



Assessing The Socio-Economic Status Of Tomato Growers In Salem District Mecheri Taluk

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Abstract

This study examines the socio-economic status of tomato producers in Mecheri Taluk, Salem District. A survey of 30 tomato farmers was conducted to gather data on their demographic characteristics, farm management practices, and economic performance. For the present study, the data was obtained from primary data. The primary data was collected from the selected respondents who were engaged in tomato producers. The tomato producers were selected from Mettur Taluk tomato producers was selected randomly, which accounted to 30 tomato producers in total of the respondents. The field investigation was carried out were related to agriculture year 2024-2025. The findings of this study have implications for policymakers and stakeholders seeking to improve the livelihoods of tomato producers in the region.

Keywords: Tomato Producers, Socio-Economic analysis, Mecherri Taluk, Salem District

1. Introduction

Tomatoes are currently an important food component globally. The tomatoes are in fact the largest vegetable both in terms of production and consumption. Tomato is produced temperate, subtropical and its largest horticulture crop produced in terms of yield in the world. The present-day tomato has a short history of human utilization. It was accepted to have its birthplace in the South American Andes, which is in present day Peru where it was developing in the wild at the foot of slopes. It was then taken to different pieces of the world by the early pioneers where it was planted as elaborate interests however not eaten. In Europe for example it was planted in gardens as enlivening plants and was viewed as harmful. Despite the fact that tomato was acknowledged later as an eatable harvest in Europe in around 1840 there was as yet severe restriction to its utilization in different pieces of the world.

Worldwide tomato creation expanded during the 1920s because of advancements in innovations that made automated handling conceivable. With expanding information in benefits got from hereditary change of tomatoes, progressively attractive parameters have been chosen for varietal improvement to upgrade the harvest for human utilization. Today, incalculable assortments of tomatoes are devoured everywhere throughout the world in various plans. Tomatoes are one of the fastest growing agriculture products in the world today. Tomatoes in the world are prone to frequent price fluctuations and thus global farmers are not only vulnerable but also globally affected by climate change tomato. There are many countries that benefit by exporting large quantities of tomatoes so that the growth of that country will be good. Countries that produce the most tomatoes in the world china constituted the country with the largest volume of tomato production. India ranks second in the area as well as in production of tomato. The major tomato growing countries are USA, ITALY, TURKEY and EGYPT.

Tomato is globally cultivated for its fleshy fruits and known as a protective food because of its special nutritive value and its wide spread production. It is the world's largest vegetable crop after potato and it tops the list of canned vegetables, tomatoes are eaten directly as raw vegetable or consumed in a variety of processed products like ketch-up, sauce, chutney, juice, diced, soup, paste, puree etc. It is a rich source of vitamin A and C, and also contains minerals like iron, phosphorus and is the richest source of nutrients, dietary fibers, antioxidant like lycopene and beta carotene, and the compounds that protect cells from cancer. The crop is a short generation time of about three to four months, well adapted to different cropping systems of cereal grains, pulses and oilseeds. Hence, it is the most widely grown vegetable crops grown worldwide under outdoor and indoor conditions.

With the increase in diversification of the agricultural sector, there is also an increase in acceptance of the agricultural input such as fertilizer, pesticides, machinery, pest resistance and high yielding seeds among farmers, these made farm operations more efficient and productive But incomes from agricultural investment are still low. This is because there is a high cost of farm inputs and farmers also face various challenges such as drought, flood and various irrigation problems which added to the cost of production. It is with this concern in mind that this study embarked upon. Hence it aimed at assessing the profitability of tomato production in the study area.

The management of resources by farmers to cope with the increased demand for the food, fiber and exports crops is necessary. For farmers to remain in the business there must to be profit. One of the prerequisites to this is through the estimation of input- output relationship relative to inputs prices, the rate of substitution and products prices. Since tomato production entails different cost out lays, the farmers would want to know its profitability before venturing in to the production. This can practically be achieved through the knowledge of costing production and estimation of benefits in monetary terms hence these prompted this research work. Additionally, the study exposed the problems associated with the tomato production investment and the recommendations aid in designing policies to mitigate the problems. The crop is a short generation time of about three to four months, well adapted to different cropping systems of cereal grains, pulses and oilseeds. Hence, it is the most widely grown vegetable crops.

2. Methodology

In this article main objectives as given point out (a) Socio – Economic condition of tomato Producer In the study area. (b) Economic benefit of tomato production in the study area. In this Connection an increase in total tomato production may come from an increase in the area planted and increase yields, and increased cropping intensity. However, the scope for expansion of growing areas is limited because of loss agriculture land to urbanization, land conversion. These small ruminants are a source of employment and income to farmers during the off season in agriculture coupled with tomato production. These studies would help the researcher, policy Makers and government in taking appropriate step for their well being.

For the present study, the data was obtained from primary data. The primary data was collected from the selected respondents who were engaged in tomato producers. The tomato producers were selected from Mettur Taluk tomato producers was selected randomly, which accounted to 30 tomato producers in total of the respondents. The field investigation was carried out were related to agriculture year 2024-2025.

Tools analysis in this project was simple percentage and average values were used to describe the socio-economic condition of the selected sample in tomato producers in this study area.

The tomato producer's farmers from the data collected through survey method did not maintain any records and hence they had to recall bias from their memory and furnish the information for queries put forth by the researcher. Hence, the data collected were subject to recall bias. However in order to make the result reliable for drawing conclusion relevant for universe of the study. Care has taken to minimize the recall bias through cross checks, if the accuracy and reliability of data given by the respondents were doubted.

3. Review of Literature

Moneruzzaman (2009) At the harvesting stage, the decision on when to pick tomatoes is important. The stage of development of the tomato fruit at which farmers harvest depends on whether they are to be subjected to immediate consumption or if they are to be consumed later. It follows that farmers should harvest the crop when they are already ripe if the intention is to consume immediately. However, if they intend to sell later, harvesting should be scheduled in such a way that there is enough time to allow for transportation to the market so as to minimize post-harvest losses, considering the perishable nature of tomatoes and their susceptibility to bruises. Thus, farmers should harvest the tomatoes at the mature green stage for long distance marketing in order to ensure longer shelf life.

Vassalos (2013) noted that income earned from fresh vegetable production is dependent on harvest timing decisions because price is influenced by supply. Fresh vegetables including tomatoes exhibit high inelasticity of supply due to limited storage opportunities as a consequence of their high perishability.

Adimabuno (2010) extensively discussed the ailing tomato processing industry in Ghana which was once thriving and remunerative as it initially enjoyed government support such as irrigation facilities, price control, input subsidies and market access. The author argued that the effect of trade liberalization, more so the reduction of import tariffs, led to an influx of cheap tomato paste products into the Ghanaian market, thereby outcompeting local factories' products. Moreover, mismanagement of processing factories coupled with technical inefficiencies led to closure of some of them. The use of rudimentary technologies and high overhead costs to undertake traditional processing methods such as drying and milling was also identified as a constraint to commercial expansion among tomato farmers.

Robinson and Kolavalli (2010) also explored the reasons as to why tomato processing in Ghana has failed. The authors outlined that abolishment of import quotas, lack of technical knowhow, poor marketing, and wanting financial management capabilities as impediments. Other reasons include inadequate supply of varieties suitable for processing which escalate the costs incurred by Ghanaian factories hence making them less competitive than processing firms in European Union which enjoy government subsidies. Furthermore, the price of fresh tomatoes is usually too high for the domestic tomato paste production to compete with imports.

Adenuga (2013) reported that tomato is one of the major fruit vegetables in Nigeria. In view of its seasonal availability and the need to make it available all-year round, effort must be made to increase efficiency of its production especially during the dry season. A study was therefore carried out to examine the economics of dry season tomato production in Kwara state, Nigeria. It estimated the costs and returns and assessed the technical efficiency of dry season tomato production. A two-stage random sampling technique was used to select 105 respondents for the study. A well-structured questionnaire was used to collect data from the respondents. Major tools of analysis used for the study were the gross margin analysis and the stochastic frontiers model. Results of the study showed that a gross margin of N 18,956.75/ha (US\$ 120.74/ha) was realized from dry season tomato production. Furthermore, the result of the stochastic frontier model shows that age, education status of the farmers and access to credit had significant effect on the efficiency of dry season tomato production. This study therefore highlights the need for government to invest in public education and to make credit available to farmers as a way of reducing the burden of high cost of production.

Agbabiye (2012) in his study economics of tomato production in the wet and dry seasons were examined with special reference to the efficiency of input use and varietal suitability for production seasons. Two varieties of tomato, TI-563 and TI-570 were used and gross margin analysis was employed to compare the performance of the two varieties. Inputs were valued at farm gate prices while farm products were valued at prevailing market prices. Simple linear regression was used to relate input-yield interaction per season. There was fruit yield difference between the two seasons in both varieties. Total production cost was higher in the dry season as a result labour required for irrigation. There was a negative returns-to-scale for labour on land preparation, water and insecticide applications in the dry season. All economic indices considered indicated that the profitability of varieties TI-563 and TI-570 was higher in the wet and dry seasons respectively. The consideration of economic factors in classifying varieties into wet and dry season types was emphasized.

Ayesha (2012) reported that reflects the overtime changes in global tomato production and export trends, market destinations for Pakistani tomato, regional acreage comparison, country's share in tomato export and revealed comparative advantage (RCA) of tomato. Pakistan's share in world tomato exports was negligible in 2000. The results of global and domestic tomato production and export trends depict that the export share in production for the world and Pakistan increased significantly since 2007. At present, Pakistan has no RCA in tomato trade as the value of RCA is much below the unity. However, keeping in view the 8% growth rate in tomato area and 5% in production, there are opportunities in tomato production for export from Pakistan. At present Pakistan's exports are heavily focused on Middle East and Afghanistan markets. Therefore, there is a need to look for other markets to increase the tomato exports during the glut supply season.

Naika (2005) The plants are typically vine, prostrate, and are either determinate, semi determinate or indeterminate based on whether the apical stem terminates in an inflorescence. Most shoots form in the axils of leaves. Tomato is an annual plant which can reach a height of over two meters.

According to Dittoh (1992), vegetables add flavor to the food and also provide considerable protein, vitamins and minerals. Most vegetable are low in starch content and are a good source of phyto-nutrients. They serve as roughage, which promote digestion, and prevent constipation. Vegetable crops not only improve the nutritional quality of diets, the production of vegetables under irrigation and their marketing provides many people with employment in the dry season, it constitute a major component of the country's food sector.

According to Olukosi and Ogunbile, (1989), fixed cost are those costs incurred on fixed inputs which cannot be used up during one production process, on the other hand, variable cost are those costs associated with variable inputs and do change with changes in output level.

Olukosi and Ogunbile, (1989) The prospect of earning and maintaining profitability serves as the incentive for creativity and efficiency among farmers. Profitability stimulates farmers to venture into risky business and also drive them to develop ways of cutting cost and adopting new technologies always in an effort to satisfy consumer interest.

Dittoh, (1992) reported that dry season vegetable production in Nigeria has benefits in monetary terms hence these prompted this research work. Additionally, the study exposed the problems associated with the tomato production investment and the recommendations aid in designing policies to mitigate the problems. Previous researches centered around improvement of production and productivity through the use new varieties and agronomic practices but assessment of the different cost outlays also play an important role in determining whether the farmers stay in the business or otherwise.

Tewari (1974) studied the income and investment behavior of vegetable and cereal growing farms in mid-hills of Himachal Pradesh and found that, the expenditure on various inputs was found to be higher on vegetable growing farms and the expenditure on fertilizers contributed more than 40 per cent of the total variable cost. However, the gross income of cereal growing farms was less than half of the vegetable growing farms. The analysis suggest that, by improving the quality of land, adopting land development measures and increase in irrigation vegetable growing farms could increase their income.

Mukherjee (1991) in their study of economics of tomato cultivation in West Bengal found that, except in the case of marginal farms, increase in the size of operational holdings leads to increase in gross returns per hectare for all the other farm size groups.

Babu (2004) Tomato is one of the important "protective foods" both because of its special nutritive value and widespread production. It is the world's largest vegetable crop after potato and sweet potato, but it tops the list of canned vegetables.

Tsutomu (2007) However its cultivation has been limited by an abundant attack of pathogens and analysis of tomato pathogen interactions is very important in order to establish effective control methods.

Sudha, (2006) A huge impact was found on the income of the farmers cultivating vegetables due to the use of commercial hybrid seeds and as a result, the production of tomato and okra has tremendously increased, helping the farmers to increase their farm incomes up to a great margin.

Soni and Ahmed (1992) in their study found that, cost of cultivation of food grains was substantially less in comparison with tomato which was attributed to investment on farm-yard manure (FYM) and labour inputs, and use of chemical fertilizers but tomato was found to have a significantly higher cost-benefit ration than that of food grain crops.

Singh (1990) observed that amongst the important input variables like seed, manure and fertilizers, human labour, plant protection and marketing costs, only plant protection and marketing cost were found as significant input variables in tomato crop. The coefficient of human labour was also a significant factor having a positive effect on the returns of pea crop on small farms. As majority of the coefficients were statistically no significant for most of the vegetables, the author suggested the choice of correct level of use of resources for better returns.

Reddy, (2010) talked about the value chains and retailing of fresh vegetables and fruits in Andhra Pradesh and laid emphasis over the success of the new retailing market emerging in the present times. It has been offering greater opportunities to vegetable and fruit growers and they are reaping a large chunk of financial and economic benefits.

Moneruzzaman (2009) At the harvesting stage, the decision on when to pick tomatoes is important. The stage of development of the tomato fruit at which farmers harvest depends on whether they are to be subjected to immediate consumption or if they are to be consumed later. It follows that farmers should harvest the crop when they are already ripe if the intention is to consume immediately. However, if they intend to sell later, harvesting should be scheduled in such a way that there is enough time to allow for transportation to the market so as to minimize post-harvest losses, considering the perishable nature of tomatoes and their susceptibility to bruises. Thus, farmers should harvest the tomatoes at the mature green stage for long distance marketing in order to ensure longer shelf life.

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1.4 Result and Discussion

Table – 1 : Gender - Wise Classification Respondents

S. No	Sex	No.of.Respondents	Percentage
1	Male	24	80
2	Female	06	20
	Total	30	100

Table – 2 : Age of the respondents

S.No	Age	No.of.Respondents	Percentage
1	< 30	15	50
2	31 - 40	14	47
3	40 >	01	03
	Total	30	100

Table – 3 Educational status of the Respondents

S.No	Educational	No of Respondents	Percentage
1	Illiterate	18	60
2	Secondary	10	33
3	Higher Secondary	02	07
	Total	30	100

Table – 4 : Total Member of family Respondents

S.No	Categories	No of Respondents	Percentage
1	<-3	08	27
2	3 - 5	20	67

3	5 - 7	02	06
	Total	30	100

Table - 5: Loan Borrowing of the respondents

S.No	Categories	No of Respondents	Percentage
1	Relatives	05	17
2	PSU Bank	05	17
3	Co-Opertive	12	40
4	Private banks	08	26
	Total	30	100

Table – 6 Income Family Members among the Selected Respondents (Yearly)

S. No	Income	No of Respondents	Percentage
1	< - 100000	20	67
2	100000 - 150000	07	23
3	150000 - 200000	02	07
4	200000 Above	01	03
	< - 100000	20	67
	Total	30	100

Sources: Primary data

The major of from the selected 67% respondents cultivating tomato produce 3-5 were 27 % of respondents were cultivating less than 3 members cultivating small amount of tomato production. The study area in very rare of 5 – 7 members in family. But the families got marginal land farming in the study area. The family produce the larger producing in tomato. The next table 4.5 loan borrowing of the respondents. the selected respondents of the above details five have taken loans from relatives in 17 percent, five have taken loans from public sector bank 17 percent, maximum have taken loans from co-operative societies 40 percent and have taken loans from private banks 26 percent. Income wise respondents out of the total respondents (30) 20 respondents (67%) earn below 1 lakh in year and 7 respondents earn (23%) 1 lakh to 1.50 lakh and 1.50 lakh to 2 lakh 2 respondents (7%) and above 2 lakh only one person (3%) the income is changes in family member and jobs and agriculture benefit etc.,

Table – 2:**Cost and returns of Tomato Production Per Acre**

S.No	Particular	Cost
1	Seeds	4,475
2	Manure	3,558
3	Transport Cost	3,221
4	Pesticides	3,986
5	Soil Preparation	1,500
6	Repair of Machinery	1,400
7	Water	2,086
8	Weed Removing	3,008
9	Total Cost Cultivation (1+2+3+4+5+6+7+8)	23,234
10	Yield (per/acre) Kg (60)	1,000
11	Cross Return	60,000
12	Net Return (9 – 12)	36,766

Source: Primary Data

Above the table 7 examine various expenditure incurred for tomato production/ per acre. This expenditure was vary from respondents so we take the average value of expense. Selling average cost was 60 rupees/per kg and net return 36755. In this above chapter clearly explain data analysis and interpretation.

4 . Conclusion

Tomatoes are currently an important food component globally. The tomatoes are in fact the largest vegetable both in terms of production and consumption. Tomato is produced temperate, subtropical and it's largest horticulture crop produced in terms of yield in the world.

The present-day tomato has a short history of human utilization. It was accepted to have its birthplace in the South American Andes, which is in present day Peru where it was developing in the wild at the foot of slopes. It was then taken to different pieces of the world by the early pioneers where it was planted as elaborate interests however not eaten. In Europe for example it was planted in gardens as enlivening plants and was viewed as harmful. Despite the fact that tomato was acknowledged later as an eatable harvest in Europe in around 1840 there was as yet severe restriction to its utilization in different pieces of the world.

Worldwide tomato creation expanded during the 1920s because of advancements in innovations that made automated handling conceivable. With expanding information in benefits got from hereditary change of tomatoes, progressively attractive parameters have been chosen for varietal improvement to upgrade the harvest for human utilization. Today, incalculable assortments of tomatoes are devoured everywhere throughout the world in various plans.

Seasonal crop tomato was majorly cultivating cauveri belt rest of the location cultivating very low level. Due to water scarcity is one of biggest factor for farmers. The rural development was affecting more agriculture and tomato cultivation. So many real estate companies are focusing Mettur Taluk area. Mettur water facility and roads so that it could be big from threat up coming days. Government should restrict these kind activities. Government should help them to cultivation process and procurement of tomato in the form subsidize kind of PSU bank also expand their loan option to agriculture specifically tomato cultivators.

Most of the Respondents highlighted that they are receive co-operative loans and relatives so government provide the public sector bank banks. Tomato cultivators are facing storage facilities because of this they cannot store and sell. Due to this farmers has to sale very low price. Private companies and brokers (intermediary) are procuring very low cos.

This one of important for reducing tomato cultivation in the selected area. Educational status of the respondents were represented from the data. Secondary and illiterate respondents are involved in agriculture. From the data higher secondary and hier than that people are very less in agriculture. It shows that educated peoples are went to other mode of jobs Scientific management practices, followed would reduce the incidence of diseases, improve the quality of production and would enhance the productivity Research centre could help them to increase the yields and climate changes issues overcome.

The gender-wise classification of selected respondents was examined in the table 1 table reveals that out of 30 selected espondents nearly 24 of them male, which accounted to 80 percent to the total and 6 farmers was female 20 percent. According to data more male was involved in agriculture most of the respondents replied they farming as a family member's tomato produce in this study area. The next table discussed below table 4.2 age composition of respondents.

The age group of respondents thirty age members fifteen respondents (50 percent) involved in tomato production above 31-40 between fourteen respondents (47 percent) involved in tomato production and above forty is (3 percent) of the respondents involved tomato production. This could be scarcity of future food and others agriculture need. The next table 4.3 education status of the respondents.

Educational status of the respondents was represented from the data. Illiterate (60%) and literate (18%) respondents are involved in agriculture. From the data higher secondary and higher that people a very less in agriculture. It shows that educated people are went to other mode of jobs. The next 4 total member of family respondents.

This above table 8 shows that major of from the selected 67% respondents cultivating tomato produce 3-5 were 27 % of respondents were cultivating less than 3 members cultivating small amount of tomato production. The study area in very rare of 5 – 7 members in family. But the families got marginal land farming in the study area. The family produce the larger producing in tomato. The next table 4.5 loan borrowing of the respondents.

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Various expenditure incurred for tomato production/ per acre. This expenditure was vary from respondents so we take the average value of expense. Selling average cost was 60 rupes/per kg. Tomato production also costly for seedling and seed easy get but climate changes also price changes Mettur river close but many villages not get irrigation is main problem. We noticed many tomato cultivators depend on rain and ground water.

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