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AN EVALUATION STUDY ON MUSHROOM CULTIVATION IN MALAYALAPUZHA GRAMA PANCHAYATH PATHANAMTHITTA

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Abstract

Mushroom growing is an occupation requiring patience, intelligent observation and a skill that can be developed only through expertise, training and intelligent experience. But it is an important occupation which can become livelihood for the rural poor. In a rural area, where majority of women are unemployed can grow mushroom within their home to earn a livelihood.

The major findings of the study are

- Total number of beneficiaries of the project is 107 in which 44 per cent of beneficiaries belong to SC Category.
- The average cost for cultivating mushroom in an year is ₹ 134454 and for a month is ₹ 11204
- The average harvest of the units per year is 1890 kg.
- The average income per year of the units is ₹ 3,56,688
- The average price of mushroom/Kg during the study period is ₹ 189
- The profit per year of the mushroom producing units is ₹ 222234 and profit per month is ₹ 18510.

Disclaimer

This working paper has been prepared by Shri. Shibin. P.B, Research Assistant, District Planning Office, Pathanamthitta. The facts and figures in the report are based on quick field survey done by the author and do not reflect the views or polices of Kerala State Planning Board. The purpose of this document is to provide a comprehensive overview of the scheme/projects implemented by the Local Self Government during XI Five Year Plan.

Mushroom Cultivation In Malayalapuzha Grama Panchayath

Introduction

Mushrooms have been used throughout the world both as food and medicine for thousands of years. They are rich source of nutrition and form a major chunk of health foods. They grow by feeding off other living organic matter. The climate of Kerala supports cultivation of mushroom. The main advantage of mushroom over other plants is that it does not require soil for growth. It can be cultivated from bio wastes.

Mushrooms are the best natural food easily available in Kerala. Mushrooms are different from other plants. It has no roots, stems or leaves. The availability of agricultural waste and weather conditions in the state are suited for mushroom cultivation. Mushroom cultivation has grown from a hobby to a mini industry in the state. It's a small business undertaken mainly by women in their houses.

Malayalapuzha Grama Panchayat

Malayalapuzha grama panchayat is situated in Konni block of Pathanamthitta district.The panchayat has an area of 27.53 sq.km. According to 2001 Census, the total population of the panchayat is 18266. About 80 per cent of the people in the panchayat depends upon agriculture and a majority of the people are below poverty line. Major crops in the panchayath are paddy, coconut, banana and rubber. Lack of infrastructure, health problems, unemployment are the major problems of the panchayat.

1.1 Objectives of the Study

- To make an evaluation about cost and outcomes of the project
- To evaluate the problems faced by the mushroom cultivators
- To suggest ways for the profitable cultivation of mushroom.

1.2 Statement of the Problem

Even though Mushroom cultivation is a profitable business in Kerala due to its favourable climatic conditions, mushroom farming is not spreading fast. There are certain problems which hinder the spread of mushroom farming in the panchayath. Mushroom farming is a highly remunerative enterprise with quick return in very short period. But cultivation of mushroom is not spreading among rural people. The present study is conducted in order to find out these problems and to suggest remedial measures for the growth of mushroom farming in the district.

1.3 Methodology

There are 5 Kudumbasree units engaged in mushroom farming. These Kudumbasree units are engaged in mushroom farming from 2008-09 to 2011-12. The cultivation during these four years is taken for the study. Interview method was used with structured interview schedules.

Primary data were collected from the 26 workers in various kudumbasree units engaged in the cultivation of mushroom using questionnaire.

Secondary data was collected from the plan documents and studies and reports of different organizations about mushroom cultivation.

1.4 Limitations of the Study

- Since the study is confined to a small area like panchayat, the results cannot be generalized.
- The study has been conducted in a short period, so many of the problems are not being discussed.

1.5 Significance of the Study

- Mushroom cultivation is not a very skilled process, so it can be adopted by anyone in the rural area to earn a livelihood.
- High nutritional value of mushroom gives good profit for the producer and hence is a good business opportunity.

Mushroom Cultivation in Malayalapuzha Grama Panchayat: Problems and Profitability

2.1 Project Details

The project was started during 2008-09 and continues for the last four years. The project covers a period of 5 years. The total cost of the project is ₹ 5 lakh in which ₹ 3 lakh is beneficiary share. The project is implemented through VEO, Malayalpuzha. There are 5 Kudumbasree units engaged in mushroom farming during different years. The names of the Kudumbasree units are Thejus, Neelima, Athira, Mahass and Mamtha. These groups also have mushroom based food producing units. They mainly cultivate paddy straw mushroom and oyster (chippikoon) mushroom. The spawn for their units are bought from Krishi Vigyan Kendra, Pathanamthitta. The workers of these groups also got training from STEMS in, Adoor. The main objective of the project is to ensure a regular income for the rural women.

2.2 Analysis of Cost and Outcome of the Project

Cost of the Project

The total cost of the project is ₹ 5 lakh in which ₹ 3 lakh is beneficiary share which is taken as loan from bank and ₹ 2 lakh is given as subsidy from the plan fund.

2.2.1 Beneficiaries of the Project

The total number of beneficiaries till 2011-12 is 107 and it is shown in table 2.1

Table 2.1
Details of Beneficiaries of the Project

Category	APL		BPL		Total
	Women	Men	Women	Men	
General	10	8	7	10	35
SC	12	14	9	12	47
ST	4	3	11	7	25
Total	**26**	**25**	**27**	**29**	**107**

Source: Sample Survey

The above table shows the list of beneficiaries of the project during last four years. It is clear from the above table that a majority of the beneficiaries are from SC category (44%).The other major categories are ST (23%) and General (33%).

2.2.2 Cost for Cultivating Mushroom

The units had incurred an initial investment of ₹ 20000 which included infrastructure, equipments and training expense. Averages of 200 beds were cultivated in a month during these years. The spawns are bought from Krishi Vigyan Kendra, Pathanamthitta and also from Bodhana, Thiruvalla. The miscellaneous cost includes the cost for training, transportation, firewood, cover etc. The cost of mushroom cultivation per year is shown in the following table 2.2.

Table 2.2
Cost of Cultivating Mushroom/year (In ₹)

Year	Spawn	Paddy straw	Miscellaneous	Total
2008-09	49350	20675	50400	120425
2009-10	50950	24090	58150	133190
2010-11	52800	26600	60800	140200
2011-12	54000	25000	65000	144000
Total	**207100**	**96365**	**234350**	**537815**

Source: Sample Survey

The above table shows the cost of producing mushroom during last four years. It is understood from the table that the cost of production has been increasing during these years. The miscellaneous cost constitutes a substantial part of the total cost of production. The average cost of production for a year is ₹ 134454 and the average cost of production per month is ₹ 11204.

2.2.3 Harvest, Price and Income During Different Years

On an average three harvest can be reaped in a month. An average of one Kg can be reaped from one bed. From June to October the harvest will be high owing to the cool climate and high humidity in the atmosphere. But from November to May the harvest

may be normally low. But the producers maintain humidity using sprayers, wet sack etc. The average harvest, price and income of the units during the last four years are shown in table 2.3.

Table 2.3
Details of Harvest, Price and income

Year	Harvest(In kg)	Price/kg(In ₹)	Income(In ₹)
2008-09	1850	180	3,33,000
2009-10	1950	185	3,60,750
2010-11	1900	190	3,61,000
2011-12	1860	200	3,72,000
Total			**14,26,750**

Source: Sample Survey

The above table shows harvest (kg), price and income (₹) of the Kudumbasree units during last four years. The average harvest in a year is 1890 kg. The average income of the unit per year is ₹ 3, 56,688. It is understood from the table that the price of mushroom has shown an increasing trend during the last four years. The average price of mushroom/kg is ₹ 189.

It is clear from the above two tables that the various Kudumbasree units had good profit by cultivating mushroom. Their total profit from this four year is ₹ 9, 96,650 and the average profit per year is ₹ 2,22,234. The average total profit /month is ₹ 18510.

2.3 Major Problems of Mushroom Farming in Malayalapuzha Grama Panchayath

1. Difficulty of Getting Good Quality Spawn

The yield of mushroom to a great extent depends upon quality of spawn. The non availability of good quality spawn is a common problem of mushroom farming in the panchayath. In the panchayath the units are buying spawn from distant areas like Thiruvalla and Adoor, but are not getting good quality spawn.

2. Lack of Facility for the Storage of Spawn

This is also a problem experienced by the units in the panchayat. These units buy spawn from distant areas, when they take

more units of spawn they need cooling facility for storing spawn, otherwise spawn may be damaged.

3. High Transportation Charges

In village areas the workers need to hire vehicles in order to transport inputs such as paddy straw and seeds from areas where they are available to local areas. So transportation charge will increase the input price of mushroom cultivation and affects profits of mushroom farmers. In Malayalpuzha they are collecting input from Thiruvalla and Bodhana, Adoor. So transportation cost adversely affects their profit.

4. Lack of Immediate Access to Market

When large quantity of mushrooms is harvested per day, then its marketing becomes a major problem. Since mushroom is an easily perishable commodity, producers in village areas have no access to local markets where they can easily dispose off their produce. Lack of marketing facilities is a cause for the lack of interest among farmers in taking up mushroom cultivation.

5. Need for Sanitation and Hygienic Conditions

The very first requirement in mushroom growing is sanitation and hygienic conditions. Most of the problems in mushroom growing arise due to improper hygiene. Hygiene covers all the measures, which are necessary to minimize the possible incidence of the pests and pathogens. Thus, hygiene and sanitation go hand in hand at all stages of mushroom growing. Farm hygiene is the main problem for a mushroom grower since it directly affects the harvest.

6. Lack of Awareness among Consumers

The people are not aware of the medicinal qualities as well as mineral and protein content of mushroom. So this becomes another problem which affects the marketing of the product.

7. The damage occurs in mushroom beds due to fungus species, bacteria and diseases is the problem which also affects the quality of mushroom.

8. Seasonality and Wide Fluctuation in the Harvest

The harvest of mushroom mainly depends upon different seasons, so it creates an irregular supply of the output in the market. This irregular supply gives rise to instability in price.

9. Failure to form Fruit Body

If there is deficiency of light, excessive temperature or poor ventilation, it can cause for the poor harvest. So proper care should be taken while growing mushroom otherwise it will result in poor harvest.

2.4 Suggestions and Recommendations

1. Adopt hygienic measures so that we can avoid the damage to the harvest.
2. Panchayat may conduct training programmes to help the members to develop the skills required for mushroom farming.
3. Panchayat may allocate more funds for primary activity like mushroom cultivation.
4. Seminars may be conducted to spread awareness among people about the medicinal properties of mushroom.
5. More and more mushroom producing units can be started as it doesn't require soil other than bio-wastes.
6. Storage and cooling facilities must be provided for the units to procure spawn.
7. Value added products from mushroom such as pickles, cutlets, cakes etc. are promising enterprise. So mushroom cultivation should be promoted for the expansion of food processing industry.
8. The compost left after cultivation should be used for making manure, vermin compost etc.
9. The authorities may promote mushroom cultivation at household level.
10. The workers should be given the facilities for producing spawn, so that they can avoid the problem of collecting spawn from distant areas.
11. The present growers must form co-operative societies inorder to share the technical information on day to day growing and spawn production.

12. The cost of production should be maintained as low as possible by utilising the agricultural wastes.
13. Good and committed entrepreneurs should be encouraged to become involved in the mushroom cultivation.
14. The government must take the initiative for the export of processed mushroom by purchasing from the small scale mushroom farmers.

Conclusion

Mushroom growing is an occupation requiring patience, intelligent observation and a skill that can be developed only through expertise, training and intelligent experience. But it is an important occupation which can become livelihood for the rural poor. In a rural area, where majority of women are unemployed can grow mushroom within their home to earn a livelihood.