

# MOTIVATIONAL FACTORS OF TAPIOCA CULTIVATION: A MICRO-LEVEL STUDY IN NAMAKKAL DISTRICT OF TAMIL NADU

## Abstract

In the contemporary business environment, the tapioca industries are the key in enabling the livelihood promotion and opportunities to increase the income generational process at grassroots level. The tapioca industry is a hub determining the supply and demand of the production industries. The tapioca industry start is a crucial process which decides by various motivational factors. In this context, the present study is an attempt to understand the motivational factors of tapioca industries start up in Namakkal District.

**Keywords:** Tapioca; motivation; livelihood; supply, demand

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## **I. INTRODUCTION**

Tapioca industries are generally starting as a small scale industry which enables the employment at local level. The Tapioca business is the avenue for agro-industrial products; these industries are producing the sago, starch and food such as ice cream and noodles etc. Moreover, these industries are playing a vital role in transmitting the modernization and innovations in agriculture at rural level. The Tapioca industries help in creating employment opportunities to the rural youth and maximizing the inclusive growth at grassroots level by utilizing of local resources for livelihood promotion. This has initiatives and efforts are led to gainful diversification of the resources towards a sustainable growth and development at grassroots. It is understood that the Tapioca industries are running for producing various forms of tapioca products such as food and industrial products which includes starch, sago, liquid glucose, vitamin C, gums and high fructose syrup. The industrial of tapioca has extended to cotton textile, jute textile industry and paper and hard board industry.

## **II. EARLIER STUDIES ON TAPIOCA CULTIVATION**

Sajeev (2023) study indicated that Tapioca in India is mainly processed for the production of sago and starch. It is understood that processing operations for starch include peeling, washing, rasping, settling, and drying. The sago processing industries operations involved are pulverization of the starch, globulation, sizing, roasting, and drying. The entire tapioca starch produced in India is consumed domestically, the most important end-use sector being the food and textile industries. Further author found that it has a great need for diversification of the tapioca processing industry. Tapioca is utilized in three major ways as human food, animal feed, and industrial raw material.

Kanagasabapathi (2019) study found that value addition is a potential resource which can help to generate more income to the farmers and hence the authors recommended that the farmers need to be motivated and be provided with necessary support for value addition in tapioca.

Meenambal (2017) study revealed that traditional methods of starch extraction from roots were not only ineffective and inefficient but also the quality of starch produced was low. In contrast, mechanical processing of sago palm was much more effective and efficient and also the starch produced is of higher quality and more hygienic.

Azmi (2014) conducted a study entitled “The Design of Integrated Tapioca Agro-Industries Development Model” found that tapioca is an agro industries related product which uses as raw material. It is understood that tapioca industry has a great development potential in Indonesia, the raw material is available in abundant quantity and also there is high level of market demand for the product. Rajakumari (2010) conducted a study entitled “A Study on Sago Industries in Salem District, Tamilnadu” indicated sago industries provides direct and indirect employment to thousands of people in and around Salem district and promote a crop in vast non-traditional areas with limited water supply. The author found that growth of tapioca industries in and around Salem district has been a motivating factor for the farmers to involve more in tapioca cultivation.

### III. OBJECTIVES OF THE STUDY

- To study the socio-economic profile of the respondents
- To find out the motivational factors of tapioca in the study area
- To examine the constraints faced by the respondents to start the tapioca industry

### IV. RESEARCH METHODOLOGY

The study is conducted in Namakkal District. For the study the researcher used the purposive sampling research methodology to select the 25 samples in the study area.

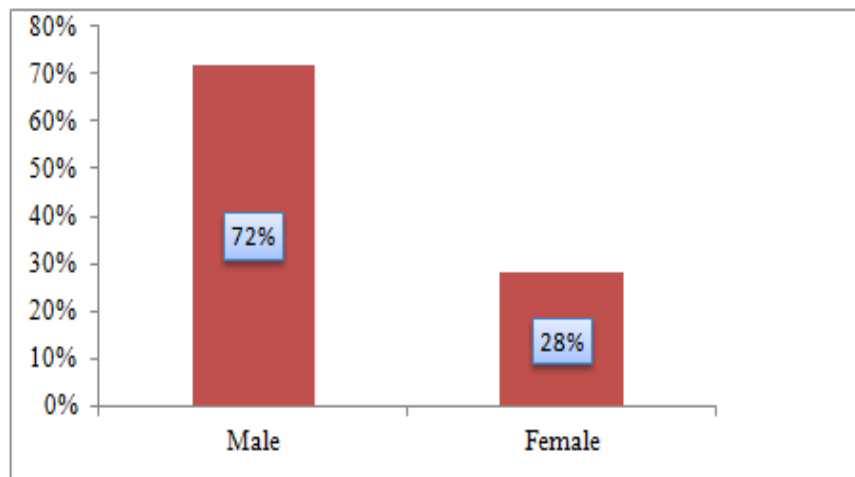
### V. DISCUSSION AND ANALYSIS

#### 1. Socio-Economic Profile

- **Gender Wise Classification:** Gender is a significant factor in determining the desirable changes in human attitude, behavior, and care of others. It decides one's perception to cope with rational thinking in managing correct decisions.

**Table 1: Distribution of respondents according to their Gender**

S. No	Particulars	Number	Percent
1	Male	18	72.0
2	Female	07	28.0
<b>Total</b>		<b>25</b>	<b>100.0</b>
Note: $\chi^2 = 0.513$ significant at 0.028			



**Figure 1: Distribution of respondents according to their Gender**

The available data [Table.1] shows that 72 per cent of the male respondents are running the Tapioca Industries in the study area. It is noted that 28 per cent of the female respondents are also running the Tapioca Industries. The chi-square test result [ $\chi^2 = 0.513$  significant at 0.028] of industries of tapioca run has highly associated with genders owned tapioca industries.

- **Age Wise Classification:** Age is considered as a significant factor to determine the mental ability of an individual to make decisions.

**Table 2: Distribution of respondents according to their Age**

S. No	Particulars	Number	Percent
1	Below 25 years	05	20.0
2	Between 25-50	12	48.0
4	Above 50	08	32.0
<b>Total</b>		<b>25</b>	<b>100.0</b>

Table 2 indicates that a significant proportion [48 per cent of respondents is belonged to the age group of 25-50 years who are running the Tapioca Industries, followed by [32 per cent] above 50 years category. It is noticed that a small level [20%] of respondents are belonged to the age group of 25 years category.

- **Experience Wise Classification:** Experience in running the industries means that number of years of experience possessed by an individual in Tapioca production and selling which helps in decision making, understanding the new technologies and acceptance or rejection of new technologies in Tapioca cultivation.

**Table 3: Distribution of respondents according to their experience in Tapioca production and selling field**

S. No	Particulars	Number	Percent
1	Below 5 Years	07	28.0
2	Between 5-10 Years	14	56.0
3	Above 10 Years	04	16.0
<b>Total</b>		<b>25</b>	<b>100.0</b>
Note: $\chi^2 = 0.228$ significant at 0.013			

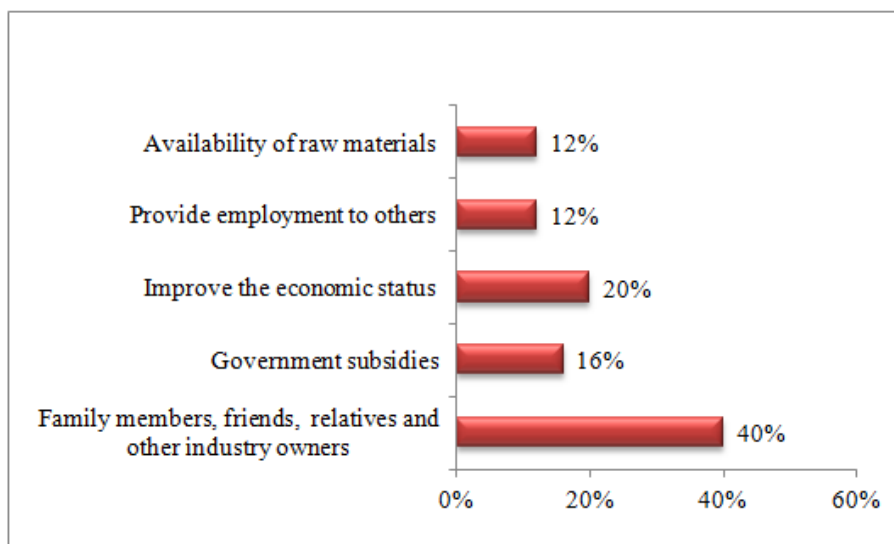
Table 3 shows that a majority [56 per cent] of the respondents found to be 5-10 years of tapioca industries running experience, followed by [28 per cent] less than 5 years of experience and also it is understood that 16 per cent of the respondents had more than 10 years of experience in running the tapioca industries in the study area. The chi-square test result [ $\chi^2 = 0.228$  significant at 0.013] of industries of tapioca run has highly associated with experience in handling.

- **Motivational Factors to Start the Tapioca Industry:** The available data in Table.4 indicated that a significant proportion [40 per cent] of the respondents stated their tapioca business industries by motivating their family members, friends, relatives and also other competitors in the field. It is noticed that 20 per cent of the respondents started their industries to improve their economic condition through regular flow of income, followed by [16 per cent] for getting the Government subsidies. It is understood that 12 per cent of the respondents started their business for providing employment opportunities to the people at grassroots level and also 12 per cent felt that there was huge level of raw materials are availed to convert as food and industrial

products to earn a better profit by starting their tapioca business because it has a wide range of scope to enable their regular flow of income.

**Table 4: Distribution of respondents according to their motivational factors to start the Tapioca Industries**

S. No	Particulars	Number	Percent
1	Family members, friends, relatives and other industry owners	10	40.0
2	Government subsidies	04	16.0
3	Improve the economic status	05	20.0
4	Provide employment to others	03	12.0
5	Availability of raw materials	03	12.0
<b>Total</b>		<b>25</b>	<b>100.0</b>



**Figure 2:** Distribution of respondents according to their motivational factors to start the Tapioca Industries

Hence, the study is concluded that most of the respondents have started their tapioca business industries in the study area for earning regular revenue as per the direction of their family members, relatives and friends. It is interesting to note that some of the competitive industry owners also guide the respondents to start the business of tapioca in the study area for gaining mutually through sharing their opportunity and sorting out the challenges in the field by investing on enabling modern equipment and storage which can be used by other owners by providing on rental basis.

- **Constraints Faced by Respondents in Tapioca Industries:** Table 5 provides the Eigen ranking system results that the majority [95 per cent] of the respondents expressed that non-availability of short duration variety is the significant cause of tapioca industries since it has to cultivate about 8 to 10 months; followed by [92 Per

cent] insufficient planting material and [89 per cent] lack of awareness among the tapioca industries owners about the processing methods and further conversions. It is understood that Tapioca Mosaic Diseases (CMD) is a series threat to tapioca varieties, it is reported by 85 per cent of the respondents and [72 per cent] limited diversification in the tapioca products which affects the price structure in the study area.

**Table 5: Distribution of respondents according to their constraints in Tapioca Industries [Multiple Responses]**

S. No	Particulars	Eigen Ranking	Percent
1	Non-availability of short duration variety	I	95.0
2	Lack of sufficient planting material	II	92.0
3	Lack of awareness among processors	III	89.0
4	Tapioca Mosaic Diseases (CMD) among all varieties.	IV	85.0
5	Limited diversification	V	72.0

## VI. SUMMARIES OF MAJOR FINDINGS OF THE STUDY

### 1. Socio-Economic Profile of the respondents

- The study found that 72 per cent of the male respondents are running the Tapioca Industries in the study area. It is noted that 28 per cent of the female respondents are also running the Tapioca Industries.
- It is understood that significant proportion [48 per cent of respondents is belonged to the age group of 25-50 years who are running the Tapioca Industries, followed by [32 per cent] above 50 years category. It is noticed that a small level [20%] of respondents are belonged to the age group of 25 years category.
- The majority [56 per cent] of the respondents found to be 5-10 years of tapioca industries running experience, followed by [28 per cent] less than 5 years of experience and also it is understood that 16 per cent of the respondents had more than 10 years of experience in running the tapioca industries in the study area.
- The chi-square test result [ $\chi^2 = 0.228$  significant at 0.013] of industries of tapioca run has highly associated with experience in handling.

### 2. Motivational Factors to start the Tapioca Industry

- The study findings revealed that significant proportion [40 per cent] of the respondents started their tapioca business industries by motivating their family members, friends, relatives and also other competitors in the field.
- It is noticed that 20 per cent of the respondents started their industries to improve their economic condition through regular flow of income, followed by [16 per cent] for getting the Government subsidies.
- It is understood that 12 per cent of the respondents started their business for providing employment opportunities to the people at grassroots level and also 12 per cent felt that there was huge level of raw materials are availed to convert as food and industrial

products to earn a better profit by starting their tapioca business because it has a wide range of scope to enable their regular flow of income.

- Hence, the study is concluded that most of the respondents have started their tapioca business industries in the study area for earning regular revenue as per the direction of their family members, relatives and friends. It is interesting to note that some of the competitive industry owners also guide the respondents to start the business of tapioca in the study area for gaining mutually through sharing their opportunity and sorting out the challenges in the field by investing on enabling modern equipments and storage which can be used by other owners by providing on rental basis.

### **3. Constraints Faced by Respondents in Tapioca Industries**

- The study found that majority [95 per cent] of the respondents expressed that non-availability of short duration variety is the significant cause of tapioca industries since it has to cultivate about 8 to 10 months; followed by [92 per cent] insufficient planting material and [89 per cent] lack of awareness among the tapioca industries owners about the processing methods and further conversions.
- It is understood that Tapioca Mosaic Diseases (CMD) is a series threat to tapioca varieties, it is reported by 85 per cent of the respondents and [72 per cent] limited diversification in the tapioca products which affects the price structure in the study area.

## **VII. CONCLUSION**

In the emerging business settings, Tapioca industries are sources to produce the food and industrial products which focus to provide employment opportunities to the communities' at large scale on direct and indirect basis. In addition to that the Tapioca is one of the richest sources of starch which has a great demand for industrial and end-use sector particularly in textile, paper, adhesive, dextrin, food and sweetener industries so as Tapioca Industries are imperative to enable the livelihood opportunity and promotion for regular flow income at grassroots level.

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