

**AN ECONOMIC ANALYSIS OF ONION CULTIVATION IN PERAMBALUR
DISTRICT, TAMILNADU**

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Abstract

Agriculture plays a significant role in Indian economy by constitutes 17-18% to country's GDP in 2018. The agriculture sectors meet up the food requirement in the country by taking much effort on production of almost all agricultural produces. India has occupied the second position with 5.5 lakh hectares of area of cultivable land and 77 lakh tonnes of production of onion next to China in the world. In vegetables, onion plays a vital role in Indian and foreign cuisine. Without onion there is no dish prepared and completed in Indian food. However, India stands in the second place in production of onion with 20% of share in the world production next to China. Since the demand for onion is throughout the year in India there is always faces the problems in supply. Therefore, this paper attempt to the examine the cost and return structure of onion cultivation in the study area and to suggest the remedial measure to improve the production and marketing of onion.

Keywords: *Cost of cultivation, small, medium, large farmers, cost benefit analyses.*

I. INTRODUCTION

Agriculture stands as the backbone of Indian economy. 43.21 percent population of the country is directly dependent on the agriculture sector for their primary means of income generation and the sector contributes around 15 percent to the country's total GDP (World Bank, n.d.). In India, Onion is an important vegetable crop not only grown for internal consumption but also is the highest foreign exchange earner among the Indian fruits and vegetables. India is the second largest onion producer in the world with annual production of 23.5 million tons in the year 2018-19.

II. STATEMENT OF THE PROBLEM

Onion producing farmers in Perambalur district have faced many problems in growing small onion like, climate change, unseasonal rainfall, high cost of fertilizers, pesticides and transportation, storage loss, insufficient natural manure, non availability of labour, lack of market information, price fluctuation, irrigation facility, water scarcity, financial support, middlemen interference and non availability of cold storage facilities. Farmers supply plenty of onion to the market through middlemen at lesser price. The requirement of seed onion for next cultivation is increased the current price level. The onion growers face the higher amount of storage loss every year. Further, price changes depend upon the monsoon in the shallot growing districts of Tamil Nadu, demand rose in the local, national and international markets.

III. OBJECTIVES OF THE STUDY

- To evaluate the cost and return structure of onion cultivation in the study area.
- To suggest the remedial measure to improve the production and marketing of onion.

IV. METHODOLOGY

The study is based on primary data which have been from different farmer's households by using interview schedule methods. About 90 farmer's households are interviewed for the study; therefore, multistage sampling technique is use in the sample selection process. In Tamil Nadu state, perambalur District, Alathur Block, one of the Major onion cultivation district in Tamil Nadu. Present study is list of village's cultivation of onion from Taluk office at perambalur, A total of six villages were selected the random sample methods. For purpose of selection of the sample farmer's small farmers, medium farmers, large formers are considered. The collected data were, analysed with help of table percentages, average and ANOVA was used.

From the table - 1 the cost of onion cultivation by the sample farmers of different size group in the study areas. The maximum per acre operational cost was found to be Rs. 5090.10 for large type farmers and was mainly from family labour. Due to large land area they had to work daily for de-weeding, manual ploughing of surface soil. The minimum operational cost was found from bullock labour for small type farmers i.e. Rs. 1201.51. In case of material cost, the highest cost was involved in plant protection i.e. Rs. 6161.20 for large type of farmers. Poaching was the major hazardous problem found in farm area of large type of farmers. To overcome these problems they were use to do fencing for protection. The highest fixed cost was recorded from rental value of owned land for large scale farmers i.e. Rs. 26066.62.

From the table above – 4.3 that the Cost – Benefit analysis of onion production for all type of onion growers. The Benefit – Cost ratio were found maximum (6.74: 2) for large type of farmers whereas small type of farmers hold minimum (3.59: 2) benefit – cost ratio (Table 2 and 3). By getting this type of result we can say that there is an inverse relationship between net benefit and benefit - cost ratio. The type of farmers who were having small land area have better benefit - cost ratio because they can manage their all the needs and requirement for onion cultivation in better way within less involvement of cost than the farmers having large area. This result show that farm management practice is very important factor for better production of onion which is not up to the mark in large type of farmers in perambalur district of tamilnadu.

Table-1

**COST OF ONION CULTIVATION BY THE SAMPLE FARMERS OF DIFFERENT
SIZE GROUP IN THE STUDY AREAS**

S.I	Particulars	Size Group of onion Growers		
		Small	Medium	Large
A.	Operational Cost			
1.	Imputed value of family labour	5090.10	5721.11	5155.26
2.	Hired Human labour	4121.25	4361.20	5148.35
3.	Bullock labour	1201.51	1321.25	1720.25
4.	Machine power	2198.08	2420.44	3315.22
	Total	12610.94	13825.00	15339.08
B.	Material Cost			
1.	Seed	3522.03	4123.52	4572.30
2.	Manures and fertilizers	1251.76	1851.54	2236.10
3.	Plant Protection	3150.21	5232.44	6161.20
4.	Irrigation charges (by tube well Diesel + electricity)	3211.05	4151.00	5110.00
5.	Interest on working capital @6% for season	1232.11	1534.33	2107.73
	Transportation	1702.00	2100.00	2200.00
	Total	14069.16	18992.83	22387.33
C.	Fixed Cost			
1.	Rental value of owned land	21000.00	22741.60	26066.62
2.	Land revenue	50.00	50.00	50.00
3.	Depreciation and maintenance of implements and machinery	2113.17	2365.03	2425.23
4.	Interest on owned fixed capital	276.46	373.11	475.75
	Total cost	23439.63	25529.74	29017.6

Source: computed primary

Table-2
YIELDS AND RETURN OF ONION CULTIVATION OF SAMPLE FARMERS IN THE STUDY AREA

Sl. No.	Particulars	Small farmers	Medium farmers	Large farmers
1.	Total yield (q/ha)	4500	5625	11250
2.	Price received per kg	40	40	40
4.	Gross return (Rs)	180000	225000	450000
5.	Net returns over total cost (Rs.)	129880.27	166652.43	420982.4

Source: computed primary data

Table.3
COST – BENEFIT ANALYSIS OF ONION PRODUCTION FOR ALL TYPE OF ONION GROWERS

Particulars Grover's	Cost Involved Per acre. (Rs.)	Gross Return (Rs.)	Net Benefit (Rs.)	Cost– Benefit
Small	50119.73	180000	129880.27	3.59
Medium	58347.57	225000	166652.43	3.85
Large	66743.47	450000	420982.4	6.74

Source: computed primary data

V. FINDING AND SUGGESTION OF THE STUDY

- The majority of the 41.37 percent, 36.66 percent and 38.70 percent of small, medium, large farmers were earned the income level of 50000 above.
- The 86.20 percent and 86.66 percent, 87.09 percent of the small, medium, large farmers have own land agricultural onion cultivation.

- The 96.55 percent and 100.0 percent and 96.77 percent of small, medium, large farmers have irrigated land in agriculture.
- The net return were found maximum (Rs. 420982.4) for large type of farmers whereas minimum (Rs. 450000) was for small type of farmers according to availability of land area utilized for onion cultivation.
- The Cost – Benefit analysis of onion production for all type of onion growers. The Benefit – Cost ratio were found maximum (6.74: 2) for large type of farmers whereas small type of farmers hold minimum (3.59: 2) benefit – cost ratio (Table 5 and 6). By getting this type of result we can say that there is an inverse relationship between net benefit and benefit - cost ratio.

A. SUGGESTIONS OF THE STUDY

- The government should be generous in establishing Cold Storage for onion in the interest of small and marginal farmers.
- The government should establish Agmark Grading Laboratories. Separate seed centres and soil testing centres should be established in Perambalur.
- As most of the onions are transported to Dindugul for the purpose of export, the transportation cost occupies the major percentage of total marketing cost. Therefore measures should be taken to establish training facilities to boost direct export of onion from Perambalur.
- The role of middlemen should be checked and legitimized.
- The government can render regular goods carrier service facilities for enhancing movement of onion to the nearest mundies.
- Government should implement trade policy for price stabilization and farmers' market since it is less price elastic.
- As the rising input cost is main problem for smallholdings, the cultivators should be try to use natural manures, which is available in rural areas.

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