE | 36000X2 | 72000 | | |
| TOTAL SALE | | 1,44,000 | | |
| ANNUAL PROFIT= (1,44,000-13,450)=1,30,550. | | | | |
| MONTHLY PROFIT=Rs 10,879 | | | | |

❖ Promote Ornamental Fish Farming Business

Proper promotion of the product is important. The Aquarium shop is a very good option. One can sell their fishes from their own shop. In addition, they can also distribute the fishes to the other retail outlets.

Register business with local business to business directories. Create business website. Join the fish farming associations. Finally, try to build a wide and strong distribution channel to promote ornamental fish farming business.

Financial institutions like NABARD, and National Fisheries Board support this industry as a cottage venture. Kolkata, Mumbai, Chennai, Kochi are the main business centres for this industry who get their supplies from the small entrepreneurs. About 90 per cent of ornamental fish is traded from Kolkata port followed by 8 per cent from Mumbai and 2 per cent from Chennai. India's share to global ornamental fish trade is less than one percent but still she is projected as a "sleeping giant" because of yet untapped potential resources.

