# ADOPTION BEHAVIOUR OF TAPIOCA GROWERS IN NAMAKKAL DISTRICTS OF TAMIL NADU

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**Abstracts:** The present study was to analyses the overall adoption and practice-wise adoption of technologies by the tapioca farmers. Majority of the farmers were medium level of adoption categories. Out of twelve independent variables only four variables like age, educational status, experience in tapioca cultivation and social participation were found positive significant with adoption. The findings of the study will be immense help to extension functionaries for strengthening their efforts on promoting technologies in tapioca cultivation.

#### Introduction

Tapioca is also known as cassava. It is the predominant source of calories, tapioca is a tuber crop of huge economic importance as it is used not only for human and animal food consumption, but also used as a raw material for various industrial products. Tapioca is cultivated for consumption as raw tuber after cooking and also processed for making starch, which is the basic raw material for making sago, wafers etc., the adoption of technologies is a complete pattern of mental and physical activity. Several personal, psychological, economic and social factors largely determine the extent and nature of adoption and also continuance of the technology. So for this in efficiency, lack of proper and timely training for extension personal was forecast seasonal (Sargunam 1987).

# Research Methodology

The present study was conducted in kollihills and paramathivellur blocks of Namakkal district of Tamil Nadu covering 120 tapioca cultivation farmers selected randomly from the above mentioned blocks. The details related to profile characteristics of tapioca cultivation farmers, extent of adoption and practice-wise adoption in tapioca by farmers. The using well structured interview schedule, percentage analysis and correlation analysis was used as statistical tool to get meaningful interpretation of the results.

# **Findings and Discussion**

Extent of Adoption of recommended tapioca cultivation technologies by tapioca growers.

The results on distribution of respondents according to their level of extent of adoption are presented in Table 1.

Table 1. Distribution of respondents according to their level of extent of adoption

(n=120)

Sl. No.	Category	Number of respondents	Per cent
1.	Low	32	26.67
2.	Medium	60	50.00
3.	High	28	23.33
	Total	120	100.00

It could be seen from the table 1 that exactly half of the respondents (50.00 per cent) had medium level of adoption and 26.67 per cent of the respondents came under low level of adoption. A lesser number of respondents (23.33 per cent) were found to be under the category of high level of adoption. Hence it could be concluded that most of the respondents were aware of the

cultivation practices and another possible reason was most of the respondents had low to medium levels of learning experience and medium level of extension agencies contact. This finding is in line with the findings of Manikandan (2013).

# Practice- wise adoption of technologies by the Tapioca farmers Table 2. Distribution of respondents according to their practice- wiseadoption level

(n=120)\*

SI. No.	Recommended technologies	Number of respondents	Per cent
1	Sett selection	100	83.33
2	Sett treatment	75	62.50
3	Main field preparation	97	80.83
4	Planting	110	91.67
5	Manuring	85	70.83
6	Irrigation management	82	68.33
7	Weed management	67	55.83
8.	Pest and disease management	75	62.50
9.	Harvest techniques	120	100.00

#### \* - Multiple response 4.3.I.I. Sett Selection

#### 1) sett Selection

Majority of the respondents adopted the correct sett selection (62.50 per cent) in the main field. Most of the farmers were adopting the correct sett selection and after that only they were planting the setts in the main field.

# 2) Sett Treatment

Majority of the respondents had adopted the recommended sett treatment (62.50 per cent). This might be due to the fact that the non-adopters were not convinced of the practice. The non-availability of fungicide, lack of skill and high cost of labour might be the reasons for non-adoption.

# 3) Main Field Preparation

Most of the respondents (80.83 per cent) had applied recommended quantity of FYM /acre. The better adoption might be due to their medium to high experience in Tapioca cultivation.

#### 4) Planting

More than ninety per cent of the respondents (91.67 per cent) adopted the recommended technologies in planting in their Tapioca cultivation. It might be due to the fact that this is considered as the most important technology in Tapioca cultivation and respondents were knowing the importance of planting.

#### 5) Manuring

Around sixty percent of the respondents (60.83 per cent) applied the recommended quantity of organic manures and inorganic fertilizers. The possible reason might be whenever the respondents apply proper fertilizers management they got additional yield and income.

#### 6) Irrigation Management

Majority of the respondents (68.33 per cent) followed the recommended quantity of irrigation in their field. The remaining (31.67 per cent) did not adopt the practice. The probable reason for non-adoption might be due to the in sufficient water and also due to the electricity problems in the study area.

#### 7) Weed Management

Above fifty per cent of the respondents (55.83 per cent) adopted the recommended weedicide application in main field as the remaining 44.17 per cent of the respondents did not adopt the recommended weedicide application in main field. Lack of trained labour and high cost of inputs were the reasons for nonadoption. Similar finding was also reported by Rajivgandhi (2010).

#### 8) Pest and Disease Management

Around sixty per cent of the respondents (57.50 per cent) adopted the pest and disease management practice in the total sample, the remaining 42.50 per cent of the respondents did not adopt this in their field. Lack of knowledge about pest and disease management techniques, dosage of chemicals, non-availability of labour, high cost of chemicals might be the reasons for the non-adoption. This finding is in line with the findings of Manikandan (2013).

# 9) Harvest techniques

It could be observed from Table 2 that all the respondents (100.00 per cent) had harvested the tapioca crop at right time. This might be due to the fact that farmers by their experience were well aware of the fact that harvesting at correct time influences the yield level.

# 2) Relationship between the Socio-Economic and psychological characteristics with their Extent of Adoption of Tapioca farmers on recommended tapioca Cultivation Technologies

The zero order correlation coefficient (r) was computed to know the relationship characteristics of respondents with their extent of adoption the findings and discussion are given below.

The zero order correlation co-efficient (r) was worked out to study the relationship of the independent variables with the extent of adoption of tapioca farmers and the results are presented in Table 3.

It might be seen from table 3 that out of twelve independent variables, only four variables, viz., age (Xp, educational status (X2), experience in tapioca cultivation (X7) and scientific orientation (Xu) were found to have positive and highly significant relationship with the extent of adoption of tapioca production technologies.

The significant variables alone were considered for discussion. It could be interpreted from the correlation analysis that age (Xi), educational status (X2), experience in tapioca cultivation  $(X_7)$  and scientific orientation (Xu) have contributed positively and significantly to the extent of adoption of tapioca production technologies.

Table 3. Zero order correlation co-efficient of independent variables with their extent of adoption

(n=120)

Sl.No.	Variables	'r' value
X,	Age	0.216*
X <sub>2</sub>	Educational Status	0.200*
X <sub>3</sub>	Occupational Status	-0.070NS
X4	Annual Income	0.086NS
X <sub>5</sub>	Area under Tapioca Cultivation	-0.019NS
$X_6$	Fanning Experience	-0.008NS
<b>X</b> 7	Experience in Tapioca Cultivation	0.116*
X <sub>8</sub>	Social Participation	-0.177NS
X9	Extension Agency Contact	-0.064NS
X <sub>10</sub>	Mass Media Exposure	0.009NS
х,,	Scientific Orientation	0.264**
Xi2	Training Received	0.025NS

NS - Non Significant \*- Significant at 5 % level \*\* - Significant at 1% level

There was positive and significant relationship of age (Xi) with the extent of adoption by tapioca farmers. Age showed a positive and highly significant relationship with adoption, this otherwise means that young farmers would adopt the technologies better rather than old farmers. The young farmers might be interested to get reliable and complete information about agricultural technologies. This would have enabled them to adopt the technologies better. This finding is in line with the findings of Manikandan (2013).

There was a positive and significant relationship between the educational status and adoption level of tapioca growers. Education not only adds knowledge but also widens the horizons of individual. Higher the education, wider will be the interaction with different sources and it increases their ability to grasp facts, analyse and interpret them in a better way to adopt the technologies. This finding derives support from the findings of Kannan (2013).

Experience in Tapioca cultivation (X7) was found to be positively significant with the extent of adoption. More experience in farming activities would have helped them to acquire skills on recommended technologies which in turn would have enabled them to adopt new technologies. This finding is in line with the findings of Arockiyamary (2011).

# Conclusion

The study will be immersive help to extension functionaries strengthening their efforts on promoting cultivation technologies in tapioca.

### References

- 1.Sargunam, K. 1987, Unpublished M.Sc., (Ag) Thesis, Annamalai University, Annamalai Nagar.
- 2. Manikandan, J. 2013. Unpublished M.Sc., (Ag) Thesis, Annamalai University, Annamalai Nagar.
- 3.Rajygandhi, A. 2010. Unpublished M.Sc., (Ag) Thesis, Annamalai University, Annamalai Nagar.
- 4.Kannan, J. 2013. Unpublished M.Sc., (Ag) Thesis, Annamalai University,, Annamalai Nagar.
- 5. Arockiyamary, 2011. Unpublished M.Sc., (Ag) Thesis, Annamalai University, Annamalai Nagar.

