# A Study On Farmers' Production Of Traditional Rice Varieties In Thanjavur District Of Tamilnadu

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#### Abstract

Food culture is staring all over countries in the world. The food culture is tied with the human being. The technology and science are grown day by day. But the food habits are followed as culture and tradition of the people. Thanjavur District is one of the Districts in Tamilnadu. It has the oldest history and culture. It is very popular in Architecture, agriculture and temples. The traditional rice varieties of Tamilnadu are Mappillai Samba, Karuppu kavuni, Karunguruvai, Atthur Kichali Samba, Thanga Samba, Vadan Samba, Iluppaipoo Samba, Garudan Samba, Anai komban, Ganda Sali, Chinnar, Kala namak, etc., The study has the objective to study the traditional rice varieties produced by the farmers of Thanjavur District in Tamilnadu. The Thanjavur District is the major rice producing region in that. The traditional rice varieties are cultivated in this District. The farmers are cultivated mostly Mappillai Samba, Karuppu Kavuni, Poongar, Sornamasuri and Kullakkar rice varieties. The study was descriptive in nature. Simple Random sampling method was adopted in this study. In Thanjavur District has 10 Blocks. Out of 10 Blocks, Kumbakonam, Pattukottai and Thanjavur Blocks were selected. In Each block, 50 farmers were selected randomly with the total of 150 respondents. 82 % of the respondents were more than 5 years' experience in the cultivation of traditional rice in the study area. It was found that 78 % of the respondents were taken high yield of production with 25to 30 bags. From this study, the farmers are to be concentrate about the seed selection, nursery, planting, preparation of land; planting technology, crop, insects and water management are the important factors to produce the traditional rice varieties in Tamilnadu.

Key Words: Traditional rice varieties, production, output, organic farming practices.

# **I.INTRODUCTION:**

Food culture is staring all over countries in the world. The food culture is tied with the human being. The technology and science are grown day by day. But the food habits are followed as culture and tradition of the people. It is considered as identity of the people. Wheat, Barley, Rice are the major food in the world .The vegetables are added with any one of the wheat, barley and rice. Western countries are taking food with balanced diet. They want to include in their all nutrition. In Asian countries, the people are preferred what they have. In India, Rice and Wheat are the preferable food. Rice is the most dominant one. The village people have simple and organic food in India. Recently, many farmers in India turned back to organic farming practices. The organic farming practices have high

usage of fertilizer and water. The soil resources are decreasing in inorganic practices. Due to many advantages, the farmers in India look back to native seeds and native food crops.

Thanjavur District is one of the Districts in Tamilnadu. It has the oldest history and culture. It is very popular in Architecture, agriculture and temples. Thanjavur District is the rice bowl of Tamilnadu. The paddy cultivation is done highly in this place only. The traditional rice varieties are cultivated by many farmers in this District. The traditional rice varieties of Tamilnadu are Mappillai Samba , Karuppu kavuni, Karunguruvai, Atthur Kichali Samba, Thanga Samba, Vadan Samba, Iluppaipoo Samba, Garudan Samba, Anai komban, Ganda Sali, Chinnar, Kala namak, Kattu yanam,Kuda vazhi, Kuzhiyadichan,Kottara Samba, Kotha malli samba,Singinikar, Seeraga Samba, Surakurvai, Sempalai, Salem sanna, Sorna masuri, Thuyamalli, Thengai poo Samba, Bhavani, Basumathi, Poongar, Kullakkar, Kuruvikkar, Ponni, Manjal Ponni, Muttrina sannam, Maraththondi, Rasakkadam,Rattha Sali etc.,1200 traditional rice varieties are exist in Tamilnadu. Organic agricultural Scientist Co.Nammalvar and Nel Javaran had taken effort in Tamilnadu to save traditional rice varieties. Due to that,174 traditional rice varieties are documented by the farmers in Tamilnadu. The traditional rice varieties are cultivated in the season of Navarai ( December-Janauary), Swarnavari (April- May) Samba (July and August), Kuruvai (June, July) and Thaladi (September and October). Hence this study was tested the production of traditional rice varieties in Thanjavur District of Tamilnadu.

### **II. REVIEW OF LITERATURE:**

**2.1. M.F. Rola-Rubzen, J.A. Janes, V.P. Correia and F. Dias (2014),** This paper reported that the farming systems in two horticulture growing regions in Timor Leste and outlines the challenges and constraints faced by farmers in the production and marketing of horticultural products. The paper focused about the farming systems in Timor Leste. The Challenge of the farmers was the low productivity due to lack of inputs and farm management. Product quality is a problem due to poor product handling. In Marketing, the poor transport road network system, inadequate communication infrastructure, lack of storage facilities, and the lack of a grading and standardization system in the industry were the problems. Given the high local demand for vegetables and the potential for exports, it is important to address these challenges for producers to benefit from market opportunities and increase their incomes. Dealing with these challenges will require a whole value chain approach.

**2.2.** AGNES DOE A. AGBANYO (2012), the aim of this research is to compare the two methods of rice cultivation under the two styles of farming – the E- and the I- Calculi. The study shall focus on the extent to which farmers are able to exercise choice in their own localities and how they are able to develop their own strategies, gain access to support services, and the extent to which they become indebted and dependent upon various types of loans and how this affects the productivity, welfare, wellbeing, and sense of entitlements, without making any assumptions about which technology is more progressive or backward as has characterized modernization period. The study examines how access to policy support among smallholder farmers using modern varieties and inputs and those using indigenous varieties and low inputs affect agricultural practices and the main constituent in smallholder agriculture. The study was exploratory and by design. A sample of 50 respondents from the two communities was used with the aim of obtaining detailed information on the study. This study has revealed that farmers increasingly become defenseless and vulnerable in the face of higher

commoditization of agriculture so that at Weta, farmers have become dependent on credits with poor terms and tougher interest rates but are unable to disengage from them due to externalization of farm input supply that comes with expensive cost.

**2.3. Nagaraja, D** (**2011**), "The study was undertaken in Shimoga district of Karnataka state with an overall objective of enquiring into production and marketing of organic rice cultivation vis-à-vis conventional rice cultivation. The study is based on primary data obtained from 80 farmers, 40 each of organic and conventional rice and 30 consumers of organic rice. The data were analysed using descriptive statistics, partial budgeting and regression analysis. The results revealed that cultivation of organic rice incurred higher expenditure than conventional rice at Rs.10157 and Rs.11563 per acre respectively. The cost of production worked out to Rs. 557/q indicating cost effectiveness of producing organic rice. The return from organic rice. The analysis of resource use efficiency of organic rice indicated that the inputs such as FYM, seeds, expenditure on labour were found to significantly influence the yield. It was observed that organic farmers used more of FYM and other organic inputs.

### **III. OBJECTIVES OF THE PROBLEM**

The study has the objectives:

- 1. To study the traditional rice varieties produced by the farmers of Thanjavur District in Tamilnadu.
- 2. To evaluate the cost of production and output traditional rice varieties in the study area.
- 3. To collect the farmers' perception on production of traditional rice varieties.

### **IV. STATEMENT OF THE PROBLEM**

The farmers in Tamilnadu are involved in organic farming practices then and there. The paddy cultivation needs more water. But some of the the traditional rice varieties are grown based on poor usage of water, all climatic conditions and less usage of organic fertilizer. The Cauvery delta region in Tamilnadu is suitable to cultivate paddy. Thanjavur, Thiruvarur, Thiruchirapalli, Pudukkottai, Nagappattinam and Mayiladuthurai Districts are the Cauvery Delta Region. The Thanjavur District is the major rice producing region in that. The traditional rice varieties are cultivated in this District. The farmers are cultivated mostly Mappillai Samba, Karuppu Kavuni, Poongar, Sornamasuri and Kullakkar rice varieties. The study focused to test the cost of production of these rice varieties in the study area. The study filed the reasons for choosing these rice varieties.

### V.RESEARCH METHODOLOGY

The study covers to test the production of traditional rice varieties in the study area. Due to high cost of fertilizer, seed and destroy of soil resources, the farmers are moving to traditional farming practices. Traditional rice cultivation is done among the farmers for retrieving of traditional rice varieties and offering nutritional food to people. The study was conducted in Thanjavur District of Tamilnadu. The study was descriptive in nature. Simple Random sampling method was adopted in this study. In Thanjavur District has 10 Blocks. Out of 10 Blocks, Kumbakonam, Pattukottai and Thanjavur Blocks were selected. In Each block, 50 farmers were selected randomly with the total of

150 respondents. Simple percentage, Chi Square and ANOVA were used to analyse the data in this study.

# VI.REULTS AND DISCUSSION

## 6.1. Findings:

## **Cost and Output:**

# Table 1: Per hectare traditional rice varieties' cost and Output

# 1.Name of the variety: Mappillai Samba

Iappillai amba	Seed	Seed (Rs)	Seeding (Rs)	Planting (Rs)	Manure (Rs)	Harvesting charge (Rs)	-	Total cost of production (Rs)
	2 Kg	100	500	1000	1650	3250	1330Kg	5500

Source: Primary data

Season: All seasons

Soil preferred: Alluvial soil, clay soil

Crop age: 135 days to 140 days

Nursery Age: 20-25 days

Crop average Height: 182.88sm

Crop maximum Height: 198.5 cm

# 2.Name of the variety: Karuppukavuni

Karuppukav uni	Seed (Quantit y)	Seed (Rs)	Seeding (Rs)	Plantin g (Rs)	Manur e (Rs)	Harvesting charge (Rs)	Output (Quantit y)	Total cost of producti on (Rs)
	2 1/2 Kg	150	750	1500	2200	3500	1350 kg	8100

Source: Primary data

Season: Samba season

Soil preferred: Clay soil

Crop age: 150 days

Nursery Age: 20-25 days

Crop average Height: 127.56cm

Crop maximum Height: 140 cm

# **3.Name of the variety: Poongar**

]	Poongar	Seed (Quantity)	Seed (Rs)	Seeding (Rs)	Planting (Rs)	Manur e (Rs)	Harvestin g charge (Rs)	Output (Quantity)	Total cost of productio n (Rs)
		2 Kg	100	650	1600	2100	3100	2075 kg	7550

Source: Primary data

Season: All seasons

Soil preferred: Alluvial soil, clay soil

Crop age: 70 days to 90 days

Nursery Age: 20 days

Crop average Height: 122.9cm

Crop maximum Height: 153.5 cm

## 4.Name of the variety: Sornamasuri

Sornamasuri	Seed	Seed	Seeding	Planting	Manur	Harvestin	Output	Total
	(Quantity)	( <b>R</b> s)	( <b>R</b> s)	( <b>R</b> s)	e ( <b>R</b> s)	g charge	(Quantity)	cost of
						( <b>R</b> s)		produc
								tion
								(Rs)
	2 Kg	100	500	1600	2100	3000	2050	7300

Source: Primary data

Season: Samba, Thaladi seasons

Soil preferred: Clay soil

Crop age: 135 days to 140 days

Nursery Age: 25-30 days

Crop average Height: 167.64cm

Crop maximum Height: 182.88 cm

### 5.Name of the variety: Seeraga Samba

Seeraga Seed Seeding Planting Manur Harvesting Output Total c
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Samba	(Quantity)	(Rs)	(Rs)	(Rs)	e ( <b>R</b> s)	charge (Rs)	(Quantity)	of
								productio n (Rs)
	2 ¼ Kg	300	750	1000	2500	3500	1500	7950

Source: Primary data

Season: Samba, Thaladi seasons

Soil preferred: Clay soil

Crop age: 135 days to 140 days

Nursery Age: 25-30 days

Crop average Height: 133.56cm

Crop maximum Height: 152.7 cm

#### 6.2. Simple Percentage analysis:

- 90% of the respondents of farmers were male.
- 70 % of the farmers were having less than 2 acres of land.
- 82 % of the respondents were more than 5 years' experience in the cultivation of traditional rice in the study area.
- 78 % of the respondents were taken high yield of production with 25to 30 bags.
- 95% of the respondents were prepared manure on their own.

#### 6.3. ANOVA

**H**<sub>0</sub>: There is a significant relationship between Income and choice of production of traditional rice varieties among farmers.

H<sub>1</sub>: There is no significant relationship between Income and choice of production of traditional rice varieties among farmers.

Source Variance	Sample Square	Degree of Freedom	Measure of Square	F ratio	F (5%) Limit
Sample Square between	2.27	3	0.756	0.216	13.96
Sample Square within	-335.52	96	-3.495	0.210	13.90

#### Interpretation

As the calculated value (0. 216) is less than the table value (2. 76) the null hypothesis is accepted. The difference observed blow the income and choice of production of traditional rice varieties among farmers are not significant based on the data it would be inferred that the income of the farmers is determined the choice of production of traditional rice varieties.

### **VI. CONCLUSION**

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It is believed that, the traditional rice varieties are not giving high yield production. But recent days, many farmers in India are made continuous effort to prove the traditional rice varieties which are given high output. In Tamilnadu, the farmers have been made field research in their land by cultivation of traditional rice varieties. From this study, the farmers are to be concentrate about the seed selection, nursery, planting, preparation of land; planting technology, crop, insects and water management are the important factors to produce the traditional rice varieties in Tamilnadu. The traditional rice varieties are nutritional and healthy to the people. Hence, these are to be encouraged to cultivate by the Government, Scientists and Agricultural research Institutes.

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