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# Carp Farming in Village Ponds

## The untapped potential in Tiruvallur District - An overview

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FOOD security is the concept towards which we have always worked. Fish is one of the important food consumed by a large sector of people of our country. Really it is a challenging task to meet out the food demand in the upcoming years as the country becomes highly populous. Researches showed that an individual consumes 40 gm of fish per day against the recommendation of 100 gm per day. The sources of fish catch are mainly from sea, rivers, lakes and ponds. But still there is a gap between the catch and the demand. Currently, in modernization of carp farming there is an enormous scope for rearing fish to meet out the demand by utilizing all the available water resources and get sustained in fish production.

The Krishi Vigyan Kendra, Tiruvallur has taken up a Front Line Demonstration (FLD) on Carp farming in village ponds. The main motive of the FLD is to utilize the under utilized water resources available locally and facilitate the farmers and rural youth to fetch more income from the readily available resources. The most suitable fish farming in village ponds is Composite carp Culture. There are various types of carps available. Among them Catla, Rohu, Common carp, Silver carp, and Grass carp are highly suitable for composite culture. They feed on food material available at various levels of pond which would facilitate to utilize the whole pond efficiently. If these carps are reared in correct ratio in ponds then it would increase the productivity and returns.

### Feeding habit of fish reared in ponds

| Carp | Feeding habit |
|---|---|
| Catla | Zoo plankton |
| Rohu | Phytoplankton and Zoo plankton |
| Common carp | Water plants, insects, crustaceans and benthic worms |
| Grass carp | Aquatic vegetation |
| Silver carp | Phytoplankton |

Front Line Demonstration (FLD) on "Carp farming in village ponds" at Krishi Vigyan Kendra, Tiruvallur

The Krishi Vigyan Kendra, Tiruvallur has taken up a FLD on Carp farming in Vathatoor village of Tiruvallur District in an area of 5 acres. The ponds were taken for lease in agreement with the village Panchayat by the unemployed rural youth of that village. In the selected ponds 10,000 numbers of fish fingerlings were stocked in the month of October, 2009 and as per the details given below.

| Type of carp fingerlings | Numbers released |
|---|---|
| Catla (*Catla catla*) | 2,750 |
| Rohu (*Labeo rohita*) | 2,000 |
| Common carp (*Cyprinus carpio*) | 2,250 |
| Grass carp (*Ctenopharyngodon idella*) | 3,000 |

Trainings on Composite fish culture were given by the scientists of Krishi Vigyan Kendra, and Department of fisheries, Tiruvallur at various stages of the demonstration. Selection of ponds, stocking of fingerlings, maintenance of ponds, feeding of fish and disease management techniques were

*Fish farming is an age old traditional practice in the world. People did fishing for sustenance. But now the scene has changed. There is a large scope for fish catch as it is one of the major food of the people of the country. In Tamil Nadu the total inland fisheries sector has about 3.71 lakh ha which are amenable for both capture and culture fisheries. The fish production from the inland sector during 2008-09 was 1.6 lakhs tonnes. Still there is a gap between the catch and the demand. This gap can be bridged by utilizing the available water resources in the Tiruvallur. The KVK, Tiruvallur of Tamil Nadu State intervened with a Front Line Demonstration on "Carp farming in village ponds" with a motive of utilizing the untapped water potential available in villages. The results showed a three-fold increase of what was spent. The respondents opined that the demonstration was really a suitable option for income generation and motivated other farmers and rural youth also.*

**Table 1.** Yield and economic returns

| Carp | Numbers | Economics | | | |
|---|---|---|---|---|---|
| Catla | 2,750 | Gross cost | Gross income | Net return | BC ratio |
| Rohu | 2,000 | 1,05,000 | 4,00,000 | 2,95,000 | **1: 3.81** |
| Common carp | 2,250 | | | | |
| Grass carp | 3,000 | | | | |

imparted to the beneficiaries at the appropriate stage.

It was observed that after a period of nine months, ie. by July, 2010, the fish have attained a weight of 1.5 kg to 2.5 kg. The beneficiaries have started harvesting the fish. The price ranged from ₹ 80 to ₹ 100 per kg. From an area of 5 acres they have harvested 5 tonnes of fish resulted in a gross income of ₹ 2,95,000. The cost benefit ratio is 1:3.81.


## SUMMARY

The Front Line Demonstration on Carp farming showed that composite fish culture is a wonderful avenue for increasing the fish production in Tiruvallur district. The income generated was multifold compared to the expenditure. The demonstration showed that the locally available water bodies in villages and small hamlets can be utilized efficiently. The field day conducted on the day of harvest motivated the other farmers and rural youth of the near by villages to tap the untapped potential of water resources of their habitat. In a nut shell, Composite fish culture is a source for additional income generation by utilizing the unutilized and underutilized aquatic resources. The farmers can also have Integrated Farming System in which fish culture is one of the components in a small area of their holdings. They can rear fish in field channels and paddy fields which would facilitate them to get additional income from diversified sources.



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