

Consumer Buying Behavior and Marketing Constraints for Whole Spices in Prayagraj District Of Uttar Pradesh

उत्तर प्रदेश के प्रयागराज जिले में साबुत मसालों के लिए उपभोक्ता खरीद व्यवहार और विपणन बाधाएं

Prashant Kumar Gautam

Project Report

**Master of Business Administration
(Agri Business)**



उत्तमा वृत्तिस्तु कृषिकर्मैव

2022

**Institute of Agri Business Management
Swami Keshwanand Rajasthan Agricultural University,
Bikaner – 334006**

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Project Report

Submitted to the

Swami Keshwanand Rajasthan Agriculture University, Bikaner

In partial fulfilment of the requirement for the degree of

Master of Business Administration

(Agri Business)

By

Prashant Kumar Gautam

2022

INSTITUTE OF AGRI BUSINESS MANAGEMENT
SWAMI KESHWANAND RAJASTHAN AGRICULTURAL UNIVERSITY, BIKANER

Certificate – I

Date:

This is to certify that **Mr. Prashant Kumar Gautam** had successfully completed the Comprehensive Examination held on **26/04/2022** as required under the regulation for the degree of Master of Business Administration (Agri Business).

DIRECTOR, IABM

INSTITUTE OF AGRI BUSINESS MANAGEMENT
SWAMI KESHWANAND RAJASTHAN AGRICULTURAL UNIVERSITY, BIKANER

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This is to certify that this project report entitled “**Consumer Buying Behavior and Marketing Constraints for Whole Spices in Prayagraj District Of Uttar Pradesh**” submitted for the degree of Master of Business Administration (Agri Business) in the field of embodies bonafide project work carried out by **Prashant Kumar Gautam** under our guidance and supervision and that no part of this project report has been submitted for any other degree. The assistance and help received during the course of investigation have been fully acknowledged. The draft of this project report was also approved by the Advisory Committee on

(Satyveer Singh Meena)
Major Advisor

DIRECTOR, IABM

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Advisory Committee:

(Satyveer Singh Meena)

Major Advisor

(Amita Sharma)
Member

(Rajeev Kumar Narolia)
Member

(S. L. Godara)
Dean PGS Nominee

Recommended for approval

DIRECTOR, IABM

Approved

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Post Graduate Studies

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The candidate was examined orally on his / her project report by the committee with following recommendations:

- (1) The performance of the candidate has been found satisfactory. We recommend the Acceptance of the project for the award of the degree.
- (2) The performance of the candidate has been found unsatisfactory. The candidate be Asked to reappear in the oral examination.

(Satyveer Singh Meena)
Major Advisor

(Amita Sharma)
Member

(Rajeev Kumar Narolia)
Member

(S. L. Godara)
Dean, PGS Nominee

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The Dean Post Graduate Studies, Swami Keshwanand Rajasthan Agricultural University, Bikaner with three copies of the bound project report and the certificate of incorporation of correction and modification.

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Analysis address	satyveer.skraub@analysis.urkund.com

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Date:

PLACE: Bikaner

(Prashant Kumar Gautam)

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
CAGR	Compound Annual Growth Rate
ICAR	Indian Council of Agricultural Research
DASD	Direct Access Storage Device
BOPP	Biaxially Oriented Polypropylene

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Executive Summary

Spices are an essential component of any Indian meal, whether prepared at home or elsewhere. Many companies are now producing whole spices, spices powder, curry seasoning masala, masala powder, and other spices on a huge scale. Because there are several brands firmly planted in the market, the market of these brands has been intense. Information on customer buying behaviour about whole spices, factors influencing whole spice purchases, and challenges with whole spice use would aid businesses in developing alternative market techniques.

The current study looked at consumer purchasing behaviour, awareness, and constraints for whole spices in the Prayagraj District of Uttar Pradesh. A planned timetable will be used to collect primary data from wholesalers, mart owners, and customers. MS Excel, descriptive statistics, and factor analysis were used to analyse the data. Prayagraj is a growing city where people are becoming more aware of the importance of high-quality, unadulterated spices. The study predicts that the use of packaged whole spices will increase to 41.6 per cent.

The majority of consumers buy whole spices once a month and prefer or choose packaged spices. Out of 154 customers, 62 use it because it is more hygienic and safer, 36 because it tastes good to family members, 24 because it is easier to use, and 20 because it is readily available. According to the report, 39 per cent of consumers like to experiment with different brands. Furthermore, if a certain brand is unavailable, 61 per cent of consumers prefer to continue with the same brand.

Customers are less aware of whole spice brands, which is one of the key restrictions in market whole spices. Customers will be most tempted by discounts and offer such as buy one get one free, according to the survey. It is recommended that consumers prefer

whole spices over ground spices for the sake of purity and quality to give nutritional content and flavour to their cuisine and improve their family's health.

कार्यकारी सारांश

मसाले किसी भी भारतीय भोजन का एक अनिवार्य घटक हैं, चाहे वह घर पर या कहीं और बनाया गया हो। कई कंपनियां अब बड़े पैमाने पर साबुत मसाले, मसाले पाउडर, करी मसाला मसाला, मसाला पाउडर और अन्य मसालों का उत्पादन कर रही हैं। चूंकि बाजार में कई ब्रांड मजबूती से स्थापित हैं, इसलिए इन ब्रांडों का विपणन तीव्र रहा है। साबुत मसालों के बारे में ग्राहक के खरीदारी व्यवहार की जानकारी, पूरे मसाले की खरीद को प्रभावित करने वाले कारक, और पूरे मसाले के उपयोग की चुनौतियों से व्यवसायों को मदद मिलेगी

वर्तमान अध्ययन ने उत्तर प्रदेश के प्रयागराज जिले में उपभोक्ता खरीद व्यवहार, जागरूकता और साबुत मसालों के लिए बाधाओं को देखा। थोक विक्रेताओं, मार्ट मालिकों और ग्राहकों से प्राथमिक डेटा एकत्र करने के लिए एक नियोजित समय सारिणी का उपयोग किया जाएगा। डेटा का विश्लेषण करने के लिए एमएस एक्सेल, वर्णनात्मक सांख्यिकी और कारक विश्लेषण का उपयोग किया गया था। प्रयागराज एक बढ़ता हुआ शहर है जहां लोग उच्च गुणवत्ता वाले, मिलावटी मसालों के महत्व के बारे में अधिक जागरूक हो रहे हैं, अध्ययन में भविष्यवाणी की गई है कि पैकेज्ड साबुत मसालों का उपयोग बढ़कर 41.6 प्रतिशत हो जाएगा।

अधिकांश उपभोक्ता महीने में एक बार साबुत मसाले खरीदते हैं और डिब्बाबंद मसाले पसंद करते हैं या चुनते हैं। 154 ग्राहकों में से, 62 इसका उपयोग करते हैं क्योंकि यह अधिक स्वच्छ और सुरक्षित है, 36 क्योंकि इसका स्वाद परिवार के सदस्यों को अच्छा लगता है, 24 क्योंकि इसका उपयोग करना आसान है, और 20 क्योंकि यह आसानी से उपलब्ध है। रिपोर्ट के मुताबिक 39 per cent उपभोक्ता अलग-अलग ब्रैंड के साथ एक्सपेरिमेंट करना पसंद करते हैं। इसके अलावा, यदि कोई निश्चित ब्रांड उपलब्ध नहीं है, तो 61 प्रतिशत उपभोक्ता उसी ब्रांड के साथ जारी रखना पसंद करते हैं।

ग्राहकों को होल स्पाइस ब्रांड्स के बारे में कम जानकारी होती है, जो पूरे मसालों के विपणन में प्रमुख प्रतिबंधों में से एक है। सर्वेक्षण के अनुसार, ग्राहक छूट और ऑफ़र जैसे कि एक खरीदें एक मुफ्त प्राप्त करें, से सबसे अधिक लुभाएंगे। यह अनुशंसा की जाती है कि उपभोक्ता अपने व्यंजनों को पोषण सामग्री और स्वाद देने और अपने परिवार के स्वास्थ्य में सुधार करने के लिए शुद्धता और गुणवत्ता के लिए पिसे हुए मसालों पर साबुत मसालों को प्राथमिकता दें।

1. Introduction of Spices

1.1 Introduction

Spices play an increasingly essential function in the flavouring of meals all over the world. Spices can be made from a variety of plant components, including bark, fruits, leaves, buds, flowers, roots, rhizomes, styles, seeds, stigmas, and the entire plant tops. Spices had volatile aromatic oils and aromatic flavours. Spice use and consumption are steadily expanding due to its growing health relevance (Kaefer and Milner, 2008). Today, China, Brazil, India, Guatemala, Indonesia, and Madagascar dominate spice production, which is a major trading activity (WTO, 2012).

A spice, according to renowned spice author Rosengarten (1969), is a product that enhances or changes the quality of anything, such as changing the taste of food to give it zest or pungency; a spicy or long-lasting flavouring; or a relish. Spices, herbs, and certain fragrant vegetables are therefore used to lend odour and flavours to foods under the word "spice." Spices can be used alone or in conjunction with other spices to give foods a distinctive flavour and colour (Peter, 2003). They are used to boost food palatability and deliver micronutrients. Meat products contain a wide range of spices, seasonings, and flavouring. (Tainter and Grenis, 1993).

Many civilizations have used spices and herbs to enhance the flavours and scent of foods for ages. Early societies recognized the importance of spices and herbs in both food preservation and medicine (Ghadekar et al., 2006). Spices have several uses, according to Hernandez et al. (2014), including flavouring, medicinal, preservative, colourant, and insecticides. Spices include antibacterial, antifungal, and antiviral properties, as well as antioxidant qualities in various foods. Spices can also be used for natural meat preservation. Cinnamon is a natural preservative that may easily replace harmful industrial preservatives. Some spices, such as coriander, fennel, turmeric, and cloves, are also

used to treat dental and skin disorders, as well as glaucoma, insulin resistance, and blood sugar control (world of spices,2018).

India has long been renowned as the world's spice bowl. About 63 spices are widely farmed in our country, according to the Bureau of Indian Standards. India is known around the world for being the only country that produces practically every type of spice.

India produces over 4 million tonnes of spice and exports over 180 different spice products to over 150 countries. In terms of dollar value, the Indian spice sector has increased by 26 per cent. India has a total area under spice cultivation of 2.3 million hectares, with an annual spice production of over 27 lakh tonnes worth around Rs. 13000 cr. Indian spices account for roughly 35 per cent of global spice commerce. The Indian spice processing sector faces several challenges, including a lack of standardized raw materials, an unscientific manufacturing procedure, a lack of human training, acquiring financing, and market issues, among others. Because India is the world's largest producer and processor of spices, the Indian spice processing sector has a bright future as an agro-processing unit.

1.2 Introduction of Whole Spices (Khada Garam Masala)

India's great cultural diversity is reflected in its wide range of culinary delights, which is one of the reasons why Indian cuisine ranks higher than other cuisines around the world. Each Indian state has its particular flavours and ingredients that work wonders in drawing you in. Due to the extensive use of spices like cinnamon, clove, cardamom, jeera, star anise, black pepper, bay leaves, nutmeg, and peppercorn, Indian cuisine has a distinct quality that makes it genuinely desi. Khada masala, often known as Garam masala, is a traditional Indian spice blend used in a variety of vegetarian and non-vegetarian cuisines. Khada masala is made out of a variety of Indian species that are pulverized in specified amounts and utilized when cooking. Curries gain an aromatic taste from cooking. However, there is no set recipe

for producing this masala because each Indian household makes it to its tastes and preferences. It's one of the most popular masalas in Indian cooking, and it has a slew of health benefits. Garam masala, also known as khada masala, literally means "a spicy concoction." Where hot refers to the Ayurvedic medication blends used to warm the body. These spices are used to help the digestive tract digest food by igniting the digestive fire. When Garam masala is added to a curry, it gives it eleven different flavours, according to Ayurveda. Cumin, cardamom, and black cardamom flavour them. Mace, Nutmeg, Cassia, Black pepper, Star anise, Bay leaf, Cinnamon has a warm and sweet flavour, whereas piper and cardamom provide a sweet flavour. Khada masala has numerous strong compounds that provide numerous health advantages.

1.3 Global Overview

The global spices market was worth USD 5.86 billion in 2019 and is predicted to increase at a CAGR of 6.5 per cent from 2020 to 2027. One of the main causes of increasing spice consumption is the growing demand for authentic cuisines around the world. The expanding popularity of varied flavours in foods and snacks is likely to encourage producers to offer high-quality, enticing, and dependable goods that can meet consistent worldwide standards. Spices can change the flavours of a dish and are associated with regional characteristics. The Middle East and Southeast Asia, for example, are likely to contribute to fusions, which are expected to grow in popularity throughout the forecast period.

In 2019, Asia Pacific had the greatest share of nearly 35.0 per cent. The Asia Pacific is one of the world's largest spice producers and exporters. The region boasts the world's greatest population and has seen a significant increase in the demand for spices. The majority of spices and herbs are grown in nations like India, Vietnam, China, and Thailand, making the region the world's leading exporter. With the advent of market and promotional activities, rising consumer affluence,

and the growth of domestic brands, consumption in the region is also developing rapidly. Ajinomoto, Everest, Catch, Japan, and MDH are some of the well-known participants in the sector. China is one of Asia Pacific's top spice consumers. Domestic consumption is the primary driver of demand, followed by restaurant outlets. The diversification of daily food in China as a result of rising individual income and economic progress has given rise to a variety of options for meeting the demand for seasoning and spices.

1.4 Indian Whole Spices Market

India is one of the world's most prolific spice producers. India is, in reality, the world's largest producer of cumin, ginger, chilli, and turmeric. India is the world's second-largest producer of pepper. According to studies, India produces over 3 million tonnes of spices each year, worth approximately 186 billion rupees (US\$ 3 billion).

Seed Spices Bowl (Rajasthan and Gujarat) is a dry and semi-arid region in India that contributes more than 80 per cent of overall seed spice production. Signify ISO lists 109 spices, 63 of which are produced in India and 20 of which are classified as seed spices. Cumin, coriander, fennel, fenugreek, Ajwain, anise, caraway, celery, dill, and nigella are among the ten most fundamental seed spices studied by the ICAR-NRCSS.

According to the Spices Board, an Indian government organisation that promotes Indian spices, India produces 30 percent of the world's pepper, 35 percent of the world's ginger, and 90 percent of the world's turmeric. Andhra Pradesh leads the country in stew and turmeric output, with 49 percent and 57 percent, respectively. Rajasthan is the largest producer of coriander, cumin, and fenugreek, with 63 percent, 56 percent, and 87 percent, respectively.

Seed spices were also developed in a number of other states and districts, including Uttar Pradesh, Madhya Pradesh, Bihar, West Bengal, Orissa, Punjab, Karnataka, and Tamil Nadu. Because there is such a large number of seed spices to introduce in new districts,

increased yields can be achieved with ease by implementing new advancements. Cumin has the most popularity among seed spices, followed by coriander, fennel fenugreek, Ajwain, celery, nigella, dill, anise, and others. Because these are uncommon harvests, they are used extensively in conjunction with food crops and as cover/mixed goods in rainfed/immersed settings.

Each of these harvests was mostly produced during the Rabi season. India is the world's largest producer, consumer, and exporter of seed spices. Seed spices account for 51.79 percent of total district production and 19.06 percent of total spice production in the country. The area covered by seed spices is approximately 1.74 million hectares, with a production of approximately 1.45 million tonnes (DASD, Calicut-2016-17). India is an obvious source of seed spices for acquiring countries all over the world. Seed spices have been gaining popularity, and acquiring countries are looking to India for high-quality seed spice production.

Table 1: Year wise production and Export of Indian Spices

S.No.	Year	Production (in1000 Metric Tons)	Exports in (1000 Metric Tons)
1	2009	4144.91	426.80
2	2010	4015.92	456.04
3	2011	5350.50	521.82
4	2012	5951.00	659.11
5	2013	5743.50	741.32
6	2014	5908.29	810.87
7	2015	6108.00	764.91
8	2016	6988.00	895.74
9	2017	8122.00	932.55
10	2018	8124.00	998.03

(Source: www.indiaspices.com)

The table no. 1 shows that creation of flavors in 1000 metric tons and their fares in 1000 metric tons from India.

a) Competitive Landscape

The competitive landscape of the sector has also been explored, with Chuk de, MDH, Everest Food Products Pvt. Ltd, Catch spices, MTR Foods Pvt. Ltd, and Patanjali Ayurved Limited, Eastern spices and Rajesh spices being some of the important participants.

b) Packing size

Brand owners and retailers are under increasing public pressure to reduce packaging's environmental impact. According to a recent Packaging Europe article, brand owners are currently attempting to address consumers' environmental concerns in a variety of ways.

According to a recent Deloitte study, over half of shoppers, or 51 per cent, make purchase decisions on the shelf. Although pricing remains the most important factor in customer purchasing decisions, flexible packaging plays a vital role in product differentiation at the point of sale. Consumers play a crucial role in this circumstance. What exactly are customers looking for? What are their packaging preferences for products?

- It's critical to create a package that has shelf appeal. You can only close the transaction with today's consumer if you have "off-the-shelf-appeal." Consumers are not hesitant to pick up things or to leave them at the checkout when making a final assessment at the moment of transaction.
- Size is important. Smaller portion packaging is becoming increasingly popular among customers. This is due to an increase in elder households and a decrease in family sizes. Single-serve portions are critical. This aligns with consumer

demand for reduced portion sizes and packaging preferences, making practical use a priority.

- People remember around 10 per cent of what they hear, 20 per cent of what they read, and 80 per cent of what they see. Because colour contributes for 80 per cent of the visual information a person processes, choosing excellent branding colours is critical.

C) Challenges Faced by the Spice Industry

India, the world's largest producer, consumer, and exporter of spices, has some issues with traceability and security regulations. Contaminants, pesticide innovations, and poisons remained major difficulties despite the fact that they could be addressed by modern development. The state of Indian agriculture today isn't good – soil fertility is dwindling, water resources are deteriorating and becoming logically more polluted due to the unusual use of agrochemicals, and agriculturist jobs are being influenced both fairly and unfairly by natural change and unavoidable misfortunes Bhushan and Mishra (2018).

In India, the spice industry plays a critical role in the economy and the livelihoods of a large number of small-scale producers. Around 98 percent of India's spice production is done by small-scale farmers, who typically grow under two hectares and alternate between producing different yields of spices. (Gupta & Chandak 2020) Low and shaky agriculturist income, difficulties going to business parts, limited access to medicinal administrations and preparation, and obligated overall dealing power are a few of the social and financial issues that small scale farmers in the territory face. Furthermore, it suffers labour issues such as poor working conditions, underage labour, and a lack of written agreements with the workers. The following are the major difficulties facing the Indian spice industry:

- One of the major difficulties affecting the Indian Spice industry is low profitability, which results in low intensity in the global business sectors.
- Competition India confronts stiff competition in the flavour of the overall system from other delivering nations. The bulk of these countries have no domestic market for the flavours they produce, making it difficult for them to sell even at cost (Sunil Nair, 2018).
- Indian Spices do not have crop insurance. Exceptional natural disasters frequently force these small and tiny manufacturers into an emergency situation. Small landholdings and a lack of specialized knowledge exacerbate the problem.

d) Opportunities

Annually, the Indian spice market is worth INR 40,000 crore. Pepper, cardamom, bean stew, ginger, turmeric, coriander, cumin, celery, fennel, fenugreek, Ajwain, dill seed, garlic, tamarind, clove, and nutmeg are among the main spices produced in the country.

The market is highly disordered, with the marked segment accounting for roughly 15 per cent of the total. Players such as Eastern, Chuk de, Catch, Everest, Ramdev, and others dominating the marked market. Tata Chemicals has recently promoted their spices brand Tata Sampan Spices.

Spice distribution is increasingly taking place through retail and e-commerce portals. Self-labeled products are being offered by retailers such as Walmart, Kroger's, and Tesco to establish their position in the market and maintain competitiveness. However, retailers are making products with a higher affinity to expose their product content through transparent packaging and those with a longer shelf life more readily available.

1.5 Whole Spices Packaging

Importing countries prefer bulk packing, and packaging regulations for whole dried spices are less rigorous. Unit packages are gradually becoming more popular in the country. The majority of consumers purchase entire spices in bulk. Packaged spices are primarily sold in towns with established super bazaars. Whole spices are packaged in 50-70 um polyolefin pouches in quantities ranging from 50 to 1 kilo gram. A few brands are packaged in PET/PE laminate for better printability.

The laminate/film can be customized to meet specific functional and market needs, depending on the functional and market requirements. Laminates of various compositions are used to make printed flexible pouches. Polyester (10 or 12 microns) and BOPP-based laminates are more commonly used for spice packaging.

1.6 Health Benefits of Whole Spices

In India, spices are used extensively in the preparation and consumption of food. Because of their rich and spicy flavours, Indian curries are popular all over the world. If you enjoy cooking or a good meal, you'll recognise that each spice has its own distinct flavour and essence. However, Indian spices benefits go beyond taste and flavour. Indian spices not only make the meal flavoursome, but Indian spices health benefits have been investigated by researchers across the world with respectable results.

However, not all spices are equally beneficial to your health. The health advantages of Indian spices are best realised when you include organic spices in your diet. Organic spices are free of any foreign stuff that shouldn't be there, such as dirt or other foreign matter. As a result, organic spices are pure and concentrated sources of vitamins, minerals

and other useful ingredients for your body, free of any impurities (Adrienne Youdim, 2020).

Spices are recognized to provide a variety of health benefits; in fact, it is the addition of a bouquet of spices to traditional Indian home-cooked food that makes it one of the healthiest meals consumed worldwide. Spices have significant nutritional value and offer numerous health advantages.

i) Anise: In Chinese, Indian, Malaysian, and Indonesian cuisines, star anise is commonly used in cooking. Star anise is high in linalool, an essential oil, and vitamin C, two key antioxidants that protect the body from cellular damage caused by environmental pollutants.

ii) Black Pepper: When a pinch of black pepper is added to any recipe, the flavour is multiplied. Black pepper, commonly known as the "King of Spices," aids weight reduction, relieves colds and coughs, improves digestion, increases metabolism, and treats a variety of skin conditions. With a dash of black pepper, a glass of haldi doodh becomes considerably more restorative.

iii) Cumin: This seed has a bitter flavour and is used extensively in Middle Eastern cuisine. It can help with digestion, immunity, and treat skin problems, sleeplessness, respiratory problems like asthma and bronchitis, and anaemia.

iv) Cloves: Clove have antibacterial, antifungal, and antiseptic properties. They're high in antioxidants and minerals, as well as omega-3 fatty acids, fibre, and vitamins and minerals. Clove oil contains a high amount of antioxidants. It is used as an antibacterial and pain reliever in aromatherapy, notably for toothaches and stomach pain.

v) Coriander: Coriander seeds include anti-oxidants and dietary fibre, which help the liver function properly and ease bowel movements. They aid in the production of digestive chemicals and juices that aid in the digesting process. If you're suffering from indigestion, try including

coriander seeds in your diet.

vi) Celery Seeds: Celery seeds is a Mediterranean plant that is also used to make tea. It helps with menstruation irregularities, anxiety, joint pain, uric acid levels in the body, and inflammation. Celery has long been utilised by medical professionals to treat high blood pressure. According to studies, eating as few as four celery stalks each day can help lower blood pressure.

vii) Cinnamon: Cinnamon is a popular household spice that has been used for centuries all over the world. It has a huge amount of antioxidants that protect the body from disease and contains anti-inflammatory properties. Cinnamon is used in a variety of ethnic foods and is currently popular due to its ability to alleviate bloating.

viii) Cardamom: Cardamom, also known as elaichi, is native to India, Bhutan, Nepal, and Indonesia. It is the third most expensive spice on the planet. This spice boosts heart health, aids digestion, improves oral health, aids diabetes, aids depression, aids asthma, avoids blood clots, and treats skin infections since it is high in vitamin A and vitamin C, calcium, iron, and zinc.

ix) Fennel: It's a Southern European native that's now cultivated all across Europe, the Middle East, China, India, and Turkey. Dietary fibre is abundant in this spice. Its potent antioxidants aid in the removal of damaging free radicals from the body and promote a healthy lifestyle. It also aids in the prevention of ageing and degenerative neurological illnesses.

xi) Nutmeg: Nutmeg is a common spice used in culinary all over the world, and it's also known for its medicinal properties. Nutmegs were employed in ancient times for a variety of health cures. It reduces bad breath, aids liver detoxification, promotes restful sleep, and is thought to improve skin texture.

xii) Paprika: Peppers are used whole as well as powdered. Powdered paprika offers numerous advantages and a mild flavour. Paprika is high in anti-inflammatory compounds, which can decrease blood pressure

and improve eye health. Paprika aids digestion by boosting saliva and stomach acids, which aid in the breakdown of food and the availability of nutrients for energy.

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xiv) Star Anise: Star anise is a tiny seed that grows on an evergreen tree and is shaped like a star. It has a licorice flavour and is high in antioxidants, including vitamin C. It also has antifungal effects and benefits women's health. It is high in fibre and may aid in constipation prevention.

2. Review of Literature

Krishnaraj & Gunaseelan (2020) This instrument of analysis comprised studies on supply chain management and different actors in the spice supply chain management. To determine the present state of supply chain management

Mohan and Suganthi (2017) Rural Consumers Awareness of Consumer Rights was the subject of their research project. The survey was carried out to determine the extent of consumer awareness of their rights in rural areas. The study found a strong relationship between rural consumers' awareness of consumer rights and their age, educational qualification, married status, and monthly income, but no significant relationship between gender, type of family, occupation, and monthly income.

Gottadari & Prasad (2016) Identified spices and their active components in terms of targets and mode of action; in particular, their potential application as a natural bio ingredient in food preservation and shelf-life enhancement.

Subramanian and Vaideke's (2015) Consumer awareness and attitudes regarding consumer protection measures were investigated. Their research discovered no link between gender and attendance at awareness meetings. They also looked into the link between age and attendance at awareness meetings. The study also discovered a link between age and attendance at awareness conferences.

Sewanand (2014) Consumer Awareness and Consumer Protection Act-A Study have shown in their study. According to the findings, all respondents have a general understanding of consumer protection. They are virtually entirely familiar with the word JAGO GRAHAK JAGO.

They are also familiar with quality parameters/standards such as ISO, ISI Agmark, and others.

Kuma et al (2014) A customer decision is the choice of one action from two or more options. "Consumer Acquire Decision" refers to a customer's decision to purchase items from an alternate option. With various market tactics, market experts should initiate participants in the purchasing decision to make product purchases. Consumer behaviour is defined by Engel et al. (1986, 5) as "those activities of individuals directly involved in the acquisition, use, and disposal of economic products and services, as well as the decision processes that precede and determine these acts." Simple observation provides limited insight into the complicated structure of consumer decisions; therefore, academics have increasingly turned to behavioural sciences for more advanced concepts and techniques of investigation to better understand, predict, and possibly manipulate consumer behaviour.

Rajkumar (2011) Two distinctly diverse business operators' organised traditional retailers are studying the logistical chain of spice market. Licensed retailers, who are registered for sales tax and income tax, engage in structured and unorganised market activities, and their businesses are managed by professionals as a firm, limited corporation, or cooperatives. Traditionally those who operate in an unorganised market with various outlet types, such as mom and pop businesses, market non-permanent shops, and street sellers.

Kumar (2006) Found that a majority of rural consumers prioritise product quality in his research in rural India, which revealed that the rural consumer's income level is rising, resulting in increased consumption and purchasing power for the consumers. (Laldinliana 2012), The importance of marketers'/producers' promotion efforts is reflected in the ranking of the most important buying factors, particularly for two-wheelers, as evidenced by the responses of more

than a third of the household sample, who identified promotion as the most important factor influencing their purchase.

Indiramma (2004) Concluded the India has achieved significant development in the field of spice packaging, spices are still packaged in conventional ways that are either ineffective or expensive. India must seize the market for spice exports in consumer packages.

Sarkar (2002) Spices are used to prepare cuisines all around the world because of their flavouring capabilities, according to the author. These, on the other hand, are grown and collected in warm, humid climates where a large range of microorganisms can thrive. The hygienic state in the region where the stores are produced and processed is typically determined by the microbiological quality, specifically the load of total heterotrophs or Enterobacteriaceae. Spices, like many other agricultural commodities, are subjected to microbial contamination from dust, wastewater, animal and even human excreta throughout collecting, processing, and retail markets.

Peter (1999) Identified the spice development in India during the post-independence era' has resulted in an assessment of spice development in India during the post-independence era. This research looks at the history of Indian spices as well as the successes made in the growth of spices following independence. It also discusses the formation of the Cardamom Board and, later, the Spices Board. A comparison of developmental programmes throughout several five-year plan periods was also conducted, yielding some key findings, conclusions, and recommendations for the resurrection of the Indian spices sector.

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krishnan Nair's (1987) Analysis of the problems and prospects of Selling Cardamom in India and Abroad discuss the challenges and opportunities of market cardamom both inside and outside of our country. The study has highlighted potential market opportunities in other countries and advised ways for expanding export volume and improving cardamom prospects in India and overseas. He has studied cardamom production issues and provided some crucial recommendations for resolving them to a large extent.

Jose (1978) Studies about the problems and prospects of India's Key Spices, conducted a comprehensive examination of the issues and prospects of our major spices, pepper and cardamom. This research examines issues in the agriculture sector in general and issues in the spice industry in particular. He discovered that pepper and cardamom play a significant role in the economy of Kerala and that issues in the sector will have an impact on India's foreign exchange reserves.

Howard and Sheth (1969) proposed one of the first customer behaviour models. The model analyses purchasing behaviour by incorporating numerous social, psychological, and market factors on customer choice. Consumer decision-making varies depending on the strength of the consumer's attitude toward the available brands, which is mostly determined by the consumer's knowledge and familiarity with the product class.

3. Research Methodology

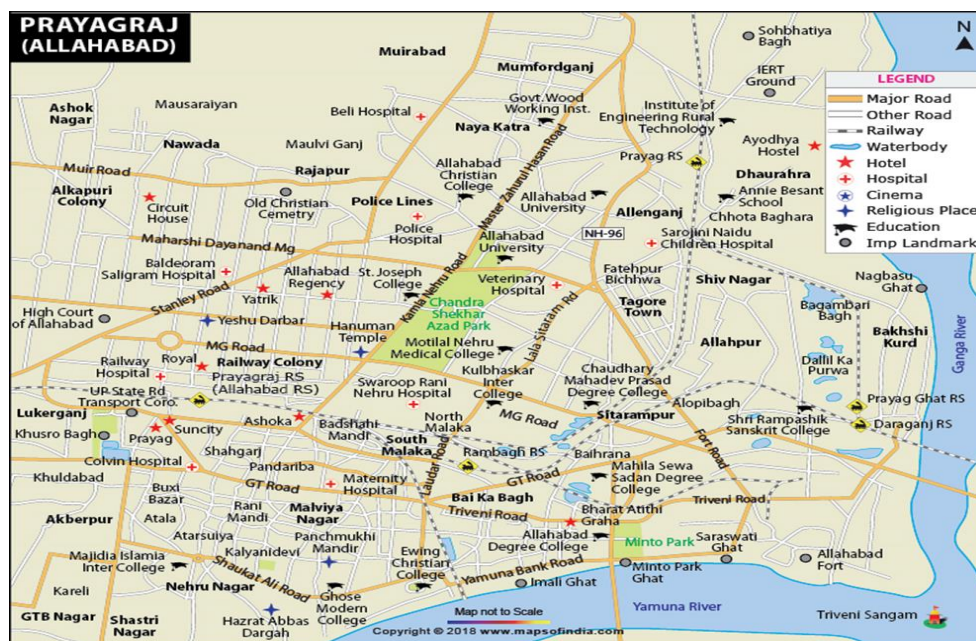
3.1. Research Design

The plan of work at its core is to set up the scopes of objectives and to decide upon the methodology for attaining the objectives. Research methodology is the specific plan, procedure or technique used to identify, select, process, and analyse information about a topic. The methodology allows the researcher to create insight in to the topic that one is about to work on.

3.3. Area of Study

The area selected for study is Prayagraj, Uttar Pradesh. It has an affluent population comprised of a mix from across the state. Prayagraj is among the highest in the state in terms of size and socio-economic profile and its steadily increasing quality of life makes it one of the hottest destinations for the study

Figure 1. Map of District



Source: mapsofindia.com/maps/uttarpradesh/allahabad.html

3.3. Collection of Data

1. Primary and secondary data were collected to meet the objectives of the study
2. Primary data was collected from the consumers and retailers with the help of a structured questionnaire schedule
3. Secondary data was collected from various reports, research papers and government data bases

3.4. Research Instrument

1. Structured schedule was prepared.
2. Schedule includes open and close – ended questions.
3. The data was analyzed with quantitative analysis of data with the help of MS Office Excel and google forms.
4. The study was descriptive.

3.5. Sampling Unit

To study the objectives, consumers of the selected areas are taken as the sample unit and data is collected from them. The sample consists of consumers belonging to different occupations, religions, categories and age groups.

3.5.1. Sampling procedure

Judgmental sampling was used for selecting the state and district under study. Total sampled (150) out of which 100 consumer 25 whole sellers and 25 mart owners survey was approximate. During the survey process, consumers were approached through a convenience-based approach. The areas have been selected both from rural and urban areas that a mix of data can be obtained with different demographic characteristics.

Table 3.1: Selection of Sampling Unit and Sample Size

Sampling Unit	Sampling Size	Selection Criteria
State	Uttar Pradesh	Judgmental Sampling Highest in population
District	Prayagraj (01)	Judgmental Sampling (Highest tourist visit)
Location	<ul style="list-style-type: none">• Naine• Allahpur• Teliernanj• Civil Lines• Mamfordganj	Judgmental Sampling (Based on Footfall in the area)
Consumers	20 consumers from each locality (100)	Convenience sampling (consumers who are using a whole spice scenario last 5 years)
Whole seller & Mart owner	5 mart owners (25) and 5 whole sellers (25) from each locality (50)	Convenience sampling

3.5.3. Sampling technique

- The sample was selected based on convenience sampling for the consumers of the study area
- Approximate 150 Consumers, 25 whole sellers and 25 mart owners from various areas of Prayagraj district of Uttar Pradesh

3.6. Analytical Tools

Systematic gathering of data for this particular purpose from various sources will be systematically observed, recorded, and gathered. Required statistical tools will be used to derive meaningful inferences in the form of charts and graphs.

Objective 1: To study the demographic profile and consumer awareness about whole spices

- The objective was to collect demographic information such as age, income level, gender, educational level, and so on. The data was shown in pie charts, and a schedule was created to determine the level of customer knowledge about Whole spices
- The data was represented in pie chart and pictorial form

Objective 2: To identified factor influencing the consumer buying behaviour of whole spices

- The objective was to use a structured schedule to uncover the elements impacting customer purchasing behavior such as socio-cultural, health, time saving, living standards, occupation, and so on
- The essential attributes impacting customer purchase behaviour of whole spices were determined using factor analysis.

Objective 3: To study market constraints in whole spice

The objective was to use structured schedule to understand the constraints faced by shopkeeper/ retailers in packaged whole spice market like high prices, customer awareness, availability of the product etc.

4. Results and Discussion

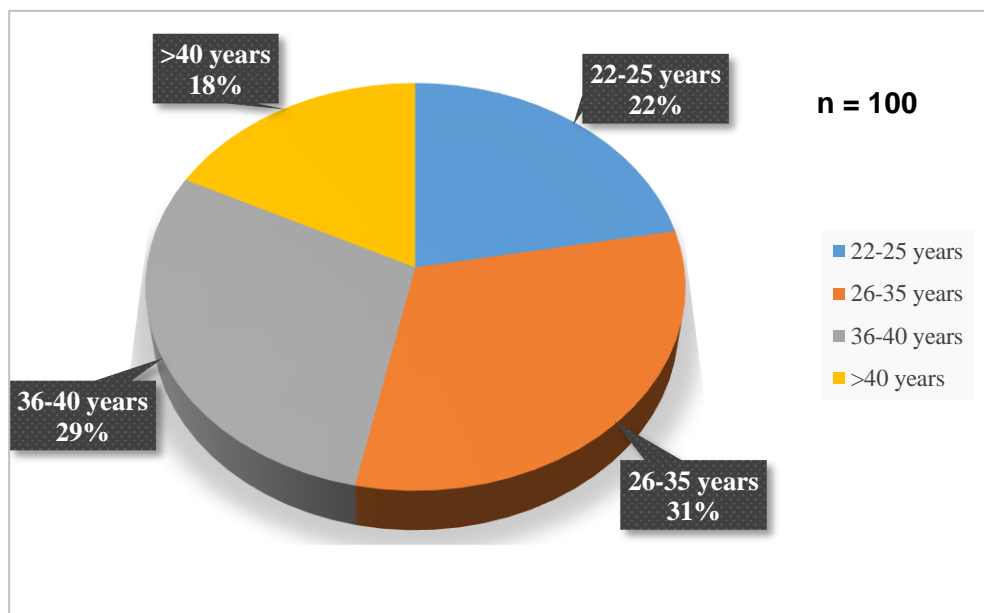
This chapter is the heart of the thesis, and it is here that the data from the intended study is presented, along with an analysis of it. The following primary sections in this chapter present the objectively achieved results and findings:

4.1. Demographic profile of the consumers like age, income, marital status etc. are shown hence

4.1.1. Consumers of various ages

According to their age, the respondents were divided into four groups: 22-25, >26-35, >36 – 40, and >40 & above, as shown in (Figure 2) below.

Figure 2: Age groups of consumers



Source: Researcher's own computation on primary data

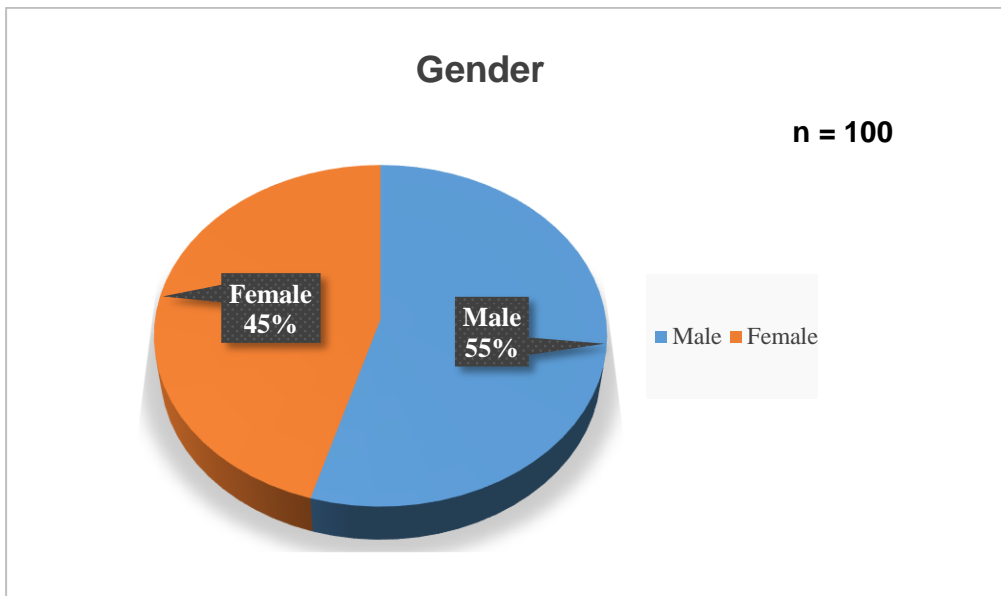
The age distribution of consumers who use whole spices is depicted in the graph above. According to the findings, the consumption of whole spices varies depending on the age group. According to the survey

findings, 22 per cent of the respondents are between the ages of 22 and 25. As a result, 29 per cent of respondents were between the ages of 26 and 35. Only 18 per cent of consumers were beyond the age 40 of 29 per cent only were between the ages of 36 and 40.

4.1.2. Gender distribution of consumer

The gender was distributed into two groups which were male and female and represented in (Figure 3) below

Figure 3: Gender wise classification of consumer



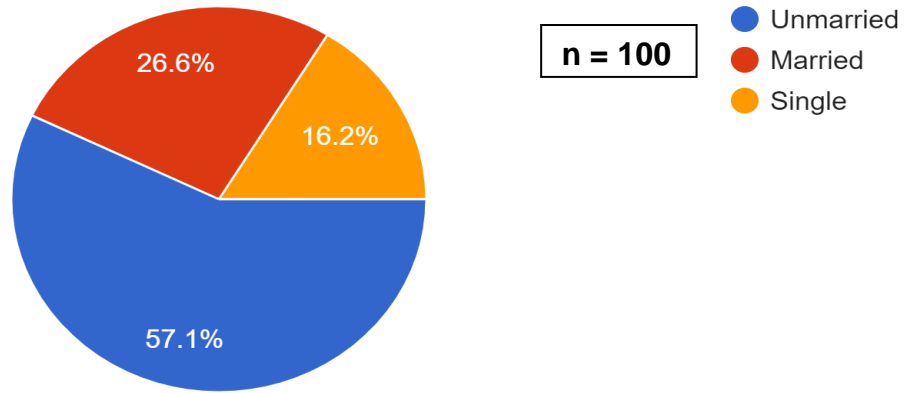
Source: Researcher's own computation on primary data

As seen in the graph above, the gender distribution of whole spices customers was around 55 per cent male and 45 per cent female, with a total sample population of 150

4.1.3. Marital status of the consumers

This was done to determine whether the customer was married or unmarried and single, and the findings are represented in the diagram below.

Figure 4: Marital status of consumer



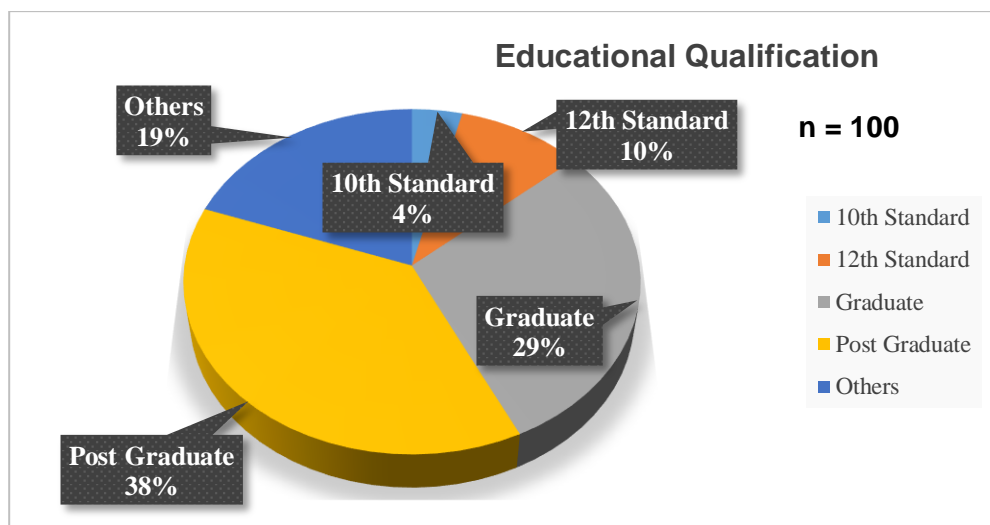
Source: Researcher's own computation on primary data

(Figure 4) above represents the majority of respondents were unmarried (57.1 per cent) and married 26.6 per cent were married consumers and 16.2 per cent of consumers are single.

4.1.4. Educational qualification of the consumers

10th, 12th Graduate, Postgraduate, MBA Agribusiness and Others were the different categories. The results are shown in (Figure 5) below.

Figure 5: Education-wise classification of consumer

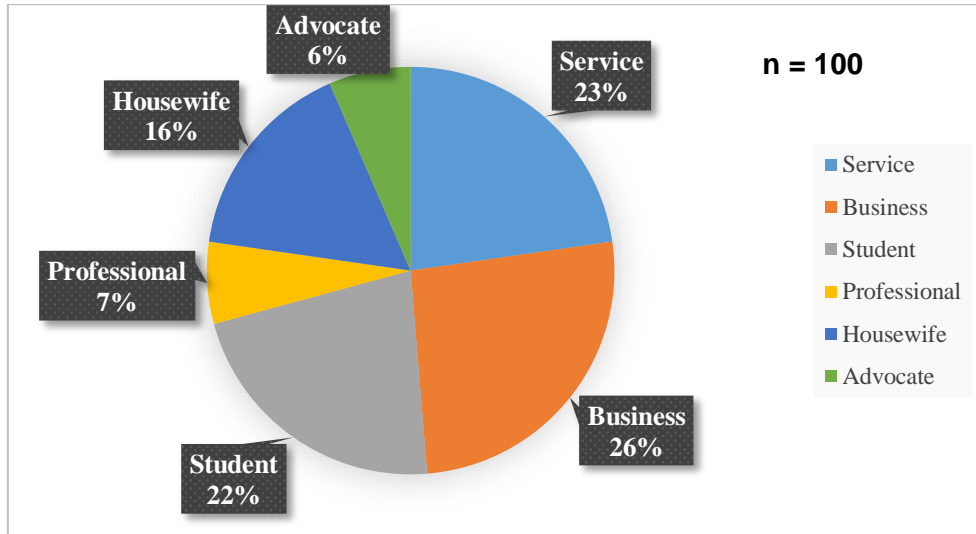


Source: Researcher's own computation on primary data

4.1.5. The profession of the consumers

The consumer was indifferent professions like Service, Business, Student, Professional, Housewife, and Advocate. The results were depicted in the Figure below.

Figure 6: Profession of the consumer



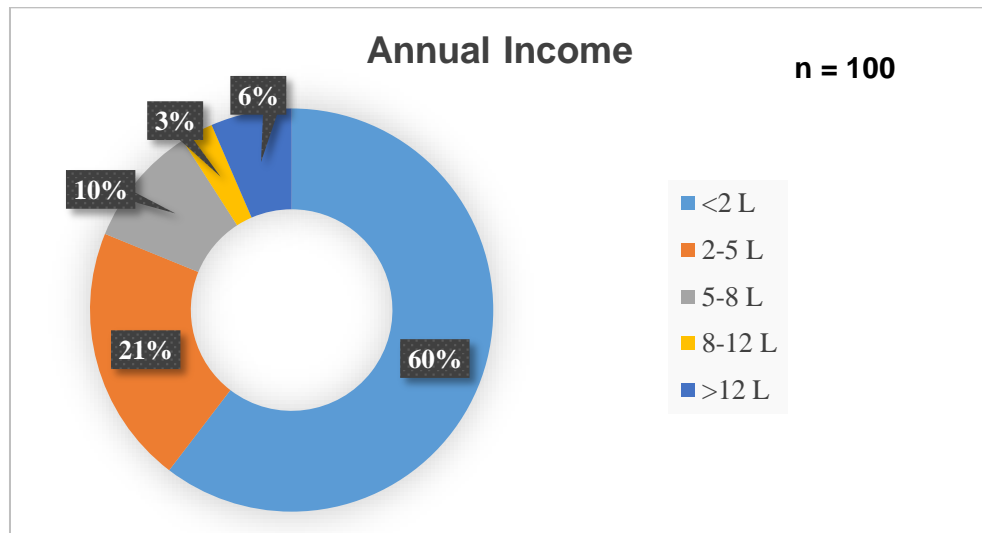
Source: Researcher's own computation on primary data

As illustrated in (Figure 6) above. The consumers' occupations were divided into six categories: service, business, Student, Professional and other. The percentages of respondents were 26, 23, 22, 16, 7, and 6 per cent, as shown in the pie chart. The sample has a total population of 150 people.

4.1.6. The annual income of the consumers

Consumers of whole spices were divided into five income levels, as depicted in the graph below.

Figure 7: Monthly income-wise classification of the consumer



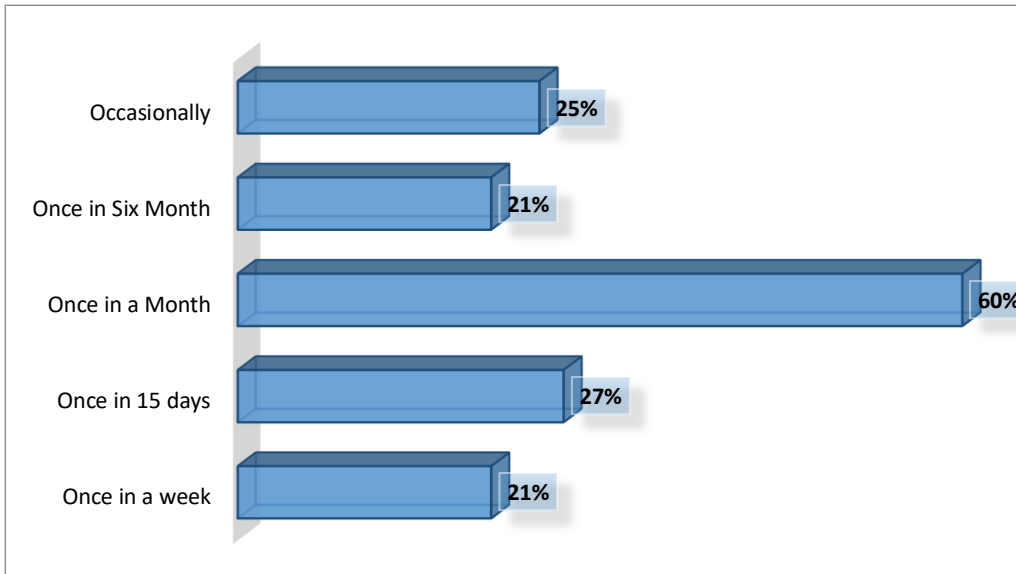
Source: Researcher's own computation on primary data

The above (Figure 7) depicts the annual income of 150 consumers who participated in the survey. As shown in the graph, 60 per cent of consumers have an annual income of less than 2 lakh while 21 per cent have an annual income between 2 to 5 lakhs. 10 per cent earn between 5-8 lakh annually while only 3 per cent is from 8 to 12 lakh and the rest of 6 per cent have an annual income of more than 12 lakhs.

4.2. How often do Consumers purchase Whole spices

Consumers were asked to reveal how often they prefer to buy whole spices and below are the results depicted through a graph (Figure 8) with a percentage of a total of 150 consumers. Consumers were given the choices of frequency of buying like occasionally, one in a week, once in 15 days, once in a month & once in six months.

Figure 8: Frequently consumers buy whole spices



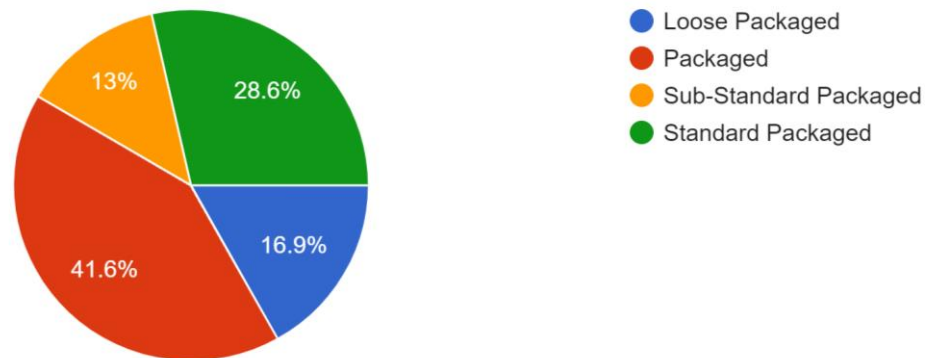
Source: Researcher’s own computation on primary data

Most of the consumers (60 per cent) buy whole spices once a month while 27 per cent in 15 days and 25 per cent buy it occasionally. 21 per cent of consumers buy whole spices once a week and the almost same number of consumers 21 per cent buy once in six months.

4.3. Consumer preference for whole spices

There are various types of packaging of whole spices available in the market viz. loose packaged, sub-standard packaged & standard packaged whole spices. Consumers were asked to relay their preferences. Results are shown below in a pie chart in form of the percentage of consumer’s preferences with a total of 150 consumers.

Figure 9: Whole spices are preferred by consumers



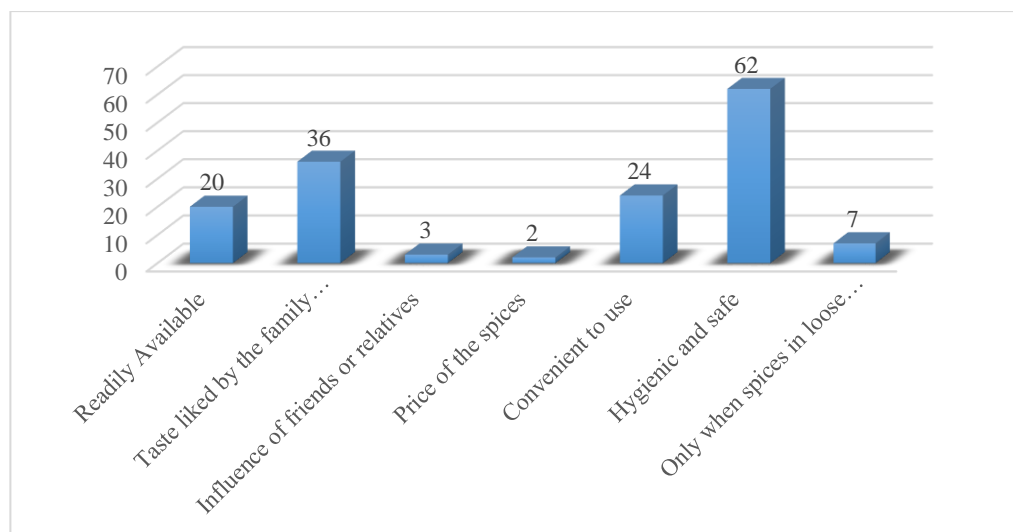
Source: Researcher’s own computation on primary data

As shown above (Figure 9), the majority (41.6 per cent) of consumers prefer packaged whole spices as opposed to this only 16.9 per cent prefer loose packaged whole spices. 13 per cent of consumers are fine with substandard packaging and 28.6 per cent prefer standard packaged whole spices.

4.4. Reason for Purchasing Packed Spices

There are various reasons to prefer packaged whole spices over loose spices. varying from availability to quality and convenience. The below graph depicts consumers’ thought process while purchasing packaged whole spices in percentage form among 150 consumers.

Figure 10: Reasons for purchasing Spices in Packed Form



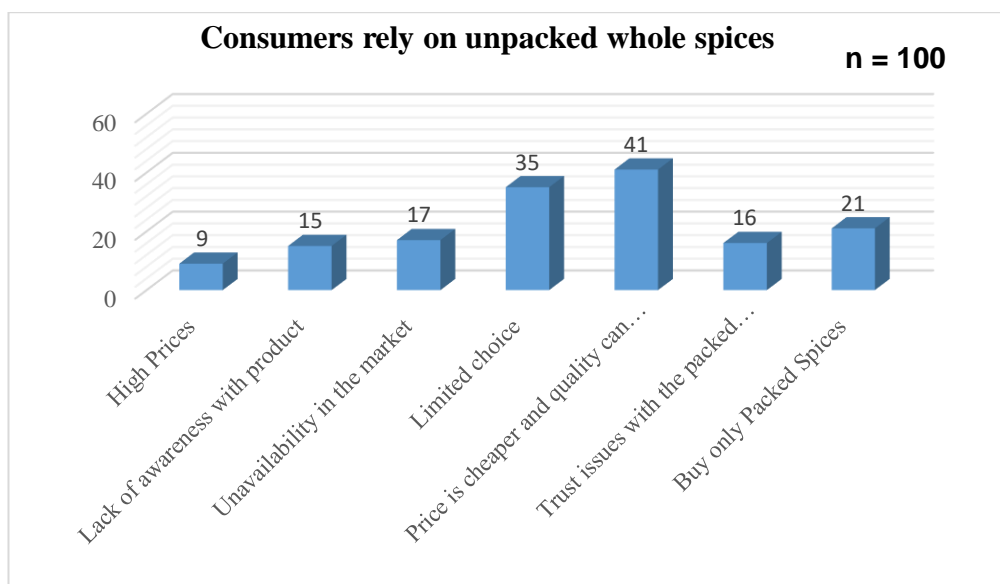
Source: Researcher's own computation on primary data

As deduced from the above graph (Figure 10), out of 150 consumers, hygiene and safety are of utmost concern for 62 per cent of consumers to buy packaged spices. 36 per cent like the packaged spices taste better while 24 per cent say it is more convenient to use. 20 per cent of consumers rely on availability while 7 per cent Purchase packaged spices only when loose one is not available. 3 per cent and 7 per cent of consumers are influenced by friends or relatives & price of spices respectively.

4.5. Consumers rely on unpacked whole spices

Why consumers still rely on unpackaged whole spices even when packaged whole spices are available is an important factor to consider. Here consumers were given various factors to choose from due to which they still rely on unpackaged whole spices. Factors vary from price, and availability to trust

Figure 11: Unpackaged whole spices preferred by consumers



Source: Researcher's own computation on primary data

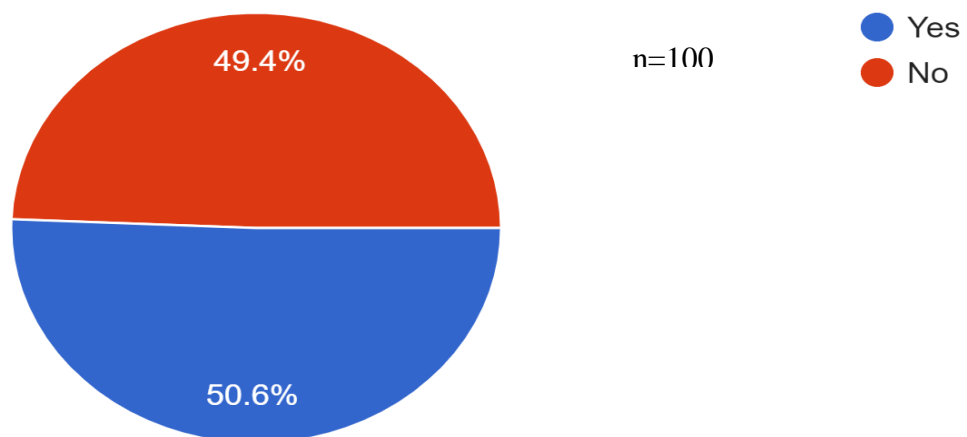
41 per cent of 150 consumers feel the price is cheaper for unpackaged whole spices and 35 per cent feel they have a limited choice of

packaged whole spices while 17 per cent also feel unavailability of packaged whole spices is also an important factor. 15 per cent of consumers lack awareness of packaged whole spices and 9 per cent feels packaged one have high prices. Although 21 per cent buy packaged spices only 16 per cent of consumers still have trust issues with packaged whole spices. (Figure 11)

4.6. Consumers' Aware of Whole-Spices Brand

Awareness and market play an important role in the consumers buying behaviour. The below pie chart is the representation of the consumer's awareness of various whole spices brands available in the market.

Figure 12: Awareness of the whole spices brand



Source: Researcher's own computation on primary data

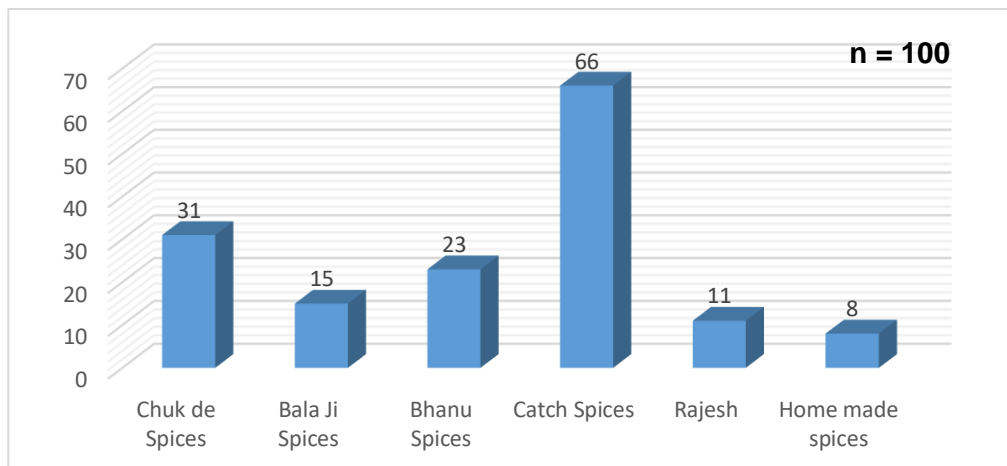
Out of the total 150 consumers, as inferred from the chart (Figure 12) almost 50 per cent of consumers knew about various brands of whole spices available in the market while an equal number of consumers are still unaware of the whole spices brands available in the market.

4.7. Consumer preference for Different Brands

Which brands do consumers prefer for whole spices is shown in the graph below (Figure 13) 150 Consumers had chosen their preferred

brand of whole spices available in the market from the various choices given viz. Chuk de, Balaji, Bhanu, catch Rajesh and home-made whole spices blend

Figure 13: Preferred brands by the consumer



Source: Researcher's own computation on primary data

The most preferred brand of spices is Catch according to a survey of 154 consumers. 66 per cent of consumers chose Catch spices over Chuk de spices (31 per cent), Bala Ji spices (15 per cent), Bhanu spices (23) and Rajesh spices (11 per cent). Although 92 per cent of consumers can prefer these branded spices, there are still 8 per cent of consumers who rely on their homemade blend of spices

4.8. Constraints in the Market of Packaged Whole Spices

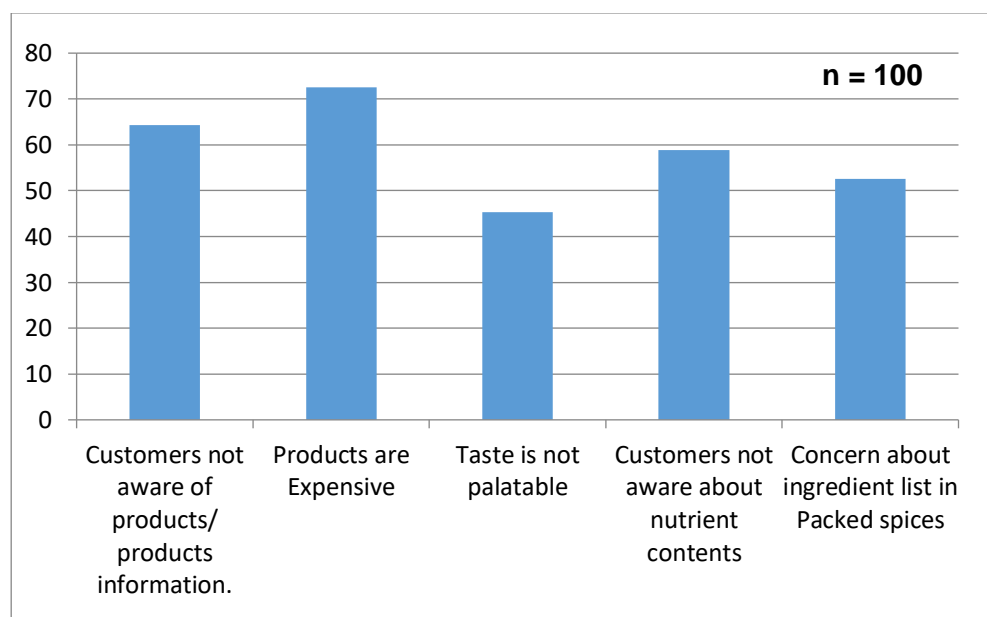
Table 4.1 shows the key challenges that shopkeepers/retailers encounter while market packaged whole spices. The table clearly shows that Products are Expensive (Rank I-72.50). Customers are unaware of products/information (Rank II - 64.25). Customers are unaware of nutrient content (rank III), followed by customers unaware of nutrient content in processed organic food products (rank IV), and Taste is unappealing (rank V)

Table 4.1. Constraints in the Market of Packaged Whole Spices

S.No.	Factors	Mean Score	Rank
1.	Products are Expensive.	72.50	I
2.	Customers are not aware of products/ products information.	64.25	II
3.	Customers are not aware of nutrient contents	58.90	III
4.	Concern about ingredient list in Packed spices	52.50	IV
5.	Taste is not palatable	45.25	V

Source: Researcher’s own computation on primary data

Figure 14: Constraints in the market of packed whole spices



Source: Researcher’s own computation on primary data

Table 14. Shows the challenges faced by traders in Prayagraj when it comes to market packaged whole spices. The data clearly shows that not all clients who shop at organized retail markets buy packaged whole spices. In this regard, the respondent traders were requested to explain why packed whole spices were being sold. The top factor,

according to the dealers, is a lack of understanding regarding packaged whole spices (rank I). The next most important cause, according to traders, is the impact of processed organic food goods on their health (rank II). As a result, certain sorts of clients are prohibited from purchasing. Customers find packaged whole spices to be prohibitively pricey, according to the traders. Customers' other concerns, as disclosed by the traders, include natural additions, not being satisfied with the taste, and a lack of knowledge about nutrient content.

4.9. When the preferred brand of Whole Spice is not available

If there is an unavailability of consumers' preferred brand of whole spices what will consumers do? 150 consumers have selected their most probable action in this scenario which is depicted in the below chart (Figure 15) in percentage form. 39.6 per cent of the consumer will buy from another store and almost the same 39 per cent will go for another brand of whole spices in case of unavailability. 7.8 per cent will place an order to get the required brand and 8.4 per cent of the consumer will postpone the purchase.

5.2 per cent of consumers will go to another store but in case of emergency will buy another brand.

Figure 15: Preferred brand basis on the availability

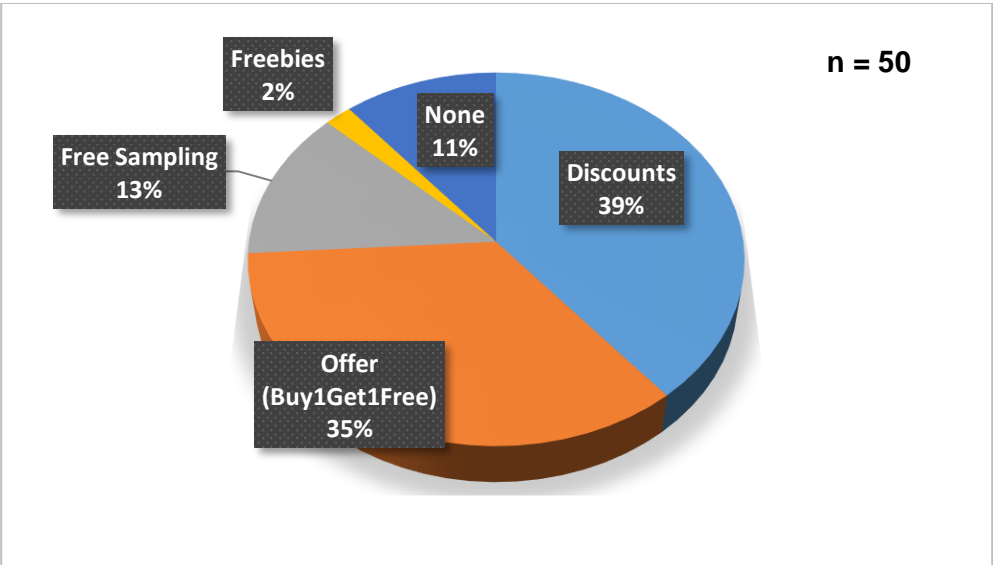


Source: Researcher’s own computation on primary data

4.10. Attractive Promotion Scheme

As market is of utmost importance, promotion schemes play a significant role in it. Consumers were asked which promotion schemes attract them the most to buy the product. Based on their preference and choices below pie chart (Figure 16) is prepared.

Figure 16: Offers attract the consumer



Source: Researcher’s own computation on primary data

Out of the 150 consumers, 39 per cent of consumers showed a preference for discounts while 35 per cent of consumers were more interested in offers like buy 1 get 1 free. 13 per cent prefer a free sample and 2 per cent get more pushed to buy the product when a freebie is offered. Although 89 per cent of consumers feel their buying pattern gets affected by promotional schemes, 11 per cent of consumers feel that these schemes do not change their purchasing pattern.

4.11. Factors Influencing Consumer Preference towards the Packaged Whole Spices in Prayagraj city

Factor analysis was used to identify the important attributes influencing the consumers to purchase packaged whole spices. The first step is to check the adequacy of factor analysis with the help of Kaiser- Meyer-Olkin (KMO) measure and Bartlett’s Test Table. The KMO measure was 0.876 which revealed that the factors extracted will account for a fair amount of variance. The chi-square value for Bartlett’s test was significant.

This reflects the importance shown by the consumers for packaged whole spices. It is clear from the study that consumers have accepted packaged whole spices similar to unpackaged loose whole spices.

Table 4.2: KMO and Bartlett’s test for variance among the factors

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.876
Bartlett's Test of Sphericity	Approx. Chi-Square		357.730
	Degree of freedom		45
	Sig.		.000

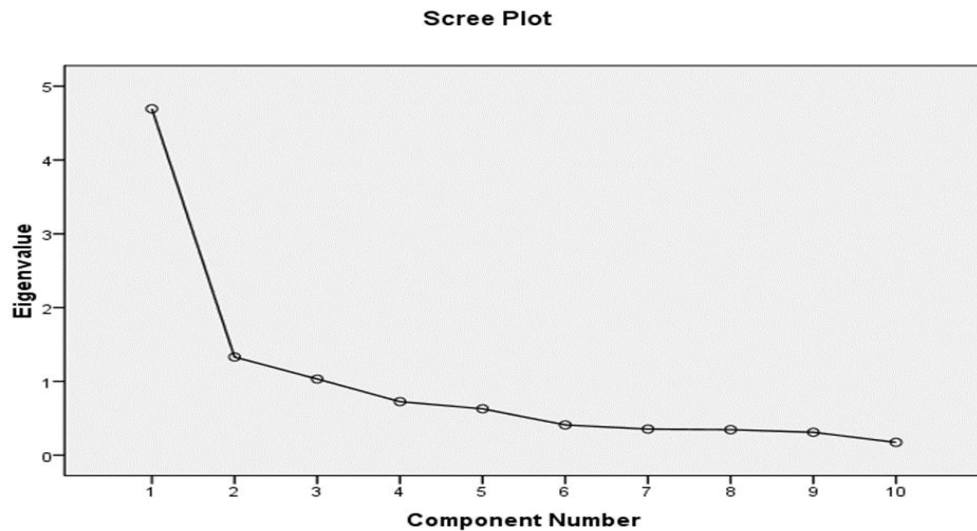
Source: Researcher’s own computation on primary data

The factors influencing the consumer preference for packaged whole spices are presented in Table and Figure. values greater than 1 are

considered for determining the factor influencing the consumer preference with the help of a Cree plot. It is clear from the table the 3 factor has an Eigen value greater than 1. Hence only 3 factors were shown in Figure.

The study indicates that the consumer preference for packaged whole spices is mainly influenced by nutritional content and appearance under factor.

Figure 17: Catlett's scree plot for factors influencing consumer preference towards packaged whole spices in Prayagraj city



The study also exhibited that consumers prefer packaged whole spices because that fact that they are safer, healthier and tastier than loose unpackaged whole spices

Table 4.3: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	per cent of Variance	Cumulative per cent	Total	per cent of Variance	Cumulative per cent	Total	Per cent of Variance	Cumulative per cent
1	4.694	46.939	46.939	4.694	46.939	46.939	3.866	38.665	38.665
2	1.330	13.302	60.241	1.330	13.302	60.241	1.814	18.144	56.808
3	1.032	10.316	70.557	1.032	10.316	70.557	1.375	13.748	70.557
4	.725	7.249	77.805						
5	.628	6.282	84.087						
6	.409	4.092	88.180						
7	.353	3.532	91.712						
8	.346	3.455	95.167						
9	.310	3.102	98.268						
10	.173	1.732	100.000						
Extraction Method: Principal component analysis.									

Table 4.4: Factors influencing consumer preference toward the Packaged Whole spices in Prayagraj city

Rotated Component Matrix			
	Component		
	1	2	3
MRP Cross Check	.886		
Expiry Date	.869		
Satisfaction		.848	
Advertisement			.691
Extra Cost	.684		
Weight of the Packet		.880	
Branding Cost	.514	.690	
Branded spices are costlier as compared to their quality	.578		
Decline in Demand			.882
Availability			.603

The factors influencing the consumer preference for packaged whole spices are presented in (Table 4.2). The first step is to check the adequacy of factor analysis with the help of Kaiser-Meyer-Olkin (KMO) measures and Bartlett's test. The KMO measure was 0.595 which reveals that the factors extracted will fair amount of variance. The chi-square value for Bartlett's test was significant. Hence income is the major factor influencing consumer preference, therefore null hypothesis was rejected. This reflects the importance shown by the consumers for packaged whole spices. It is clear from the study that the consumers

have accepted packaged whole spices similar to unpackaged loose whole spices.

The factors influencing the consumer preference for packaged whole spices are presented in (Table 4.4) and a Figure value greater than 1 is considered for determining the factor influencing the consumer preference with the help of a screen plot. It is clear from the table the 4 factor has an Eigen value greater than 1. Hence only 3 factors were shown in Figure. The study indicates the consumer preference for packaged whole spices is mainly influenced by Well beingness, Appearance and Product value

Component 1 (Product Value) – This Factor includes MRP Cross-Check, Expiry Date, Extra Cost, Branding Cost & Branded spices Price and their quality

Component 2(Fulfilments) - This Factor includes satisfaction, Weight of the Packet & Branding Cost

Component 3 (Retailing)- This factor includes MRP Cross-Check, Decline in Demand & Availability

This highlights the fact that consumers in Prayagraj city prefer packaged whole spices which are very significant in their day-to-day consumption. This also highlights the fact that from the point of view of the company who are involved in the market of packaged whole spices, there is a huge potential in this segment, since, consumers buy packaged whole spices which are needed in their life and on a day-to-day basis. It is inferred from the study that the consumers have to buy these packaged whole spices frequently, which indicates continued demand in a market which necessitates continuous production and market of Packaged whole spices by companies

5. Conclusion & Recommendation

The survey proved that consumers purchase packaged whole spices regularly, indicating ongoing demand in a market that requires shops to provide packaged whole spices.

Consumer were eager to buy Whole Spices brands even though the costs were slightly higher on the market, indicating the importance of packaged whole spices to consumers in terms of health, nutritional value, and other variables.

Consumer preferences differed depending on the relevance of packed whole spices in terms of health, nutritional value, ascent, and other features, as well as the reputation of the company's brand. Companies should place a greater emphasis on these product characteristics.

5.1 Conclusion

- The majority of customers (31 per cent) are between the ages of 26 and 35. As a result, 29 per cent of respondents were between the ages of 36 and 40. Only 18 per cent of consumers were beyond the age of 40, while only 22 per cent were between the ages of 22 and 25
- There were approximately 55 percent males and 51 per cent females. The bulk of respondents were single 57.1 per cent and only 26.6 per cent were married consumers
- The majority of graduate consumers (29 per cent), followed by 38 per cent who finished post-graduation, 4 per cent who were 10th, and 10 per cent who were 12th
- The majority of the respondents (26 per cent) and (23 per cent), respectively, were Businessman and service personnel, with the remaining consumers (22 per cent) student
- consumer whole spice buying frequency 60 consumers out of 154 buy spices once a month and 27 consumers buying in once in 15 days, 25 consumers purchase spice occasionally, and 21 consumers buy once a week

- The majority of the preference whole spices (41.6 per cent) for packaged spices, 28.6 per cent for standard packaged, 16.9 per cent loose packaged, and 13 per cent of consumers preferred substandard packaged whole spices
- 62 per cent of consumers out of 150 purchase the packaged whole spices because the packaged whole spices are safe and hygienic and 36 per cent of consumers purchase because of the taste liked by the family member there is much more reason where consumers preferred packaged whole spices
- Whole spice brands are preferred by the majority of people. Catch spices have a market share of 66 per cent, Chuk de spices have a market share of 31 per cent, Bhanu spices have a market share of 23 per cent, and there are many more brands on the market that consumers prefer

5.2 Recommendation

- It's worth noting that the Internet and friends/relatives had a significant impact on customer purchasing decisions. Companies can also use social media for advertising
- The nutritional worth and benefits of ingesting packaged whole spices can be displayed on the top of the shelves in retail establishments that sell packaged whole spices, as this is one of the factors affecting the preference for packaged whole spices
- Companies should make it clear that powdered species can be tampered with, but whole spices cannot; consumers can grind their spices for a pure powder in a particular amount of all spice mixture for a superior taste. As a result, businesses can emphasis this value to clients and promote whole spices in this manner. It will lower the companies' processing costs

6. Bibliography

- Bhardwaj, R. K., Rohatash, K., Sikka, B. K., Singh, A., Sharma, M L., & Singh, N. K. (2011, March) Challenges and constraints of marketing and export of Indian spices in India. In Proc. International conference on technology and business management (pp. 28-30).
- Cates S.C and Carter-Young H (2004), "Consumer Attitudes Towards and Preferences for Food Standards of Identify" Journal of Food Products Marketing, Vol.10 (1): 67-84.
- Gondalia, V. K., &Macwan, J. (2019). Growth and prospects of export of major seed spices from India. Emerging Global Economic Situation: Impact on Trade and Agribusiness in India, 91.
- Ibrahim, Y. C., & Arunachalam, P. (2015). Export performance of Indian spices in the WTO regime: a disaggregated analysis (Doctoraldissertation, Cochin University of Science and Technology).
- Kamarasan, V. (2014) A study on consumer behaviour towards packaged spices in Madurai. International Research Journal of Business and Management, 7(11), 30-36.
- Klaiman, K., Ortega, D. L., &Garnache, C. (2016). Consumer preferences and demand for packaging material and recyclability. Resources, Conservation and Recycling, 115, 1-8.
- Krishnaraj, S., Gunaseelan, R., Arunmozhi, M., &Sumandiran, C. S. P. (2020). Supply chain perspective and logistics of spices in Indian retail industry. *Materials Today: Proceedings*.
- Kumar, A. A. (2016) Factors influencing customers buying behaviour. Global Journal of Management and Business Research.

- Meena, M. D., Lal, G., Meena, S. S., Lal, S., & Chaudhary, N. (2019) Seed spices export from India: prospects and constraints. *International Journal of Seed Spices*, 9(2), 12-20.
- Mohan, S., Rajan, S. S., & Unnikrishnan, G. (2013) Marketing of Indian spices as a challenge in India. *International Journal of Business and Management Invention*, 2(2), 26-31.
- Pandian, T. L. P. D. M. (2022) A Study on supply chain management of spices in India. *Center for Development Economic Studies*, 9(12), 43-50.
- Powar, S. R. (2013) Present scenario of Indian spice industry and its trend in production and export. *Asian Journal of Management*, 4(3), 197-204.
- Rajkumar, P. (2012). Spice route: the logistic journey of spices in retail supply chain perspective. *UTMS Journal of Economics*, 3(1), 9-20.
- Sattar, S., Das, P. C., Hossain, M. S., Sarower, K., & Uddin, M. B. (2019). Study on Consumer Perception towards Quality of Spices Powder Available in Bangladesh. *Open Journal of Safety Science and Technology*, 9(4), 137-144.
- Sharangi, A. B., & Pandit, M. K. (2018). Supply chain and marketing of spices. In *Indian Spices* (pp. 341-357). Springer, Cham.
- Silvis, I. C. J., Van Ruth, S. M., Van Der Fels-klerx, H. J., & Luning, P. A. (2017). Assessment of food fraud vulnerability in the spices chain: An explorative study. *Food Control*, 81, 80-87.
- Srivastava, S.K. et.al (2011), "Demand and Supply of Major Spices in India: A Regional Analysis", *Indian Journal of Arecanut, Spices & Medicinal Plants*, Vol.13 (4) 26-42.
- Tomar, P., & Katani Kalan, L. *Indian Spice Industry: Trends and Challenges*.

Umali-Deininger, D., & Sur, M. (2007). Food safety in a globalizing world: opportunities and challenges for India. *Agricultural Economics*, 37, 135-147.

ANNEXURE - I

Demographics

1. Name: _____

2. Gender:

Male Female

3. Age Group:

22-25 years 26-35 years 36-40 years

>40 years

4. Profession:

Services Business Student

Professional

Others _____

5. Annual Income Level:

< 2 Lacs 2-5 Lacs 5-8 Lacs

8-12 Lacs >12 Lacs

6. Highest Qualification:

≤ 8th Standard ≤ 12th Standard

Graduate Post Graduate

Others _____

7. Marital Status:

Unmarried Married

Consumer Buying Behaviour and awareness

8. How often do you purchase Spices?

Once in a week

15 Days

One Month

Six Months

Occasionally

9. Which type of Whole Spices do you prefer?

- Loose Packaged
- Packaged
- Sub-Standard Packaged
- Standard Packaged

10. What is the reason for purchasing packaged spices products?

- Readily Available
- Taste liked by the family member
- Influence of friends or relative
- Price of the spices
- Convenient to use
- Others _____

11. Why do you rely on unpacked whole spices?

- High Prices
- Lack of awareness with product
- Unavailability in the market
- Limited Choices
- Others _____

12. Are you acquainted with Whole-Spices Brand? Yes/No. If yes, Please Specify

13. Which of the following brands do you prefer the most?

- Chuk De Spice
- Bala ji Spices
- Bhanu Spices
- Other _____

14. While purchasing the branded spices; do you look for the ingredient available on the Packet?

- Yes No Sometimes
- Often Always

ANNEXURE II

Market Constraints

15. What are the factors influencing preference for a particular brand (Tik the followings)?

- | | | | |
|------------------|--------------------------|---------------------------|--------------------------|
| Reasonable Price | <input type="checkbox"/> | Offers | <input type="checkbox"/> |
| Quality | <input type="checkbox"/> | Freshness | <input type="checkbox"/> |
| Quantity | <input type="checkbox"/> | Retailer's Influence | <input type="checkbox"/> |
| Brand Image | <input type="checkbox"/> | Shelf life of the product | <input type="checkbox"/> |
| Availability | <input type="checkbox"/> | Labelling | <input type="checkbox"/> |
| Advertisement | <input type="checkbox"/> | | |
| Any Other | _____ | | |

16. What will be alternate purchasing, if the preferred brand is not available?

- | | |
|-------------------------------------|--------------------------|
| Go to another store/Shop | <input type="checkbox"/> |
| Postpone the purchase | <input type="checkbox"/> |
| I will buy another brand | <input type="checkbox"/> |
| Place order to get a required brand | <input type="checkbox"/> |

17. Which promotion scheme attracts you the most?

- | | |
|----------------------|--------------------------|
| Discounts | <input type="checkbox"/> |
| Offer (Buy1Get1free) | <input type="checkbox"/> |
| Free Sampling | <input type="checkbox"/> |
| Free Bees | <input type="checkbox"/> |
| Any Other | _____ |

18. Are you satisfied with your current brand?

- Yes No

Alternative Strategies

19. If no, what additional quality do you expect?

Please Specify _____

20. Do you ever come across adulteration in the spices?

Yes No

21. If yes, to whom did you complain?

Shopkeeper

Main Supplier

Company

Internet Consumer forum

22. Are you aware of consumer courts that work for consumer grievances?

Yes No

Buying Behaviour and Awareness

Out of the below-mentioned statements, how would you rate them? Please tick them on a scale of 1-5 with 1 representing minimal influence and 5 representing strong influence.

Sl. No	Statements	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	There is a decline in the demand for whole spices during the pandemic time					
2	Do you feel satisfied with your whole spice brand?					
3	Do you check the MRP before buying the product?					

4	Do you examine the expiry date of the item?					
5	Do you cross-check the weight of the product as mentioned on the packet?					
6	People are more concerned about the price of spices rather than brand					
7	Branded spices are costly compared then the quality					
8	Do you feel people can pay extra for the branded spices?					
9	Availability of branded spices is more important for me					
10	Advertisement is important for me to choose branded spices					

