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**AN ECONOMIC ANALYSIS OF AGRICULTURAL MARKETING IN  
THOOTHUKUDI TALUK, THOOTHUKUDI DISTRICT**

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**Abstract**

Agricultural marketing is the study of all the activities and policies involved in the procurement of farm inputs by the farmers and the movement of agricultural products from the farms to the consumers. The agricultural marketing system is a link between the farm and the non farm sectors. In the study area majority of the farmers are not able to get cheap loan facilities to finance the expenditure involved in paddy, banana and coconut cultivation. As the small farmers are hard pressed for cash to meet postponed consumption needs and to pay off debts, they have to sell soon after the harvest when the price is low. Paddy production is seasonal in nature while its demand is inelastic. This is also affect the price fixation. There is a large variation in the quality of paddy which makes their grading and standardization some what difficult. This study reveals that, marketable and marketed surplus are the same for the three products. Marketed surplus is more in banana marketing compared to paddy and coconut. That is most of the paddy cultivators are poor and spend a lot on their consumption and also they have to pay more for the artisans. The percentage of marketed surplus to total output of banana is greater among the large scale units.

There is no regulated market in this study area. Majority of the farmers have earned more marketable surplus of their commodities. Banana producers earn more income than the other commodities producers. The researcher came to a conclusion that lack of adequate transport facilities is one of the reasons for market failure in the study area.

### **1.1 Introduction**

A market means a social institution which performs activities and provides facilities for exchanging commodities between buyers and sellers. It includes all the activities involved in the creation of time place, form and possession utility. Agricultural marketing comprises all the operations, and the agencies conducting them, involved in the movement of farm produced foods, raw materials and their derivatives.

Agricultural marketing is the study of all the activities and policies involved in the procurement of farm inputs by the farmers and the movement of agricultural products from the farms to the consumers. The agricultural marketing system is a link between the farm and the non farm sectors. It includes the organisation of agricultural raw materials supply to processing industries the assessment of demand for farm inputs and raw materials, and the policy relating to the marketing of farm products and Inputs.

### **1.2 Statement of the Problem**

In the study area majority of the farmers are not able to get cheap loan facilities to finance the expenditure involved in paddy, banana and coconut cultivation. One of the most ruthlessly exploited segments of Indian community is that of the farmers. As the small farmers are hard pressed for cash to meet postponed consumption needs and to pay off debts, they have to sell soon after the harvest- when the price is low.

Paddy production is seasonal in nature while its demand is inelastic. This also affects the price fixation. There is a large variation in the quality of paddy which makes their grading and standardization somewhat difficult.

The selected villages of Thoothukudi Taluk with more than 80 per cent of the total population dependent on agriculture and lot of marketing business go on in the villages. The villages are solely depended on agriculture so a survey has been undertaken to study the process of cultivation of agricultural products and the trend the agricultural marketing.

### **1.3 Objectives of the study**

1. To assess the marketable surplus and marketed surplus of the farmers.
2. To estimate the marketing costs and market margin of commodities.
3. To examine the facilities and infrastructure for agricultural marketing.
4. To study the income pattern of the farmers in the study area.
5. To enumerate problems if any and suggest remedial measures.

### **1.4 Methodology**

The present study aims at analysing the agricultural marketing at Thoothukudi Taluk villages in Thoothukudi District. The study depends up on both primary and secondary data. Primary data were collected from 100 agricultural households' farmers. The secondary data were collected from village Panchayat office records.

### **1.5 Scope of the study**

The scope of the study has been restricted to the marketing in paddy, banana and coconut in the selected villages of Thoothukudi Taluk, It is essential to know the economic conditions of the agricultural marketing in the study area. It helps to enhance the agricultural prices. It suggests measure to solve the problems of agricultural marketing. It helps to get a statistical view of the particular village.

## **2.1 CONCEPTS AND REVIEW OF LITERATURE**

### **Concepts**

#### **Producers' surplus of agricultural commodities**

This is the quantity which is actually made available to the non-producing population of the country. The arrangements for marketing and the expansion of markets have to be made. Only for the surplus quantity available with the farmers and not for the total production. The rate at which agricultural production expands determines the face of agricultural development which the growth in the marketable surplus determines the face of economic development.

#### **Producer's surplus**

The marketable surplus is that quantity of the produce which can be made available to the non-farm population of the country. The marketable surplus is the residual left with the producer-farmer after meeting his requirements for family consumption farm needs for seeds and feed for cattle, payment to labour in kind, payment to artisans, carpenter, blacksmith, potter and mechanic payment to land-lord as rent, and social and religious payment in kind. This may be expressed as follows.

$$MS = P - C, MS - \text{marketable surplus}, P - \text{Total production}, C - \text{Total requirements.}$$

Family consumption, farm needs, payment to labour artisans, land lord and payment for social and religious work.

#### **Marketed Surplus**

Marketed surplus is that the quantity of the produce which the producer, farmer actually sells in the market irrespective of his requirement for family consumption, farm needs and other payments. The marketed surplus may be more, less or equal to the marketable surplus.

Bransil writers that there is only one term marketable surplus. This may be defined subjectively or objectively. Subjectively, the term marketable surplus refers to theoretical surplus available for sale with the producer-farmer after he has met his genuine consumption requirements and the requirements of his family, the payment of wages in kind his feed and seed requirements and his social and religious payments. Objectively the marketable surplus is the total quantity of arrivals in the market out of the new crop.

#### **Marketing Efficiency**

Marketing efficiency is the ratio of market output (satisfaction or marketable surplus) to marketing input (marketing cost). An increase in this ratio represents improved efficiency and a decrease denotes reduced efficiency. A reduction in the cost for the same level of satisfaction or an increase in the satisfaction at a given cost results in the improvement in efficiency.

#### **Review of Literature**

According to James Bates and J.R. Parkinsen production in the organised activity of transforming resources into finished products in the form of goods and services and the objective of production is to satisfy the demand of such transformed resources.

G.C. Madel study on “The marketable surplus of Aman Paddy in East Indian villages”, has revealed that the proportion of sale to receipt is lower in the case of lower holdings groups and higher of upper groups.

H.P. Nanda in his article titled “The market limits has analysed the feasibility of opening Indian agriculture to market forces”. According to him this can not be undertaken due to the vagaries of the monsoon and the market forces are operating only in favour of the traders.

P.C. Bancil study on, “problem of marketable surplus”, in his study the marketable surplus of cereals and grams. According to his study in the case of banana production, there is only a marketable surplus of 30 per cent.

## 2.2 Size of Land Holding

The size of the family and their land holding is one of the determining factors of the marketable surplus. Small farmer coupled with large size of the family, lower will be the economic conditions. In order to maintain their standard of living at a bear minimum level, he is in a position to dispose all their surplus agricultural products without any consideration of price level. Being a poor can not retain their product for their own family needs. Under this circumstance, the marketed surplus is greater than the marketable surplus.

**Table1 : Pattern of Land Ownership**

| Size of land holding in acres | No. of Respondents | Percentage    |
|-------------------------------|--------------------|---------------|
| 1-2 marginal farmer           | 73                 | 73.00         |
| 2-5 small farmer              | 25                 | 25.00         |
| Above 5 Large farmer          | 02                 | 02.00         |
| <b>Total</b>                  | <b>100</b>         | <b>100.00</b> |

Source: Field survey

The table 1 shows that, the patterns of land ownership of the agricultural households are classified in to three categories. They are marginal farmer, small farmer and large farmer. Out of the 100 families 73 families are coming under marginal farmers, and 25 families are coming under small farmer and only 2 families are coming under large farmers. This data reveals that majority of the marginal farmers are having less than two acres of land.

## 2.3 Income of the Households

An income particular helps us to know the living condition of the agricultural producers. Income is one of the important determining factors of a marketable surplus. Rich farmers do not need financial assistance from other agencies, because of his sound financial position. He does not sell out all the agricultural produce at once. It reduces the marketable surplus. He is waiting to sell out their products for higher prices.

**Table: 2: Income of the Household**

| Income group in (Rs)   | No. of households | Percentage    |
|------------------------|-------------------|---------------|
| Below 50,000           | 15                | 15.00         |
| Rs. 50,000 – 1,00,000  | 35                | 35.00         |
| Rs. 1,00,000- 1,50,000 | 30                | 30.00         |
| Rs. 1,50,000-2,00,000  | 15                | 15.00         |
| Rs. 2,00,000 & Above   | 05                | 05.00         |
| <b>Total</b>           | <b>100</b>        | <b>100.00</b> |

Source: Field survey

The above table 2 shows that out of 100 respondents 15 respondents annual income is below Rs 50,000 which constitutes 15 per cent. 35 respondents are having income between Rs.50,000 – 1,00,000, which constitutes 35 per cent. This shows that most of the agricultural producers come under this classification. 5 respondents are having income between Rs. 2,00,000 and above, which constitute 5 per cent. It reveals that, the inequality of income among the groups are very large.

## 2.4 Marketing

### Crop pattern and Agricultural Surplus

Agriculture is the backbone of Indian economy and prosperity of agriculture can also largely be responsible for the prosperity of the entire Indian economy. Cropping pattern can be made more rational through appropriate changes in economic motives of higher production. Marketable surplus is the total quantity of the commodity available for sale, out of the current production after meeting the normal requirements of the produces for household consumption, necessary payment for wages, rent, share of produce etc. Marketable surplus will always be less than the actual production. The producer's surplus is of two types. They are marketable surplus and marketed surplus. The total productions, the marketable and marketed surplus of different products for the farmers in the study area are given in the Table.3

**Table: 3 Marketable and Marketed Surplus**

| Crops   | Farm Size    | Total Output     | Total Consumption | Total Expenditure (including Seeds, Religious Payment Of artisans & family feeding cattle) | Marketable surplus | Marketed surplus | %of Marketed Surplus To Total Output |
|---------|--------------|------------------|-------------------|--|--------------------|------------------|--------------------------------------|
| Paddy   | Marginal     | 1,93,200         | 55,100            | 84,000   | 54,100             | 54,100           | 28.00                                |
|         | Small        | 1,36,500         | 32,900            | 66,300   | 37,300             | 37,300           | 27.34                                |
|         | Large        | 70,800           | 15,400            | 22,400   | 33,000             | 33,000           | 46.61                                |
|         | <b>Total</b> | <b>4,00,500</b>  | <b>1,03,400</b>   | <b>1,72,700</b>  | <b>1,24,400</b>    | <b>1,24,400</b>  | <b>31.06</b>                         |
| Banana  | Marginal     | 13,65,000        | 14,120            | 6,81,300   | 6,69,580           | 6,69,580         | 49.05                                |
|         | Small        | 9,36,000         | 9,400             | 4,66,500   | 4,60,100           | 4,60,100         | 49.15                                |
|         | Large        | 4,86,000         | 4,500             | 2,22,200   | 2,59,300           | 2,59,300         | 53.35                                |
|         | <b>Total</b> | <b>27,87,000</b> | <b>28,020</b>     | <b>13,70,000</b>   | <b>13,88,980</b>   | <b>13,88,980</b> | <b>49.84</b>                         |
| Coconut | Marginal     | 75,000           | 2,400             | 18,800   | 53,800             | 53,800           | 71.74                                |
|         | Small        | 88,600           | 2,800             | 22,000   | 63,800             | 63,800           | 72.00                                |
|         | Large        | 82,400           | 2,800             | 21,200   | 58,400             | 58,400           | 70.87                                |
|         | <b>Total</b> | <b>2,46,000</b>  | <b>8,000</b>      | <b>62,000</b>  | <b>1,76,000</b>    | <b>1,76,000</b>  | <b>71.54</b>                         |

Source: Field survey

The table 3 gives the details of the marketed surplus in the marketing of the three products paddy, banana and coconut. Marketable and marketed surplus are the same for these products. Marketed surplus is more in banana marketing compared to paddy and coconut. That is most of the paddy cultivations are poor and spend a lot on their consumption

and also they have to pay more for the artisans. In the case of banana, little for family consumption and there is nothing towards the payment to artisans and minimum for feeding the cattle. There are more obligations in the marketing of paddy compared to banana and coconut. Another reason is that paddy is the major food item and banana and coconut is a minor food item. The percentage of marketed surplus to total output of paddy is greater among the small scale units. The percentage of marketed surplus to total output of banana is greater among the large scale units.

### 2.5 Marketing Efficiency

Marketing efficiency =  $O / I \times 100$ , O = Marketable surplus, I = Marketing cost.

The marketing efficiency of the farmers in the study area is given in the tables 4 and 5.

**Table 4: Marketing Cost in Paddy, Banana and Coconut Products**

| Crops   | Farm Size | Marketable surplus | Transport | Commission | others | Total Input |
|---------|-----------|--------------------|-----------|------------|--------|-------------|
| Paddy   | Marginal  | 54,100             | 2,200     | 425        | 210    | 2,835       |
|         | Small     | 37,300             | 1,775     | 350        | 180    | 2,305       |
|         | Large     | 33,000             | 1,135     | 315        | 315    | 1,580       |
|         | Total     | 1,24,400           | 5,110     | 1,090      | 520    | 6,720       |
| Banana  | Marginal  | 6,69,580           | 30,000    | 1,650      | 840    | 32,490      |
|         | Small     | 4,60,100           | 18,000    | 1,475      | 750    | 20,225      |
|         | Large     | 2,59,300           | 9,250     | 1,225      | 590    | 11,065      |
|         | Total     | 13,88,980          | 57,250    | 4,350      | 2,180  | 63,780      |
| Coconut | Marginal  | 53,800             | 1,800     | 400        | 300    | 2,500       |
|         | Small     | 63,800             | 2,400     | 600        | 350    | 3,350       |
|         | Large     | 58,400             | 2,000     | 500        | 250    | 2,750       |
|         | Total     | 1,76,000           | 6,200     | 1,500      | 900    | 8,600       |

Source: Field survey

**Table 5: Marketing Efficiency in Paddy, Banana and Coconut products**

| Crops  | Farm size | Marketing Output(O) | Marketing Input (I) | Marketing Efficiency (in Rs) O/I X 100 |
|--------|-----------|---------------------|---------------------|--|
| Paddy  | Marginal  | 54,100              | 2,835               | 1,908.29                               |
|        | Small     | 37,300              | 2,305               | 1,618.22                               |
|        | Large     | 33,000              | 1,580               | 2,088.61                               |
|        | Total     | 1,24,400            | 6,720               | 1,851.19                               |
| Banana | Marginal  | 6,69,580            | 32,490              | 2,060.88                               |
|        | Small     | 4,60,100            | 20,225              | 2,274.91                               |
|        | Large     | 2,59,300            | 10,065              | 2,576.25                               |
|        | Total     | 13,88,980           | 63,780              | 2,177.77                               |

|         |              |                 |              |                 |
|---------|--------------|-----------------|--------------|-----------------|
| Coconut | Marginal     | 53,800          | 2,500        | 2,152.00        |
|         | Small        | 63,800          | 3,350        | 1,904.48        |
|         | Large        | 58,400          | 2,750        | 2,123.64        |
|         | <b>Total</b> | <b>1,76,000</b> | <b>8,600</b> | <b>2,046.51</b> |

Source: Field survey

Table 4 and 5 reveal of facts about the marketing efficiency in paddy, banana and coconut cultivation. Transport cost takes the major portion of the marketing cost to the paddy, banana and coconut cultivation. The marginal and small farmers' marketing efficiency is lower level to the paddy, banana and coconut cultivation. But the large Farmers' marketing efficiency is higher level to the paddy, banana and coconut cultivation. The two tables give the facts about the marketing efficiency in paddy, banana and coconut cultivation.

## 2.6 Marketing Finance

Loans are taken by the cultivators for two purposes either for meeting the consumption need or for cultivation. These loans are taken in kind as well as in cash from the ex-landlord, big landlord and village money lenders. The annual rate of interest in case of seed loan may vary from 25 to 50 per cent. While incase of cash loans from 12 to 24 per cent. These agencies advance loans on the condition that the produce will be sold to them or through them. In such sales the producers do not get a fair price. The villages' merchants, it-inerrant and petty traders generally depend upon their own resources, but in times of need, also borrow from the whole sale merchants, commission agents at a rate varying from 9 to 12 per cent. The following table shows the marketing finance of agricultural marketing

**Table 6: Finance Particulars**

| Source of Fund | No. of Respondents | Percentage    |
|----------------|--------------------|---------------|
| Owned          | 15                 | 15.00         |
| Borrowed       | 42                 | 42.00         |
| Both           | 43                 | 43.00         |
| <b>Total</b>   | <b>100</b>         | <b>100.00</b> |

Source: Field survey

The above table 6 shows that out of 100 respondents are getting their financial commitments for meeting their expenses for agricultural purpose through borrowed money plus their owned money. They are also indulged to borrow from government. The various marketing agents borrow funds at a high rate of interest. This naturally leads to a rise in the cost of marketing with the ultimate result that the share of the price received by the producer is correspondingly reduced. 43 respondents have borrowed and owned finance for their expenses for agricultural purpose which constitutes 43 per cent. Majority of the agricultural producers have borrowed more money from money lenders and big landlords.

The table reveals that the financial institutions policy has frequently changed by the government. One of the reasons for non-payment of the loans is that the government issued order about the repayment of loans. The government frequently writes off the loans. This factor induces the borrower not to repay their loan even though some people are having the capacity to pay the loan.

## 2.7 Mode of Sales

When the produce is brought for sale to the market each individual produce is allowed a lot number. Some sales are based on the verbal understanding between buyers and sellers with mentioning the rate as it is understood that the buyer will pay the prevailing rate. This method is followed when cultivators borrow from the traders or where his residence is far away from the market.

A cultivator, who has to borrow heavily for a growing crop, often mortgages it in advance. So that the sale of produce, which is hardly more than a mere formality takes almost in his fields as soon as the crop is harvested. In all other cases where crop is not formally mortgaged it has to be disposed of almost immediately after harvest in order to pay off the debt. The following table shows the mode of sales.

**Table 7: Mode of sales**

| Mode of Sales  | No. of Respondents | Percentage    |
|----------------|--------------------|---------------|
| Village trader | 25                 | 25.00         |
| Weekly market  | 65                 | 65.00         |
| Mandies        | 10                 | 10.00         |
| <b>Total</b>   | <b>100</b>         | <b>100.00</b> |

Source: Field survey

The table 7 shows the mode of sales of the cultivators. Out of 100 respondents 65 respondents sell their agricultural surpluses through weekly market which constitute 65 per cent. 25 respondents sell their surplus village traders which constitute 25 per cent, only 10 respondents sell their agricultural surpluses through mandies which constitute 10 per cent. The researcher has come to know that most of the cultivators would like to sale their produce to the weekly market because of they have borrowed more money from them.

## 2.8 Findings and suggestions:

### Findings

1. Out of the 100 families, 60 households are having the family size of less than three numbers which constitute 60 per cent. 40 households are having the family size 4 – 6 members which constitute 40 per cent.
2. More than 73 per cent of the farmers are Marginal farmers and 25 per cent of the farmers are small farmers and 2 per cent of the farmers are large farmers.
3. It is found that most of the people are dependent in their families. In the age group above 60, nearly 60 per cent of the members are dependent. Further, 40 per cent of the members are dependent in the age groups of 14 – 25.
4. Out of 100 respondents 15 respondents annual income is below Rs.50,000 which constitutes 15 per cent. 45 respondents are having income between Rs.1,00,000 – 2,00,000. which constitutes 45 per cent. This shows that most of the agricultural producers come under this classification. 5 respondents are having income between Rs.2,00,000 and above, which constitute 5 per cent.
5. Further this study reveals that, among the three types of farmers marketable surplus is more or less same. The three products are paddy, banana and coconut, in banana and coconut marketable surplus is more because there is no need to retain huge amount of banana and coconut for their consumptions.



6. In case of finance out of 100 respondents 43 respondents meet their agricultural expenses through financial assistance from government agencies and their own finance. Only 15 have met their financial expenses by themselves. Remaining 42 respondents have borrowed from others.
7. There is a weekly market in this study area only 65 per cent of the agricultural output are sold out through this market. Remaining 35 per cent of the agricultural outputs are sold out through village traders and mandies.
8. It is found that, the mode of transport, 62 per cent of the agricultural products are transported only through tractors. Remaining the agricultural product is transported through lorry.
9. It is found that, among the three types of farmers marketable surplus of paddy is 28 per cent, 27.34 per cent and 46.61 per cent respectively. As for banana the marketable surplus is 49.05 per cent, 49.15 per cent and 53.35 per cent respectively. The coconut marketable surplus is 71.73 per cent, 72.01 per cent and 70.87 per cent respectively. It is found that, coconut marketable surplus and marketed surplus is higher than other commodities.

### **Suggestions**

1. Proper weights and measures should be introduced and frequent check up should be done by the government.
2. The government should publish the actual ruling price list of the different commodities.
3. The government should provide proper facilities for storing their products.
4. The government should provide adequate road and communication facilities to the proposed market area.
5. The government should arrange adequate and cheap means of transport facilities in this area.
6. Fair price markets may be started in this area to sell out their marketable surplus.
7. The sources and availability of finance for agricultural operations are inadequate in this area. Therefore, the nationalized banks should come forward to provide finance to the agriculturist.

### **Conclusion:**

This study reveals that nearly 73 per cent of the respondent families are having small size of land holding. A large portion of the agricultural surplus produce is going to their consumption purpose. The living conditions of the agricultural family is very poor in this area, small size of land holdings is one of the reasons for low level of agricultural output which is the main cause for backwardness in this area. The researcher came to a conclusion that lack of adequate transport facilities is one of the reasons for market failure in this study area. There is no regulated market in this study area. In this study area, majority of the agriculturist have earned more marketable surplus of their commodities. Banana producers earn more income than the other commodities producers. Hence, majority of the agricultural producers engaged in banana cultivation. Even though, the agricultural marketing is not satisfactory in this study area. It is concluded that, if the agricultural marketing facilities are well established in this area which facilities to provide more income of the agriculturist. So the government should start well organized agriculture market in this area.

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