

Pond Farming in India

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ABSTRACT

Farm ponds are small tanks or reservoir like constructions, are constructed for the purpose of storing the surface run off, generated from the catchment area. The main aim of construction of farm pond is to make the availability of protective irrigation at critical growth stages of crop. The farm pond has the great impact on changing the crop productivity as well as crop intensity. It helps in changing the economic situation of farmers. The irrigated area also increases due to the construction of farm pond. India has been predominantly an agricultural country. Hence, it is true that progress of India is very much dependent on the development of agriculture. The increased agriculture production depends upon the number of factor in which, water play an important role. Economic change was measured in terms of change in employment generation at individual level, beneficiaries created more employment opportunities, after construction of farm pond. Social change was measured in terms of change in material possession, change in education of family members and change in implement possession. The data revealed that medium change in material possession, implement possession and education of family members after farm pond. The farm pond has a great impact on changing the crop productivity as well as crop intensity. It also helps in changing the economic situation of farmers. Hence pond farming plays a major role in the agricultural field.

1. INTRODUCTION

Farm ponds are created in various parts of India along with Maharastra. The main aim of construction of farm pond is to make the availability of protective irrigation at critical growth stages of crop. In Maharastra through various schemes of Government the farm ponds are allotted to farmers namely, National Horticulture Mission, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and Mahatma Phule Jal Abhiyan etc.

2. MEANING OF FARM PONDS

Farm ponds are small tanks or reservoir like constructions, are constructed for the purpose of storing the surface run off, generated from the catchment area.

POND FARMING AND ITS TYPES

About half of India's population depends directly on agriculture. The severe drought prevailing in the country has caused distress in many districts across 11 states, affecting about more than 300 million people. In recent years, the area under irrigation was expanded considerably and production was intensified by increasing the number and size of the ponds. Now a large number of government organizations, municipalities are digging with the use of earth moving tractors. Pond farming is now promoted in many places. In broad sense, the farm ponds are divided in following two general categories. They are

- **Embankment Type**
- **Excavated or Dug Out Type**
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Apart from these two types there are 5 other types of farm ponds. They are

- **Surface Ponds**
- **Spring Or Creek Fed Ponds**
- **Off Stream Storage Ponds**
- **Seepage Ponds**
- **Pump-Fed Pond**

EMBANKMENT TYPE

Embankment type farm ponds are generally constructed across the stream or water course. Embankment ponds are more common in areas with moderate to steep sloping terrain. They are created by building a dam or embankment. But it will pay way for more seepage.

EXCAVATED OR DUG OUT TYPE

As the name implies, dug ponds are created by removing soil and allowing water to fill in the dugout area. The use of this type of pond is suitable, particularly where a small supply of water is required. This is most useful type.

SURFACE PONDS

Surface ponds are constructed in farms. They are considered to collect surface runoff from farm area into a local depression or the lowest portion of the farm.

SPRING OR CREEK FED PONDS

These farm ponds are found in the hilly regions. . It may be a perennial source for water within a farm.

OFF STREAM STORAGE PONDS

These ponds are based on streams and seasons. The streams are seasonal from which water is drawn into the farm pond by diversion.

SEEPAGE PONDS

These ponds are supplied with water from the water table by seepage.

PUMP-FED PONDS

The sources of these ponds are such as a well, spring, lake or irrigation canal and are supplied water from these sources by pumping.

FARM PONDS CAN BE DESIGNED FOR THREE STRATEGIES OF IRRIGATION

- Meeting the crop water requirement
- Meeting water requirement of critical

- Meeting water requirement in cropping system approach

3. COMPONENTS OF FARM PONDS

The farm pond essentially consists of following components:

- 1. Storage area
- 2. Earthen embankment
- 3. Mechanical and emergency spillways.

BENEFITS OF POND FARMING

Ponds have been constructed for various reasons such as irrigation, drinking water, live stock watering. More recently ponds are being installed for recreational activities like swimming, fishing as well as agricultural practices like fish farming.

- ❖ Increased Crop yield potential
- ❖ Less soil erosion
- ❖ Increased Land Value

INCREASED CROP YIELD POTENTIAL

It allows the water table to be controlled during the growing season in order to create the most fertile farmland possible. Without any water management, a good portion of land would be useless. Hence, it increases the crop yield potential.

LESS SOIL EROSION

It allows the water to filter through the soil which leads to less erosion and allows the soil to stay intact. Hence it reduces soil erosion and makes the land more fertile.

INCREASED LAND VALUE

It keeps the land in good condition. Due to the adequate water facility the land become more fertile. Hence it increases the land value.

OTHER BENEFITS

The farm pond has the great impact on changing the crop productivity as well as crop intensity. It helps in changing the economic situation of farmers. The irrigated area also increases due to the construction of farm pond. India has been predominantly an agricultural country. Hence, it is true that progress of India is very much dependent on the development of agriculture. The increased agriculture production depends upon the number of factor of which, water play an important role. Therefore by increasing the construction of farm ponds and the practice of pond farming, the living status of farmers gets better and in the same way it also increases the economic growth of the nation.

POND FARMING IN FISHERY

In our country farm ponds are mainly used in fishery. Fish farming is nothing but the process of growing fish in the pond for commercial purpose. By this fisherman gets more profit and it is also useful for the economic development of both fisherman and the country.

4. OBJECTIVES OF FARM PONDS IN FISHERY

- ❖ Promote, facilitate and influence the best possible standards of fisheries management.
- ❖ Provide the technical and general knowledge necessary for competent fisheries management.
- ❖ Be the organization of choice for evidence based advice and guidance for sustainable fisheries management.
- ❖ Be the membership body of choice for fisheries managers, and to provide good value fisheries management service to members and customers of the institute.

**5. IMPACTS OF FARM PONDS
TECHNOLOGICAL CHANGES**

Technological changes in agriculture were measured in terms of change in crop productivity, change in cropping pattern and soil conservation structure. It was observed thus at individual levels farmers and other users showed medium change in respect of technological change before use of farm pond.

ECONOMIC CHANGES

Economic change was measured in terms of change in employment generation at individual level, beneficiaries created more employment opportunities, after construction of farm ponds.

SOCIAL CHANGES

Social change was measured in terms of change in material possession, change in Education of family members and change in implement possession .The data revealed that medium change in all the three aspects after farm pond.

6. CONCLUSION

The farm pond has a great impact on changing the crop productivity as well as crop intensity. It also helps in changing the economic situation of farmers. Hence pond farming plays a major role in the agricultural field.

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