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Research Article

FACTORS INFLUENCING THE CHARACTERISTICS OF TAPIOCA FARMERS AND THEIR YIELD GAP IN SALEM DISTRICT

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Abstract: The study was undertaken with the objective of determining the socio-personal characteristics of tapioca farmers and their relationship with yield gap. A sample of 120 respondents was selected from Attur block of Salem District. From the Attur block five villages were selected based on their maximum population. The total number of respondents to be selected from five villages was on the basis of proportionate random sampling techniques. Collection of data was done with the help of Pre-tested and semi-structured interview schedule. The study revealed that out of fourteen variables only eight variables was significant with their yield gap.

Keywords: Casava, Tapioca farmers, Yield gap

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Introduction

Improvement Tapioca is also known as casava (*Manihot esculenta*). It is the predominant source of calories in tropics after rice and maize. It is vital for both food security and income. Although it is originated in Brazil, it is now being cultivated all over the world particularly in the tropical and subtropical century. In India, the crop was introduced during the latter part of the 17th century by the Portuguese. Who lived in the erst while Kerala state. Tapioca is a tuber crop of huge economic importance as it is used not for human and animal feed and also as a raw material for various industrial products. Tapioca is cultivated for consumption purpose and also processed for making starch which is the basic raw material for making sago, wafers, etc. The starch is also used in textile industries paper mills, gum industry and in leather industry for different purposes. Sago is commonly used for human consumption. It occupies a predominant place among diet of the people in the northern states of India. Tapioca flour can be used in food preparation like chappathi, cakes, biscuits and bread. Cassava is cultivated both under irrigated and rainfed conditions. In Salem district of Tamil Nadu alone, 34000 hectares of land under tapioca cultivation and there are 650 units engaged in tapioca processing. In and around Salem the yield of tapioca is about 25-30 tonnes/ha which was found to be the highest yield in the world. National average in 19 tonnes/ha and world average production stands at 10 tonnes/ha. There is a need to study about the yield gap in their area as it is useful for the farmers.

Methodology

There are nine taluks in Salem district. Among nine taluks, Attur taluk was selected based on the maximum area under tapioca cultivation. There are 95 villages in Attur block. Out the 95 villages five villages were selected based on the maximum number of tapioca growers. A sample size of 120 respondents was considered adequate for the study. The number of respondents to be selected from each village were selected by following proportionate random sampling procedure. The data were collected by using well-structured interview schedule. The collected data were processed and tabulated for statistical analysis.

Finding and Discussion

Relationship between the profile characteristics of tapioca farmers with their yield gap

Zero order correlation was computed to know the relationship of profile characteristics of the respondents with yield gap. The results are given in Table1.

Table-1 Zero order correlation co-efficient of profile characteristics of tapioca growers with yield gap

Variable no.	Variables	'r' value
X_1	Age	-.191*
X_2	Educational status	-.059NS
X_3	Occupational status	-.102NS
X_4	Farming experience	-.111NS
X_5	Farm size	-.341**
X_6	Annual income	-.189*
X_7	Socio-economic status	-.229*
X_8	Social participation	-.159NS
X_9	Extension agency contact	-.329**
X_{10}	Mass media exposure	-.201*
X_{11}	Innovativeness	-.191*
X_{12}	Risk orientation	-.062NS
X_{13}	Scientific orientation	-.229*
X_{14}	Economic motivation	.081NS

** - *Correlation is significant at 0.01 level*, * - *Correlation is significant at 0.05 level*, *NS - Non-significant*

It could be inferred from Table 1 that out of fourteen variables studied eight variables are age, farm size, annual income, socio-economic status, extension agency contact, mass media exposure, innovativeness and scientific orientation were found to be negatively significant with yield gap. The remaining variables were found to be non-significant with yield gap. Among the significant variables, two variables are farm size and extension agency contact were found to have negative and significant association at one per cent level. Remaining six variables viz., age, annual income, socio-economic status, mass media exposure, innovativeness and scientific orientation were found to have negatively significant association at five per cent level.

Age showed a negative and significant relationship at five percent level with yield gap. As older farmers had more experience in tapioca cultivation they might have gain adequate knowledge in cultivating tapioca which may be the reason for minimizing yield gap. This finding is line with the findings of *Termaric Oinam* (2014) [1]. Farm size showed a negative and significant relationship at one per cent level with yield gap. As the land holding of tapioca farmers decreases, they might have capable to disburse more attention in their field which might help in reducing yield gap. This result derives supports from the findings of Jeya (2006) [2]. Annual income showed a negative and significant relationship at five per cent level with yield gap. High level income farmers would have facilitated themselves and give full potential in their field which in turn had the capacity to reduce the yield gap. This finding in line with the findings of Priya (2017) [3]. Socio-economic status showed a negative and significant relationship at five per cent level with yield gap. Respondents with high socio-economic status would have gain the knowledge of technical know-how in farming with more exposure which give them strength to reducing yield gap. The results are in accordance with the results of Dhineshkumar (2016) [4]. Extension agency contact showed a negative and significant relationship at one per cent level with yield gap. Respondents with more exposure to extension agents would have gain knowledge in farming and subsequently produce higher yield thereby minimizing the yield gap. This findings is similar to the findings of Aito Chophi (2016) [5]. Mass media exposure showed a negative and significant relationship at five per cent level with yield gap. Farmers with frequent exposure to mass media have acquired the latest knowledge and practices which may have resulted them in producing higher yield plummeting yield gap. This finding is line with the findings of Jayasundar (2011) [6]. Innovativeness showed a negative and significant relationship at five per cent level with yield gap. Tapioca farmers who long for new innovations has the capability to produce higher yield subsequently reducing yield gap. Scientific orientation showed a negative and significant relationship at five per cent level with yield gap. Farmers practicing farming in a scientific way would have enabled them to produce more yields leading to lesser yield gap. These findings are supported by the findings of Jeya (2006). The variables *viz*., age, farm size, annual income, socio-economic status, extension agency contact, mass media exposure, innovativeness and scientific orientation significantly contributed for yield gap and therefore the hypothesis that there will not be relationship between the independent variables and yield gap of the farmers is summarily rejected.

Conclusion

Out of Fourteen variables among two variables are farm size and extension agency contact of tapioca farmers showed negatively significant at one per cent level of relationship with their yield gap. Remaining six variables *viz*, age, annual income, mass media exposure, socio-economic status, innovativeness and scientific orientation were found to have negatively significant association at five per cent level relationship with their yield gap. The remaining variables were found to be non-significant with their yield gap.

Application of research: The study helpful for fourteen variables only eight variables was significant with their yield gap.

Research Category: Agriculture Extension

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