# FACTORS AFFECTING THE DEMAND FOR PLYWOOD: A STUDY AMONG PLYWOOD TRADERS IN ERNAKULAM DISTRICT

Dissertation submitted to

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In partial fulfillment of the requirement for the degree of

**MASTER OF ARTS in ECONOMICS** 

By

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## **CERTIFICATE**

This is to certify that the project titled "FACTORS AFFECTING THE DEMAND FOR PLYWOOD: A STUDY AMONG PLYWOOD TRADERS IN ERNAKULAM DISTICT" is a record of the original research work conducted by NITTY TATUES (Register No: AM21ECO011) under my guidance and supervision in partial fulfillment of the requirements for the award of the degree in Master of Arts in Economics (Affiliated to Mahatma Gandhi University, Kottayam). The research work has not previously formed the basis for the award of any Degree, Diploma, Associate ship, Fellow ship or any other similar title and it represents a contributory work on the part of the candidate

Dr. Mary Liya C.A

Dr. Anupa Jacob

Head of the department

Guide and supervisor

DECLARATION	
I hereby declare that the project titled "FACTORS AFFECT PLYWOOD: A STUDY AMONG PLYWOOD TRADERS IN submitted by me for the M.A. Degree in economics is my original was previously formed the basis for the award of the other Academic quantum similar title of any other university or board.	ERNAKULAM DISTRICT" work and this work has not been
Signature of the supervisor  Dr. Anupa Jacob	Signature of the Candidate Nitty Tatues

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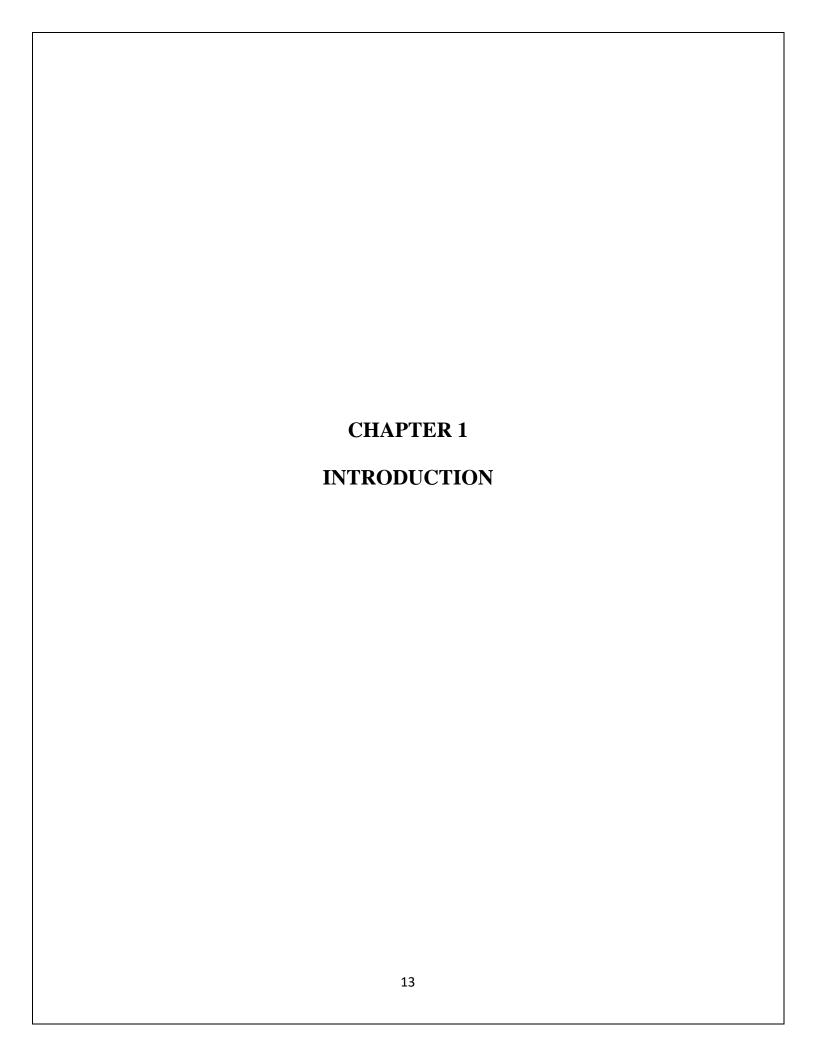
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#### 1.1. INTRODUCTION

Plywood, a recently created phrase, has taken the place of the term veneer, which became one of our important wood products a century ago.

Although plywood is regarded as a recent material and is defined in the dictionary as a substance made from thin layers or plies of wood veneer, it actually has a long history. It is a word with a wide range of uses that is admired for its durability, affordability, and adaptability.

The most significant market in the worldwide industrial sector is the plywood industry. Between 2022 and 2028, the global plywood market is anticipated to expand significantly.

Plywood first on the industrial scale in the 1850s. Early modern times saw the use of ornamental hardwood, especially in the production of furniture items. The use of plywood made from softwood species did not become widespread until the 20<sup>th</sup> century.

The method of "laminating layers of veneers by glueing them together to end up with a thick layer" that British mechanical engineer Samuel Bentham described in 1797 was the subject of a patent application. This is what is today referred to as plywood.

Immanuel Nobel, a Swedish engineer and architect, found that joining several thin layers of wood together would make the components more durable 50 years later. At that time, plywood boards began to be utilised in place of the more traditional cardboard or canvas to hold casel paintings.

The need for office space has increased globally, which has boosted the plywood market in the building industry. Urban consumers prefer to purchase durable, lightweight furniture, driving the plywood industry, and manufacturers' go-green strategies have acted as a significant factor that has boosted the market's growth. The increase in urbanisation is increasing demand for easy to install and ready-made furniture. The demand for plywood is being driven by the expanding furniture and interior design sectors.

In India, the plywood sector has just been around for the last 80 years or so. The Indian plywood sector is one of the biggest in the world, and it also projects a promising future. There are nearly 3800 operating wood panel processing enterprises in India that can be considered plywood manufacturing facilities. Due to rapid urbanisation and changing lifestyle trends, the residential

sector's rising need for furniture is the main driver of the Indian plywood industry. Additionally, quickly growing distribution networks and declining manufacturing costs are fostering a favourable market picture across the nation.

Although the plywood industry has been functioning for more than a century worldwide, Kerala's large-scale plywood proliferation is a comparatively recent occurrence. The outdated lumber mills gave rise to the modern plywood sector. The Assam plywood industry's fall and the growth of perumbavoor practically happened at the same time. Perumbavoor is home to around 1000 plywood manufacturing facilities. The area has recently made strides in producing high-quality goods. Local timber is used by the plywood manufacturers in the area, resulting in plywood of medium quality and low grade. Around one lakh people are employed directly and another two lakh are involved indirectly in the plywood industry. For the past two decades, the sector has started to grow here.

Consequently, the plywood business helps to stimulate the economy. It is one of Kerala's most dynamic and promising industries. The industry does make a significant economic contribution to the state and contribute significantly to the growth of other sectors.

### 1.2. REVIEW OF LITERATURE

- 1. Ms. VAISHALI RATHORE, DR.MANISH DIDWANIA (2022): The effectiveness of the plywood business is highlighted in this article. The profitability, or capacity to make a profit from activities, of an organisation can be used to gauge its performance. Its profitability, comprising gross and net profit, for the running company over a given time period is measured. This sector has developed into one of the most significant for the economy of the country. Given the sector's growing importance, a review of the operations of the enterprises functioning within is important.
- 2. EI MUHLAING (2021): It discusses the production quality issues in the sizable paper plywood market, where the trend is both local and global. The size of the global plywood

market is also predicted to be substantial, and the need for ready-made furniture that is simple to assemble is driving the market's expansion. This paper's primary goal is to identify the underlying causes of quality issues and create solutions for the manufacturing of plywood.

- 3. RAGHUNATH (2021): He research in the topic of "A study on impact of sound financial management practices on financial performance with reference to western India plywood Ltd." This referred to the effect of the cash management practices over the profitability and he also identified a strong correlation between the two. This this study he also suggested that the practice on the part of management for generating higher productivity levels.
- 4. KT PARTHIBAN, C CINTHIA FERNANDAZ (2020): It discuss about that In India, the demand for wood and wood products is rising at a startling rate. The population boom, Urbanisation, industrialization, and related advances in science and technology all contribute to an acceleration of this demand. Low forest cover, a limited supply of wood from natural forests, along with policy and legal requirements, have all contributed to a reduction in the supply of existing forest resources. This has led to a promotion of agroforestry, which has attracted significant interest and attention across the nation. Although agroforestry is a long-standing technique, it has only recently been adopted by a wide range of stakeholders for commercial and industrial purposes.
- **5. LEDAN ZAMIRIAN** (2020): Tries to understand the root of delamination, the most prevalent flaw in plywood production. It is simple to expand the problem-solving strategy, which combines numerical simulation, experimental design, and non-linear regression, for process improvement of related plywood production systems.
- **6. SHREERANGA BHAT (2017)**: This focuses on the various problems faced by the plywood industry and to determine optimal solutions to improve its overall performance. This paper aims at the following objectives such as to increase productivity by

implementing lean strategy, to eliminate the wastage and non – value added activities, to create an intelligible working environment. The article also points out the reasons for decreased productivity in the industry.

- 7. SOUJANYA SHRIVASTAVA, AJAY KUMAR SAXENA(2017): It Discusses the Ministry of Statistics and Program Implementation, Compendium of Environmental Statistics, 2015 The forest area statistic from the Compendium of Environmental Statistics is slightly less than the FSI's estimate of the forest cover from its 2015 report (70.17 million ha, which is 21.34 per cent its total geographic area or TGA). The MoS &PI computed with respect to the entire reporting area for land utilisation in India, the FSI calculated the total forest cover with respect to the TGA.
- **8. SAMANI** (2016): The article analyses and rates the performance of plywood made from veneers that have been treated and fire retarded. It uses the burning rate and the flammability test to gauge the effect of pressure treatment on plywood performance. The composition of phosphoric acid has the biggest impact on the functionality and strength of plywood.
- **9. JUAN PABLO** (2016): The examination of the Indian plywood market in this article highlights the growing need for wood and wood products. Due to the rising demand for plywood on the domestic market, there is now an opportunity for foreign manufacturers and investors to enter the Indian domestic plywood market. This research confirms that consumer income is favourably connected with import demand for plywood while pricing considerations are adversely correlated. Yet, it appears that India's demand for plywood is income elastic but price inelastic.

- 10. RR SAFIN AND RR KHASANSHIN (2015): Discusses the technology for making plywood that emits little formaldehyde when it is decorated. The technology of preparatory contact thermal modification of veneer sheets for low-toxic decorative plywood and laminated products is discussed in the article. It is known that as the temperature and length of the thermal treatment increase, the density of wood material decreases.
- **11. P MISHRA, KP VISHWAJITH, K PADMANABAN, BS DHEKALE, PK SAHU** (2014):This study used the Autoregressive Integrated Moving Average (ARIMA) model to anticipate the production, import-export, and consumption of particle board and plywood.
- **12. PIOTR BORYSIUK AND IZABETA NIZIATEK** (2013): Attempts to analysis the process of plywood production model. It aims to describe the possibility of change in the production process in order to optimize production and minimize waste. It also indicates the possibility of minimizing production costs. Costs reduction could be achieved by modernizations of technology and production equipment.
- 13. SUBIN OSWAL, SHUBHAM JATANIA, SINDHUJA THAPLIYAL: A metropolis, moving raw materials can be a very difficult task. Many factors, including heavy traffic, temporary road closures, parking difficulties, and a low volume of goods, drive up the perunit cost of transportation and render it unprofitable for the seller. The goal of this study is to use the Modified Distribution Method on the transportation model to propose a cost-reducing solution. Using actual data on the movement of raw materials utilised by a Mumbai-based furniture manufacturing company, we quantify our hypothesis.

#### 1.3. STATEMENT OF A PROBLEM

Topic is chosen because recently, there has been a decrease in the demand for plywood. The GDP of the country has always benefited from the plywood industry. Since deforestation was occurring at an alarming rate worldwide, nations all over the world had taken action to halt tree-felling. If afforestation had been done concurrently, the industry might not have gone through this catastrophe. It is also acknowledged that in recent years, uses of plywood have been supplanted by goods like PVC, WPC, aluminium sheets, cement boards, etc. These plywood goods are excellent in every way, for instance, being strong, long-lasting, and suitable for both indoor and exterior uses.

It is evident that the degree of competition and the influx of new players into the plywood market have increased over the last several years. Despite the high number of traders in this industry, sales were reduced by the limited number of construction projects and other works. The dealers in this field deal with a variety of different difficulties.

The competition is fierce, as was previously noted. Various traders employ a variety of pricing techniques in an effort to boost sales and stay in business. Must examine the price tactics that merchants employ in order to boost their sales.

#### 1.4. OBJECTIVES

- To study factors effecting the demand.
- To analyse the challenges faced by the traders.
- To analyse the pricing strategies adopted by the traders.

## 1.5. THEORETICAL FRAMEWORK

Theory of Structure, Conduct, and Performance

According to the structure-conduct-performance (SCP) paradigm, market structure influences business behaviour, which in turn affects performance. Many variables, including the number of competitors in a given industry, the variety of items available, and the entry and exit barriers, can be used to gauge market structure. The term "conduct" describes particular business practices like price gouging, product differentiation, covert collusion, and the abuse of market dominance. Many measures, including profitability, allocative efficiency, and productive efficiency, can be used to evaluate a company's success.

The range of opportunities and constraints that are accessible to a firm are determined by the characteristics of the industry in which it operates. Businesses have few options and are subject to many limitations in highly competitive industries. Businesses in these sectors aim to maximise social welfare, yet long-term returns never exceed the cost of capital. In essence, firm behaviour and long-term firm performance are determined by industry structure.

On the other hand, businesses that operate in a low-competition climate not only have more options available to them, but also less restrictions. The alternatives that are accessible to businesses can be used to their advantage. For instance, businesses in these sectors have the ability to set prices that have a large economic impact. Yet, entry barriers—a feature of industry structure—determine how long their advantage will last. If there are no entry barriers, new rivals will quickly eliminate the industry's firms' competitive edge. In order to maintain their competitive advantage and superior performance, businesses need employ competitive strategies. Hence, despite the fact that companies in certain industries occasionally enjoy a competitive advantage, industry structure has a significant impact on business behaviour and performance.

#### 1.6 RESEARCH METHODOLOGY

The investigation is supported by primary data. The primary data were gathered through in-person interviews, phone interviews, and questionnaires completed on Google forms. Sent to certain individuals and group of traders in the plywood trading industry. A total of sixty traders make up the study's sample size. The sampling technique is used the purposive sampling techniques.

A collection of plywood traders in the Ernakulam district were chosen as the study's subject matter in order to examine the demand, difficulties, and pricing methods in different traders in the plywood sector. The number of respondents included in the study (60) divided by the total population (200) is multiplied by 100 to determine the sample size, which is thirty percentage and is derived from the unit's total population, which is two hundred. The sample Percentage is obtained.

Convenience sampling methodology was used to choose the study's participants. Participants were chosen for these on the basis of their availability and willingness to participate.

Utilising straightforward statistical tools like tables and diagrams, the acquired data has been examined and represented. These methods have been used to depict different trading preferences, demands, challenges, and pricing strategies. Earnings and expenses of plywood traders in Ernakulam.

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#### 1.7. SCHEME OF THE STUDY

Scheme of the study is organised into 4 chapters:

#### **CHAPTER 1:**

This chapter is about introduction, in this section it deals with the introduction, review of literature, objectives, Statement of a problem, theoretical framework, methodology and the limitations.

#### **CHAPTER 2:**

This chapter is about overview, in this section it deals with the overview of production and profitability analysis of plywood industries.

#### **CHAPTER 3:**

This chapter is about analysis and interpretation, in this section it deals with the primary analysis of production and profitability analysis of plywood industries and their interpretation of the data collected from respondents.

#### **CHAPTER 4:**

This chapter is about findings and the conclusion, in this section it deals with the finding, recommendations and conclusion, That we collected from the primary data.

#### 1.8 LIMITATIONS

- A large study region and a short study period.
- While during the in person interview we are unsure of the traders sincerity.

#### 1.9. CONCEPTS AND DEFINITION

**REVENUE**: Revenue is the term used to describe the sales earnings. A slight increase in the quantity sold per unit results in an increment to overall income known as marginal revenue. The total of all receipts is the revenue. The revenue per sold unit is known as average revenue.

**EXPENDITURE**: Spending by investors, customers, or the government is referred to as expenditure. Real purchases of goods and services constitute consumer expenditure; the acquisition of assets or the transfer of personal property by an individual does not. Government spending is handled differently; some of it is spent on actual goods and services, but government interest payments and transfer payments to individuals, such as pensions, are also counted. Government spending is also not clearly divided into current account and capital account items, possibly because it is difficult to tell the difference between the two.

**PROFIT**: The difference between a business's receipts and outlays for any given period is its profit. Together with cash transactions and asset holding exchanges, this also includes credit transactions and revaluations. Dividends, profit taxes, and the difference between net assets at the end of the period and net assets at the beginning of the period are all included in a company's profit. As long as a company is operating, its earnings are an opinion rather than an established fact. Profits cannot be objectively calculated until a business has been ultimately liquidated and its

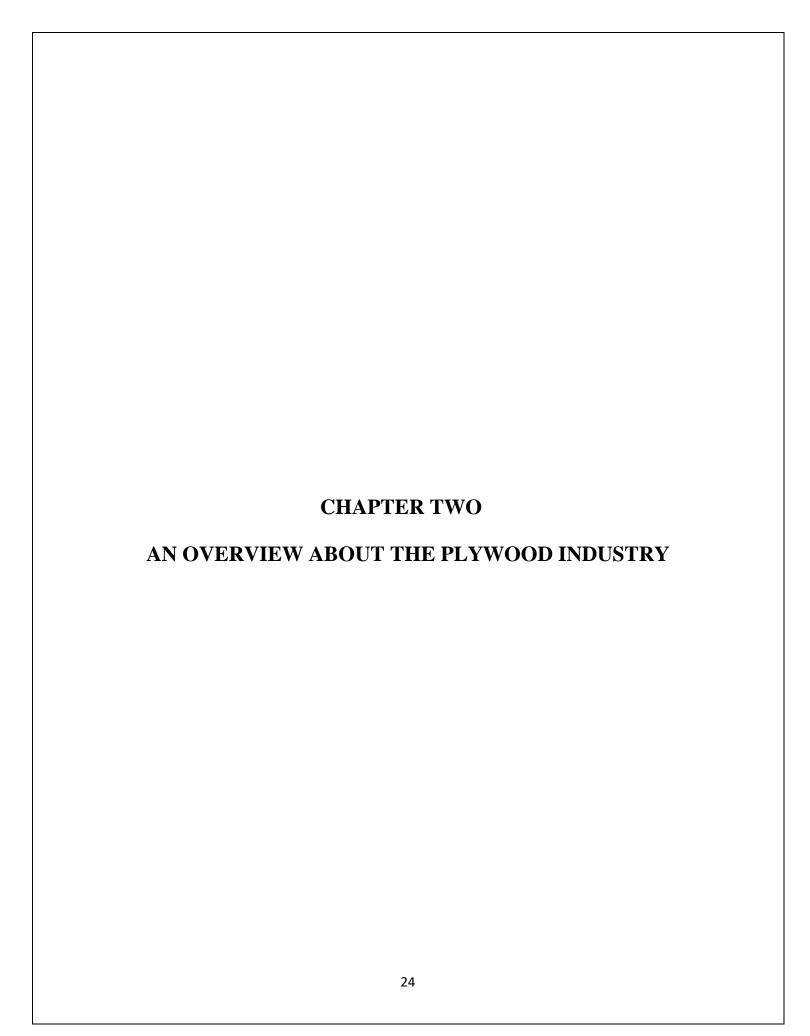
assets have been turned to cash. Physical and financial assets must be valued using judgement until then, especially if they are not traded on active markets.

**DEMAND**: Demand is the capacity and desire to purchase a good or service. It refers to how many units of a good or service economic agents are willing to purchase at a specific price.

**SUPPLY**: The quantity of a product or service that is being sold. The supply function connects supply to the elements that impact its level. These criteria include the cost of the good, the cost of the inputs (factors, services, and intermediate goods), the number of businesses involved in its production, and their levels of capital equipment.

**PRICE**: The price is the sum paid for each unit of a good or service. This is simple to observe because many goods and services have prices that can be purchased in any number of units. Customers can find these prices displayed in any typical store. Price is less obvious for some goods and services, though. Large orders, repeat customers, and certain client groups may be eligible for special terms. In some markets, the price of each item is negotiated between buyers and sellers. The cost of comparable commodities changes throughout time and space, and the quality of goods with the same name varies. An overall assessment of the costs of products in a given category is called a price index.

**TRADE**: The exchange of goods between two parties, be they states or people. Economic activity's fundamental element is trade, which is conducted for both parties' benefit. It is also a form of skill, like a plumber's or a carpenter's. An organisation of workers with comparable talents was the precursor to a trade union. Invisibles, managed trade, multilateral trade, restraint of trade, shuttle trade, terms of trade, and trade deficit are some of the categories into which the trade can be divided. Other categories include the balance of trade, bilateral trade, fair trade, free trade, gain from trade, inter-industry trade, intra-industry trade and managed trade.



#### 2.1 INTRODUCTION

Strong adhesives are used to join thin layers of wood veneer to create the building material known as plywood. It is made up of softwoods and hardwoods, or a mix of both, sourced from maple, mahogany, oak, pine, cedar, spruce, and teak. Commercially, it can be found in plywood forms for tropical, aeronautical, decorative, flexible, and marine uses. The material is adaptable and may easily fit the aesthetics of any interior design. It is a reasonably priced, precisely sized sheet of wood that was manufactured in a factory and does not swell or deteriorate when the humidity of the air changes. It is used to make furniture such tables, chairs, bookcases, cabinets, sofa frames, mattresses, and stools. It is also used to make a mould for concrete constructions and for ornamental purposes, such as the inside and external cladding of cabinets, shelves, and other storage areas.

This part analyses the specifics of what plywood is, what it's uses are, how much plywood is in demand, what challenges the plywood trade faces, and what price techniques are employed by the dealers of plywood.

#### 2.2 USES OF PLYWOOD

#### **Exterior Wall Sheathing:**

Plywood is a common material for exterior wall sheathing. Because it is strong and long-lasting, it can act as a reliable foundation for finishing touches like siding or brick. Plywood is accessible, comes in a variety of thicknesses to suit different purposes, and is easy to install.

#### **Interior Walls:**

Plywood can be used for interior walls because of a few benefits. The strength and weight capacity of plywood make it the perfect material for hung goods like hefty artwork or bookcases. As a result of its resistance to moisture, it can be used in spaces like bathrooms and kitchens that may experience wetness or humidity. Plywood may also be easily worked with and shaped to fit any area.

#### **Roofing and Flooring:**

Because of its great strength-to-weight ratio, sturdiness, and water resistance, plywood is frequently used for roofing and flooring. Both professional contractors and do-it-yourselfers frequently choose plywood because it is inexpensive and reasonably simple to install.

#### **Construction Material:**

Plywood is robust and long-lasting, and it doesn't warp or split easily. It is simple to cut and shape, and you can paint or stain it to match the other wood in the house. The fire resistance of plywood is not as high as that of certain other building materials, but it is still a solid option for many uses.

#### **Furniture:**

Depending on the look you want, plywood can make excellent furniture. It can be utilised for both indoor and outdoor furnishings. Plywood might be a fantastic choice if you want to go for a more rustic appearance. Also, it is user-friendly and reasonably priced. As outdoor furniture, it is a fantastic option because it is portable and lightweight.

#### **Cabinets:**

For a variety of uses, plywood can be used to build cabinets. It is an easily painted or stained material that is quite inexpensive and may be used to match a room's décor. Plywood can be simply cut and put together using basic equipment because it is a thin sheet of wood.

#### **Space Shipping and Aviation:**

Due to its strength, light weight, and ease of usage, plywood is frequently utilised in aerospace and space transportation. Due to its moisture resistance and ease of maintenance, plywood is a popular material choice for aircraft.

#### **Ship Construction Material:**

Due to its strength, low weight, and ease of use, plywood is a preferred material for shipbuilding. It is also reasonably priced. Plywood is prone to decay and insect damage, however it is not as resilient as some other materials.

#### **Different Interior Games Stadium:**

For many different sports, plywood can serve as the inside game venue. It is a cheap, sturdy material that is simple to adapt to make a special playing space. To give your game a distinctive look, plywood can also be painted or stained.

#### **DIY Projects:**

Due to its strength, light weight, and ease of use, plywood is a fantastic material for do-it-yourself projects. It is also very reasonably priced and can be cut, drilled, and bent to match almost any project requirement. Use the right safety equipment, such as a dust mask and gloves, when working with plywood to protect yourself from wood dust and splinters.

#### 2.3 THE DEMAND FOR PLYWOOD

Due to a variety of causes, including trade liberalisation, the diversity of commercialization channels, and other factors that affect the demand for and production of wood goods, the trade of wood and wood products is expanding quickly throughout the world. By advancing their wood-based industries through more effective processing techniques, all these factors increase competitiveness among countries that produce wood.

In the instance of India, economic liberalisation policies have contributed significantly to the nation's recent strong economic development rate, which has been reflected in a continually rising gross domestic product (Ablett 2007). Consequently, India is now regarded as one of the nations with the world's highest population growth rates and the second-fastest expanding economies, just after China (Bartosh 2007). India thus emerged as a major player in the global economy. One of the world's most populous nations is regarded as being India. In 1991, India's economy underwent economic liberalisation, which helped it grow at a rapid rate and maintain a high GDP rate. Middle class is consistently expanding. Has expanded the construction industry for homes and infrastructure while raising local purchasing power. The demand for wood and wood products has risen as a result of substantial investments in these industries. As a result, there is now a greater need for plywood on the local market in India, which presents a business opportunity for international investors and plywood producer nations.

Plywood is a major material used in many applications, including furniture, interiors, panelling, and packaging, and Kerala is one of the well-known states in India known for its thriving building industry. Population expansion, urbanisation, economic growth, and construction activity are some of the variables that affect plywood demand in Kerala. Due to the high rate of literacy and emphasis on education in Kerala, there is a high demand for infrastructure and educational facilities, which increases the demand for plywood items including desks, seats, cabinets, and walls. A further factor in the demand for high-quality plywood for hotel and renovation interiors is the state's thriving tourism industry. Since plywood is more affordable, more durable, and more versatile than wood, it is gradually replacing the customary practise of utilising wood extensively in construction and interior design. Given its reliability, resistance to warping and breaking, and ease of installation, plywood is frequently chosen over real wood. A number of well-known companies and regional producers operate in Kerala's flourishing plywood manufacturing sector. It is important to keep in mind, nevertheless, that the supply and manufacturing of plywood can be impacted by the availability of raw materials, notably timber. The industry is moving towards ecofriendly and certified plywood solutions as worries about sustainable sourcing and the environment gain relevance. Government initiatives and rules concerning building codes, fire safety, and environmental sustainability also have an impact on Kerala demand for plywood. This laws are very important in regulating the kind and calibre of plywood used in different applications.

#### 2.4 CHALLENGES FACED BY PLYWOOD INDUSTRY IN KERALA

Kerala, an Indian state in the southwest, has experienced a number of difficulties with the use and manufacture of plywood. In the state, plywood—a versatile building material comprised of thin layers of wood veneer—has been extensively employed for a variety of projects, including infrastructure, housing, and furniture. The Kerala plywood sector has, however, been hampered by a number of persistent problems and barriers.

The availability and sourcing of raw materials is one of the main difficulties the plywood industry in Kerala faces. Over time, Kerala's forests have been heavily exploited, which has decreased the supply of high-quality wood needed to make plywood. The woods of the state are home to a variety of important wood species, but unsustainable logging methods, illegal harvesting, and encroachments have drastically reduced the supply of these resources. The economics of plywood

manufacture in Kerala have been further impacted by the lack of high-quality wood, which has led to higher production costs and a need to import from other states or nations.

The state's plywood industry has also faced considerable difficulties as a result of environmental rules and concerns. Kerala is well renowned for its distinctive ecology, which encompasses both terrestrial and marine ecosystems, and has a high biodiversity. The government has put tight restrictions and guidelines for logging and timber extraction in place in an effort to protect the environment and the forests. These conservation-related initiatives are crucial, but they have also put obstacles in the way of the plywood industry's ability to secure required permits and comply with environmental regulations. This has had a negative impact on Kerala-based plywood firms' ability to produce and their ability to compete.

The standardisation and management of plywood product quality have also been ongoing difficulties. Low-quality and subpar plywood has been widely available on the market as a result of inadequate quality control and enforcement. In addition to harming Kerala's plywood industry's reputation, this puts customers' safety at danger. For the production and marketing of high-quality plywood goods, it is necessary to strengthen quality control procedures, raise consumer and manufacturer knowledge, and enforce rules more strictly.

The plywood industry's unorganised and informal sections present a substantial additional problem. Kerala has a high number of small-scale plywood makers, many of which operate without the necessary licencing and adherence to industry standards. In addition to affecting plywood quality, this absence of control and regulation fosters unhealthy competitiveness and unethical behaviour. Additionally, the existence of unorganised sectors makes it difficult to create a coordinated strategy to address the problems facing the plywood industry as a whole.

The expansion and stability of Kerala's plywood industry have also been hampered by the market demand's erratic behaviour and economic reasons. The demand for plywood products has been affected by shifting customer preferences, economic downturns, and international market conditions. Plywood demand declines when the economy is weak because of lower activity in the furniture and building industries, which are key consumers of the material. For plywood producers, especially those who are large-scale operators, this may lead to overcapacity and financial hardships.

Both domestic and foreign players fiercely compete with Kerala's plywood sector. Local plywood enterprises face competition from imports, other plywood manufacturers, and other building materials. Gaining a competitive edge in the market depends on elements including pricing competition, quality standards, and brand awareness.

Moreover, the expansion and viability of the plywood business depend on the industry's ability to embrace technological innovations. Increased productivity, lower prices, and higher-quality products can be achieved by introducing contemporary equipment, automating operations, and using new production techniques. Smaller plywood enterprises may find it difficult to invest in such modifications and stay up with the quick pace of technical advancements.

Many industries regularly struggle with the lack of skilled employees. It might be challenging to locate qualified people who are knowledgeable about the processes used to manufacture plywood, how the technology works, and how to manage the quality. For the sector to close the skills gap and guarantee a skilled workforce, training and development programmes must be funded.

The plywood sector is also vulnerable to market instability, which includes variations in the cost of raw materials, shifting consumer tastes, and changing economic situations. The stability and profitability of plywood enterprises can be impacted by erratic demand and market changes. These difficulties might be lessened by diversifying product offers and modifying marketing strategies.

#### 2.5 CHALLENGES FACED BY PLYWOOD TRADERS

Plywood traders confront a number of difficulties in conducting business on a daily basis.

The difficulty that plywood traders frequently encounter is the shifting cost of raw materials, particularly the price of wood. Price strategies and profit margins may be affected by changes in timber prices. Price volatility may be influenced by variables such shifting demand and supply, governmental regulations, and environmental laws.

Quality control is yet another issue the traders must deal with. It is essential for plywood traders to maintain consistent product quality. They must carefully pick suppliers and producers who uphold high standards for quality. However, because production processes can vary, potential flaws might occur, and there are cheap products on the market, maintaining quality control can be

difficult. Plywood dealers must set up dependable quality assurance procedures and forge strong connections with credible suppliers.

Additionally, there are both organised and unorganised players in the plywood sector. Participants in the unorganised and informal sectors, who may offer lower pricing due to fewer overhead expenses and less compliance with regulations, are a common source of competition for traders. Competing with such parties may affect organised plywood traders' profit margins and market share.

To meet consumer needs while lowering carrying costs, plywood traders must properly manage their inventories. Moisture, vermin, and poor storage practices can all harm plywood. To reduce losses and guarantee customer satisfaction, appropriate warehouse facilities, effective inventory management systems, and prompt stock turnover are necessary.

In addition, there are seasonal variations in demand for plywood as well as market swings. The demand for plywood may be impacted by monetary issues, trends in the building sector, and changes in consumer preferences. To lessen the effects of market volatility, plywood traders should predict market trends, arrange their inventories accordingly, and diversify their product offerings.

Trades in plywood frequently experience issues with credit and payments. It can be challenging to maintain a balance between giving consumers credit and making sure they make their payments on time. A plywood trader's cash flow and financial stability may be impacted by late payments or defaults. To overcome these issues, it is crucial to develop clear credit regulations, run credit checks, and uphold sound financial management procedures.

To deliver goods to customers on time, plywood dealers must provide effective logistics and transportation. Issues including poor transportation infrastructure, backed-up traffic, and rising fuel prices can affect logistics operations and raise expenses. These obstacles can be solved by creating solid relationships with dependable logistics providers and by optimising delivery routes.

Finally, traders of plywood must adhere to a variety of legal and regulatory standards relating to taxation, licencing, environmental standards, and labour regulations. Maintaining compliance with changing laws and regulations can be difficult and time-consuming. Plywood dealers can

overcome these difficulties by hiring legal and accounting experts and investing in reliable compliance solutions.

#### 2.6 VARIETY OF PRICING STRATEGIES THAT ARE USED BY TRADER

The price strategy used by plywood merchants can change based on a number of variables, including market conditions, competition, production costs, and consumer demand.

**PRICING STRATEGY:** The pricing strategy in marketing, in its simplest form, entails adjusting prices in response to market factors. Price is the value that a person, after doing research, assigns to a good or service. Competitiveness, market conditions, consumer willingness to pay, expenditures made, etc. are all taken into account by a pricing strategy. Pricing is the process of determining a cost for the ownership and usage of goods. Pricing is all about making choices. The first stage is to evaluate the business's requirements and goals. The following step is to do market research and evaluate the level of competition. After that, a solid pricing strategy will help the business survive. The last stage of research involves talking to the target market's (consumers) about their perceptions of the brand, product, or service. Price setting is not the same as pricing strategy. It employs factors that are not taken into consideration while determining a price. The strategy, for example, considers the seasonality of demand, client preferences, and purchasing patterns in addition to an examination of the products currently on the market. Nonetheless, the strategy excels with a variety of consumer categories (varying tastes and preferences). Hence, with stable production levels and high demand, there is uncertainty and unpredictability (a chance to reap greater profits).

**PREMIUM PRICING:** With premium pricing, you can set prices that are greater than those of rivals. The primary objective of premium pricing is to forward a particular vision or perception of a product that is consistent with its potential increased value and other distinguishing qualities. These reasons are why companies use a premium pricing approach. Another key component of premium pricing is that customers may even be aware of any explanations for price hikes. They merely assist a business in its endeavours.

In this case, the greater pricing is in direct opposition to marketing tactics. Marketing experts employ strategies to convince consumers that a brand name is worthy of their allegiance and that

a company with a solid reputation sells high-quality items. In essence, premium pricing fosters the notion that a certain business has value and quality that match the price tag or creates the impression that it controls the market.

BREAK EVEN PRICING: Break even pricing is the practise of determining a price at which a company will lose money on every transaction. The goal is to use low prices as a strategy to capture market share and drive rivals out of the market. A company might be able to increase output levels in this way to the point where it can reduce costs and begin producing a profit at what was previously the break-even threshold. Alternatively, after eliminating competitors, the company can raise prices just enough to make a profit without enticing possible new competitors with an excessive price increase. The concept can be applied to figure out the price below which a seller will begin to lose money on a sale. This information can be useful when interacting with a customer who is looking for the lowest price.

**DISCOUNT PRICING:** Using a discount pricing strategy, a retailer will sell a product for less than it would normally cost for a specific period of time. With the ultimate purpose of boosting sales, it entails lowering goods prices and providing various bargains. It is a pricing tactic intended to change a consumer's estimation of the worth of a good or service in order to pique curiosity, foster client loyalty, or boost the number of units sold.

While adopting a discount plan, a retailer may have a number of objectives in mind, all of which help to successfully increase sales. Either the quantity of sales or the sum of sales from purchases can be increased. The former seeks to attract new clients' interest and attention in order to boost overall revenue. The latter seeks to enhance the overall number of products sold per transaction by appealing to current clients.

MARKUP PRICING: Markup pricing is a method of determining the cost of a commercial enterprise's goods or services for sale to its end clients. The markup or markup pricing is typically expressed as a percentage of the product's or service's cost price. We markup or raise the offering's price by that amount in relation to the cost price. In this way, we determine the selling price. Markup pricing is necessary and consists of just increasing the cost by a margin in order to make enough money for the company. Hence, it is referred to as "cost-based pricing". This is very important for the efficient operation, continuation, and expansion of the company. Additionally, because they made investments in the company and assumed the related business risks, all of the

company's stakeholders will share in the benefit. The earnings of a company will increase with the markup price of its product.

**PEAK LOAD PRICING:** Peak load pricing refers to the practise of charging more for goods and services when demand is at its greatest. In other words, peak load pricing is the elevated cost incurred when there is a lot of demand. When a business discriminates on the basis of high utilisation, high traffic, high demand times, and low demand times, it is doing so on the basis of efficiency. The consumer who purchases the product during a period of high demand must fork over more money than someone who makes their purchase when demand is low.

**TARGET RETURN PRICING:** Target return pricing bases the price on the intended rate of return on investment. Return on investment is another name for desired return. E-commerce uses this kind of technique. With the use of market department insights, additional data, and clients' willingness to pay, the selling price is established in this. The selling price is now subtracted from the planned profit, and the resulting sum reveals the upper and lower limits of the production cost.

**SKIMMIMNG PRICING:** In this tactic, the product is initially sold for a premium price with the goal of removing the "cream" from the market. In order to swiftly make the most money possible, the company targets customers who are prepared to pay a significant markup for the products and sets a high beginning price for them. Although the business initially sells fewer items, it makes a sizable profit. In order to attract customers who are willing to buy the pricey goods for a lesser price, or the next sector of the market, the price is gradually reduced over time.

**PENETRATION PRICING:** By launching the new product at a low price, the penetration pricing strategy seeks to quickly permeate the market. The company adds a slight markup to its cost of manufacture when setting the price of the products. Since many consumers are compelled to acquire the product due to its low price, rising sales result in higher profits. Sales growth allows the company to cut costs, which in turn allows other companies to lower their prices even further.

**BUNDLING:** The process of grouping together multiple complimentary products and services into a single package price that is less expensive than the total of their individual costs is known as bundling. When a sizable portion of clients view the combination of services as an alluring

package, this is done. Instead of incurring the high cost of obtaining new customers, it can be more cost-effective for sellers, who can sell more products to existing customers.

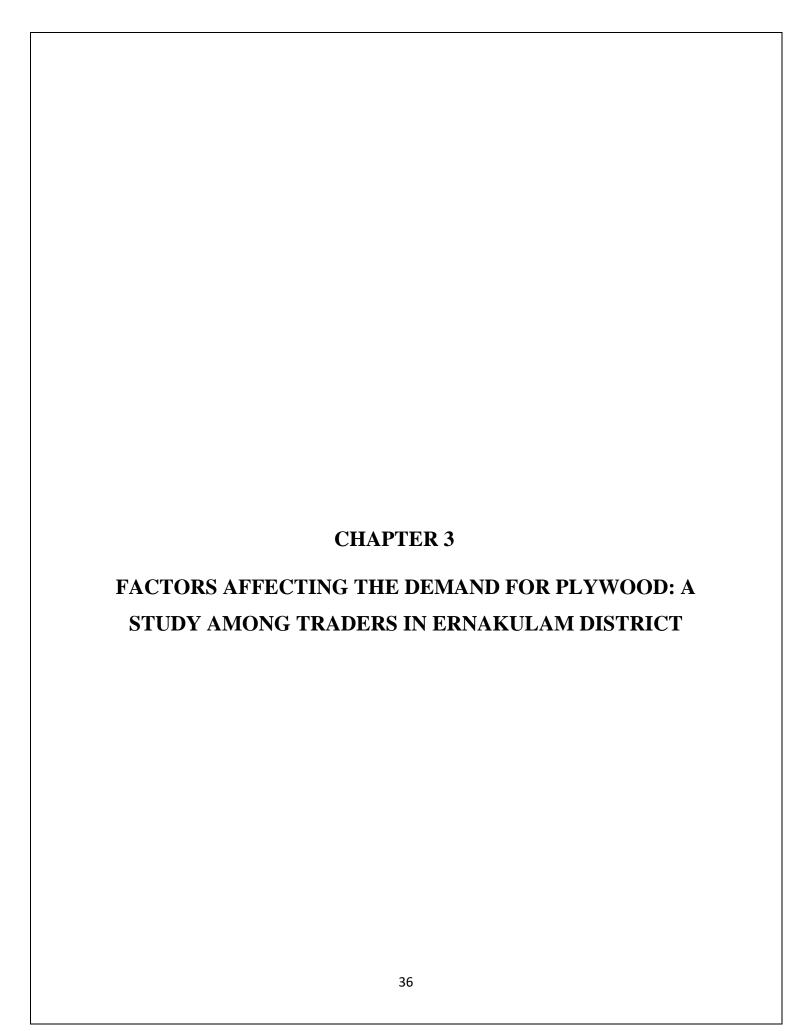
Bundling agreements are often not thought of as one-time promotions because they are seen as longer-term partnerships. These agreements can increase a business's sales volume while keeping out competitors. For sellers that recognise that each customer has a high lifetime value, bundling is a particularly alluring proposition because it enables them to keep customers for extended periods of time and raise profits over multiple years. This bundling in this part can be broken into two components.

**CROSS SELLING BUNDLIES**: With this bundling strategy, merchants sell an auxiliary item in addition to the primary item. For less expensive things, accessories, or parts that match a more expensive item, this kind of bundling works effectively.

**GIFTING BUNDLES**: Gift bundles are designed for customers who want to give a loved one a collection of related products.

#### 2.7 CONCLUSION

In this section we examine the overview of the objectives-the factors affecting the demand, to analyse the challenges faced by the traders and to analyse the pricing strategies adopted by the traders. We describe the functions of plywood in the first part. Explains the demand for plywood in the following part. The issues faced by the plywood industry in Kerala and by plywood traders are then explained. The last section describes the various pricing schemes that traders employ.



3.1 INTRODUCTION

A crucial segment of the worldwide manufacturing and construction industries is the plywood

sector. A flexible engineered wood product known for its strength, longevity, and affordability is

plywood. It is made by joining together thin layers of veneered wood, alternating the grain

direction of each layer to strengthen the structural stability.

Numerous industries, including building, furniture production, packaging, and interior design, use

plywood extensively. Because of its strength to weight ratio, it is a great option for structural

applications like flooring, roofing, and wall panels. Additionally, due to its dimensional stability

and resistance to warping, it can be used to create cabinets, doors, and other furniture pieces.

3.1.1 ANALYSIS CRITERIA

This chapter focuses on the essential information gathered during telephone and in-person

interviews. To assess the data, a total of sixty samples were taken. The questions were created

based on the demand for plywood, difficulties that the merchants faced, and price tactics they used.

There are four subsections in this chapter.

General information of the respondents.

To study factors affecting the demand.

To analyse the challenges faced by the traders.

To analyse pricing strategies adopted by the traders.

3.2 GENERAL INFORMATION OF THE RESPONDENTS

Age, education, years of experience, annual income, and the number of hours worked per day are

significant criteria in this section since they can be used to determine a person's socioeconomic

status.

3.2.1 AGE

Table: 3.2.1

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Age	Percentage of response	Number of response
18-30	18.3	11
30-50	60	36
50-70	20	12
>70	1.7	1
Total	100	60

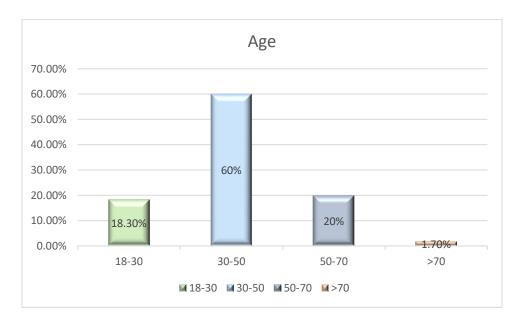


Figure: 3.2.1 Source: Primary data

The information on the respondents' ages was gathered to examine the participation of younger and older people in this area. The research makes it obvious that sixty per-cent of traders are between the ages of 30 and 50 when they start trading. Youth involvement in the business is declining. Participants aged 18 to 30 make up just eighteen per-cent. This demonstrates the fall in young people working as plywood merchants in these industries.

### 3.2.2 SEX

Table: 3.2.2

Sex Percentage of response Number of response	
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Male	90	54
Female	10	6
Total	100	60

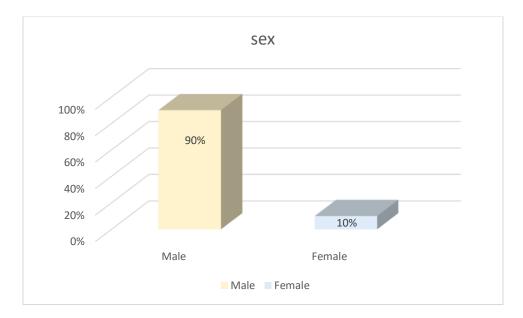


FIGURE: 3.2.2 Source: Primary data

It displays the participation of both men and women in the plywood industry. The numbers make it very evident that only ten per-cent of women work in this area, compared to ninety per-cent of men. In this industry, there are extremely few women working.

# **3.2.3 EDUCATION QUALIFICATION**

Table: 3.2.3

Education qualification	Percentage of response	Number of response
Illiterate	0	0
SSLC	5	2
HSS	20	12
UG	53	32
PG	21.7	14
Total	100	60

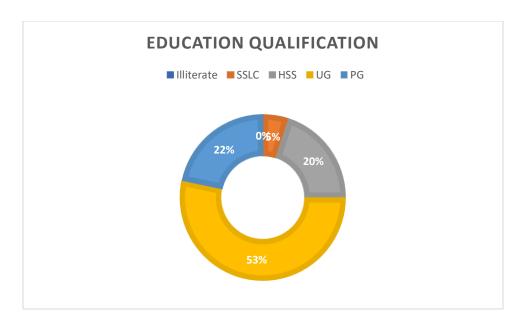


FIGURE: 3.2.3 Source: Primary data

The aforementioned information demonstrates the respondents' level of education. The findings show that fifty three per-cent of the respondents have bachelor's degree. The level of education after graduation, which accounts for 21.7 per-cent of responses. Twenty per-cent of responders have completed their secondary education. Only five per-cent of responders are SSLC certified.

# 3.2.4 ANNUAL INCOME

Table: 3.2.4

Annual income	Percentage of response	Number of response
<50,000	1.7	1
50,000-1,00,000	16.7	10
1,00,000-5,00,000	40	24
5,00,000-10,00,000	23.3	14
>10,00,000	18.3	11
total	100	60

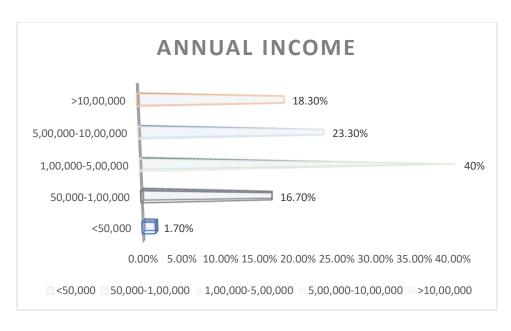


FIGURE: 3.2.4 Source: Primary data

The respondents' income distributions are shown above. According to the research, the vast majority forty per-cent of respondents earn between one lakhs to five lakhs rupees each year. The eighteen per-cent of those who receive more than ten lakhs do so. 1.7 per-cent of respondents, at the very least, earn less than rupees fifty thousand annually. According to the research, most dealers fall within the range of one lakh to five lakh.

### 3.2.5 YEARS OF EXPERIENCE

Table: 3.2.5

Years of experience	Percentage of response	Number of response
<10 years	40	25
10-20 years	33.3	20
20-30 years	10	5
30-40 years	11.7	7
40-50 years	3.5	2
>50 years	1.5	1
total	100	60



FIGURE: 3.2.5 Source: Primary data

Information on the length of the dealers' years of experience in the plywood industry. The data shows that the biggest percentage of traders forty per-cent have been in the business for less than ten years, while only thirty three per-cent have ten to twenty years of experience. 11.7 per-cent of traders have between thirty to forty years of experience. 1.5 per-cent of traders have experience, and they have been trading for more than fifty years.

# 3.2.6 HOURS TRADERS WORK IN A DAY

Table: 3.2.6

Hours trader work in a day	Percentage of response	Number of response
<5	0	0
5-8	36.7	22
8-12	61.7	37
>12	1.6	1
total	100	60

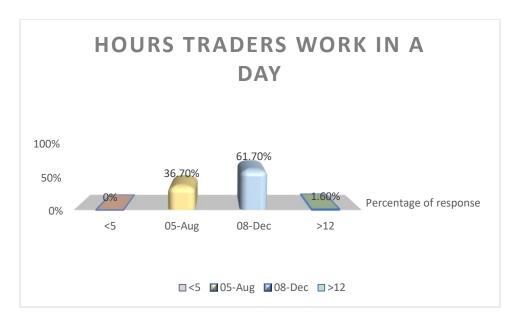


FIGURE: 3.2.6 Source: Primary data

The traders' hours of operation are listed above. According to the research, 61.7 per-cent of traders work eight to twelve hours every day. They could think that working eight to twelve hours will result in a higher amount of sales, however only 36.7 per-cent of traders work between five and eight hours every day. The percentage of traders who have worked more than twelve hours is 1.6 per-cent. No participants are working less than five hours a day.

### 3.3 FACTORS AFFECTING THE DEMAND

In the operations of plywood dealers, the demand for plywood plays a crucial role. Low demand will inevitably have an impact on the traders' company. In this part, we examine the variables influencing the demand for plywood.

# 3.3.1 SEASON WHEN THE DEMAND IS HIGHEST

Table: 3.3.1

Season when the demand is	Percentage of response	Number of response
highest		
January-April	5	3
April-July	6.7	4

July-October	36.7	22
October-December	6.7	4
No seasonal demand	45	27
total	100	60

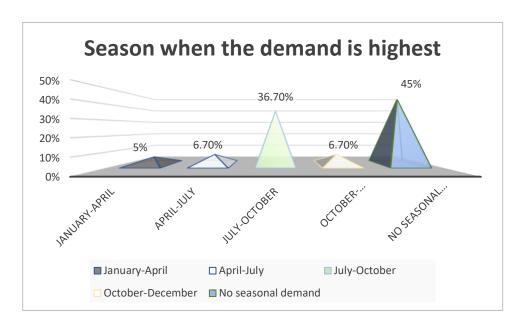


FIGURE: 3.3.1 Source: Primary data

This data indicates the time of year when demand is at its peak. A whopping forty five per-cent of traders claim that there is no seasonal demand. July to October has the second-highest demand for plywood, according to 36.7 per-cent of respondents. 6.7 per-cent of dealers think that the plywood is in demand from April through July and from October through December. The remaining traders think that the seasonally demand occurs from January to April.

### 3.3.2 ONLINE DEMAND FOR PLYWOOD

Table: 3.3.2

Online demand for plywood	Percentage of response	Number of response
Higher demand (Useful)	16.7	10
Lowest demand(Not useful)	83.3	50

Total	100	60

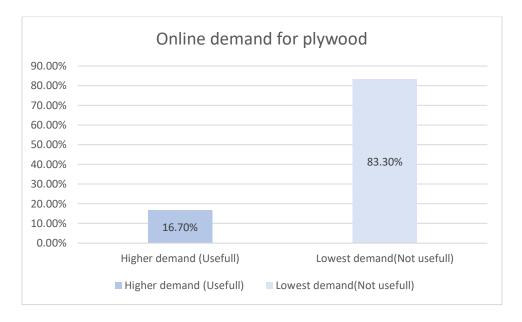


FIGURE: 3.3.2 Source: Primary data

According to the research, eighty three per-cent of traders concur that the lowest demand for plywood is found online (not useful). Because there would be a problem if buyers purchase plywood online due to color and quality difficulties. The higher demand (useful) 16.7 per-cent of dealers support the increased demand for plywood online.

# 3.3.3 QUALITY WHICH HAS HIGHER DEMAND

Table: 3.3.3

Quality which has higher	Percentage of response	Number of response
demand		
Non quality products	10	5
Quality products	40	25
Both	50	30
total	100	60



FIGURE: 3.3.3 Source: Primary data

The data above is presented in accordance with the quality that is most in demand. According to the research, consumers are more interested in both high- and low-quality products. The response rate from traders is fifty per-cent. The forty per-cent response indicates that there is demand for superior goods. Ten per-cent of traders think that there is a strong market for subpar goods. Depending on their needs, customers may require high-quality or low-quality products.

# 3.3.4 PRODUCTION WHICH HAS HIGHER DEMAND

Table: 3.3.4

Production which has higher	Percentage of response	Number of response
demand		
Import produce	30	20
Local produce	70	40
total	100	60

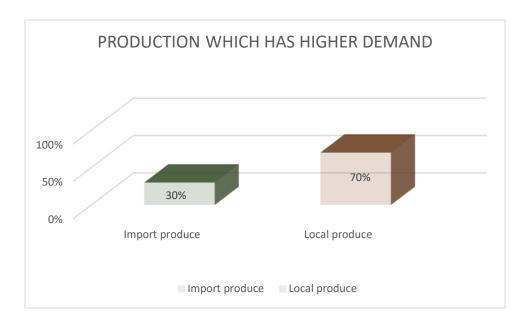


FIGURE: 3.3.4 Source: Primary data

The findings clearly show that seventy per-cent of traders concur that domestic plywood production is in higher demand. Thirty per-cent of the traders approved the import of manufactured plywood. According to traders, clients prefer domestically made plywood over imported plywood because the latter is more expensive. The middle class consumers are not eager to use plywood made overseas. The majority of wealthy people will purchase imported plywood.

### 3.4 THE CHALLENGES FACED BY THE TRADERS

Many difficulties that plywood sellers confront in the sector have an immediate negative impact on their sales. So, in this section, we'll look at the difficulties faced by traders.

# 3.4.1 CUSTOMER OPTING TO BUY DIRECTLY FROM MANUFACTURER AFFECT BUSINESS

Table: 3.4.1

Customer opting to buy directly	percentage of response	Number of response
from manufacturer affect		
business		
Strongly agree	36.7	22

Agree	23.3	14
Neutral	11.7	7
Disagree	20	12
Strongly disagree	8.3	5
Total	100	60

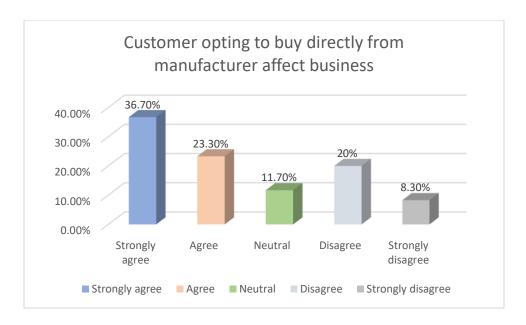


FIGURE: 3.4.1 Source: Primary data

According to the data above, consumers who choose to buy directly from manufacturers have an impact on traders business. The majority of respondents 36.7 per-cent strongly agree the idea of consumers buying plywood directly from producers will affect their business, while twenty three per-cent agree to it. Twenty per-cent of traders disagree with it since, at the very least, eight per-cent of traders have no impact at all on their businesses. A neutral response rate of 11.7 per-cent is observed. Because manufacturers offer discounts to clients and boost their sales, customers buy large quantities of plywood straight from them.

### 3.4.2IMPORT PLYWOOD

Table: 3.4.2

Import plywood	Percentage of response	Number of response
yes	17.2	10
no	82.8	50
total	100	60

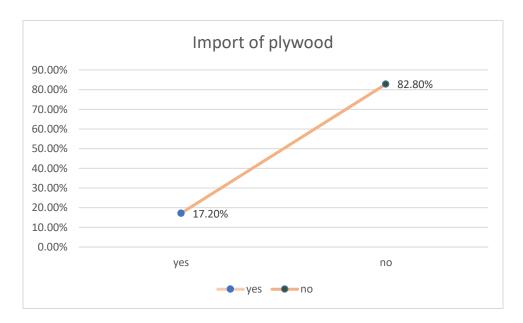


FIGURE: 3.4.2 Source: Primary data

Dealers are permitted to import plywood, but according to this statistics, 82.8 per-cent of dealers are not doing so. On the other hand, seventeen per-cent of traders import plywood, whereas the majority of dealers do not. Because there is a lower demand for imported plywood than for domestic plywood. However, the traders that import plywood do so with the intention of making more money. When customers demand imported goods.

### 3.4.3 DELAY IN DELIVERY TRUCK ON THE BUISNESS PROFIT

Table: 3.4.3

Delay in delivery truck on the	Percentage of response	Number of response
business profit		
Highest effect	16.7	10
Lowest effect	60	36

sometimes	23.3	14
total	100	60

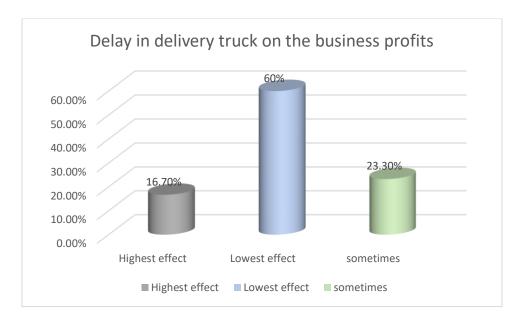


FIGURE: 3.4.3 Source: Primary data

The information above demonstrates how a delivery truck's delay reduces business earnings. The impact with the lowest percentage, Sixty per-cent. The traders don't really have a big impact on their business. Twenty three per-cent of traders occasionally make an impact. Traders with a 16.7 per-cent impact have the greatest impact. By explaining the situation to the consumers, traders can delay the delivery truck with no problem. The majority of customers will know that and wait for it. Customers will turn to other traders if they have a pressing need for any traders.

# 3.4.4 SELLER COMPENSATE FOR THE IMPORT (INTERNATIONAL AND DOMESTIC) DAMAGES

Table: 3.4.4

Seller compensate for the	Percentage of response	Number of response
import(international and		
Domestic) damages		
discount	76	46
Return	20	12

No compensation	2	1
Replacement	2	1
Total	100	60

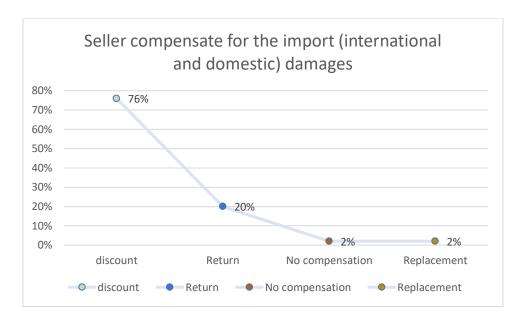


FIGURE: 3.4.4 Source: Primary data

The aforementioned data shows that the seller makes up for import (domestic and international) damage, and seventy six per-cent of replies suggest that the seller gives discounts for the damaged products. Twenty per-cent of buyers will return defective goods to the vendors; two per-cent of sellers will replace the goods; and two per-cent of sellers will offer no compensation. The majority of retailers run the risk of having to accept damaged goods back, particularly when they are imported. To avoid that the sellers gives the traders a discount. Some sellers only accept damaged goods for return.

# 3.4.5 TRADERS COMPENSATE FOR THE DAMAGED PRODUCTS AND PRODUCTS THAT ARE DAMAGED BY THE SELLER THROUGH SALES

Table: 3.4.5

Traders compensate for the	Percentage of response	Number of response
damaged products and		

products that are damaged by		
the seller through sales		
discount	70	42
Gift	6.7	3
Vouchers	1.5	1
Return	13.3	8
No compensation	6.7	4
Replacement	1.8	2
Total	100	60

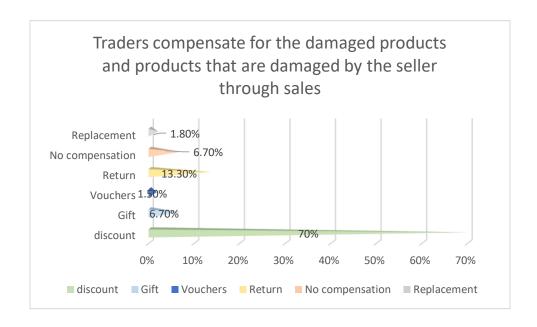


FIGURE: 3.4.5 Source: Primary data

Given the number of responses to the question, "How do you compensate for the damage products and products that are damaged by the seller through sales," it is abundantly obvious that seventy per-cent of traders will offer discounts to clients for damaged goods. Products will be returned at a thirteen per-cent rate when there is any damage through the sales. 6.7 per-cent of dealers refuse to pay any compensation. Some traders will present it as a gift. Because the traders offers a discount on it or because of anything like rough goods, some customers will purchase

the damaged things. The traders will take the product back if there is any damage from the shipping process.

### 3.4.6 TRANSPORTATION COST THAT TRADERS INCUR

Table: 3.4.6

Transportation cost that trader	Percentage of response	Number of response
incur		
Buyer incur	9.8	6
Seller incur	80.3	48
Sometimes buyer	9.8	6
total	100	60

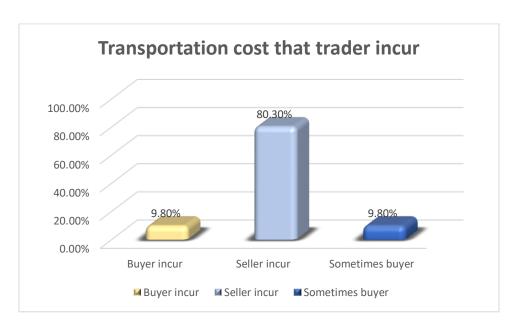


FIGURE: 3.4.6 Source: Primary data

The statistics on transportation costs reveals that eighty per-cent of the cost of transportation is borne by the traders (sellers), and 9.8 per-cent of the cost is occasionally borne by the buyer. Nine point eight percentage of transportation cost is borne by the buyer. The majority of traders offer free transportation to customers when they purchase a product from them, saving them the cost of transportation. But occasionally the buyer will be responsible for the transportation costs.

## 3.4.7 INSURANCE

Table: 3.4.7

Insurance	Percentage of response	Number of response
Yes	96.6	58
No	3.4	2
total	100	60

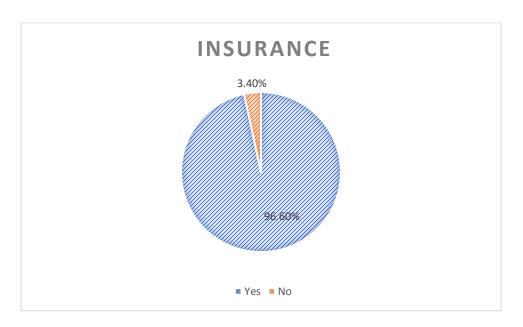


FIGURE: 3.4.7 Source: Primary data

According to the aforementioned figures, 96.6 per-cent of traders have insurance. three per-cent or a relatively small number of dealers do not have insurance.

# 3.4.8 TYPES OF INSURANCES THAT THE TRADERS HAVE

Table: 3.4.8

Types of insurances that the	Percentage of response	Number of response
traders have		
Fire	53	32
Flood	42	25

Total property	3	2
Truck	2	1
Total	100	60

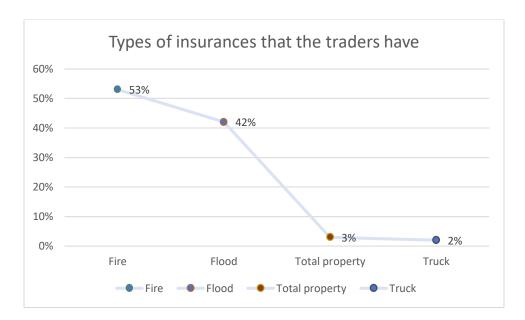


FIGURE: 3.4.8 Source: Primary data

There are numerous types of insurance, including truck, flood, and fire. According to the aforementioned data, fifty three per-cent of traders have fire insurance. Flood insurance is second with a forty two per-cent. The two per-cent of traders only have truck insurance; only three percent of traders have entire property insurance. Most of the traders have fire and flood insurance, which makes it simple for them to file claims for damaged goods if a fire or flood occurs. This also holds true for the truck and the entire property.

### 3.4.9 ADVERSITY

Table: 3.4.9

Adversity	demonetization	flood	COVID19	Number of	Number	Number
				response	of	of
				(demonetization)	response	response
					(flood)	

						(COVID
						19)
Terribly	28	35	47	17	29	21
distressed						
affected	27	43	23	16	14	26
unaffected	20	10	15	12	9	6
Very little	25	12	13	15	8	7
affected						
total	100	100	100	60	60	60

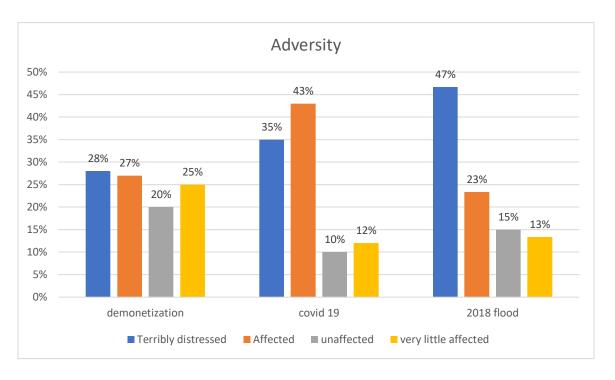


FIGURE: 3.4.9 Source: Primary data

This data displays the three possible pairings of the components demonetization, flood, and COVID 19. The initial data shows how demonetization has affected the economy. When currency was demonetized, twenty eight per-cent of traders experienced extreme distress. Demonetization has an impact on twenty seven per-cent of dealers, but not as much as it has on the genuinely troubled people. Twenty five per-cent of traders are completely untouched by the demonetization,

whereas twenty per-cent of dealers are just slightly impacted. Although many dealers were impacted by the demonetization, the majority of them received cash at the time of demonetization.

The second statistic demonstrates the impact of COVID 19, with forty-three per-cent of traders reporting negative effects from COVID 19, and thirty-five per-cent reporting severe distress. The ten per-cent of traders had no impact on the COVID 19, and the twelve per-cent of traders were just slightly impacted. The last two bar graphs illustrate the traders who are not impacted by COVID 19 and how the first two traders are affected by the lock down and other issues that create no sales at that time. After the COVID 19 new entrants were entered in trading sector, these traders have no affect in the profitability.

The flood may be seen in the final graph. A whopping forty seven per-cent of the traders in this industry were greatly distressed by the flood. Only twenty three per-cent of traders are significantly impacted by the flood, compared to a substantially larger percentage of traders who are extremely distressed. The flood has had a negligible or nonexistent impact on fifteen per-cent and thirteen per-cent of traders, respectively. The flood was extremely destructive in the majority of the locations, causing extensive damage to many traders' goods. Trade losses result from this, while in other regions traders are not impacted by the flood and some traders have only lately opened their doors for business. Consequently, such traders are unaffected by the water.

### 3.4.10 TRADERS REVENUE COVER THEIR RENT

Table: 3.4.10

Traders revenue cover their	Percentage of response	Number of response
rent		
Yes	22.4	14
No	32.8	19
Own building	10.3	6
Sometimes	34.5	21
total	100	60

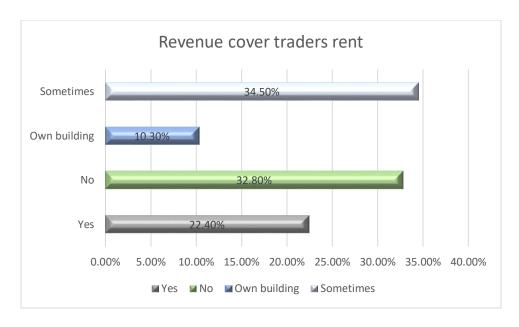


FIGURE: 3.4.10 Source: Primary data

This information demonstrates if the rent is covered by the trader revenue. 34.5 per-cent of traders report that occasionally, their income will be enough to pay their rent. Due to the low sales, traders' rent was not paid in full with a 32.8 per-cent occupancy rate. Twenty-two per-cent of traders had their rent paid, while ten per-cent of traders had their own buildings. The traders are not affected by rent. For that traders, the building is an asset.

# 3.4.11 LOCATION OF TRADERS STORE AFFECT TRADERS SALES

Table: 3.4.11

Location of traders store affect	Percentage of response	Number of response
traders sales		
Yes	51.7	31
No	41.7	25
Sometimes	6.6	4
total	100	60



FIGURE: 3.4.11 Source: Primary data

In the information provided, place is significant in this industry. 51.7 per-cent of business owners concur that the location has an impact on sales. The walking customers won't come to the shops if they are not located in a road-facing region. That will impact how profitable their sales are. Some well-known vendors had sales, but the sales had no impact on the area. 6.6 per-cent of business owners concur that location can have an impact on sales.

### 3.4.12 LEVEL OF COMPETITION

Table: 3.4.12

Level of competition	Percentage of response	Number of response
Very high	66.1	40
High	27.1	16
Low	3	2
Very low	3	2
total	100	60

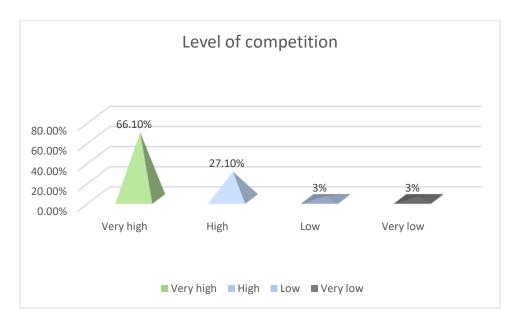


FIGURE: 3.4.12 Source: Primary data

The findings make it very evident that the degree of rivalry in this industry is quite high, with sixty six per-cent of traders agreeing that it is very high and twenty seven per-cent agreeing that it is high but not very high. Three per-cent of traders believe there is little to no competition. Three per-cent of traders believe that the level of competition is very low in this industry.

### 3.4.13NEW ENTRANTS AFFECT THE PROFITABILITY OF TRADERS BUISNESS

Table: 3.4.13

New entrants affect the	Percentage of response	Number of response
profitability of traders business		
Strongly agree	41.7	25
Agree	28.3	17
Neutral	10	6
Disagree	10	6
Strongly disagree	10	6
total	100	60

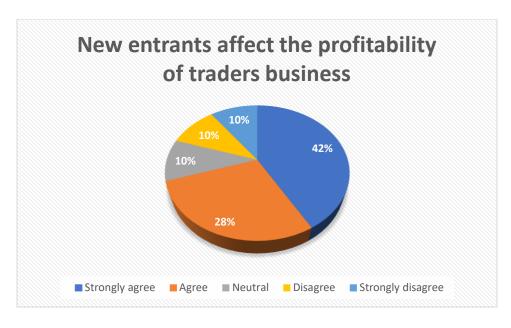


FIGURE: 3.4.13 Source: Primary data

Due to the intense competition, this analysis demonstrates how new entrants have an impact on traders' businesses' profitability. According to the data presented above, forty-two per-cent and twenty-eight per-cent of traders strongly agree and concur that the entry of new entrants has an adverse effect on a trader's business' profitability. Ten per-cent of the dealers were in a position to provide a neutral statement. The percentage of traders who disagreed and strongly disagreed was ten per-cent each. Even though new traders enter the market, their business will continue to be profitable.

# 3.5 PRICING STRATEGIES ADOPTED BY THE TRADERS

According to plywood traders, price strategy is crucial in their industry. To improve their sales, various dealers use various pricing techniques. Here, we look at several pricing tactics and how they influence traders.

### 3.5.1 PRICING OF COMPETITORS AFFECT TRADERS BUISNESS

Table: 3.5.1

Pricing of competitors affect	Percentage of response	Number of response
traders business		
yes	63.3	38
no	20	12

sometimes	16.7	10
total	100	60

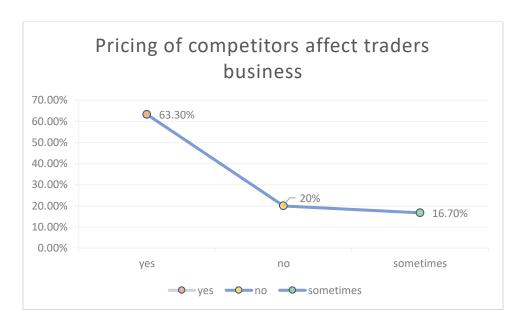


FIGURE: 3.5.1 Source: primary data

The data above shows how competitor pricing affects the business of the trader. This demonstrates how the pricing of rival companies' items has an impact on the sales of sixty three per-cent of traders. Due to their inability to raise prices to a level that would prevent business losses, some competitors establish cheap pricing, which causes a difficulty for other dealers. Twenty per-cent of traders, however, have little impact on the business when rivals set different prices. These traders will maintain their price positions here. The pricing of competitors in the industry can occasionally be influenced by traders in the range of 16.7 per-cent.

# 3.5.2 OFFSET THE DAMEGE CAUSED BY THE PRICING STRATEGIES OF THE COMPETITORS

Table: 3.5.2

Offset the damage caused by	Percentage of response	Number of response
the pricing strategies of the		
Competitors		

Reduction in price	30.5	18
No reduction in price	23.7	15
Sometimes reduction in price	45.8	27
total	100	60

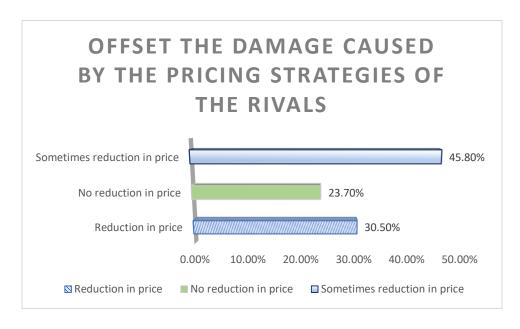


FIGURE: 3.5.2 Source: Primary data

The aforementioned information demonstrates the actions taken to mitigate the harm brought on by competitors' pricing practices. Approximately 45.8 per-cent of traders occasionally cut their prices. A whopping 35.5 per-cent of the traders approved of lowering the price for the sales. However, a reduction of 23.7 per-cent will not result in a lower price. According to them, price decrease won't result in more sales. This is due to the fact that when competitors lower their prices, clients will choose those traders rather than the others, preventing all dealers from making sales. Most traders will lower the product's price in order to increase sales in order to prevent this.

## 3.5.3 TRADERS PRICING STRATEGIES WITH REGARDS TO THE CUSTOMERS

Table: 3.5.3

Traders pricing strategies with	Percentage of response	Number of response
regards to the customers		

Competitive pricing	40.7	26
Value based pricing	8.5	4
Premium pricing	8.5	5
Penetration pricing	35.60	22
Own pricing	6.7	3
Total	100	60



FIGURE: 3.5.3 Source: Primary data

40.7 per-cent of business owners provide their clients reasonable prices. A whopping 8.5 per-cent of dealers use value-based pricing strategies and 8.5 per-cent premium pricing for their customers. A percentage of 35.6 per-cent of traders employ penetration pricing. 6.7 per-cent of dealers utilize their own pricing. Due to their desire to boost sales, new entrants primarily employ penetration pricing. Some vendors charge more for higher-quality products

### 3.5.4 AIM OF PRICING STRATEGY

Table: 3.5.4

Aim of pricing strategy	Percentage of response	Number of response
Higher revenue	23.7	14

Survival	23.7	15
High sales	42.4	25
Growth	10.2	6
total	100	60



FIGURE: 3.5.4 Source: Primary data

Based on the goal of traders' pricing strategies, the data is provided. Forty two per-cent of business owners claim that they require high sales. 23.7 per-cent of traders claim that in order to survive in this industry, they need to generate bigger sales revenues. 23.7 per-cent traders need to survive in this sector. The goal of ten per-cent of traders is to accelerate business growth.

### 3.5.5 FACTORS AFFECTING PRICING STRATEGIES

Table: 3.5.5

Factors affecting pricing	Percentage of response	Number of response
strategies		
Price variations	25.4	15
Demand variations	22	13
Lack of customers	39	25
Competitive pricing policies	11.9	7
total	100	60

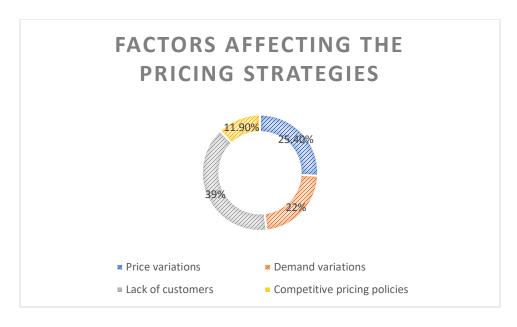


FIGURE: 3.5.5 Source: Primary data

The information above suggests that there are variables influencing pricing tactics. With thirty nine per-cent fewer customers, the pricing approach is affected. Twenty five per-cent of traders think that pricing strategy changes as a result of price differences in sales. Demand changes have a twenty two per-cent impact on the price strategy. The competitive pricing policy has an impact on 11.9 per-cent of pricing strategies. The traders think that product price variations will have an impact on their pricing tactics. Different pricing tactics are used depending on how the demand varies for the various products. This has an impact on traders' pricing methods.

### 3.5.6TRADER OFFER DISCOUNT TO THEIR CUSTOMER

Table: 3.5.6

Trader offer discount to their	Percentage of response	Number of response
customer		
Yes	40.7	25
No	16.9	10
Sometimes	42.4	26
total	100	60



FIGURE: 3.5.6 Source: Primary data

Depending on the discount offered to customers. The forty two per-cent of merchants who responded to the survey claim that they occasionally give discounts to clients. The majority of traders about 40.7 per-cent agree that they offer discounts to customers, while just 16.9 per-cent of traders disagree.

### 3.5.7 DISCOUNT AFFECTS TRADERS PROFITS

Table: 3.5.7

Discount affects traders profits	Percentage of response	Number of response
Yes	60	36
No	21.7	13
Sometimes	18.3	11
total	100	60



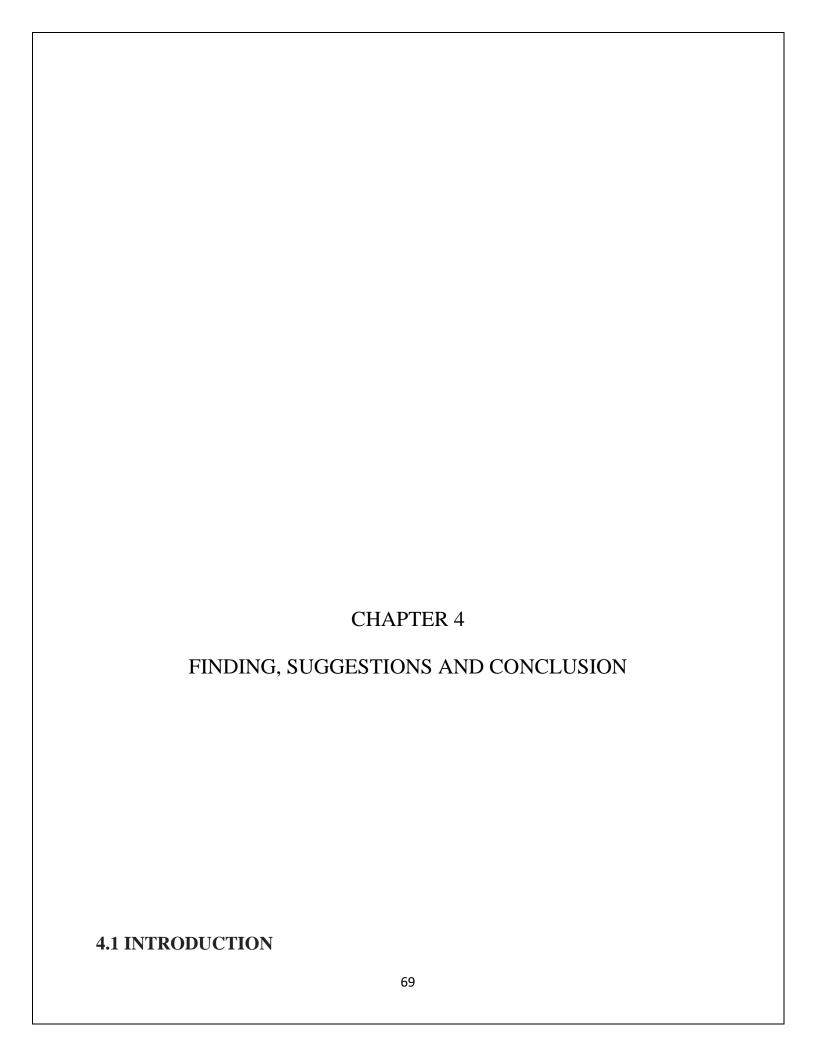
FIGURE: 3.5.7 Source: Primary data

According to the aforementioned data, sixty per-cent of traders concur that offering a discount on those products will boost sales and boost dealers' profits. Customers are not receiving discounts from 21.7 per-cent of the traders. They think that the discount won't result in more revenue. On occasion, traders will give discounts to clients in the hopes of making a profit. A customer discount is occasionally offered by eighteen per-cent of customers

### 3.6 CONCLUSION

The primary data is evaluated based on the goals (to examine the impact of demand, examine the difficulties experienced by plywood traders, and examine the pricing tactics used by the traders). A comprehensive study of the basic information obtained from the plywood traders. The population of the Ernakulam district is the focus of this chapter's investigation. It is clear from the overall analysis that the demand, difficulties, and price methods for plywood traders present a number of hurdles. Demand indicates that there has been relatively little growth in this industry's need for plywood throughout the years. The intensity of competition, the arrival of new competitors, the location, and other factors are among the difficulties faced by the traders.

From the pricing strategy, it was deduced that many traders create various forms of pricing strategies in order to maximise their personal profits.



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The study is based on the variables influencing the demand for plywood traders in the district of Ernakulam. The primary data were obtained via the purposive sampling. For data analysis, 60 plywood traders were collected. It has been demonstrated that traders encounter numerous issues related to their goals, the variables influencing demand, their challenges, and the price tactics they use. This chapter provides recommendations for resolving the issue from the preceding chapter in more depth.

### 4.2 MAJOR FINDINGS

The following list summarises the main conclusions of the study that examined the earnings and expenses of plywood traders in Ernakulam. Based on the study's goals, the conclusions are grouped into three subsections.

### 4.2.1 THE FACTORS AFFECTING THE DEMAND

- A few years ago, traders saw seasonal demand (from July to October), because, in the opinion of the general public, during the Malayalam festival season (chingam), more people build new homes than during the other months. 45 percentage of traders agreed that they don't have any seasonal demand at all, according to the current pattern. The sales are consistently quite poor.
- Everyone now buys items online, based on the current trend. Around 83 percentage of traders admit than online demand, however, is of no value at all in the plywood industry. Online demand is useless in the plywood business since consumers don't understand the quality and colour of the items, which will cause problems.

### 4.2.2 THE CHALLENGES FACED BY THE TRADERS

➤ Clients should approach manufacturers directly if they want goods in large quantities since manufacturers offer clients better discounts and rates than traders. 36.7 percentage of

traders strongly agree that customers opting to buy directly from manufacturer this has an impact on traders' sales.

- ➤ The majority 80 percentage of merchants pay for their own transportation. The profitability of the trader will be impacted if the consumer purchases less products and the shipping distance is too great. Since the cost of transportation will increase with distance. The traders suffer a loss as a result this will cause a serious issue for the traders.
- The impact of COVID 19, floods, and demonetization is still having an impact on merchants' sales.
- ➤ Year after year, the cost of rent rises. Rent can't be paid if there aren't any sales in accordance with it. 34.5 percentage of traders admit that financial success of traders is impacted by this.
- The majority 51.7 percentage of trader's business is significantly impacted by location. The only frequent consumer the traders will receive is if they are not situated near a road or in a densely populated area. They don't attract customers who are on foot. As a result, traders' sales decline, which has an impact on their earnings.
- The plywood industry is one with intense competitiveness. The level of competition has caused a reduction in trader revenue.66 percentage of traders concede it.
- ➤ Because consumers have more options to buy the products from various traders, 41.7 percentage of traders agree that the new entries in the plywood sector have a significant impact on the profitability of the traders.

### 4.2.3 PRICING STRATEGIES ADOPTED BY THE TRADERS

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- ➤ Majority 63 percentage of traders adjust their prices in accordance with it in order to increase sales. Due of this, sales to other traders decline. The profitability of the trader is impacted by this.
- ➤ It is evident from the aforementioned argument that competitors' pricing has an impact on a trader's profitability. 45.8 percentage of traders are sometimes lowering their prices to boost sales in order to make up for those losses. However, these price cuts are only effective up to a certain degree before they become unprofitable. The traders will stop receiving the genuine worth of the goods beyond a certain point.
- ➤ The majority vendors provide their consumers competitive prices. And the majority of businesses set penetration prices for their clients in order to boost sales. 40.7 percentage of trader allow competitive pricing and 35.6 percentage of traders allow penetration pricing.
- ➤ Majority 42 percentage of traders provide sometimes discount to their consumers. Discounts draw customers, which boosts sales for retailers, which boosts profits.

## 4.3 RECOMMENDATIONS

- ➤ Identify the architects, builders, and contractors who commonly need plywood for their projects. To promote long-term partnerships, provide them with exclusive discounts or loyalty programmes.
- Expose your items by taking part in trade events and exhibitions related to your industry. You may meet potential clients and professionals in the field at these events, which offer fantastic networking possibilities.
- ➤ Build a credible online presence by utilising social media sites and a business website. Display your product line, draw attention to its advantages, and provide customer testimonials. If you want to reach a wider audience, think about investing in web advertising.

- ➤ Work together with nearby decorators or interior designers to advertise your plywood goods for their projects. Offer them special discounts or rewards for recommending your products to their customers.
- > Sales will rise as ancillary products are introduced alongside the primary offering.

### 4.4 CONCLUSION

Plywood is more widely and conveniently available worldwide than wood. Plywood has just entered the construction business as a result of the dearth and high cost of wood.

Plywood is a versatile material as a result. Plywood prices change based on the design and use. For a typical indoor workspace, one can use regular plywood. For a particular need, like water resistance, one should use standard waterproof plywood, which is more expensive than the usual kind.

The study's focus is on the factors affecting the demand on plywood: A study among the traders in Ernakulam district. The study's goals are to examine plywood demand, the difficulties faced by plywood merchants, and the various pricing tactics employed by the traders. In recent years, we discovered that there hasn't been a seasonal need for plywood. Additionally, plywood traders do not benefit from the internet demand. The majority of retailers are struggling with customers choosing to buy in bulk straight from manufacturers instead of retailers. The intensity of competition and the influx of new players into the plywood market contribute to a decline in traders' profitability. The plywood industry is impacted by COVID 19, Floods, and Demonetization. When customers purchase in very small quantities and the shipping distance is too long, the sellers bear the majority of the transportation costs, which results in losses for the traders. The location also has an impact on the merchants' sales.

The traders have significant hurdles due to their geographic location because they cannot attract foot traffic if they are not near a road. Many traders adjust their prices to increase their sales, which has an impact on the sales of other dealers. To increase their sales, the majority of traders set competitive and penetration prices.

By studying the data, discovered that the majority of the traders want to increase their sales because of the intense rivalry, the influx of new players into the market, the strong demand for plywood, and the difficulties that the traders must overcome.

To get out of those predicaments, the traders need to cultivate relationships with builders and contractors, use marketing and promotion, go to trade events and exhibits, work with interior designers, and sell complementary products. By doing this, the dealers can boost their sales.

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# **QUESTIONNAIRE**

- 1. Name:
- 2. Age:
  - 18-30
  - 30-50
  - 50-70
  - >70

# 3. Sex:

- Male
- Female

# 4. Education Qualification

- Illiterate
- SSLC
- HSS
- UG
- PG
- Other...

# 5. Annual Income

- <50,000</li>
- 50,000-1,00,000
- 1,00,000-5,00,000
- 5,00,000-10,00,000

# 6. Years of experience

- <10 years
- 10-20 years
- 20-30 years
- 30-40 years
- 40-50 years
- >50 years

# 7. How many hours do you work in a day

- <5
- 5-8
- 8-12
- >12

8. Season when the demand is highest
• January-April
<ul> <li>April-July</li> </ul>
<ul> <li>July-October</li> </ul>

- October-December
- No seasonal demand
- 9. Rate the online demand for plywood
  - Higher demand (Useful)
  - Lowest demand (Not useful)
- 10. According to quality which has higher demand
  - Non quality products
  - Quality products
  - Both
- 11. According to production which has higher demand
  - Import produce
  - Local produce
- 12. Customer opting to buy directly from manufacturer affect business
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- **14.** Import plywood
  - Yes
  - No
- **15.** Delay in delivery truck on the business profit

Return
No compensation
Replacement
16. How do traders compensate for the damaged products and products that are damaged by
the seller through sales.
• Discount
• Gift
• Vouchers
• Return
<ul> <li>No compensation</li> </ul>
• Replacement
17. What are the transportation costs that you incur
Buyer incur
• Seller incur
<ul> <li>Sometimes buyer</li> </ul>
18. Do you have insurance
• Yes
• No
19. Which type of insurances that the traders have
• Fire
• Flood
79

**16.** How does the seller compensate for the import (international and domestic) damages

Highest effect

Lowest effect

Sometimes

Discount

•	Total property
•	Truck
20. Adver	sity of Demonet
•	Terribly distre
_	A ffootod

- netization, Flood, COVID 19
  - tressed
  - Affected
  - Unaffected
  - Very little affected
- 21. Does your revenue cover your rent
  - Yes
  - No
  - Own building
  - Sometimes
- 22. Location of traders store affect your sales
  - Yes
  - No
  - Sometimes
- 23. Level of competition
  - Very high
  - High
  - Low
  - Very low
- 24. New entrants affect the profitability of traders business
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- 25. Pricing of competitors affect traders business
  - Yes
  - No

- Sometimes
- 26. Measures taken to offset the damage caused by the pricing strategies of the rivals
  - Reduction in price
  - No reduction in price
  - Sometimes reduction in price
- 27. What are your pricing strategies with regards to the customers
  - Competitive pricing
  - Value based Pricing
  - Premium pricing
  - Penetration pricing
  - Own pricing
- 28. Aim of pricing strategy
  - Higher revenue
  - Survival
  - High sales
  - Growth
- 29. What are the factors affecting pricing strategies
  - Price variations
  - Demand variations
  - Lack of Customers
  - Competitive pricing policies
- 30. Did you offer discount to your customers
  - Yes
  - No
  - Sometimes
- 31. Discount affects traders profits
  - Yes
  - No
  - Sometimes

