

173856

**ANALYSIS OF MARKETING STRATEGIES OF  
ORGANIC RICE –JAIVAM AMRITHAM**

by  
NIPUNA S.  
(2014 – 31 - 136)

**MAJOR PROJECT REPORT**

Submitted in partial fulfillment of the  
requirement for the post graduate degree of

**MBA IN AGRIBUSINESS MANAGEMENT**

**Faculty of Agriculture  
Kerala Agricultural University**



**COLLEGE OF CO-OPERATION, BANKING AND MANAGEMENT**

**VELLANIKKARA, THRISSUR-680656**

**KERALA, INDIA**

**2016**


*Declaration*

---

## DECLARATION

I, hereby declare that this project report entitled “ANALYSIS OF MARKETING STRATEGIES OF ORGANIC RICE –JAIVAM AMRITHAM” is a bonafide record of work done by me during the course of project work and that it has not previously formed the basis for the award to me of any degree/diploma, associateship, fellowship or other similar title of any other University or Society.

Vellanikkara  
08-08-2016

  
NIPUNA S.  
2014-31-136

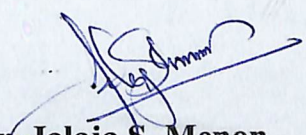
*Certificates*

---

## CERTIFICATE

Certified that this project report entitled “ANALYSIS OF MARKETING STRATEGIES OF ORGANIC RICE –JAIVAM AMRITHAM” is a record of project work done by Nipuna S. under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship, or associateship to her.


Vellanikkara  
08-08-2016



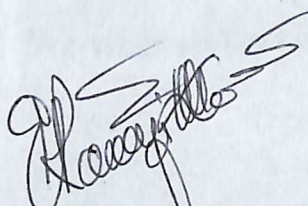
**Dr. Jalaja S. Menon**  
(Supervising Guide)  
Assistant Professor  
College of Horticulture  
KAU

## CERTIFICATE


We, the undersigned members of the advisory committee of Ms. Nipuna S., candidate for the degree of MBA in Agribusiness Management, agree that the project work entitled "ANALYSIS OF MARKETING STRATEGIES OF ORGANIC RICE –JAIVAM AMRITHAM" may be submitted by Ms. Nipuna S. in partial fulfillment of the requirement for the degree.



**Dr. Jalaja S. Menon**  
Assistant Professor  
College of Horticulture  
KAU  
(Supervising Guide)



**Dr. E. G. Ranjit Kumar**  
Director, MBA (ABM)  
College of Co-operation, Banking & Management  
Kerala Agricultural University  
Vellanikkara



**Dr. A. Sakeer Husain**  
Institutional Co-ordinator  
Centre for E-learning  
KAU  
(External Examiner)



ADAT FARMERS SERVICE CO-OPERATIVE BANK LTD NO R 689  
P O PURANATTUKARA, THRISSUR-680551  
PH: 0487 2307792, 0487 2309761  
Website : afcbank.in  
e-mail : adatfarmersbank@gmail.com

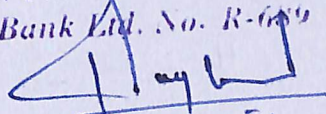


23/05/2016

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Miss Nipuna S (2014-31-136) MBA-ABM student of College of Co-operation, Banking and Management of Kerala Agricultural University, Vellanikkara has successfully completed her project work at 'Adat Farmers Service Co-operative Bank Ltd No R 689' on 'Analysis of Marketing Strategies of Organic Rice – Jaivam Amritham' during the period from 21<sup>st</sup> March 2016 to 10<sup>th</sup> May 2016 as part of her academic curriculum. She was found to be sincere and enthusiastic in collecting various data and information required for the study.

We wish all success in her future endeavours.

For The Adat Farmers' Service  
Co-operative Bank Ltd. No. R-689  
  
Managing Director

Acknowledgement

# *Acknowledgement*

---



## ACKNOWLEDGEMENT

*I am very glad to present this study entitled "ANALYSIS OF MARKETING STRATEGIES OF ORGANIC RICE- JAIVAM AMRITHAM." This work could not have been in its present form without timely advice, guidance and help of an ample lot of well-wishers. To them, who had remained with me as a constant inspiration, I place my advent resolution.*

*I bow with gratitude before the invisible power of all blessings, all through my life and above all for the help extended to me through various known and unknown hands during the course of my project work.*

*I considerate as a moment of great delight to express my gratitude to all those who have lend me a helping hand, directly or indirectly in the completion of my work. I have no hesitation to declare that the outcome of the project is the culmination of the collective wisdom and encouragement of a group of elites to whom I owe its credibility, however I will be failing in my duty if I do not endorse a few.*

*I am extremely indebted to my Guide, Dr. Jalaja S. Menon, Assistant Professor, College of Horticulture, KAU for her valuable guidance, tremendous support, tireless patience and incomparable concern during my project work, even in the midst of her busy schedules. Without her, my project work would have remained a dream. Though words cannot express my utmost gratefulness to her, I feel heaven to place my boundless gratitude unreserved for her always.*

*I reckon with inner heart, my deep sense of gratitude, solemn indebtedness and special thanks to Dr. Ranjan S. Karippai Professor & Retired Head KRISHI VIGYAN KENDRA-THRISSUR for his insightful comments, suggestions, encouragement and for the stimulating discussions, but also for the hard question which incented me to widen my project from various perspectives. It is with a deep sense of gratitude that I express my heartfelt thanks to him for his timely advices, constant encouragement and affection rendered on me throughout my academic pursuit.*

*I remember with much respect and gratitude, the good advices and help of Smt. Susheela Varma, Managing Director of Adat Farmers' Service Co-operative Bank, who paved an initial way towards my study. She was extremely down to earth throughout my project work.*

*I would like to place on record of my heartfelt thanks to Dr. Molly Joseph, Associate Dean, Dr. E. G. Ranjit Kumar, Director and Dr. A. M. Jose, Associate Director, MBA-ABM, for their constant inspiration and motivation throughout my academic career. A special thanks to Dr. Deepa S. Pillai, District Manager, NABARD, Thrissur, Dr. S. Krishnan, Asst prof. & Head,*

*Agricultural Statistics, CoH, and Smt. Sathya Varma, Agriculture Officer, Adat Grama Panchayath who extended their helping hands for my work.*

*My work would be incomplete if I am not submitting the table of acknowledgement to Mr. Jithin Gopi C., Manager, Adat Farmers' Service Society Supermarket, Adat, HR Manager, Elite Supermarket, Miss. Divya Sivan, Floor Manager, Elite Supermarket, Thrissur, Mr. Akhil, Manager, ESAF Supermarket, Mannoothy, Mr. M. R. Unnikrishnan, Member of Director Board, Nissarga Organic shop, Poonkunnam and other personalities whom I have been fortunate enough to meet and interact during my project work. Words are not sufficient to thank the entire respondents of my study including the key informants and all staff members of Adat Farmers' Service Co-operative Bank. Regardless of their busy schedule they have co-operated with me all the way and gave me all the information needed for my study.*

*I am highly obliged to Prof. Philip Sabu, Retired Director, MBA-ABM, College of Co-operation Banking and Management and Dr. A. M. Jose, Associate Director, College of Co-operation Banking and Management, Examiners of my proposal presentation, for their discerning criticism, effective judgments, encouragement and insightful comments made my project more logical.*

*I would like to place on record of my heartfelt thanks to Retired Associate Dean of CCBM, Dr. A. Sukumaran, for his advices, guidance, and motivation throughout my carrier.*

*I wish to express my thanks to Mr. K. P. Sathian, Librarian who is an infinite source of knowledge, love and inspiration. I also express my sincere gratitude to all the library staff of our college as well as Central Library for all the help they extended during my college days.*

*I wish to express my heartfelt gratitude towards all the teachers, and staff of our college especially, Miss. Nimisha P. K. and Mrs. Omana K. K. for providing me great help, support, motivation and inspiration throughout my academic career.*

*No words can fully explain my affection and gratitude to my beloved parents and all my family members.*

*Above all, I bow my head before the Almighty, whose grace and blessings have empowered me to complete this toil. I would also use this opportunity to beg pardon to all those who have ever been hurt, knowingly or unknowingly by my words and deeds.*

*Needless to say, I solely am responsible for any errors, which may remain.....*

**NIPUNA S.**

## CONTENTS

| <b>Chapter No.</b> | <b>Title</b>   | <b>Page No.</b> |
|--------------------|--|-----------------|
| 1                  | Design of The Study  | 1-16            |
| 2                  | Review of Literature   | 17-27           |
| 3                  | Organic Rice Production- An Overview                                       | 28-37           |
| 4                  | Consumers' Willingness to Buy Organic Products- A<br>Theoretical Framework | 38-40           |
| 5                  | Adat Farmers' Service Co-operative Bank Ltd. No. R.<br>689- A Profile      | 41-50           |
| 6                  | Marketing Strategies- An Analysis  | 51-81           |
| 7                  | Summary of Findings and Suggestions  | 82-89           |
|                    | Bibliography   |                 |
|                    | Appendix   |                 |
|                    | Annexure   |                 |

## LIST OF TABLES

| <b>Table No.</b> | <b>Title</b>   | <b>Page No.</b> |
|------------------|--|-----------------|
| 1.1              | Distribution of respondents in selected four retail shops                    | 9               |
| 1.2              | Distribution of Key Informants   | 9               |
| 1.3              | Distribution of participants for FGD   | 10              |
| 3.1              | Organic agricultural land: The top five countries in Asia 2009               | 30              |
| 6.1              | Socio-economic profile of Jaivam Amritham consumers                          | 52              |
| 6.2              | Consumer's attitude towards the purchase of Organic Rice                     | 58              |
| 6.3              | Consumer's Opinion Regarding Jaivam Amritham                                 | 59              |
| 6.4              | Influential factors towards the purchase of Jaivam Amritham by the consumers | 62              |
| 6.5              | Frequency of Purchase of Jaivam Amritham                                     | 68              |
| 6.6              | Prior usage of any other organic rice by the consumer                        | 70              |
| 6.7              | Reason for buying Jaivam Amritham  | 71              |
| 6.8              | Bran content in Jaivam Amritham  | 73              |
| 6.9              | Consumers opinion regarding reducing bran content in Jaivam Amritham         | 74              |
| 6.10             | Package of Jaivam Amritham that consumers usually buy                        | 75              |
| 6.11             | Preferred package of the product   | 76              |
| 6.12             | Preferred purchase location of Jaivam Amritham                               | 78              |

## LIST OF FIGURES

| <b>Figure No.</b> | <b>List of Figures</b>  | <b>Page No.</b> |
|-------------------|---|-----------------|
| 4.1               | Framework reflecting consumer behaviour towards food products                           | 39              |
| 4.2               | Framework of factors affecting organic consumers' attitudes and willingness to purchase | 39              |
| 5.1               | Organizational structure  | 46              |
| 5.2               | Marketing channel existing in the marketing of Jaivam Amritham- Organic rice            | 50              |
| 6.1               | Level of Education of Jaivam Amritham Consumers   | 54              |
| 6.2               | Occupation of Jaivam Amritham consumers   | 55              |
| 6.3               | Average monthly income of Jaivam Amritham consumers                                     | 56              |
| 6.4               | Family size of Jaivam Amritham consumers  | 57              |
| 6.5               | Consumer's attitude towards the purchase of Organic Rice                                | 59              |
| 6.6               | Taste as an influential factor  | 63              |
| 6.7               | Cooking time as an influential factor   | 64              |
| 6.8               | Pesticide residue free as an influential factor   | 65              |
| 6.9               | Nutritional benefits as an influential factor   | 67              |
| 6.10              | Affordability of price as an influential factor   | 65              |
| 6.11              | Frequency of Purchase of Jaivam Amritham  | 69              |
| 6.12              | Prior usage of any other organic rice   | 70              |
| 6.13              | Reason for buying Jaivam Amritham   | 72              |
| 6.14              | Presence of bran content in Jaivam Amritham   | 73              |
| 6.15              | Opinion regarding reducing bran content   | 74              |
| 6.16              | Purchased package size of Jaivam Amritham   | 75              |
| 6.17              | Preferred packaging of the product  | 77              |
| 6.18              | Preferred fixed package size for purchasing Jaivam Amritham                             | 78              |
| 6.19              | Preferred purchase location of Jaivam Amritham  | 79              |

## LIST OF ABBREVIATIONS

|          |  |
|----------|--|
| ac       | Acre   |
| AFCS     | Adat Farmers' Co-operative Society                                       |
| AFSCB    | Adat Farmers' Service Co-operative Bank                                  |
| APEDA    | Agricultural and Processed Food Products Export Development<br>Authority |
| FGD      | Focused Group Discussion   |
| Govt     | Government   |
| INDOCERT | Indian Organic Certification Agency                                      |
| KII      | Key Informant's Interview  |
| NPOP     | National Programme for Organic Production                                |
| NSOP     | National Standards for Organic Products                                  |
| USDA     | U.S. Department of Agriculture   |
| WTP      | Willingness to Purchase  |

*Chapter - 1*

*Design of the Study*

---

## Chapter 1

### DESIGN OF THE STUDY

#### 1.1 Introduction

The role of organic agriculture in providing food and income is now gaining wider recognition (Van Elzakker et al 2007). Organic farming is a sustainable farming system that produces healthy crops and livestock without damaging the environment. It avoids the use of artificial chemical fertilizers and pesticides and emphasize on developing a healthy and fertile soil and growing a mixture of crops. In this way, the farm remains biologically balanced with variety of insects and wildlife that act as natural predators of crop pests, and soil full of microorganisms and earthworms to keep its vitality. What makes organic agriculture unique is that, under various laws and certification programs, almost all synthetic inputs are prohibited and "soil building" crop rotations are mandatory. Properly managed, organic farming reduces or eliminates soil and water pollution and helps conserve water and soil on agricultural lands. Organic farming is one of the several approaches to sustainable agriculture, which is an eco friendly production system. Organic agriculture is gaining importance in the agriculture sector of many countries, irrespective of their stage of development.

India is bestowed with lot of potential to produce all varieties of organic products due to its various agro climatic regions. In several parts of the country, the inherited tradition of organic farming is an added advantage. This holds promise for the organic producers to tap market which is growing steadily in the domestic market related to the export market. Currently, India ranks 33rd in terms of total land under organic cultivation and 88th position for agriculture land under organic crops to total farming area. The cultivate land under certification is around 4.43 million Ha (2010-2011). In 2000, the Government of India released the National Standard for Organic Products (NSOP) under the National programme for Organic Production (NPOP). It stipulates that inspection and certification by a nationally accredited certification body is mandatory for labelling and selling products as "Organic".

The increase of the environmental consciousness has had a thoughtful effect on consumer behaviour, with the green product market expanding at a remarkable rate. Therefore, in the past decades there has been an increase in production and



consumption of organically-produced products which was seen as having less impact to the environment. In December 2000, the National Organic Standards Board of the U.S. Department of Agriculture (USDA) established a national standard for the term "organic." Organic food, defined by how it cannot be made rather than how it can be made, must be produced without the use of sewer-sludge fertilizers, most synthetic fertilizers and pesticides, genetic engineering (biotechnology), growth hormones, irradiation and antibiotics. A variety of agricultural products can be produced organically, including produce of grains, meat, dairy, eggs, and processed food products. "Organic" does not mean "natural." There is no legal definition as to what constitutes a "natural" food. However, the food industry uses the term "natural" to indicate that a food has been minimally processed and is preservative-free. Natural foods can include organic foods, but not all natural foods are organic.

Indian markets from low- involvement to high- involvement product categories have been experiencing sweeping changes in the past decade. Changing life styles, fragmented market segments, consumer preferences, and intense competition from various other brands of corporate have made marketing strategies a prerequisite for marketing success. India has been going through radical changes in the marketing arena in the last decade. Globalization in terms of multinational corporation brands entering Indian markets, the emergence of young professionals in urban areas, the opening up of luxury and leisure markets, the impact of mass media and the influence of Westernization are some of the critical aspects which have forced Indian marketers to adopt marketing strategies (Narayanasamy and Ramasamy, 2011). These strategies have been formulated against the backdrop of the Indian culture, which is strongly entrenched in the consumer psyche, and amidst changes in the social environment. Production and marketing strategies are determined by consumer beliefs, attitudes, responses to organically grown products and the willingness to pay a premium price.

Because organic products are credence goods, consumers may not know whether a product is produced using organic or conventional methods unless they are told so (Giannakas, 2002). Thus, awareness and knowledge about organically produced foods are critical in the consumer purchase decisions. Krissoff (1998) reported that consumers purchase organic products because of a perception that such products are safer, healthier and more environmentally friendly than conventionally produced alternatives. Human health, food safety along with several other product

characteristics such as nutritive value, taste, freshness, appearance, and other sensory characteristics influence consumer preferences (Makatouni, 2002, Bonti-Ankomah and Yiridoe, 2006).

Rice is the staple food of Kerala and so the demand for the rice is also very high, and it is necessary to augment its production. The system of our agriculture based on the traditional knowledge and practices handed down from generation to generation could not produce enough to feed the increasing population. The ignominy of our dependence for food on the western developed nations and the politics of food aid practiced by them added to our determination to be "self-sufficient in food production by modernizing agriculture. The green revolution fulfilled our aspirations by changing India from a food importing to a food exporting nation. However, the achievement was at the expense of ecology and environment and to the detriment of the well-being of the people. The agriculture system adopted from the west has started showing increasing unsustainability and once again, the need for an appropriate method suitable to our requirements is being felt. The practice of organic farming, said to be the best-known alternative to the conventional method, also originated in the west, which suffered from the ill effects of chemical agriculture.

By realizing the health hazards of chemical fertilizers, consumers are now switching over their preference to organic rice and hence the farmers too. Consumers all over the world have concern about their health as well as the environment's sustainability. They are now worried about the presence of the negative consequences of chemical residues on their health and on the environment in conventional production methods. As a result, markets for "green" or "eco-friendly" products are rapidly increasing as its consumption is recognized as one of the contributors to a healthy and sustainable lifestyle.

Thrissur Kole Wetlands are unique wetlands lying in Thrissur District in Kerala, India. It gives 40 per cent of the Kerala's rice requirement and acts as a natural drainage system for Thrissur city and Thrissur District. The Kole Wetlands is one of largest, highly productive and threatened wetlands in Kerala and has been declared in Ramsar Convention for protection and it comes in Central Asian Flyway of migratory birds. The most important crop of the district is paddy. Kole

lands extent over an area of 1100 hectares partly along Thrissur, Chavakkad and Mukundapuram taluks of Thrissur district.

With the cultivation season round the corner and de-watering underway, farmers in the low-lying estuarine plains of Kole wetlands could be heard wondering the same thing: Where are the snakes, frogs and fish which were all found in abundance until just a few years before? “The excreta of the fish were highly beneficial to the soil and the frogs consumed several of the more harmful insects. Now, their population is slowly dwindling because of use of pesticides,” said a farmer busy dewatering the Kole farms. The statistics say as much. The results of a study on Kole wetlands conducted by the Centre for Economic and Social studies in 2011 says the quantity of fertilisers used per hectare of rice, almost 282 kg, was twice the Kerala average of 123 kg per hectare. The soil analysis tests on the Kole farms have shown a low potassium and nitrogen content while the phosphorus is supposedly high. It was the indiscriminate use of fertilisers, disregarding the micronutrient requirements of the soil that proved counterproductive to the flood plains. In some areas, the productivity is as low as 4 tonnes/ hectare, while the output goes as high as 12 tonnes/hectare in those areas where the fertilisers are properly applied. However, the use of chemical fertiliser has since been reduced to a large extent. Smt. Jayasree K., the former Deputy Director of Agriculture says “Over the years, we have phased out the use of fertiliser with an aim to make the produce ‘Safe to Eat’”. At the same time, she agreed that some farmers with the help of unscrupulous chemical companies were involved in the use of fertilisers uncontrollably. (The New Indian Express, Kole Land Awaits an Organic Shift, 02<sup>nd</sup> October 2015).

The 73<sup>rd</sup> and 74<sup>th</sup> amendments of the constitution led to the setting up of a decentralized democratic local self-government system in the country. Panchayaths are given freedom to formulate and implement their own development programmes within the operational guidelines issued by the State Planning Board. Improving the production and productivity of agriculture in a locality, introduction of new crops, adoption of mechanized farming and expanding the area under crops are vested with Grama Panchayath. The projects under agriculture are implemented through Krishi bhavans, the Panchayath level unit for agricultural development. Mission Adat-Jaivam Amritham is such an initiative taken by Adat Farmers Service Co-operative Bank (AFSCB) of Adat Grama Panchayath.

Adat Grama Panchayath, home to about 3,000 acres of Kole paddy fields, has successfully launched itself on the organic path to farming and set a model for panchayaths elsewhere in the State. "Mission Adat- JAIVAM AMRITHAM" is such an initiative implemented exclusively for improving the condition of organic paddy cultivation. They have selected 82 ac (Ombathumuri) and 94 ac (Kadavil) of Kole land from Adat panchayath and initiated organic paddy cultivation. First harvest yielded 170 tonnes of paddy per field which is remarkably good when compared to other organic rice production. The Panchayath began, in 2007 with an intense sensitisation campaign and gave training to the farmers in organic farming and began with cultivation in 350 acres in Chathan Kole Pupilakadu Padam without using any pesticide. Except for a mild dose of chemical fertilizers in the initial stage, the rest of the manures used were organic. Now they are on the way to 100% organic cultivation.

## **1.2 Statement of the Problem**

The distribution of organic products happens through different channels like exclusive stores/outlets, conventional retail stores; supermarket/ hypermarkets, advanced order based sales, home delivery, direct sales from the farmers in open markets, and mobile retail shops (Ghosh, 2004). The food industry delivers certified organic products to consumers through specialized stores and large supermarkets. The organic products in the Indian market cost general at least/ almost double the price of conventional products, and prices vary between different marketing channels (Garibay and Jyoti. 2003).

As indicated by further fieldwork, consumers prefer organic products over conventional ones when they consider health risks, lifestyles associated with organic production, concerns about chemical residues in food, and about impact on the environment and wildlife. At present, the organic rice- Jaivam Amritham market is still in an early phase of its development, and its retail outlets are available only in metro cities, without any availability of more varied assortments inside this category, furthermore, these specialized stores are normally situated double the distance where the remaining household purchases are carried out. Hence, consumers are not provided the convenience of access to a comprehensive range of products in one place. Despite these issues, however, not many efforts have been carried out to profile this market segment (Menon, 2009). Furthermore, the majority of needed research in

this field has been undertaken by AFSCB and hence, consumer's willingness to buy Jaivam Amritham in Thrissur District is significantly under-researched. Accordingly, there is an urgent need to fill this research gap. In particular, research studies on consumer's willingness to buy and it deserves careful investigation.

Now, AFSCB is planning to expand their organic rice production to rest of the Kole padavu. In order to improve the production, processing and marketing of organic rice, it is very much relevant to probe into consumer's willingness to buy organic rice. By analyzing the above, it might be able to structure a better marketing strategy for AFSCB, Mission Adat- Jaivam Amritham.

### **1.3 Need and Significance of the Study**

The market of organic products is growing as the number of people willing to eat organic food and pay premium price is increasing. The future of organic agriculture will, to a large extent, also depend on consumer demand and their motive for paying extra price for organically grown food. Thus, a consumer-oriented approach to understanding the market for organic products is important for pursuing better management of organic farming. However, this is a complex process, which is determined by factors such as quality production, certification, infrastructure and market environment and policies (Aryal, 2008). It is also important to understand consumers' decision-making regarding organically produced foods and seek strategies about how consumption can be promoted.

It is highly important to examine the underlying factors that might influence the tendency of consumer to purchase organic food products. Such research is believed could help to formulate a strong market communication and policy strategies in order to influence behaviour toward organic rice. As most researches were conducted in developed countries, there might be some socio-demographic differences in organic food acceptance and consumption behaviour. According to Lockie et al. (2002) the proportion of people consuming organic food products may increase as they experience a rise in income and normally organic food consumers are among those with high education level compared to non-organic consumers.

The future of organic agriculture will, to a large extent, depend on consumer demand. Thus, a consumer-oriented approach to understanding organic agriculture is important not only in its own right, but also in terms of response to shifting market dynamics. From a marketing perspective, it is important to understand our (human) conception of consumer decision-making regarding organically produced foods, and how consumption can be promoted. Product development and marketing strategies are also affected by consumer beliefs, attitudes and responses. This could vary depending on the region of the world. Thus, a clear understanding of consumer attitudes and the motivations underlying actions in responding to organically grown products is important. To succeed in today's competitive marketplace, each company must frame a marketing strategy. The marketing strategy is the marketing logic by which the company hopes to achieve its marketing objectives (Ferrell and Hartline, 2008). The marketing objectives say 'Where to go' and the marketing strategy says 'How to go'. The marketing strategy helps to segment the market, target the most promising segment, and position the product in the consumer's mind as a clear, distinct, and desirable place relative to competing products (Clewelt, 2000)

The present research undertook such an attempt to determine the consumer's willingness to buy organic rice- Jaivam Amritham so that AFSCB can explore the current market of organic rice. This research was also intended to suggest marketing strategies for JAIVAM AMRITHAM- the organic rice, produced by AFSCB and marketed by ESAF.

#### **1.4 Objectives**

The specific objectives of the study are as follows,

- 1) To analyze the consumer's attitude towards the purchase of organic rice- JAIVAM AMRITHAM, a product of Adat Farmers Service Co-operative Bank.
- 2) To suggest marketing strategy to enhance the marketing scope of Jaivam Amritham.

## **1.5 Methodology**

### ***1.5.1 Research design***

The study was conducted by collecting data from various consumers and retailers of Thrissur District as suggested by the Adat Farmers Service Co-operative Bank (AFSCB). For the purpose of the study, both quantitative and qualitative data of primary and secondary in nature were collected using different methods. Thrissur District was the canvas for the study as AFSCB is initially planning to expand their market in Thrissur District. The main focus of this research was to analyze consumer's attitude towards the organic rice- Jaivam Amritham and their willingness to buy the product and also to suggest marketing strategy to further explore the market opportunities of organic rice.

### ***1.5.2 Description of the Study Area***

Thrissur is a revenue district of Kerala situated in the central part of the state, spanning an area of 3,032 km<sup>2</sup>. This district is home to over 10% of Kerala's population. Thrissur is known as the cultural capital of Kerala. It is situated in south western India 10.52°N 76.21°E and is in the central part of Kerala, India. Thrissur is at sea level. Thrissur municipality came into existence on 1<sup>st</sup> July 1942 and later in the year 2000 it was upgraded to the level of municipal corporation. Thrissur Municipal Corporation came into being on 2<sup>nd</sup> October 2000 with a total area of 101.42 sq km. As per provisional reports of Census India, population of Thrissur Corporation in 2011 was 317474 consisting 154188 males and 163286 females. The total households in the city are 66827 and sex ratio is 1092/1000 male. According to census 2011 the average population density is 2868 persons per sq km. In the central area of the town, the population density is as high as 3130 persons per sq km, while it is 1458 persons in the outer fringes of the city (Census India, 2011). Thrissur has a literacy rate of 97.24%. Thrissur was also the second highest urbanized district in Kerala after Ernakulam. The Corporation manages 101.42 km of Thrissur city limits of 55 wards through five divisions Ayyanthole, Vilvattom, Ollukkara, Ollur and Koorkanchery.

### 1.5.3 Study Location

To conduct the study more meaningfully four retail shops were selected from Thrissur District. They are Adat Farmers' Co-operative Society Supermarket, Adat, Elite Supermarket, Thrissur, Nissarga Organic shop, Pookunnam, and ESAF Swasrya Bazar, Mannoothy. These four shops were selected as representative shops from urban and peri-urban areas of Thrissur District so that taste and preferences of consumers in these areas can be compared.

### 1.5.4 Sampling Size

The sample for the survey included at least 30 conveniently selected consumers from each retail shops, thus with a total of 120 consumers. In addition, purposively selected retailers, members of AFSCB, Convenor/member of Adat Kole padavu and Agricultural officer of Adat Grama Panchayath had also been included in the sample to obtain relevant qualitative and quantitative data. The distribution of sample respondents and selected locations are provided in Table 1.2 and 1.3.

**Table 1.1 Distribution of respondents in selected four retail shops**

| Sl. No. | Retail Shops | No. of respondents |
|---------|--------------|--------------------|
| 1       | AFCS         | 30                 |
| 2       | Elite        | 30                 |
| 3       | Nissarga     | 30                 |
| 4       | ESAF         | 30                 |
|         | <b>Total</b> | <b>120</b>         |

**Table 1.2 Distributions of Key Informants**

| Sl. No. | Location     | No. of KIIs |
|---------|--------------|-------------|
| 1       | Adat         | 5           |
| 2       | Elite        | 1           |
| 3       | Nissarga     | 1           |
| 4       | ESAF         | 1           |
|         | <b>Total</b> | <b>8</b>    |



**Table 1.3 Distributions of Participants for FGD**

| Sl. No. | Location                 | No. Of FGDs |
|---------|--------------------------|-------------|
| 1       | AFSCB                    | 15          |
| 2       | Ombathu muri Kole padavu | 8           |
| 3       | Kadavil Kole Padavu      | 8           |
|         | <b>Total</b>             | <b>31</b>   |

### ***1.5.5 Types of data and methods of data collection***

Both quantitative and qualitative data of primary and secondary in nature were collected for the study. Qualitative data was generated through Key Informant Interviews (KII) with the help of checklists and Focused Group Discussion (FGD). Quantitative data were gathered by a survey among the 120 sample respondent consumers from four retail shops with a pre – tested, structured questionnaire. Necessary secondary data had also been collected from available reports, records and other documents of Adat Farmers’ Service Co-operative Bank. The primary data had been gathered in 33 days in four retail shops. The data collection started on 20<sup>th</sup> April, 2016 which involved detailed gathering of information on different parameters of interest for the study from each respondent by employing the questionnaire. Qualitative data were also gathered from 8 KIIs and from three FGDs. Key informants were identified with the help of officials of Adat farmers’ Service Co-operative Bank in the selected locations. Comprehensive guideline of open-ended questions was used to guide FGDs (FGD guide) and KIIs (check list) and to gather more information regarding the issue under investigation. The participants of these FGDs were selected based on the criteria of familiarity with the issue under investigation and ability to express their opinion genuinely and properly, on behalf of the consumers’ as well as producers’ category they represent.

#### ***1.5.5.i Quantitative data collection methods***

Before the start of the survey in Aril 2016, the researcher decided to pre-test the questionnaire in Adat Farmers’ Service Co-operative Society Supermarket with the help of the Managing Director of AFSCB. After the pre-test of the questionnaire, the questions were rearranged, which involved both open-ended and close-ended

questions and translated into Malayalam before going to actual survey area. The researcher used the broad frame with the objectives of the study in mind especially on the ethical issues (such as how to treat the respondents not to hurt their feelings, confidentiality and friendly) while collecting the data. The respondents were purposefully selected with the criteria of being the users of Jaivam Amritham, related to the topic of interest to avoid bias.

#### ***1.5.5.ii Qualitative data collection methods***

The second phase of the study focused on qualitative data collection through KIIs and FGDs. Qualitative data were used to supplement and to fill gaps of the quantitative data collection process and also for triangulation of survey data. Tape recording was the method of documentation of qualitative data and the data had been transcribed daily to avoid forgetting and missing the contextual emotional states of the discussants or respondents.

##### ***1.5.5.ii.(a) Key Informant Interview (KII)***

The key informant interviews were not a question-answer session. It rather involved a sort of case studies to have a good insight of how the situation was in the past, the recent transformation and other points of study. The key informants for the study were include Managing Director, AFSCB, Managers of ESAF and AFCS supermarket, Floor manger of Elite supermarket, Member of Director board, Nissarga Organic shop and Agriculture Officer of Adat Grama Panchayath. During the interview, some related issues were also raised to stimulate the process and also guide the respondent to the main issue. The interview used to start with general questions and then it proceeded using the checklist. KIIs were held at AFSCB Office, Adat Krishibhavan, Kole Padavu conveners Office as well as in four retail shops. Such interviews were held with the officers in order to have a good insight about the topic of interest.

##### ***1.5.5.ii.(b) Focus Group Discussion (FGD)***

FGDs were carried out in AFSCB with 15 members and with both Kole padavu groups with maximum of eight persons in each FGD. A total of 3 FGDs were held. During the FGD, the researcher was involved as facilitator, using the FGD

guide. The interview used to start with general questions about some historical information to know the background and what was the condition in the past compared to the present condition and the possible causes of the change regarding prevalence, practice and other current issues related to organic rice. Thereafter, the researcher probed the farmer group raising the specific points according to the FGD guide and facilitated in depth discussions. During the discussion, the role of the researchers was to give a chance and stimulate the passive participants to respond to similar questions or share their community experience and observations about the issue under discussion. This was mainly done to avoid the dominance of one or two group members, making sure that every participant has an opportunity to speak, and to get a good mix of wide perspectives. In case of deviation from the main topic, they were brought back into the intended track in a friendly manner. The discussions were held according to the preference of discussants in Krishibhavan offices as well as in AFSCB conference halls. Each FGD were lasted for 1-2 hours.

#### ***1.5.6 Key observations made***

The following key observations were made while conducting the study.

- 1) The consumer's attitude towards the purchase of organic rice
- 2) Consumers' opinion regarding JAIVAM AMRITHAM
- 3) Influential factors towards consumer preference of JAIVAM AMRITHAM
- 4) Marketing strategies of JAIVAM AMRITHAM- the organic rice
- 5) Production related factors with respect to JAIVAM AMRITHAM

#### ***1.5.7 Methods of Data analysis***

The data collected for analyzing the marketing opportunities of Jaivam Amritham and consumer's attitude towards the purchase of organic rice Jaivam Amritham were analyzed by using SPSS (Statistical Package for the Social Sciences) version 20 computer software. The qualitative data collected through KIIs and FGDs had been analysed with narrations, interpretations and tabulations. Quantitative data obtained from survey were analysed using simple descriptive statistics like means, frequencies and percentages. The analysis of qualitative data was made both during

and after data collection. Then narrative analyses were used through recording, writing the manuscript daily after each qualitative data collection, coding or collecting the same ideas and explained in detailed and organized way. Ordered logistic Regression model was used to analyse the consumers' attitude towards the purchase of organic rice. Kendall's W test was used to delineate the factors responsible for consumers' purchase of Jaivam Amritham and to rank the consumer's general opinion towards consumption of Jaivam Amritham.

#### ***1.5.8 Identification of marketing strategies of organic rice- Jaivam Amritham***

The factors that contribute towards the marketing strategies of Jaivam Amritham were finalized from the questionnaire, and also from the qualitative data collected through KIIs and FGDs. The factors collected through questionnaire were analyzed by using simple descriptive statistics like means, frequencies and percentages. The factors collected through KIIs and FGDs were analyzed by using narration, interpretation and tabulation.

#### ***1.5.9 Measurement of consumers' attitude towards organic rice***

The attitude rating items were designed based on the reviewed literature and changed into statements that can clearly extract respondent's agreement or disagreement. These include both positive and negative statements. All the items reflected the degree of accuracy of attitude on the concept of organic rice purchase and consumption in the context of the given situation in the locations of the survey. These statements were measured on a five point continuum. Accordingly, the scores were allocated for statements, which range from 1 to 5. The scores for the positive statements were given as: strongly agree=5; agree=4; no opinion=3; disagree=2; and strongly disagree=1. The scores for the negative statements were given as: strongly agree=1; agree=2; no opinion=3; disagree=4; and strongly disagree=5.

#### ***1.5.10 Measurement of consumers' opinion regarding consumption of Jaivam Amritham***

The opinion rating items were designed after having a prior discussion with the Jaivam Amritham consumers from AFCS Supermarket that can clearly extract respondent's agreement or disagreement. These formed as a basis for the analysis. All the items clearly defined in a way such that the consumers can give responses

according to their experience in Jaivam Amritham consumption. The statements were measured on a five point continuum. The scores were given as: strongly agree=5; agree=4; no opinion=3; disagree=2; and strongly disagree=1.

#### ***1.5.11 Analysis of influential factors towards consumer preference of Jaivam Amritham***

The major influential factors towards consumer preference of Jaivam Amritham were identified from consumers' general attitude towards Jaivam Amritham. The factors were measured on a five point continuum. The scores were given as: strongly agree=5; agree=4; no opinion=3; disagree=2; and strongly disagree=1. These were analysed by percentage and ranking.

#### ***1.5.12 Major Variables Observed***

- i. Frequency of purchasing Jaivam Amritham
- ii. Source of information regarding Jaivam Amritham
- iii. Duration of using Jaivam Amritham
- iv. Reason for purchasing Jaivam Amritham
- v. Satisfaction regarding the cost of Jaivam Amritham
- vi. Taste of Jaivam Amritham
- vii. Bran content in Jaivam Amritham
- viii. Preferred package of purchasing
- ix. Preferred place of purchase
- x. Consumer's general attitude towards organic rice
- xi. Consumer's general attitude towards the consumption of Jaivam Amritham
- xii. Distribution channel of Jaivam Amritham
- xiii. The market price of Jaivam Amritham

## **1.6 Scope of the Study**

This study was designed to analyse consumers' attitude towards organic rice- Jaivam Amritham and to suggest marketing strategies to further capture the organic rice market in Thrissur district in the state of Kerala. Adat Farmer's Service Co-operative Bank is intensively working to make organic rice available in the preferred areas. But there is a gap found between the consumers and the AFSCB. So this research work could help them to narrow down the gap and could also help to establish better marketing strategies for JAIVAM AMRITHAM- the organic rice.

Finally, although the findings of this study will have limited scope to generalize to the whole country or region, it will have applicability to places of similar context and will serve as a springboard for others who will initiate similar investigations.

## **1.7 Limitations of the Study**

This study was focused only on the marketing strategies and consumer's attitude towards Jaivam Amritham in the Thrissur Corporation. The study has some limitations of resource in terms of time, personnel, transport facility and budget to cover all consumer groups found in Kerala. Thus, the study takes into account only purposively selected consumers from four main retail shops where the Jaivam Amritham sells and selected locations (i.e., Adat, Thrissur, Poonkunnam and Mannoothy), thus with a total of 120 consumers. In addition to this, purposively selected respondents like retailers, members of AFSCB, Convenor/member of Adat Kole padavu and Agricultural officer of Adat grama Panchayath had also been included in the sample to obtain relevant qualitative data. Furthermore, this study focused only on consumers of Jaivam Amritham. Non-consumers of the same were not taken into account and thus, whose attitude towards Jaivam Amritham were not analysed.

## **1.8 Chapter Plan of the Project**

The study has been designed into the following chapters:

- Chapter -1 -- Design of the Study
- Chapter -2 -- Review of Literature
- Chapter -3 -- Organic Rice Production- An Overview
- Chapter -4 -- Consumers' Willingness to Buy Organic Products- A  
Theoretical Framework
- Chapter -5 -- Adat Farmers' Service Co-operative Bank Ltd. No. R.  
689- A Profile
- Chapter -6 -- Marketing Strategies- An Analysis
- Chapter -7 -- Summary of Findings and Suggestions

*Chapter - 2*

*Review of Literature*

---



## Chapter 2

### REVIEW OF LITERATURE

Review of literature is the important part of all scientific research that would help the researcher to understand the relevant studies and identify the research gap. This chapter discusses the available reading material about organic farming, organic rice and consumer attitude so as to establish a theoretical framework for the study, based on ideas and concepts expressed by various authors and researchers. This chapter is crucial to support the further analysis and research in the following chapter.

Researches on consumers' attitude towards the use of chemical substance in agriculture were explored as early as in 1965 (Bearler and Willits, 1968). This marked the beginning of the era when human beings were becoming more concerned with preserving the environment. However, given the need to expand the production in agricultural sector to ensure continuous supply of food, the use of pesticides and other chemical substance is hard to resist. Perhaps, green product industry could be deemed as the ideal solution to this problem. The growth of organic agriculture is seen as part of the emerging marketing trends where consumers demand to know what benefits a food could deliver before making a purchasing decision. Given the various factors that influence the intention to purchase organic products, it is necessary to examine which of the factors give the strongest effects.

#### 2.1 Belief on the Safety and Health Aspects of Organic Products

Research related to consumer attitudes and preferences for organic products is very unnoticeable (Chinnici et al., 2002). Results of studies confirmed that consumers have positive attitudes towards organic products where one of the most common mentioned reason for purchasing organic products was it is perceived as healthier than conventional alternatives (Chinnici et al., 2002; Harper and Makatouni, 2002). Consumers do not always buy sustainable products as consequences of environmental concern or to benefit the community or due to personal beliefs but mainly to give priority to health.

## **2.2 Belief on the Friendliness of Organic Products to the Environment**

In Malaysia, as reported in its 9th Malaysia Plan (2006), the use of chemical and hazardous substances showed an increase, particularly in the agricultural sector. The volume of fertilizers used increased from 2.2 million tones in 2001 to 4.0 million tones in 2004. Through Skim Akreditasi Ladang Malaysia (SLAM) and Skim Organic Malaysia (SOM), government has introduced better farming practices to reduce the use of chemicals and hazardous substances. Given the high awareness on preserving the environment, consumers welcome any efforts that seek to apply environmental friendly farming practices. Consumers are getting more concerned with the consumption of chemical substance used in farming and environmental concern is a strong attitude towards preserving the environment. Given the high concern, the behavioural intention of consumers is somehow influenced.

## **2.3 Perception of Organic Product Worth of Purchase**

In the international literature one can find a large body of research regarding consumer's willingness to pay for environmental friendly and/or quality/safety food products (Harris et al., 2000) as well as for non-food products (Laroche et al., 1996). Perhaps the most convincing evidence supporting the growth of ecologically favourable consumer behaviour is the increasing number of individuals who are willing to pay more for environmental friendly products (M.harris, 2007). Some researchers have found that organic food consumers are less likely to consider price as important compared to those consumers who don't and never purchase organic products before. It thus expected that price could be one factor that influences people's intention to consume organic product.

## **2.4 Availability of Organic Product Information**

Empirical evidence shows that consumer's difficulty in locating environmentally directed products is partly due to lack of information (Brown 2003). Several studies have identified that lack of organic food availability in store is considered as one of the barriers to consumer purchase (Beardworth et.al., 2002; Davies, 1995). Market maven are defined as "individuals who have information about

many kinds of products, place to shop and other facts of market and initiate discussion with consumers and respond to requests from consumers about market information” (Feick and Price 1987). Interaction between consumers with positive believe and attitude and high market experience and high product availability might create a favourable attitude towards purchase behaviour, which would result in a stronger intention to purchase leading to a higher purchase of organic food products.

Bourn and Prescott (2002) reported that besides health, food safety and environmental considerations, several other product characteristics such as nutritive value, taste, freshness, appearance, color and other sensory characteristics influence consumer preferences.

Harper and Makatouni (2002) indicated that, although health and food safety concerns were the main motives for organic food purchases, ethical concerns, specifically in relation to standards of animal welfare play a significant influencing role in the decision to purchase organic food.

According to Giannakas (2002), organic products are credence goods, consumers (unlike producers who are aware that their products are organic) may not know whether a product is produced using organic or conventional methods, not even after repeated purchase and consumption, unless they are told so.

According to (Saba, 2002), research related to consumer attitudes to organic foods indicated that the consumption of organic foods is related to decreasing confidence in the quality of conventional foods and to an increasing concern for health.

According to (Ariyawardana, 2002), majority of consumers were not willing to sacrifice the cost for their health advantages. Therefore, the price of organic products should be competitive with the conventional products

Results of Robyn Neeson’s study (2005) indicated there was no immediate rice yield benefit to organic producers by applying any of the various organic fertilizers tested. Ongoing experimentation may have shown benefits to cereal or pastures, which followed in the rotation, but this, were not evaluated. He recommended carefully monitoring crop yield responses to fertilizer applications and carefully considering the cost: benefit of fertilizer applications to their cropping and

livestock rotation.

Organically produced food is generally regarded as healthier, safer, better tasting and more nutritious than conventionally produced food (Perrini et al. 2009; Krystallis and Chryssohoidis 2005). In spite of these, the relatively higher prices of organic food, together with lack of availability, lack of awareness of the organic concept and uncertainty over the truthfulness of organic food claims are hindering more widespread consumption (Krystallis and Chryssohoidis 2005).

Luth, Spiller, and Lulf (2007) found that customer satisfaction has a high impact on the economic success of a shop. But the results of the readiness to switch survey show that customer satisfaction and commitment are not sufficient to explain loyalty. There are no significant differences in customer satisfaction between organic food shop customers and organic supermarket customers, but there are strong differences with regard to discount oriented customers.

In Bangladesh, a research on organic food consumers was conducted by Hossain, Sugimoto, Ueno and Rafiul (2007) and they observed that most of the consumers were aware of the 'harmful effects of pesticides or chemical fertilizer on human body and environment'. Due to the lack of knowledge about organic food, they have no option to normal food.

Harris (2007) reported that, perhaps the most convincing evidence supporting the growth of ecologically favourable consumer behaviour is the increasing number of individuals who are willing to pay more for environmentally friendly products

Ranabhat (2008) advocated that certification can help differentiate the organic products from other products, which can be helpful to promote organically grown products in the market. Information on the products including the nutritive value, origin, manufacture and expiry date as well as brand name whether it is pure organic or not are the important aspects of the product development and meantime will also encourage consumers to buy without any hesitation.

Efthimia (2008) stated in this paper is to identify consumers' attitudes and behaviour towards organic products in Greece. This paper draws on a non-probability quota sample of 660 respondents to explore the attitudes and behaviour of Greek

consumers towards organic food products. Greek consumers seem to be informed about environmental and health issues. They seek information about the nutritional value of food and demand more products free from chemical residues. The results show that most consumers associate organic consumption mainly with fruit and vegetables. Although demographics seem to affect attitudes towards organics, their value in explaining actual behaviour is minimal. It is recognized that the data gathered in this study focus on the metropolitan area of Thessaloniki, Greece. The specific area though, is considered to be representative of the total Greek population. The results confirm that health, concern for the environment, animal welfare and support of the local economy are drivers of organic consumption. However, there is an indication that the importance of motives and barriers may vary for different product categories and perhaps future research should focus on product segmentation. Although certain similarities in consumers' attitudes towards organic food products have been identified, this paper records the variation in behaviour towards organics among the various consumer groups examined in Greece, and highlights the gap between attitudes and actual behaviour. Given the complexity of consumer decision making, future research should explore the other value trade-offs that consumers make.

Asaduzzaman, and Itohara (2008) shows that consumers were highly conscious regarding their personal health, had medium awareness regarding the environmental hazards caused by agro-chemicals, are aware, and a few had low awareness. But the supply of organic food items in the local market was insufficient; and most mentioned that organic rice, fruits, fish, shrimp, egg and chicken satisfied less than half of their family demand.

As organic food is generally regarded as more nutritious and safer than conventionally-produced food, health-conscious individuals are more likely to develop positive attitudes towards the health enhancing attributes of organic food (Michaelidou and Hasson 2008).

As organic food is generally regarded as more nutritious and safer than conventionally- produced food, health- conscious individuals are more likely to develop positive attitudes towards the health enhancing attributes of organic food. (Hassan, 2008).

Consumer willingness to pay and the intention to purchase organic food may reflect by many motivators such as healthiness, environmentalism, perception, awareness and etc., (Xia and Zeng, 2008).

Likewise, Roitner-Schobesberger et al. (2008) found that health consciousness was a main motive to purchase organic food in Thailand, particularly when consumers are concerned with residues from synthetic chemicals used in agriculture

Shivakumar (2009) opines that Organic foods are a matter of choice of the individuals or enterprises. Organic farming is essentially a marketing tool, and cannot replace conventional farming for food security, quality and quantity of crop outputs. With a growing population and precarious food situation, India cannot afford to take risk with organic farming alone.

Qingbin and Parsons (2010) observed that although organic food has rapidly emerged as an important food industry in the United States and many other countries, farmers and fruit growers need more information on consumer preferences and willingness to pay for locally grown organic food products to make better production and marketing decisions. This article presents the findings from a conjoint study on consumer valuation of major attributes of fresh apples (production method, price, certification, and product origin) and the tradeoffs between price and other attributes. Analysis results based on data from 382 respondents, or 3056 observations, in the state of Vermont suggest that there is likely a significant niche market for locally grown organic apples, and many consumers, especially people who had purchased organic food, are willing to pay significantly more for organic apples produced locally and certified by the Northeast Organic Farming Association. This study also suggests that there are significant differences in preferences between respondents who had purchased organic food and respondents who had not purchased organic food, although both groups showed a strong preference and willingness to pay for locally grown apples as compared with apples from other regions.

As (Nasution, 2010), factors driving consumers' behaviour towards buying organic food and profiling organic conscious consumer based on demographic factor.

Result of studies confirmed that consumers have positive attitudes towards organic where one of the most common mentioned reason for purchasing organic

products was it is perceived as healthier than conventional alternatives, (Juhdi, February 2010). Additionally, (Saba, 2002), consumer attitudes to organic foods indicated that the consumption of organic foods is related to an increasing concern for health.

Price premium is the excess price a customer pays over the fair price and “true” value of a product. There are a sufficient number of customers who are willing to pay a nominally higher price for value products, (Bin Mai, 2010)

According to Voon (2011), an individuals’ attitude towards consuming an organic product is the most important point for predicting and explaining consumers’ choices toward the organic foods.

Farah Ayuni Shafie (2012) stated that Food safety, human health and environmental concern along with sensory attributes such as nutritive value, taste, freshness and appearance influence organic food consumer preferences. Demographic variables may define organic consumers but the correlation is not very significant. Consumers also associate organic food with natural process, care for the environment and animal welfare and the non-use of pesticides and fertilizers. Premium price continues to suppress organic food consumption. Understanding the grounds of increasing level of organic food consumption such as motivation are most critical in understanding the potential of the organic food to become a genuinely mainstream market.

Norsida (2014) this study aimed to explore the factors influencing consumers' intentions towards the purchase of organic rice. The result showed health, food safety and environmental benefits as the most important factor influencing consumer's preferences towards organic rice followed by the other three factors namely organizational interventions, market and packaging. This finding would help stakeholders in the organic rice industry to understand the underlying pattern of consumer behavioural intention and decision towards purchasing organic rice in Malaysia.

Purushothaman and Subburaj (2014) who studied on consumer behaviour normally should include the less observable decision processes that accompany consumption, including where how often and under what conditions consumers make

their purchases of desired goods and services. Most of the marketers have accepted the fact that the understanding of consumer behaviour is essential to their long run success. Therefore their major activities and strategies such as market opportunity analysis, target market selection and marketing mix decision, are consumer oriented.

The reviews of all these literatures have contributed significantly towards the present study. The loop holes present in all these studies have opened a new scope for the study. The major variables required for analysing the consumers' attitude towards organic rice were finalised from the above literatures. This paper presents the results conducted with consumers who come and purchases at specified supermarket which is certain to sell Jaivam Amritham. Again, to be highlighted the objective of this paper is to gain knowledge about consumers' attitude towards organic rice and also the market opportunities of Jaivam Amritham. To that end, the consumers' purchase behaviour, reasons for buying Jaivam Amritham, its taste, price, packaging and preferred place of purchase were also analysed with a sample size of 120 consumers.

## 2.5 References

- Bearler, R.C. and Willits, F.K. 1968. Worries and non-worries among consumers about farmers use of pesticides. *Journal of consumer Affairs*. Vol. 2, p. 189.
- Chinnici, G., D'Amico, M., & Pecorino, B. 2002. A multivariate statistical analysis on the consumers of organic products. *British Food Journal*. 96(3), pp. 187-199.
- Harris, B., Burrell, D. And Eicher, S. 2000. Demand for local and organic produce: a brief review of the literature. *Report No.254A*. University of Kansas: Institute for Public Policy and Business Research. consumption in Australia. *Sociologia Ruralis*. Vol.42(1), pp. 23-40.
- Laroche, M., Bergeron, J. and Barbaro-Forleo, G. 2001. Targeting Consumers Who Are Willing to pay more for Environmentally-Friendly Products. *Journal of Consumer Marketing*. 18(6), 503-520.
- Harris, M. 2007. Does sustainability sell? Market responses to sustainability certification. *Management of Environmental Quality: An International Journal*. Vol. 18(1), pp. 50 – 60.



- Bourn, D. and Prescott, J. 2002. A comparison of the nutritional value, sensory qualities and food safety of organically and conventionally produced foods. *Critical Reviews in Food Science and Nutrition*. 42(1), pp.1-34.
- Harper, G.C. and Makatouni, A. 2002. Consumer perception of organic food productions and farm animal welfare. *British Food Journal*. Vol. 4, pp. 287-299.
- Giannakas, K. 2002. Information asymmetries and consumption decisions in organic food product markets. *Canadian Journal of Agricultural Economics*. 50(202), pp. 35-50.
- Saba. 2002. Attitudes towards organic foods and risk/benefit perception associated with pesticides. *British Food Journal*. 106 (2), pp. 93-105.
- Ariyawardana, A. P. 2002. Market Potentials and Willingness to Pay for Selected Organic Vegetables in Kandy. *Sri Lankan Journal of Agricultural Economics*. 45 (3), p. 65
- Robyn, N. 2005. Organic Rice Production – Improving System Sustainability. Research Organisation Name: NSW Department of Primary Industries.
- Perrini, F., Castaldo, S., Misani, N. and Tencati, A. 2010. The impact of corporate social responsibility associations on trust in organic products marketed by mainstream retailers: a study of Italian consumers. *Business Strategy and the Environment* 19(8), pp. 512-526.
- Krystallis, A. and Chryssohoidis, G. 2005. Consumers' willingness to pay for organic food: Factors that affect it and variation per organic product type. *British Food Journal*. 107(5), pp. 320- 343.
- Lüth, M., Spiller, A. and Lülfs, F. The Future of Organic Retailing Stores: A Customer Satisfaction Survey.
- Hossain, T. 2007. Adoption of Organic Rice for Sustainable Development in Bangladesh. *Journal of Organic Systems*. Japan. 3(1), p. 29.
- Ranabhat, A. 2008. Potentials of Organic Agriculture in Nepal. In: Chaudhary, Aryal, K. and Tharu, D. (ed.), *Proceedings of International Workshop on Opportunities and*

*Challenges of Organic Production and Marketing in South Asia*, NPG, Kathmandu, Nepal, pp.34-46.

Efthimia. 2008. Attitudes and behaviour towards organic products: an exploratory study. *International Journal of Retail & Distribution Management*. 36(2), pp. 158-175.

Sarker, A., Yoshihito Itoharu. Organic Farming And Poverty Elimination: A Suggested Model For Bangladesh. *Journal of Organic Systems*, Japan, 2008. 2(2), pp. 37

...

Michaelidou, N. and Hassan, L. M. 2008. The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*. 32(1), pp. 163-170.

Hassan, D. N. 2008. The Role of Health Consciousness, Food Safety Concern and Ethical Identity on Attitudes and Intention towards Organic Food. s. n., s. 1.

Wei Xia, Y. Z. 2008. Consumers' Willingness to Pay for Organic Food in the Perspective of Meta- analysis.

Roitner-Schobesberger, B., Darnhofer, I., Somsook, S. and Vogl, C.R. 2008. Consumer perceptions of organic foods in Bangkok, Thailand. *Food Policy* 33( 2), pp. 112- 121.

Shivakumar, B. G. 2008. Organic Farming in India: Myths and Realities.

Qingbin. 2010. Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food. *British Food Journal*. 107(8), pp. 606 - 625.

Nasution, R. A. 2010. Consumer Attitude and Intention to Buy Organic Food as a Result of Brand Extension: An experimental Approach. *International Conference on Management Science & Engineering*. 12(3), p. 25.

Juhdi, S. N. 2010. Organic Food: A Study on Demographic Characteristics and Factors Influencing Purchase Intention among Consumers in Klang Valley, Malaysia. *International Journal of Business and Management*. Vol. 2, p. 12.

Voon, K. S. 2011. Determinants of Willingness to Purchase Organic Food: An Exploratory Study Using Structural Equation Modelling. *International Food and Agribusiness Management Review*. Vol. 3, p.23.

Norsida. 2014. Factors Influencing Consumers' Purchasing Behaviour towards Organic Rice in Malaysia. *World Applied Sciences Journal*. 32(4), p. 611.

Farah, A. and Shafle. 2012. *Procedia –Social and behavioral Sciences*. Vol. 49, pp. 360- 367.

Purushothaman. 2001. Organic Farming for Sustainable Agriculture. *Indian Farming*, June 2001. pp. 12-14.

*Chapter - 3*  
*Organic Rice Production- An*  
*Overview*

---

## Chapter-3

### ORGANIC RICE PRODUCTION AN OVERVIEW

#### 3.1 Organic Rice Farming-an Overview

Increased/indiscriminate use of chemical fertilizers and pesticides during green revolution periodically resulted in several harmful effects on soil, water and air causing their pollution. This has reduced the productivity of the soil by deteriorating soil health in terms of soil fertility and biological activity. The excess/indiscriminate use of pesticides has led to the entry of harmful compounds into food chain, death of natural enemies and development of resurgence/resistance to pesticides. Out breaks of insect pests have occurred after insecticides were over used and outbreak of brown plant hopper (BPH), *Nilaparvata lugens* in rice is an example of this over use (Wang et al. 1994). Hence, enhancement and maintenance of system productivity and resource quality is essential for sustainable agriculture. It is believed that organic farming can solve many of these problems as this system is believed to maintain soil productivity and pest control by enhancing natural processes and cycles in harmony with environment. Organic farming is defined as a production system which largely excludes or avoids the use of fertilisers, pesticides, growth regulators, etc. and relies mainly on organic sources to maintain soil health, supply plant nutrients and minimise insects, weeds and other pests.

#### 3.2 World Scenario of Organic farming

Organic agricultural land and farms as well as the global market continued to grow in many countries during 2009. According to the latest FiBL/IFOAM survey on certified organic agriculture worldwide (data as of end of 2009), statistical information on organic agriculture is now available from 160 countries, an increase of six countries since 2008. There are 37.2 million hectares of organic agricultural land (including in-conversion areas). The regions with the largest areas of organic agricultural land are Oceania (12.2 million hectares), Europe (9.3 million hectares), and Latin America (8.6 million hectares). The countries with the most organic agricultural land are Australia, Argentina, and the United States. Currently 0.9 percent of the world's agricultural land is organic. However, some countries reach

far higher shares: Falkland Islands (35.7 percent), Liechtenstein (26.9 percent), and Austria (18 percent). Seven countries have more than ten percent organic land. Compared with 2008, organic land increased by two million hectares or six percent. Growth was strongest in Europe, where the area increased by almost one million hectares. The countries with the largest increases were Argentina, Turkey, and Spain. Apart from agricultural land, there are further organic areas, most of these being areas for wild collection. These areas constitute 41.9 million hectares and have increased by 10 million hectares since 2008. There were 1.8 million producers in 2009, an increase of 31 percent since 2008, mainly due to a large increase in India. Forty percent of the world's organic producers are in Asia, followed by Africa (28 percent), and Latin

America (16 percent). The countries with the most producers are India (677'257), Uganda (187'893), and Mexico (128'862). Almost two-thirds of the organic agricultural land of 37.2 million hectares in 2009 was grassland/grazing areas (23 million hectares). With a total of at least 5.5 million hectares, arable land constitutes 15 percent of the organic agricultural land. An increase of 13.2 percent compared with 2008 was reported. Most of this category of land is used for cereals including rice (2.5 million hectares), followed by green fodder from arable land (1.8 million hectares), and vegetables (0.22 million hectares). Permanent crops account for approximately six percent of the organic agricultural land, amounting to 2.4 million hectares. Compared with the previous survey, almost half a million hectares more were reported. The most important crops are coffee (with 0.54 million hectares reported, constituting one-fifth of the organic permanent cropland), followed by olives (0.49 million hectares), cocoa (0.26 million hectares), nuts (0.2 million hectares), and grapes (0.19 million hectares).

### **3.3 Global market**

According to Organic Monitor, the global market for organic food and drink is recovering from the repercussions of the economic crisis. Single-digit market growth was observed for the first time in 2009 because of the economic slowdown reducing industry investment and consumer spending power. Organic food and drink sale expanded by roughly five percent to 54.9 billion US dollars in 2009. Global revenues have increased over three-fold from 18 billion US dollars in 2000 and

double-digit growth rates were observed each year, except in 2009. Healthy growth rates are envisaged to restart as consumer spending power rises and as more countries come out of economic recession. The countries with the largest markets are US, Germany, and France; the highest per capita consumption is Denmark, Switzerland, and Austria. The top five countries in Asia regarding organic agricultural land during 2009 were tabulated as follows.

**Table 3.1 Organic agricultural land: The top five countries in Asia 2009**

| Country     | Agricultural land (in ha) |
|-------------|---------------------------|
| China       | 18,53,000                 |
| India       | 11,80,000                 |
| Kazakhstan  | 1,34,862                  |
| Philippines | 52,546                    |

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certified.

### **3.4 Organic farming in India**

Organic farming is not a new concept to India and traditionally Indian farmers had practiced it and some areas can be classified as organic by default. Currently, India ranks seventh in terms of total land (1180000 ha, including wild herb collection area of MP and UP) under organic cultivation and first in number of organic producers (677, 257) in the world. Since 2001, the Indian Government has pressed ahead with its organic agenda through regulations and by managing and building capacity within the sector. The Government of India implemented its National Programme for Organic Production (NPOP) in 2001. The National Programme includes an accreditation programme for certification bodies, as well as norms for organic production and group certification. It is also concerned with the promotion of organic farming. The Competent Authority is the Agricultural and Processed Food Products Export Development Authority (APEDA), which is under the Ministry of Commerce & Industry. There are currently 20 accredited certification bodies – of which most are Indian and some local offices of international bodies – certifying 2,099 operators. The operators include both individual operators and nearly a thousand grower groups, which themselves organise more than 600,000 farmers.

### ***3.4.1 Extent of organic rice in India***

India has tremendous potential to become a major exporter of organic rice in the International market. APEDA made efforts to produce and export basmati rice, aromatic rice and other rice varieties by establishing model farms in states like Punjab, Haryana and Uttar Pradesh. During 2008-09, around 5630 MT of organic basmati rice was exported from India through APEDA.

## **3.5 Kerala State Organic Farming Policy**

Kerala Government have seized of the importance of organic farming and, realized the health hazards and un-sustainability of chemical farming as it clearly states in its Biodiversity Strategy and Action Plan that the state has to have an organic farming policy in 2008 to protect its rich biodiversity and thus sustain various livelihoods dependent on this precious resource.

### ***3.5.1 Objectives of the Organic Farming Policy***

1. Make farming sustainable, remunerative and respectable.
2. Enhance natural soil fertility and productivity.
3. Ensure soil and water conservation.
4. Ensure agricultural bio-security and food and nutritional security.
5. Create and ensure domestic market for organic products controlled by the farmers.
6. Prevent the use of agrochemicals and other hazardous material and, ensure chemical – free water, soil and food.
7. Ensure seed and food sovereignty.
8. Promote biodiversity based ecological farming.
9. Ensure quality control in organic inputs and agricultural produce
10. Enable human health promotion by providing safe agricultural products and commodities



### **3.5.2 Strategies of organic farming policy**

1. Ensure seed sovereignty of the farmers and the State
2. Phase out implementation of organic farming policy
3. Compact Area Group approach in organic farming
4. Improve soil quality and ensure water conservation measures
5. Promote a mixed farming approach for livelihood security and ecological sustainability
6. Conserve and improve agro-biodiversity and undomesticated biodiversity
7. A state-wide intensive campaign on organic farming in the form of a popular movement: "Jaiva Keralam
8. Ensure availability of quality organic manure to the farmers
9. Ensure farm inputs for organic farming
10. Capacity Building for farmers, implementing officers, agencies, and local self-government members
11. Develop Model Sustainable Organic Farms in the State.
12. Ensure and improve the health and wellbeing of the tribal through special tribal agriculture programmes.
13. Establish Producer Companies promoted by organic farmers
14. Establish storage and transportation facilities
15. Promote farm level processing, value addition and encourage the use of organic farm produce in food industry
16. Develop diverse channels for marketing of organic produce
17. Develop a simple certification process in the State for all organic farmers
18. Provide financial incentives for promoting organic farming

19. Encourage the use of renewable energy sources
20. Introduce organic farming in education institutions
21. Reorient Research, Education and Extension
22. Phase out Chemical Pesticides and Fertilizers from the farming sector
23. Integrate of various departments, local self-governments and organizations
24. Organisational set-up for promotion of organic farming ,,,

### **3.6 National Programme for Organic Production (NPOP)**

The national programme involves the accreditation programme for certification bodies, norms for organic production, promotion of organic farming. The NPOP standards for production and accreditation system have been recognized by European Commission and Switzerland as equivalent to their country standards. Similarly, USDA has recognized NPOP conformity assessment procedures of accreditation as equivalent to that of US. The National Programme for Organic Production proposes to provide an institutional mechanism for the implementation of National Standards for Organic Production, through a National Accreditation Policy and Programme. The aims of the National Programme for organic production, inter alia, include the following:

- (a) To provide the means of evaluation of certification programmes for organic agriculture and products as per the approved criteria.
- (b) To accredit certification programmes
- (c) To facilitate certification of organic products in conformity to the National Standards for Organic Products.
- (d) To encourage the development of organic farming and organic processing

### **3.7 Organic Certification**

Government of India has identified six Accreditation Agencies for certification of organic products. They are: Agricultural & Processed Food Products Export

Development Authority (APEDA), Coffee Board, Spices Board, Tea Board, Coconut Development Board, Directorate of cashew and Cocoa Development functioning under the Ministry of Commerce and Industries. Twenty two inspection and certification bodies are accredited to certify organic products based on the National Programme for Organic Production (NPOP) guidelines. Certification of organic products has emerged as an important issue in their marketing. Certification not only assures consumers that a product that is not observably different from non-organic food was grown, processed and packaged according to rules that limit or ban synthetic inputs and that protect the environment, and assures producers that unscrupulous use of the term 'organic' does not defraud them of price premiums and market shares, it also makes the market more efficient by reducing information asymmetry along the marketing chain. The harmonization of standards can reduce the cost of obtaining information by protecting consumers and growers from fraudulent products and claims, and processors can have low cost verification of the authenticity of organic produce inputs. But, there are difficulties in harmonization as there are different stakeholders in the organic food sector with different objectives.

## **Some NPOP accredited inspection and certification bodies**

### ***3.7.1 INDOCERT***

INDOCERT (Indian Organic Certification Agency) is a nationally and internationally operating, certification body established in 2001 as a non profit organisation by the NGOS promoting organic farming. It is accredited by National Accreditation Body (NAB), Government of India, as per National Programme for Organic Production (NPOP). Indocert provides certification in organic agriculture, Global GAP, FSMS, UTZ certified coffee/ tea, inspection for Fair trade Certification, cosmetics certification, input approval programme etc. INDOCERT is accredited for providing Food Safety Management System Certification, conducting awareness training programme on Food Hygiene. Besides, INDOCERT holds international accreditation according to EN 45011/ ISO 65, issued by DAkkS, Germany, for certification as per rules equivalent to Reg. (EC) No. 834/2007 & 889/2008 (plant production, animal husbandry, aquaculture, food processing, sub contracting) as amended, and export of these products according to the regulations of the importing countries; agricultural production based on the GLOBALGAP certification

programme, integrated farm assurance, fruit and vegetables. INDOCERT functions as a platform for training, awareness creation and information dissemination.

### ***3.7.2 Lacon Quality Certification (India) Pvt. Ltd***

Lacon Quality Certification (India) Pvt. Ltd., a subsidiary of LACON GmbH, Germany, LACON Quality Certifications (India) Ltd. is incorporated as a Private Limited company in the state of Kerala as per the Companies Act 1956. It offers a wide range of certification services for agriculture and food production sectors. Our main areas of services are inspection and certification of: organic production; processing and handling of agricultural produce; export and import of such products as per the relevant national rules and Certification for International Featured Standards (IFS).

### ***3.7.3 IMO Control Private Limited (IMO India)***

IMO Control Private Limited (IMO India) is the first and most renowned certification body in India in the field of organic agriculture and ecological products. IMO India started its activities in 1995 with the aim of providing timely, cost effective and professional services in its area of specialization and operation. IMO India inspects and certifies organic operations that cover producers, processors and exporters.

IMO India is accredited according to NPOP-India and is the first Indian organic certification agency to obtain international accreditation under ISO 65 for its activities. IMO has a committed team of well qualified professionals with many years of active and international experience in the concerned fields of certification.

### ***3.7.4 SGS India Pvt Ltd***

SGS is engaged in inspection, verification, testing and certification services. The company is originally founded in 1878 in Rouen. The company has over 67000 employees globally. SGS operates a network of over 1250 offices and laboratories around the world. SGS started its operations in India in 1950 and currently has a workforce of more than 4000 people operating at over 60 locations including 32 labs. SGS India is headquartered in Mumbai. The company offers services to all industry sectors from energy to automobiles and textiles to pharmaceuticals. Textile, minerals,

industrial and agriculture are the large business portfolios for SGS India compared to other portfolios.

The range of agricultural services offered by SGS in India is one of the most diversified amongst other countries offices within SGS. The range of services caters to manage risk, do better business with both stand-alone and integrated independent solutions for every aspect of agricultural and food supply chains.

### **3.8 Organic Standards**

Organic standards define precisely the minimum requirements that a farm or product should meet in order to be certified organic.' There are organic standards on national and international levels. For certification of products for export, the standards of the target market or importing country are to be compiled with. Some private labels such as Naturland, Demeter and BIO SUISSE have certain stipulations in addition to the national standards.

#### ***3.8.1 Indian National Standards for Organic Products (NSOP)***

In 2000, the Government of India released the National Standards for Organic Products (NSOP) under the National Programme for Organic Production (NPOP). It stipulates that inspection and certification by a nationally accredited certification body is mandatory for labelling and selling products as “organic”.

#### ***3.8.2 European Regulation EEC 834/2007***

Most relevant for exports to Europe is the European Regulation EEC 834/2007.

#### ***3.8.3 IFOAM Basic Standards***

Being the mother of organic standards, IFOAM Basic Standards are not standards for certification but standards for standard setting on the national and international levels. They are regularly reviewed and updated in a democratic process by the IFOAM members from all over the world.

### **3.8.4 US-NOP standards**

USDA's National Organic Program regulates the organic standards for farm production, wild crop harvesting and handling operation. In order to label or to sell an agricultural product as organic in the U.S., compliance with NOP standards is an indispensable requisite.

## **3.9 Benefits of Organic Rice**

Consumers purchasing organically grown foods because of to taste the difference and see the quality of virtually any organic product they buy. Regardless of minimal price differences, consumers can smell, taste and see the difference in the quality of organically grown food products. Consumers buy organically grown food products not just because of competitive prices, but due to the increased availability of organic food products as seen in both grocery and organic food specialty stores. Organically grown products are free from harmful chemicals, artificial flavours and preservatives that ultimately cost consumers money when they purchase non-organically grown products. Eating organic rice may in fact, reduce the risk of heart attacks, strokes and cancer for individuals who abstain from consuming products produced by conventional farming methods. Biochemists are continually researching the inherent benefits of organically grown rice and discovering the consequences consuming products loaded with toxins and chemicals which, until recently, have only begun to be introduced to humans.

## **3.10 Nutritional Value of Organic Rice**

The nutritional value of food is largely a function of its vitamin and mineral content. In this regard, organically grown food is dramatically superior in mineral content to that grown by modern conventional methods. Because, organic farming reaps the benefits soil life offers in greatly facilitated plant access to soil nutrients. Healthy plants mean healthy people, and such better nourished plants provide better nourishment to people and animal's alike. A major benefit to consumers of organic rice is that it is free of contamination with health harming chemicals such as pesticides, fungicides and herbicides. As you would expect of populations fed on chemically grown foods, there has been a profound upward trend in the incidence of diseases associated with exposure to toxic chemicals in industrialized societies.

*Chapter - 4*

*Consumers' Willingness to Buy  
Organic Products – A Theoretical  
Framework*

---

## Chapter 4

### CONSUMERS' WILLINGNESS TO BUY ORGANIC PRODUCTS- A THEORETICAL FRAMEWORK

In general, the willingness to pay a price premium decreases as the price premium increases, consistent with the law of demand. In consumer behaviour theory, consumers make their own decisions to balance the marginal health utility and marginal price of one unit of quality-food products. In this research, a simple framework was used (Fig.5.1) to analyze consumer behaviour towards food products, which includes the willingness to pay a price premium. Consumers decide whether to buy a product or not based on three main aspects: Knowledge, Attitude and Intention. Knowledge about products and their benefits influences their willingness to pay for the products. Knowledge of people is affected by type and quality of information made available to consumers. Advertisement, quality packaging, labelling and certification play pivotal role in knowledge enrichment. Once a consumer is ready to buy, the next step is to see how much he or she is willing to pay for the product. Purchase behaviour reflects the real WTP and the consumer gains positive or negative experiences which will reversely affect consumers' WTP in future. Knowledge and awareness have respectively direct and indirect effects on attitudes toward consumer to choose the products, and the willingness to pay a price premium, so they are important factors determining the demand. Thus, awareness and knowledge about organically produced foods are critical in the consumer willingness to pay more for the product.



Figure 4.1 Framework reflecting consumer behavior towards food products (adopted from Millock (2002) and Bonti-Ankomah and Yiridoe (2006))

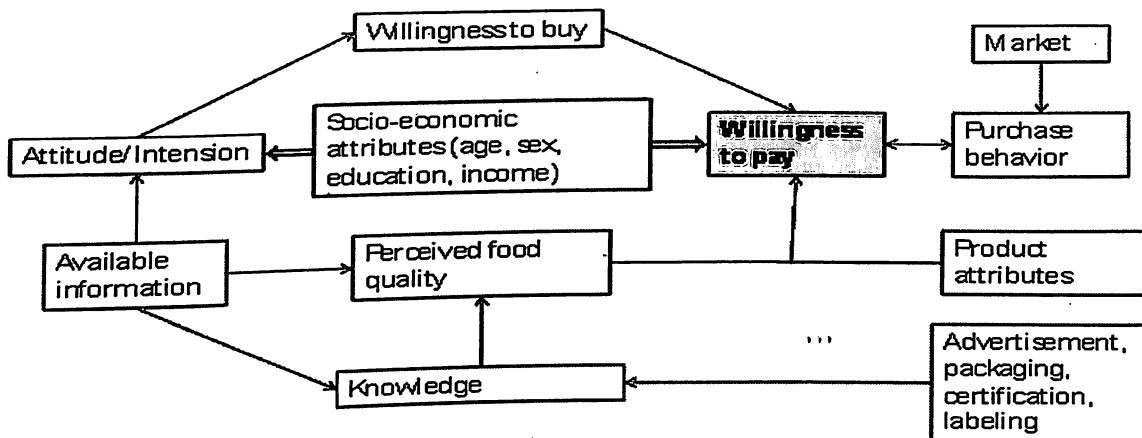
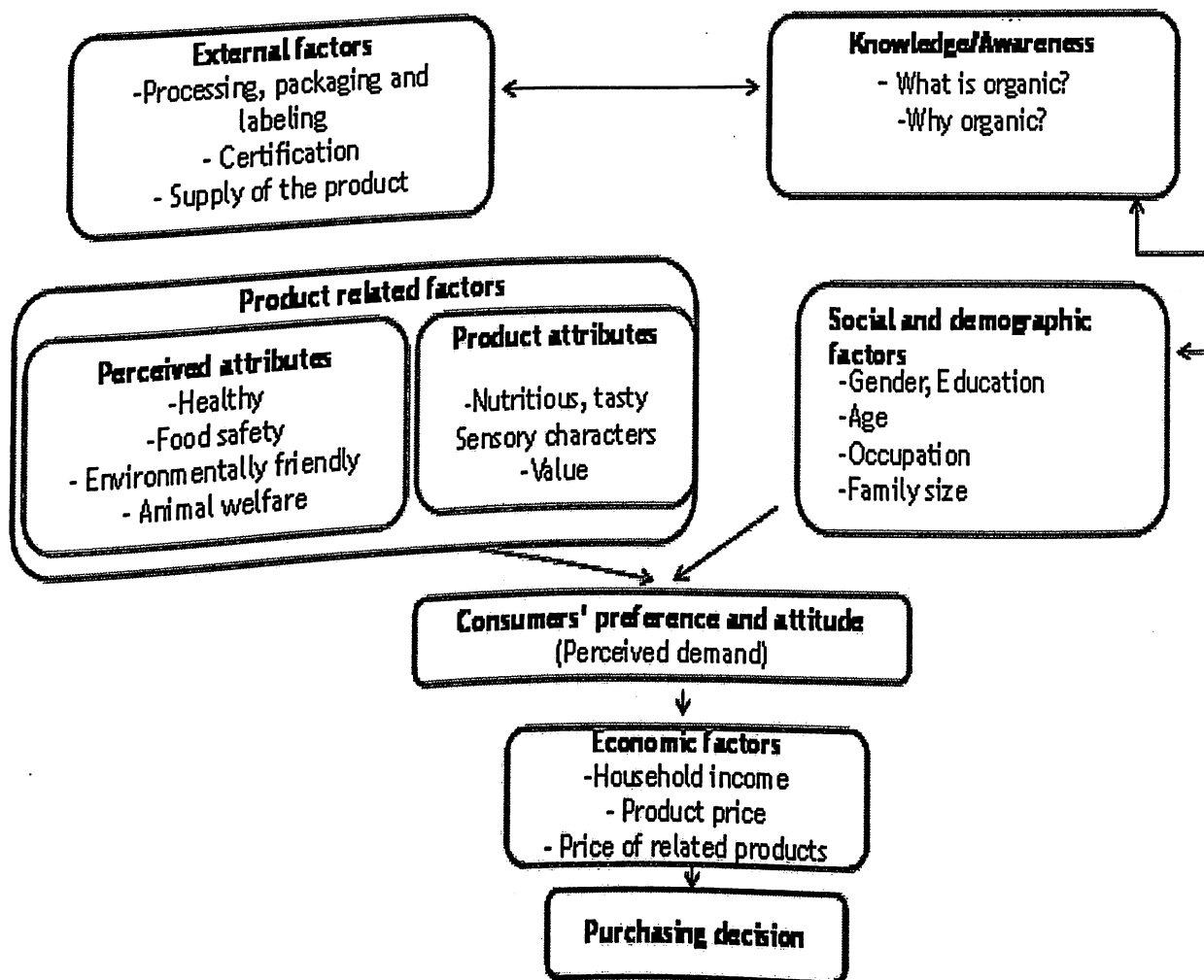


Figure 4.2 Framework of factors affecting organic consumers' attitudes and willingness to purchase adopted and modified from Bonti-Ankomah and Yiridoe (2006)



Similarly, the framework presented in Figure 5 reflects the factors affecting consumers' attitude and willingness to purchase. Consumers' willingness to purchase is affected by exogenous factors like processing, packaging, certification and labelling and consumers' knowledge and awareness about the products. If an individual cannot clearly differentiate between two alternative products, a price premium on the organic product can confuse and/or affect the individual's purchasing decision. Consumers' education, occupation, household size along with product attributes affects their attitude and preference to buy the products. These factors further depend on consumers' household income and product price to make a decision for purchase.

*Chapter – 5*

*Adat Farmers' Service Co-operative  
Bank Ltd. No. R. 689– A Profile*

---

## Chapter 5

### ADAT FARMERS' SERVICE CO-OPERATIVE BANK LTD. NO. R. 689- A PROFILE

|                        |   |
|------------------------|---|
| Name                   | : Adat Farmers Service Co-Operative Bank Ltd. No. R. 689  |
| Established            | : 20-01-1980  |
| Head Office            | : Puranattukara   |
| Area of operation      | : Whole area of Adat Panchayath, East part of the Erathrikove Roads and East part of Thrissur kunnamakulam road |
| District               | : Thrissur  |
| Taluk                  | : Thrissur  |
| Village                | : Puranattukara   |
| Post office            | : Puranattukara   |
| Number of members      | : 29776   |
| Liability              | : Limited B   |
| Audit classification   | : B   |
| Type of Audit          | : Concurrent  |
| General classification | : Class I special Grade   |
| Number of branches     | : 7   |
|                        | 1. Puranattukara  |
|                        | 2. Choorakattukara  |
|                        | 3. Adat   |
|                        | 4. Muthuvara  |

5. Amala Nagar

6. Chittilappilly

Peramangalam (Extension Counter)

## 5.1 History

Adat Farmers Service Co-operative Society is a unique rural co-operative bank. It has undergone many transformations. AFSCB, was registered as "Grammodharana Society" on 27<sup>th</sup> January 1954. The society started functioning from 12<sup>th</sup> August 1954. It was converted into Multipurpose Co-operative society on 25<sup>th</sup> April 1962 with the objective of establishing close and continuous connection with members. The Multipurpose Co-operative Society was later converted into Puranattukara Service Co-operative Society. The main objective of the society, in addition to providing credit and discharging other service function, is to arrange for pooling and marketing the agricultural produce of the farmers and devising storage facilities for them. On 1<sup>st</sup> December 1974, the Puranattukara Service Co-operative Society name was changed into Puranattukara Service Co-operative Bank Ltd. No. 3324. Then the Puranattukara Service Co-operative Bank Ltd. No. 3324 was converted into the Puranattukara Farmers Service Co-operative Bank Ltd. No. 3324 on 17<sup>th</sup> January 1977. This was the first Farmers Service Societies organized in Kerala. The leadership played an active role in enlarging its loanable resources in Kerala, the first Primary Co-operative Bank mobilising deposits more than one crore in 1974 was AFSCB and received award from District Co-operative Bank. Later the present AFSCB was organized by the amalgamation of these services societies viz, Puranattukara Farmers Service Co-operative Bank Ltd. No. 3324, Choorakattukara Service Co-operative Bank Ltd. No. 329 and Adat Lift Irrigation Co-operative Society Ltd. No. 8. Adat Farmers Service Co-operative Bank Ltd. No. R. 689 was registered on 20<sup>th</sup> January 1980 and started functioning from 3<sup>rd</sup> February 1980.

On 2006 onwards the bank started a new form of Farming called organic farming and they implemented it successfully. From the last quarter of the 2008 the bank has entered into the core banking system or any branch banking connecting all the branches and head office. In 2014 the bank started a new scheme of group farming

and it is successfully going. The bank is always committed and shown an extraordinary enthusiasm in implementing statutory and seasonal project proposed by the state government to make it as a grand success. Bank is committed to reach out its customer anywhere anytime to meet their dealings with the bank with pleasure.

## **5.2 Area of operation**

The area of operation of the bank covers whole of Adat panchayath, east part of Perathrikove roads and east part of Thrissur Kunnankulam road. But the members of Ayyanthole panchayath in Adat Lift Irrigation Co-operative Society are able to continue as members for farming activities.

Adat is a small and agriculturally potential panchayath. the head office of the bank is situated at Puranattukara and the bank has six branches and one extension counter. The major crops growth in the area is rice, coconut and arecanut. The infrastructural and market facilities are also very satisfactory.

## **5.3 Objectives of AFSCB**

1. The prime and supreme objective of the bank is as per its bye-law, is to provide loan facilities to increase the farmer's product and returns, and provide other facilities and services like consumer products etc., to those peoples including small scale farmers, marginal farmers, village workers and other small and medium scale traders.
2. The bank should provide short, medium and long term loans, to its members mainly for agricultural activities. It should also provide loans to non-agricultural needs like medical treatment, education, to meet the existing debt of members etc..
3. The bank should undertake the sale, purchase and supply of following items including fertilizers, seeds, machines, tools, cattle fields and other raw materials which are necessary for the small and medium scale industries.
4. The bank distributes tractors, power tillers bulldozers, pump sets, etc., for agricultural activities.

5. The bank collects all the agricultural products as per industrial needs or for social welfare schemes and provides its better utilization.
6. The bank facilities lift irrigation projects guidelines for farming activities.
7. The bank promote co-operation among members and develop methods to increase the saving habit of members.
8. It is also considered as the important objective of bank to open hi-tech supermarkets in KSIDC, KINFRA, DIC, Sitharam Textiles Mills, etc., those situated in Puzhakal padam.
9. To develop Tourism programmes in Kole padavu
10. It also provides overdraft facilities to business groups those who residing in Thrissur Taluks.

#### **5.4 Management and administration of AFSCB**

General body is the supreme authority of the bank. They meet annually to check out the general policy of the bank. The general body elect the board of directors among themselves. The general body is entrusted with the power like approval of annual budget, election and removal of board of directors, consideration of annual reports, disposals al surplus if any according to the Act and BYE-law etc... The board of directors are elected from the general body. The day to day management of the bank is vested with the board of directors consisting of 14 members. The term of board of directors is 5 years.

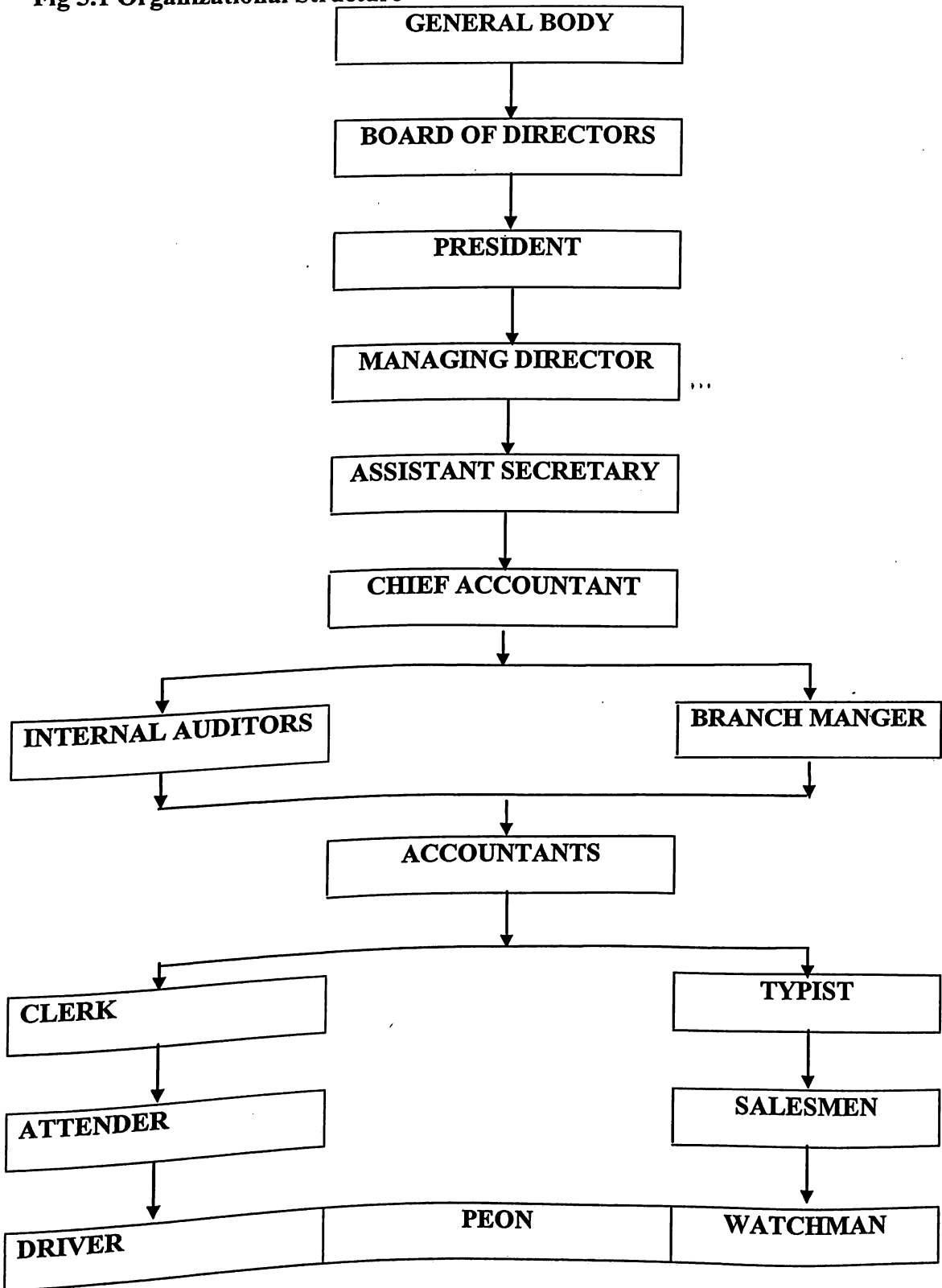
#### **5.4.1 Structure of Board of Directors of Bank**

|   |           |
|---|-----------|
| Representative elected from members             | 8         |
| Women representatives                           | 3         |
| SC/ST representative                            | 1         |
| Representative member from depositors           | 1         |
| Managing Directors/Secretary/Ex-officio officer | 1         |
| <b>Total</b>                                    | <b>14</b> |

The AFSCB conducted its annual general body meeting in 2010 to 2011. The latest general body meeting conducted in January 2014 by board of directors. The Adat Farmers Service Co-operative society elected the representatives general body on 2<sup>nd</sup> March 2014 and on 28<sup>th</sup> March 2014 they start its function.



**Fig 5.1 Organizational Structure**



## **5.5 Adat Panchayath – A Model for All**

Around 500 members in 2004-2005 joined together to cultivate organic paddy in 330 acres of kole-wetland in Adat Panchayath. The total output came to 1000 tonnes. It is probably for the first time that such a cooperative effort has taken place in the State. The cultivation is done under the supervision of the certifying agency Indocert. They were mobilized and fully supported with technical back up of three organizations-Adat Farmers Cooperative Society, Kerala Agricultural University and Indocert. ESAF is now marketing the rice under the brand name 'Jaivam Amritham'.

A detailed calendar of operations of the integrated organic farming package was prepared by drawing the best scientific knowledge of scientists and technologists and rich practical experience of seasoned farmers. Prior to sowing, de-watering and weeding was done in time, and soil and water samples were analyzed to determine the right dose of nutrients required to raise a healthy crop. The programme was a grand success, and it belied the expectations of many rice farmers in the region. The organically grown rice and poison-free straw are sold at premium price. The farmers have already taken up test sowing of a short-duration pulse crop following the harvest of the rice crop. A sound package of eco-friendly technologies to grow rice is being successfully adopted at Adat panchayath. The technologies work well with indigenous rice variety such as Jyothy.

### ***5.5.1 Objectives***

One of the key objectives of this programme is to revive and sustain the soil fertility in this rich rice belt, and bring back its clean environment to its original glory. The farmers were assured of all technical support, credit and quality inputs were supplied in time. The price for the produce was fixed well ahead of sowing, and farmers were assured of a ready market. There have been continuous consultations with the farmers all through the programme, and full cooperation of the farmers led to its successful implementation.

### ***5.5.2 Organisational Setup***

Adat panchayath is the organizing body for conducting organic rice cultivation. A group of 515 farmers under Chathankole karshaka Samajam joined

together for organic paddy farming.

### ***5.5.3 Supporting Organisations***

#### ***5.5.3.i Adat Farmers Co-operative Society***

Adat Farmers Co-operative Society is giving financial support to the farmers. Finance needed for meeting the expenses of cultivation was given by the society as overdrafts.

Interest collected is only 4 percent and it is a great help to farmers who find it difficult to arrange the money for farming. Also the society has a depot for storing fertilizers and organic manure and is giving to farmers in subsidized rates. One of the retail outlet is situated (Muthuvara) inside the society campus.

#### ***5.5.3.ii Kerala Agricultural University***

All the technical support was given by the University. The advices regarding farming were also given by University which is situated in the same district. Researchers and scholars frequently visit the farm and interact with farmers and will give necessary guidance regarding organic farming. University was also helping Samajam to implement new methods and package of practices throughout the season.

#### ***5.5.4.iii Indocert - Certifying Body***

INDOCERT is nationally accredited by Government of India to do inspection and certification as per the National Standards for Organic Production regulated by APEDA and internationally accredited by DAP, Germany. In the field of organic farming, INDOCERT also functions as a platform for training, awareness creation, information dissemination and networking. INDOCERT is offering organic certification. Both on-farm and off-farm processing must be subjected to inspection by the certification body, in order to be labelled and marketed as "organic".

## **5.6 Market Potential**

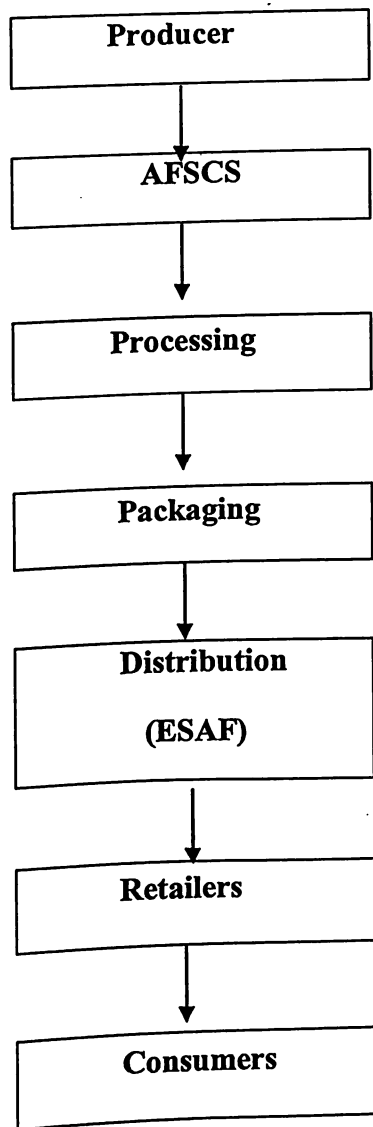
The total rice production in the State, which has an annual rice demand for 40 lakh tonnes, is estimated at around four lakh tonnes and hence it depends on imports of rice from neighbouring States. The non-remunerative price for paddy has forced the

farmers to give up its cultivation and the government in a bid to bring them back is currently procuring it at Rs 800 a quintal. As part of market intervention exercises to ensure the paddy growers of a moderate price, has embarked upon cultivating organic paddy, given the future potential demand at a higher price.

## **5.7 Marketing Channel**

Here in Adat panchayath the marketing is mainly taken place through the below channel. Kole padavu conveners are responsible for the production of the organic rice. The organic rice is harvested from the padavu are brought to the Adat Farmers' Service Society and from there to the miller (Palakkad and Kalady) to do the processing such as milling, dehusking, packing etc. From there ESAF officials collect the packages and brought to the retail shops situated at Thrissur, mainly in three different locations such as Thrissur town, Poonkunnam and Mannoothy and one at Ernakulam also. Consumers collect it from these centres in different periods. There are daily consumers, weekly consumers and institutional customers.

**Figure 5.2 Marketing channel existing in the marketing of Jaivam Amritham-Organic rice.**



Chapter – 6

Marketing Strategies—An Analysis



173856

## Chapter 6

### MARKETING STRATEGIES- AN ANALYSIS

Rice is the staple food and one of the most important agricultural produce in Kerala. As Kerala is increasing its organic rice production, the consumer's attitude and perception towards organic rice like Jaivam Amritham is also varying. As a result its marketing is also becoming more complex.

This chapter is devoted to the analysis of the objectives of the study, viz the analysis of consumers' attitude towards the purchase of organic rice and to suggest marketing strategies of organic rice- Jaivam Amritham. Both primary and secondary data were used for the study. Primary data were collected through survey method using structured pretested questionnaire. The survey was conducted in selected retail shops in the areas of Thrissur district. A sample of 120 consumers was surveyed. The data were analyzed using the statistical tools namely percentage analysis, Kendall's W test and Ordered Logistic Regression Model.

The results obtained are presented in this chapter under the following major heads:

- 6.1 Socio-Economic profile of consumers of Jaivam Amritham
- 6.2 Consumer's attitude towards the purchase of organic rice
- 6.3 Consumer's opinion regarding Jaivam Amritham
- 6.4 Analysis of influential factors towards consumer preference of Jaivam Amritham
- 6.5 Market sustenance and strategies of Jaivam Amritham
- 6.7 Constraints faced by AFSCB regarding the production of Jaivam Amritham

#### **6.1 Socio-Economic Profile of Consumers of Jaivam Amritham**

Socio economic status is the measure of economic and social prospects of the individual .It indicates the social position of an individual with respect to education, income and occupation. In order to analyse the socio- economic characteristics of the respondents, such indicators viz education, occupation, family size and average monthly family income are considered and they are given in Table 6.

The respondents (consumers) were surveyed with a pretested and well structured questionnaire. The consumers of Jaivam Amritham constituted heterogeneous groups with regard to the variables. Data collected with regard to the selected personal variables such as education, occupation, average monthly family income and family size of the respondents were analyzed using descriptive statistical tools and presented in table 6.

**Table 6.1 Socio-economic profile of Jaivam Amritham consumers (n=120)**

| Sl. No                               | Category         | Number of respondents | Percentage |
|--------------------------------------|------------------|-----------------------|------------|
| <b>Education</b>                     |                  |                       |            |
| 1.                                   | Secondary        | 22                    | 18.3       |
|                                      | Higher Secondary | 24                    | 20.0       |
|                                      | UG               | 53                    | 44.17      |
|                                      | PG               | 21                    | 17.5       |
| <b>Occupation</b>                    |                  |                       |            |
| 2.                                   | Employed         | 48                    | 40.0       |
|                                      | Daily wages      | 16                    | 13.3       |
|                                      | Pensioner        | 22                    | 18.3       |
|                                      | Business         | 36                    | 28.3       |
| <b>Average Monthly Family Income</b> |                  |                       |            |
|                                      | Below 10,000     | 13                    | 10.8       |
|                                      | 10,001-30,000    | 58                    | 48.3       |
|                                      | Above 30,001     | 49                    | 40.8       |



| Family Size |            |    |      |
|-------------|------------|----|------|
| 4.          | Two        | 14 | 11.7 |
|             | Three      | 32 | 26.7 |
|             | Four       | 47 | 39.2 |
|             | Above four | 27 | 22.5 |

Source: Compiled from primary data

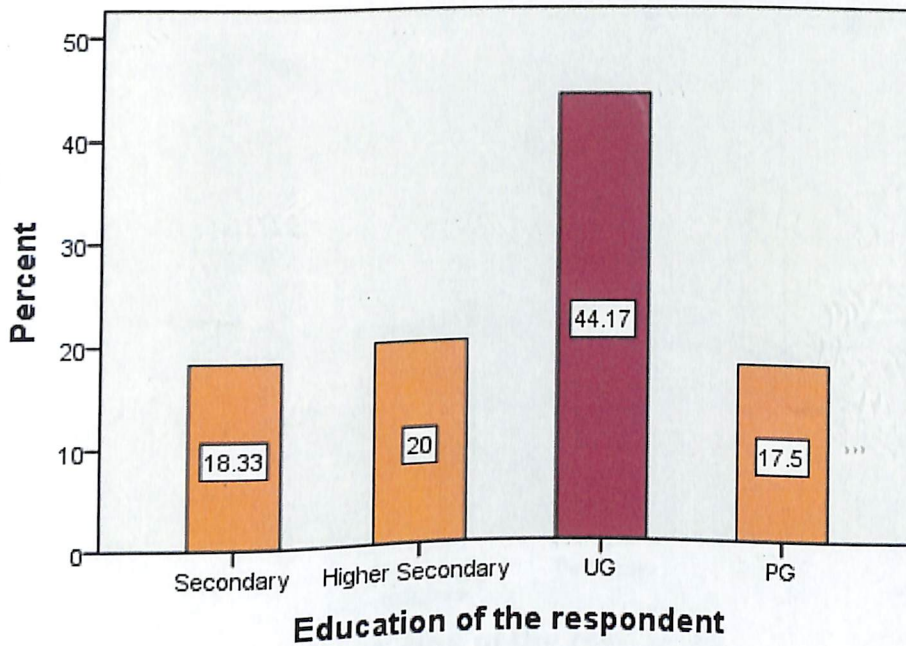
The results revealed that 44.17% of Jaivam Amritham consumers had undergone Under Graduate level of education. Out of 120 consumers surveyed, majority of them i.e., 40% were employed. The average monthly family income of the consumers ranged from ₹10,001 to ₹30,000. It is also evident from the table that, 39.2% of families have at least four members in their family.

#### 6.1.1 Educational qualification of Jaivam Amritham consumers

The consumers were classified in terms of educational status. Upon descriptive analysis of consumer specific Socio-economic variables, the results revealed that 44.17% i.e., nearly half of Jaivam Amritham consumers had undergone Under Graduate level of education and those consumers who finished Higher Secondary level of education was 20%. Those consumers who finished secondary level and Post Graduate level of education were a few i.e., 18.33% and 17.5% respectively.

The consumers who finished Under Graduate level education had the lion's share of the sample consumers. So, the study signalled that, nearly half of the Jaivam Amritham consumers were educated and as the level of education increased, the consumer's awareness regarding the availability of such health beneficial products were showed an increasing trend. Diamantopoulos *et al.*, (2003) argue that educational level and social class influence the consumers to purchase green products due to their better awareness towards this. Further, Wanninayaki M. (2008) reported that, as customers' educational level, income level and perceived importance have recorded positive and significant impact on WTP for organic rice.

**Fig. 6.1 Level of Education of Jaivam Amritham Consumers**



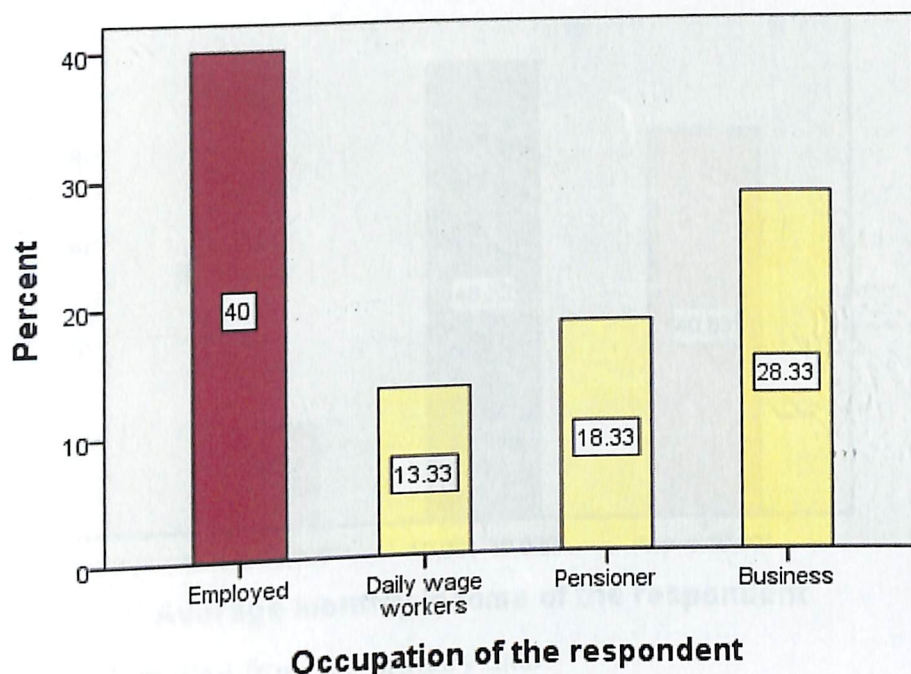
Source: Compiled from the primary data

### **6.1.2 Occupation of Jaivam Amritham consumers**

The analysis revealed that, the major proportions of Jaivam Amritham consumers were employed. They shared 40 percent of the total occupation followed by those who carried out business (28.33%). The categories of Jaivam Amritham consumers also included pensioners as well as daily wage workers (18.33% and 13.33% respectively).

Occupation of the consumer is also another influential factor of organic rice purchase. As the individuals get higher occupation, their living status will also hike up. Thus their purchasing power will increase and that influence them to have more and premium products in their basket. When compared to other conventional rice the price of organic rice like Jaivam Amritham was almost double. Even with the higher price of the product, 13.33% of the consumers who were daily wage workers were also interested to purchase such organic rice due to health benefits.

**Fig. 6.2 Occupation of Jaivam Amritham consumers**



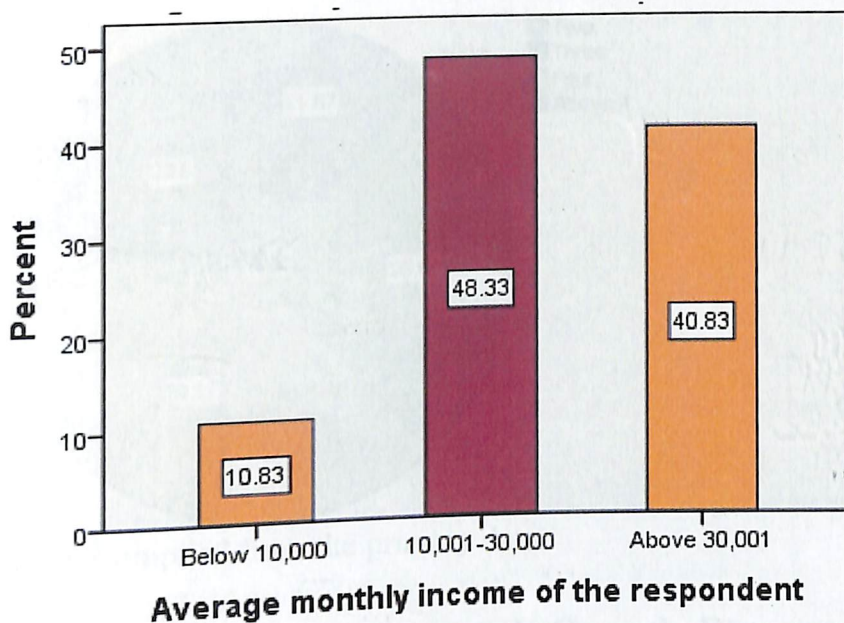
Source: Compiled from the primary data

### **6.1.3 Average monthly income of Jaivam Amritham consumers**

It can be depicted from the figure that, expectedly, people from middle class (48.33%) monthly income between ₹10,001-₹30,000 is majority in purchasing organic rice- Jaivam Amritham, followed by those who have monthly income of above ₹30,001 (40.83%). More interestingly, 10.83% of people even with monthly income below ₹10,000 were used to buy Jaivam Amritham.

Jaivam Amritham is a premium priced product as it is organically produced. It costs almost double the price of conventional rice. These types of organic rice are produced and marketed in order to have safe food habits. Since it fetches higher price in the market, it could be affordable only to those who have an average monthly income between ₹10,001- ₹30,000. The least percentage also should be considered. Though it is a premium product, people (10.83 %) even in the income group of less than ₹10,000 were also purchasing Jaivam Amritham. This could be because of the fact that, they are also becoming more conscious about their family health.

**Fig. 6.3 Average monthly income of Jaivam Amritham consumers**



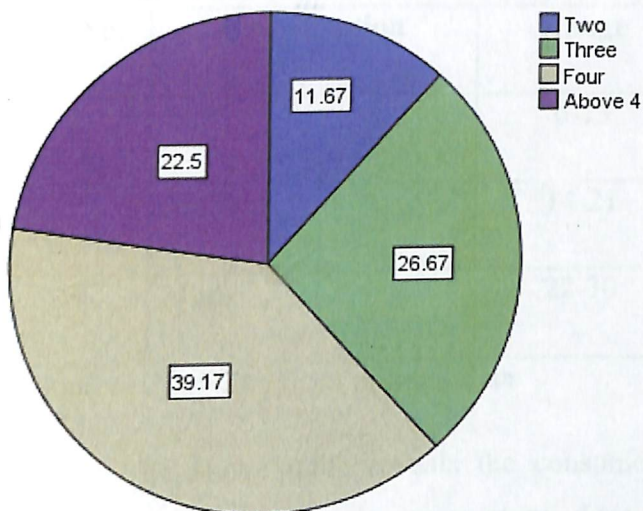
Source: Compiled from the primary data

#### **6.1.4 Family size of Jaivam Amritham consumers**

A survey was conducted among the Jaivam Amritham consumers to find out the average family size of consumers. Majority of the Jaivam Amritham consumers were having a household size of four persons on an average (39.17%). Three persons per family fetched the second position regarding the family size with a percentage share of 26.67, followed by the families with more than four members and two members each with a percentage share of 22.50% and 11.67% respectively.

Mean family size of Thrissur is 4.77 (Reshma, 2015). It is not the family size that influences the purchase of Jaivam Amritham; it is its nutritional benefits.

**Fig. 6.4 Family size of Jaivam Amritham consumers**



Source: Compiled from the primary data

## 6.2 Consumer's attitude towards Organic Rice consumption

Consumer attitudes are likes and dislikes. That is, the positive or negative orientations toward organic or conventionally grown food. Weisberg *et al.* (1996) argued that consumer preference for a particular product is based on attitudes toward available alternatives. A pre-tested structured questionnaire was distributed among the sample consumers of Jaivam Amritham to analyse their attitude towards organic rice. Following six major factors were identified with the help of the expert officials and the questionnaires were distributed.

The table will portray the consumer's attitude about the purchase of organic rice. The six statements were analysed using Ordered Logistic Regression Model because the dependent variable 'attitude' is measured in ordinal scale. These statements were measured on a five point continuum. Accordingly, the scores were allocated for statements, which range from 1 to 5. The scores for the positive statements were given as: strongly agree=5; agree=4; no opinion=3; disagree=2; and strongly disagree=1. The scores for the negative statements were given as: strongly agree=1; agree=2; no opinion=3; disagree=4; and strongly disagree=5. The consumers were classified into three classes according to the total score that they received for each statement, i.e., Low (ranges from 6-13), Medium (ranges from 14-21), High (ranges from 22-30). The results of the study were observed as follows.

**Table 6.2 Consumer's attitude towards the purchase of Organic Rice (n=120)**

| Sl. No. | Classification | Range | Frequency  | Percentage  |
|---------|----------------|-------|------------|-------------|
| 1       | Low            | 6-13  | 0          | 0           |
| 2       | Medium         | 14-21 | 15         | 12.5        |
| 3       | <b>High</b>    | 22-30 | <b>105</b> | <b>87.5</b> |

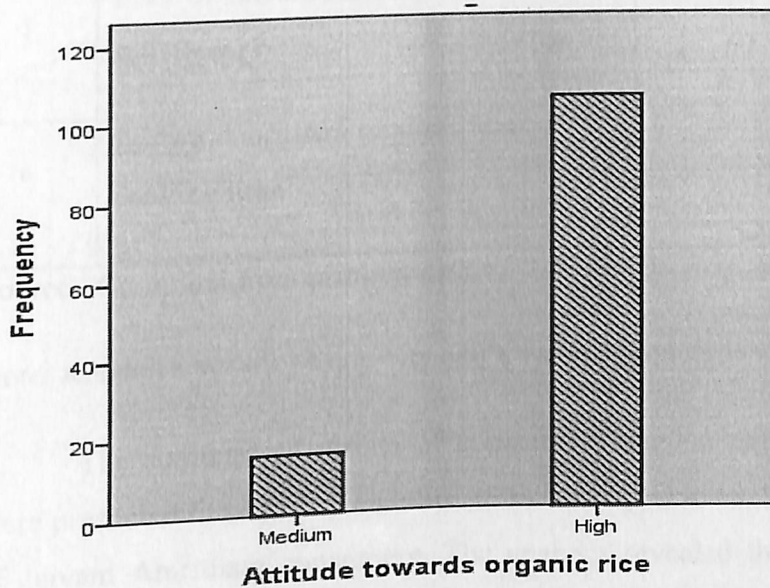
Source: Compiled from primary data

The above table reveals the consumers' attitude towards the purchase of organic rice. The consumers were grouped into three classes as shown in the table in accordance with the scores that they secured for each attitude measuring statements.

The analysis revealed the consumers' favour towards the purchase of organic rice. It is important to note that, none of the consumers were unfavourable towards the purchase of organic rice. That may be because of the reason that, only consumers of Jaivam Amritham were surveyed for the purpose. The attitude of non-consumers towards organic rice was not taken into account. Thus, a result was obtained like this. Most interestingly, 87.5% of the consumers were highly favourable towards the same. It is due to the fact that, the consumers believe organic rice as highly beneficial to combat lifestyle diseases. Compared to the risks of health hazards with pesticide residue leading even to cancer, it is obliged to use complete organic rice. They accept the reality that, organic rice is very much essential to have safe food habits for the family. They concur that, it is really worth to pay for organic rice because of its inevitable benefits. A similar study done by Krissoff (1998) reported that consumers purchase organic products because of a perception that such products are safer, healthier and more environmentally friendly than conventionally produced alternatives. Human health, food safety along with several other product characteristics such as nutritive value, taste, freshness, appearance, and other sensory characteristics influence consumer preferences (Makatouni, 2002, Bonti-Ankomah and Yiridoe, 2006). Although the attributes associated with organic foods may be difficult to identify by visual inspection alone, most consumers purchase organic products because of a perception that these products have unique (and in some cases superior) attributes compared to conventionally grown alternatives as reported by Vindigni et. al, 2002. Perhaps the most convincing evidence supporting the growth of

ecologically favourable consumer behaviour is the increasing number of individuals who are willing to pay more for environmentally friendly products (Harris, 2007).

**Fig. 6.5 Consumer's attitude towards the purchase of Organic Rice**



Source: Compiled from the primary data

### 6.3 Consumers' Opinion Regarding Jaivam Amritham

The data required for the study were collected from the sample Jaivam Amritham consumers with the help of pre-tested questionnaire. The variables required for the study were furnished from prior discussions and from literature review. The variables were formed into statements and gave five point scale (5- Strongly agree, 4- Agree, 3- No opinion, 2- Disagree, 1- Strongly disagree). According to the responses of consumers' the data were analysed using Kendall's W test to delineate the opinions and ranked. The observations were analysed and tabulated as follows.

**Table 6.3 Consumer's Opinion Regarding Jaivam Amritham (n=120)**

| Sl. No. | Opinions  | Mean Rank Score | Rank |
|---------|---|-----------------|------|
| 1       | Jaivam Amritham has no toxic pesticide residues | 4.59            | I    |
| 2       | Jaivam Amritham has good nutritional benefits   | 4.53            | II   |

|   |  |      |     |
|---|--|------|-----|
| 3 | Jaivam Amritham prevents diseases          | 4.08 | III |
| 4 | Taste of Jaivam Amritham is good           | 2.98 | IV  |
| 5 | Price of Jaivam Amritham is satisfactory   | 2.69 | V   |
| 6 | Jaivam Amritham requires less cooking time | 2.13 | VI  |

Source: Compiled from primary data

Note: Kendall's  $W^a$  - 0.383; a- Kendall's value of concordance

The summarised results of consumer's opinion regarding Jaivam Amritham were presented in table 3. Kendall's  $W$  test was used to analyse and rank the opinions of Jaivam Amritham consumers. The analysis revealed that, maximum number of consumers accept the fact that Jaivam Amritham has no toxic pesticide residues. Secondly, consumers prefer Jaivam Amritham because of its nutritional benefits. Consumers ranked the disease prevention quality of Jaivam Amritham as third. The fourth rank was for the opinion that Jaivam Amritham has good taste. The fifth and sixth ranks were secured by affordability of Jaivam Amritham and the cooking time of Jaivam Amritham respectively.

Organic rice like Jaivam Amritham is produced fully in an eco-friendly way i.e., no chemical fertilizers or pesticides are used. From the survey it was found that the consumers were fully aware about the fact that Jaivam Amritham is fully free from any type of toxic pesticide residues and it is 100 percent organic. According to Harper and Makatouni (2002), health and food safety concerns were the main motives for organic food purchases.

The consumers accept that Jaivam Amritham has good nutritional benefits. Efthimia (2008) also in his study stated that, consumers seek information about the nutritional value of food and demand more products free from chemical residues. Jaivam Amritham is a half polished rice. Thus it maintains almost half of its bran content which adds more nutrition to the product. Compared to the risks of health hazards caused due to the consumption of poisonous rice or vegetables, that even



sometimes leads to deadly diseases like cancer, using the Jaivam Amritham is highly helpful to prevent such type of diseases to some extent. Jaivam Amritham consumers also accepted that and gave third rank to the same opinion. Regarding the taste of Jaivam Amritham, consumers ranked it 'four' among the above six opinions. But it should also be noted that more than half of consumers were satisfied regarding the taste. But, they prefer the rest of the opinions have more importance than the taste. It was not because of the taste that they purchased Jaivam Amritham, but because of its health benefits.

The consumers were diminutively unconcerned about the cost of the product. They gave rank 'five' for the opinion that Jaivam Amritham is affordable. Jaivam Amritham is a premium placed product. Despite other conventional way of rice production, organic way of rice production incurs much cost of production. The costs of organic inputs are also high and very limited in availability. In order to break even the income and expenditure, the organic products marketed at higher price. But, the consumers were not much concerned about this factor. However, despite higher prices, consumers are increasingly becoming aware of the negative consequences of the conventional farming and are consuming organic products (Aryal et al. 2009, Pinna et al. 2014, Ghorbani et al. 2007). It means that consumer would not compromise on their health and environment and would pay a price premium instead to protect the two. In this regard, it is necessary to understand the two inter-related terms, consumers' awareness and their Willingness to Pay (WTP), which governs whether or not the consumer will consume a particular product. According to Rao and Bergen (1992), willingness to pay of customers for any product is determined by its intrinsic and extrinsic features. People are becoming more conscious about their health and they are ready to give away the money from their pocket if it worth good. Accordingly in the case of Jaivam Amritham, the price premium does not pull them back towards the purchase. Finally, the consumers accounted that Jaivam Amritham required only less cooking time, since, it was half polished and due to its bran content, it required only less gestation time.

## 6.4 Analysis of influential factors towards consumer preference of Jaivam Amritham

Consumers prefer a product due to certain reasons or factors. The present study examined whether there is any specific factor that drives the consumers to buy Jaivam Amritham. The pre-tested questionnaires were distributed among the consumers through the retail outlets. The collected data were analysed using simple descriptive statistical tools like mean and percentage. After conducting the analysis, certain major factors were identified and those are furnished as in the table below.

**Table 6.4 Influential factors towards the purchase of Jaivam Amritham by the consumers**

| SL NO | FACTORS                     | I (%) | II (%) | III (%) | IV (%) | T (%) |
|-------|-----------------------------|-------|--------|---------|--------|-------|
| 1     | Good taste                  | 80    | 83.3   | 60      | 46.7   | 62.5  |
| 2     | Better Cooking Time         | 53.3  | 56.7   | 60      | 66.7   | 59.2  |
| 3     | Free from pesticide residue | 73.3  | 60     | 60      | 80     | 68.3  |
| 4     | Highly Nutritional          | 53.3  | 60     | 70      | 76.7   | 65    |
| 5     | Affordable price of product | 70    | 67.5   | 76.7    | 63.3   | 67.5  |

Source: Compiled from primary data

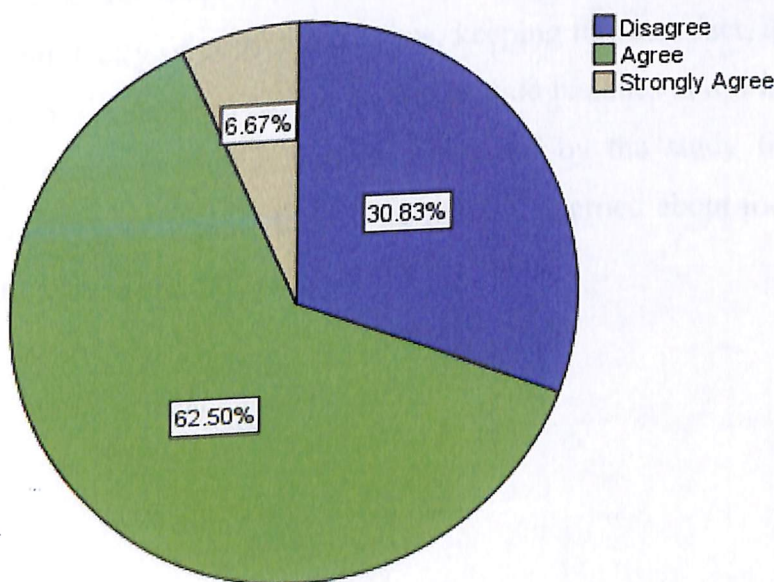
Note: I- Elite Supermarket, Thrissur; II- Nissarga organic shop, Poonkunnam; III- Adat Farmers' Co-operative Society Supermarket, Adat; IV= ESAF Supermarket, Mannoothy; T- Pooled mean

This table was constructed to determine the factors that influence the consumers' preference over Jaivam Amritham. The consumers of Nissarga organic shop (II) and Elite supermarket (I) preferred Jaivam Amritham because of its taste (83.3% and 80% respectively). These two supermarkets are situated in the urban area of Thrissur district. The consumers of ESAF supermarket (IV) confirmed that, they prefer Jaivam Amritham because of the fact that Jaivam Amritham is free from toxic pesticide residues (80%). Consumers of AFCS (III) agreed that the price of Jaivam

Amritham is affordable (76.7%), since they were from the producer area and might know about the difficulties in the production of Jaivam Amritham. From the above table, it could be depicted that Jaivam Amritham consumers are conscious about the taste of the rice too. A similar study conducted by Shafie (2012) stated that Food safety, human health and environmental concern along with sensory attributes such as nutritive value, taste, freshness and appearance influence organic food consumer preferences.

The figure below will give a clear cut idea about how much the taste as a factor influence the consumers to prefer Jaivam Amritham. Sandalidon et.al (2002) has mentioned that health is the main reason for purchase of organic, followed by quality characteristic such as taste, colour and flavor. The majority (62.50%) of the consumers agreed that they prefer Jaivam Amritham due to its good taste. Another 30.83% must also be considered since, that much percent of the consumers had an opinion that the taste of Jaivam Amritham is not good. Usually, rice with high bran content will taste less. Jaivam Amritham is a half polished organic rice which is positioned as healthy, nutritious rice. Thus, it is important to convey the rest 30.83% of the consumers about the benefits of organic rice and should convince them that, Jaivam Amritham is for the health and not for the taste.

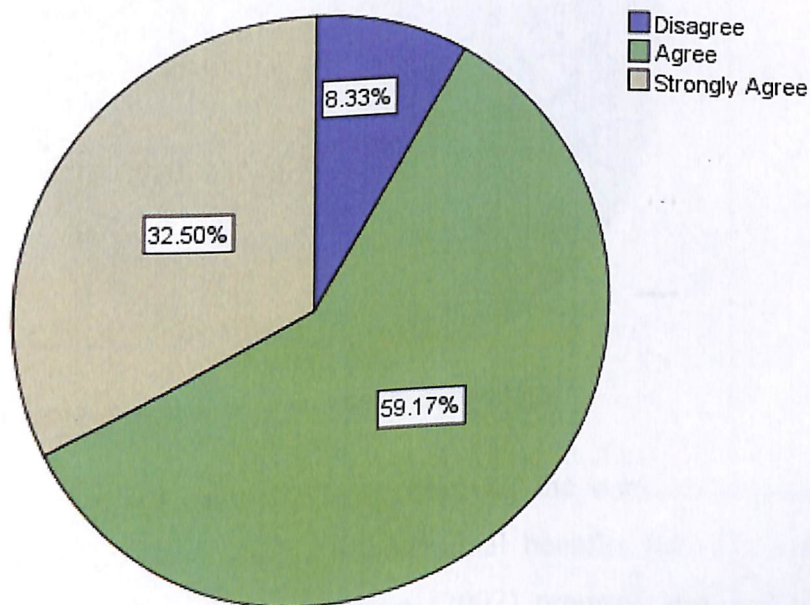
**Fig. 6.6 Taste as an influential factor**



Source: Compiled from the primary data

In general, half polished rice requires less time to cook. The figure above depicts that, more than 90% (59.17%+32.50%) consumers preferred to buy Jaivam Amritham because they considered the cooking time as an influencing factor. They agreed the fact that, Jaivam Amritham consumes only less time to cook.

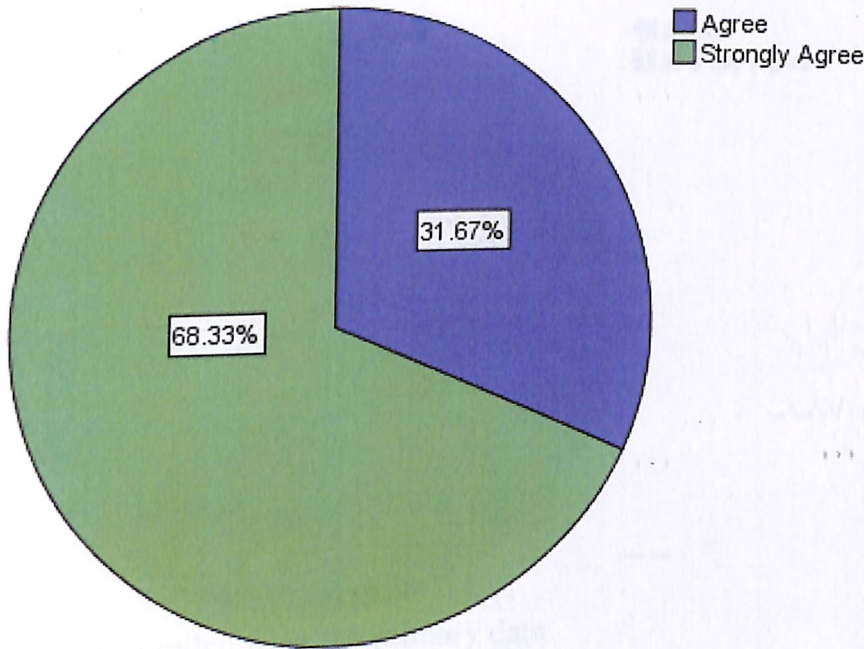
**Fig. 6.7 Cooking time as an influential factor**



Source: Compiled from the primary data

Consumers prefer organic products because of the reason that, these products will be free from any sort of pesticide residues. Organic farming is purely devoted to natural way of cultivation. Thus, keeping this as a fact, all the consumers agreed that, Jaivam Amritham has no such pesticide residues and it is 100 percent organic, safe to eat product. This is further supported by the study findings like consumers who usually buy organic food were more concerned about food safety than price (Shakya, 2005; Aguirre, 2001).

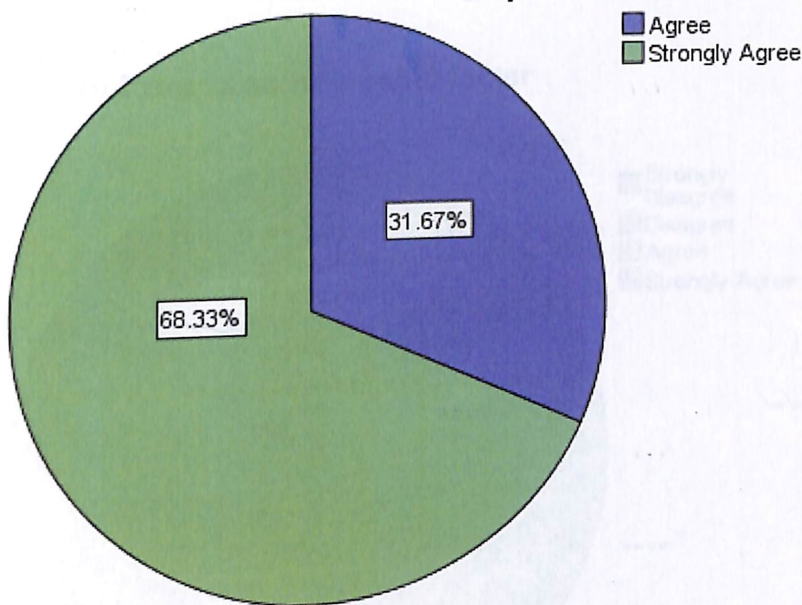
**Fig. 6.8 Pesticide residue free as an influential factor**



Source: Compiled from the primary data

It can be concluded that, all the consumers preferred organic rice Jaivam Amritham because of its nutritional benefits (68.33% strongly agreed and 31.67% agreed). Bourn and Prescott (2002) reported that besides health, food safety and environmental considerations, several other product characteristics such as nutritive value, taste, freshness, appearance, color and other sensory characteristics influence consumer preferences. The half polished Jaivam Amritham is rich in bran content. Consuming stabilized rice bran offers a number of health benefits, because it serves as an excellent source of essential nutrients (fibre, Manganese, Phosphorus, Magnesium, Iron, Vitamins B-5 and B-6). There was no one with an opinion that Jaivam Amritham has no benefits over ordinary rice.

**Fig. 6.9 Nutritional benefits as an influential factor**

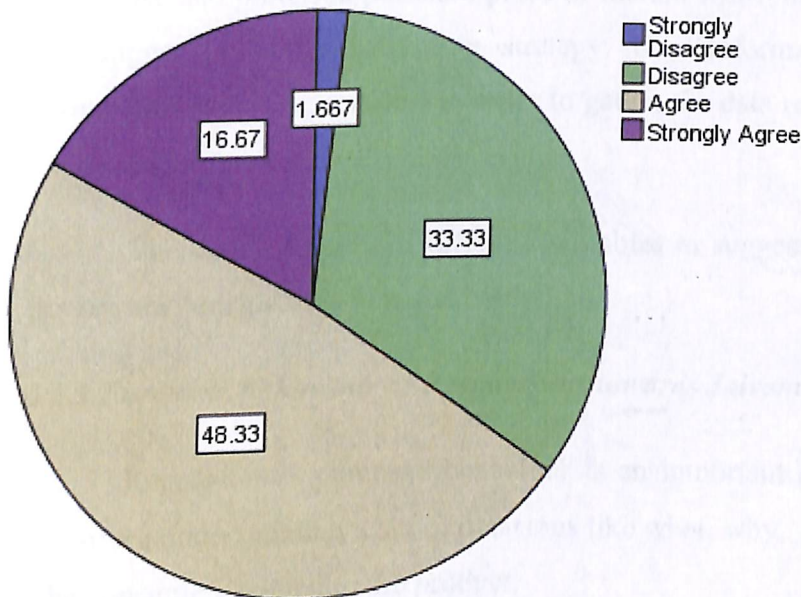


Source: Compiled from the primary data

Price itself act as an influential factor for all the products. Consumers' willingness-to-pay a price premium for organic products is an important determinant of organic farm profitability and long-term financial sustainability. Organic product in general costs almost double the cost of conventional products. Jaivam Amritham is also a premium product. It also costs almost double the conventional rice. From, the figure above it can be said that 67.50% of the consumers were satisfied with the price of the product. Even though it costs higher, the consumers were ready to purchase the product, because, they were more conscious about their health and most of them were educated and thus they know the ill effects of consuming other poisonous products. Various study supported that consumers will give second priority to the price of the products and they always look for the quality organic food. They feel that the price of organic food becomes the cost of investment in "good health" (Aryal (2008), Menon (2008), Sandalidou et.al, 2002). The similar study by Millock (2002) in Denmark reported that, 35% of the consumers are willing to pay more for any type of organic products compared to 18% of consumers who are not willing to pay for all kind of products. In this case, organic products also depends with the consumers preference which product to buy or not. Menon (2008) on his paper organic agriculture and market potential mentioned that the organic product are gaining price premium from 5% to as high as 60% in some products. Another important observation is that 32.50%

of consumers affirm that the cost of Jaivam Amritham is higher, but they are purchasing the same, understanding its health benefits.

**Fig. 6.10 Price as an influential factor**



Source: Compiled from the primary data

Thus by observing the pooled mean in Table 9, it can be concluded that, the most important influential factor towards the Purchase of Jaivam Amritham as reported by the consumers is that, it is free from any sort of pesticide residues. They believe in the purity and quality of Jaivam Amritham. The next important factor is the affordable price of the product. It can be visible from the figure 14 that the consumers were accepted the fact that organic products incurs much higher price and when compared to the benefits that it offer, its price is not a matter of concern. Following to that, the nutritive value that Jaivam Amritham offered attracted the consumers to buy the product. The taste and reduced cooking time also persuaded them to buy Jaivam Amritham.

## 6.5 Marketing strategies of Jaivam Amritham

The second important objective of the study was to explore the marketing strategies of organic rice, Jaivam Amritham. Pre-tested questionnaire were distributed through the retail outlets to the consumers. Necessary data were also collected from the retail shops, Adat Kole padavu conveners and officials of AFSCB. The variables like consumer's behaviour towards purchase of Jaivam Amritham, pre- purchase of any other organic rice, information sources, duration of

Jaivam Amritham purchase, reason for buying Jaivam Amritham, affordability of Jaivam Amritham, satisfaction regarding the taste and bran content, opinion regarding reducing bran content, package of purchase, preferred package of purchase and preferred purchase place of Jaivam Amritham were analyzed in order to suggest a better marketing strategy. Key Informants Interview was also conducted with four retailers in order to gather the data required to substantiate the consumers' opinion.

The detailed study of different variables to suggest better marketing strategy for Jaivam Amritham is furnished as below.

### **6.5.1 Purchase Behaviour of Respondents towards Jaivam Amritham**

Respondent's purchase behaviour is an important area to study. It actually involves understanding a set of decisions like what, why, when, how, how much of the consumers related to the product.

#### **6.5.1.i Frequency of Purchase of Jaivam Amritham**

Frequency of purchase by consumers will help the marketers to identify regular customer so that they can determine their storage quantity. The table below shows the respondent's frequency of purchase of Jaivam Amritham.

**Table 6.5 Frequency of Purchase of Jaivam Amritham (n=120)**

| Sl. No. | Particulars        | Percent |
|---------|--------------------|---------|
| 1       | Regularly          | 54.2    |
| 2       | Occasionally       | 37.5    |
| 3       | Whenever available | 8.3     |

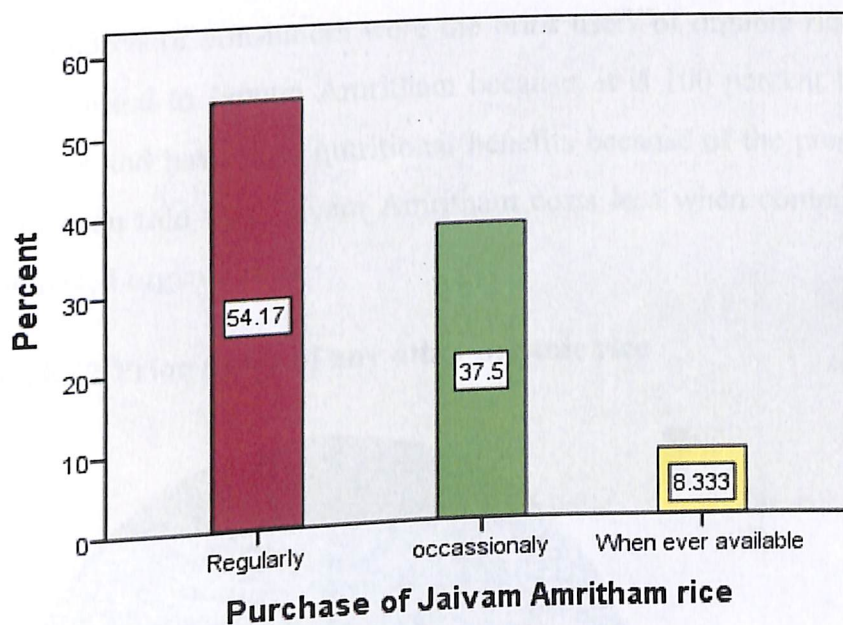
Source: Compiled from primary data

Table 6.5 represents the purchasing behaviour of respondents. Among the Jaivam Amritham consumers majority of the respondents (54.17%) are regular consumers. Jaivam Amritham consumers who are occasional in purchasing constitute 37.5% of the total. Least number (8.33%) of respondents said that they rarely purchase Jaivam Amritham.



People were well aware about the health benefits of Jaivam Amritham. Though it is a premium product, they considered the welfare of the family as important. It was observed from the figure that, regular buyers of Jaivam Amritham more than half of the total sample selected. Occasional buyers of Jaivam Amritham were less than that of regular buyers. This could be because of the reason that, people are becoming more consciousness in what they are consuming day by day. Even though related products are available in the market with price much less than the organic rice, without deviating to such adulterated products the people are sticking on to the health assuring quality organic rice like Jaivam Amritham.

**Fig. 6.11 Frequency of Purchase of Jaivam Amritham**



Source: Compiled from the primary data

### **6.5.1.ii Prior usage of any other organic rice by the consumers**

When it comes to the analysis of purchase behaviour of Jaivam Amritham consumers, it is also very much important to analyse whether they have ever used any other organic rice. This will be helpful for them to differentiate both the rice according to the price, taste, etc. and what prompted them to shift to Jaivam Amritham.

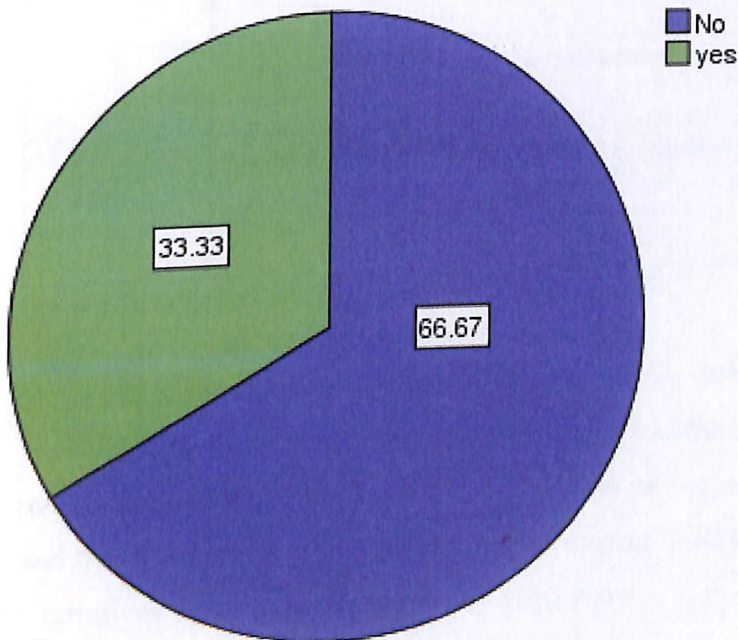
**Table 6.6 Prior usage of any other organic rice by the consumers (n=120)**

| Sl. No. | Particulars      | Percent |
|---------|------------------|---------|
| 1       | First time users | 66.7    |
| 2       | Regular users    | 33.3    |

Source: Compiled from primary data

Even though organic rice of some other brands was available in the market, 66.67% of the consumers have never used any other organic rice before. They preferred Jaivam Amritham because of the fact that it was produced by their home land (Adat- Thrissur) and they believed in the quality of the product. It was also found that 33.33% of consumers were the prior users of organic rice of some other brand. They shifted to Jaivam Amritham because; it is 100 percent free from any pesticide residues and have high nutritional benefits because of the presence of bran. Some of them even told that Jaivam Amritham costs less when compared to their previously purchased organic rice.

**Fig. 6.12 Prior usage of any other organic rice**



Source: Compiled from the primary data

### 6.5.2 Reasons for buying Jaivam Amritham by the consumers

There should be some reasons that trigger the consumers to prefer Jaivam Amritham over other organic rice. The important reasons were gathered from the consumers of AFSC supermarket while pre-testing the questionnaire. The observed reasons were further scrutinised and given to the consumers. The responses were analysed and tabulated as follows.

**Table 6.7 Reasons for buying Jaivam Amritham (n=120)**

| Sl. No. | Particulars  | Percent     |
|---------|--|-------------|
| 1       | a) Taste   | 10.8        |
| 2       | <b>b) Nutritional benefits</b>                         | <b>40.0</b> |
| 3       | c) Less cooking time                                   | 1.7         |
| 4       | d) Native Rice   | 7.5         |
| 5       | e) Non-toxic   | 18.3        |
| 6       | f) Organic Certification                               | 6.7         |
| 7       | g) Both non toxicity and nutritional benefits          | 10.8        |
| 8       | h) Both nutritional benefits and organic certification | 4.2         |

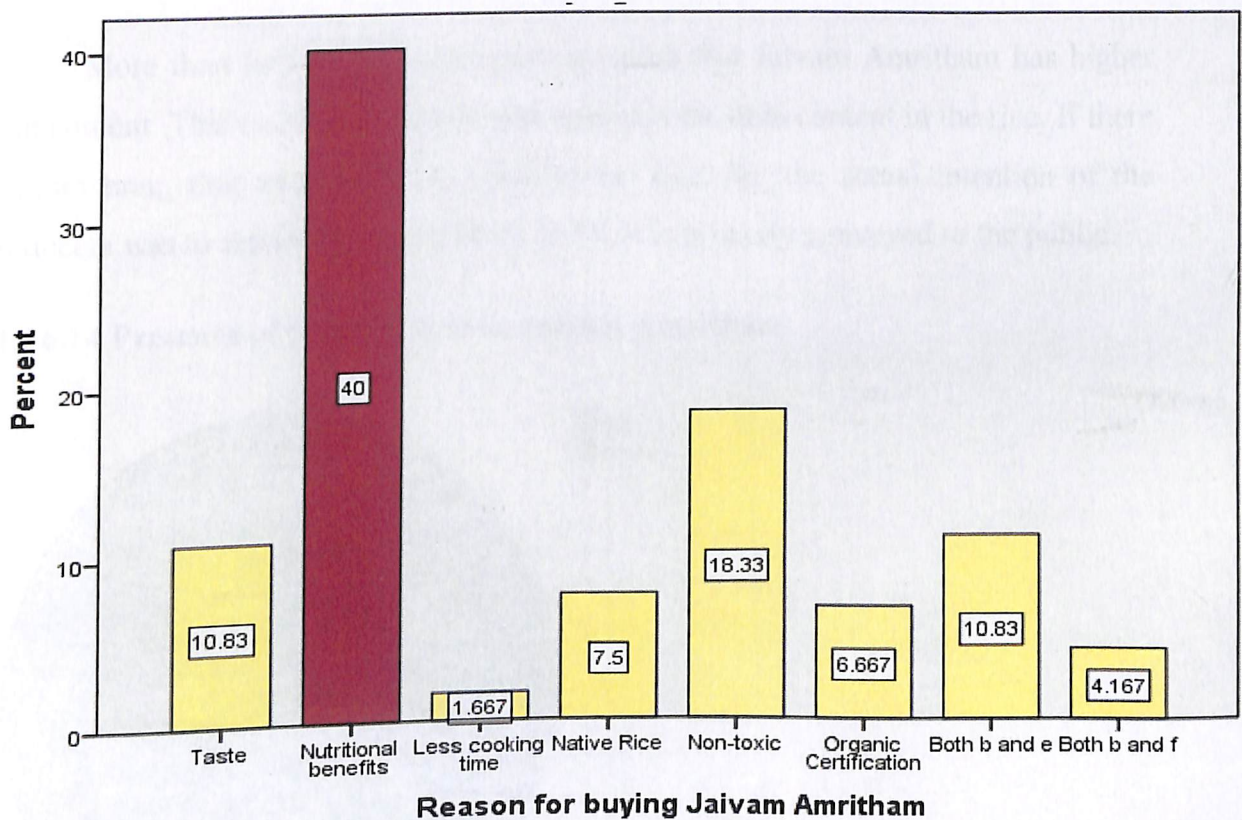
Source: Compiled from primary data

It was observed that, the major reason behind the purchase of Jaivam Amritham by the consumers is because of its nutritional benefits (40%). The next is due to the non-toxicity of rice (18.3%). Taste factor as also both nutritional benefits and non toxicity shares equal proportion of total percentage (10.8%). The consumers were given least concern to the cooking time of the rice. Even though it takes less time to cook when compared with other rice, consumers were not giving any importance to this.

Reasons for purchase of Jaivam Amritham act as the driving force for the rice to explore in the market. The most important reason for the purchase of Jaivam

Amritham as reported by the consumers was its nutritional benefits. Organic rice like Jaivam Amritham is very nutritive and very safe to consume also. It is essential to purchase organic rice to have family welfare. Certified organic products like Jaivam Amritham will never compromise for its quality. One of the important qualities of Jaivam Amritham that everyone must note is that Jaivam Amritham is a half polished rice. Thus, even after milling the rice, it will maintain almost half of its total bran content. How much is the bran content present that much is the nutritive value of the rice.

**Fig. 6.13 Reason for buying Jaivam Amritham**



Source: Compiled from the primary data

### **6.5.3 Opinion regarding the presence of bran content in Jaivam Amritham**

Jaivam Amritham is half polished to maintain the bran content of the rice because which will add the nutritive value to the rice. A survey was conducted among the consumers to know whether they are aware about the presence of bran content in the rice.

**Table 6.8 Bran content in Jaivam Amritham (n=120)**

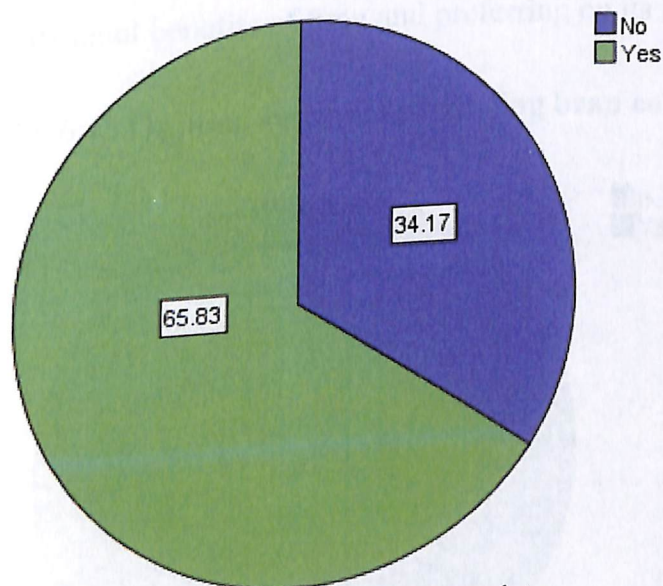
| Sl. No. | Particulars                 | Percent     |
|---------|-----------------------------|-------------|
| 1       | Bran content is less        | 34.2        |
| 2       | <b>Bran content is more</b> | <b>65.8</b> |

Source: Compiled from primary data

The figure below depicts that 65.83% of consumers accept that Jaivam Amritham contains higher amount of bran, whereas 34.17% of consumers reported that they never felt Jaivam Amritham has higher bran content.

More than half of the consumers accepted that Jaivam Amritham has higher bran content. This rice is half polished to maintain the bran content in the rice. If there is more bran, that adds nutritive value to the rice. So, the actual intention of the producers was to retain the bran content and that is properly conveyed to the public.

**Fig. 6.14 Presence of bran content in Jaivam Amritham**



Source: Compiled from the primary data

#### **6.5.4 Opinion regarding reducing bran content in Jaivam Amritham**

It was observed from the survey that, some of the consumers prefer taste more than its nutritive value. Thus some of them want to reduce the bran content of Jaivam Amritham. The opinions regarding the same were furnished as below.

**Table 6.9 Consumers opinion regarding reducing bran content in Jaivam Amritham (n=120)**

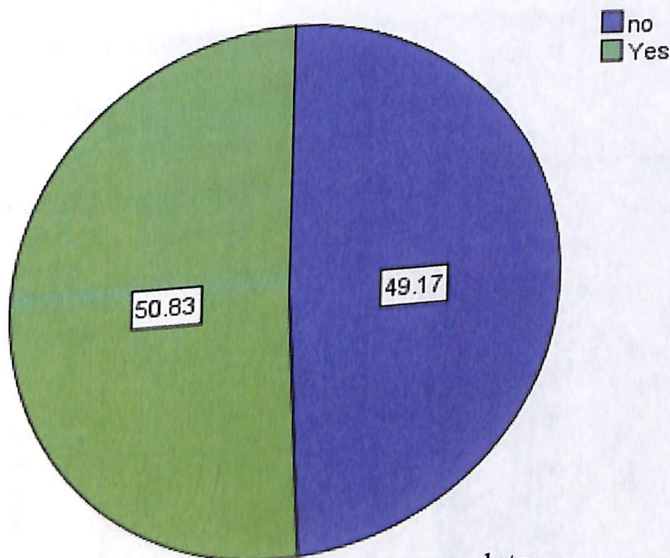
| SI No | Particulars            | Percent     |
|-------|------------------------|-------------|
| 1     | Retain the bran        | 49.2        |
| 2     | <b>Reduce the bran</b> | <b>50.8</b> |

Source: Compiled from primary data

From the table and figure it can be observed that 50.83% of consumers prefer to reduce the bran content in Jaivam Amritham. Not much less, 49.17% of consumers prefer to maintain the bran.

This variation was observed among the consumers because of the reason that, some consumers prefer taste rather than nutritive value. Jaivam Amritham is nutrient rich organic rice. It maintains half of its bran content even after its milling thereby it adds nutritive value to the rice. Here, 50.83% of consumers wanted to reduce the bran, this might be because of the reason that, they do not know the nutritional benefits of bran and preferring on its taste.

**Fig. 6.15 Opinion regarding reducing bran content**



Source: Compiled from the primary data

### **6.5.5 Package of Jaivam Amritham that consumers usually buy**

The available package sizes in the market were 5Kg bag and 10Kg bag. But in AFSC supermarket, the product was available as loose also. So that the

consumers can purchase as much quantity they want. An analysis was conducted to know which package size that consumers usually buy. The results were tabulated as follows.

**Table 6.10 Package of Jaivam Amritham that consumers usually buy (n=120)**

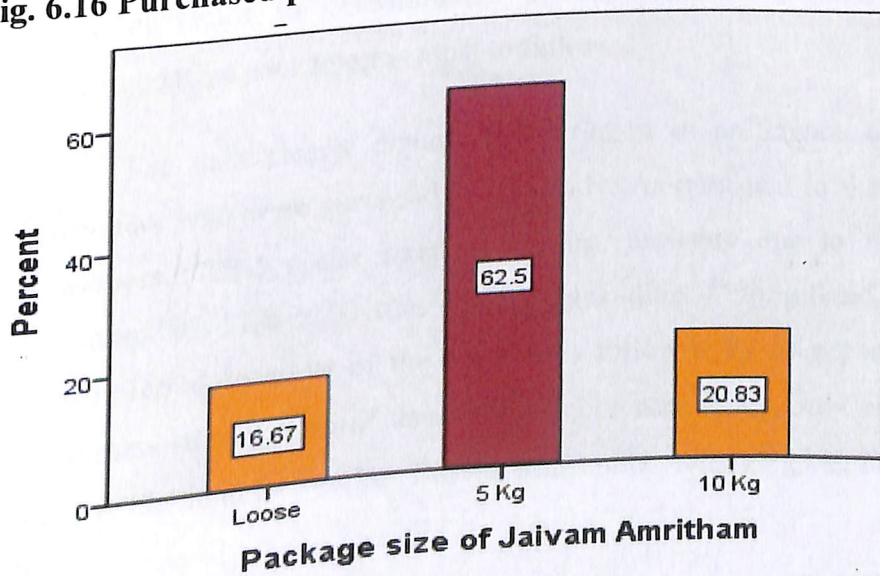
| Sl. No. | Particulars | Percent |
|---------|-------------|---------|
| 1       | Loose       | 16.7    |
| 2       | 5 Kg        | 62.5    |
| 3       | 10 Kg       | 20.8    |

Source: Compiled from primary data

The table above depicts that 62.50% of consumers usually buy 5Kg bag of Jaivam Amritham. 10Kg bag was preferred by 20.8% of consumers. Product is available as loose only in AFSC supermarket and that was about 16.7%.

From the figure given below, it can be depicted that more than half of the consumers bought 5Kg bag. Only 5Kg and 10Kg bags were available in the market (except AFSC supermarket, loose also available). From the available packaging they prefer 5Kg because, Jaivam Amritham is half polished and shelf life is less when compared to other conventional rice. Thus it was not safe for them to buy 10Kg bag.

**Fig. 6.16 Purchased package size of Jaivam Amritham**



Source: Compiled from the primary data

### 6.5.6 Preferred Package of Purchase

The study was also conducted to know the consumers opinion regarding the packaging size of Jaivam Amritham. The pre-tested questionnaires were distributed among the Jaivam Amritham consumers and the responds were analysed. The following table will explain the results.

**Table 6.11 Preferred package of the product (n=120)**

| Sl. No. | Supermarkets          | Fixed Packaging |     |      |       | Loose     |
|---------|-----------------------|-----------------|-----|------|-------|-----------|
|         |                       | 2Kg             | 5Kg | 10Kg | >10Kg |           |
| 1       | Elite Supermarket     | 8               | 8   | 7    | 1     | 6         |
| 2       | Nissarga Organic shop | 16              | 3   | -    | -     | 11        |
| 3       | AFSCS Supermarket     | 8               | 7   | 5    | 2     | 8         |
| 4       | ESAF Supermarket      | 9               | 2   | 4    | 4     | 11        |
|         | Fixed packaging total | 41              | 20  | 16   | 7     |           |
|         | <b>TOTAL</b>          | <b>84</b>       |     |      |       | <b>36</b> |

Source: Compiled from primary data

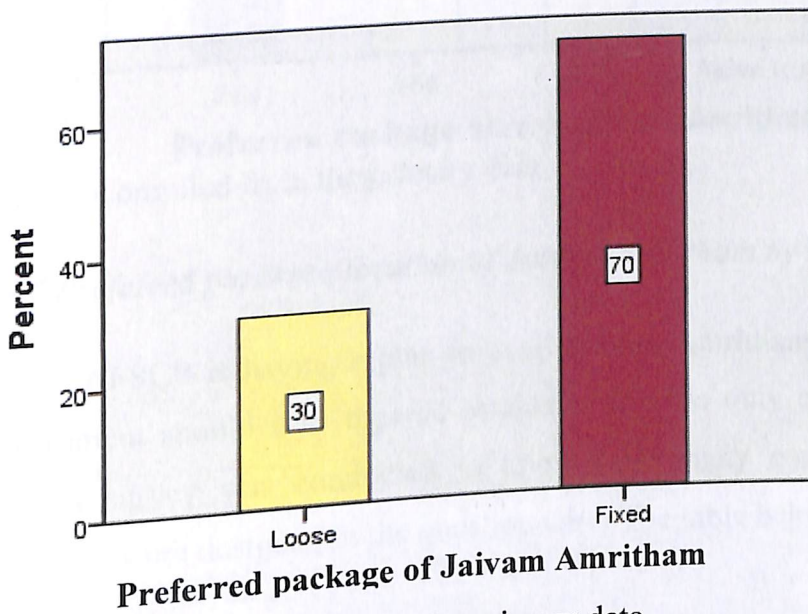
The findings presented in the above table reveals the results of the preferred package size of Jaivam Amritham consumers. The packaging of the product is an important factor in determination of the consumer preference. Affordable and accommodative packaging is must to follow.

The data clearly depicts the variation in preference of packaging by the consumers who were surveyed in the study. As indicated in the results, most of the consumers (70%) prefer fixed packaging, probably due to the affordability and accommodative characteristics of fixed packaging. Among fixed packaging, 2Kg bag was preferred by most of the consumers followed by 5Kg packaging. Out of 120 consumers surveyed 36 of them prefer loose packaging. Only 5Kg and 10 Kg Bags were available in the market. But the consumers prefer 2Kg bag more than that of 5Kg bag.



From the figure below, it can be depicted that, 70% of the consumers were preferred fixed packaging of Jaivam Amritham than loose. It might be because of the reason that, they would like to purchase Jaivam Amritham as in packets and as and when required. They don't have the time to spare for weighing and then purchasing the things. Most importantly, there is a chance for adulterating the rice when it comes as loose. In most of the privileged supermarkets, there is no such provision for weighing and then purchasing the product. The products comes as packages, the consumer selects according to their preference.

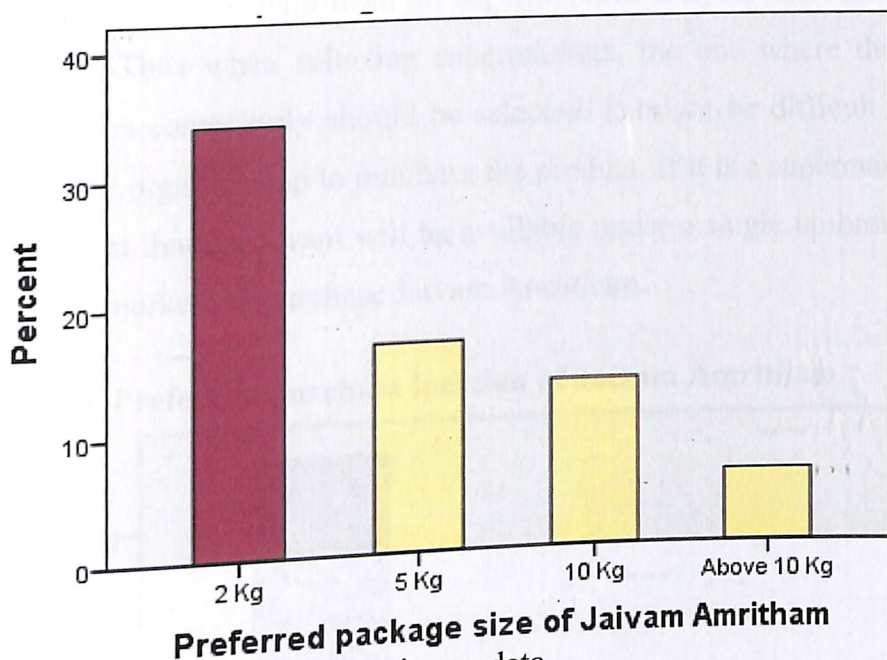
**Fig. 6.17 Preferred package of the product**



Source: Compiled from the primary data

The results of the below figure can be shows that most of the consumers preferred 2Kg bag (34.17%) as their most convenient purchase size. Apart from available packages in the market (5 and 10Kg bags) the consumers would like to have 2Kg bags also. Since it is a half polished rice, its shelf life is less when compared to other conventional rice, buying 5 or 10Kg bags sometimes raise tension also. Moreover it is also important to note that consumers prefer 2 Kg because, they would like to get the product as and when required. They don't want to keep the product for a long time. So, in order to avoid that, the consumers want 2Kg bags in the market. Regular consumers of Jaivam Amritham wanted to have 5Kg bags in the market (16.67%). Some of the consumers also prefer 10Kg bags in the market and about 5.83% prefer more than 10Kg in the market, as they might be the big consumers of Jaivam Amritham.

**Fig. 6.18 Preferred fixed package size for purchasing Jaivam Amritham**



Source: Compiled from the primary data

### 6.5.7 Preferred purchase location of Jaivam Amritham by the consumers

AFSCB is having a plan to avail Jaivam Amritham only in organic shops or government should start organic markets that sells only certified organic products. Thus a survey was conducted to know how many consumers prefer that. The questions were designed in the questionnaire. The table below shows the results of the survey.

**Table 6.12 Preferred purchase location of Jaivam Amritham (n=120)**

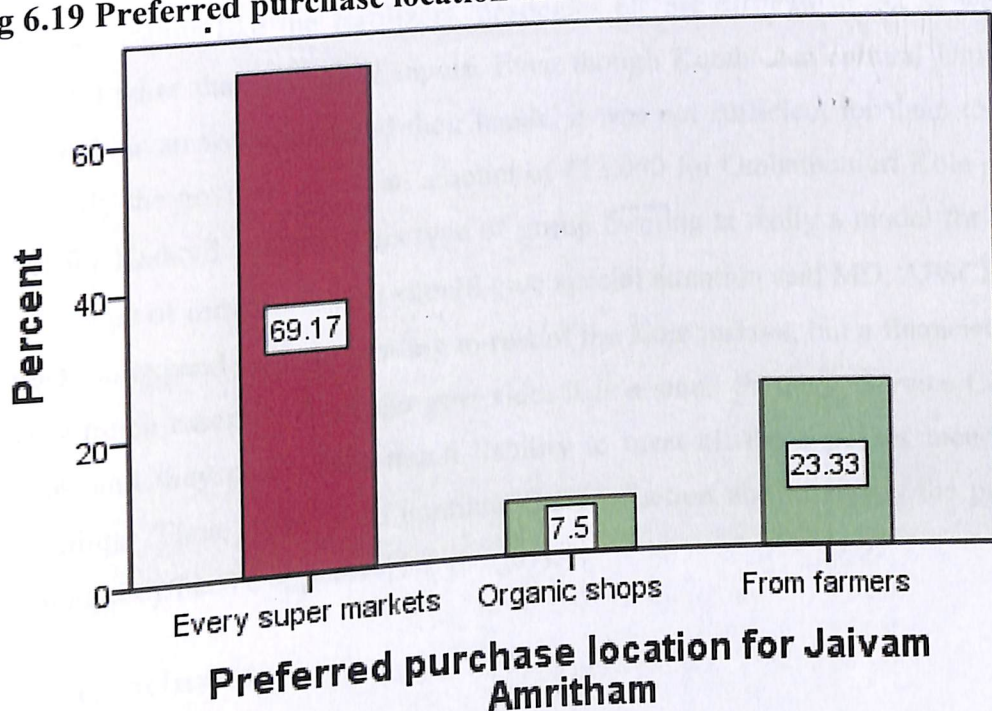
| Sl. No. | PARTICULARS         | FREQUENCY | PERCENT |
|---------|---------------------|-----------|---------|
| 1       | Every super markets | 83        | 69.2    |
| 2       | Organic shops       | 9         | 7.5     |
| 3       | From farmers        | 28        | 23.3    |

Source: Compiled from primary data.

From the above table, it could be noted that 69.2% of consumers prefer to have Jaivam Amritham in all supermarkets. Some of them also prefer to get directly from the farmer (23.3%). Only 7.5% of the consumers prefer to get it from organic shops.

As indicated in the below figure, more than half of the consumers prefer to have Jaivam Amritham from all supermarkets. But, Jaivam Amritham is a premium product. Thus when selecting supermarkets, the one where the premium class of consumers comes only should be selected. It might be difficult for them to go to a particular organic shop to purchase the product. If it is a supermarket, all the varieties of product that they want will be available under a single umbrella. Thus they prefer all supermarkets to purchase Jaivam Amritham.

**Fig 6.19 Preferred purchase location of Jaivam Amritham**



Source: Compiled from the primary data

## 6.6 Constraints faced by AFSCB regarding the production of Jaivam Amritham

Jaivam Amritham, a product by AFSCB from the Kole lands of Adat Grama Panchayath was launched during 2<sup>nd</sup> July 2015. From a total of 13 Kole padavu, they selected two padavu of 82 ac (Ombathumuri) and 94 ac (Kadavil) respectively and started organic cultivation of paddy. The system was called Rice- Fish- Duck system of paddy cultivation. The bank purchased the land as lease from the farmers by giving a margin of ₹25,000 per acre for each farmer. Both Kole padavu have a committee of eight to ten members, one convener from both committees. The bank is taking care of all the activities of the field, right from land preparation to translocation of the produce to the mill. Only organic inputs were used for the cultivation, which is

certified by Lacon, a German quality certification company. The rice is half polished and packed from Palakkad. ESAF is the agency behind the distribution of the rice.

The analysis of primary data revealed that, there exists a huge demand for the product in the market. But an in depth analysis was necessary to probe into the producers' capacity to meet the whole demand. It was observed from secondary data, FGD and KII that, the producer (AFSCB) found it difficult to sustain the production of Jaivam Amritham as the cost of production exceeds the income because, the organic inputs like the fertilizers, pesticides etc are difficult to get as well as costs much higher than chemical inputs. Even though Kerala Agricultural University and Krishibhavan were extended their hands, it was not sufficient for them to withstand. Initially the govt has given an amount of ₹13,000 for Ombathumuri Kole padavu, but not for Kadavil padavu. This type of group farming is really a model for all. So, for such type of initiations govt should give special attention said MD, AFSCB. They are ready to expand organic farming to rest of the Kole padavu, but a financial back up is very much essential from the govt side. It is a small Farmers' Service Co-operative bank and they don't have much liability to meet all the expenses incurred for the farming. Thus, in order to continue the production and to supply the product year round, they need a support from the govt.

## **6.7 Conclusion**

The current chapter made an attempt to justify the objectives of the study, consumers' willingness to buy organic rice and marketing strategies of Jaivam Amritham. Necessary data were collected using various methods and was analysed by using appropriate statistical tools. The results were tabulated and figures were prepared for easy understanding of the facts.

In order to frame out the marketing strategy, the consumers' opinion regarding Jaivam Amritham was also probed into. Despite the availability of other branded as well as local organic rice, consumers preferred to buy Jaivam Amritham. The influential factors towards Jaivam Amritham purchase were also analysed. It was scrutinized from the analysis that, the consumers were willing to pay for organic rice and they possessed a favourable attitude towards the same. They prefer Jaivam Amritham for various reasons. Now the organic rice market is showing a positive sign and from the analysis it was found that, there exists a good market for Jaivam

Amritham. But it was also important to analyse the factors of production. From KII and FGD it was found that AFSCB is facing some constraints to expand the cultivation. Since the demand is prevailing in the market and it if it is possible to give them a better backup either as an incentive or as a financial support by the govt. or any other related agency will be a great consolation for them.

*Chapter - 7*

*Summary of Findings and  
Suggestions*

---

## Chapter 7

### SUMMARY OF FINDINGS AND SUGGESTIONS

Organic food market has shown a tremendous growth in the last few years. Certainly organic rice is an important part of it, as rice is the staple food of people in Kerala. People are becoming more conscious about their health, as they are well educated. Thrissur is the pioneer in organic rice cultivation in Kerala. Adat Farmers' Service Co-operative Bank has taken up an initiative to start organic rice production at the Panchayath level. They produced and ESAF marketed the product under the brand name Jaivam Amritham. Before launching a premium product like Jaivam Amritham, it is important to investigate the consumers' willingness to pay for the product. After having a prior discussion with the officials of AFSCB, it was understood that, a detailed study regarding the same is a necessity for them. In the light of this, the present study was undertaken with the following objectives:

1. Consumers' attitude towards the consumption of organic rice- Jaivam Amritham
3. To suggest marketing strategies for Jaivam Amritham

The study was conducted in four retail outlets of Jaivam Amritham, namely Elite Supermarket, Nissarga organic shop, AFCS supermarket and ESAF supermarket which were located in urban and peri-urban areas of Thrissur district. For the collection of the data, questionnaire was prepared, pretested and used for quantitative data and supplemented with key informant interview and case narrations as the qualitative data. There after data were coded, analysed and interpreted by using descriptive statistics with the help of SPSS-version 20 computer program.

This study was ended up with appropriate results that gave a proper meaning to the objectives of the study, which will be beneficial for AFSCB in future time. The major findings of the study are summarised as follows.

## **7.1 Summary of findings**

The major findings of the study are as follows;

### ***7.1.1 Consumers' attitude towards organic rice***

A favourable attitude was observed among the consumers towards organic rice. Consumers preferred organic rice over conventional rice because, compared to the risks of health hazards with pesticide residue leading even to cancer, using the complete organic rice was highly beneficial for them. Furthermore, in order to have safe food habits for the family and to achieve the whole family's welfare, getting this type of organic rice was really good. Consumers also had an opinion that the production and marketing of organic rice to be encouraged even though it costs almost double the price of conventional rice, since it was for the welfare of the society. The premium for organic rice results from higher production and distribution costs, as well as consumers' willingness to pay extra for organic rice. The consumers were ready to pay for premium products like Jaivam Amritham. As long as demand increases faster than supply and prices of conventionally produced rice remain constant, organic rice will continue to sell for higher prices.

### ***7.1.2 Consumers opinion regarding the purchase of Jaivam Amritham***

Consumers were willing to purchase Jaivam Amritham because they considered it as organic and free from toxic pesticide residues. Beside to this, they preferred Jaivam Amritham because, it was highly nutritious and it helped to prevent diseases. It is a premium product, but at the same time consumers conceded that it was really worth to pay for such organic rice since these products meets the value of their money. Furthermore, consumers purchased Jaivam Amritham not because of the price, but because of its nutritional benefits. Presently, it is not available in all supermarkets. If it is supplemented in all supermarkets, then the demand can be further increased.

### ***7.1.3 Influential factors towards consumer preference of Jaivam Amritham***

From the study it was observed that, the most important influential factors towards the purchase of Jaivam Amritham were the lack of any pesticide residues, high nutritive value, good taste, affordable price and reduced cooking time. The



consumers strongly relayed on the quality parameters of Jaivam Amritham. Among all these, non-toxic nature and the nutritional benefits attracted them more towards Jaivam Amritham. It is because of the fact 'concern for human health and safety', which is a key factor that influences consumer preference for organic food like Jaivam Amritham. The various studies had observed a consistent deterioration in human health over time and that motivated the consumers to buy Jaivam Amritham as insurance and/or investment in health.

#### ***7.1.4 Marketing strategies of Jaivam Amritham***

It was observed from the study that, most of the consumers of Jaivam Amritham were regular purchasers for the past few months. There is a growing awareness and demand among consumers for healthy food like Jaivam Amritham. It was found that the potential demand for Jaivam Amritham is far higher than present production can satisfy. Since the supply and retail system is still weakly developed, this potential demand cannot be met. Jaivam Amritham is retailed through supermarkets and organic shops and a few through direct marketing. Among all these, consumers preferred to get Jaivam Amritham through all supermarkets. When it comes to the packaging of Jaivam Amritham, consumers preferred 2 Kg bag more than the prevailing package sizes. Increasing the purchasing power of consumer signals an opportunity for Jaivam Amritham to flourish. Growing health awareness coupled with increasing purchasing power enhances the affordability towards Jaivam Amritham.

#### ***7.1.5 Production related factors***

When compared to the conventional rice production, organic rice production incurs high cost. It was difficult for a Farmers' Service Co-operative Bank like AFSCB to continue such an endeavour alone. Thus they are waiting for the helping hands from the govt either as an incentive or as a financial support. As far as the demand is prevailing in the market, investing in such project will not make losses.

## 7.2 Suggestions

Jaivam Amritham is slowly but steadily finding its way in the average households of Kerala. As an upcoming segment in retail, it is indicative of the rising health-consciousness among the consumers. Jaivam Amritham market is gradually witnessing the shift from being an elitist to a healthy product and showing signs of consistent growth.

1. Lack of established marketing channels is the major weaknesses of Jaivam Amritham. The demand for the product is still exists in the market. Thus, AFSCB need to develop a proper marketing channel for the supply of the product. Proper infrastructure facilities need to be strengthened. It is better to market the product directly to the retailers (without the intermediary of wholesaler) so the price of the product can still be reduced and could make available to all the classes of people.
2. Improving the packaging and providing more technical backup to the producers and distributors are the need of the hour. More investments are required for research and development for improving the quality of the product.
3. AFSCB has to concentrate on the packaging of Jaivam Amritham. It will be comfortable for the consumer if it is available in 2 kg bags. At the same time, they should take necessary steps to make the packaging of Jaivam Amritham more attractive.
4. There are both categories of consumers exists in the market, those who prefer to retain bran content and those who don't, both with almost equal proportion. Thus, it is the right time to create awareness among the people regarding the nutritive values and health benefits of bran. Rather than reducing the bran in rice, it is better to promote the product by highlighting positive aspects of bran.
5. It is better to think about different marketing initiatives in order to communicate the product to consumers. Consumers' attention could be catchable only through proper promotion. It is the time to invest in

advertisements to promote the product. The following is a list of the most common methods applied:

- Printing and distribution of leaflets: Promotional materials can print in mass quantities and can distribute, providing information about AFSCB, product, and sometimes activities.
  - Labels on the packages that shows the nutritional aspects of Jaivam Amritham in comparison with other conventional rice.
  - Mass media: Articles can publish in the printed media such as newspapers and magazines, describing the benefits of Jaivam Amritham. They can have a link with journalists who are interested in the issue and support the organic movement.
  - Advertisements: Advertise in local newspapers that have wide circulation. Placing banners in strategic locations within the city could also be attempted. Not only that, they can also think about advertising through radio.
  - Direct marketing: This can be undertaken over the phone as recorded calls.
  - Display information and photographs: Display the photographs of keystones in supermarkets to sensitise the customers about the people behind the product.
  - Participation in trade and food fairs: Display and sell products at trade and food fair (e.g. Agri expo) and create awareness among the people which could boost the sale of Jaivam Amritham domestically.
6. If proper promotion is forwarded, AFSCB can supply the product to additional outlets in the major populated cities of the state.
  7. It is better to make Jaivam Amritham available in all elite supermarkets where premium class of consumers come.
  8. It is preferred to have special racks for Jaivam Amritham in the supermarket so that the consumers could easily find out the product. In some of the supermarkets it is already exists but, something more could have done to

attract the consumers. Not only that, there should someone in the supermarket who is able to clarify the doubts of the customers.

9. It is better to focus on market development in order to reach another segment of consumers, i.e., prospective consumers who show concern for health and the environment but do not buy organic products yet. In this case, two attainable strategies could be creation of "Jaivam Amritham corners" in places of purchase and placing brochures in these areas.
10. It is possible to expand the Jaivam Amritham sales through a market penetration strategy directed at different segments of consumers based on their socio- economic profile and other factors which are influencing them for consuming Jaivam Amritham.
11. It is necessary to setup some awareness programs in Krishibhavans at the district level, which can be can be imparted from Principal Agriculture Officer so that number of farmers can come under this umbrella. The rising health-consciousness will certainly trigger demand in the near future.
12. Organic products are having higher demand in the export market. It could be said that, if opportunities exist, it could be worthwhile to focus on both the domestic market and the export market. The successful export of one organic item could serve as an important money generator for the development of the domestic market. It is the time to think about the opportunities of export of Jaivam Amritham.
13. If AFSCB can invest means they can think about a start up i.e., an 'Organic Ethnic Food Shop', where only organic foods cooked and served. Not only rice, they can start organic vegetable cultivation wherever possible and can included in this shop.
14. The rules and regulations for Lacon organic certification were profound and so also the production cost was really high. Hence, government assistance is to be given to the producer.
15. Refinement of organic production package by the expert is highly essential for realization of better productivity from the Kole lands.

16. As there is a sudden decline in the organic production practices, a sustenance production incentive can be given to the growers to make them involved in the aspect. A special crop insurance policy can be set up by the govt for organically produced produces, since the yield of such produce cannot be predictable.

For the next marketing development, AFSCB should focus on new package design with corporate identity. This will create good impression for Jaivam Amritham and organisation. However, professional package design requires substantial investment. Future market promotion should include "product benefits". This is linked with a sales strategy in which the target group is the non-user consumer. To have access to this new consumer group, creative publicity activities are needed. Again, product quality becomes a critical issue as product benefits also include product quality. Quality development is therefore a key to market success.

### **7.3 Conclusion**

The market for organic rice, augmenting rapidly, still constitutes a niche in the food sector. In this context Adat Farmers' Service Co-operative Bank has initiated its first step towards the enrichment of Organic rice market in the state. But the market for the organic rice is still sedentary in nature. In present scenario health consider drives the increase in demand for organic products. But, the price premium attached to the organic certification makes these products more affordable principally to urban, educated and affluent consumers. The Government and exporters should take up task of locating such organizations in the country and encourage them to continue with organic farming. Not that the initiatives have not begin- they have but now an awareness and communication programme should be taken by both as Government information and Education programme at farm level while corporate body should aggressively carry out mass media awareness on Development of Organic food. Domestic markets are now taking its full life for the expansion of organic rice. The market potential for organic rice is now showing an upward trend. In this context, AFSCB can go for collaboration between public and private agencies and that will be beneficial to support technical and financial activities. From this study, it was observed that the consumers prefer Jaivam Amritham for number of reasons and they

are willing to purchase it even for the premium cost. But at the same time, the constraints faced by the producers must be mitigated. Thus, when the demand is pertain in the market and if proper support is extended to the producer, AFSCB can think about the expansion of its organic rice production.

173856



## *Bibliography*

---

## BIBLIOGRAPHY

### Books

Ghorbani, M. and Hamraz, S. 2009. *A survey on factors affecting on consumer's potential willingness to pay for organic products in Iran*. Trends in Agricultural Economics 2(1), pp. 10-16.

Helga, W. 2011. *Organic Agriculture Worldwide Key results from the global survey on organic agriculture 2011*.

Sharma, A. K. 2007. *A Handbook of Organic Farming*. Agrobios (India), Jodhpur, 45p.

### Journals

Aryal, K.P., Chaudhary, P., Pandit, S. and Sharma, G. 2009. Consumers' Willingness to Pay for Organic Products: A Case from Kathmandu Valley. *The Journal of Agriculture and Environment*. Vol. 10, pp. 15-26.

Batt, P.J. and Giblett, M. 1999. A pilot study of consumer attitudes to organic fresh fruits and vegetables in Western Australia. *Food Australia*. Vol. 51, pp. 549-550.

Bin Mai, N. M. 2010. No Free Lunch: Price Premium for Privacy Seal-Bearing Vendors. *Journal of Management Information Systems*. 5(2). p. 12

Diamantopoulos, A., Schlegelmilch, B.B., Sincovics, R. R. and Bohlen, G. M. 2003. Can Socio-Demographics Still Play a Role in Profiling Green Consumers? A Review of the Evidence and Empirical Investigation. *Journal of Business Research*. Vol. 56, pp. 465-480.

Harris, M. 2007. Green Tick: an example of sustainability certification of goods and services. *Management of Environmental Quality: An International Journal*, Vol. 18(2), pp. 167 – 178.

Kamal, P., Aryal *et.al.* 2009. Consumers' willingness to pay for Organic products: A case from Kathmandu Valley. *The Journal of Agriculture and Environment*, 10 (12), pp. 25-27.



Krissoff, B. 1998. Emergence of U.S. organic agriculture - can we compete? *American Journal of Agricultural Economics*. 80(5), pp. 1130-1133.

Krystallis, A. and Chrysohoidis, G. 2005. Consumers' willingness to pay for organic food: Factors that affect it and variation per organic product type. *British Food Journal*. 107(5), pp. 320- 343.

Makatouni, A. 2002. What motivates consumers to buy organic food in UK? Results from a qualitative study. *British Food Journal*. 104(3/4/5), pp. 345-352.

Mohan, R. P. and Subha, R. 2005. Organic farming: Its relevance to the Indian context. *Journal of Current Science*. 88 (4), pp. 561-568.

Pal, S.S., Singh, R., Chinmay, R. and Jat, M. L. n. d Prospects and Problems of growing crops organically in upper genetic plains Rengim. *Indian Farming*. 53 (4), pp. 30-32.

Pandey, j. and Singh, A. 2012. Opportunities and constraints in organic farming: An Indian perspective. *Journal of Scientific Research*. Vol. 56, pp. 47-72.

Rao, R.A. and Bergem, M.E. 1992. Price premium variations as a consequence of buyer's lack of information. *Journal of consumer behaviour*. 19(3), pp. 412-423.

Sandalidou, E., Baourkis, G. and Siskos, Y. 2002. Customers' perspectives on the quality of organic olive oil in Greece: A satisfaction evaluation approach. *British Food Journal*. 104(3/4/5), pp. 391- 406.

Vindigni, G., Janssen, M.A. and Jager, W. 2002. Organic food consumption: A multi-theoretical framework of consumer decision making. *British Food Journal*. 104(8), pp. 624-642.

Wanninayake, C.B., Aruna Shantha, A. 2008. Pricing economic value of organic rice under dichotomous choice framework: An environmental perspective. *The Journal of Agriculture and Environment*. Vol. 10(8), p. 56.

## **Thesis**

Anil, J. 2009. Stakeholders Perception Towards Branding Organic Rice- A case

study at Adat Panchayath Thrissur . B.Sc. (C & B) thesis, College of Co-operation, Banking and Management. Kerala Agricultural University, Thrissur, 72p.

Aryal, K.P. 2008. General perceptions of producer, traders and consumers about organic products in Kathmandu valley. 56p.

Reshma, T. 2015. Sustaining organic farming in Kerala: farmers' apprehensions and appreciations - current approach and the way forward. MBA (ABM) Major Project Report. College of Co-operation, Banking and Management. Kerala Agricultural University.

## Reports

Aguirre, Gonzales, J. A. 2001. Marketing and Consumption of Organic Products in Costa Rica. *Working Paper No.5*. The School for Field Studies, Centre for Sustainable Development, Atenas, Costa Rica.

Ghorbani, M., Mahmoudi, H. and Liaghati, H. 2007. Consumers' Demands and Preferences for Organic Foods: A Survey Study in Mashhad, Iran. 3rd QLIF Congress.

Kaushik, K.K. 1997. Sustainable Agriculture: Issues and Policy Implications, Productivity.

Menon, M. K. 2008. Organic Agriculture and Market Potential for Organic products in India. In Chaudhary, K., Aryal and Tharu, D. (ed.), *Proceedings of International Workshop on Opportunities and Challenges of Organic Production and Marketing in South Asia*, NPG, Kathmandu, Nepal, pp.87-94.

Millock, K., Hansen, L.G., Wier, M. and Anderson, L. M. 2002. Willingness to Pay for Organic products: A Comparison between Survey Data and Panel Data from Denmark, AKF Denmark. p. 12.

Pinna M., Del Chiappa, G. and Velcovska, S. 2014. The food quality labels: Awareness and willingness to pay in the context of Italy. In J. C. Andreani & U. Collesei (eds). *Proceedings from the XII International Conference Marketing Trends*, Paris-Venice: Paris - Marketing Trends Association.

- Rahni, D. 2004. 'Organic agriculture: A Future Trend for better health and environment.'
- Saba, M. K. 2008. Organic Agriculture and Market Potential for Organic products in India. In: Chaudhary, P., Aryal, K. and Tharu, D. (ed.), *Proceedings of International Workshop on Opportunities and Challenges of Organic Production and Marketing in South Asia*, NPG, Kathmandu, Nepal, pp.120-124.
- Save, B.1992. Natural Farming-An Experience, in Somani and others. *Proceedings of National Seminar on Natural Farming*, Rajasthan College of Agriculture, Udaipur.
- Sha.1983. Allocative efficiency, tenure and technology in Punjab's irrigated agriculture. A case study approach.
- Shakya, D. B. 2005. Organic Products: International Market. In G. Sharma and P.B. Thapa (ed.). *Proceeding of National workshop on organic agriculture and food security*. Kathmandu Nepal, pp. 145-157.
- Sharma, A. K. 2001. The potential for organic farming in the dry lands of India. *Arid Lands Newsletter*, Office of Arid Lands Studies, College of Agriculture and Life Sciences.
- Singh, Y.V., Singh, B. V., Pabbi, S. and Singh, P.K. 2003. Impact of Organic Farming on Yield and Quality of BASMATI Rice and Soil Properties.
- Sunandini, G. P., Shaik haffis, Ramrao, C. A. and Reddy, Y. V. R. 1992. Input use efficiency on paddy farms in west Godawari district of Andhra Pradesh.
- Sununtar, S. PingSun, L. and Junning, C. 2001. Contract Farming and Poverty Reduction: The Case of Organic Rice Contract Farming in Thailand.
- Van Elzakker, B., Parrott, n., Chola M. and Adimdao, M. 2007. Organic Farming In Africa in H. Willer and M. Yusseffi (Eds.) *The World of Organic Agriculture: Statistics and Emerging Trends*. Bonn, IFOAM, pp.96-106.
- Van, E. B., Parrott, N., Chola, M., Chonya, and Adimdao, S. 2007. Organic Farming In Africa.

Willer, and Yousseffi, M. 2009. The World of Organic Agriculture: Statistics and Emerging Trends. Bonn, IFOAM, pp. 96-106.

Willer, H. and Klicher, L. 2009. The World of Organic Agriculture. Statistics and Emerging Trends 2009. p. 21.

### Websites

Charyulu, D. and Biswas. 2010. *Economics and Efficiency of Organic Farming vis-à-vis Conventional Farming in India*. Indian Institute of Management, Ahmedabad. Available: <http://www.iimahd.ernet.in/publications/data/2010-04-03Charyulu.pdf> [04 April 2016].

Corporation of Thrissur. 2016. Corporation of Thrissur home page [on-line]. Available: <http://www.corporationofthrissur.net/agriculture> [06 April 2016].

GOK[Government of Kerala].2008. *Kerala State Organic Farming Policy, Strategy and Action Plan* [on-line]. Available: [http://foodprocessingindia.co.in/state\\_pdf/Kerala/Kerala-Organic-Farming-Policy\\_2008.PDF](http://foodprocessingindia.co.in/state_pdf/Kerala/Kerala-Organic-Farming-Policy_2008.PDF) [10 April 2016]

Jeena, T. 2010. Understanding the Kole Lands in Kerala as A Multiple Use Wetland Ecosystem [on-line]. Available: [http://www.cess.ac.in/cesshome/wp/WP\\_89.pdf](http://www.cess.ac.in/cesshome/wp/WP_89.pdf) [06 April 2016].

Ravi, N. 2014. Consumer Preferences and Influencing Factors for Purchase Places of Organic Food Products: Empirical Evidence from South India. *Electr. J.* [e-journal] 5(44), pp. 5-17 Available: [https://www.researchgate.net/publication/283072178\\_Consumer\\_Preferences\\_and\\_Influencing\\_Factors\\_for\\_Purchase\\_Places\\_of\\_Organic\\_Food\\_Products\\_Empirical\\_Evidence\\_from\\_South\\_India](https://www.researchgate.net/publication/283072178_Consumer_Preferences_and_Influencing_Factors_for_Purchase_Places_of_Organic_Food_Products_Empirical_Evidence_from_South_India)[06 July 2016].

Singh, S. 2013. Organic Products: Marketing Practices and Problems in the Plains and Hilly Regions of Uttarakhand. *Electr. J.* [e-journal] 43(2). Available: <http://www.indianjournalofmarketing.com/index.php/ijom/article/view/34050> [06 April 2016].

Thrissur Kole Wetlands. 2016. Wikipedia The Free Encyclopedia home page [online]. Available: [https://en.wikipedia.org/wiki/Thrissur\\_Kole\\_Wetlands](https://en.wikipedia.org/wiki/Thrissur_Kole_Wetlands)[06 May 2016].

Vaisakh, E. 2015. *Kole Land Awaits an Organic Shift*. The New Indian Express [online]. Available: <http://www.newindianexpress.com/states/kerala/Kole-Land-Awaits-an-Organic-Shift/2015/10/02/article3058032.ece> [04 June 2016].

*Appendix*

---

APPENDIX



COLLEGE OF CO-OPERATION BANKING & MANAGEMENT

KERALA AGRICULTURAL UNIVERSITY

VELLANIKKARA, KAU (P.O), TRICHUR

ANALYSIS OF MARKETING OPPORTUNITIES OF ORGANIC RICE – JAIVAM  
AMRITHAM

SURVEY SCHEDULE TO CONSUMERS

1. Name :
2. Address :
3. Gender  
a) Male                       b) Female
4. Education qualification of Father/ Mother  
a) Secondary                       b) Higher secondary   
c) Under Graduate                       d) Post Graduate
5. Monthly income of the family  
a) Below 10,000                       b) 10,001-20,000                       c) 20,001-30,000   
d) 30,001-40,000                       e) Above 40,000
6. Occupation of Father/ Mother

- a) Self employed       b) Govt. job       c) Non Govt. job   
 d) Daily wages       e) Pensioner       f) business

7. Family size

- a) 2       b) 3   
 c) 4       d) Above 4

8. Regarding purchasing 'Jaivam Amritham', you are ...

- a) Regular       b) Occasionally       c) Whenever available

9. Did you use any other organic rice before using Jaivam Amritham?

- a) Yes       b) No

If yes, what is the reason for changing to Jaivam Amritham?

10. From where did you get the information regarding Jaivam Amritham?

- a) News paper       b) Advertisements       c) Krishibhavan   
 d) AFSC society       e) Others       f) From other supermarkets

11. How long you are using Jaivam Amritham?

- a) 2 months       b) 4 months       c) 6 months   
 d) More than 6 months

12. What is the reason for buying Jaivam Amritham?



- a) Taste     b) Nutritional benefits     c) Less cooking time   
d) Native rice     e) No pesticide residue     f) Organic certification

13. Are you satisfied with the price of Jaivam Amritham?

- a) Satisfied     b) More, but buying due to its health benefits

14. The taste of Jaivam Amritham is?

- a) Good     b) Very good     ...  
c) Bad     d) Very bad

15. The bran content in Jaivam Amritham is more?

- a) Yes     b) No

If yes, do you like to reduce the bran content?

- a) Yes     b) No

16. The package of Jaivam Amritham that you often buy?

- a) Loose     b) 5 Kg     c) 10 Kg

17. The package of Jaivam Amritham that you prefer to buy?

- a) Loose     b) 2 Kg     c) 5 Kg   
d) 10 Kg     e) More than 10 Kg

18. From where do you prefer to buy Jaivam Amritham?

- a) From all supermarkets     b) Only from organic shops   
c) Directly from farmers

20. General attitude towards organic rice

| SL NO | Product attributes              | Strongly Agree | Agree | No opinion | Strongly Disagree | Disagree |
|-------|---------------------------------|----------------|-------|------------|-------------------|----------|
| 1     | Safe for consumption            |                |       |            |                   |          |
| 2     | Good taste                      |                |       |            |                   |          |
| 3     | Help to prevent diseases        |                |       |            |                   |          |
| 4     | Requires less cooking time      |                |       |            |                   |          |
| 5     | Ab of Toxic pesticidal residues |                |       |            |                   |          |
| 6     | It is worth paying more         |                |       |            |                   |          |
| 7     | Have good nutrnl befts          |                |       |            |                   |          |
| 8     | organic rice is more fresh      |                |       |            |                   |          |

Thank you for your kind co-operation

**ജൈവം അമൃതം അരിയുടെ ഉപഭോക്താവിനുള്ള ചോദ്യാവലി**

1. പേര് :
2. മേൽവിലാസം :
3. സ്ത്രീ  പുരുഷൻ
4. ഗൃഹനാമന്റെ /ഗൃഹനാമയുടെ വിദ്യാഭ്യാസം :
 

|  |   |
|--|---|
| a) സെക്കന്ററി <input type="checkbox"/> | b) ഹയർ സെക്കന്ററി <input type="checkbox"/>    |
| c) ബിരുദം <input type="checkbox"/>     | d) ബിരുദാനന്തരബിരുദം <input type="checkbox"/> |
5. കുടുംബത്തിലെ മൊത്ത മാസ വരുമാനം
 

|   |  |   |
|---|--|---|
| a) 10,000 ൽ താഴെ <input type="checkbox"/>   | b) 10,001-20,000 <input type="checkbox"/>    | c) 20,001-30,000 <input type="checkbox"/> |
| d) 30,001 - 40,000 <input type="checkbox"/> | e) 40,001 നു മുകളിൽ <input type="checkbox"/> |   |
6. ഗൃഹനാമന്റെ /ഗൃഹനാമയുടെ തൊഴിൽ സ്വയം തൊഴിൽ  സർക്കാർ ജോലി  സർക്കാർ ഇതര ജോലി   
 ദിവസക്കൂലി  പെൻഷണർ  വ്യവസായം
7. കുടുംബാംഗങ്ങളുടെ എണ്ണം  
 2  3  4  4-ൽ കൂടുതൽ
8. ജൈവം അമൃതം അരി വാങ്ങിക്കാറുണ്ടോ?  
 സ്ഥിരമായി  വല്ലപ്പോഴും  കിട്ടുമ്പോഴെല്ലാം വാങ്ങിക്കുന്നു
9. വാങ്ങിക്കാറില്ല   
 ജൈവം അമൃതം വാങ്ങുന്നതിന് മുമ്പ് മറ്റേതെങ്കിലും ജൈവ അരി ഉപയോഗിച്ചിരുന്നോ?  
 ഉണ്ട്  ഇല്ല   
 ഉണ്ടെങ്കിൽ ഏത്? ജൈവം അമൃതം അരിയിലേക്കു മാറാനുള്ള കാരണം.
10. ജൈവം അമൃതം അരിയെക്കുറിച്ചുള്ള വിവരം എവിടെ നിന്ന് അറിഞ്ഞു?  
 ന്യൂസ് പേപ്പർ  പരസ്യങ്ങൾ  കൃഷിഭവൻ   
 അടാട്ട് ഫാർമേഴ്സ് സർവ്വീസ് സഹകരണ സംഘം വഴി   
 മറ്റുള്ളവർ പറഞ്ഞ് കേട്ട്  സൂപ്പർ മാർക്കറ്റിൽ കണ്ടപ്പോൾ
11. ജൈവം അമൃതം അരി ഉപയോഗിക്കാൻ തുടങ്ങിയിട്ട് എത്ര നാളായി?  
 രണ്ട് മാസം  നാല് മാസം  ആറ് മാസം   
 ആറിൽ കൂടുതൽ
12. എന്തുകൊണ്ട് ജൈവം അമൃതം അരി ഇഷ്ടപ്പെടുന്നു?  
 സ്വാദ്  പോഷകഗുണം  എളുപ്പത്തിൽ വേവുന്നത് കൊണ്ട്   
 നാട്ടിൽനിന്ന് തന്നെയുള്ള അരി ആയതിനാൽ   
 വിഷരഹിതമായതിനാൽ  ജൈവ സർട്ടിഫിക്കറ്റ് ഉള്ളതുകൊണ്ട്

13. ജൈവം അമൃതം അരിയുടെ ഇപ്പോൾ നിലവിലുള്ള വിലയിൽ താങ്കൾ തൃപ്തനാണോ? തൃപ്തികരം  കൂടുതലാണ് എങ്കിലും ഗുണം അറിഞ്ഞുകൊണ്ട് വാങ്ങിക്കുന്നു
14. ജൈവം അമൃതം അരിയുടെ സ്വാദ് നല്ലത്  വളരെ നല്ലത്  മോശം  തീരെ മോശം  ...
15. ജൈവം അമൃതം അരിയിൽ തവിട് കൂടുതലാണെന്ന് തോന്നുന്നുണ്ടോ? ഉണ്ട്  ഇല്ല   
ഉണ്ടെങ്കിൽ കുറയ്ക്കണമെന്ന് ആഗ്രഹിക്കുന്നുണ്ടോ? ഉണ്ട്  ഇല്ല
16. ജൈവം അമൃതം അരിയുടെ ഏതു തരം പാക്കേജിങ്ങാണ് നിങ്ങൾ വാങ്ങുന്നത്? ഇഷ്ടമുള്ള അളവ് തൂക്കി വാങ്ങിക്കുന്നു  5 കിലോ  10 കിലോ
17. ഏതു തരം പാക്കേജിൽ അരി ലഭ്യമാകാനാണ് നിങ്ങൾ താൽപ്പര്യപ്പെടുന്നത്? തൂക്കി വാങ്ങുന്നത്  2  5  10   
10 -ൽ കൂടുതൽ
18. ജൈവം അമൃതം അരി എവിടെ നിന്നും വാങ്ങുവാൻ താൽപ്പര്യപ്പെടുന്നു? എല്ലാ വിധ സൂപ്പർമാർക്കറ്റിൽ നിന്നും  ജൈവഷോപ്പുകളിൽ നിന്നും മാത്രം   
കർഷകനിൽനിന്ന് നേരിട്ട്
19. ജൈവ അരിയെ കുറിച്ചുള്ള പൊതു അഭിപ്രായം

| ക്രമ നം | അഭിപ്രായങ്ങൾ   | ശക്തമായ യോജിക്കുന്നു | യോജിക്കുന്നു | വിയോജിക്കുന്നു | ശക്തമായി വിയോജിക്കുന്നു | യാതൊരു അഭിപ്രായവും ഇല്ല |
|---------|--|----------------------|--------------|----------------|-------------------------|-------------------------|
| 1       | അരി കേരളത്തിന്റെ നിത്യോപയോഗമായിരിക്കേ, വിലകൂടിയ ജൈവ അരി ഉൽപാദിപ്പിച്ച് അത് വിപണനം ചെയ്യുന്നത് നിരുത്സാഹപ്പെടുത്തേണ്ട കാര്യമാണ്                             |                      |              |                |                         |                         |
| 2       | കുടുംബത്തിനു മൊത്തം സുരക്ഷിത ഭക്ഷണം നൽകേണ്ടതിനാൽ വില അൽപം കൂടുതലാണെങ്കിലും ജൈവം അമൃതം പോലുള്ള ജൈവ അരി വാങ്ങുന്നത് സഹായകരമാണ്                               |                      |              |                |                         |                         |
| 3       | ജൈവ അരി ഉപയോഗിക്കുന്നതിൽ യാതൊരു പ്രാധാന്യവുമില്ല. കാരണം, നെല്ല് കുത്തി, അതിനു ശേഷം അത് പാകം ചെയ്യുമ്പോൾ അരിയിൽ അടങ്ങിയിരിക്കുന്ന വിഷാംശങ്ങൾ ഇല്ലാതാകുന്നു. |                      |              |                |                         |                         |
| 4       | കീടനാശിനികൾ ഉപയോഗിച്ചതുകൊണ്ട് മാത്രം ഭക്ഷിക്കാനുള്ള അരി വിഷമയമാകുന്നില്ല.  |                      |              |                |                         |                         |
| 5       | അരിയിലെ അവശിഷ്ട വിഷാംശം മൂലം മാർക രോഗങ്ങൾ ഉണ്ടാകാൻ സാധ്യതയുള്ളതിനാൽ ജൈവം അമൃതം പോലുള്ള ജൈവ അരി ഉപയോഗിക്കുന്നത് നല്ലതാണ്.                                   |                      |              |                |                         |                         |
| 6       | കുടുംബത്തിന്റെ ആയുരാരോഗ്യം കണക്കിലെടുക്കുമ്പോൾ ഭക്ഷ്യയോജ്യമായ ഇത്തരം ജൈവ അരിയുടെ വില കണക്കിലെടുക്കേണ്ട ആവശ്യമില്ല  |                      |              |                |                         |                         |

20. ജൈവ അമൃതം അരിയെക്കുറിച്ചുള്ള അഭിപ്രായം.

| ക്രമ നം | അഭിപ്രായങ്ങൾ             | ശക്തമായ യോജിക്കുന്നു | യോജിക്കുന്നു | വിയോജിക്കുന്നു | ശക്തമായി വിയോജിക്കുന്നു | യാതൊരു അഭിപ്രായവും ഇല്ല |
|---------|--------------------------|----------------------|--------------|----------------|-------------------------|-------------------------|
| 1.      | സ്വാദിച്ഛം               |                      |              |                |                         |                         |
| 2.      | രോഗങ്ങളെ തടയുന്നു        |                      |              |                |                         |                         |
| 3.      | എളുപ്പത്തിൽ വേവുന്നു     |                      |              |                |                         |                         |
| 4.      | തുപ്തികരമായ വില          |                      |              |                |                         |                         |
| 5.      | മാരക അവശിഷ്ടവിഷാംശം ഇല്ല |                      |              |                |                         |                         |
| 6.      | ഉയർന്ന പോഷകഗുണം          |                      |              |                |                         |                         |

21. മറ്റ് അഭിപ്രായങ്ങൾ രേഖപ്പെടുത്തുക.

സഹകരിച്ചതിന് നന്ദി

*Annexure*

---

ANNEXURE

Conducting Focused Group Discussions



Conducting Key Informants Interviews

