

Market Analysis of Packed Tender Coconut Water in India



A Project Funded by
Coconut Development Board, Kochi



उत्तमा वृत्तिस्तु कृषिकर्मैव

Institute of Agri Business Management
Swami Keshwanand Rajasthan Agricultural University
Bikaner



Project Team

Dr. Aditi Mathur

Principal Investigator

Assistant Professor, Institute of Agri Business Management
Swami Keshwanand Rajasthan Agricultural University, Bikaner

Ms. Gadhe Shruthi

Co Principal Investigator

PhD Scholar,

Institute of Agri Business Management
Swami Keshwanand Rajasthan Agricultural University, Bikaner

Under the Guidance of

Ms. Deepthi Nair

Deputy Director, Marketing
Coconut Development Board, Kochi, Kerala

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Coconut Water in India**

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Kochi, Kerala**

**Submitted by
Dr. Aditi Mathur
Principal Investigator**

**INSTITUTE OF AGRI BUSINESS MANAGEMENT
SWAMI KESHWANAND RAJASTHAN AGRICULTURAL UNIVERSITY
BIKANER - 334006**

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Executive Summary

Coconut water is gaining importance in present days as people are becoming more health conscious and shifting from carbonated drinks to fruit juices. Coconut water is a good substitute for carbonated drinks as it contains high amount of nutritional value. Considering the growing acceptance and popularity of coconut water as a healthy drink, the study was carried out to understand the market status and analyse it for seeking clearer insight of packed tender coconut water. The major objectives of the study were to study the present status of Packed Tender Coconut Water (PTCW) in India, analyze the consumer behaviour for Packed Tender Coconut Water in terms of awareness, perception, preference and buying behavior, identify the various marketing channels and their efficiency for Packed Tender Coconut Water and suggest a suitable marketing strategy for it.

Descriptive type of research was carried out and both primary and secondary data is used for the study. Multistage sampling technique is used for the selection of respondents and the study area. Eight states were selected for the study viz. Delhi, Rajasthan, Gujarat, Punjab, Madhya Pradesh, Tamil Nadu, Karnataka and Telangana. One potential city from each state was selected based on the availability of packed tender coconut water. The cities selected were Delhi, Jaipur, Ahmadabad, Chandigarh, Indore, Hyderabad, Bangalore and Chennai. From the cities 800 consumers were identified by using mall interception method for the study who were asked to fill the questionnaire which was framed to seek information related to packed tender coconut water. The data collected from the respondents were analyzed by using different statistical tools.

The market of packed tender coconut water is niche and fragmented, there exists a small group of players in different parts of the country. Some of the players include Jain Agro Food Products Private Limited (Bengaluru), Dabur India Limited (Ghaziabad), Manpasand Beverages Limited (Vadodara), Sakthi Coco Products (Pollachi), Vaarun Aqua Beverages Private Limited (Hyderabad), Agricoles Natural Foods Pvt Ltd (Palakkad), LifeTree Agro Foods (Palakkad), Yogic Foods Pvt Ltd (Delhi). 31 percent of Indian packed tender coconut water is available in northern region which means 185.38 million by values followed by 26 percent in the southern region which accounts to million. 23 percent of the share is occupied by western region which accounts to 137.54 million by values and 20 percent is occupied by eastern region which accounts to 119.6 million. The overall demand assessed for packed tender coconut water come out to be more in the northern region. The majority of respondents are under the age group of 20-35 years and graduates both in northern

and southern region with an occupation of professionals with an income group of Rs.51,000-Rs.80,000 monthly. Out of 1400 respondents only 863 respondents were aware which accounts to 62 percent and 537 respondents were unaware.

Majority of the aware consumers (644) had tasted packed tender coconut water whereas 156 consumers have not tasted packed tender coconut water, as they had purchased it for their family members and 45 percent of consumers tasted because of the health benefit whereas 32 percent of consumers tasted because of it being a novel product in the market and 23 percent of consumers tasted because of the unavailability of natural tender coconut water. Most of the consumers tasted the brand Cocolal which occupies the market share of 34 percent as compared to other brands. Consumers' major reason for tasting had been the recommendation by doctor which accounts to 24 percent followed by 21 percent of consumers consume it for health benefits. Preferred occasion to consume packed tender coconut water is during sickness which accounts to 30 percent followed by travelling which accounts to 20 percent, at work 16 percent, when outside with family or friends 15 percent, other occasions 11 percent 324 consumers preferred tetra packing which accounts to 40 percent of the total share followed by 318 consumers who preferred plastic packing which is 40 percent and 158 consumers preferred glass packing.

Seasonal preference of packed tender coconut water was studied among 800 consumers, out of all the consumers, 490 consumers preferred to drink packed tender coconut water in summer season which accounts to 61 percent followed by 310 consumers who preferred throughout the year which accounts to 39 percent. Preferred parameters of consumers while purchasing packed tender coconut water was analysed and it was found that, 23 percent of consumers preferred the presentation on the shelf followed by 20 percent of the consumers who considered price, 18 percent of consumers preferred packing. Nearly 45 percent consumers checked the expiry date of packed tender coconut water. Out of 800 consumers, majority of the share is occupied by the purchase through offline mode which accounts to 71 percent and only 29 percent of the purchase is through the online mode. Association of demographic profile and mode of buying of packed tender coconut water in northern region shows that gender has only influence on mode of buying, checking of expiry date before buying and mode of payment at one percent significance and it has no influence on reason to drink packed tender coconut water, frequency of purchase and quantity of buying. Marital status has influence on mode of buying, quantity purchased of packed tender coconut water, mode of payment and it has no influence on reason to drink packed tender coconut water, frequency of purchase, checking of expiry date of packed tender coconut water before buying. Age group has influence on

reason to buy packed tender coconut water and checking expiry date of packed tender coconut water before buying and it has no influence on mode of buying, frequency of purchase, quantity, mode of payment. Educational qualification and occupation has influence on mode of buying, checking of expiry date, mode of payment and it has no influence on reason to drink packed tender coconut water, frequency of purchase and quantity. Monthly family income has no influence on any of the factors such as reason to drink packed tender coconut water, mode of buying, frequency of purchase, checking of expiry date, quantity and mode of payment whereas in southern region marital status has influence on mode of buying and frequency of purchase of packed tender coconut water at one percent significance and has no influence on reason to drink packed tender coconut water, checking of expiry date, quantity and mode of payment. Age group, Educational qualification and occupation has influence on mode of buying, checking of expiry date before purchasing of packed tender coconut water and mode of payment while purchasing and has no influence on reason to drink packed tender coconut water, frequency of purchase, quantity. Monthly family income as only influence on frequency of purchase of packed tender coconut water and mode of payment while purchasing whereas gender has no influence on any of the factors.

The myth of touch and feel of the product is the major factor which affects consumer's perception to buy in offline mode. Availability, awareness, offers, ease of comparison with other brands and ease of purchasing the product are the factors which influenced the consumers' perception to buy in offline mode. Saving time is the major factor which affects consumer's perception to buy in online mode. Availability of the product, offers provided by online sites, easy way to purchase, price, complete information regarding the product before purchase are the factors which influence the consumer's perception to buy in online mode.

There are mainly four channels of distribution in marketing of packed tender coconut water in India.

They are:

1. Manufacturer → C & F Agent → Distributor → Retailer → Consumer
2. Manufacturer → C & F Agent → Distributor → Wholesaler → Retailer → Consumer
3. Manufacture → C & F Agent → Super stockiest → Sub distributor → Retailer → Consumer
4. Manufacturer → Distributor → Retailer → Consumer

Among the four marketing channels, the net margin received by the manufacturer is highest in the fourth channel and same in all the remaining three channels. In the fourth channel, the manufacturers' margin is high because lack of middlemen in between him and the ultimate consumers.

Marketing efficiency shows that most efficient channel of marketing is Channel IV. Marketing efficiency of channel IV is 3.48, which is most efficient because of there is less number of marketing intermediary involved in this channel and marketing cost is very low in this channel and marketing margin is also low compared to other channels. The intermediaries perceived that packed tender coconut water is unique and gave the highest weightage whereas the credit facility provided by the manufacturer was given the least weightage.

Based on the data available from above objectives the marketing mix of packed tender coconut water was prepared as below

1. Product: Consumers preferred to purchase fresh tender coconut water but because of unavailability of tender coconuts in various geographical locations and consumers are shifting to drink packed tender coconut water due to health consciousness. The demand is high for the packed tender coconut water during summer season specially in the Northern region of India.
2. Price: The price of the packed tender coconut water is high as compared to tender coconut so consumers preferred price of packed tender coconut water at Rs. 20/- per bottle of 200 ml.
3. Place: The most preferred place of consumers to drink packed tender coconut water is when they are sick or commuting thus the most suitable places of availability of packed tender coconut water is high near hospitals and malls/ supermarket.
4. Promotion: People are unaware of packed tender coconut water because of no proper promotional activities carried out by the either players or Coconut Development Board. The players are expecting CDB to generate market promotional activities to boost the sales and acceptance of packed tender coconut water.
5. Packing: The consumers preferred to accept the tetra pack of packed tender coconut water as it is easy to carry, hygienic and it can be disposed easily.

The study also concludes with the segmentation, targeting and positioning of packed tender coconut water in India. Married, graduates, professionals of the age group 20-35 years can be segmented for packed tender coconut water. PTCW can be targeted for the income group of Rs.51000-Rs.80000/- per month as these people have more purchasing power. Health benefit was the most important reason for tasting packed tender coconut water in northern region whereas in southern region consume it due to its uniqueness. Packed tender coconut water

can be promoted by involving doctors, health workers and by providing free samples. 31 percent of people in northern region and 28 percent of people in southern region prefer to consume packed tender coconut water when they are sick overall 30 percent of people so it shall be positioned as healthy drink by doctors' recommendation Majority of people in northern region perception is that packed tender coconut water is a healthy replacement of fresh tender coconut water followed by a good substitute of carbonated drink whereas in southern region it is a good substitute of carbonated drink so it can be used as a refreshing and energy drink.

Chapter 1 Introduction

1.1 Background of the study

Coconut is an agricultural and livelihood crop for many people in Southeast Asia, the Pacific region, Africa and some countries in Latin America. The coconut palm (*Cocos nucifera Linn*) is one of the five legendary *Devavrikshas* and is considered as *Kalpavriksha* – the all giving tree – in Indian classics. Coconut is considered as the “tree of life” in developing countries as they depend on it as a source of food, medicine, shelter, fuel and furniture among others (Magat, 2006).

Coconut is grown in more than 90 countries of the world. Global production of coconut sums up to around 61 Million metric tons annually (2017-18). Among the Asian and Pacific Coconut Community (APCC), mainly six countries i.e. Philippines, Indonesia, India, Sri Lanka, Brazil and Vietnam together account for 80.65 per cent of the total area under coconut cultivation and about 82 per cent of world production (2017-2018). The area covered under the cultivation of coconut in the world is around 26 million hectares.

Table 1.1: List of major coconut producing countries in the world (2017-18)

Sr. No	Country	Production (MT)	Share (Percent)
1	Indonesia	18.30	30
2	Philippines	15.35	25.16
3	India	11.93	19.56
4	Brazil	2.89	4.74
5	Srilanka	2.51	4.11
6	Vietnam	1.30	2.13
7	New Guinea	1.20	1.97
8	Mexico	1.06	1.74
9	Thailand	1.01	1.66
10	Malaysia	0.65	1.06

Source: <http://coconutboard.nic.in/Statistics.aspx>

The overall production rate is in up trend since the last decade as the production has risen around 25 per cent. The major markets of coconut in the world are Indonesia, Philippines and Sri Lanka.

India has a vast coastline of 7517 Km and is the third largest coconut producer in the world. India contributes about 15.46 per cent in area and 18 per cent in terms of production of coconut in the world. The major portion of coconut cultivation is from the four south Indian states, namely Kerala, Tamil Nadu, Andhra Pradesh and Karnataka, which comes up to 90 per cent of total coconut production.

Coconuts are known for their great versatility, which has many traditional uses, ranging from food to cosmetics. Coconut is used as a regular part of diet for many people in the tropics and subtropics. Coconuts are distinct from other fruits for their large quantity of water and when immature, they are known as tender-nuts or jelly-nuts and may be harvested for their potable coconut water. When mature they can be used as seed nuts or processed to give oil from the kernel, charcoal from the hard shell, and coir from the fibrous husk. The oil and milk derived from coconut are used in cooking and frying, as well as in soaps and cosmetics.

Coconut provides food security and livelihood opportunities to 64 million people around globe and 12 million people in India (CDB annual report, 2018). Coconut crop requires hot and humid climate and sandy soil is suitable for coconut cultivation with growth factors of consistent rainfall and ample sunlight. The harvesting period of coconut varies based on the utilization of fruit. If coconut is used for the purpose of water then it is harvested in five to six months, when used for domestic purpose the coconut should be of eight to 10 months and when it is used for the purpose of oil it requires 10 to 12 months.

Coconut water is a gift of nature which is the first soft drink in the world. Coconut water has been consumed by the Indians and South Americans for the past 4000 years due to its innumerable health benefits and an eco friendly refreshing drink. Coconut water has a slightly sweet and nutty taste which doesn't taste like coconut and coconut water has a flavor of its own. Coconut water has long been the most popular beverage consumed in the tropics where it is considered not only a refreshing drink but a health tonic. Coconut water is considered as a super food because it filled with many minerals, vitamins, antioxidants, amino acids, enzymes, and growth factors. Coconut water is low in fat and has only a fifth of the sugar found in most fresh fruit juices. Its unique combination of nutrients gives it incredible health promoting properties.

Coconut water is a natural isotonic beverage which has almost the same level of electrolyte balance as in our blood. It is the 'fluid of life' that promotes anti-aging, healthy cell growth and rehydration. Coconut Water serves as a mineral drink with therapeutic properties that help in regaining the vitality of the human body. Coconut Water contains most of the minerals such as potassium, sodium, calcium, phosphorous, iron, copper, magnesium etc. The contents of arginine, alanine, cystine and serine in the protein of coconut water is higher than those in cow's milk. The amounts of electrolytes present in mineral content of coconut water are better at relieving dehydration and heat stroke than water and other fruit juices. Tropical people believe that coconut water prevents constipation, digestive disturbances, malnutrition, fatigue, kidney stones, osteoporosis, urinary tract infections, sterility, dysentery, influenza, and cholera. Coconut water has many benefits for skin and hair.

The coconut water has currently gained popularity due to its potential health benefits and as a best possible replacement of energy drink. Growing consumer preference toward natural and healthy drinks coupled with willingness to pay a higher price resulted in growing demand for coconut water. In due time, with increasing awareness among consumers and further product innovation there is a potential risk of coconut water replacing the demand for traditional soft and sports drinks. Coconut water is in a burgeoning growth phase and has become an integral part of the sports beverage market. The trend exists due to its nutritional benefits and natural hydrating qualities. The global sports beverage market, which encompasses the coconut water segment as well, is witnessing a phenomenal growth mainly due to rising health and fitness consciousness across the general population.

1.2 Global Scenario of Packed Tender Coconut Water

There are over 250 companies that offer a coconut-related beverage in 20,000 stores around the world. The coconut water category has exploded in the last few years, and is expected to be the next big beverage category. Since 2005, this new category has roughly doubled in size every year. The coconut water category is already worth Rs. 26800 million in the United States alone, and is expected to be a \$1 billion industry by 2014 (Kelzer, 2013). The US market is dominated by Vita Coco, which is estimated to hold a 60 per cent share in the lucrative US market, while in the European market Green Coco is the leading brand, yet to make a big dent in the market.

Brazil is the largest coconut water market. Southeast Asian countries are the largest coconut producing countries and large quantities of coconut are available in these regions for extracting

coconut water. The natural beverage has a location advantage in tropical belts in terms of widespread consumer awareness about its health and nutritional benefits due to centuries-long use unlike other regions namely the US and EU. Increasing health awareness across the EU and US has resulted in growing demand for health focused drinks. This has paved way for the demand for coconut water in the recent past. With global population growing old, it is essential to satisfy their needs with right product portfolio and coconut water has a potential market to address the same.

The major markets for traditional coconut products such as copra, desiccated coconut, and coconut oil are Nepal, Hong Kong, Vietnam, USA, UK whereas the major markets for nontraditional coconut products such as frozen grated coconut, VCO are USA, UK and Canada

1.3 Indian Scenario of Packed Tender Coconut Water

Indian Coconut industry is contributing more than Rs. 8300 million to the Indian GDP and this industry helps in earning foreign exchange to tune of Rs. 13000 million per annum(CDB, 2017). While branded & packaged coconut water consumption in India is still at a nascent stage, it has a big market in developed countries. India produces around 1,500 crores coconuts per year. Out of the entire harvest, only 15 percent is used for tender coconut water. Coconut water is the unorganized segment that consists of coconut vendors selling from push carts. The industry expecting this market to grow considerably as packaged coconut water brings shelf life and portability benefits and therefore increases the footprint across the country where coconut water can be sold. There is an increasing demand in packaged coconut water for a few reasons: Consumption is already high, Food safety is major concern, Healthy is trendy, and it's all about being natural. The coconut development board is currently considering increasing that number to 25 percent, the organized sector of tender coconut producers are slowly increasing. Tapping further into the health market there is a demand for diversification beyond just flavored varieties. It can be treated as a healthy alternative to sugary soft drinks for kids and adults.

Table 1.2: Year wise Area, Production and Productivity in India

S. No	Year	Area	Production	Productivity
1	2008-09	1894.57	15729.75	8303
2	2009-10	1895.20	16918.40	8927
3	2010-11	1895.90	16942.92	8937
4	2011-12	2070.70	23351.22	11277
5	2012-13	2136.67	22680.03	10615
6	2013-14	2140.50	21665.19	10122
7	2014-15	1975.81	20439.60	10345
8	2015-16	2,088.47	22,167.45	10,614
9	2016-17	2,082.11	23,904.10	11,481
10	2017-18	2,096.72	23,798.23	11,350

Source: <http://coconutboard.nic.in/Statistics.aspx>

From table 1.2 it can be observed that in India coconut is cultivated mainly in the coastal areas and the area under coconut cultivation is 2.09 Million hectares, production is 23.79 million tones and productivity is 11350 nuts/ha (CDB, 2017-18), out of which Kerala stands first in position in terms of area and production followed by Karnataka whereas Tamil Nadu stands first in terms of productivity. The major coconut growing states are Andhra Pradesh, Kerala, Karnataka, Tamil Nadu and Odisha.

In India packed tender coconut water is projected to grow at a CAGR of over 17 per cent, in value terms, during 2017-2022, due to rising health concerns owing to hectic and stressful lifestyle and increasing consumer spending on wellness products to prevent signs of ageing. Moreover, surging demand for packaged coconut water can be attributed to growing awareness about potential health benefits of drinking coconut water, natural and healthy drinks over high calorie carbonated drinks. All the above stated factors are likely to propel demand for India packaged coconut water market over the next five years (Chechi, 2017).

1.4 Overview of the present study

Coconut water is perceived as a super food and exotic. Many people are buying into the perception of it as a healthy alternative to soft/sports/energy drinks. If lauric acid (found in mother's milk) is in

fact present in coconut water then there could also be scope to market coconut water to expectant mothers and new mothers as a supplement to their diet.

The biggest markets in India are in Delhi, Bangalore, Ahmedabad and Mumbai. With a rise in demand, companies like Jain Agro Food Products, the Karnataka based company that sells packaged coconut water under the 'Coco-Jal' brand have found large markets within the country and has contributed to a 20 to 25 percent growth in the domestic industry (CDB, 2016). Even though there is a huge demand for coconut water in India, the market is not fully tapped. Therefore, it is very important to have foresight on the supply-demand balance and to analyze the scenario of the market.

The ambiguity over what can be termed as natural, organic and a super food may affect how coconut water is marketed and in turn interpreted to the market. Coconut water has a varying prices scale from the lower end Grace Coconut water which sells at around 79 Rs. per 330ml tin to premium priced brands like Dr Antonio Martin's that sells for 197.49 (500ml) (Anonymous, 2017). This confuses the market place and cheaper brands could undermine those brands that invest in marketing spend and need to recoup their investment through a higher rate of return price. Excessively over priced brands may be the first to fall as the market develops a perceived price band. The focus is primarily with respect to coconut water which has currently gained popularity due to its potential health benefits and as a best possible replacement of energy drink. Growing consumer preference towards natural and healthy drinks coupled with willingness to pay a higher price resulted in growing demand for coconut water. In due time, with increasing awareness among consumers and further product innovation there is a potential of coconut water replacing the demand for traditional soft and sports drinks.

To understand the market dynamics the present study is undertaking. Descriptive type of research has been done and both primary and secondary data is used for the study. Multistage sampling technique is used for the selection of respondents and the study area.

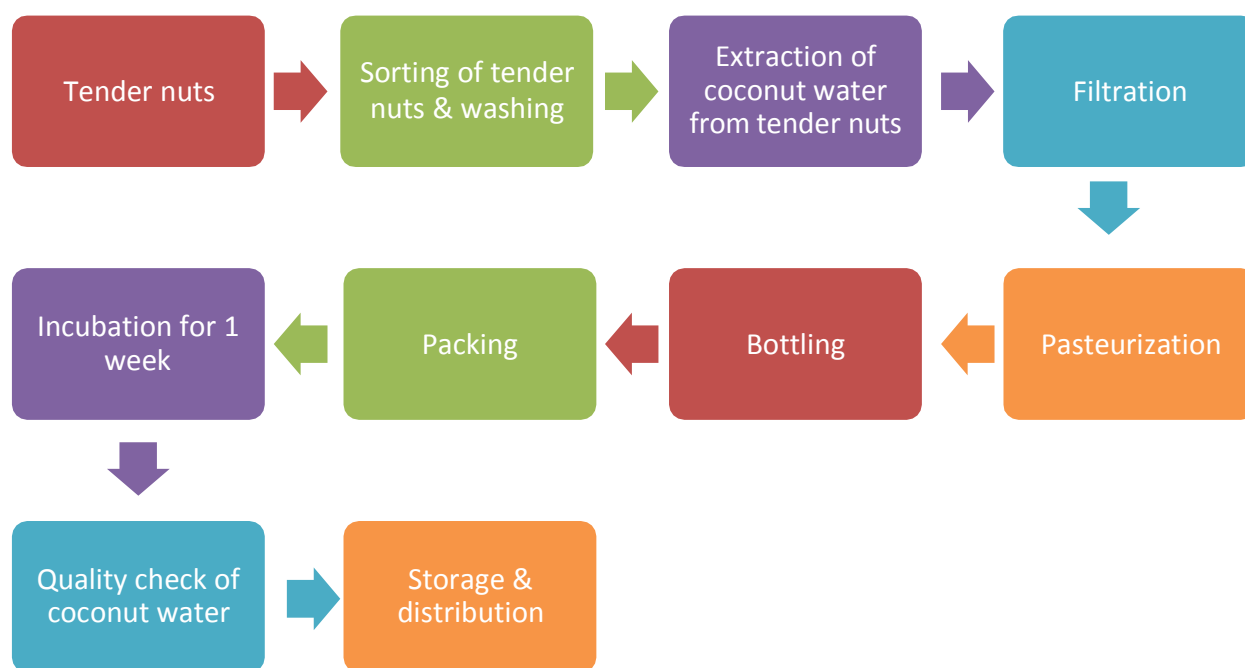
Eight states were selected for the study and they were Delhi, Rajasthan, Gujarat, Punjab, Madhya Pradesh, Tamil Nadu, Karnataka and Telangana. One potential city from each state has been selected based on the availability of packed tender coconut water. The cities selected were Delhi,

Jaipur, Ahmadabad, Chandigarh, Indore, Hyderabad, Bangalore and Chennai. From each city consumers were identified for the study who were asked to fill the questionnaire which was framed to know information related packed tender coconut water. The data collected from the respondents were analyzed by using different statistical tools. Based on the problem statement and scope of the study, the objectives framed were to study the present status of Packed Tender Coconut Water (PTCW) in India, analyze the consumer behaviour for Packed Tender Coconut Water in terms of awareness, perception, preference and buying behaviour, identify the various marketing channels and their efficiency for Packed Tender Coconut Water and suggest a suitable marketing strategy for the packed Tender Coconut Water

Present Status of Packed Tender Coconut Water in India

The market of packed tender coconut water is niche and is very fragmented. The companies which are in the production are small and medium scale enterprises and the technology to process the packed tender coconut water is obtained from from Defence Food Research Laboratories (DFRL) in collaboration with Coconut Development Board (CDB). The common method followed by the players of packed tender coconut water is depicted in figure 2.1.

Figure 2.1: Flow chart of processing of packed tender coconut water



It can be observed from figure 2.1 that processing of packed tender coconut water starts from identifying the source of tender nuts and bringing them to the processing plant and then the nuts are sorted and washed in order to remove dirt present on them. It is then followed by the extraction of coconut water from the nuts through mechanically supported high drain conveyer and then filtration process is carried out in order to remove any pulp that may have got mixed in the water during extraction. Pasteurization of the filtered coconut water is performed followed by bottling and

packing. The packed coconut water is kept in incubation for one week and after completion, the sample of the batch is taken and sent to lab for quality check and after the quality check, the storage and distribution is carried out. Different companies use different packing material for packing and different pack size based on their availability and requirement. The marketing of packed tender coconut water exists in both offline (malls, supermarkets and exhibitions) and online (Amazon, Big basket, India Mart, company websites) mode.

2.1 Major market players of packed tender coconut water in India

The market of packed tender coconut water is niche and fragmented, there exists a small group of players in different parts of the country. Some of the players include Jain Agro Food Products Private Limited (Banglore), Dabur India Limited (Ghaziabad), Manpasand Beverages Limited (Vadodara), Sakthi Coco Products (Pollachi), Vaarun Aqua Beverages Private Limited (Hyderabad), Agricoles Natural Foods Pvt Ltd (Palakkad), LifeTree Agro Foods (Palakkad) and Yogic Foods Pvt Ltd (Delhi).

Figure 2.2: Few players of packed tender coconut water



The information about the major players in terms of their brand name, pack size, packing material used, market reach and their mode of sales was collected from various secondary sources like company portal, officials of CDB, intermediaries in the market and various magazines and online material. The information is compiled and presented in the table 2.1.

Table 2.1: Information about major companies dealing in packed tender coconut water in India

Sr. No	Name of the companies	Brand Name	Pack size	Packing material	Shelf life	Market Reach	Mode of online sales
1	Jain Agro Food Products Private Limited	Cocojal	200 ml	Eco friendly bottles and Tetrapack	12 months	Delhi, Gurugram, Chandigarh, Jaipur, Ahmedabad, Indore, pune, Mumbai, Kanpur, Lucknow, Kolkata, Hyderabad, Chennai, Banglore, Thiruvananthapuram, Manglore, and Coimbatore	Amazon & Big Basket
2	Dabur India Limited	Real Activ	200 ml	Bottles	6 months	Delhi, Gurugram, Chandigarh, Jaipur, Ahmedabad, Indore, Mumbai, Lucknow, K Hyderabad, Chennai, Banglore, and Thiruvananthapuram,	Amazon
3	Shakti Coco products	Tender Coco	200 ml	Bottles & Cups	8 months	Delhi, NCR area, Punjab, Haryana, Himachal, Kolkata, Jharkand	-
4	Vaarun Aqua	Coco Vibrant	240 ml	pet bottle without	12 months	Punjab, Karnataka, Uttar Pradesh and	Big Basket &

	Beverages Private Limited			using wad		Telangana	Directly through company website
5	Agricoles Naturel Foods Pvt Ltd.,	Cocosip	200 ml	Bottles	8 months	Delhi, Indore, Jaipur, Meerut, Ghaziabad, Vishali, Lucknow, Vizag, Baroda, Nagpur, Nasik, Chennai, Bangalore	-
6	Yogic Foods Pvt Ltd	Ofresh	200 ml	Bottles	9 months	Gwalior, Delhi, Ghaziabad, Jaipur, Haridwar, Mumbai, Pune	Amazon, India Mart

Source: Primary data collected by the researcher from the company websites and representatives

The details of all the players in terms of their branding, market reach, packaging, pricing is detailed below.

1. Jain Agro Food Products Private Limited is the pioneer in the segment in India. It is the first player to enter this market and is awarded by national government of India as the “Best Coconut Processor” (www.jainagro.com). Jain Agro Food Products Private Limited packed tender coconut water sells under the brand name, Coccojal. Coccojal is packed in bottles of food grade quality and are eco friendly. It is packed in Tetrapacks for easy transportation to the consumers. Coccojal is available in malls, super markets and even in retail stores. Coccojal can also be purchased through online sites such as Amazon and BigBasket. The pack size is 200ml and shelf life of the product is 12 months. Coccojal is widely available in all parts of the country and it is the pioneer in this segment. It reaches all the categories of the consumers but most of the market exists in northern areas like Delhi, Gurugram, Chandigarh, Jaipur, Ahmedabad, Indore, Pune, Mumbai, Kanpur, Lucknow and Kolkata. It is also available in tourist destinations like Shimla and Manali during summer season. In the southern region it covers all the capital cities like, Hyderabad, Chennai, Thiruvananthapuram, Bengaluru, Manglore, and Coimbatore. Coccojal is available not only in malls & grocery stores but also in major hospitals in the country.

2. Dabur India Limited is a market giant of fruit beverages in India and it sells packed tender coconut water under the brand name, Real Activ. Many small players of packed tender coconut water carry out bulk packing for Dabur India Limited. Real Activ is packed in bottles of quantity 200 ml with a shelf life of six months. Real Activ is available in malls as well as in online stores. The major market is North India where demand is high due to the climatic conditions and unavailability of raw tender nuts to drink. Real Activ is present in major cities of northern states and some areas of southern region like Chennai and Mangalore. Ganesh Enterprises from Kerala takes a major share in packing of Real Activ.
3. Sakthi Coco Products is a Tamil Nadu based company which has created its own identity in the coconut and its bi products segment. Sakthi Coco products markets the packed tender coconut water under the brand name Tender Coco with the shelf life of eight months and its packing is available in bottles and cup with a capacity of 200 ml. The major markets of Tender Coco are Delhi, NCR area, Punjab, Haryana, Himachal Pradesh, West Bengal and Jharkand. Sakti Coco Products also does co packing for Dabur India Limited (Real Activ), Warana Dairy and Agro industries Ltd (Mojoco). Sakthi Coco Products has obtained the technology from Defence Food Research Laboratory (DFRL, Mysore) in collaboration with Coconut Development Board (CDB, Kochi).
4. Vaarun Aqua Beverages Private Limited is a Telangana based company which transferred technology from Defence Food Research Laboratory (DFRL) in collaboration with Coconut Development Board (CDB). Vaarun Aqua Beverages Private Limited started its marketing in the brand name of Coco Vibrant. Coco Vibrant has created its own space in the segment of packed tender coconut water by continuous experiments and increased the shelf life to 12 months with a pack size of 240 ml in PET bottle. The major markets of Coco Vibrant are Punjab, Karnataka, Uttar Pradesh and Telangana. In these markets it is available not only in malls and grocery stores but also in the hospitals. Coco Vibrant is marketed via offline and online stores such as Big Basket and through its own company website. They are the first to develop a technology of packing the coconut water in pet bottles without using a wad and with 12 months shelf life.
5. Agricoles Naturel Foods Pvt Ltd., is a Kerala based company which brands the packed tender coconut water in the name of Siponut. Siponut is available in bottles with a quantity

of 200 ml with a shelf life of eight months. Siponut is available in the markets of Delhi, Indore, Jaipur, Meerut, Ghaziabad, Vishali, Lucknow, Vizag, Baroda, Nagpur, Nasik, Chennai, and Bangalore. Agricoles Naturel Foods Pvt Ltd transferred technology from Defence Food Research Laboratory (DFRL) in collaboration with Coconut Development Board (CDB). Agricoles Naturel Foods Pvt Ltd also carries out co packing in the brand name of Coco Rush. The spoiled bottles of coconut water during manufacture are utilized for the preparation of coconut water vinegar and the shell of the nuts are used for fuel purpose.

6. Yogic Foods Pvt Ltd is a Delhi based company but its processing unit is located in Tamil Nadu. Yogic Foods Pvt Ltd has obtained technology from Defence Food Research Laboratory (DFRL) in collaboration with Coconut Development Board (CDB) and it markets in the brand name of OFresh with a shelf life of nine months and has the pack quantity of 200 ml. Ofresh is available in offline and online markets. The major markets of Ofresh are Gwalior, Delhi, Ghaziabad, Jaipur, Haridwar, Mumbai and Pune.

There are many other players who are doing the bulk packing to major giants like Vijayanagara Coco Foods Private Limited for Cocofly and LifeTree Agro Products for many other players.

2.2 Market share of major companies of packed tender coconut water

Based on the secondary data, market share of various sub sectors in Indian beverage market such as fruit juice sector, bottled water sector, carbonated drinks and other energy drinks sector were calculated and are depicted in Table 2.2.

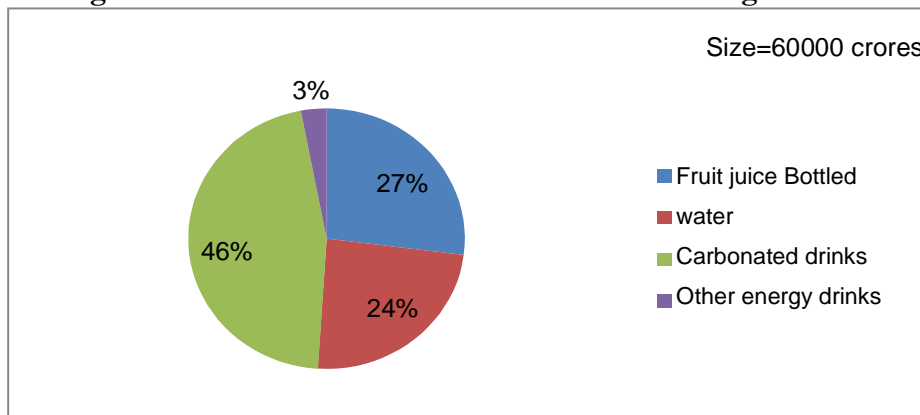
Table 2.2: Market share and size of sub sectors in Indian Beverage Market

S. No	Sub – Sector	Market size (Rs. crores)	Market share
1	Carbonated drinks	28000	46%
2	Fruit juices	16000	27%
3	Bottled water	15000	24%
4	Other energy drinks	1000	3%

Source: <https://tejas.iimb.ac.in/articles/107.php>

The total Indian beverage market size is worth Rs.60000 crores, of which 46 percent of the share is occupied by carbonated drinks sectors with the market size of Rs. 28000 crores and the second majority share is occupied by fruit juice sector with a share of 27 percent and with the size Rs. 16000 crores followed by bottled water sector with a share of 24 percent with market size of Rs. 15000 crores. Only 3 percent share is occupied by other energy drinks with market size of Rs. 1000 crores, which includes the packed tender coconut water also. Figure 2.3 depicts the market share by sub sectors in Indian beverage market.

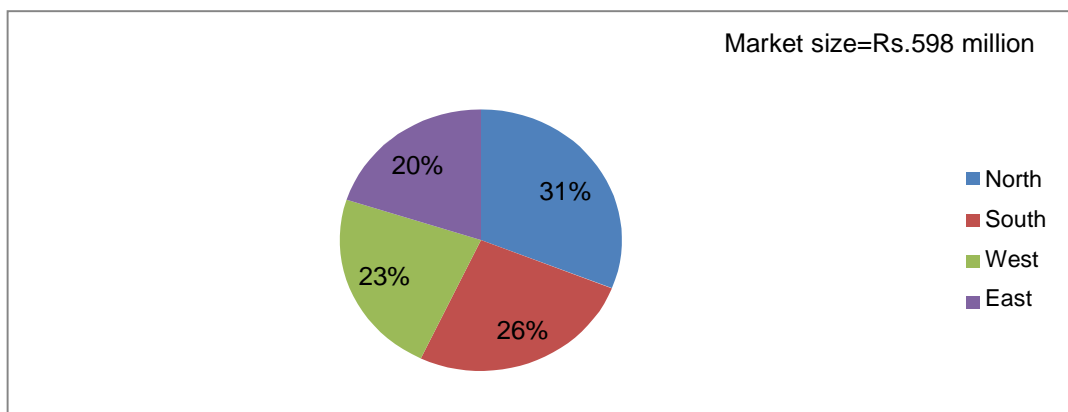
Figure 2.3: Market share of PTCW in Indian Beverage Market



Source : <https://tejas.iimb.ac.in/articles/107.php>

Technisci research reported that the market size of packed tender coconut water in India is \$ 9.2 million during 2017 and is expected to grow at a CAGR of 18.4% during 2018-2023 to reach \$ 25.4 million by 2023 based on increasing demand of packed tender coconut water day by day. Figure 2.4 depicts the market share of packed tender coconut water region wise.

Figure 2.4: Consumption of Packed Tender Coconut Water region wise



Source: <https://www.techsciresearch.com/report/india-packaged-coconut-water-market/3359.html>, 2017

Figure 2.4 indicates that 31 percent of Indian packed tender coconut water is in northern region which means 185.38 million of value, followed by 26 percent in the southern region which accounts to 155.48 million. 23 percent of share is occupied by western region which accounts to 137.54 million values and 20 percent is occupied by eastern region which accounts to 119.6 million.

Table 2.3 depicts the market share of packed tender coconut water players in the northern region and the result shows that 185.38 million is the total market value of northern region of packed tender coconut water out of which Jain Agro Food Products Pvt Ltd holds 56 percent of the share which accounts to Rs.103.81million by value followed by Agricoles Naturel Foods Pvt Ltd which occupies 21 percent of the share.

Table 2.3: Market share of players in the northern region (Approx.)

Sr. No	Companies	Value (Million)	Percentage (%)
1	Jain Agro Food Products Pvt Ltd	103.81	56
2	Agricoles Naturel Foods Pvt Ltd	38.93	21
3	Dabur India Limited	14.83	8
4	Shakti Coco Products	9.27	5
5	Others	18.54	10
Total		185.38 Million	100

Source: Researchers computation from the data provided by intermediaries

Dabur India Limited occupies eight percent of the share which accounts to Rs.14.83 million value, five percent share is occupied by Shakti Coco Products which accounts to Rs.9.27 million value and remaining ten percent share is occupied by other companies such as Manpasand, Sangeetha Foods, Cocofly etc which accounts to Rs. 18.54 million value.

Table 2.4 depicts the market share of packed tender coconut water players in the southern region and result shows that out of Rs. 155.48 million value of southern region, 33 percent of share is occupied by Jain Agro Food Products Pvt. Ltd which accounts to Rs. 51.31 percent followed by 25 percent of share is occupied by Shakti Coco products.

Table 2.4: Market share of players in southern region (Approx.)

Sr. No	Companies	Value (Million)	Percentage (%)
1	Jain Agro Food Products Pvt Ltd	51.31	33
2	Agricoles Naturel Foods Pvt Ltd	18.6	12
3	Dabur India Limited	12.44	8
4	Shakti Coco Products	38.87	25
5	Vaarun Aqua Beverages Private Limited	23.32	15
5	Others	10.88	7
Total		155.48	100

Source: Researchers computation from the data provided by intermediaries

Eight percent of share is occupied by Dabur India Limited which accounts to Rs. 12.44 million value and seven percent share is occupied by other players such as Life Tree Agro Limited, Ganesh Foods, Golisoda etc which accounts to a value of Rs.10.88 million value.

The demand of packed tender coconut water is increasing because of increasing health concern among consumer due to hectic and stressful life style. Increasing awareness among consumers about the health benefits of drinking coconut water, rising consumer preference towards healthy and natural drinks over carbonated drinks is leading to increased demand of coconut water. Increasing disposable income among consumers, rising young working class population, growing e-commerce and organized retail stores are some of the other factors which can positively affect increase the demand of packed tender coconut water in near future.

2.3 Constraints faced by the players of packed tender coconut water

The constraints faced by the organizations that exist in packed tender coconut water were identified through a brief pilot study and the specific constraints identified were

- Unavailability of credit facility
- Shortage of tender nuts
- Inadequate market intelligence information

- Lack of regular demand
- Lack of consumer awareness
- Losses in production process
- Lack of proper transportation facility
- Lack of assistance by CDB
- Unavailability of manpower
- Lack of proper technology
- Lack of trouble shooting knowledge in production process
- Lack of proper marketing facilities
- Low shelf life of the raw material
- Heavy price fluctuations of raw material.

To analyze the constraints, Garrett ranking method is used by calculating Garrett Score. Table 2.5 depicts the constraints faced by the players of packed tender coconut water.

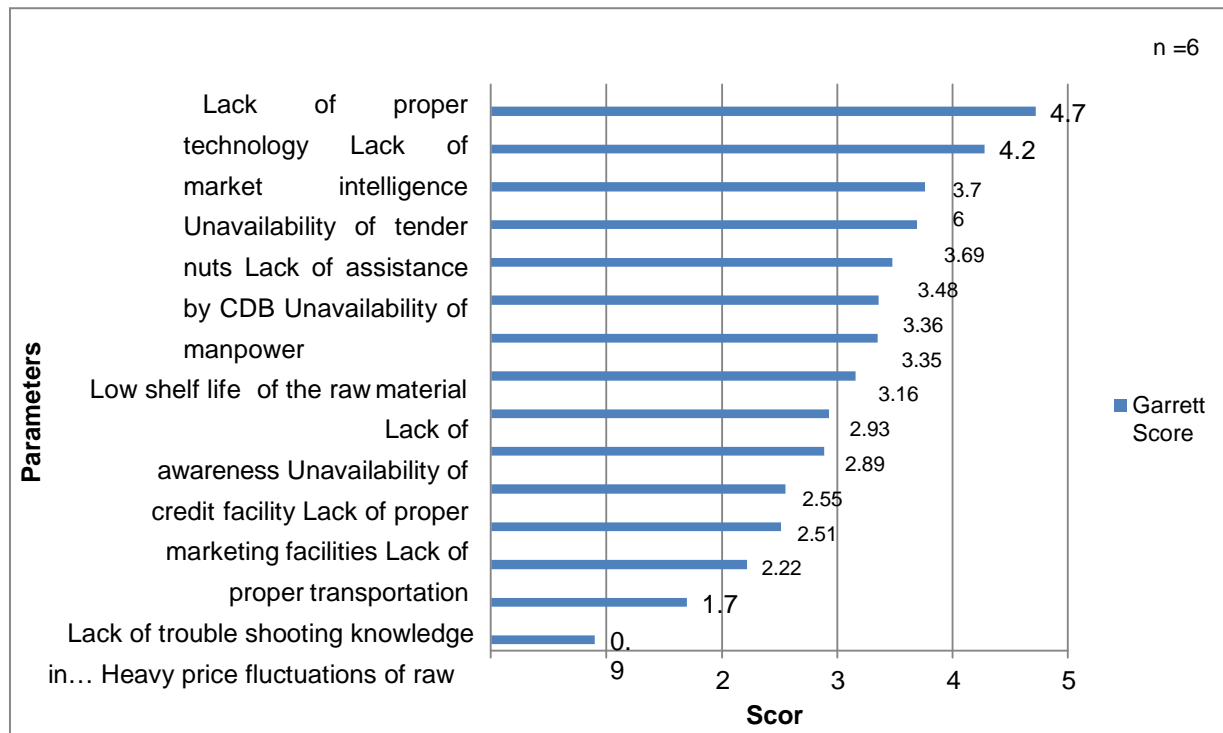
Table 2.5: Constraints faced by the players of packed tender coconut water

Sr. No	Parameters	Garrett score	Rank
1	Lack of proper technology	4.72	I
2	Lack of market intelligence information	4.28	II
3	Shortage of tender nuts	3.76	III
4	Lack of assistance by CDB	3.69	IV
5	Unavailability of manpower	3.48	V
6	Low shelf life of the raw material	3.36	VI
7	Lack of consumer awareness	3.35	VII
8	Unavailability of credit facility	3.16	VIII
9	Lack of proper marketing facilities	2.93	IX
10	Lack of proper transportation facility	2.89	X
11	Lack of trouble shooting knowledge in production process	2.55	XI
12	Heavy price fluctuations of raw material	2.51	XII
13	Lack of regular demand	2.22	XIII
14	Losses in production process	1.7	XIV
15	Others if any	0.9	XV

Source: Researcher's own computation from primary data

From Table 2.5, it is observed that Garrett score of the constraints ranged from 0.9 to 4.72. Data reveal that with a Garrett score of 4.71 lack of proper technology is the major constraint faced by the players. Out of six respondents three ranked lack of proper technology as the most important whereas lack of market intelligence with Garrett score 4.28 ranked second followed by unavailability of tender nuts with a score of 3.76. Lack of proper transportation is also one of the constraint faced by players and ranked tenth with a score of 2.89 followed by lack of trouble shooting knowledge in production process with score 2.55, heavy price fluctuations of raw material with a score of 2.51, lack of demand with a score of 2.22, losses in production process is not a major constraint because the losses are only one to two percent, so it ranked 14 with a score of 1.7 and the others incase if any scored 0.9. The Garrett score depicted is presented in figure 2.5.

Figure 2.5: Constraints faced by the players of Packed Tender Coconut Water



Source: Researcher's own computation from primary data

The main reason for lack of proper technology which scored 4.72 clearly shows is the major constraint, because there is no proper established technology to process packed tender coconut water. The players of packed tender coconut water are not satisfied with the technology transferred from CDB. The players experienced many difficulties while using the CDB transferred technology and there are huge losses. So, players are expecting a standard and advanced technology to be established to process packed tender coconut water.

The next major constraint is lack of market intelligence because there is no authentic information regarding processing and marketing of packed tender coconut water. The players are facing difficulty in estimating demand and there exists a supply demand gap. Unavailability of tender nuts for processing ranks at three because the coconut production is available only in coastal belt of the country and there are many coconut allied industries existing and increasing day by day and there is a decrease in the production compared to the past. So it is becoming difficult for all the coconut based industries to get good quality and sufficient quantity of tender nuts.

The fourth major constraint faced by the players is lack of assistance by CDB, as many players are from non agriculture sector but with the interest and zeal they entered in this sector so, players feel CDB should give training to the manufacturers and should appoint a technical consultant so that a guidance can be provided from time to time to all the players to overcome their operational and technological constraints. The next constraint they are facing is unavailability of manpower which scored 3.48 which is because the technology transferred by the players from CDB is not completely automated and it requires skilled manpower as the contamination during processing is more when the coconut water is exposed to air during processing. So intensive care has to be taken and testing has to be done at every stage of processing which requires more number of skilled manpower.

Low shelf life of the raw material is another constraint faced by the players of packed tender coconut water which scored 3.36. As is widely known coconut water is a sensitive product which is easily perishable so players are trying to increase the shelf life by doing various experiments during processing. After many trails at present in the market the product packed tender coconut water reached on an average of nine months shelf life. The next constraint faced is lack of awareness among the consumers regarding the product. Only few consumers who are living in the cities are gaining awareness because of the presence of packed tender coconut water in the shelves of malls and stores. The reach of the product is low in the rural areas due to unawareness among the consumers. In order to overcome this problem, the players are expecting that CDB should take initiative and carry out massive campaigning PAN India so that the demand can be increased for packed tender coconut water.

Unavailability of credit facility which scores 3.16 is one of the constraints faced by the players of packed tender coconut water because the buyers are asking the product on credit whereas the players are purchasing the raw tender nuts for processing from farmers through contract agreement and the players are supposed to pay the fixed price in advance to farmer, so the players are facing

financial problems. Lack of proper marketing facilities is another constraint faced by the players with a Garrett score of 2.93 because all the companies are producing in low volumes thus it is difficult to provide the samples to the intermediaries for marketing and unable to reach all the markets.

Lack of proper transportation is another constraint faced by the players with a score of 2.89. Most of the manufacturing units are established in the southern states because of the availability of raw materials in those areas and the demand is more in the northern regions compared to the southern part of the country. So in order to market they have to transport the product to the distant markets and need to hire a vehicle where the players are unable to afford such a huge transportation cost. Lack of trouble shooting scores 2.55, the technology for processing of packed tender coconut water is new and most of the players are modifying the technology based on their experiences and in case of any problem they are not in a position to troubleshoot that problem. There is lack of trained manpower to troubleshoot the problems in this sector so most of the companies are facing the difficulty to overcome the technical issues during production.

Heavy price fluctuations of raw materials scored 2.53, as the main raw material for processing the packed tender coconut water is tender coconut. There are two main reasons for the price fluctuations one is because of production fluctuations round the year, when coconut production is less than the price of tender coconut is high and the another reason is seasonal demand of the packed tender coconut water. The demand of packed tender coconut water is high during the summers then the requirement of tender nuts is more during summers to meet the demand, but during summers the demand for tender nuts is more because most people consume raw tender coconut water directly so the price fluctuations for tender nuts is high based on availability and demand. The other constraints faced by the players are the entry of market giants like Dabur and Paper boat so the players are unable to compete with these giants and thus increase of the competitors day by day is another constraint faced by the players.

Chapter 3

Consumer Awareness and Buying Behaviour of Packed Tender Coconut water

Consumer behaviour is an in-depth study of the individual which influences the framing of market strategy. The parameters of consumer behaviour are social factors, personal factors like occupation, economic situation and psychological factors like motivation, perception, attitudes and beliefs.

The objective was to understand consumer behaviour towards packed tender coconut water. Study was carried out in North Indian cities of Delhi, Jaipur, Indore, Ahmedabad, Chandigarh and South Indian cities of Bangalore, Chennai and Hyderabad. It was observed that consumer's behaviour varies in the northern and southern regions based on the demographic profile and climatic conditions.

Overall 1400 consumers were contacted and the data was collected from the respondents through mall interception method out of which 820 respondents are from northern region and 580 respondents are from southern region. Tabulation has been done for the demographic profile after calculating the percentage of each factor. The demographic profile of the respondents include the factors such as gender, marital status, age group, educational qualification, occupation and monthly family income were collected for both northern and southern India respondents.

Table 3.1: Demographic profile of the respondents

Sr. No	Demographic		N=820 Northern Region		N=580 Southern Region		N=1400 Total	
			Number	Percentage	Number	Percentage	Number	Percentage
1	Gender	Male	530	64.63%	286	49.31%	816	58.28%
		Female	290	35.37%	294	50.69%	584	41.71%
2	Marital Status	Single	456	55.61%	216	37.24%	672	48%
		Married	364	44.39%	384	66.20%	728	52%
3	Age Group (Yrs)	<20	92	11.21%	53	9.13%	145	10.36%
		20-35	323	39.39%	291	50.17%	614	43.86%
		36-50	286	34.87%	162	27.93%	448	32%
		>50	119	14.51%	74	12.76%	193	13.78%
4	Educational Qualification	Illiterate	31	3.78%	43	7.41%	74	5.28%
		Primary Level	23	2.80%	12	2.06%	35	2.5%
		Secondary level	54	6.58%	31	5.34%	85	6.07%

		Intermediate	140	17.07%	72	12.41%	212	15.14%
		Graduation	361	44.02%	287	49.48%	648	46.28%
		PG & above	211	25.73%	135	23.27%	346	24.71%
5	Occupation	Student	103	12.56%	64	11.03%	167	11.92%
		Professional	418	50.97%	296	51.03%	714	51%
		Businessman	213	25.97%	128	22.06%	341	24.36%
		Housewife	86	10.49%	92	15.86%	178	12.71%
		Others	0	0	0	0	0	0
6	Family Monthly Income (Rs)	<20000	43	5.24%	36	6.20%	79	5.64%
		20000 – 50000	271	33.04%	242	41.72%	513	36.64%
		51000 – 80000	297	36.22%	230	39.65%	527	37.64%
		81000 - 100000	158	19.27%	60	10.34%	218	15.57%
		>100000	51	6.22%	12	2.06%	63	4.5%

Source: Researchers own computation from primary data

Table 3.1 depicts the demographic profile of 820 respondents from northern and 580 from southern region of India which includes their frequency distribution in terms of their gender, marital status, age group, educational qualification, occupation and family monthly income. Table 3.1 indicates that in the northern region majority of respondents are male with 64.63 percent share whereas in the southern region majority of respondents are female with 50.69 percent. Most of the respondents from the northern region are single with 55.61 percent whereas 66.20 percent are married in the southern region and 52 percent of total respondents are married. In the northern region majority of share is occupied by the age group of 20-35 years with a percentage of 39.39 percent followed by 36-50 years age group with a percentage of 34.87 percent whereas in the southern region the percentage is 50.17 percent and 27.93 percent and overall is 43.86 percent and 32 percent respectively. Majority of respondent's educational qualification is graduation both in northern and southern region with a percentage of 49.02 and 49.48 percent respectively. 50.97 percent of respondents are professionals in the northern region whereas 51.03 percent of respondents are professionals in the southern region and 51 percent of the overall respondents are professionals. 36.22 percent of northern region respondents are under the income group of Rs.51000 – Rs.80000 whereas in the southern region highest percentage is occupied by the income group of Rs.20000 – Rs.50000 with a percentage of 41.7 percent and overall respondent's highest percentage is from the income group Rs.51000 – Rs.80000.

3.1 Level of awareness among consumers for packed tender coconut water

The objective is to find out the awareness among the respondents regarding packed tender coconut water; in order to fulfill this objective primary data was collected from targeted respondents. 1400 respondents were asked regarding packed tender coconut water and out of them 863 respondents were aware of packed tender coconut water of which 482 respondents from northern region were aware and 381 respondents from southern region were aware remaining 537 respondents both from northern and southern region said they are unaware of packed tender coconut water.

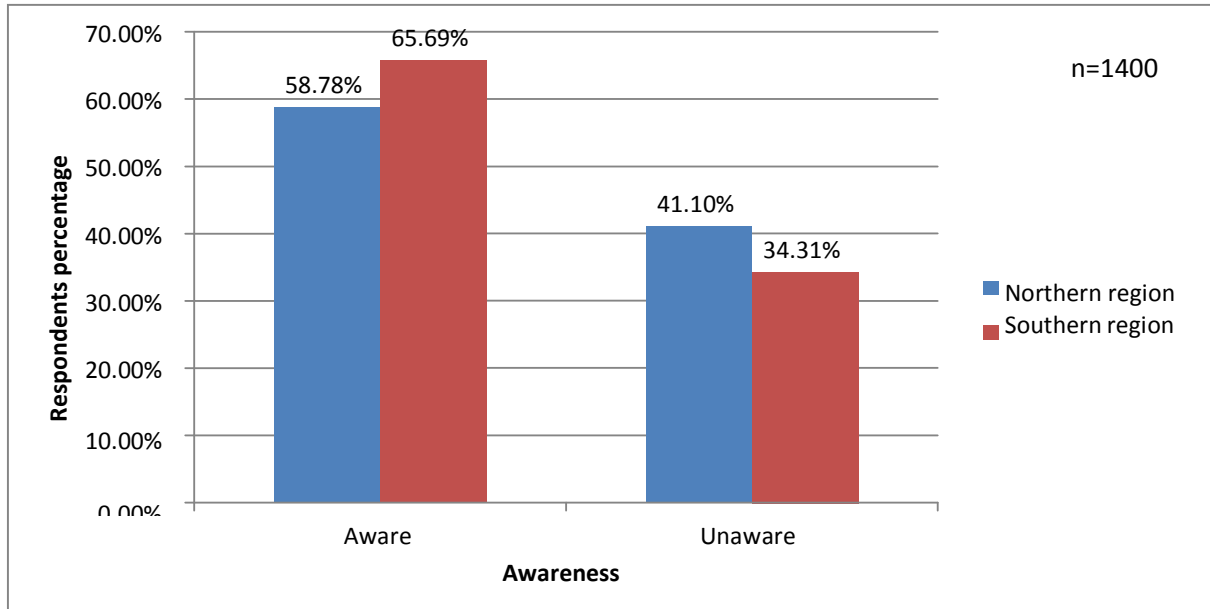
Table 3.2: Awareness of respondents regarding packed tender coconut water

Sr. No	Parameter	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Aware	482	58.78%	381	65.69%	863	61.64%
2	Unaware	338	41.1%	199	34.31%	537	38.36%
3	Total	820	100%	580	100%	1400	100%

Source: Researchers own computation from primary data

Table 3.2 depicts the respondent's awareness regarding packed tender coconut water region wise. In northern region 58.78 percent of respondents are aware of packed tender coconut water whereas 41.1 percent of respondents are unaware of packed tender coconut water. It is observed that 65.69 percent of respondents are aware in the southern region and only 34.31 percent of respondents are unaware regarding packed tender coconut water.

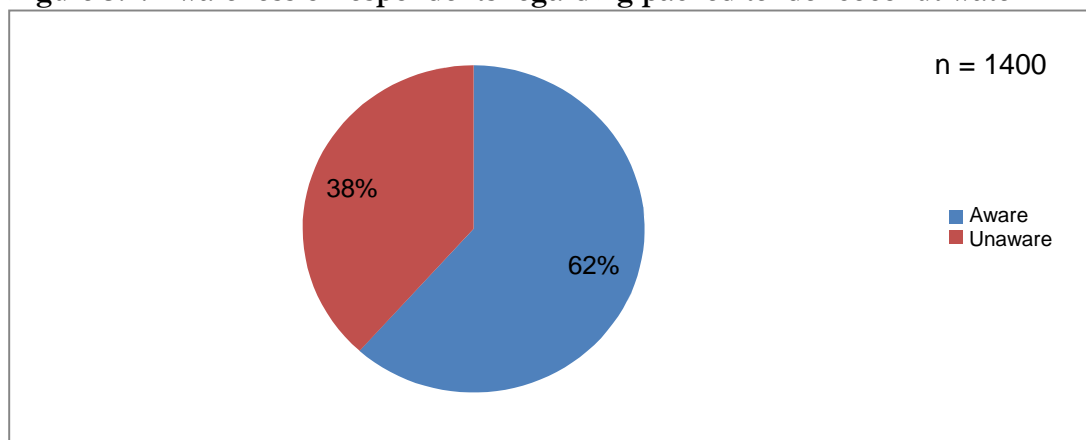
Figure 3.1: Level of awareness among respondents for packed tender coconut water in northern and southern region



Source: Researchers computation from primary data

Fig 3.1 depicts the comparison of respondents aware of packed tender coconut water in northern and southern region and it shows that 65.69 percent of respondents from southern region are aware of packed tender coconut water and 58.78 percent of respondents are aware of packed tender coconut water in southern region which results in 6.91 percent of respondents are more aware in southern region compared to northern region. 41.10 percent of respondents are unaware in northern region regarding packed tender coconut water whereas 34.31 percent of respondents are unaware in southern region.

Figure 3.2: Awareness of respondents regarding packed tender coconut water



Source: Researchers computation from primary data

Fig 3.2 depicts the level of awareness among respondents regarding packed tender coconut water and result shows that out of 1400 respondents only 863 respondents are aware which accounts to 62 percent and 537 respondents are unaware which accounts to 38 percent.

To identify the source of awareness from the aware respondent (62 percent), 800 respondents were selected of which 480 respondents from northern region and 320 respondents from southern region were the consumers of packed tender coconut water. The data collected from the consumers regarding source of awareness about packed tender coconut water is depicted in table 3.3.

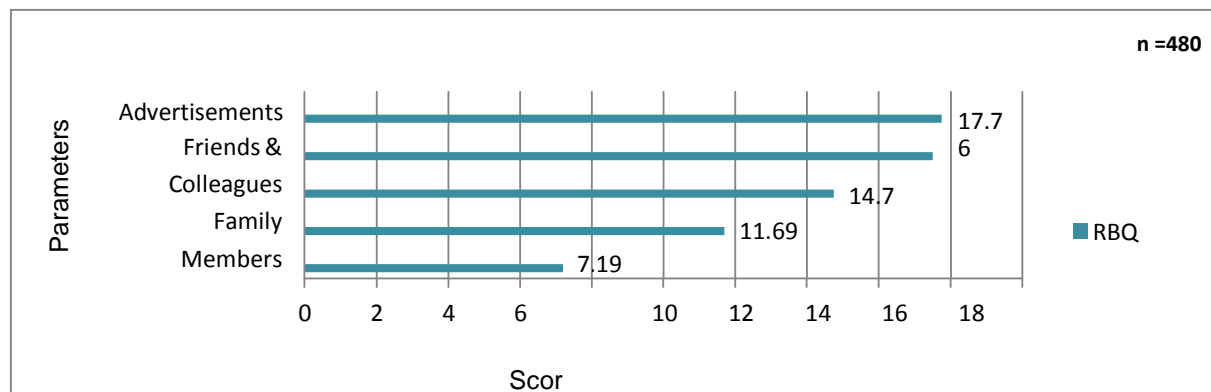
Table 3.3: Source of awareness regarding packed tender coconut water in northern region

Sr. No	Source of Awareness	RBQ Mean	Rank
1	Advertisements	17.76	I
2	Friends and Colleagues	17.5	II
3	Family members	14.75	III
4	Relatives	11.69	IV
5	Other source	7.19	V

Source: Researcher's own computation from Primary Data

RBQ Technique is used for analysis to find the main source of awareness among consumers regarding the packed tender coconut water. Five different sources of parameters were considered like friends and colleagues, family members, relatives, advertisements and other sources. For all the five sources RBQ score has been calculated based on the number of consumers opted for different sources. RBQ score is depicted in figure 3.3.

Figure 3.3: Source of awareness regarding packed tender coconut water among the consumers of northern region



Source: Researcher’s own computation from Primary Data

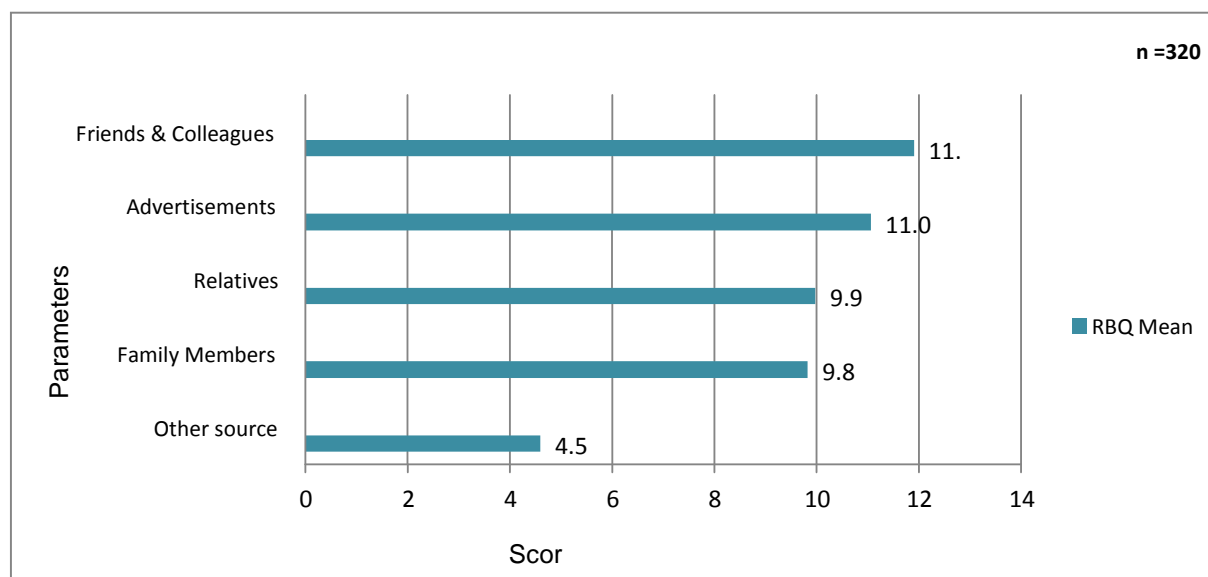
Figure 3.3 shows advertisement is the main source of awareness among consumers which scored 17.76. The market players are targeting the younger generation as this category is more open to experience and are generally open to welcome new variants. There are various advertisement platforms such as newspapers, T.V, social websites and sponsoring of events. Friends and colleagues is another source of information regarding packed tender coconut water which scored 17.5 with second highest source followed by family members with score of 14.75, relatives as a source scored 11.69 and other source of information like direct promotion activities at job locations scored 7.19. Table 3.4 depicts the source of awareness regarding packed tender coconut water among the consumers of southern region and it is observed that the main source of information is from friends and colleagues followed by advertisement, relatives, family members and other sources.

Table 3.4: Source of awareness regarding packed tender coconut water in southern region

Sr. No	Source of Awareness	RBQ Mean	Rank
1	Friends and Colleagues	11.9	I
2	Advertisements	11.06	II
3	Relatives	9.97	III
4	Family members	9.82	IV
5	Other source	4.59	V

Source: Researcher’s own computation from Primary Data

Figure 3.4: Source of awareness regarding packed tender coconut water in southern region



Source: Researcher’s own computation from Primary Data

Figure 3.4 depicts the source of awareness regarding packed tender coconut water among the consumers of southern region and it shows that friends and colleagues are the main source of awareness among the consumers. Advertisement scored RBQ mean of 11.06 and it stands at second place in terms of source of awareness regarding packed tender coconut water. Relatives are another means of source for information regarding packed tender coconut water which scored 9.97 with third highest source followed by family members with score of 9.82.

After the assessment of the level of awareness and source of the consumers’ awareness regarding PTCW, it was further examined that how many consumers of Northern and Southern region have tasted packed tender coconut water. The findings are detailed below.

Out of the total 800 consumers who were aware about packed tender coconut water, 80.5 percent had tasted it also and the majority were from Northern region. The table 3.5 details the findings.

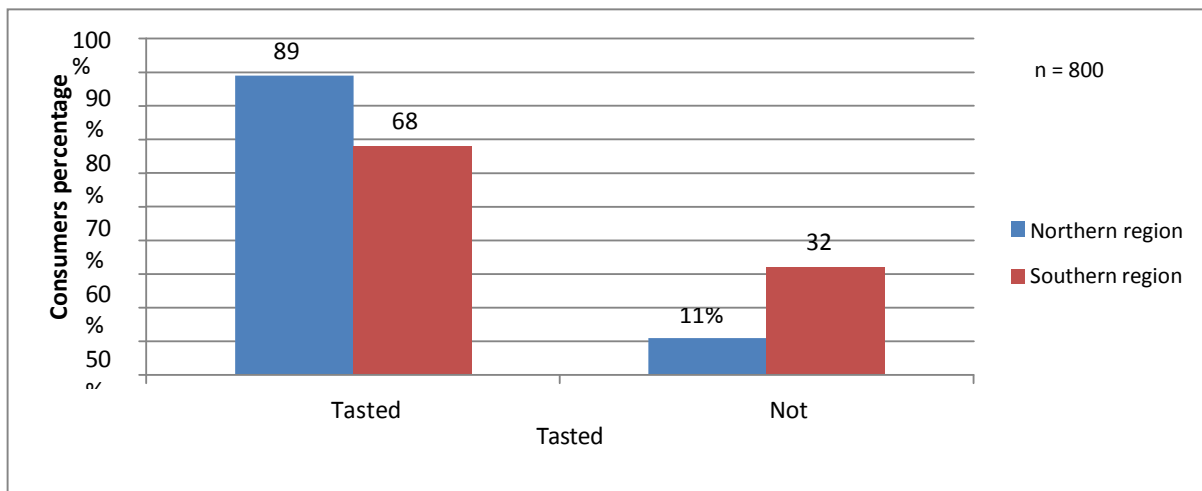
Table 3.5: Percentage of consumers who have tasted packed tender coconut water

Sr. No	Parameter	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Tasted	427	89%	217	68%	644	80.5%
2	Not Tasted	53	11%	103	32%	156	19.5%
Total		480	100%	320	100%	800	100%

Source: Researchers computation from primary data

Table 3.5 depicts the percentage of consumers who have tasted packed tender coconut water and result shows that in northern region out of 480 consumer's 427 consumers had tasted the packed tender coconut water which accounts to 89 percent and 53 consumers did not taste the packed tender coconut water which accounts to 11 percent. In the southern region out of 320 consumers 217 consumers have tasted the packed tender coconut water which accounts to 68 percent whereas 103 consumers have not tasted the packed tender coconut water which accounts to 32 percent.

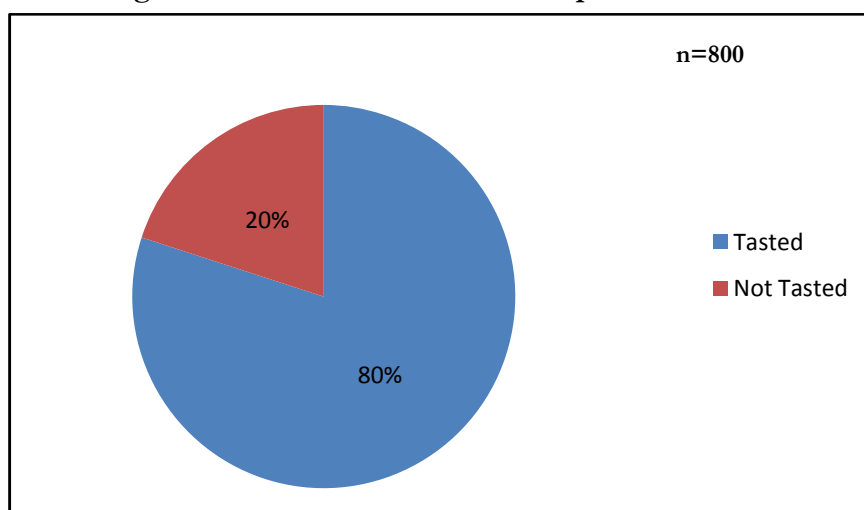
Figure 3.5: Comparison of percentage of consumers who tasted packed tender coconut water in northern and southern regions



Source: Researchers computation from primary data

Fig 3.5 depicts the comparison of percentage of consumers who tasted packed tender coconut water in northern and southern regions and it shows that 89 percent of consumers in northern region tasted the packed tender coconut water whereas 68 percent of consumers in southern region tasted the packed tender coconut water which results in 21 percent more of consumers from northern region tasted packed tender coconut water than consumers of southern region.

Figure 3.6: Percentage of consumers who have tasted packed tender coconut water



Source: Researchers own computation from primary data

Fig 3.6 depicts the percentage of consumers who have tasted packed tender coconut water and result shows that out of 800 consumers, 644 consumers tasted packed tender coconut water which accounts to 80 percent whereas 156 consumers have not tasted packed tender coconut water which accounts to 20 percent of the sample size.

The respondents who had tasted the packed tender coconut water were further probed regarding their reason for consumption/ purchase. The major parameters were identified from the review and on the basis of pilot study, they were health benefits, newness of the product and unavailability of natural coconut water. The details of the findings are presented in the table 3.6 below.

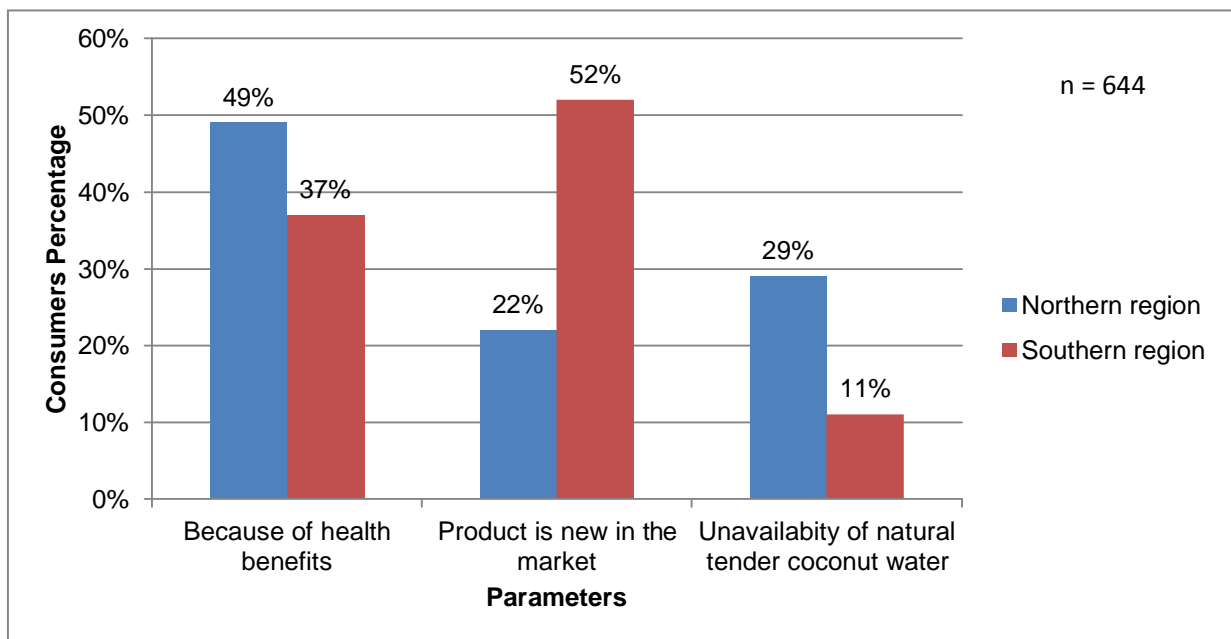
Table 3.6: Reason to taste packed tender coconut water

Sr. No	Parameter	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Because of health benefits	209	49%	80	37%	289	44.88%
2	Product is new in the market	94	22%	113	52%	207	32.14%
3	Unavailability of natural tender coconut water	124	29%	24	11%	148	23%
Total		427	100%	217	100%	644	100%

Source: Researchers computation from primary data

Table 3.6 depicts the reason to taste packed tender coconut water by consumers and the result shows that from northern region 427 consumers have tasted packed tender coconut water out of which 209 consumers tasted it because of health benefits which accounts to 49 percent and 124 consumers tasted because of unavailability of natural tender coconut water which accounts to 29 percent followed by 94 consumers tasted because of product is new in the market whereas in the southern region 217 consumers tasted packed tender coconut water out of which 113 consumers tasted because of the product is new in the market which accounts to 52 percent and 80 consumers tasted because of the health benefits which accounts to 37 percent followed by 24 consumers tasted because of unavailability of natural tender coconut water which accounts to 11 percent. From the overall sample size of 800, 644 consumers tasted packed tender coconut water out of which 289 consumers tasted packed tender coconut water because of its health benefits which accounts to 44.88 percent and 207 consumers tasted because of the product is new in the market which accounts to 32.14 percent followed by 148 consumers tasted because of the unavailability of natural tender coconut water which accounts to 23 percent.

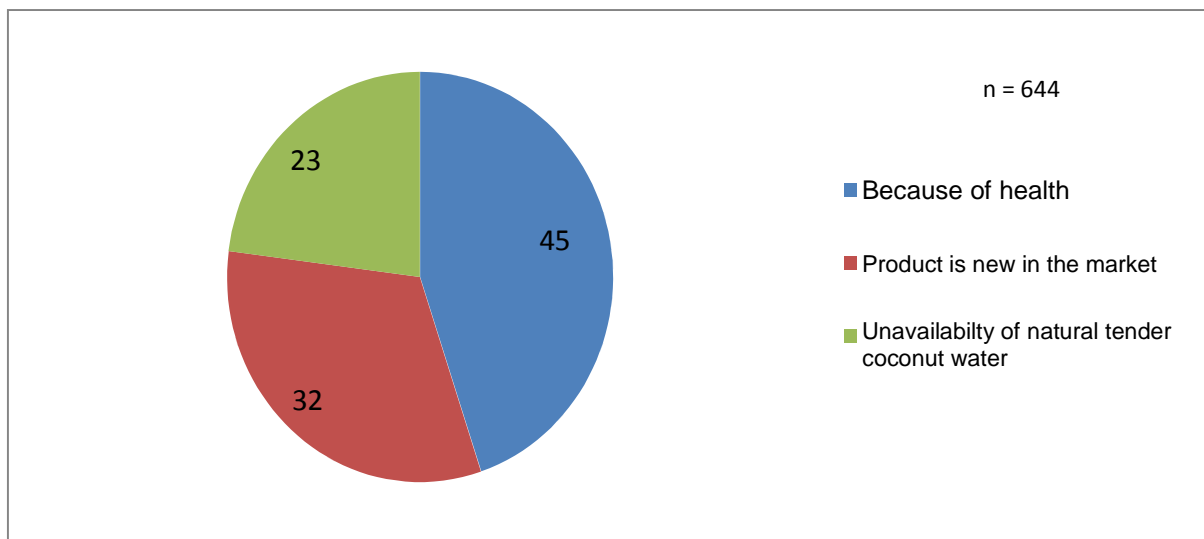
Figure 3.7: Comparison of reason to taste packed tender coconut water by consumers of northern and southern region



Source: Researchers computation from primary data

Fig 3.7 depicts the comparison of the reason to taste packed tender coconut water by consumers in northern and southern region and it shows that out of 644 consumers who had tasted packed tender coconut water, 49 percent of consumers from northern region tasted the packed tender coconut water because of health benefits whereas only 37 percent of consumers from southern region tasted which results in 12 percent of consumers more in northern region tasted packed tender coconut water because of health benefits than southern region. 22 percent of consumers from northern region tasted because of the product is new in the market whereas in the southern region 52 percent tasted which results in 30 percent of consumers from southern region tasted because of the product is new in the market than the consumers of northern region. 29 percent of consumers from northern region tasted because of unavailability of natural tender coconut water whereas in the southern region only 11 percent tasted which results in 18 percent of consumers from northern region have tasted because of the unavailability of natural tender coconut water than consumers of southern region.

Figure 3.8: Reason to taste packed tender coconut water by consumers



Source: Researchers computation from primary data

Fig 3.8 depicts the reason to taste packed tender coconut water and shows that out of 800 sample size, 640 consumers have tasted packed tender coconut water of which 45 percent of consumers tasted because of the health benefit whereas 32 percent of consumers tasted because of the product is new in the market and 23 percent of consumers tasted because of the unavailability of natural tender coconut water and result shows that majority of the share is occupied by the health benefits of packed tender coconut water.

The brands available in the market are quite few and thus leaves less choice for the consumers, the consumers who had tasted and consumed packed tender coconut water were inquired about the brand they had tasted. The table below presents the details of the responses received.

Table 3.7: Brand of packed tender coconut water tasted by respondents

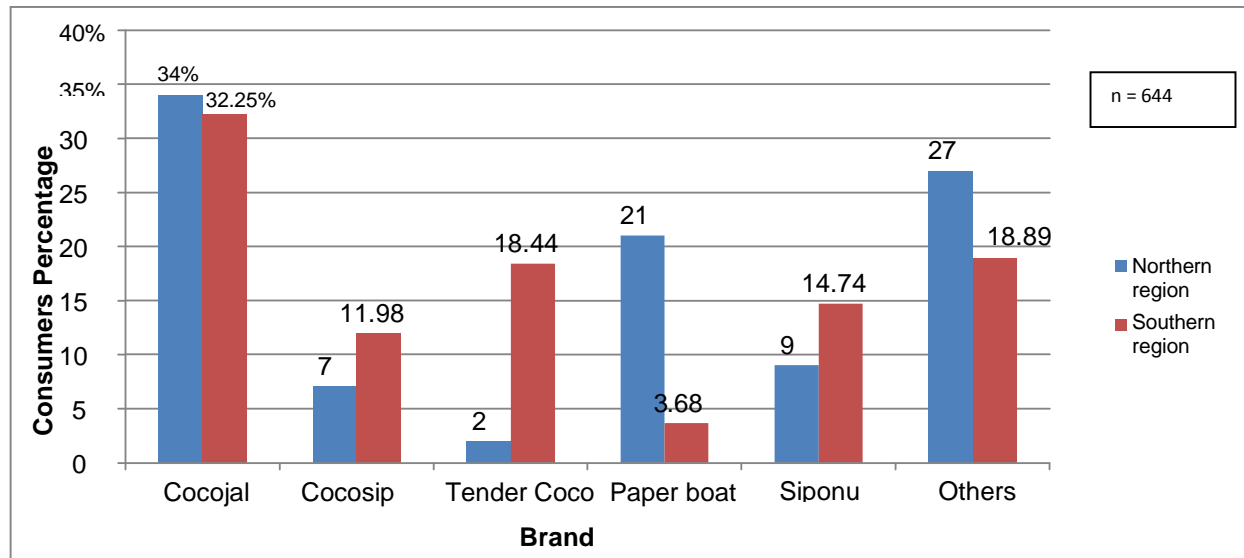
Sr. No	Brand	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Cocojal	146	34%	70	32.25%	216	33.54%
2	Cocosip	30	7%	26	11.98%	56	8.69%
3	Tender Coco	10	2%	40	18.44%	50	7.76%
4	Paper boat	87	21%	8	3.68%	105	16.30%
5	Siponut	40	9%	32	14.74%	72	11.18%
6	Others	114	27%	41	18.89%	145	22.51%
Total		427	100%	217	100%	644	100%

Source: Researchers own computation from primary data

The table 3.7 shows that 427 consumers from northern region have tasted packed tender coconut water of which 146 consumers tasted Cocojal brand which accounts to 34 percent and 114 consumers tasted other brands such as Manpasand, Real active, Ofresh which accounts to 27 percent followed by 87 consumers tasted paper boat brand which accounts to 21 percent, 40 consumers tasted Siponut which accounts to nine percent, 30 consumers tasted Cocosip which accounts to seven percent and only ten consumers tasted Tendercoco which accounts to two percent. However, in the southern region out of the 217 consumers who had tasted packed tender coconut water, 70 consumers had tasted Cocojal brand which accounts to 32.25 percent followed by 41 consumers who tasted other brands such as Cocovibrant, Cocofly, Golisoda etc which accounts to 18.89 percent, 40 consumers had tasted Tendercoco brand which accounts to 18.44 percent, 32 consumers tasted Siponut brand which accounts to 14.74 percent, , 26 consumers have tasted the brand Cocosip which accounts to 11.98 percent and 8 consumers tasted Paperboat which accounts to 3.38 percent.

The figure 3.9 shows the difference among the brands in Northern and Southern region of the country

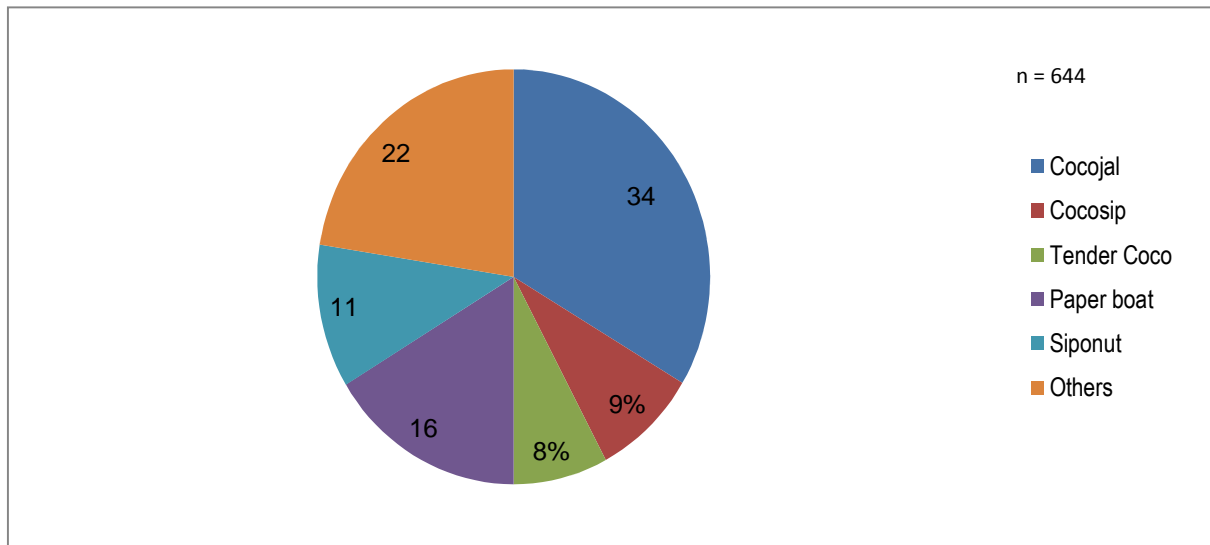
Figure 3.9: Comparison of brand of packed tender coconut water tasted by percentage of consumers in northern and southern region



Source: Researchers own computation from primary data

Fig 3.9 depicts that 34 percent of consumers tasted Coccojal brand in northern region whereas in southern region 32.25 consumers tasted which shows that only 1.75 percent of consumers more in northern region tasted Coccojal brand but overall combining both northern and southern region majority of the consumers had tasted Coccojal brand as compared to other brands. 27 percent of consumers had tasted other brands such as Manpasand, Ofresh in northern region whereas in southern region 18.89 percent which reveals that 7.11 percent of consumers more in northern region than the consumers of southern region. 21 percent of consumers in northern region tasted paper boat brand whereas in southern region only 3.68 percent tasted. Nine percent of consumers from northern region have tasted the brand Siponut whereas in southern region 14.74 percent consumers tasted. Seven percent of consumers from northern region have tasted the brand Cocosip whereas in southern region nearly 11.98 percent of consumers have tasted. Two percent of consumers from northern region have tasted the brand Tendercoco whereas 18.44 percent tasted in southern region.

Figure 3.10: Brand of packed tender coconut water tasted by respondents



Source: Researchers computation from primary data

Fig 3.10 depicts the brand of packed tender coconut water tasted by the respondents and result shows that majority of the share is occupied by the brand Coccojal which occupies the share 34 percent followed by other brands such as real active, Manpasand, Cocofly, Ofresh, Cocovibrant etc which accounts to 22 percent of the total share, 16 percent of share is occupied by Paperboat brand, 11 percent of the share is occupied by Siponut brand, nine percent of the share is occupied by Cocosip and eight percent of the share by Tendercoco.

3.2 Consumers' perception and preference towards packed tender coconut water

To fulfill the objective of both consumer's perception and preference different type of data was collected from consumers with the help of a structured questionnaire (attached in the appendix). Perception of consumers towards packed tender coconut water was inferred through nine parameters viz., the price of product is high, the product is tasty, it is a good substitute of carbonated drinks, it is easily available, it is easy to carry, the product is unique, it has attractive packing, the product is natural and it is a healthy replacement of fresh tender coconut water. Consumer's perception towards packed tender coconut water in northern region is shown in table 3.8.

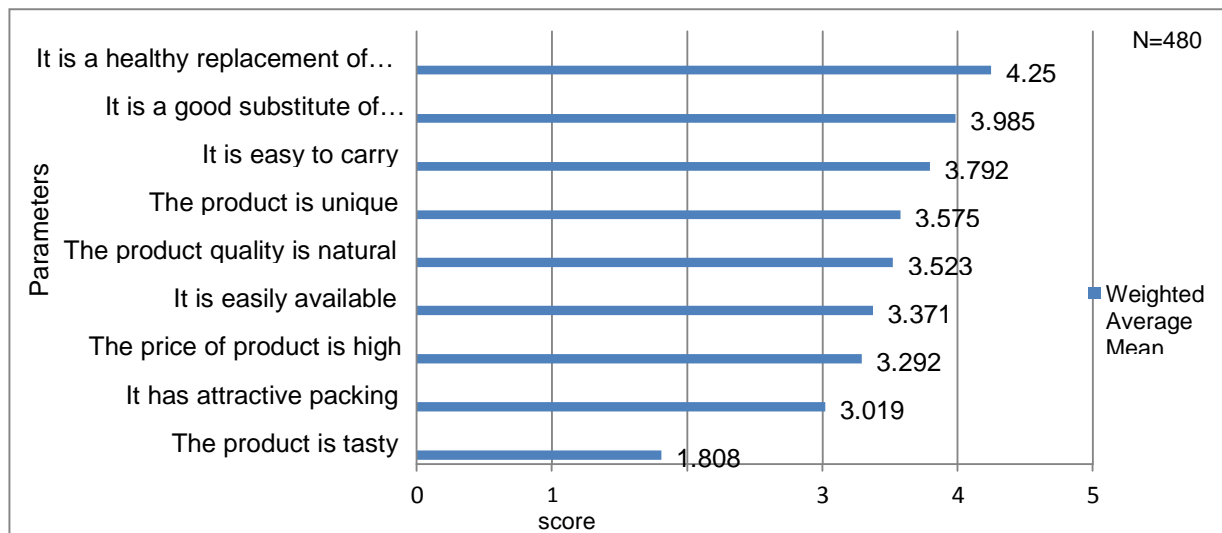
Table 3.8: Consumers perception towards packed tender coconut water in northern region

Sr. No	Parameters	Weighted Average Mean	Rank
1	It is a healthy replacement of fresh tender coconut water	4.250	I
2	It is a good substitute of carbonated drinks	3.985	II
3	It is easy to carry	3.792	III
4	The product is unique	3.575	IV
5	The product is natural	3.523	V
6	It is easily available	3.371	VI
7	The price of product is high	3.292	VII
8	It has attractive packing	3.019	VIII
9	The product is tasty	3.013	IX

Source: Researcher’s own computation from Primary Data

Weighted average method is used to find out the consumers perception towards packed tender coconut water. Five point scales is taken for consideration, point one referred to strongly disagree to five as strongly agree. Weighted score for parameter was calculated and average score to be analyzed and rank is allotted on the basis of average score. Figure 3.11 depicts the consumer’s perception towards packed tender coconut water based on weighted average score and rank.

Figure 3.11: Consumers perception towards packed tender coconut water in northern region



Source: Researcher’s own computation from Primary Data

Figure 3.11 shows that majority consumers perceived that packed tender coconut water is a healthy replacement of fresh tender coconut water as the availability of tender nuts is low in northern regions compared to the southern region thus it was ranked first and scored 4.25. People are becoming more health conscious so they are ready to replace the carbonated drinks with packed tender coconut water, so packed tender coconut water is a good substitute of carbonated drinks ranked second with a score of 3.985. Compared to natural tender coconut it is easy to carry the packed tender coconut water as natural tender coconut weighs two to three kgs whereas the packed tender coconut water is maximum of 300 ml. The product is unique scored 3.575 followed by the product is natural with a score of 3.523 and ranked five, it is easily available scored 3.371, It has attractive packing scored 3.019 and the product is tasty scored 3.013.

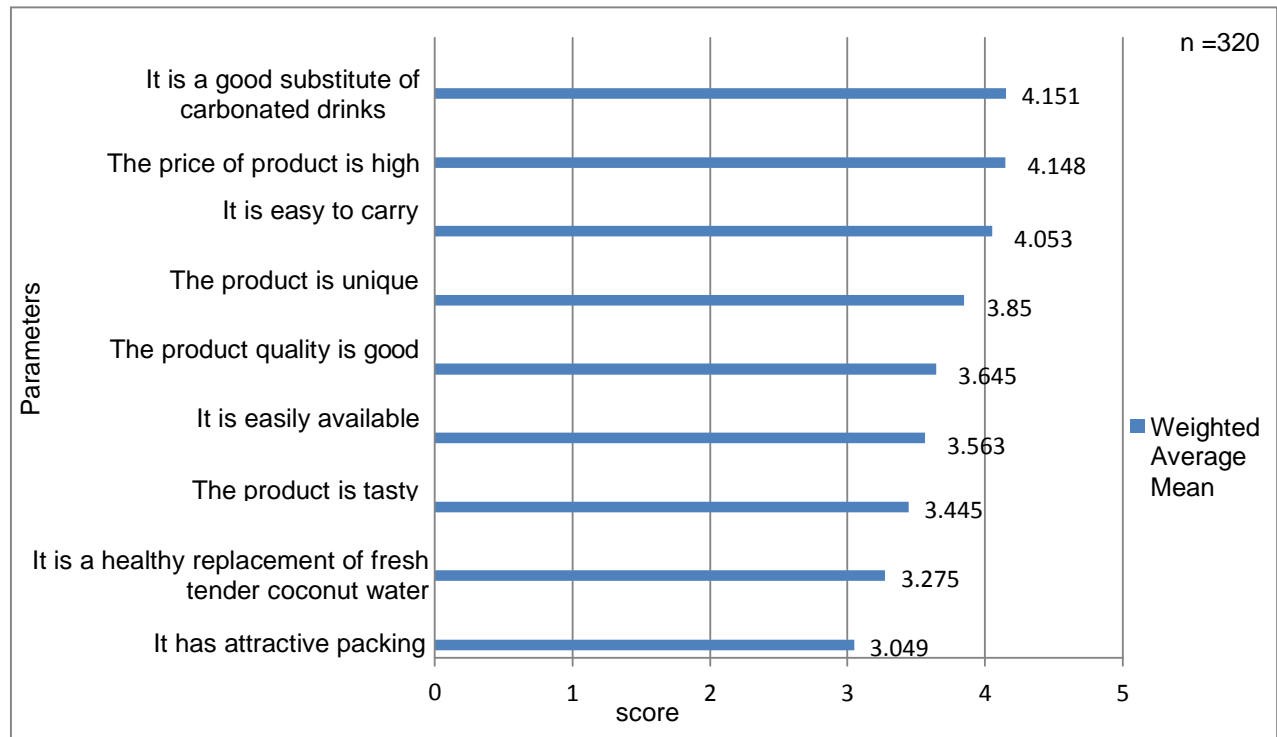
Table 3.9: Consumers perception towards packed tender coconut water in southern region

Sr. No	Parameters	Weighted Average Mean	Rank
1	It is a good substitute of carbonated drinks	4.151	I
2	The price of product is high	4.148	II
3	It is easy to carry	4.053	III
4	The product is unique	3.850	IV
5	The product is natural	3.645	V
6	It is easily available	3.563	VI
7	The product is tasty	3.445	VII
8	It is a healthy replacement of fresh tender coconut water	3.275	VIII
9	It has attractive packing	3.049	IX

Source: Researcher's own computation from Primary Data

Table 3.9 depicts the consumer's perception towards packed tender coconut water in southern region and it is observed from the table that the most important parameter the consumer perceives towards packed tender coconut water is that it is a good substitute of carbonated drinks. Consumer's perception towards packed tender coconut water in southern region based on weighted average mean is depicted in figure 3.12.

Figure 3.12: Consumers perception towards packed tender coconut water in southern region



Source: Researcher’s own computation from Primary Data

Figure 3.12 shows that the packed tender coconut water is a good substitute of carbonated drinks and ranks one with a score of 4.151 which indicates the consumers feel that packed tender coconut water is better than the soft drinks as these carbonated drinks consists of artificial sugar content in them which is not good for the health and leads to obesity. Consumers feel that the price of product is high and ranked second with weighted score of 4.148. Packed tender coconut water is easy to carry compared to natural tender coconut and scored 4.053. The product is unique scored 3.85 followed by the product is natural with a score of 3.645 and ranked five, it is easily available scored 3.563, the product is tasty scored 3.445. Most of people feel that it is not a healthy replacement for fresh tender coconut water because consumers are having a perception of packed tender coconut water losses some of the nutritional values during processing so packed tender coconut water score 3.275 and it has attractive packing scored the least.

Further the respondents were inquired about the most prominent reason for the consumption of packed tender coconut water and the responses obtained are shown in table 3.10

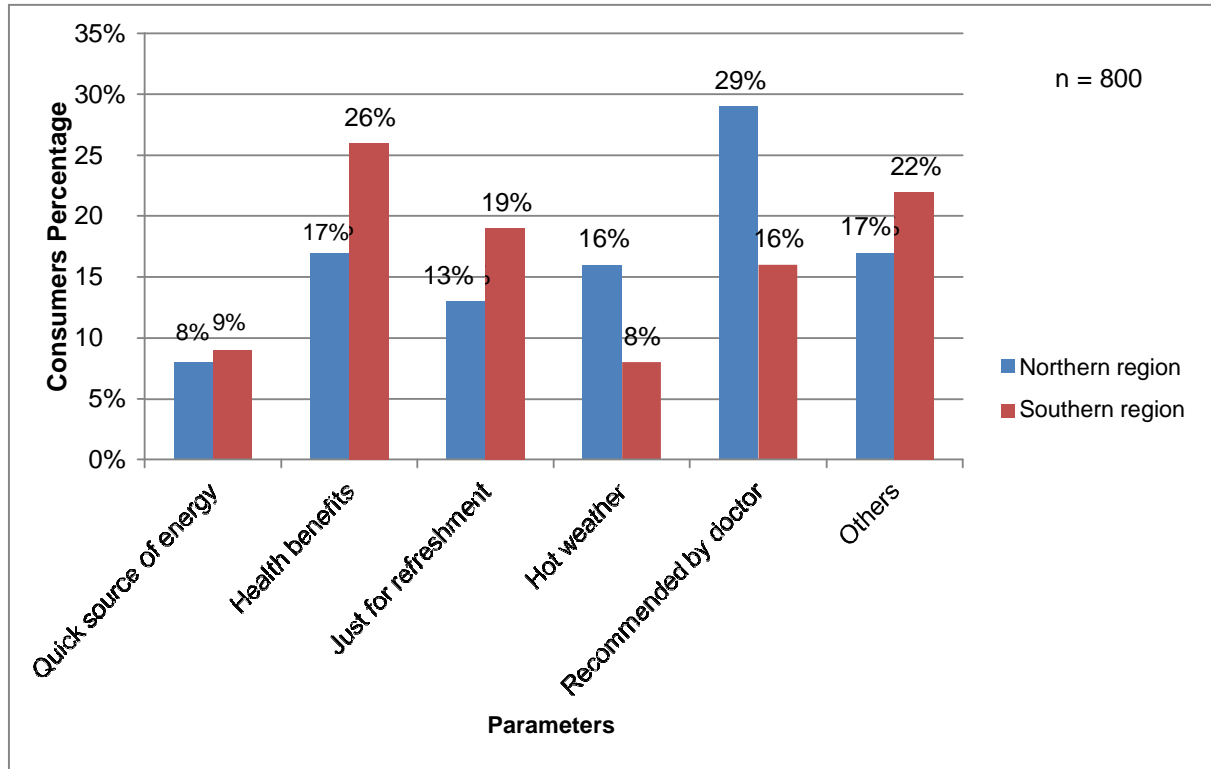
Table 3.10: Reason of consumption of packed tender coconut water

Sr. No	Parameters	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Quick source of energy	40	8%	30	9%	70	8.75%
2	Health benefits	84	17%	84	26%	168	21%
3	Just for refreshment	60	13%	60	19%	120	15%
4	Relief from hot weather conditions	76	16%	26	8%	102	12.75%
5	Recommended by doctor	140	29%	50	16%	190	23.75%
6	Others	80	17%	70	22%	150	18.75%
Total		480	100%	320	100%	800	100%

Source: Researchers computation from primary data

Table 3.10 depicts the reason of consumption of packed tender coconut water and result shows that in northern region the sample size is 480 consumers of which 140 consumers consume because of recommendation by a doctor which accounts to 29 percent followed by 84 consumers consume because of health benefits which accounts to 17 percent, 80 consumers consume because of other reasons such as product is new, it is tasty, it is natural which accounts to 17 percent, 76 consumers consume because of the relief from hot weather which accounts to 16 percent, 60 consumers consume just for refreshment which accounts to 13 percent and 40 consumers consume as a quick source of energy which accounts to eight percent whereas in southern region the sample size is 320 consumers of which 84 consumers consume because of health benefits which accounts to 26 percent followed by 70 consumers consume because of other reason such as product is new, it is natural which accounts to 22 percent, 60 consumers consume just for refreshment which accounts to 19 percent, 60 consumers consume because of recommendation by doctor which accounts to sixteen percent, 30 consumers consume as a quick source of energy which accounts to nine percent and 26 consumers consume because of hot weather which accounts to eight percent.

Figure 3.13: Comparison of percentage of consumer's reason to drink packed tender coconut water in northern and southern region

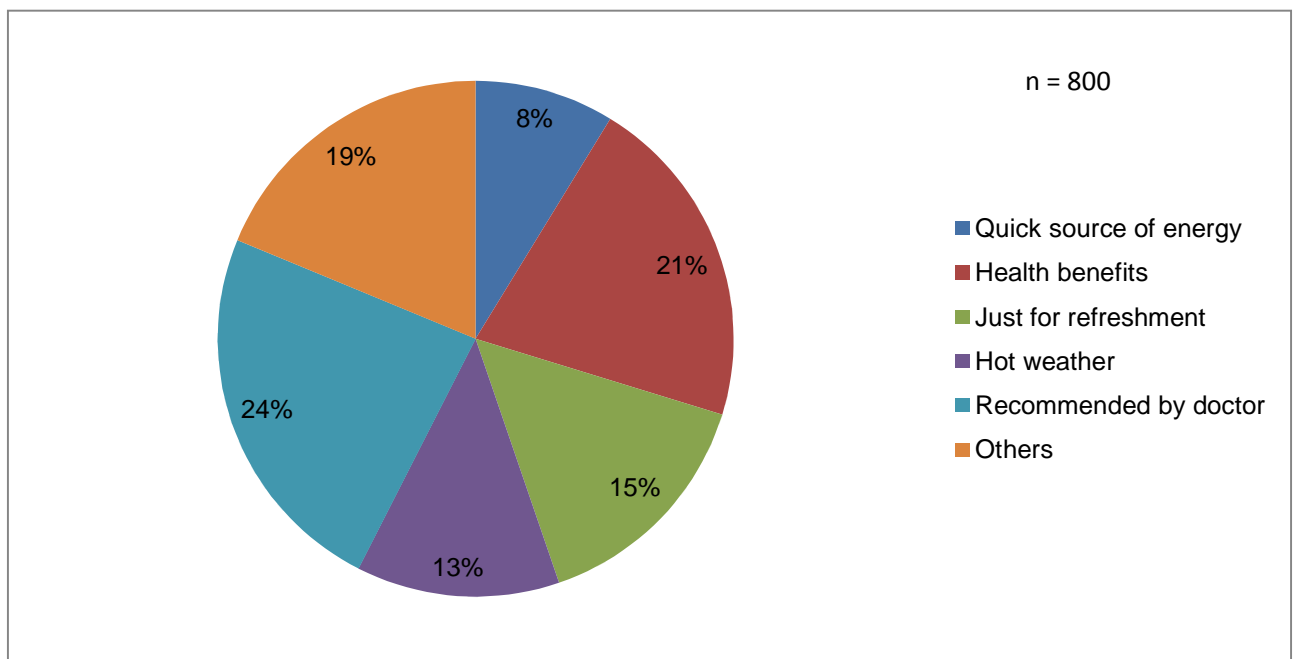


Source: Researchers computation from primary data

Fig 3.13 depicts the comparison of percentage of consumer's reason to consume packed tender coconut water in Northern and Southern region and it shows that 29 percent of consumers consume because of the reason recommended by doctor in northern region whereas in southern region 16 percent which results in 13 percent of more consumers from northern region consume because of recommendation of doctor than southern region consumer. 17 percent of consumers from northern region consume because of health benefits whereas in southern region 26 percent consumers consume which results in nine percent of consumers from southern region consume because of health benefits than northern region consumers. 13 percent of consumers from northern region consume just for refreshment whereas in southern region 19 percent consumers consume which results in six percent of more consumers from southern region consume just for refreshment than northern region consumers. 17 percent of consumers from northern region consume for other reasons such as product is new, it is natural whereas in southern region 22 percent of consumers consume which results in five percent of consumers consume more from southern region than

northern region consumers. 16 percent of consumers from northern region have consume because of hot weather whereas in the southern region eight percent which results in eight percent of consumes more consume from northern region than consumers of southern region. Eight percent of consumers from northern region consume because of quick source of energy whereas from southern region nine percent of consumers which results in one percent of more consumers' from southern region than northern region consumers.

Figure 3.14: Reason for consumption of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.14 depicts the reason to consume the packed tender coconut water and results show that from the sample size of 800 consumers, majority of share is occupied by recommendation by doctor which accounts to 24 percent followed by 21 percent of consumers consume for health benefits, 19 percent of consumers consumed because of other reason such as product is new, it is tasty, 15 percent of consumers consumed just for refreshment, 13 percent of consumers consumed because of hot weather and only eight percent of consumers consumed as a quick source of energy.

To assess the preference of the consumers towards packed tender coconut water nine parameters were identified on the basis of review and pilot study viz. price, quality, packing, brand, quantity, shelf life, offer, appearance and promotion. Five point scaling techniques was used seeking responses regarding the parameters where one was used for depicting least important and five for depicting most important. Consumer preference towards packed tender coconut water in northern region is shown in table 3.11.

Table 3.11: Preferred attributes of packed tender coconut water in northern region

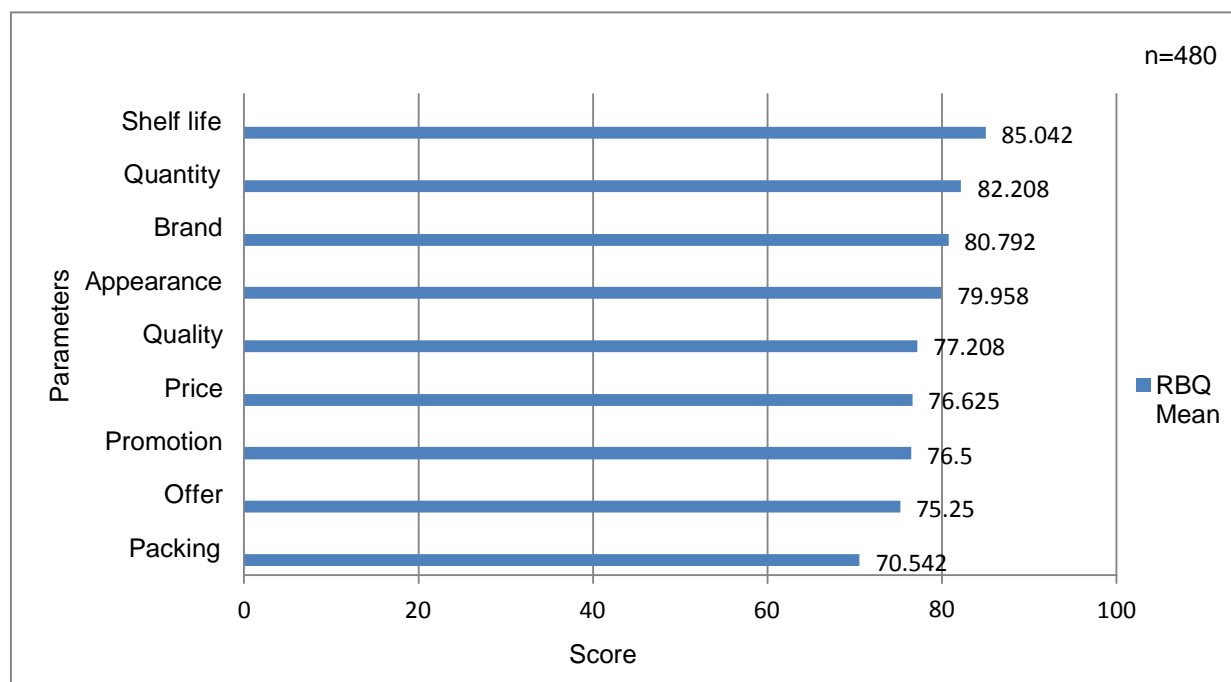
Sr. No	Parameters	RBQ Mean	Rank
1	Shelf life	85.042	I
2	Quantity	82.208	II
3	Brand	80.792	III
4	Appearance	79.958	IV
5	Quality	77.208	V
6	Price	76.625	VI
7	Promotion	76.500	VII
8	Offer	75.250	VIII
9	Packing	70.542	IX

Source: Researcher's own computation from primary data

To analyze the consumer preference towards packed tender coconut water in northern region RBQ technique is used. RBQ mean is calculated and rank is given to the parameters based on their score which is shown in table 3.11. Rank I indicate the most preferred parameter followed by other parameters based on their score. Figure 3.15 depicts consumer preference towards packed tender coconut water in northern region based on their RBQ mean.

Figure 3.15 indicates that shelf life scored as the major factor which consumers prefer towards packed tender coconut water. Shelf life plays a crucial role for packed tender coconut water as the taste of the product varies on the duration of its shelf life. The next preferred parameter for consumer preference towards packed tender coconut water is quantity which scored 82.208. Brand is the third important parameter which scored 80.792 followed by appearance of packed tender coconut water in the market with a score of 79.958, Other parameters like quality, price, promotion and offers were ranked at fifth, sixth, seventh and eighth respectively

Figure 3.15: Preferred attributes of packed tender coconut water in northern region



Source: Researcher’s own computation from primary data

Consumer preference towards packed tender coconut water is calculated by collecting the data from 320 consumers in the southern region and analyzed using RBQ technique. Table 3.12, depicts the preferred attributes of packed tender coconut water in southern region.

Table 3.12: Preferred attributes of packed tender coconut water in southern region

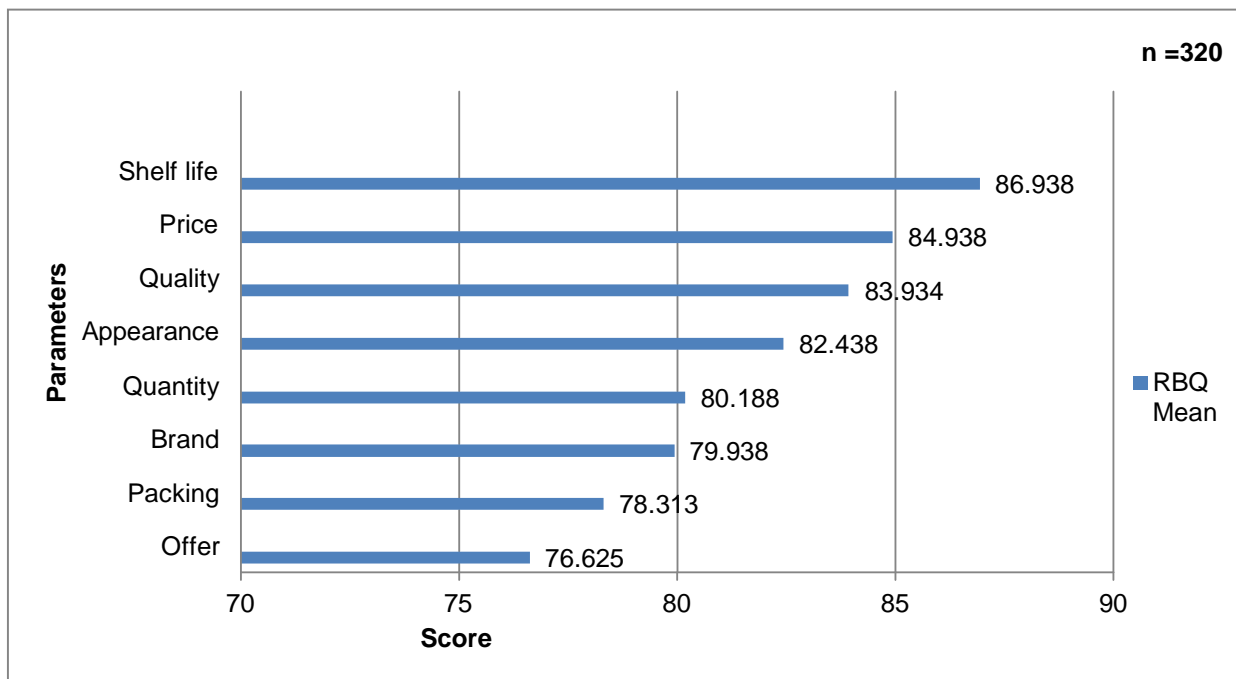
Sr. No	Parameters	RBQ Mean	Rank
1	Shelf life	86.938	I
2	Price	84.938	II
3	Quality	83.934	III
4	Appearance	82.438	IV
5	Quantity	80.188	V
6	Brand	79.938	VI
7	Packing	78.313	VII
8	Offer	76.625	VIII
9	Promotion	73.500	IX

Source: Researcher’s own computation from primary data

Table 3.12 indicates that the highly preferred parameter regarding packed tender coconut water is shelf life with RBQ mean 86.938 and promotion of packed tender coconut water is not much preferred by the consumers of southern region. Figure 2.21 depicts consumer preference towards packed tender coconut water in southern region based on their RBQ mean.

Figure 3.16 indicates that shelf life scored 86.938 is the major factor which consumers prefer towards packed tender coconut water as taste varies based on shelf life of the product. The next preferred parameter for consumer preference towards packed tender coconut water is price which scored 84.938. Quality of packed tender coconut water is the third important parameter which scored 83.934 followed by appearance of packed tender coconut water in market shelf's with a score of 82.438, quantity with a score of 80.188, brand with a score of 79.938, packing with a score of 78.313, offer with a score of 76.625 and promotion with a score of 73.500.

Figure 3.16: Graphical representation of preferred attributes of packed tender coconut water in southern region



Source: Researcher's own computation from primary data

To understand the consumers' preference regarding the occasion for the consumption of PTCW, few parameters were identified during pilot study and are tabulated and analysed regionwise below. The parameters identified were during outing with family/friends, at work, in parties, travelling, sickness etc.

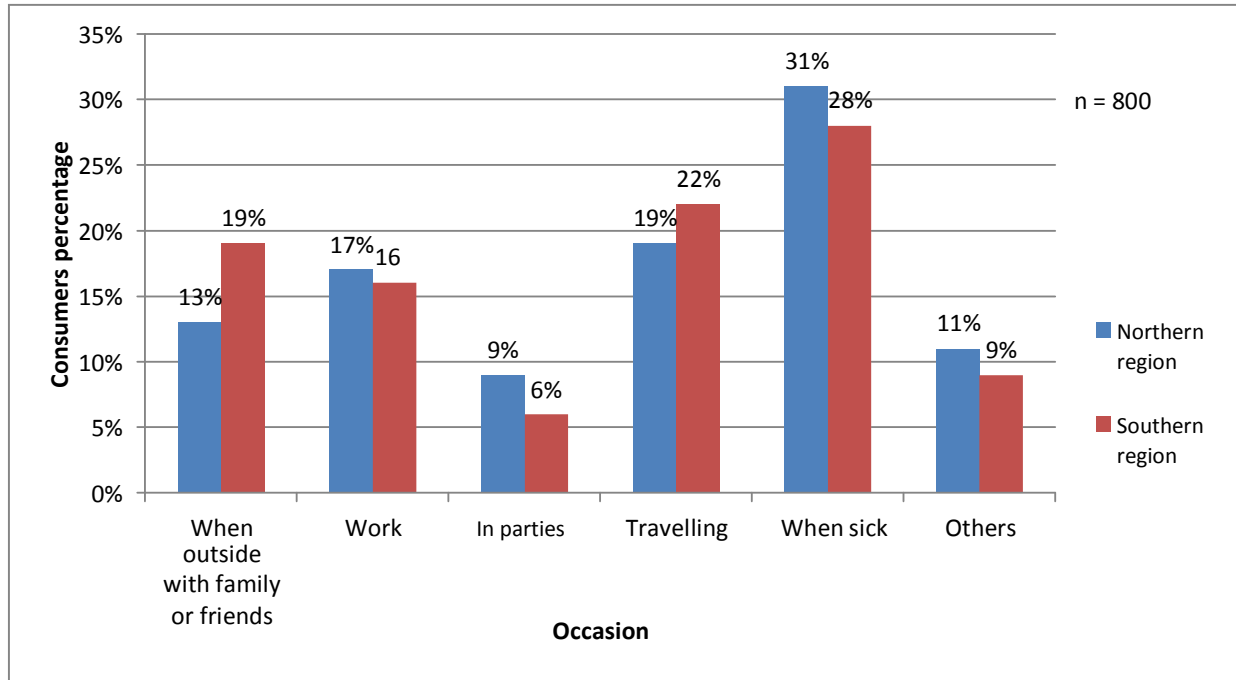
Table 3.13: Preferred occasion for the consumption of packed tender coconut water

Sr. No	Parameters	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Outing with family or friends	60	13%	60	19%	120	15%
2	Work	80	17%	50	16%	130	16.25%
3	In parties	45	9%	20	6%	65	8.13%
4	Travelling	90	19%	70	22%	160	20%
5	When sick	150	31%	90	28%	240	30%
6	Others	55	11%	30	9%	85	10.63%
Total		480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

Table 3.13 depicts the preferred occasion for the consumption of packed tender coconut water in northern region and results show that out of 480 consumers, 150 consumers responded that they prefer packed tender coconut water when they are sick and 90 consumers prefer to drink packed tender coconut water when they are travelling, 80 consumers prefer to drink during work timings, 60 consumers prefer to drink when they are outside with their family or friends, 55 consumers prefer to drink during other occasions as a remedy for hangover, when they are fast and 45 consumers prefer to drink in parties and in southern region out of 320 consumers, 90 consumers responded that they prefer packed tender coconut water when they are sick and 70 consumers prefer to drink packed tender coconut water when they are travelling, 50 consumers prefer to drink during work timings, 60 consumers prefer to drink when they are outside with their family or friends, 30 consumers prefer to drink during other occasions as a remedy for hangover, when they are fasting and 20 consumers prefer to drink in parties.

Figure 3.17: Comparison of preferred occasion for the consumption of packed tender coconut water in northern and southern region

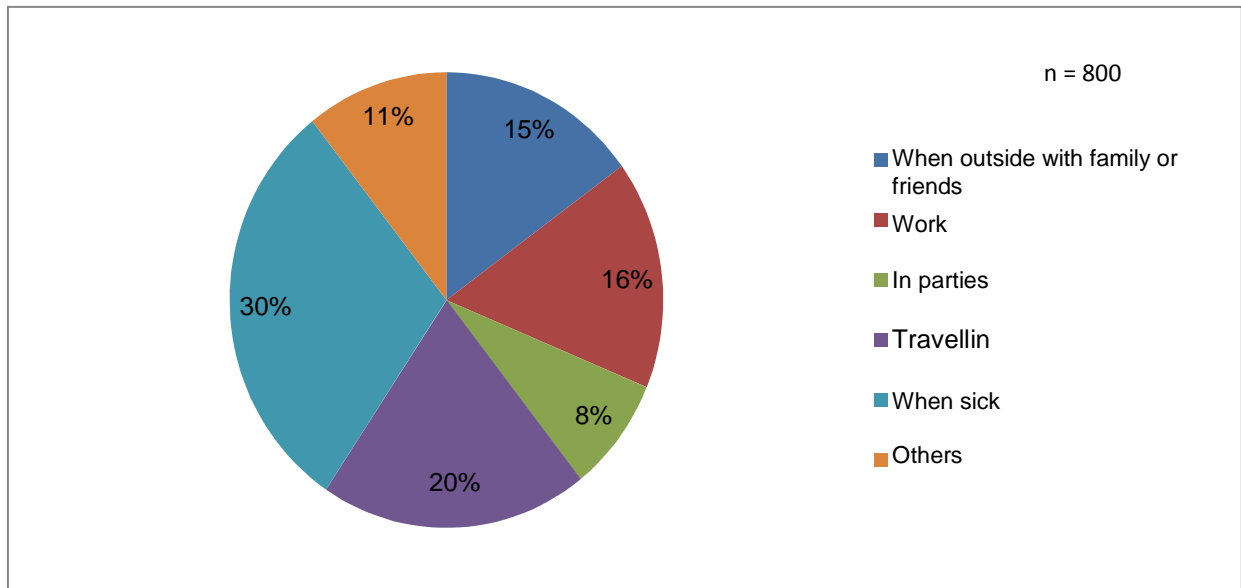


Source: Researchers computation from primary data

Fig 3.17 depicts the comparison of preferred occasion of consumers to consume packed tender coconut water in northern and southern region and shows that out of the total sample size of 800 consumers, majority of consumers both from northern and southern regions consume when they are sick and shows that 31 percent of consumers from northern region and 28 percent of consumers from southern region which results that three percent of more consumers from northern region consume when they are sick than the southern region consumers. 19 percent of consumers from northern region consume during travelling whereas in the southern region 22 percent of consumers which results in three percent more consumers from southern region than northern region consumers. 13 percent of consumers from northern region prefer to consume when they are outside with family or friends whereas in southern region 19 percent of consumers which results in six percent of more consumers from southern region prefer than northern region consumers. 17 percent of consumers prefer when they are at work in northern region whereas in southern region 16 percent consumers which result in one percent more consumers from northern region prefer than southern region consumers. Nine percent of consumers prefer to consume during parties in northern region whereas in southern region only seven percent of consumers which results in two

percent of more consumers from northern region prefer to consume than southern region consumers. 11 percent of consumers prefer other occasions in northern region whereas in southern region nine percent which results in two percent more consumers from northern region prefer than southern region consumers.

Figure 3.18: Preferred occasion to consume packed tender coconut water



Source: Researchers computation from primary data

Fig 3.18 depicts the preferred occasion to consume packed tender coconut water which results in majority of the share is occupied by the occasion when they are sick which accounts to 30 percent followed by travelling which accounts to 20 percent, at work 16 percent, when outside with family or friends 15 percent, other occasions 11 percent and in parties.

The consumers were further inquired about their preferred packaging of packed tender coconut water and the results obtained are shown in the table 3.14

Table 3.14: Preference of packaging for packed tender coconut water

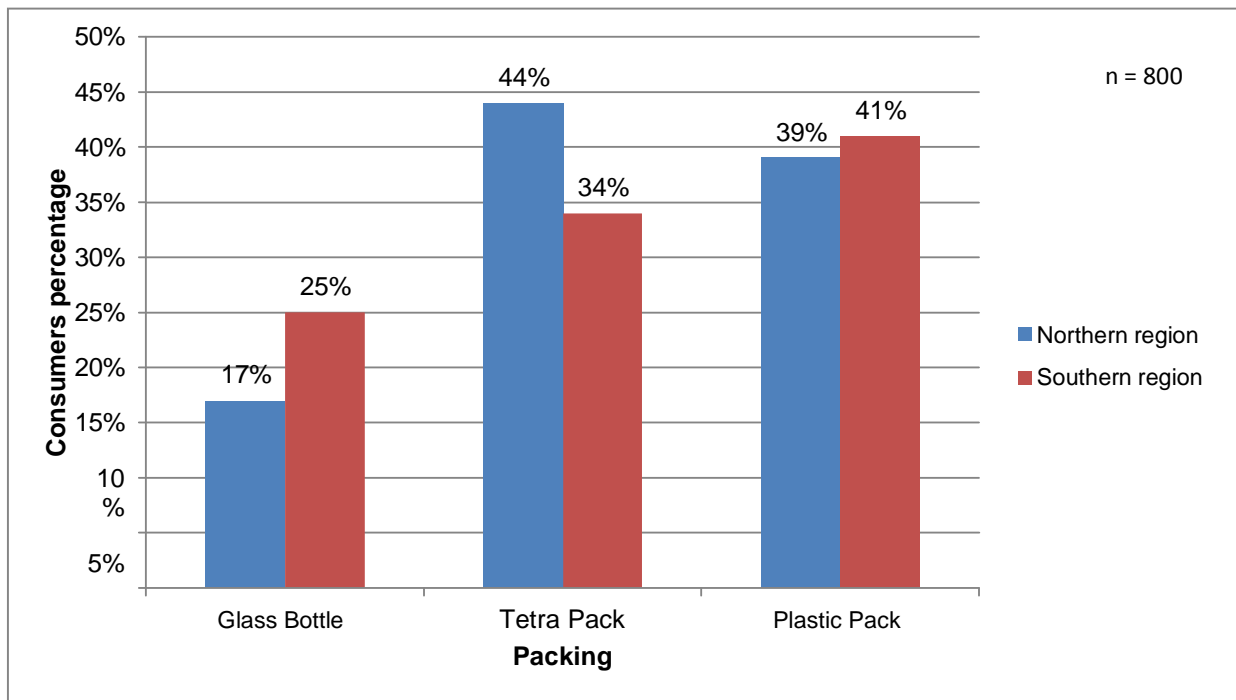
Sr. No	Parameters	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Glass Bottle	80	17%	78	25%	158	19.75%
2	Tetra Pack	214	44%	110	34%	324	40.5%
3	Plastic Pack	186	39%	132	41%	318	39.75%
Total		480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

Table 3.14 depicts the preference of consumers towards packing of packed tender coconut water and results show that in northern region out of 480 consumers, 214 consumers prefer the tetra pack for packed tender coconut water followed by plastic pack and glass bottle and in southern region out of 320 consumers, 132 consumers preferred the plastic packing for packed tender coconut water followed by tetra pack by 110 consumers and glass bottle by 78 consumers.

The consumers preference was also compared between the northern and southern region and the results are shown in figure 3.19.

Figure 3.19: Comparison of preferred packaging for tender coconut water by consumers in northern and southern region

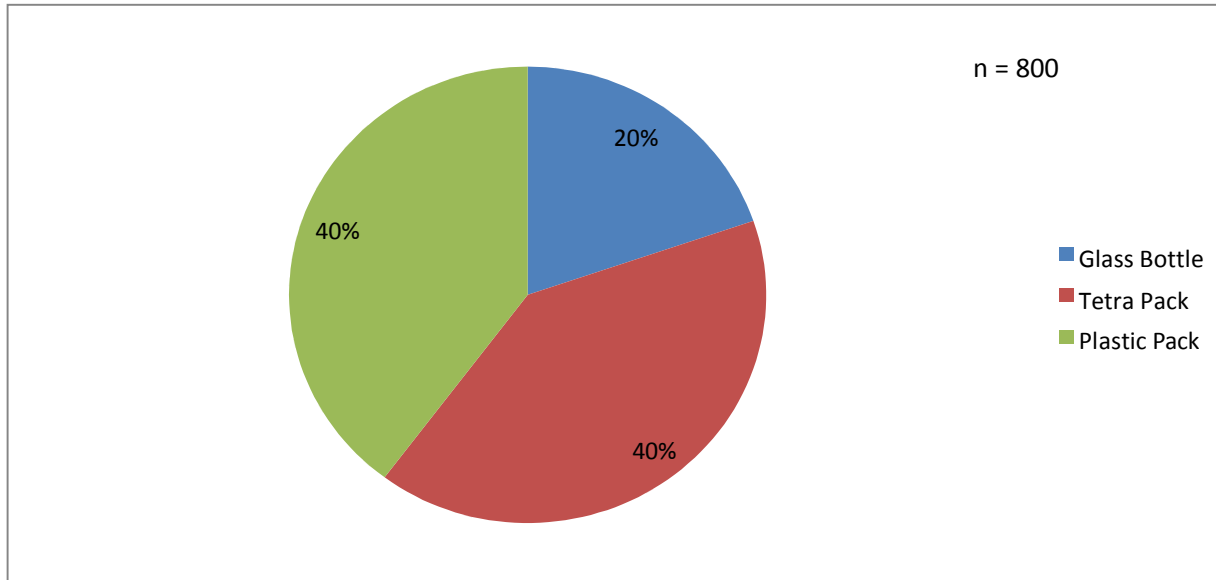


Source: Researchers computation from primary data

It can be seen from the figure 3.19 that 44 percent of consumers in northern region prefer tetra packing whereas in southern region 34 percent and 39 percent of consumers from northern region prefer plastic packing whereas in southern region 41 percent consumers prefer that. 17 percent of consumers from northern region prefer glass bottle packing whereas in southern region 25 percent of consumers prefer which results in eight percent of consumers more from southern region prefer than northern region consumers.

Hence it can be inferred that majority consumers preferred tetra pack or plastic pack for packed tender coconut water and the pie diagram below clearly represents that.

Figure 3.20: Preferred packaging for packed tender coconut water among consumers



Source: Researchers computation from primary data

It can be seen from the fig 3.20 that out of the total sample size of 800 consumers, 324 consumers preferred tetra packing which accounts to 40 percent of the total share followed by 318 consumers preferred plastic packing which accounts to 40 percent of the packing and 158 consumers preferred glass packing which accounts to 20 percent.

It is widely accepted that the preference of packed tender coconut water will have seasonal preferences too. The consumers were asked about their seasonal preferences and the responses received are shown in table 3.15 below.

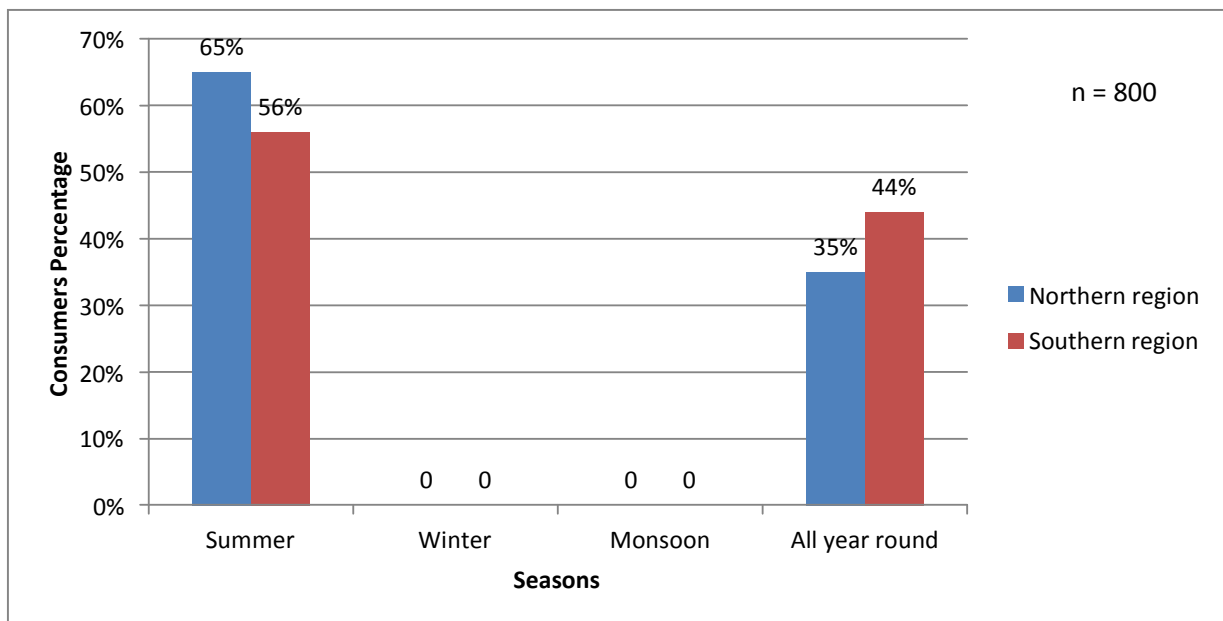
Table 3.15: Seasonal preference for packed tender coconut water

Sr. No	Parameters	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Summer	310	65%	180	56%	490	61.25%
2	Winter	0	0	0	0	0	0
3	Monsoon	0	0	0	0	0	0
4	All year round	170	35%	140	44%	310	38.75%
Total		480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

Table 3.15 depicts the Seasonal preference of consumers to drink packed tender coconut water and result show that in northern region, out of 480 consumers, 310 consumers prefer to drink packed tender coconut water in summer season whereas 170 consumers prefer to drink round the year and in southern region, out of 320 consumers, 180 consumers prefer to drink packed tender coconut water in summer season whereas 140 consumers prefer to drink round the year.

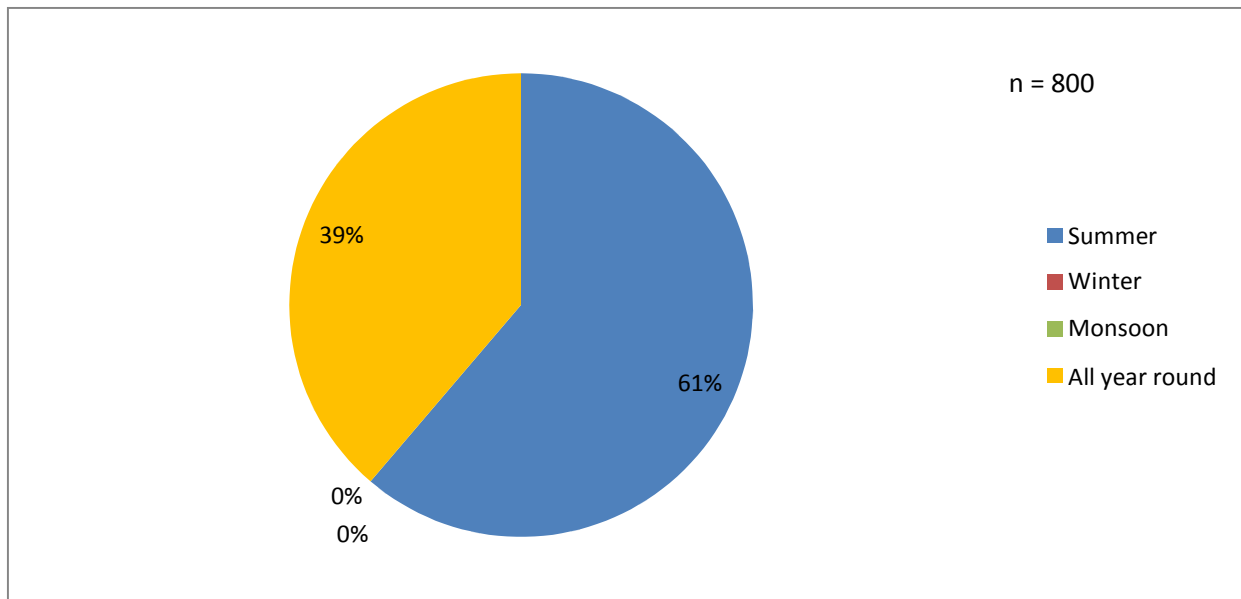
Figure 3.21: Comparison of seasonal preference of packed tender coconut water in northern and southern regions



Source: Researchers computation from primary data

Fig 3.21 depicts the comparison of seasonal preference among consumers to drink packed tender coconut water in northern and southern regions and shows that out of 800 consumers, 65 percent of consumers from northern region prefer to drink packed tender coconut water whereas in southern region 56 percent consumers prefer which results in nine percent of more consumers from northern region prefer to drink packed tender coconut water in summer season. No consumer preferred to drink in winter and monsoon seasons. 35 percent of consumers prefer to drink round the year in northern region whereas in southern region 44 percent prefer to drink which results in nine percent of more consumers from southern region prefer to drink round the year than northern region.

Figure 3.22: Seasonal preference of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.22 depicts the seasonal preference of packed tender coconut water which results in out of 800 consumers, 490 consumers prefer to drink packed tender coconut water in summer season which accounts to 61 percent followed by 310 consumers round the year which accounts to 39 percent.

3.3 Buying behaviour of consumers for packed tender coconut water

To understand the buying behaviour of packed tender coconut water few sub objectives were formulated as below

- i. To understand the influence of demographic profile on the buying behaviour of consumers
- ii. To understand the parameters considered before purchasing packed tender coconut water
- iii. To identify different modes of purchasing packed tender coconut water
- iv. To find the factors affecting the mode of buying of packed tender coconut water

3.3.1 Influence of demographic profile of consumers on their buying behaviour

The objective is to know the demographic profile of consumers and its influence on different modes of buying. To fulfill the objective, data related to demographic profile of consumers and the

association of demographic profile on buying behaviour of packed tender coconut water is required. Chi square test is used for analysis of association of demographic profile and buying behaviour of packed tender coconut water.

The important demographic variables considered for the cross tabulation were the gender, marital status, age, education, occupation and income of the respondents and buying behaviour parameters like reason to purchase, source of purchase, frequency of purchase, checking expiry date, quantity purchased and mode of payment. The detailed findings and its analysis is presented below.

The respondents were inquired about the most attractive aspect which prompted them to purchase packed tender coconut water among the shelf presentation, price and packaging. The results are shown in table 3.16.1.

Table 3.16.1: Cross tabulation of demographic profile and the reason to purchase

Demographic Profile		Reason to Purchase			Chi-Square Value
		Presentation on the shelf	Price	Packing	
Gender	Male	220	32	152	4.746 (0.093)
	Female	232	42	150	
Marital Status	Single	245	30	160	8.977 (0.011)
	Married	207	46	112	
Age	<20yrs	146	20	108	8.488 (0.075)
	20-35yrs	182	28	97	
	36-50yrs	124	28	67	
	>50yrs	0	0	0	
Education	Secondary Level	18	2	9	323.612* (0.000)
	Intermediate	174	29	96	
	Graduation	186	34	124	
	PG & above	74	11	43	
Occupation	Student	24	2	10	7.931 (.243)
	Professional	338	53	199	
	Businessman	40	13	25	
	Housewife	50	8	38	
	Others	0	0	0	
Income	<Rs.20000/-	3	2	7	5.509 (.239)
	Rs.20000-Rs.50000	295	52	176	
	Rs.51000-80000	154	22	89	
	Rs.81000-Rs.100000	0	0	0	
	>Rs.100000	0	0	0	

Source: Researchers own computation from primary data

Table 3.16.1 depicts the association of demographic profile and the reason to purchase shows that the chi square value of education is significant which shows that the education influences the reason to purchase and majority of consumers purchase the packed tender coconut water because of the influence of the way it is presented in the shelf's followed by its packing.

Further the source of purchase was cross tabulated with the demographic profile of the respondents and the results are shown in the table below.

Table 3.16.2: Cross tabulation of demographic profile and source of purchase

Demographic Profile		Source of Purchase				Chi-Square Value
		Mall / Super market	Grocery store	Convenience store	Online	
Gender	Male	262	124	10	10	10.304 (0.016)
	Female	274	87	13	20	
Marital Status	Single	231	181	13	10	116.772* (0.000)
	Married	305	30	10	20	
Age	<20yrs	86	175	13	0	340.505* (0.000)
	20-35yrs	251	36	0	20	
	36-50yrs	199	0	10	10	
	>50yrs	0	0	0	0	
Education	Secondary Level	0	19	10	0	323.612* (0.000)
	Intermediate	155	156	13	20	
	Graduation	253	36	0	10	
	PG & above	128	0	0	0	
Occupation	Student	36	0	0	0	89.652* (0.000)
	Professional	384	166	10	30	
	Businessman	65	3	10	0	
	Housewife	51	42	3	0	
	Others	0	0	0	0	
Income	<Rs.20000/-	12	0	0	0	
	Rs.20000-Rs.50000	262	208	23	30	195.265* (0.000)
	Rs.51000-80000	262	3	0	0	
	Rs.81000-Rs.100000	0	0	0	0	
	>Rs.100000	0	0	0	0	

Source: Researchers own computation from primary data

Table 3.16.2 depicts the association of demographic profile and source of purchase and the result shows that income, occupation, education, age, marital status are significant and majority of the consumers purchase from malls/supermarket.

The frequency of purchase was cross tabulated with the demographic profile of the respondents to identify the most prominent association between them. The results obtained are shown in table below.

Table 3.16.3: Cross tabulation of demographic profile and frequency of purchase

Demographic Profile		Frequency of Purchase					Chi- Square Value
		Once in a week	More than once in a week	Once in a month	More than once in a month	Occasionally	
Gender	Male	82	38	138	62	86	7.128 (.129)
	Female	69	55	138	44	88	
Marital Status	Single	97	73	140	12	113	116.247* (0.000)
	Married	54	20	136	94	61	
Age	<20yrs	79	56	116	11	12	286.547* (0.000)
	20-35yrs	38	37	49	43	140	
	36-50yrs	34	0	111	52	22	
	>50yrs	0	0	0	0	0	
Education	Secondary Level	19	0	10	0	0	445.524* (0.000)
	Intermediate	72	56	204	0	12	
	Graduation	60	27	59	51	102	
	PG & above	0	10	3	55	60	
Occupation	Student	0	0	1	11	24	110.047* (0.000)
	Professional	126	80	183	80	121	
	Businessman	15	10	38	0	15	
	Housewife	10	3	54	15	14	
	Others	0	0	0	0	0	
Income	<Rs.20000/-	0	0	0	0	12	350.810* (0.000)
	Rs.20000-Rs.50000	124	76	239	70	14	
	Rs.51000-80000	27	17	37	36	148	
	Rs.81000-Rs.100000	0	0	0	0	0	
	>Rs.100000	0	0	0	0	0	

Source: Researchers own computation from primary data

Table 3.16.3 represents the cross tabulation of demographic profile and frequency of purchase and result shows that income, occupation, education, age, marital status are significant which represents that these influence the frequency of purchase and majority of the consumers purchase occasionally. Further it was further examined the influence of demographics on the quantity purchased in terms of one pack, two to four, four to six or more than six. The results are presented in the table below.

Table 3.16.4: Cross tabulation of demographic profile and quantity purchased

Demographic Profile		Quantity Purchased				Chi-Square Value
		One pack	Two-four	Four to six	More than six	
Gender	Male	221	127	40	18	1.328 (.723)
	Female	203	125	48	18	
Marital Status	Single	247	120	47	21	7.469 (0.058)
	Married	177	132	41	15	
Age	<20yrs	178	67	24	5	29.487* (0.000)
	20-35yrs	140	106	39	22	
	36-50yrs	106	79	25	9	
	>50yrs	0	0	0	0	
Education	Secondary Level	19	4	6	0	47.922* (0.000)
	Intermediate	214	101	26	3	
	Graduation	134	106	35	24	
	PG & above	57	41	21	9	
Occupation	Student	11	14	4	7	24.932* (0.003)
	Professional	315	184	66	25	
	Businessman	46	23	7	2	
	Housewife	52	31	11	2	
	Others	0	0	0	0	
Income	<Rs.20000/-	7	4	1	0	58.797* (0.000)
	Rs.20000-Rs.50000	308	163	46	6	
	Rs.51000-80000	109	85	41	30	
	Rs.81000-100000	0	0	0	0	
	>Rs.100000	0	0	0	0	

Source: Researchers own computation from primary data

Table 3.16.4 depicts the cross tabulation of demographic profile and quantity purchased shows that demographic profile such as age, education, occupation, income are significant and result shows that majority of the consumers purchased only the one pack in one purchase.

The customers were inquired in terms of their mode of payment and it was cross tabulated with the demographic profile. The details are presented in the table below.

Table 3.16.5: Cross tabulation of demographic profile and mode of payment

Demographic Profile		Payment Mode					Chi-Square Value
		Cash	Credit Card	Debit Card	Online Payment	Others	
Gender	Male	1	97	120	151	37	15.812 (0.003)
	Female	1	132	83	156	22	
Marital Status	Single	2	98	96	202	37	35.964* (0.000)
	Married	0	131	107	105	22	
Age	<20yrs	0	23	80	171	0	228.797* (0.000)
	20-35yrs	2	115	61	70	59	
	36-50yrs	0	91	62	66	0	
	>50yrs	0	0	0	0	0	
Education	Secondary	0	10	9	10	0	298.338* (0.000)
	Intermediate	0	37	98	199	10	
	Graduation	2	162	83	15	37	
	PG & above	0	20	13	83	12	
Occupation	Student	1	8	11	16	0	95.870* (0.000)
	Professional	1	147	182	204	56	
	Businessman	0	22	10	43	3	
	Housewife	0	52	0	44	0	
	Others	0	0	0	0	0	
Income	<Rs.20000/-	0	0	0	12	0	232.736* (0.000)
	Rs.20000- Rs.50000	0	72	155	264	32	
	Rs.51000- Rs. 80000	2	157	48	31	27	
	Rs.81000- Rs.100000	0	0	0	0	0	
	>Rs.100000	0	0	0	0	0	

Source: Researchers own computation from primary data

Table 3.16.5 depicts the cross tabulation of demographic profile and payment mode shows that marital status, age, education, occupation, income influences the mode of payment. Majority of consumers prefer to purchase through online payment.

Table 3.16.1 to 3.16.5 indicates the cross tabulation of demographic profile and buying behaviour and it shows that out of 800 respondents 232 females are attracted to purchase the packed tender coconut water by the way it is presented in the shelfs whereas 220 males are attracted and 274 females buy from mall/supermarkets whereas 262 males buy. Majority respondents both from male

and female purchase once in a month and purchase one pack in a single purchase. 151 male and 156 females purchase through online payment. Majority of the respondents out of 800 respondents are single who purchase based on the way it is presented on the shelf whereas respondents who purchase from malls/supermarket are married i.e., 305 respondents. Frequency of purchase is once in a month both the respondents married and single, the 247 respondents who are single purchase the quantity of packed tender coconut water is one. 202 respondents who are single are paying the packed tender coconut water through online payment. Most of the respondents who purchase in malls/supermarkets are under the age group of 20-35 years i.e., 255 respondents whereas 185 respondents are attracted by the way packed tender coconut water presented in the shelf's and 140 respondents who are under the age group of 20-35 years purchase the packed tender coconut water occasionally with quantity of one. 186 respondents who studied graduation are attracted by the way it is presented in the shelf and 204 respondents buy the product once in a month whereas 253 respondents who studied graduation are purchasing in malls/supermarkets. Majority of the respondents are professionals who purchase the product in malls/supermarket, frequency of purchase is once in a month with a quantity of one and the payment mode is online and the income group of Rs. 20000/- – Rs. 50000/- and the type of family is nuclear.

Majority of female respondents purchase the packed tender coconut water because of the way it is presented in the shelf's whereas the source of purchase is from malls/supermarkets, frequency of purchase is once in a month with an average purchase quantity of one while the mode of payment is online payment and majority of respondents who prefer the above factors are single and under the age group of 20-35 years. The majority of the respondent's educational qualification is graduation followed by intermediate and their occupation is professional under the income group of Rs.20000/- – Rs.50000/-.

The detailed association between demographics profiles and buying behaviour in Northern India is presented in the table below.

Table 3.16.6: Association of demographic profile and buying behaviour for packed tender coconut water in northern region

	Reason to drink PTCW	Mode of buying	Frequency of purchase	Expiry date checking	Quantity	Mode of Payment
Gender	3.402 (.493)	140.58* (0.000)	5.243 (.513)	146.938* (.000)	5.273 (0.509)	165.300* (0.000)
Marital Status	2.647 (0.852)	190.827* (0.000)	13.929 (.125)	16.188 (.063)	166.628* (0.000)	191.930* (0.000)
Age group	65.858* (0.000)	7.731 (.258)	10.759 (.293)	78.349* (0.000)	10.759 (.293)	16.188 (.063)
Educational Qualification	1.702 (.790)	160.357* (0.000)	17.490 (0.008)	106.234* (0.000)	19.409 (0.006)	106.234* (0.000)
Occupation	14.260 (.027)	169.655* (0.000)	14.421 (.121)	142.111* (0.000)	12.421 (.191)	142.111* (0.000)
Monthly Family Income	7.679 (.465)	6.093 (.192)	8.010 (.237)	2.348 (.968)	8.010 (.237)	2.348 (.968)

Source: Researcher's own computation from primary data

Figures shows the probability of significance

*indicate significance at 1% level of probability

Table 3.16.6 depicts the association of demographic profile and buying behaviour of packed tender coconut water in northern region and shows that gender has only influence on mode of buying, checking of expiry date before buying and mode of payment at one percent significance and it has no influence on reason to drink packed tender coconut water, frequency of purchase and quantity of buying.

Marital status has an influence on mode of buying, quantity purchased of packed tender coconut water, mode of payment and it has no influence on reason to drink packed tender coconut water, frequency of purchase, checking of expiry date of packed tender coconut water before buying.

Age group has a significant influence on reason to buy packed tender coconut water and checking expiry date of packed tender coconut water before buying and it has no influence on mode of buying, frequency of purchase, quantity, mode of payment. Educational qualification and occupation has influence on mode of buying, checking of expiry date, mode of payment and it has no influence on reason to drink packed tender coconut water, frequency of purchase and quantity.

Monthly family income has no influence on any of the factors such as reason to drink packed tender coconut water, mode of buying, frequency of purchase, checking of expiry date, quantity and mode of payment. Similarly the association is prepared for the southern region. The detailed results are shown in the table below.

Table 3.16.7: Association of demographic profile and mode of buying of packed tender coconut water in southern region

	Reason to drink PTCW	Mode of buying	Frequency of purchase	Expiry date checking	Quantity	Mode of Payment
Gender	.447 (.800)	4.805 (.187)	3.861 (.425)	.035 (.983)	.319 (.852)	1.973 (.578)
Marital Status	7.645 (.022)	91.411* (0.000)	71.622* (0.000)	5.344 (.069)	3.604 (.165)	1.864 (.601)
Age group	8.068 (.068)	144.501* (0.000)	6.013 (.198)	102.563* (0.000)	4.376 (.378)	56.338* (0.000)
Educational Qualification	9.440 (.150)	118.633* (0.000)	8.431 (.208)	343.412* (0.000)	12.595 (.050)	102.521* (0.000)
Occupation	5.604 (.231)	60.445* (0.000)	7.108 (.130)	41.434* (0.000)	.537 (.900)	34.750* (0.000)
Monthly Family Income	.837 (.658)	9.454 (0.024)	172.907* (0.000)	3.578 (.167)	1.028 (.598)	60.265* (0.000)

Source: Researcher's own computation from primary data

Figures shows the probability of significance

*indicate significance at 1% level of probability

Table 3.16.7 depicts the association of demographic profile and its influence on mode of buying of packed tender coconut water in southern region and it indicates that marital status has influence on mode of buying and frequency of purchase of packed tender coconut water at one percent significance and has no influence on reason to drink packed tender coconut water, checking of expiry date, quantity and mode of payment. Age group, Educational qualification and occupation has influence on mode of buying, checking of expiry date before purchasing of packed tender coconut water and mode of payment while purchasing and has no influence on reason to drink packed tender coconut water, frequency of purchase, quantity. Monthly family income as only influence on frequency of purchase of packed tender coconut water and mode of payment while purchasing whereas gender has no influence on any of the factors.

To understand the buying behaviour of consumers they were inquired about the parameters they considered while purchasing the packed tender coconut water and the responses are tabulated in table 3.17 below.

Table 3.17: Parameters considered while purchasing packed tender coconut water

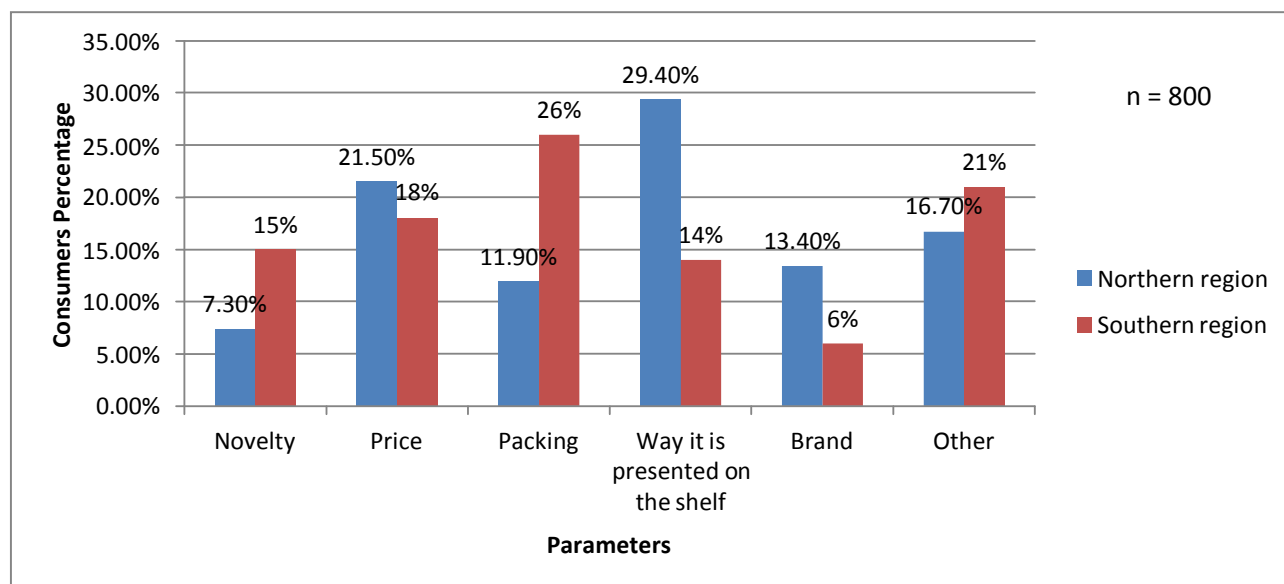
Sr. No	Parameters	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Novelty	35	7.3%	47	15%	82	10.25%
2	Price	103	21.5%	58	18%	161	20.13%
3	Packing	57	11.9%	84	26%	141	17.63%
4	Presentation on the shelf	141	29.4%	45	14%	186	23.25%
5	Brand	64	13.4%	20	6%	84	10.5%
6	Other	80	16.7%	66	21%	146	18.25%
Total		480	100%	320	100%	800	100%

Table 3.17 depicts that in northern region, out of 480 consumers, 141 consumers responded that they were attracted by the way packed tender coconut water is presented on the shelf which accounts to 29.4 percent followed by price of the packed tender coconut water responded by 103 consumers and accounts to 21.5 percent, 80 consumers responded the other reasons such as new in the market, easily available which accounts to 16.7 percent and responded by 80 consumers, 64 consumers responded that they were attracted by the brand of the product which accounts to 13.4 percent followed by 57 consumers were for packing which accounts to 11.9 percent and 35 consumers responded the novelty which counts to 7.3 percent.

In southern region out of 320 consumers sample size, 45 consumers responded that they were attracted by the way packed tender coconut water presented on the shelf which accounts to 14 percent followed by price of the packed tender coconut water responded by 58 consumers and accounts to 18 percent, 66 consumers responded the other reasons such as new in the market, easily available which accounts to 21 percent and responded by 66 consumers, 20 consumers responded

that they were attracted by the brand of the product which accounts to six percent followed by 84 consumers packing which accounts to 26 percent and 47 consumers responded the novelty which counts to 15 percent.

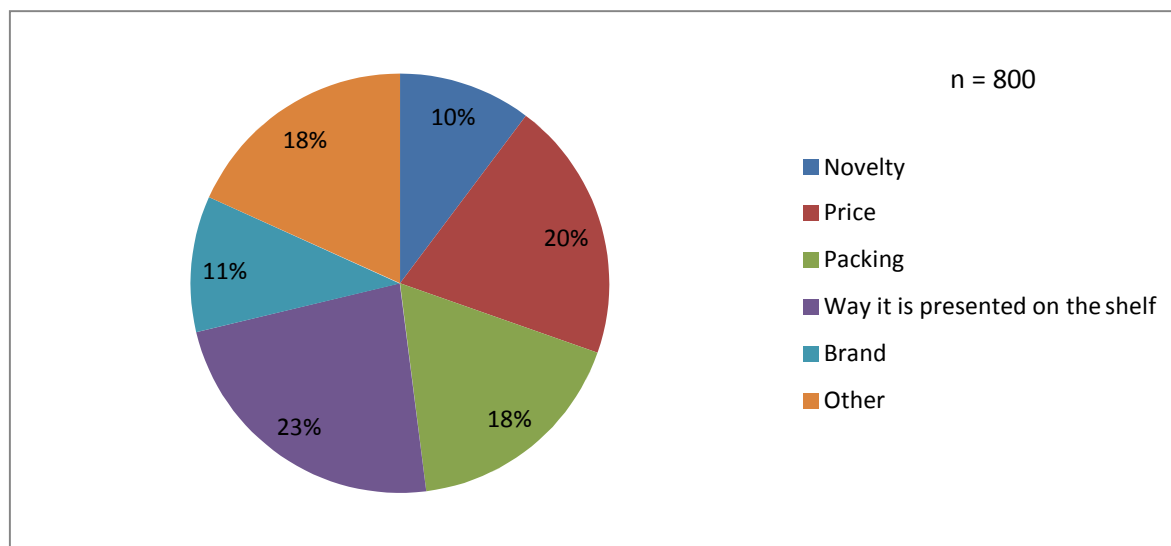
Figure 3.23: Comparison of parameters considered while purchasing packed tender coconut water in northern and southern regions



Source: Researchers computation from primary data

Fig 3.23 depicts the comparison of parameters considered while purchasing packed tender coconut water in northern and southern regions which shows that 29.40 percent of consumers consider the way it is presented on the shelf in northern region whereas in southern region it is preferred by 14 percent. 21.50 percent of consumers consider the price while purchasing packed tender coconut water in northern region whereas in southern region 18 percent consumers consider that. 11.90 percent of consumers consider the packing in northern region whereas in southern region 26 percent of consumers consider which results in 14.10 percent of consumers more in southern region than northern region consumers. 7.3 percent of consumers consider novelty in northern region whereas in southern region 15 percent of consumers consider which results in 7.7 percent of more consumes consider from southern region than northern region consumers. 13.4 percent of consumers from northern region consider the brand whereas in southern region only six percent consumers consider the brand.

Figure 3.24: Preferred parameters of consumers while purchasing packed tender coconut water



Source: Researchers computation from primary data

Fig 3.24 depicts the preferred parameters of consumers while purchasing packed tender coconut water which results in out of total sample size of 800 consumers, 23 percent of consumers consider the way it is presented on the shelf followed by 20 percent of the consumers consider price, 18 percent of consumers consider packing and the other parameters such as offers, 11 percent of consumers consider brand and only ten percent of consumers consider novelty.

The data was collected from the consumers to know the buying frequency of packed tender coconut water is depicted in the table 3.18

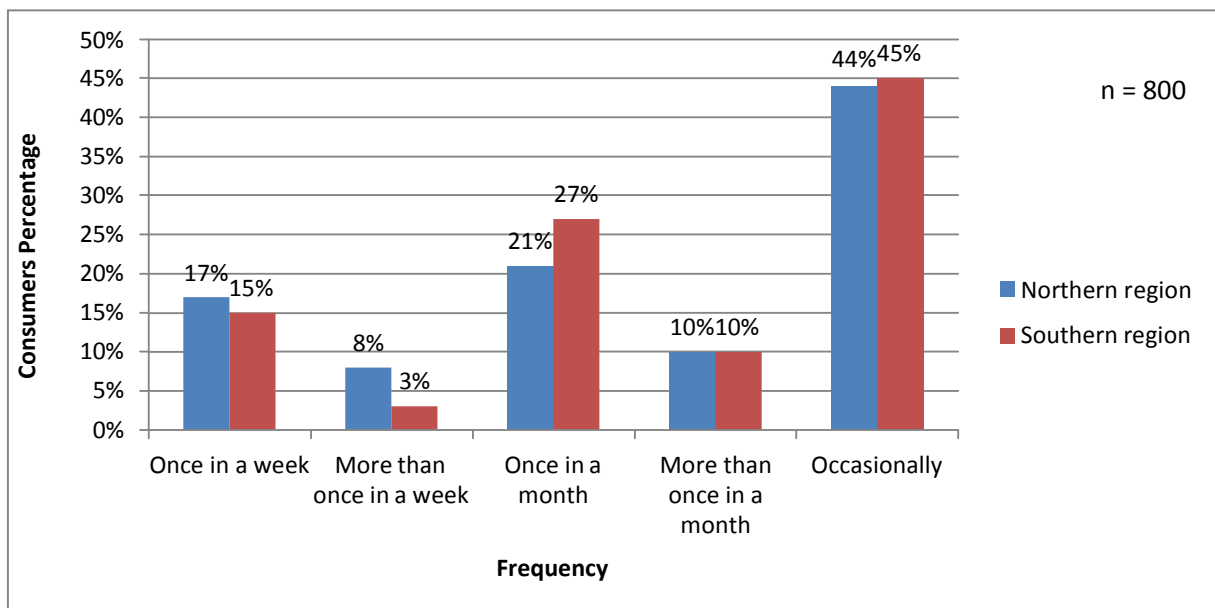
Table 3.18: Frequency of purchase of packed tender coconut water

Sr. No	Parameters	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Once in a week	84	17%	47	15%	131	16.38%
2	More than once in a week	38	8%	11	3%	49	6.13%
3	Once in a month	102	21%	86	27%	188	23.5%
4	More than once in a month	46	10%	33	10%	79	9.86%
5	Occasionally	210	44%	143	45%	353	44.13%
Total		480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

In northern region out of 480 consumers, 210 consumers purchase the packed tender coconut water occasionally which accounts to 44 percent whereas 102 consumers purchase once in a month which accounts to 21 percent followed by 84 consumers once in a week which accounts to 17 percent, 46 consumers more than once in a month which accounts to ten percent and 38 consumers more than once in a week accounts to eight percent whereas in southern region out of 320 consumers, 143 consumers purchase the packed tender coconut water occasionally which accounts to 45 percent whereas 86 consumers purchase once in a month which accounts to 27 percent followed by 47 consumers once in a week which accounts to 15 percent, 33 consumers more than once in a month which accounts to ten percent and 11 consumers more than once in a week accounts to three percent.

Figure 3.25: Comparison of frequency of purchase of packed tender coconut water in northern and southern regions

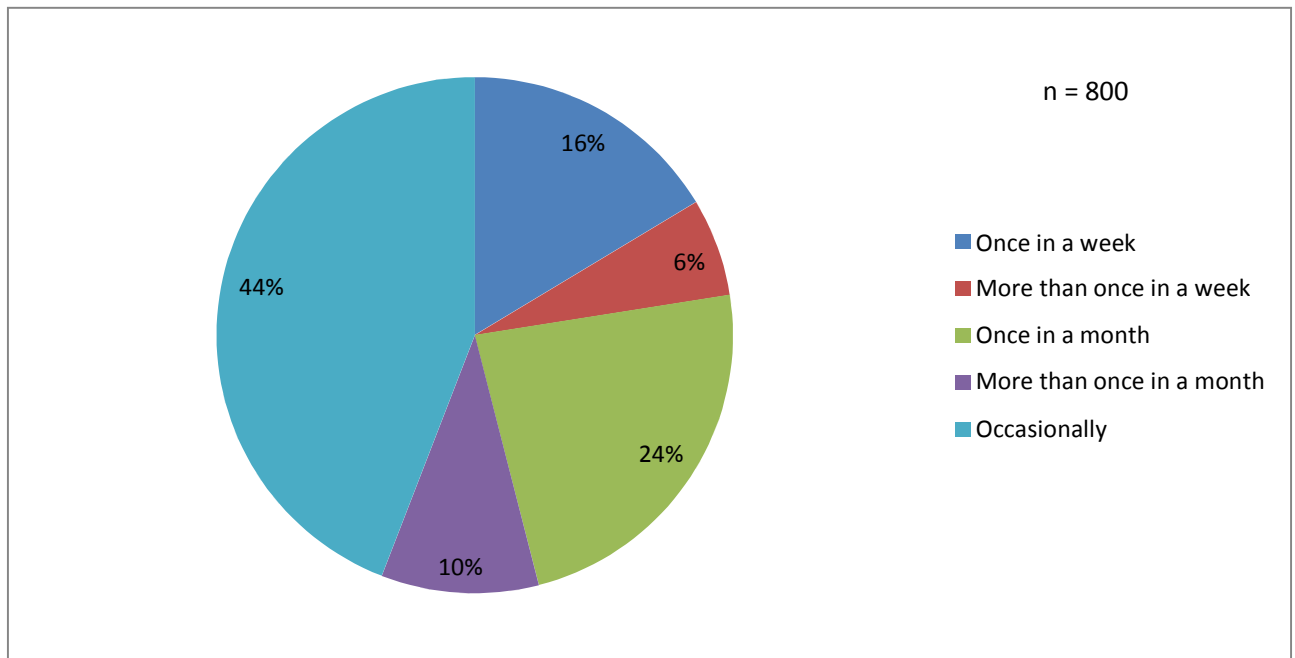


Source: Researchers computation from primary data

Fig 3.25 depicts the comparison of frequency of purchase of packed tender coconut water in northern and southern regions which shows that majority of consumers both from northern and southern region consumers prefer to purchase occasionally which is 44 percent of consumers purchase occasionally in northern region whereas in southern region it is 45 percent of consumers which results in one percent of more consumers from southern region purchase than northern region consumers. 21 percent of consumers from northern region purchase packed tender coconut

water once in a month whereas in southern region 27 percent which results in six percent of more consumers purchase in southern region than northern region consumers. 17 percent of consumers in northern region purchase once in a week whereas in southern region 15 percent consumers purchase which results in two percent more consumers in northern region purchase than southern region consumers. Ten percent of consumers both from northern and southern region purchase more than once in a month and eight percent of consumers from northern region purchase more than once in a week whereas in southern region only three percent consumers purchase which results in five percent of more consumers from northern region purchase than the southern region consumers.

Figure 3.26: Frequency of purchase of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.26 depicts the frequency of purchase of packed tender coconut water and result shows that majority of the share is occupied by the occasional purchase of packed tender coconut water which accounts to 44 percent of the total share followed by 24 percent of consumers purchase once in a month, 16 percent once in a week, ten percent more than once in a month and six percent more than once in a week.

To further probe the buying behaviour the consumers were asked about the quantity they purchase during each buy. The responses obtained are presented in table 3.19 below.

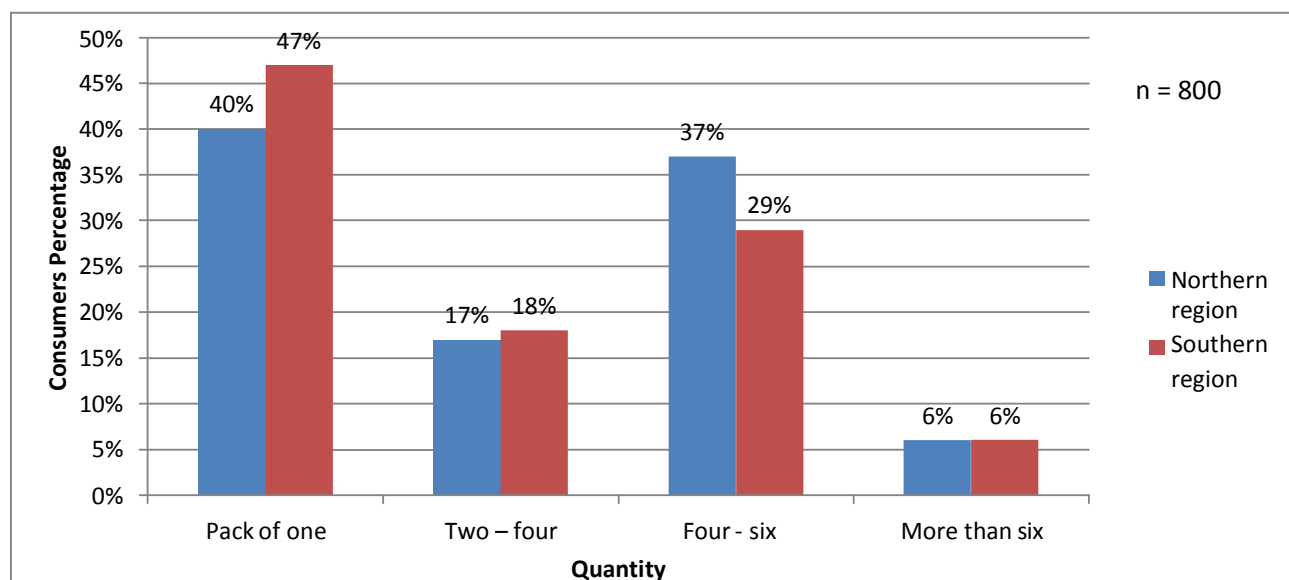
Table 3.19: Quantity purchased by consumers of packed tender coconut water

Sr. No	Quantity	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Pack of one	193	40%	152	47%	345	43.13%
2	Two – four	82	17%	56	18%	138	17.25%
3	Four - six	175	37%	94	29%	269	33.63%
4	More than six	30	6%	18	6%	48	6%
Total		480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

Table 3.19 depicts the quantity purchased by consumers of packed tender coconut water and results show that in northern region out of 480 consumers, 193 consumers purchase the quantity one at a time which accounts to 40 percent of the share whereas 175 consumers purchase a pack of four to six at a time which accounts to 37 percent followed by 82 consumers purchase two – four bottles of packed tender coconut water which accounts to 17 percent and 30 consumers purchase more than six quantity which accounts to only six percent whereas in southern region out of 320 consumers, 152 consumers purchase the quantity one at a time which accounts to 47 percent of the share whereas 94 consumers purchase a pack of six at a time which accounts to 29 percent followed by 56 consumers purchase two – four bottles of packed tender coconut water which accounts to 18 percent and 18 consumers purchase more than six quantity which accounts to only six percent.

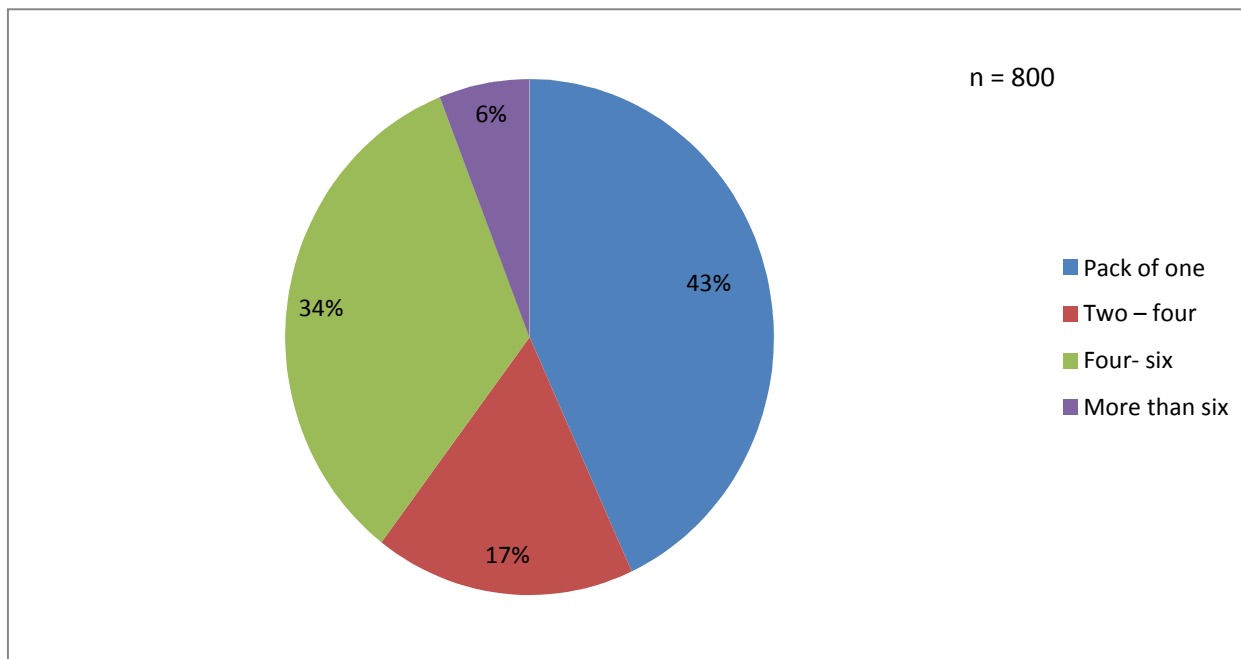
Figure 3.27: Comparison of quantity purchased of packed tender coconut water in northern and southern regions



Source: Researchers computation from primary data

Fig 3.27 depicts the comparison of quantity purchased of packed tender coconut water in northern and southern regions which shows that majority of consumers both from northern and southern region purchase only one bottle of packed tender coconut water at a time which shows 40 percent of consumers in northern region purchase only one bottle whereas in southern region it is 47 percent which results in seven percent more consumers from southern region purchase than the consumers of northern region. 37 percent of consumers from northern region purchase a pack of four to six whereas in southern region 29 percent purchase which results in eight percent of more consumers in northern region than southern region consumers. 17 percent of consumers from northern region purchase two- four bottles whereas in southern region 18 percent consumers which results in one percent of more consumers in southern region than northern region. Six percent of consumers both from northern and southern region purchase more than six bottles at a time.

Figure 3.28: Quantity purchased of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.28 depicts the quantity purchased of packed tender coconut water which shows that out of 800 consumer's majority of the share is occupied by the pack of one which accounts to 43 percent followed by 34 percent of consumers purchase the pack of six, 17 percent of consumers purchase two – four bottles of packed tender coconut water and six percent of consumers purchase the quantity of more than six.

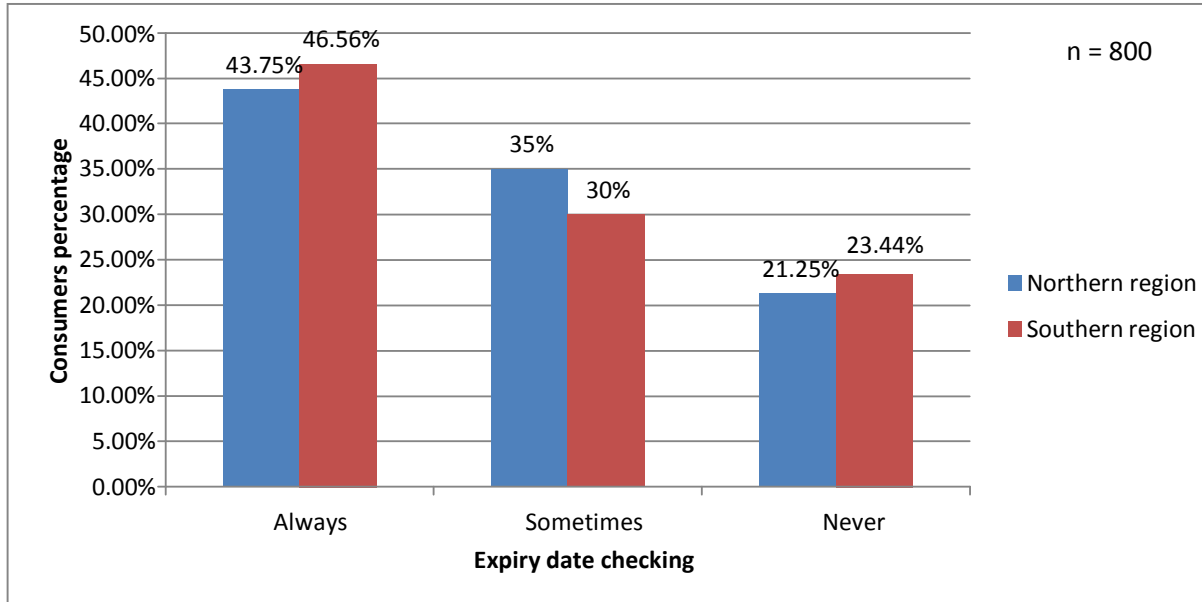
Table 3.20: Frequency of checking expiry date on packed tender coconut water by consumers

Sr. No	Expiry date checking	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Always	210	43.75%	149	46.56%	359	44.88%
2	Sometimes	168	35%	96	30%	264	33%
3	Never	102	21.25%	75	23.44%	177	22.13%
Total		480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

Table 3.20 depicts the checking of expiry date for packed tender coconut water by consumers and shows that in northern region out of 480 consumers, 210 consumers always check expiry date before purchasing packed tender coconut water which accounts to 43.75 percent followed by 168 consumers who sometimes check which accounts to 35 percent and 102 consumers won't check the expiry date before purchasing which accounts to 21.25 percent whereas in southern region out of 320 consumers, 149 consumers check the expiry date before purchasing which accounts to 46.56 percent followed by 96 consumers check sometimes which accounts to 30 percent and 70 consumers don't check the expiry date before purchasing which accounts to 23.44 percent.

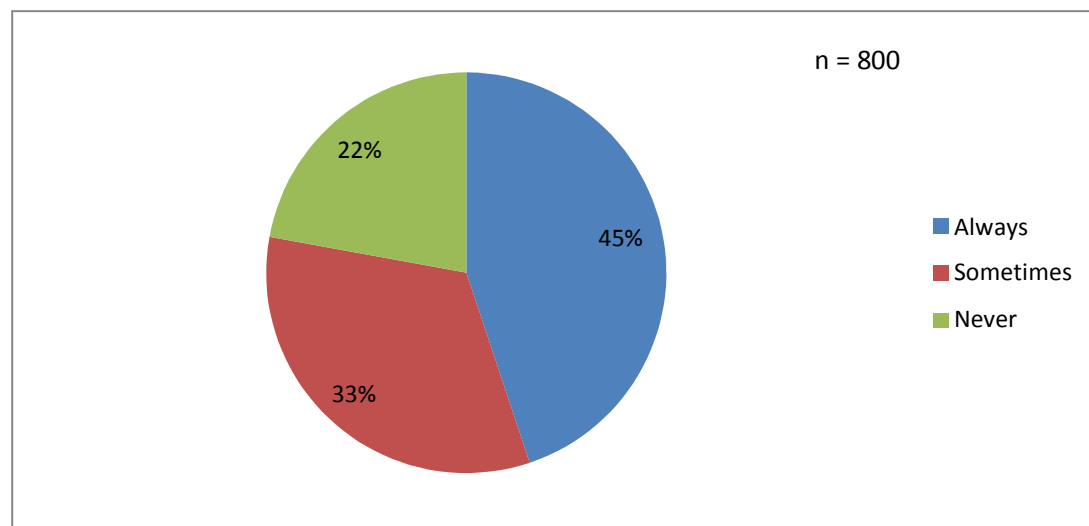
Figure 3.29: Comparison of percentage of consumers checking the expiry date of packed tender coconut water in northern and southern regions



Source: Researchers computation from primary data

Fig 3.29 depicts the comparison of percentage of consumers checking the expiry date of packed tender coconut water in northern and southern regions shows that majority of consumers both from northern and southern region prefer to check the expiry date before purchasing which is 43.75 percent of consumers from northern region whereas 46.56 percent of consumers from southern region check the expiry date before purchasing packed tender coconut water which results in 2.81 percent of more consumers from southern region check than the consumers of northern region. 35 percent of consumers from northern region check the expiry date sometimes whereas in southern region 30 percent consumers which results in five percent of more consumers from northern region than the consumers of southern region. 21.25 percent of consumers from northern region won't check the expiry date before purchasing whereas in southern region 23.44 percent of consumers which results in 2.19 percent of more consumers from the southern region than the northern region.

Figure 3.30: Percentage of consumers checking the expiry date of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.30 depicts the percentage of consumers checking the expiry date of packed tender coconut water and result shows that out of 800 consumers, 45 percent of consumers check the expiry date of packed tender coconut water followed by 33 percent of consumers check sometimes and 22 percent of consumers they won't check the expiry date of packed tender coconut water.

3.3.1 Status of different modes of buying packed tender coconut water

The data related to the modes of buying for packed tender coconut water is collected from consumers based on the questionnaire. There are two different modes of buying one is online and another is offline. Online mode is from the websites like Amazon, Bigbasket, Indiamart and Company websites. Table 3.21 depicts the region wise modes of buying of packed tender coconut water.

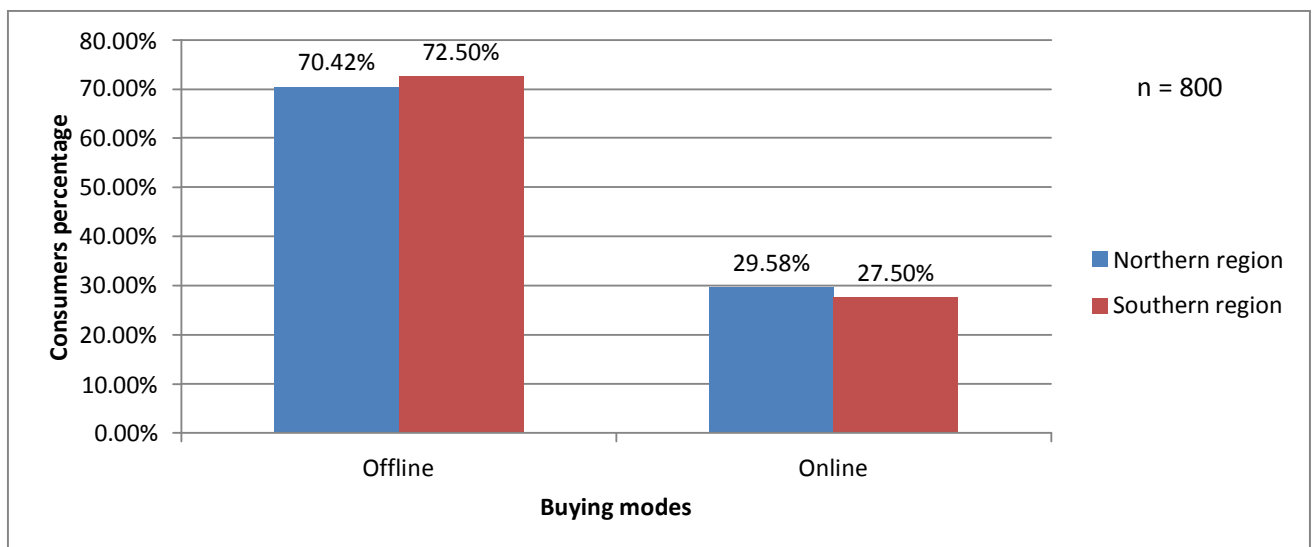
Table 3.21: Regionwise buying modes of packed tender coconut water

Sr. No	Buying mode	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Offline	338	70.42%	232	72.5%	570	71.25%
2	Online	142	29.58%	88	27.5%	230	28.75%
3	Total	480	100%	320	100%	800	100%

Source: Researchers own computation from primary data

Table 3.21 indicates that in northern region out of sample size 480, 338 consumers buy packed tender coconut water in offline mode which accounts to 70.42 percent and remaining 142 consumers buy in online mode accounts to 29.58 percent. The sample size of consumers in southern region is 320 of which 232 consumers buy in offline mode accounts to 72.5 percent and 88 consumers buy in online mode accounts to 27.5 percent. It depicted that from the overall sample size of 800 consumers, 71.25 percent of consumers purchase packed tender coconut water in offline mode such as purchase in malls/supermarkets, convenience stores, grocery stores whereas 28.75 percent of consumers purchase in online mode by using Amazon, Bigbasket, Indiamart and company websites.

Figure 3.31: Comparison of buying mode of packed tender coconut water in northern and southern regions

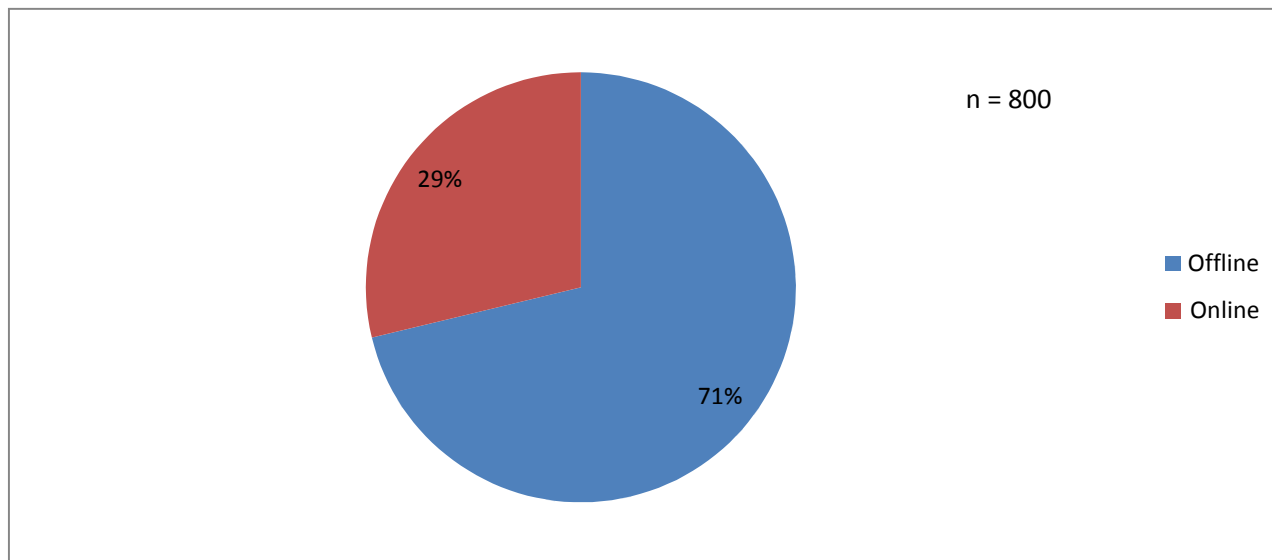


Source: Researcher's own computation from primary data

Fig 3.31 depicts the comparison of buying mode of packed tender coconut water in northern and southern regions which shows 70.42 percent of consumers from northern region buy offline mode

whereas in southern region 72.50 percent consumers which results in two percent of more consumers from southern region purchase in offline mode than the consumers of northern region. 29.58 percent of consumers from northern region purchase in online mode whereas in southern region 27.50 percent consumers which results in two percent more consumers from northern region purchase in online mode than the consumers of southern region.

Figure 3.32: Buying modes of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.32 depicts the buying modes of packed tender coconut water and result shows that out of 800 consumers, majority of the share is occupied by the offline mode which accounts to 71 percent and only 29 percent of the share is occupied by the online mode.

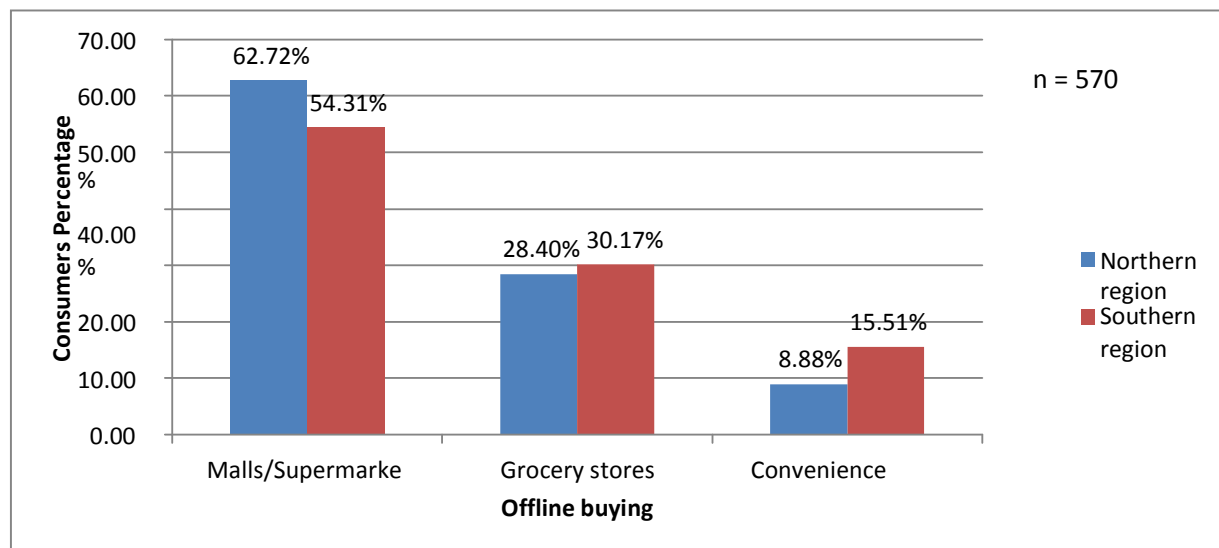
Table 3.22: Region wise offline buying mode of packed tender coconut water

Sr. No	Offline mode	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Malls/Supermarkets	212	62.72%	126	54.31%	338	59.30%
2	Grocery stores	96	28.40%	70	30.17%	166	29.12%
3	Convenience Stores	30	8.88%	36	15.51%	66	11.58%
Total		338	100%	232	100%	570	100%

Source: Researchers own computation based on primary data

Table 3.22 depicts the region wise offline buying mode of packed tender coconut water and it is observed from the table that in northern region out of 338 offline consumers, 12 consumers purchase from malls/Supermarkets which accounts to 6.72 percent followed by 96 consumers from grocery stores which accounts to 28.40 percent and 30 consumers purchase from convenience stores which accounts to 8.88 percent whereas in southern region out of 232 offline consumers, 126 consumers purchase from malls/ supermarkets which accounts to 54.31 percent followed by 70 consumers purchase from grocery stores which accounts to 30.17 percent and 36 consumers from convenience stores which accounts to 15.51 percent.

Figure 3.33: Comparison of offline buying mode of packed tender coconut water among consumers of northern and southern regions

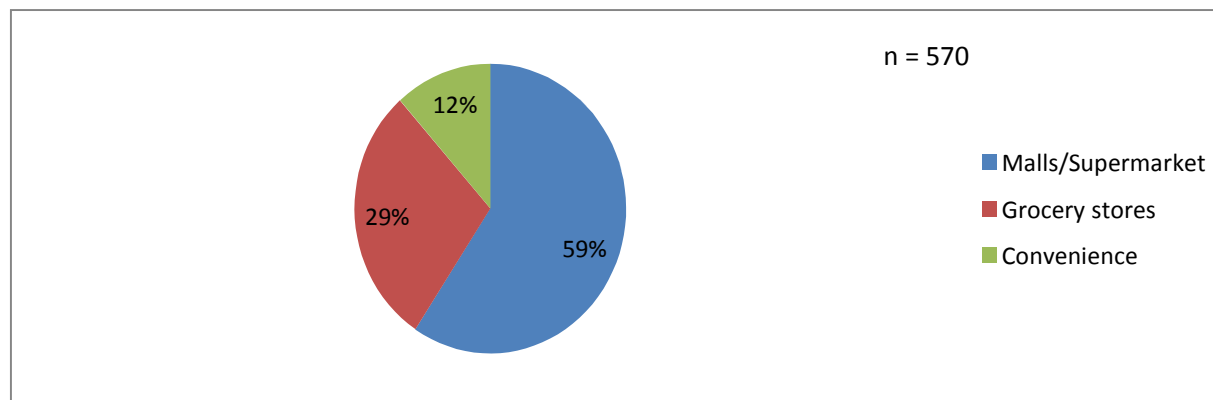


Source: Researchers computation from primary data

Fig 3.33 depicts the comparison of offline buying mode of packed tender coconut water among consumers of northern and southern regions which shows that out of the 800 consumers, 570 consumers buy in offline mode which further results in 62.72 percent of consumers in northern region buy from malls/supermarkets whereas in southern region 54.31 percent consumers which shows eight percent of more consumers from northern region buy than the southern region consumers. 28.40 percent of consumers from northern region buy from grocery store whereas 30.17 percent of consumers from southern region buy which results in two percent of more consumers from southern region buy than the northern region consumers. 8.88 percent of consumers from northern region buy from convenience store whereas in southern region 15.51 percent consumers

buy which results in six percent more consumers from southern region buy than the consumers of northern region.

Figure 3.34: Offline buying mode of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.34 depicts the offline buying mode of packed tender coconut water and result shows that majority of consumers both from northern and southern region combine contributes 59.30 percent of total offline mode buying from malls/supermarket followed by 29.12 percent from grocery stores and remaining 11.58 percent of consumers buy from convenience stores and the total offline mode of buying packed tender coconut water accounts to 570 consumers together from northern and southern region.

Table 3.23: Region wise online buying mode of packed tender coconut water

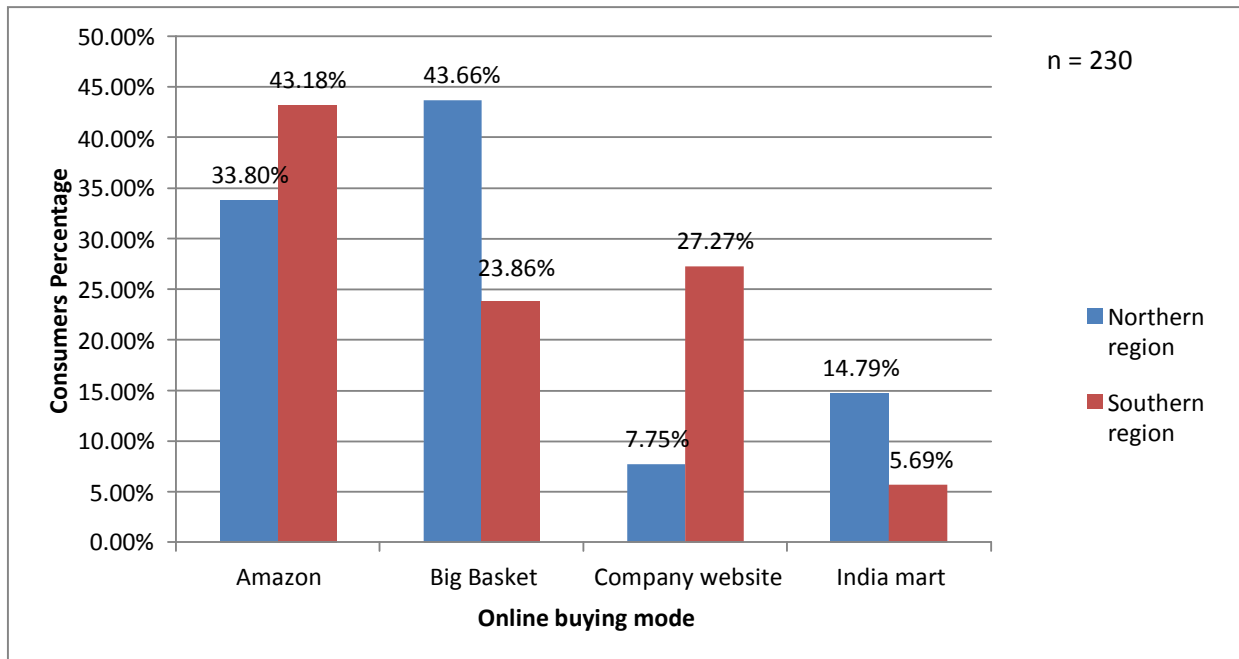
Sr. No	Online mode	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
1	Amazon	48	33.80%	38	43.18%	86	37.39%
2	Big Basket	62	43.66%	21	23.86%	83	36.08%
3	Company website	11	7.75%	24	27.27%	35	15.22%
4	India mart	21	14.79%	5	5.69%	26	11.30%
Total		142	100%	88	100%	230	100%

Source: Researchers own computation from primary data

Table 3.23 depicts the region wise online buying mode of packed tender coconut water and it is observed from the table that in northern region 142 consumer's purchase through online mode which shows 62 consumers buy from Bigbasket which accounts to 43.66 percent followed by 48 consumers buy from amazon which accounts to 33.80 percent, 21 consumers buy from indiamart which accounts to 14.79 percent and 11 consumers buy from company websites which accounts to 7.75 percent whereas in southern region out of 88 consumers, 38 consumers buy from amazon

which accounts to 43.18 percent followed by 24 consumers from company websites which accounts to 27.7 percent, 21 consumers from Bigbasket which accounts to 23.86 percent and only five consumers buy from indiamart which accounts to 5.69 percent.

Figure 3.35: Comparison of online buying mode of packed tender coconut water among consumers of northern and southern regions

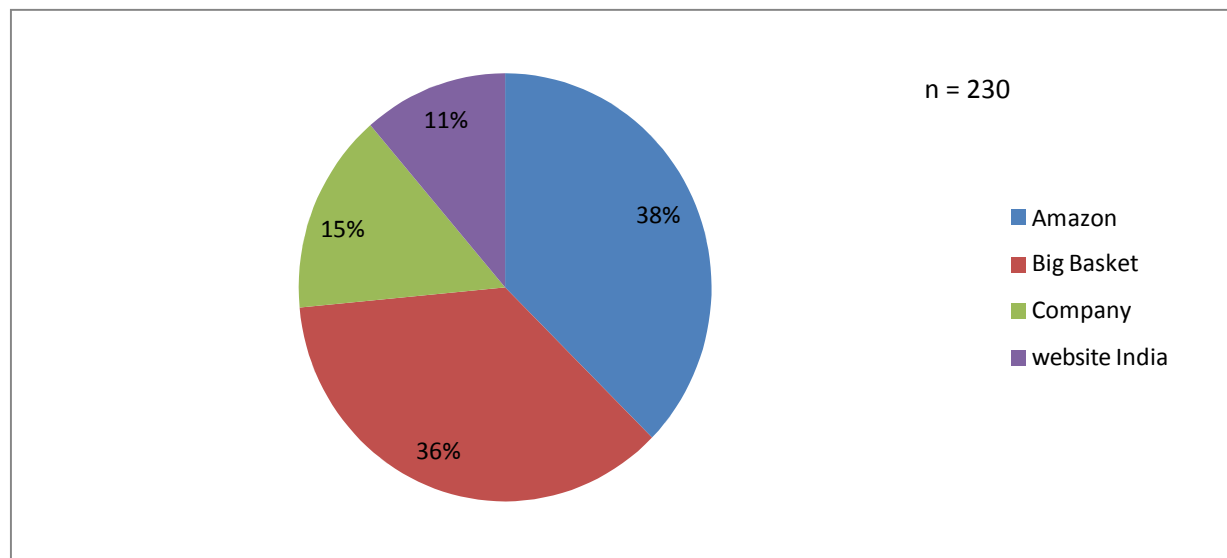


Source: Researchers computation from primary data

Fig 3.35 depicts the comparison of online buying mode of packed tender coconut water among consumers of northern and southern region and shows that online buying consumers are 230 of which 33.80 percent of consumers from northern region buy from amazon whereas in southern region 43.18 percent consumers buy which results in ten percent of more consumers from southern region buy from amazon than the consumers of northern region. 43.66 percent of consumers in northern region buy from Bigbasket whereas 23.86 percent consumers from southern region buy which results in 20 percent of more consumers from northern region buy from big basket than the consumers of southern region. 7.75 percent of consumers from northern region buy from company website whereas 27.27 percent of consumers from southern region buy which results in 20 percent of more consumers from southern region buy than the consumers of northern region. 14.79 percent

of consumers from north region buy from indiamart whereas 5.69 percent of consumers from southern region which results in nine percent more of consumers from northern region buy than the consumers of southern region.

Figure 3.36: Online buying mode of packed tender coconut water



Source: Researchers computation from primary data

Fig 3.36 depicts the offline buying mode of packed tender coconut water and result shows that majority of consumers both from northern and southern region combine contributes 37.39 percent of total online mode buying from Amazon followed by 36.08 percent of consumers buy from big basket, 15.22 percent of consumers buy from company websites and remaining 11.30 percent of consumers buy from India mart and the total online mode of buying packed tender coconut water accounts to 230 consumers together from northern and southern region.

3.3.3 Factors affecting the perception of mode of buying for packed tender coconut water

The objective is to find the factors affecting the perception of consumers of packed tender coconut water while buying through online or offline mode. Factor analysis is used for analysis separately for offline mode and online mode. To analyze the data factors affecting the perception of mode of buying were identified based on pilot study and the factors coated are time, availability, awareness, easy to purchase, offers, myth of touch feel, easy to compare with other brands, price.

3.3.3.1 Factors affecting the perception of offline mode buying of packed tender coconut water

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.672
Bartlett's Test of Sphericity	Approx. Chi-Square	3150.701
	df	36
	Sig.	0.000

Source: Researcher's own computation from primary data

Table 3.24 shows Bartlett's Test of Sphericity is a test statistics used to examine the hypothesis that the variables are uncorrelated in the population. In this case the null hypotheses related to the appropriateness of the factor analysis has been rejected. (As significant level is more than.05 levels). So, the data collected were found to be appropriate for the factor analysis.

The sampling adequacy has been proved by statistical value of KMO (Kaiser Meyer-Olkin Measure of sampling Adequacy) to examine the appropriateness of factor analysis. Here the value of KMO is .672. This indicates satisfactory sampling adequacy for the factor analysis

Table 3.25: Total Variance Explained for offline mode of buying

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.753	30.593	30.593	2.602	28.916	28.916
2	2.212	24.581	55.174	2.325	25.835	54.751
3	1.149	12.770	67.945	1.187	13.194	67.945
4	.932	10.360	78.305			
5	.748	8.313	86.618			
6	.510	5.662	92.280			
7	.423	4.702	96.982			
8	.155	1.728	98.710			
9	.116	1.290	100.000			

Source: Researchers own computation from primary data

Extraction method: Principal component analysis

Table 3.25 indicates determining the number of factor extracted for the purpose, the basic method followed here is to select those components which have Eigen-values greater than one. The principal component method using varimax rotation reduced 9 explanatory variables to 3 factors which have having Eigen-values greater than 1 but the cumulative percentage of variance technique by combining all the factors was also taken into consideration. The rule of thumb is that the factors extracted should account for at least 60 percent of the variance.

Here the number of the factors extracted was found to be three, and the cumulative percentage of variance explained by all these three factors accounts for more than sixty seven percent (67.945). The first factor can alone explain 28.916 per cent of the total variability The second factor can alone explain 25.835 per cent of the total variability and the first two factors, in combination, can explain 54.751 per cent of the total variability. The third factor can explain alone 13.194 per cent of the total variability and the three factors, in combination, can explain 67.945 per cent of the total variability.

Table 3.26: Rotated Component Matrix^a for offline mode of buying

	Component		
	1	2	3
Time	.191	-.766	.068
Availability	.006	.917	.158
Awareness	-.023	.912	.067
Easy to purchase	.230	.107	.753
Offers	.895	-.083	.111
Myth of touch feel	.918	-.070	.082
Easy to compare with other brands	.796	.125	-.209
Complete information before purchase	.426	-.164	-.013
Price	.230	-.010	-.723

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Table 3.26 shows that Varimax rotation was applied for the selected 9 attributes. The factor loadings of the 9 variables were then observed and variables were clubbed into three factors. For the purpose

of interpretation, each factor was composed of variables with factor loading 0.50 or higher on that factor.

Interpretations

From the above, it can be concluded that myth of touch feel of the product is the major factor which affect consumer's perception to buy in offline mode. Availability, Awareness, Offers, Easy to compare with other brands directly and easy to purchase the product are the factors which influence the consumers perception to buy in offline mode.

3.3.3.2 Factors affecting the perception of online mode of buying of packed tender coconut water

Table 3.27: KMO and Bartlett's Test for online mode of buying

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.553
Bartlett's Test of Sphericity	Approx. Chi-Square	1785.007
	df	36
	Sig.	0.000

Source: Researcher's own computation from primary data

Table 3.27 shows Bartlett's Test of Sphericity is a test statistics used to examine the hypothesis that the variables are uncorrelated in the population. In this case the null hypotheses related to the appropriateness of the factor analysis has been rejected. (As significant level is more than.05 levels). So, the data collected were found to be appropriate for the factor analysis.

The sampling adequacy has been proved by statistical value of KMO (Kaiser Meyer-Olkin Measure of sampling Adequacy) to examine the appropriateness of factor analysis. Here the value of KMO is 0.553. This indicates satisfactory sampling adequacy for the factor analysis.

Table 3.28: Total variance explained for online mode of buying

Component	Initial Eigen Values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.144	23.819	23.819	1.876	20.839	20.839
2	1.804	20.047	43.866	1.821	20.230	41.070
3	1.483	16.474	60.340	1.734	19.270	60.340
4	.924	10.265	70.604			
5	.806	8.959	79.564			
6	.698	7.752	87.316			
7	.612	6.796	94.112			
8	.376	4.174	98.286			
9	.154	1.714	100.000			

Source: Researchers own computation from primary data

Extraction method: Principal component analysis

Table 3.28 indicates determining the number of factor extracted for the purpose, the basic method followed here is to select those components which have Eigen-values greater than one. The principal component method using varimax rotation reduced 9 explanatory variables to 3 factors which have having Eigen-values greater than 1 but the cumulative percentage of variance technique by combining all the factors was also taken into consideration. The rule of thumb is that the factors extracted should account for at least 60 percent of the variance.

Here the number of the factors extracted was found to be three, and the cumulative percentage of variance explained by all these three factors accounts for more than sixty percent (60.340).The first factor can alone explain 20.839 per cent of the total variability The second factor can alone explain 20.230 per cent of the total variability and the first two factors, in combination, can explain 41.070 per cent of the total variability. The third factor can explain alone 19.270 per cent of the total variability and the three factors, in combination, can explain 60.340 per cent of the total variability.

	Component		
	1	2	3
Time	.944	-.030	.131
Availability	.941	-.056	.079
Awareness	.171	.224	.509
Easy to purchase	-.031	.821	-.024
Offers	.137	.837	-.107
Myth of touch feel	-.200	-.573	.137
Easy to compare with other brands	.006	.243	-.589
Complete information before purchase	-.001	.058	.722
Price	.100	-.010	.744
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

Table 3.29 shows that Varimax rotation was applied for the selected nine attributes. The factor loadings of the nine variables were then observed and variables were clubbed into five factors. For the purpose of interpretation, each factor was composed of variables with factor loading 0.50 or higher on that factor.

From the above, it can be concluded that Time is the major factor which affect consumer's perception to buy in online mode. Availability of the product, Offers provided by online sites, easy way to purchase, price, complete information regarding the product before purchase are the factors which influence the consumer's perception to buy in online mode.

Marketing Channels and their Efficiency for Packed Tender Coconut Water

This chapter is to understand the various marketing channels involved in marketing of packed tender coconut water and determine which channel provides highest marketing efficiency among all. In order to fulfill this objective data was collected from 30 stakeholders including 24 intermediaries and 6 manufacturers who are involved in the marketing of packed tender coconut water. Acharya’s model is used for the calculation of marketing efficiency.

There are mainly four channels of distribution in marketing of packed tender coconut water in India.

They are:

1. Manufacturer → C & F Agent → Distributor → Retailer → Consumer
2. Manufacturer → C & F Agent → Distributor → Wholesaler → Retailer → Consumer
3. Manufacture → C & F Agent → Super stockiest → Sub distributor → Retailer → Consumer
4. Manufacturer → Distributor → Retailer → Consumer

In the first channel, manufacturer sells packed tender coconut water to Carrying and Forwarding (C & F) agent and from him it is forwarded to retailer through distributor and finally it reaches the end consumer. Here the manufacturer sells the product in large volumes to C & F agent which further distributes to various distributors.

Second channel starts from manufacturer and goes through C & F agent, distributor, wholesaler, retailer and consumer. Here the manufacturer sells the product in large volumes to C & F agent which is further distributed to distributor, wholesaler and then reaches the retailers who then sells it to the end consumers.

Third channel involves super stockiest and sub distributor in between C & F agent and retailer. This is the more inefficient channel because of increased number of players in the marketing of packed tender coconut water.

In fourth channel, the manufacturer directly sells the packed tender coconut water to distributor who further forwards it to retailers and end consumers. This channel is mostly practiced in the local

regions of manufacturing unit when the distributor requires large volumes of packed tender coconut water.

The cost and margins involved in the overall marketing of PTCW in the different marketing channels was collected from each channel partner and are presented in the table 4.1 below.

Table 4.1: Cost and margin in the marketing of Packed Tender Coconut Water

Sr. No.	Particulars	Channel I	Channel II	Channel III	Channel IV
1.	Manufacturer				
	Cost of production	12	12	12	12
	Transportation	2	2	2	2
	Loading and unloading	2	2	2	2
	manufacturers total cost	16	16	16	16
	Manufacturer's price	19	19	19	20
	manufacturers margin	3	3	3	4
2.	Carrying and Forwarding (C & F) Agent				
	Purchasing price	19	19	19	0
	Loading/unloading	0.5	0.5	0.5	0
	Transportation	.5	.5	.5	0
	Miscellaneous charges	.25	.25	.25	0
	Selling price to distributor/super stockiest	22	22	22	0
	C & F margin	1.75	1.75	1.75	0
3.	Distributor				
	Purchasing price	22	22	0	20
	Loading/unloading	.25	.25	0	.25
	Transportation	.25	.25	0	.25
	Miscellaneous charges	.25	.25	0	.25
	Selling price	25	25	0	23
	Distributor margin	2.25	2.25	0	2.25
4.	Super Stockiest				
	Purchase price of super stockiest	0	0	22	0
	Transportation	0	0	.25	0
	miscellaneous	0	0	.25	0
	Cost born by super stockiest	0	0	.5	0
	Selling price to sub distributor	0	0	24	0
	Super Stockiest Margin	0	0	1.5	0
5.	Wholesaler				
	Purchasing price	0	25	0	0
	Loading/unloading	0	0	0	0

	Transportation	0	.25	0	0
	Miscellaneous charges	0	0	0	0
	Selling price	0	27	0	0
	Wholesaler margin	0	2.75	0	0
6	Sub distributor				
	Purchasing price	0	0	24	0
	Loading/unloading	0	0	0	0
	Transportation	0	0	.25	0
	Miscellaneous charges	0	0	.25	0
	Selling price	0	0	27	0
	Sub distributor margin	0	0	2.5	0
7	Retailer				
	Purchasing price	25	27	27	23
	Loading/unloading	0	0	0	0
	Transportation	0	0	0	0
	Miscellaneous charges	.5	.5	.5	.5
	Selling price	28	30	30	26
	Retailers margin	2.5	2.5	2.5	2.5
8	Consumer				
	Consumer purchase price	28	30	30	26

Among the four marketing channels, the net margin received by the manufacturer is highest in the fourth channel and same in all the remaining three channels. In the fourth channel, the manufacturers margin is high because lack of more number of middlemen in between him and the ultimate consumers.

4.1 Price spread of various marketing channels of Packed Tender Coconut Water

The price spread of packed tender coconut water constituted by both marketing cost and marketing margin through different marketing channels is represented in tabular form given below:

Table 4.2: Price spread of packed tender coconut water in Channel I

(Manufacturer → C & F Agent → Distributor → Retailer → Consumer)

Sr. No	Particulars	Price (Rs. Per Bottle)	Percent of consumer price
1	Manufacturer		
	Cost of production	12	42.86%
	Transportation	2	7.14%
	Loading and unloading	2	7.14%
	manufacturers total cost	15	57.14%
	Manufacturer's price	19	67.86%
	manufacturers margin	3	10.71%
2	C & F Agent		
	Purchasing price	19	67.86%
	Loading/unloading	0.5	1.79%
	Transportation	.5	1.79%
	Miscellaneous charges	.25	.89%
	Selling price to distributor/super stockiest	22	78.57%
	C & F margin	1.75	6.25%
3	Distributor		
	Purchasing price	22	78.57%
	Loading/unloading	.25	.89%
	Transportation	.25	.89%
	Miscellaneous charges	.25	.89%
	Selling price	25	89.28%
	Distributor margin	2.25	8.03%
4	Retailer		
	Purchasing price	25	89.28%
	Loading/unloading	0	0%
	Transportation	0	0%
	Miscellaneous charges	.5	1.79%
	Selling price	28	100%
	Retailers margin	2.5	8.92%

Table 4.2 depicts the price spread of packed tender coconut water in channel I. Channel I is widely used by majority of the players. In this channel the price incurred by the manufacturer is Rs 16/bottle and the selling price is Rs. 19/bottle and thus incurs a profit of Rs. 3/bottle. In this channel the packed tender coconut water reaches the consumer through a chain of C & F agent, distributor and retailer. The retailer incurs only the miscellaneous expenses and sells the packed tender coconut water to the consumer with a profit margin of Rs 2.5/bottle.

Table 4.3: Price spread of packed tender coconut water in Channel II

(Manufacturer → C & F agent → Distributor → Wholesaler → Retailer → Consumer)

Sr. No	Particulars	Price (Rs. Per Bottle)	Percent of consumer price
1	Manufacturer		
	Cost of production	12	40%
	Transportation	2	6.67%
	Loading and unloading	2	6.67%
	manufacturers total cost	16	53.34%
	Manufacturer's price	19	63.34%
	manufacturers margin	3	10%
2	C & F Agent		
	Purchasing price	19	63.34%
	Loading/unloading	0.5	1.67%
	Transportation	.5	1.67%
	Miscellaneous charges	.25	.83%
	Selling price to distributor/super stockiest	22	73.34%
	C & F margin	1.75	5.83%
3	Distributor		
	Purchasing price	22	73.34%
	Loading/unloading	.25	.83%
	Transportation	.25	.83%
	Miscellaneous charges	.25	.83%
	Selling price	25	83.34%
	Distributor margin	2.25	7.5%
4	Wholesaler		
	Purchasing price	25	83.34%
	Loading/unloading	0	0
	Transportation	.25	.83%
	Miscellaneous charges	0	0
	Selling price	27	90%
	Wholesaler margin	2.75	9.17%
5	Retailer		
	Purchasing price	27	90%
	Loading/unloading	0	0
	Transportation	0	0
	Miscellaneous charges	.5	1.67%
	Selling price	30	100%
	Retailers margin	2.5	8.34%

Table 4.3 depicts the price spread of packed tender coconut water in channel II. Price incurred by the manufacturer is Rs. 16/bottle and the selling price is Rs. 19/bottle and thus earns a profit of Rs. 3/bottle. In this channel the packed tender coconut water reaches the consumer through a chain of C & F agent, distributor, wholesaler and retailer. The retailer incurs only the miscellaneous expenses and sells the packed tender coconut water to the consumer at a price of Rs. 30/bottle. Channel II consists of more number of intermediaries than channel I which results in increase of packed tender coconut water price from Rs. 28/bottle to Rs. 30/bottle.

Table 4.4: Price spread of packed tender coconut water in Channel III

(Manufacture → C & F Agent → Super stockiest → Sub distributor → Retailer → Consumer)

Sr. No	Particulars	Price (Rs. Per Bottle)	Percent of consumer price
1	Manufacturer		
	Cost of production	12	40%
	Transportation	2	6.67%
	Loading and unloading	2	6.67%
	manufacturers total cost	16	53.34%
	Manufacturer's price	19	63.34%
	manufacturers margin	3	10%
2	C & F Agent		
	Purchasing price	19	63.34%
	Loading/unloading	0.5	1.67%
	Transportation	.5	1.67%
	Miscellaneous charges	.25	.83%
	Selling price to distributor/super stockiest	22	73.34%
	C & F margin	1.75	5.84%
3	Super Stockiest		
	Purchase price of super stockiest	22	73.34%
	Transportation	.25	.83%
	Miscellaneous	.25	.83%
	Cost born by super stockiest	.5	1.67%
	Selling price to sub distributor	24	80%
	Super Stockiest Margin	1.5	5%
4	Sub Distributor		
	Purchasing price	24	80%
	Loading/unloading	0	0
	Transportation	.25	.83%
	Miscellaneous charges	.25	.83%
	Selling price	27	90%
	Distributor margin	2.5	8.34%

5	Retailer		
	Purchasing price	27	90%
	Loading/unloading	0	0
	Transportation	0	0
	Miscellaneous charges	.5	1.67%
	Selling price	30	100%
	Retailers margin	2.5	8.34%

Table 4.4 depicts the price spread of packed tender coconut water in channel III. Price incurred by the manufacturer is Rs. 16/bottle and the selling price is Rs. 19/bottle. In this channel the packed tender coconut water reaches the consumer through a chain of C & F agent, super stockiest, sub distributor and retailer. Channel III is a rarely followed channel and only few players in the market follows this channel. Channel III consists of more number of intermediaries than channel I which results in increase of packed tender coconut water price from Rs. 28/bottle to Rs. 30/bottle.

Table 4.5: Price spread of packed tender coconut water in Channel IV

(Manufacturer → Distributor → Retailer → Consumer)

Sr. No	Particulars	Price (Rs. Per Bottle)	Percent of consumer price
1	Manufacturer		
	Cost of production	12	46.15%
	Transportation	2	7.69%
	Loading and unloading	2	7.69%
	manufacturers total cost	16	61.54%
	Manufacturer's price	20	76.92%
	manufacturers margin	4	15.38%
2	Distributor		
	Purchasing price	20	76.92%
	Loading/unloading	.25	.96%
	Transportation	.25	.96%
	Miscellaneous charges	.25	.96%
	Selling price	23	88.46%
	Distributor margin	2.25	8.65%
3	Retailer		
	Purchasing price	23	88.46%
	Loading/unloading	0	0
	Transportation	0	0
	Miscellaneous charges	.5	1.92%
	Selling price	26	100%
	Retailers margin	2.5	9.61%

Table 4.5 depicts the price spread of packed tender coconut water in channel IV. Price incurred by the manufacturer is Rs. 16/bottle and the selling price is Rs. 20/bottle and earns a profit of Rs 4/bottle. In this channel the packed tender coconut water reaches the consumer through a chain of distributor and retailer. Shortest channel among the marketing channel of packed tender coconut water is channel IV which consists of only manufacturer, and retailer to reach consumer. Channel IV is shortest so the price of packed tender coconut water which reaches the consumer is Rs. 26/bottle.

The movement of commodities from manufacturer to consumer at lowest possible cost, consistent with the provision of the services desired by the consumer, may be termed as efficient marketing. An efficient marketing system is an effective system of change and important means of raising the income level of manufacturer.

For the estimation of efficiency of marketing channels, the following ratio as suggested by Acharya and Aggarwal (2001) was used.

Acharya's modified formula:

$$M.E. = MP / (MC + MM)$$

Where, MP = Manufacturer Price

MC = Marketing cost

MM = Marketing margin

Table 4.6: Marketing efficiency of packed tender coconut water marketing channels

Channel	Manufacturer Price (MP)	Marketing Cost (MC)	Marketing Margin (MM)	Marketing Efficiency (ME)
I	19	2.5	6.5	2.11
II	19	2.75	9.25	1.58
III	19	3.25	8.25	1.65
IV	20	1	4.75	3.48

Above table of marketing efficiency shows that most efficient channel of marketing is Channel IV. Marketing efficiency of channel IV is 3.48, which is most efficient because of there are less number of marketing intermediaries involved in this channel and marketing cost is very low and marketing margin is also low compared to other channels. Channel IV is followed by channel I in which marketing efficiency is 2.11. However, marketing cost and marketing margin is less than other marketing channel except channel IV. This efficiency is attained by low number of intermediaries.

Marketing efficiency of channel III is 1.58, which is higher than only channel II, because of involvement of a large number of marketing intermediaries which increases the marketing cost and marketing margin. The manufacturers' price in channel I, II and III is same. But the difference in efficiency is due to higher marketing channels involved. Hence the least efficiency is attained in channel II only because of marketing cost. Marketing efficiency can be achieved by decreasing marketing cost and marketing margin which can be achieved only by reducing number of intermediaries involved in the marketing of packed tender coconut water.

Further it was observed that Channel I was more prevalent in Northern region as manufacturers are located in the Southern region so they directly get in contact with C & F agent and further C & F agent takes care of the complete distribution. C & F agent plays a prominent role in Northern region distribution.

In Southern region the manufacturer deals with the distributor and he directly looks after the distribution so channel IV is prevalent and the role of C & F agent is very insignificant as manufacturer directly controls the distribution channel.

4.2 Perception about Packed Tender Coconut Water among Marketing Intermediaries

The objective was developed to study and analyze the perception for packed tender coconut water by marketing intermediaries. Statements about perception for PTCW were framed viz. the price of product is high, the manufacture is supportive, timely supply of product by manufacture, it is a good substitute of carbonated drinks, the manufacture provides credit facility, the product is easy to carry, the product is unique, it has attractive packing, the product quality is good, it is a healthy replacement of fresh tender coconut water, demand of packed tender coconut water is increasing day by day. Intermediaries' perception towards packed tender coconut water is depicted in table 4.7.

Table 4.7: Perception of Intermediaries towards packed tender coconut water

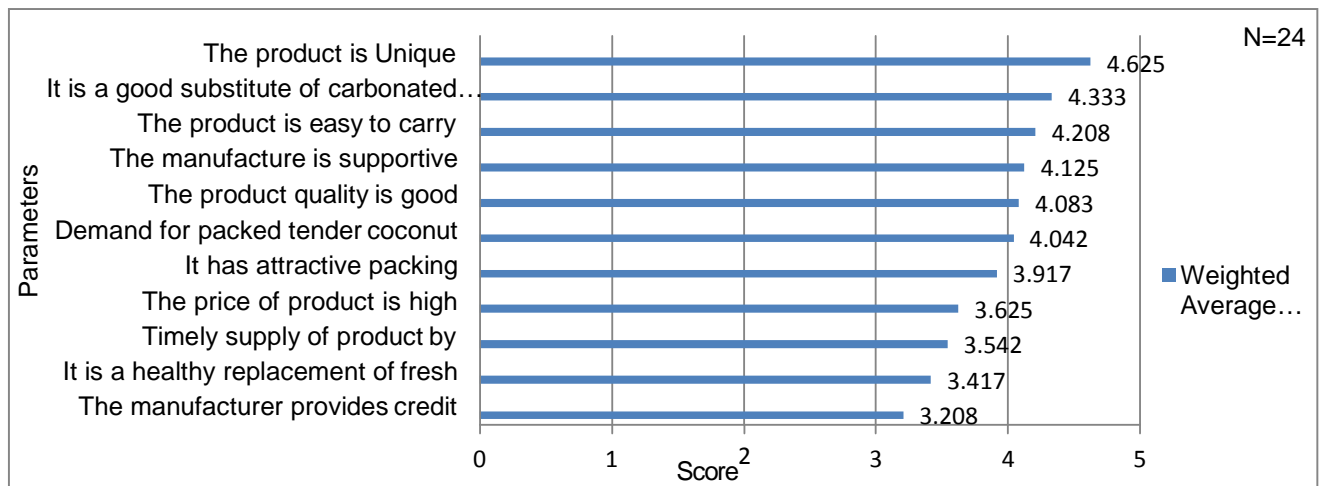
Sr. No	Parameters	Weighted Average Mean	Rank
1	The Product is Unique	4.625	I
2	It is a good substitute of carbonated drinks	4.333	II
3	The Product is easy to carry	4.208	III
4	The manufacture is supportive	4.125	IV
5	The product quality is good	4.083	V
6	Demand for packed tender coconut water is increasing day by day	4.042	VI
7	It has attractive packing	3.917	VII
8	The price of product is high	3.625	VIII

9	Timely supply of product by manufacture	3.542	IX
10	It is a healthy replacement of fresh tender coconut water	3.417	X
11	The manufacture provides credit facility	3.208	XI

Source: Researcher's own computation from primary data

Table 4.7 indicates that intermediaries perceive the product is unique which scored a weighted average mean of 4.625 and rank I. The next parameter which scored 4.33 highest is packed tender coconut water is a good substitute of carbonated drinks followed by the product is easy to carry scored 4.208, the manufacture is supportive scored 4.125, the product quality is good scored 4.083, demand for packed tender coconut water is increasing day by day scored 4.042, it has attractive packing score 3.917, the price of the product is high scored 3.625, timely supply of product by manufacture scored 3.542, it is a healthy replacement of fresh tender coconut water with a score of 3.417 and the manufacture provides credit facility scored 3.208.

Figure 4.1: Perception of intermediaries towards packed tender coconut water



Source: Researcher's own computation from primary data

Fig 4.1 depicts the intermediaries' perception towards packed tender coconut water based on the weighted average mean. The intermediaries perceive that packed tender coconut water is unique and given the highest weightage whereas the manufacturer provides the credit facility given the least weightage.

Marketing Strategy for Packed Tender Coconut Water

Marketing strategy is the comprehensive plan formulated particularly for achieving the marketing objectives of the organization. It is designed after detailed marketing research. A marketing strategy helps an organization to concentrate its scarce resources on the best possible opportunities so as to increase the sales. Michael Porter's Five Forces was developed in 1979 by Michael E Porter of Harvard Business School as a simple framework for assessing and evaluating the competitive strength and position of a business organization. This is useful both in understanding the strength of an organization's current competitive position, and the strength of a position that an organization may look to move into. According to Porter, analysis of the five forces gives an accurate impression of the industry and makes analysis easier. Based on the data available from the survey, Michael porters five force model is framed.

Figure 5.1: Michael Porters five force model of packed tender coconut water

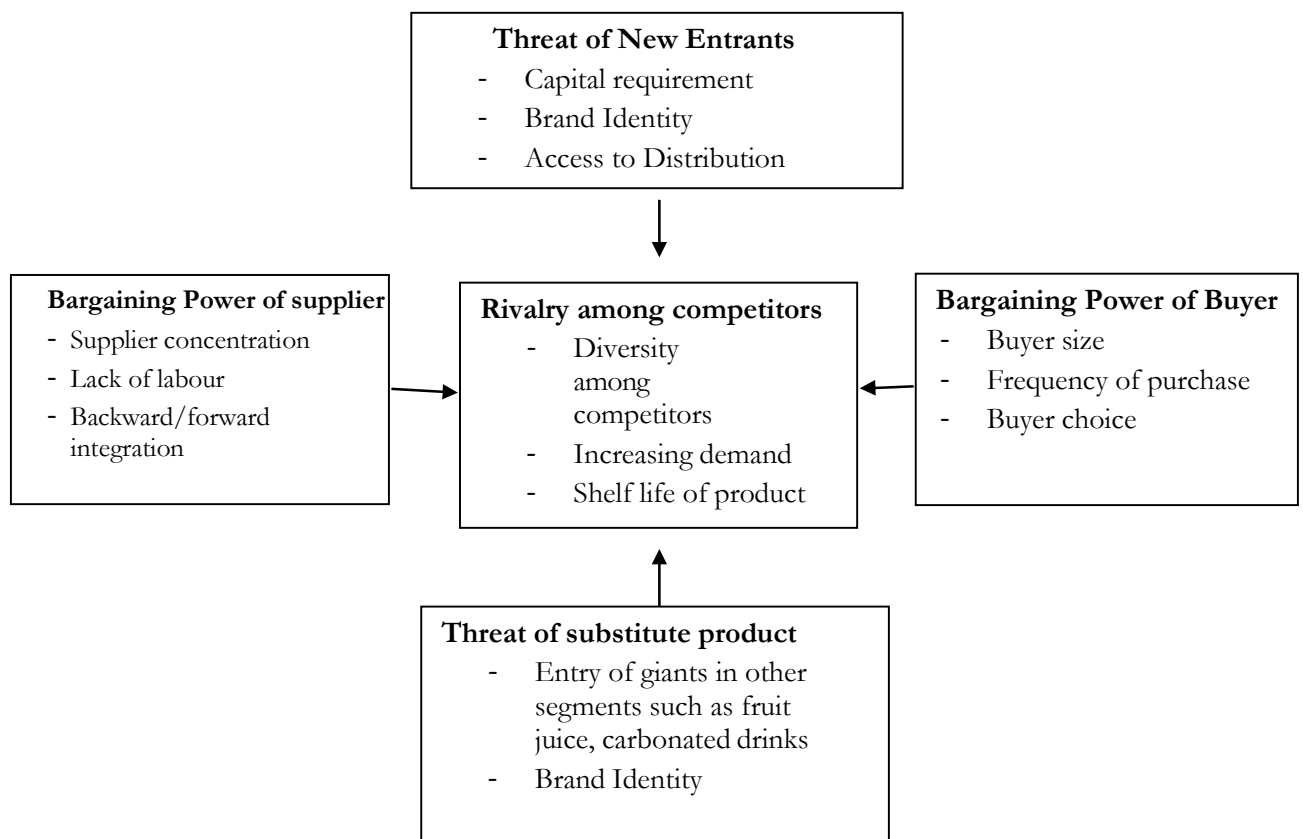


Fig 5.1 depicts the Michael porters five force model of packed tender coconut water and it shows that under the threat of new entry force the factors which plays a major role are capital requirement of a new enterprise is very low and Coconut Development Board provides assistance to the new entrants financially and technically, there is no strong brand identity in this segment so any new entrant can enter in this segment and market the product because majority consumers do not have any preferred brand and the distribution channel for marketing the packed tender coconut water is very simple so new entrant may not face much difficulty in this segment.

Another force is bargaining power of the supplier and for the case of PTCW the suppliers are local coconut growers in the coastal areas of country. The suppliers have a capability of setting the preferred price of raw material because in this segment availability of raw material is limited and it depends on the season, the technology for processing of packed tender coconut water is a semi automated so it requires skilled labour so huge demand for labour and backward integration is carried out by the suppliers by making an agreement for providing the raw coconuts round the year. Threat of substitute product is another force in Michael porters five force model and the entry of major giants in other segments like fruit juice and carbonated drinks which makes it difficult for the players of packed tender coconut water as they are unable to compete with their marketing capabilities , thus there is lack of awareness among the consumers regarding packed tender coconut water, brand identity of substitute products such as maaza, pepsi, real activ is another problem where there is a threat of substitute product for packed tender coconut water.

Bargaining power of buyers is very weak as the buyer's size is low and the demand for the packed tender coconut water is seasonal so frequency of purchase of the packed tender coconut water is low and buyer has a choice of purchasing other branded fruit juices.

Rivalry among competitors is very strong as the players of packed tender coconut water are diverse so there is no proper association among them and the demand for packed tender coconut water is seasonal and availability of raw material for processing is also seasonal and different companies have different shelf life of the product, they have developed their own technologies based on trial and error method.

Based on the data available from above, the marketing mix comprising 5 Ps viz, product, price, place, promotion and packaging of packed tender coconut water is prepared

1. Product:

Consumers prefer to purchase fresh tender coconut water but because of unavailability of tender coconuts in various geographical locations consumers are shifting to drink packed tender coconut water

Table 5.1: Preference of consumers towards packed tender coconut water

Sr. No	Preference	Northern Region		Southern Region		Total	
		Number	Percentage	Number	Percentage	Number	Percentage
2	Fresh tender coconut water	168	35%	252	78.75%	420	52.5%
3	Packed tender coconut water	312	65%	68	21.25%	380	47.5%
Total		480	100%	320	100%	800	100%

Source: Researchers computation from primary data

- Consumers prefer packed tender coconut water as a good substitute of carbonated drinks so taste of the product should be natural
- Increase of shelf life of product can increase the demand of the product

2. Price:

- The price of the packed tender coconut water is high compared to tender coconut so consumers prefer price at Rs. 20/- per bottle of 200 ml
- Most of the processing plants are settled in southern regions and demand is in northern region which is increasing the cost of the product
- Lack of proper technology is another reason which increases the cost of product

3. Place:

- The consumption of packed tender coconut water is high in northern region so there is a huge potential in northern region.
- Consumers prefer to drink packed tender coconut water when they are sick so it should be available near the hospitals
- Most of the consumers are purchasing from offline buying mode so it should be made available at all local departmental stores
- Availability of packed tender coconut water at different electronic platforms should be increased

4. Promotion:

- People are unaware of packed tender coconut water because of no proper promotional activities carried out by either players or coconut development board
- The players are expecting coconut development board to give market promotion regarding packed tender coconut water
- Providing free samples for the patients can increase the awareness of the product
- Offering discounts, offers can attract the consumers to buy packed tender coconut water
- Educating consumers regarding healthy lifestyle may increase the demand
- Use of social media can help to increase the awareness of packed tender coconut water

5. Packaging:

- Consumers prefer to accept the tetra packing of packed tender coconut water as it is easy to carry; hygiene and it can be disposed easily
- Proper labeling of the product is gaining importance because most of the consumers prefer to check the product details before purchasing such as nutritional values, expiry date
- Consumer prefer attractive packing while purchasing packed tender coconut water

5.1 Segmentation, Targeting and Positioning (STP) for Packed Tender Coconut Water

STP helps to decide which segment of consumers to target. Segmentation defines the division of mass market into small and identical market. Segmentation considers the four factors such as Demographic, Psychographics, Behavioral and geographical. The demographic factors include age, gender, income group, education; job whereas psychographics include the people's opinion, attitudes. Behavioral factors include brand preference, mode of purchase and geographical factors include the place.

Targeting defines the focus of segment on which market programme targets. Targeting considers four aspects known as "DAMP" approach given by Philip Kotler (1984). In DAMP, D stands for Distinct which means each segment should differ from other segment whereas A stands for accessible which indicates the targeted group should reach the distribution channel. M stands for measurable which reflects the easy identification of segment and it can be measured and P denotes profitable which says that the segment should be large and it should be helpful in creating profit

generation in future. Positioning defines that the brand or product which occupies the place in the mind of consumer.

Segmentation:

- In northern region majority of the male respondents have shown interested in packed tender coconut water whereas in southern region it was female. Overall 58 percent of respondents both from northern and southern region are interested in packed tender coconut water
- In northern region Single (unmarried) are purchasing PTCW whereas in southern region 66 percent are married, overall married population can be segmented for purchase packed tender coconut water
- Focus has to be made on the age group of 20-35 years as majority of the respondents both from northern and southern region are under this group and these people are ready to accept new variants
- Majority of the respondents in northern region are under the income group of Rs.51000-Rs.80000/- per month whereas in southern region majority are under the income group of Rs.20000-Rs.50000/- per month and overall majority belonged to the income group of Rs.51000-Rs.80000/- per month so focus has to be made on these peoples as they have more purchasing power.

Targeting:

- Health benefit was the most important reason for tasting packed tender coconut water in northern region whereas in southern region consume it due to its uniqueness
- Packed tender coconut water can be promoted by involving doctors, health workers and by providing free samples
- Majority of the respondents both from northern and southern region are graduates who can compare the nutritional benefits with other juices and they can understand easily, so publicity can be achieved by organizing events, awareness camps and creating strong social media

Positioning:

- Majority consumers, both in northern and southern region, are professionals so these peoples can be targeted by positioning packed tender coconut water as a healthy drink
- 31 percent of people in northern region and 28 percent of people in southern region prefer to consume packed tender coconut water when they are sick overall 30 percent of people so

it shall be positioned as healthy drink by doctors' recommendation

- Majority of people in northern region perception is that packed tender coconut water is a healthy replacement of fresh tender coconut water followed by a good substitute of carbonated drink whereas in southern region it is a good substitute of carbonated drink so it can be used as a refreshing and energy drink
- Both in northern and southern region, people prefer to consider the shelf life of packed tender coconut water which has to be considered
- Tetra packing was given importance for packed tender coconut water as it is easy to carry and it can be easily disposable.

Conclusion

Coconut water is gaining importance in present days and people are becoming more health conscious and shifting from carbonated drinks to fruit juices. Coconut water is a good substitute for carbonated drinks as it contains high amount of nutritional values. The study is carried out to understand the market scenario of packed tender coconut water and the objectives carried out for the survey were:

- I. To study the present status of Packed Tender Coconut Water (PTCW) in India
- II. To analyze the consumer behaviour for Packed Tender Coconut Water in terms of awareness, perception, preference and buying behaviour
- III. To identify the various marketing channels and their efficiency for Packed Tender Coconut Water
- IV. To suggest a suitable marketing strategy for the packed Tender Coconut Water

The study was carried out in both Northern and Southern India among the consumers, intermediaries, companies dealing with PTCW to understand the consumer preferences and constraints faced by the companies and intermediaries. The findings were analysed to arrive at the following conclusion.

- The technology used by the players of packed tender coconut water is transferred from Defence Food Research Laboratory in collaboration with Coconut Development Board
- Jain Agro Food Products Private Limited is the pioneer of packed tender coconut water, majority of the consumers tasted its brand Cocolal both in Northern and Southern region
- 31 percent of Indian packed tender coconut water is available in northern region
- The major constraint faced by the players of packed tender coconut water is lack of proper technology
- Majority of respondents are male in northern region whereas in southern region female and married
- The majority of respondents are under the age group of 20-35 years and graduates both in northern and southern region with an occupation of professionals with an income group of Rs.51,000- Rs.80,000 monthly

- Advertisement is the main source of awareness among people in northern region whereas friends and colleagues are the main source in southern region
- Health benefits of packed tender coconut water are the main reason for the consumers of northern region to taste whereas in the southern region the product is new in the market
- Majority of respondents tasted the brand Cocolal of packed tender coconut water both in northern and southern region
- The perception of consumers from northern region towards packed tender coconut water is that it is a healthy replacement of fresh tender coconut water whereas in the southern region it is a good substitute of carbonated drinks
- The main reason for the consumers of northern region to drink packed tender coconut water is it is recommended by the doctor whereas in the southern region because of its health benefits
- The parameter which the consumer of northern and southern region prefers while purchasing the packed tender coconut water is shelf life and prefers to drink when sick
- Tetra pack is the preferred type of packing the packed tender coconut water in northern region whereas plastic pack is the preferred packing in southern region
- Both the northern and southern region consumers prefer to drink packed tender coconut water during summer season
- The consumers of northern region preferred to purchase packed tender coconut water because of the way it is presented in the shelf and in the southern region it is because of its packing
- Majority of consumers both from northern and southern region buy packed tender coconut water in offline mode of supermarkets and prefer to purchase occasionally with a pack size of one at a time
- The myth of touch feel of the product is the main factor which affects consumer's perception to buy in offline mode
- Bigbasket is the major online site in northern region where consumers purchase packed tender coconut water and in southern region it is Amazon
- Saving time is the major factor which affects consumer's perception to buy in online site
- In northern region, consumers gender has only influence on mode of buying, checking of expiry date before buying and mode of payment at one percent significance and it has no

influence on reason to drink packed tender coconut water, frequency of purchase and quantity of buying whereas in southern region consumer gender has no influence on any of the factors

- In northern region, marital status has influence on mode of buying, quantity purchased of packed tender coconut water, mode of payment and it has no influence on reason to drink packed tender coconut water, frequency of purchase, checking of expiry date of packed tender coconut water before buying whereas in southern region it has influence only on mode of buying and frequency of purchase of packed tender coconut
- In northern region, age group has influence on reason to buy packed tender coconut water and checking expiry date of packed tender coconut water before buying and it has no influence on mode of buying, frequency of purchase, quantity, mode of payment whereas in southern region it occupation has influence on mode of buying, checking of expiry date before purchasing of packed tender coconut water and mode of payment while purchasing
- In northern and southern region, educational qualification and occupation has influence on mode of buying, checking of expiry date, mode of payment and it has no influence on reason to drink packed tender coconut water, frequency of purchase and quantity
- In northern region, monthly family income has no influence on any of the factors such as reason to drink packed tender coconut water, mode of buying, frequency of purchase, checking of expiry date, quantity and mode of payment
- In southern region, monthly family income has only influence on frequency of purchase of packed tender coconut water and mode of payment while purchasing
- Market efficiency of channel IV (Manufacturer-----Distributor-----Retailer) is high because of less number of intermediaries involved in it
- The intermediaries' perception towards packed tender coconut water is the product is unique
- Bargaining power of suppliers and threat of substitute product is very high factor influencing the framing of marketing strategy

The study also concludes with the segmentation, targeting and positioning of packed tender coconut water in India. Married, graduates, professionals of the age group 20-35 years can be segmented for packed tender coconut water. PTCW can be targeted for the income group of Rs.51000-Rs.80000/- per month as these people have more purchasing power. Health benefit was the most important reason for tasting packed tender coconut water in northern region

whereas in southern region consume it due to its uniqueness. Packed tender coconut water can be promoted by involving doctors, health workers and by providing free samples. 31 percent of people in northern region and 28 percent of people in southern region prefer to consume packed tender coconut water when they are sick overall 30 percent of people so it shall be positioned as healthy drink by doctors' recommendation Majority of people in northern region perception is that packed tender coconut water is a healthy replacement of fresh tender coconut water followed by a good substitute of carbonated drink whereas in southern region it is a good substitute of carbonated drink so it can be used as a refreshing and energy drink.

Appendix i
Questionnaire for consumers

- Name:
 - Address:.....
 - Email id:.....
 - Phone number:.....
- I. Gender : 1) Male 2) Female
- II. Marital Status: 1) Single 2) Married
- III. Age group:
1) < 20 years 2) 20-35 years
3) 36-50 years 4) > years
- IV. Educational Qualification:
1) Illiterate 2) Primary level 3) Secondary level
4) Intermediate 5) Graduation 6) PG & above
- V. Occupation:
1) Student 2) Professional 3) Businessman
4) Housewife 5) others if any, specify.....
- VI. Monthly (Family) Income:
1) < Rs.20,000 2) Rs. 20,000 – Rs.50,000 3) Rs.51,000 –Rs.80,000
4) Rs.81,000 – Rs. 1,00,000 5) > Rs. 1,00,000
- VII. Type of Family & members in the family
1) Nuclear Family 2) Joint Family.....
- VIII. Are you aware of the packed tender coconut water?
1) Yes 2) No
- IX. If yes, which is the source of information regarding the product?
1) Friends & Colleagues 2) Family Members 3) Relatives
4) Advertisement 5) others if any, specify.....

X. If yes, have you tasted the packed tender coconut water?

- 1) Yes 2) No

XI. What attract you to try the packed tender coconut water?

- 1) Because of health benefits 2) As product is new in the market 3) Availability
4) Others, pls specify.....

XII. Since how long you are consuming packed tender coconut water?

- 1) < One month 2) Past one month 3) Past six months
4) Past one year 5) More than one year

XIII. Which brand of packed tender coconut water you tasted?

- 1) Cocojal 2) Cocosip 3) Tender coco 4) Paper boat 5) Ipo nut
6) Others, if any Specify.....

XIV. How would you rate the product which you tasted?

- 1) Very bad 2) bad 3) Average 4) good 5) Very good

XV. Perception towards packed tender coconut water

Particulars	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)
The price of the product is high					
The product is tasty					
It is a good substitute of carbonated drinks					
It is easily available					
It is easy to carry					
The product is unique					
It has attractive packing					
The product quality is good					
It is a healthy replacement of fresh tender coconut water					

- XVI. You drink packed tender coconut water because of
- 1) Quick source of energy
 - 2) Health benefits
 - 3) Just for refreshment
 - 4) Hot weather
 - 5) Recommended by doctor
 - 6) Others, if any specify.....
- XVII. On which occasion, you prefer to drink packed tender coconut water?
- 1) When outside of home with family or friends
 - 2) Work
 - 3) In parties
 - 4) Travelling
 - 5) When sick
 - 6) Others, if any pls specify.....
- XVIII. Which do you prefer?
- 1) Fresh tender coconut water
 - 2) Packed tender coconut water
- Please specify why.....
- XIX. Which kind of packing do you prefer for packed tender coconut water?
- 1) Glass bottle
 - 2) Tetra pack
 - 3) plastic pack
- Please specify why.....
- XX. Which season do you prefer to drink packed tender coconut water?
- 1) Summer
 - 2) Winter
 - 3) Monsoon
 - 4) All year round
- XXI. What attracts you to a buy the product?
- 1) Novelty
 - 2) price
 - 3) packing
 - 4) way it is presented on the shelf
 - 5) Brand
 - 6) other, please specify.....
- XXII. Whom do you purchase the packed tender coconut water?
- 1) Self
 - 2) Spouse
 - 3) Parents
 - 4) Kids
 - 5) Siblings
 - 6) other family members
- XXIII. From where you purchase the packed tender coconut water?
- 1) Mall / Super market
 - 2) Grocery store
 - 3) Convenience store
 - 4) Online
 - 5) others, pls specify.....
- XXIV. If online, from which site you'll purchase the product?
- 1) Amazon
 - 2) Big basket
 - 3) Company websites
 - 4) Others, if any.....
- XXV. How often do you purchase the product?
- 1) Once in a week
 - 2) More than once in a week
 - 3) Once in a month
 - 4) More than once in a month
 - 5) occasionally
 - 6) other, pls specify.....

XXVI. Do you have any preferred brand to purchase?

- 1) Yes 2) No

XXVII. If yes, can you name preferred brand & reasons for preference

XXVIII. Rank the factors which affect mostly the buying mode (1 for highest and 9 for least)

Particulars	Offline	Online
Time		
Availability		
Awareness		
Easy to purchase		
Offers		
Myth of touch & feel		
Easy to compare with other brands		
Can get complete information regarding the product before purchase		
Price		

XXIX. Do you check the expiry date before buying the product?

- 1) Yes, always 2) Sometimes 3) No

XXX. How much quantity you purchase usually?

- 1) One 2) two – four 3) pack of six 4) more than six
5) Other, pls specify.....

XXXI. Mode of payment when buying the product?

- 1) Cash 2) Credit card 3) Debit card 4) online payment
6) Other, pls specify.....

XXXII. How much importance do you give to the following factors when you purchase packed tender coconut water

Factors	Least Important	Less Important	Neutral	Important	Most Important
Taste					
Price					
Quality					
Packaging					
Brand					
Quantity					
Shelf life					
Offer					
Appearance					
Promotion					

Thank You!

Appendix ii

Questionnaire for company representatives

- I. Name:
- II. Designation:.....
- III. Email id:.....
- IV. Phone number:.....
- V. Company turnover (Per annum):.....

- VI. Constraints faced by the company: (Rank 1 for highly significant and 15 for low significant)

Particulars	Ranking
Unavailability of credit facility	
Unavailability of tender nuts	
Lack of market intelligence	
Lack of demand	
Lack of awareness	
Losses in production process	
Lack of proper transportation	
Lack of assistance by CDB	
Unavailability of manpower	
Lack of proper technology	
Lack of trouble shooting knowledge in production process	
Lack of proper marketing facilities	
Low shelf life of the product	
Heavy price fluctuations of raw material	
Others (Pls mention)	

- VII. Distribution channel followed by your company for marketing the packed tender coconut water.....

- VIII. Are you exporting the packed tender coconut water?
 - 1) Yes 2) No
- IX. If yes, can you name the place to where you are exporting.....
- X. If yes, How much quantity are you exporting per month.....
- XI. Expectations from CDB
 - 1).....
 - 2).....

THANK YOU!

Appendix iii
Questionnaire for intermediaries

- I. Name:.....
- II. Type of intermediary:
 1) Stockist 2) Distributor 3) Dealer 4) Retailer
 5) Other, pls specify.....
- III. Name of the company you are dealing with.....
- IV. Purchase of packed tender coconut water
- | | Quantity purchased | From whom purchased | Purchase price |
|--|---------------------------|----------------------------|-----------------------|
|--|---------------------------|----------------------------|-----------------------|
- V. Cost incurred in procuring the packed tender coconut water
- | Particulars | Quantity | Rate | Amount |
|---------------------|-----------------|-------------|---------------|
| CGST/SGST/IGST | | | |
| Commission | | | |
| Loading charges | | | |
| Unloading charges | | | |
| Transportation cost | | | |
| Miscellaneous | | | |
| Total cost | | | |
- VI. Selling of packed tender coconut water
- | | Quantity sold | To whom sold | Sale price |
|--|----------------------|---------------------|-------------------|
|--|----------------------|---------------------|-------------------|
- VII. Average monthly sales of the product.....
- VIII. Sales of the product is high during period
- 1) January – March 2) April – June
 3) July – September 4) October – December
- IX. Problems faced (1 for highly significant and 10 for low significant)
- | Particulars | Rank |
|---|-------------|
| Lack of market information | |
| Low Shelf life of product | |
| Irregular supply | |
| Price fluctuations | |
| Lack of awareness among consumers regarding the product | |
| Seasonal demand | |
| Lack of proper transportation facilities | |
| Lack of credit facility | |
| Marketing constraints | |
| Others, pls specify..... | |

X. Perception towards packed tender coconut water and manufacturers

Particulars	Strongly disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly agree(5)
The product price is high					
The manufacturer is supportive					
Timely supply of product by manufacturers					
It is a good substitute of carbonated drinks					
The manufacturer provides credit facility					
Product is easy to carry					
Product is Unique					
It has attractive packing					
The Product quality is good					
It is a healthy replacement of fresh tender coconut water					
Demand for packed tender coconut water is increasing day by day					

XI. Distribution channel followed by you for marketing the product.....

XII. Expectations from company

1).....

2).....

Thank You!

Appendix iv
Schedule for company representatives

- I. Name of the company:.....
- II. Sex : Male 2) Female
- III. Educational Qualification:
- 1) Intermediate 2) Graduation 3) PG & above
- IV. Type of company:
- 1) Public limited 2) Private limited 3) Cooperative organization
- 4) Other, pls specify.....
- IV. Year of establishment:.....
- V. Number of workers employed:.....
- VI. Capacity of the plant:.....
- VII. Working hours per day:.....
- VIII. Type of products manufactured:
- 1) Only packed tender coconut water
- 2) Packed tender coconut water along with other byproducts of coconut water
- 3) Packed tender coconut water along with other fruit juices
- 4) Others, pls specify.....
- IX. Number of shifts per day:
- 1) One 2) Two 3) Three 4) Four
- X. Type of packing of packed tender coconut water
- 1) Bottle 2) Cup 3) Tetrapack 4) Both bottle & cup
- 5) All the three 6) others, pls specify.....
- XII. Type of manufacturing:
- 1) Manual 2) Semi-automated 3) Fully automated
- 4) Others, pls specify.....
- XIII. Major competitors of your product:.....
- XIV. Major markets of your product:
- XIV. Technology transferred from:
- 1) DFRL with the support of CDB 2) Own technology
- 3) Others, pls specify.....
- XV. Financial support of company:
- 1) Self 2) Bank 3) Coconut development board (CDB)
- 4) Other, pls specify.....
- XVI. Annual production:.....
- XVII. Maximum production of product during the period
- 1) January – March 2) April – June
- 3) July – September 4) October - December

References

- Acharya, S.S. and N.L. Agarwal, (2001), *Agricultural Marketing in India*, New Delhi: Oxford and IBH Publishing Co.
- Anojan, V., and Subaskaran, T (2015). Consumers Preference and Consumers Buying Behavior on Soft Drinks: A Case Study in Northern Province of Sri Lanka. *Global Journal of Management and Business Research*,15(2):11-37.
- Baba, S. H., Saini, A. S., Sharma, K. D. and Thakur, D. R. (2010). Impact of investment on agricultural growth and rural development: Dynamics of public and private investment in Himachal Pradesh. *Indian Journal of Agricultural Economics*. 65: 136-157.
- Cesar Julias and Sundari Siva (2016). Consumer Perception on Fruit Drinks: A Field Survey in Tirunelveli District Tamilnadu, South India. *Pune Research Scholar*. 2(4): 1-16.
- Dhanavandan S (2016). Application of Garret Ranking Technique: Practical Approach. *International journal of library and information studies*. 6(3): 135-140.
- Gahlawat, V., Rambir and Garg, A (2014). Consumer behaviour for fruit juices market in India. *International Research Journal of Commerce, Arts and Science*. 5(2):231-237.
- Krishnan Remany (2016). The best is yet to come to coconut sector. *Indian Coconut Journal*, September edition, 21-24.
- Magat (2006). Enhancement of Economic Benefits from Selected Coconut-based Farming Systems (CBFS) Practices and Technologies. *Philippine Journal of coconut studies*. 18(2): 7-15.
- Mundra, N., Gulati, K., and Gupta, R. (2012). A Comparative Analysis of the Customer's Perception on Carbonated Drinks: Pepsi versus Coca-Cola versus RC-Cola. *KHOJ: Journal of Indian Management Research and Practices*. 3(2): 1-13.
- Parmar and Singh Jai (2011). Consumer behaviour towards marketing of PepsiCo brand "NIMBOOZ". *Political Economy Journal of India*.20(3), 36-39.

- Qasim, M.S., and Agarwal, S. (2015). Consumer Behaviour towards selected FMCG (Fast Moving Consumer Goods) in Delhi NCR. *International Journal of Informative & Futuristic Research*. 2 (7): 2041-2048.
- Ramesh Babu Kakumanu (2015). Advertisements of soft drinks brands – Impact on Telangana soft drink consumer's preference. *International Journal of Marketing and Business Communication*. 4(2), 31-38.
- Rajesh M. and Purusothaman G. (2013). Consumer perception towards online shopping in kanchipuram. *International Interdisciplinary Research Journal*.1(2): 36-44.
- Rudresha C.E, Manjunatha H.R., and Chandrashekarrapa.U.(2018). Consumer's perception towards online shopping. *International Journal of Scientific Development and Research*. 3(11): 147-153.
- Sabarathanam, V. E. (1988). Manuals of Field Experience Training for ARS Scientists. NAARM, Hyderabad.
- Santos Aline Bravim, Bottoni Sharlayne de Souza, Silva Daniela Alvas, and Silva Erika Madeira Moreira da (2017). Study of the consumers of Ready -to- drink juices and Fruit Nectars. *Food Science Technol, Campinas*.10 (1):57-78.
- Theerkapathy S. and Mangalam Chandrakumar S (2014). Coconut Processing Industries: An Outlook. *Global Journal of Commerce and Management Perspective*. 3(5): 219-221.
- Ubeja, S., and Patel, R.(2014). Consumer Preference towards Soft Drinks: A Perceptual Study. *Pacific Business Review International*. 6(9): 80-86.

Web Resources

- Anonymous (2017). Coconut Water Market Size in the United States from 2014 to 2019. Retrieved from <https://www.statista.com/statistics/325473/us-coconut-water-sales>, accessed on 27/11/2017.

Anonymous (2017). Global Energy Drinks Market 2017-2021: Key Vendors are Monster Beverage Corporation, PepsiCo, Red Bull & Rockstar Energy Drink. Retrieved from <https://www.prnewswire.com/news-releases/global-energy-drinks-market-2017-2021-key-vendors-are-monster-beverage-corporation-pepsico-red-bull--rockstar-energy-drink-300515507.html> accessed on 18/11/2018.

Akansha Agarwal (2009). Use of Soft Drinks Multinational Positioning Strategy. Economic Times, Retrieved from https://shodhganga.inflibnet.ac.in/bitstream/10603/44567/7/07_chapter%202.pdf accessed on 10/4/2009.

Callander Rebecca Burn (2016). Cracking the coconut: how Vita Coco made London its top global market. Retrieved from <http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/12142910/Cracking-the-coconut-how-Vita-Coco-made-London-its-top-global-market.html>, accessed on 20/12/2017.

CDB annual report 2018. Retrieved from www.coconutdevelopmentboard.nic.in accessed on 4/3/2018.

Shah Dhvipal (2016). India: Rise of Packed Fruit Juices. Retrieved from <https://www.asiafoodjournal.com/2016/05/india-rise-packaged-fruit-juices>, accessed on 9/10/2017.

Sarah Kelzer (2013). The new coconut water fever. Retrieved from <https://www.scribd.com/document/218210799/coconut-water#1-23> accessed on 12/11/2018.

Karan Chechi (2017). India Packaged coconut water market by type, by sales type, by package type, by distribution channel, competition forecast & opportunities, 2012-2022. Retrieved from <https://www.prnewswire.com/news-releases/india-packaged-coconut-water-market-by-type-by-sales-type-by-packaging-type-by-distribution-channel-competition-forecast--opportunities-2012--2022-300492092.html> accessed on 15/8/2018

Mathur Chandini (2017). As 'health-conscious' becomes buzzword, branded fruit juice segment looks to pack a powerful punch. *The Financial Express*, 1-6.

Millington Alison (2015). Innocent looks to take coconut water mainstream with new product push. Retrieved from <https://www.marketingweek.com/2015/07/27/innocent-looks-to-take-coconut-water-mainstream-with-new-product-push/>

Roderick Leonie (2017). How one brand is retaining its challenger status? Retrieved from <https://www.marketingweek.com/2017/05/25/vita-coco-coconut-water-challenger-brand/>, accessed on 4/8/2017.

Rane Shrikant (2017). Coconut Water 2017 Global Market Size, Status and Forecast to 2022. Retrieved from <https://www.linkedin.com/pulse/coconut-water-2017-global-market-sizestatus-forecast-2022-rane/>, accessed on 29/11/2017.

Retrieved from www.Jainagrofoods.com accessed on 20/10/2018

Retrieved from www.cdbkochi.nic.in accessed on 25/3/2019

Retrieved from <https://tejas.iimb.ac.in/articles/107.php> accessed on 15/5/2019

Retrieved from <https://en.wikipedia.org/wiki/File:India-locator-map-blank.svg> accessed on 11/10/2019



उत्तमा वृत्तिस्तु कृषिकर्मैव

Institute of Agri Business Management
Swami Keshwanand Rajasthan Agricultural University
Bikaner - 334 006 (Rajasthan) +91-151-2252981/82
director@iabmbikaner.org | www.iabmbikaner.org

