



**LOCAL RICE ENTREPRENEURSHIP AND RESIDENTS’
PATRONAGE BEHAVIOUR IN THE WESTERN REGION OF
GHANA**

Submitted in fulfilment of the requirements for the degree of masters in the
Faculty of management sciences at Durban University of Technology

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ABSTRACT

Rice produced in Ghana ought to have been patronized by Ghanaians so that local rice entrepreneurs' businesses will grow and subsequently contribute to agricultural Gross Domestic Product. Despite the massive campaign on buy made in Ghana products, evidence shows that patronage of local rice is low and local rice farmers are unable to sell their rice produce, thereby creating surpluses. The study therefore assessed local rice entrepreneurship and patronage behaviours among residents in the Western Region of Ghana. The study adopted both quantitative and qualitative approaches. This empirical study adopted quantitative and qualitative (mixed) methods. A structured questionnaire aided the quantitative research approach to source data, while qualitative data was used to access data through focus group discussions utilizing an interview schedule. Participants in the focus group were selected through a purposive sampling technique. Multi-stage sampling technique was used to source 100 adult residents across the research settings as participants in gathering the quantitative data. Data analysis involved the SPSS version of 27 in making meaning of quantitative through two primary analytical tools such as descriptive and inferential, while qualitative data was analysed through the thematic tool in the form of themes and sub-themes. The findings revealed high patronage of local rice among Western Region households. Again, households in the Western Region of Ghana had a better attitude toward local rice. However, there is a neutrality of consumer ethnocentrism in the patronage of local rice. There are factors associated with local rice patronage in the Western Region of Ghana, including gender, marital status, occupation and the average percentage of income spent on food were significant factors associated with the local rice patronage in West Africa Ghana. In addition, local rice entrepreneurs face material or equipment issues, human factors and political issues. It was recommended that local rice should be structured, well packaged and advertised to raise awareness or patronage of households in the Western Region of Ghana. Moreover, Ghanaians should always consider local rice first in the market before other foreign rice. Besides, it was suggested that the government's plan to establish one district factory should also target local rice produce.

Key terms: Local Rice Entrepreneurship, Local Rice Patronage and Adult Residents, Local Rice, Foreign Rice.

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DEDICATION

To my children, Keziah Ofosu-Appiah and Oliver Ofosu-Appiah; you are my world, and I will continue to love you.

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LIST OF ABBREVIATIONS

LRE: Local Rice Entrepreneurship

RPB: Residents Patronage Behaviour

LRF: Local Rice farmers

SMEs: Small and Medium Enterprises

MoFA: Ministry of Food and Agriculture

PFJ: Planting for Food and Jobs

LR: Local Rice

FR: Foreign Rice

LRP: Local Rice Patronage

RP: Rice Patronage

LRC: Local Rice Commercialisation

PLR: Prevalence of Local Rice

CHAPTER ONE

INTRODUCTION AND CONTEXT OF THE STUDY

1.1 INTRODUCTION

Rice has become everyday staple food in Ghana and its patronage continues to rise along with the rising population. Businesses engaging in the production and sale of rice in Ghana are predominately SMEs. In the literature of SMEs, the question of what constitute a small or medium enterprise has become a major concern for many authors. The concept of SME has been defined differently by many authors. The definition of firms by size varies among researchers. Some attempt to use the capital assets while others use skill of labour and turnover level. Others define SMEs in terms of their legal status and method of production. The European Commission (EC) defined SMEs largely in term of the number of employees as follows: firms with 0 to 9 employees as micro enterprises; 10 to 99 employees as small enterprises and 100 to 499 employees - medium enterprises (Turkson, Abor and Iddrisu, 2017).

The Ghana Enterprise Agency defines Small Enterprise is the enterprise with a structure and threshold of thirty permanent employees, turnover of six million Ghana Cedis and fixed asset valued six million Ghana Cedis. The agency also defines a medium enterprise as an enterprise with a structure and a threshold as of hundred permanent employees, turnover of eighteen million Ghana Cedis and value of fixed asset is also eighteen million Ghana Cedis (GEA, 2021). The adopted the Ghana Enterprise agency definition and defines local rice SMEs as businesses that employ value-addition and meet the threshold as determined by (GEA, 2021). Therefore, any other business, regardless of size, that trades in foreign rice is not considered an SME. Local rice entrepreneurs significantly

contribute their quota to the economic development of the nation through employment creation, food provision and GDP growth. (SRID, 2015)

However, evidence shows that local rice entrepreneurs continue to suffer due to stiff competition, low patronage, bad roads and various factors (Sharma, Dev & Sharma, 2021). Consequently, local rice entrepreneurs cannot recover their investments in rice production and usually have enormous tons of rice kept in silos without buyers. This is the main issue informing this study.

Therefore, this chapter contains the study's context, which provides a general overview of the study's focus. That is the problem statement, which explains why the study should be conducted or why the research is necessary, as well as the general and specific objectives, including the research questions which act as a guide for gathering data for the study. It also discusses the study's significance, demonstrating how crucial it can be to the growth of these regional rice entrepreneurs. The scope of the study, which identifies the study's limitations, is also included in this chapter.

1.2 CONTEXT OF THE STUDY

Rice has become a common staple food worldwide because of its multi-purpose use, as it is prepared and eaten in several ways (Melgar-Lalanne, Alvarez & Castro, 2019). In Sub-Sahara Africa, rice is usually prepared by boiling and then eaten using various soups and stews. Occasionally, rice is milled into flour for breakfast, noodles, and alcoholic beverages (González, Calderon, Bosch, Timoner, Castell, Marques and Domingo 2020). Kumar, Narwah, Verma & Singh (2022) posit that rice has become a significant ingredient for most

brewery, distilling and manufacturing companies. It is, therefore, clear to categorize the use of rice into domestic and industrial.

Without a doubt, rice continues to be crucial for the growth of any economy. By producing rice, countries like Bangladesh, China, Thailand, Pakistan, and Vietnam have supported their economies by earning foreign currency through rice exports (Tolentino and Pana, 2020). Increased rice output could encourage foreign currency savings and boost small farmers' gross margins Arunrat et al. (2021). More so, Arribas et al. (2020) affirm that, rice continues to assist economies in Africa by offering 715 kcal/day, 27% of the nutritional energy supply, 20% of nutrient-dense protein, and 3% of healthy and nutritious dietary fat.

The rice distribution chain industry, which links the production and supply sectors before reaching individual consumers in Ghana, makes a considerable economic contribution (Donkoh, 2019). In recent times in Ghana, rice has been prioritized as it remains second most important grain next to maize grain and feed (Raheem, Dayoub, Birech and Nakiyemba 2021). In addition, rice was the first cereal imported into the nation; from 2005 to 2009, it accounted for 5% of total agricultural imports and nearly 58% of imports of cereals (Angelucci, Asante-Poku and Anaadumba, 2019).

Over the past decade, Ghana has seen a remarkable rise in rice consumption. This massive rise in consumption was fueled by the establishment of numerous restaurants and fast-food joints, the ease of preparing rice and increasing urbanization (Kommey, 2020). According to Lu, Addai and Ng'ombe (2021), rice consumption per capita in Ghana is estimated to be around 48 kilograms

per year, and with the Ghana Statistical Service's estimation of a population of over 30 million in 2020, rice consumption was also estimated to rise accordingly. The consumption of rice is evident that rice is among the significant cereal that feeds a large percentage of the Ghanaian population. Such a trend has compelled the Government of Ghana to initiative several programmes such as PFJ and the provision of other subsidies to boost local rice production to enable the country to meet its rice needs.

Rice patronage in Ghana in the past recent years has significantly increased. The country's rising population, rapid urbanization, expanding restaurant and fast-food options, industrialization, and the simplicity of preparing rice are all factors that have contributed to the increase in rice consumption (Teye & Torvikey, 2018). With a population of 28.2 million people, rice patronage in 2016/17 was estimated to be around 35 kg per year. Rice consumption in 2017/18 was projected to be 1.0 million MT. According to GOG sources, annual per capita rice consumption was predicted to reach 40 kg by 2020 (Schmidt, Dorosh and Gilbert, 2021).

Evidence from Ghana's rice production shows that rice production has seen incremental growth over the past decade to about 10 percent per annum between 2008 and 2019, with an exceptionally sharp increase of 25 percent in 2019 (Ali, Ghosh, Osmani, Hossain and Fogarassy, 2021). Since 2008, Ghana's paddy rice production has increased at an annual rate of 11.1 percent. In 2019, production totalled 963,000 tons (equivalent to 665,000 tons of milled rice). The expansion of rice-growing land, which rose at a rate of 6.9% per year, was a significant driver of output growth; yields, on the other hand, grew at a rate of 4.5 percent per year (Epprecht et al., 2018). A key trend in the rice industry is a steady shift

toward cultivating more fragrant varieties, with an estimated 45 percent of rice farmers presently doing so (Ragasa et al. 2014). Although regional rice yields vary significantly due to differences in production conditions and practices, aromatic rice varieties have gross margins that are twice as high as non-aromatic varieties (Yuan, Stuart, Laborte, Elreira and Dabermann, 2022).

To feed the growing population, there is a need to sustainably increase food production, particularly in Africa, which cannot be over-emphasized. To achieve this, agricultural policies must be in line with national, regional, and international objectives (Fróna et al., 2019). If food security and human welfare are to improve, the Sustainable Development Goals (SDGs) 1 and 2, which aim to end poverty and hunger by 2030, are essential. Increasing agricultural productivity through commercialization and adopting better production practices is crucial to meeting SDGs 1 and 2 because it will primarily improve the entrepreneurial farming practices of farmers in developing nations like Ghana (Baffoe et al., 2021).

In order to boost productivity, Ghana's current agricultural policy documents (the Food and Agriculture Sector Development Policy, FASDEP I & II) emphasize commercial, entrepreneurial farming. Rice production has received more attention, which reflects its importance in battling food insecurity and reducing poverty among poor smallholder farmers (Rulisa et al., 2022). Producing a marketable surplus of traditional crops, particularly rice; crop diversification; livelihood diversification; and post-harvest handling strategies, such as increasing the value of farm products through processing, are all examples of how agricultural commercialization must be keenly recognized in four dimensions (Miller et al., 2018). From the preceding analysis, it is evident

that local rice entrepreneurs will continue to live in poverty if much is not done to ensure that their produce can effectively compete against foreign rice in the local market. Achieving this requires research into local rice entrepreneurship and patronage behavior among Ghanaians.

1.3 STATEMENT OF THE PROBLEM

Globalization's effect of introduction of different countries' products on the domestic markets, particularly in Africa has exposed residents of these countries to a wide range of choices. Consequently, most domestic products continue to suffer in the local market as they face competition from foreign products (Mishra et al., 2022). Recognizing such a phenomenon and its impacts on the local economy, the government of Ghana, over the past decade, has embarked on the campaign for buy made in Ghana products, i.e., 'Proud to be Ghanaian.' This notion highlights the importance of Ghanaians taking pride in their national heritage and all things Ghanaian and patronizing products made in Ghana (Sulemana, 2019). But the question is does Ghanaian-patronized local rice produce compare to foreign-produced rice?

The study of Omale et al. (2020) suggests that rice produced in Ghana ought to be patronized by Ghanaians to help boost the country's GDP by reducing importation into the country. This will improve the lives of local rice entrepreneurs in the industry (Omale et al., 2020). However, available evidence indicates that local rice patronage is low, and this situation has resulted in large bags of paddy rice kept in silos and farms without buyers (Radhakrishna, 2020). Ghana Broadcasting Corporation (2019) asserts that over seventy thousand bags of paddy rice went bad in rice fields in the Builsa districts in the Upper East

Region, thus, creating a rice shortage. This situation is not peculiar to Builsa (Fumbisi and Gbedembiisi) but to other districts in the Volta Region (SouthTongu, North Tongu, Cental Tongu, Ketu North, Akatsi South, Akatsi North, Ho Municipal, Afadzato South, Hohoe Municipal, Jasikan, Biakoye, Kadjebi Nkwanta South). Thats, local rice entrepreneurs have not been able to successfully commercialize their produce (Grain Annual Report, 2018). One significant effect of the inability of local rice entrepreneurs to find a market for their produce can also be seen in the Ministry of Food and Agriculture (MOFA, 2018) and the Grain and Feed Annual report (2020). These reports state that the urban population consumes only 20 percent of locally produced rice due to their preference for imported long-grain aromatic rice, popularly known as perfume rice. Most of the long-grain fragrant rice patronised by Ghanaians is imported rice which constitutes about 76 percent of the total proportion of rice import demand and leaves the remaining percent for domestically produced rice (Oppong, 2020).

There is anecdotal evidence indicating that, as local rice entrepreneurs' productivity continues to increase from successive government regimes to the present day, the patronage of local rice is unable to keep pace with its increased production. The increase in imported rice on the local market makes matters worse for local rice entrepreneurs as they face intense competition (MOFA, 2018).

This creation of a local rice glut has made it impossible for entrepreneurial rice farmers to pay back their loans with interest and consequently are unable to recover investment put into rice production. The situation harms the local

economy and does not enhance the lives of those who engage in the local rice industry (Tondel et al., 2020).

It is regrettable to note that, while local rice entrepreneurs cannot commercialize their produce, there are several initiatives by the government to increase rice production. However, given the current situation and the government of Ghana's Planting for Food and Jobs programme and the Savanna Agriculture Development project (SADP) that aims at increasing rice production, the situation is expected to be worse (Anyansi-Archibong, 2021).

The welfare of the rice farmers depends on their net returns from rice cultivation. When high output meets fair commodity prices under the current input price regimes, farmers' profit margins rise (Zakaria et al., 2021). Increased profit results in higher disposable incomes, which raises the possibility that farm households' standards of living will rise as a result of increased spending (Zakaria et al., 2020). Local rice entrepreneurs (LRE) need to understand that there is little or no future for local rice entrepreneurs unless they become more entrepreneurial in the way they run their rice businesses. They must increasingly produce for markets and profits (Sugimoto, 2022). In this direction, this research seeks to investigate why local rice production has gone up in Ghana, yet local rice farmers are unable to adequately commercialize local rice.

Reassessing literature revealed few studies on home-grown rice in Ghana. Ehiakpor et al (2017) and Abukari (2019) studied factors associated with demand for rice produced in Upper East and Northern region respectively in Ghana. Further studies were conducted on Ghana's rice value chain resilience in the context of Covid 19 (Adu-Adinkra, 2021) and socio-economic analysis

of rice production in Ghana (Obirih, 2008) and suggested further studies into developing varieties that possess preferred qualities. In their research on parboiled rice processing in Ghana's northern region, Abdulai et al. (2019) concentrated on determinants, constraints, and opportunities

From the foregoing, it is clear few studies available on local rice were conducted in the Northern part of Ghana; neglecting Western Region where the growth of local rice is emerging. That is, no study on home-grown rice has been carried out in the Western Region of Ghana. In addition, none of the study investigated challenges of local rice farmers, though Abdulai (2019) suggested further study in challenges of local rice entrepreneurs; that is, explore local rice entrepreneurship and patronage behaviours of Ghanaians with a specific focus on the Western Region Households.

1.4 MAIN OBJECTIVE

The main objective of the research is to assess the challenges associated with local rice entrepreneurship and patronage behaviours among residents in the Western Region of Ghana.

1.4.1 Specific Objectives

Specifically, this study sets out to:

- To determine the patronage rate of local rice in the economy of the Western Region of Ghana.
- To describe residents' attitudes toward local rice in the Western Region of Ghana.
- To determine consumer ethnocentrism in home-grown packaged rice in the Western Region of Ghana.

- To determine the influential factors of patronage of local rice in Ghana.
- To examine the challenges of local rice entrepreneurship among farmers in the Western Region of Ghana

1.5 RESEARCH QUESTIONS

The main research question is “what challenges are associated with local rice entrepreneurship and patronage behaviours among residents of Western Region?

5.1 Specific Research Questions

- What is the rate of patronage of home-grown rice Western Region of Ghana?
- What are the residents’ attitudes toward local rice in the Western Region of Ghana?
- What is the consumer ethnocentrism in home-grown packaged rice in Western Region of Ghana?
- What are the influential factors of patronage of rice in Western Region of Ghana?
- What challenges are associated with local rice entrepreneurship among farmers in the Western Region of Ghana?

1.6 SIGNIFICANCE OF THE STUDY

The outcome of the research will aid policymakers and stakeholders in the Ministry of Food and Agriculture, especially the Agriculture Ministry, to better understand the Ghanaians’ patronage of home-grown rice and the challenges local rice farmers’ encounter.

The aftermath of this work would be helpful for individuals who want to be local rice entrepreneurs in the corporate world. Furthermore, the findings can be explored and implemented by directors and leaders in the agricultural ministries to concern local rice farmers and the dynamic management of food and agriculture. The study's outcomes study will also enrich existing literature on local rice patronage, consumer attitude toward local rice, factors that affect consumer patronage of local rice and challenges in local rice farming or production. Also, the study will guide researchers and students who wish to undertake studies related to this present study.

1.7 DELIMITATIONS

A delimitation delimits a study by geographical location, age, sex, population traits, population size, or other considerations (Dantoft et al., 2022). Delimitation is used to make the study better and more feasible, not just for the researcher's interest. It also identifies the study's constraints or weaknesses, which are not within the researcher's control (Theofanidis & Fountouki, 2018). The study was limited to the Western Region due to the closeness of the researcher's location and because there are rice farmers in the region (Zakaria et al., 2020). Since the study cannot be conducted in the entire Western Region, the target population size was 100 individual household heads who decided on the food item to be consumed by their households.

1.8 LIMITATIONS OF THE STUDY

Concerning the study, during the procedure for collecting data, the researcher's problem was the respondents' unwillingness to respond to the questionnaires. This is a significant constraint in Ghana, where the flow of information may be

corrupted by excessive bureaucracy, suspicion and even fears of superior managers being unfairly targeted. Furthermore, the schedule made it difficult for the household heads to administer the questionnaires, as they rarely adhered to their break time at home. Another challenge was the time constraints faced by the researcher. Administration of questionnaires and interviewing (Focus Group Discussion) consumed a lot of time, considering the limited time range for the study. This had some health implications on the researcher. Moreover, household heads' inability to reveal strategic data in the interests of confidentiality was a drawback of the study. Finally, due to the pandemic, some respondents hesitated to allow the researcher to visit their homes and even to touch the questionnaires, while some refused to administer the questionnaires.

1.9 ORGANIZATION OF THE STUDY

This research consists of five chapters. The first chapter serves as an introduction and sheds light on the research context, problem description, research goals, and research questions. The theoretical, conceptual, and empirical literature is reviewed in Chapter 2. Chapter 3 describes the working methodology. This chapter describes the study design and approach, study areas, data sources, data collection procedures, sampling methods, and types of analysis. This chapter gives an idea of how the findings and conclusions of the study are reached. Chapter four presents detailed results, analysis and a discussion based on the data collected. Chapter five provides a conclusion for the research. It summarises the procedures adopted in the study, discuss the research outcomes, and then draws conclusions. It also gives implications of the outcome and recommendation for further research.

1.10 OPERATIONAL DEFINITION

This section gives brief descriptions of significant concepts of interest in the study. The study adopted the following operational definitions of concepts:

Local rice entrepreneurship: For this study, local rice entrepreneurship is defined as owner-managers of rice farms who desire to grow the rice business in Ghana

Local rice patronage (LRP): The author of this study defines local rice patronage as the active purchasing of locally produced rice for household consumption.

Competition: The study considered competition as SMEs or large businesses into value addition activities of foreign rice on the market.

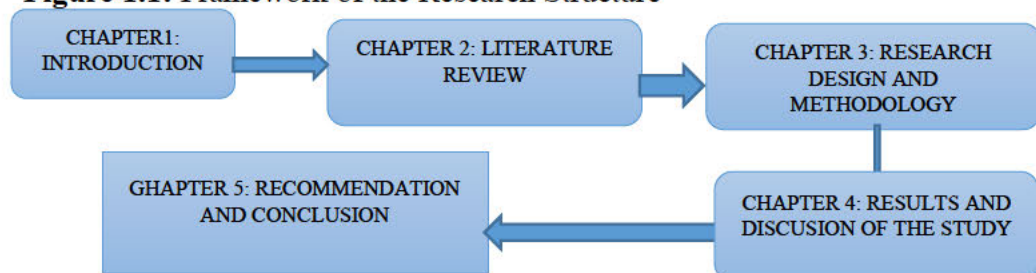
Adult Residents (AR): Individuals residing within the region either in a rented or/ own house; and make the final decision about the food item at the time of the study.

Local Rice (LR): In the context of the study, local rice refers to all rice grown and packaged in Ghana,

Foreign Rice (FR): The study considered all rice grown outside Ghana. Also, rice grown outside Ghana but packaged in Ghana is considered foreign rice.

1.11 RESEARCH STRUCTURE

Figure 1.1: Framework of the Research Structure



Source: Author's Construct, (2022)

As represented in figure 1, the study is structured into five main chapters as follows:

The context of the study is described in **Chapter 1** and includes an overview of the main concepts. The general and specific objectives that lead to research questions and serve as a road map for gathering data for the study, along with the problem statement, which identifies the need for the study or why the study should be carried out. It also discusses the study's significance, demonstrating how pertinent the study is to the growth of regional rice entrepreneurship. The study's scope, which identifies the study's upper limit or restrictions, is also included in this chapter.

Chapter two reviews theoretical and empirical literature on local rice entrepreneurship and residents' patronage behaviours. This component of the study summarizes information about the research target field from well-known academics who have worked in a related field

Chapter three presents the procedures followed and the methods employed in carrying out the research. The study area is thoroughly described in this chapter, with particular attention paid to the main economic activities, the research design that was used, the data source, the target population, the sample, and the sampling procedure. The chapter also discussed the techniques used for data collection, the research tools used to gather primary data, and the methods for processing, analysing, and presenting the data. Additionally, it provides information on ethical issues, problems encountered during the data collection phase, and reliability and validity of the data were discussed.

Chapter four displays and discusses the estimation results of the study. The section starts by presenting the demographic characteristics of the participants and the result obtained for the patronage rate of local rice, attitudes towards local rice and consumer ethnocentrism in the patronage of local rice

Chapter five shows a summary of the study, conclusions made from the research and recommendations made from results obtained for each of the objectives

1.12 CHAPTER SUMMARY

This chapter provided a summary of the study with an emphasis on the value of regional rice and the contribution of regional rice entrepreneurs to economic development. It once more listed the problem, goals, and research questions for the project. The relevance and restrictions of the study were also explored.

CHAPTER TWO
THEORETICAL APPROACHES TO LOCAL RICE
ENTREPRENEURSHIP AND RESIDENTS PATRONAGE
BEHAVIOUR

2.1 INTRODUCTION

The relevant theory which underpins this research is discussed in this chapter. The conceptual framework was developed based on the empirical review to understand residents' attitudinal change regarding patronage of rice. In addition, challenges that confront local rice entrepreneurs to grow to rice are also discussed. The chapter also looks at forces that drive patronage of rice. Finally, the chapter also looks at the research gap based on empirical review

2.2 THEORETICAL REVIEW

In this section, the theories supporting the study are presented and explained. Consumer ethnocentrism theory is the theory forming the study's foundation and is described in the subsequent sub-sections.

2.2.1 Theory of Consumer Ethnocentrism

Consumer ethnocentrism is the propensity for customers to show a favorable bias toward goods produced in their own nation while avoiding goods imported from other nations. (Karoui & Khemakhem, 2019). The theory of consumer ethnocentrism emphasizes recognising consumers' psychological and upstanding feelings in judging domestic products in contrast to foreign goods (Wang et al., 2021). Consumer ethnocentrism posits that the patronage of foreign products by citizens or natives of any nation or culture is unethical, unpatriotic and harms the domestic economy (Johnson, 2019). Consumer

ethnocentrism works perfectly when the patronage attitude of natives of a different culture is unfriendly to foreign products, hence the natives' unwillingness to buy the foreign product (Lee et al., 2020).

They are unbothered whether their patronage behavior affects the local economy or not (Sesay, 2021). According to Costa et al. (2018), ethnocentric consumers demonstrate a high level of patriotism and promote the patronage of home-grown products against foreign products (Busari & Odetoyinbo, 2021). This places home-grown products at a unique competitive advantage as far as the competition of foreign products is concerned (Keong & Dastane, 2019). Thus, increasing consumer ethnocentrism results in the attachment of exceptional pride to national identity, enhancing brand equity (Cleveland et al., 2021). To determine the level of consumer ethnocentrism, a multi-item scale called the Consumer Ethnocentric Tendencies Scale (CETSCALE) displays a propensity to choose domestically produced goods over those with foreign origins. Understanding the stability of the measure through time is necessary for proper usage of such a scale. (Sulphey & Faridi, 2020).

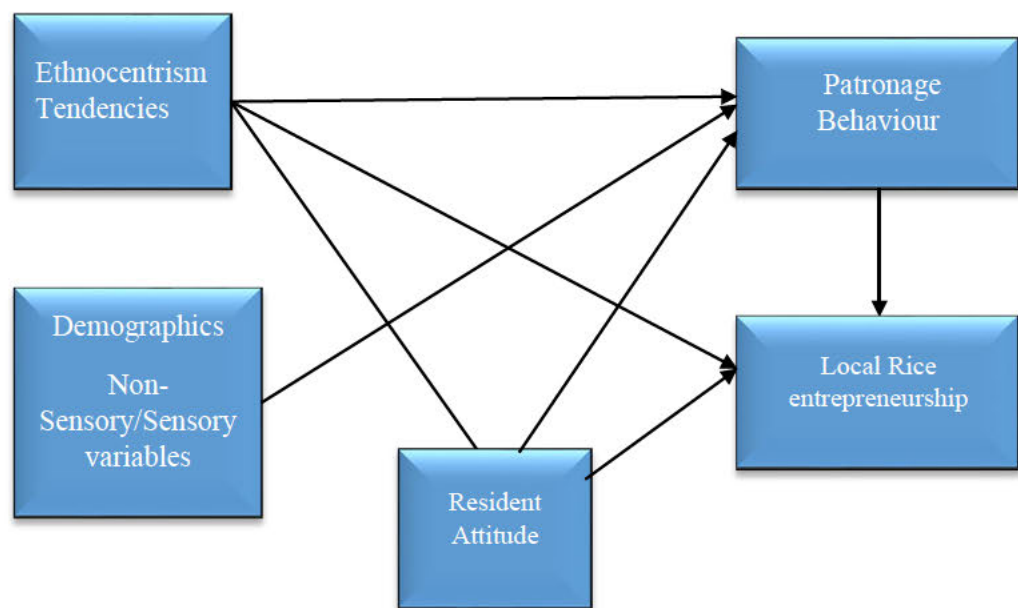
Singh et al. (2020) posits that ethnocentrism will occur due to the following factors: individualism, conservatism, cultural exclusivity and patriotism. In addition, Vuong and Giao (2020) identified factors moderating the effect of consumer ethnocentrism tendencies on individuals' attitudes toward importing products. They realised the perceived necessity of imported products and the economic threat that imports may pose to perceived personal welfare or the welfare of the domestic economy. To this end, local companies need to develop an entrepreneurial spirit and understand the dynamics of such impacts on

consumers' evaluation of home-made and foreign products (Bianchi et al., 2018).

There is no doubt that cultures with high levels of cultural superiority will desire to patronize homegrown foods to boost the lives of local entrepreneurs in that particular industry. However, one significant effect of colonization on Africa and Ghana is the feeling that anything considered European is superior; therefore, consuming European products raises individual social class (Ocheni and Nwankwo, 2012). Against this background, the research aims to investigate the effects of ethnocentrism on residents' patronage of local rice.

2.1 CONCEPTUAL REVIEW

Figure 2.1: Conceptual Review



Source: Author's construct, (2022)

The conceptual review, as presented in figure 2 above, was developed by the researcher based on the empirical review. The influence of consumer ethnocentrism on consumer behavior is triggered by demographic characteristics that include gender and marital status (Karoui and Khemakhem,

2019; Akbarov). According to Erkaya, (2018) demographic factors (age, education, and income) are correlated with consumer patronage behaviour. Petrovicova & Gibalova, (2014) have confirmed that the degree of consumer ethnocentrism is a function of demographic characteristics, socio-economic factor and regional economic factor frequently used demographic variables that influence are age, gender, education and income ((Lopez et. al 2016)

Ethnocentrism reinforces attitude and perceived control, which favorably affects the patronage intention. When compared to labels that indicate the rice's origin, items with generalist indication likely to be preferred. When the consumer's ethnocentricity is taken into account, this trend is strengthened (Luis Pedro da Rocha Miguel, 2021). Through emphasizing the benefits of purchasing local rice, such as the positive impact on the national economy or the sustainable purchase made possible by reducing the distance between production and consumption, local rice entrepreneurs lessen the difficulties associated with operating and patronising local rice. The conceptual framework above depicts that ethnocentrism variables significantly influence residents' patronage behaviour of rice. In addition, demographic factors and attitudes also affect residents' patronage behaviour. These determinant factors determine the current state of local rice entrepreneurship, influencing challenges and prospects associated with local rice entrepreneurs.

2.4 LOCAL RICE ENTREPRENEURSHIP (LRE)

These are **rice** farmers who have entrepreneurial mindset, practical decision-making abilities, risk-taking dispositions (Yoshida et al., 2019). Through entrepreneurship, rice farmers are able to grow their businesses by utilising

technology and have identifiable markets for their produce ((Lans et al, 2017)). That is, successful rice entrepreneurs have a marketing-focused mentality and are aware of the value of utilizing technology in agriculture (Cheriet et al, 2020). An entrepreneurial rice farmer is a determined and creative leader, always looking for opportunities to improve and expand his rice farm business. Entrepreneurial rice farmers assume calculated risks, and take responsibility for both profits and losses. Entrepreneurial rice farmers are passionate about growing farm business and is constantly looking for new opportunities.

Small-scale rice growers must demonstrate a notable capacity for adaptation. They discover innovative ways to develop their farms. To boost productivity, diversify production, lower risk, and ultimately improve profits, they experiment with different kinds of seeds and alternative technology (Lans et al., 2017). They take calculated risks to expand or open up new markets for their rice produce as they become more market-oriented. Small-scale rice farmers and extension agencies must recognize that their future is bleak unless they adopt a more entrepreneurial approach to managing their farms.

2.5 EMPIRICAL REVIEW

This section reports the findings obtained by previous studies on the topic under study. The section reviews literature relating to overview, definition and challenges of local rice commercialization. In addition, the section reviews imported and local rice on the local market, factors associated with the patronage of local rice with the following sub-headings: price effects of patronage, price effect of related substitute, disposable consumable income and its effect on patronage, size of household and patronage, taste, appearance

milling and cooking quality and how they influence patronage. The section finally looks at literature on consumer attitude towards local products.

2.6 OVERVIEW OF COMMERCIALIZATION

Several governments and developmental agencies are now embracing agricultural productivity growth and intensification (Kim et al., 2022) and farm expansion, leading to a rise in the amount of farm produce marketed. enlargement, resulting in an increasing marketed volume of farm produce. An increase in income from such processes may lead to a rising standard of livelihood regarding household assets, food security and, thus, poverty reduction (Kansiime et al., 2021). Agricultural commercialisation is necessary, particularly at the national level, as it not only results in food supply but also maintains low prices of food and meet the increasing urban demand for food. In addition, trading in agricultural produce including rice becomes a major source of foreign exchange and employment for countries such as Thailand and China (Suebpongsang et al., 2020).

2.7 DEFINITION OF RICE COMMERCIALISATION

Agricultural commercialization has not seen a universally acceptable definition; hence it has been defined in several ways depending on the researcher's perspective (Newton et al., 2020).

According to How et al. (2019), the meaning of the concept of commercialisation is not crystal clear; therefore, it creates misunderstanding and barriers to developing policies into practice. Nanhthavong et al. (2021) posit that agricultural commercialisation occurs when entrepreneurial farmers produce purely for the market. Market demand is achieved through acquiring

physical resources such as inputs and human resources. It is emphasized that agricultural commercialisation should be considered from both rising market surplus on the output side and higher usage of agricultural inputs on the input side. Mgale and Yunxian (2020) shared a similar view. They defined it as the aggregation of factors that include farmers, input suppliers, transporters and millers who use various ways to exploit existing opportunities to achieve an increased value of marketed farm produce. Through commercialization of cereals (rice), poverty reduction among several households would be achieved (Melese et al., 2018).

Generally, agricultural commercialisation is the gradual improvement achieved through market demand; however, the rate of acceleration is determined by external enhancers, including investment by the public development stakeholders' agencies or social actors (Mapumulo, 2022). Martey et al. (2012) define commercialization of agricultural produce as the movement from livelihood to market-driven farming. Thus, the farmer's mind is moved from survival to an economic entrepreneurial mind (Varga, 2019).

Agricultural commercialisation refers not only to entrepreneurial farmers who produce on a large scale but also those who produce on a small scale and are profit-oriented (Van Tuijl et al., 2018).

Srivastava and Saxena (2021) use the marketed surplus ratio as a criterion to determine the extent of agricultural commercialization. The marketed surplus ratio is expressed as the value of crop sales as a percentage of the value of crop production. The use of the market surplus ratio has also been affirmed by (Nunez et al., 2021). They see agricultural commercialisation as the point where

the farmer sells a surplus quantity of produce. This means that the individual entrepreneurial farmer takes away what is enough for the family and then sells the surplus to recover investment into agricultural production.

Donkoh (2020) classified the levels of agricultural commercialization in terms of percentages as subsistence farmers achieving market surplus of 25% of overall output, whereas semi-commercial entrepreneurial farmers can produce a surplus of 25% to 50% of total production. Entrepreneurial commercial farmers produce a marketable surplus above 50% of the total production (Donkoh, 2020). For the sake of this study, agricultural commercialisation is limited to entrepreneurial rice farmers, regardless of farm size and the number of employees, who can successfully add value, find a market for their produce, and thus are profit oriented (Sekyi et al., 2018).

2.8 PREVALENCE OF RICE IN GHANA

Ghana has distinct rice market segments that include open traditional markets, mini and large supermarkets and shopping malls with enclosed spaces. Rice is prevalent on all the distinct markets (MoFA, 2020; Ayeduvor, 2018). Unbranded local rice is prevalent on open traditional markets (Alhassan, Frimpong and Mohammed, 2015). A large number of unbranded local rice are available in bowl and sack in the open traditional market. On the contrary, imported rice that is branded, well-packaged, and available in several weights (1, 2, 5-, 10-, 25-, and 50-kilogram packs) with unique packaging showing country of origin are exclusively prevalent in supermarkets (Coffie et al., 2023; Ayeduvor, 2018)

Rice available on open traditional markets in Ghana usually have the following features: medium-size grain, presence of foreign materials, yellowish grains and broken grain. On the other hand, prevalence of rice in supermarkets usually has attributes that are: white, long grain, aromatic, low share of broken grains; and absence of foreign materials (MoFA, 2016). Brands of packaged local rice, such as Royal Farmers, DUQ, Aduanehene, Babrina, and Esisel, are also prevalent in supermarkets (Ayedevor, 2018). According to MoFA (2016), there few companies in the cities of Ghana that distributes branded and packaged local rice. This makes such branded packaged local rice less prevalent on the distinct markets in Accra (Coffie et al., 2023).

Unbranded local rice on the Ghanaian open markets is usually available in bowls or sacks (Ayedevor, 2018). Retailers of local unbranded rice are scattered in the market places, which makes searching for a desired quality and taste of local rice costly to the consumers. Thus, making local rice less prevalent in such situations. (Coffie et al., 2023). Although local white rice packaged brands—Bongo rice and Royal Farmer, Copa Jasmine long grain rice and Aduanehene, Mr Rabbit Jasmine Rice and Adom Rice- are perceived to be quality, they are less prevalent in open traditional markets or in shops along the street in Ghana (IFPRI, 2017). Ayeduvor (2018) posits that an average of ten different brands of imported rice are prevalent in a mini-supermarket in Ghana, whereas packaged local rice brands is unavailable in the same shops. The study by Ayeduvor (2018) discovered the prevalence of about 200 brands of imported rice in the stores, sedentary retailers and restaurants major cities of Ghana. The leading prevailing brands are Cindy, Gino, Lele, Royal Aroma, and Fortune imported mainly from Vietnam, Thailand, Pakistan, India, and USA.

2.9 FACTORS ASSOCIATED WITH THE PURCHASE OF LOCAL RICE IN GHANA

Based on the theory of demand, there are four key elements that affect how much a product or service is in demand. These elements include the cost of the good, income, the size of the population, and the cost of an equivalent (Vives et al., 2018). The demand for a commodity is also influenced by other immeasurable factors like taste and preferences, quality, etc. Quality is frequently referred to as the distinctive features of a commodity and the desire images created in the minds of consumers. (Nuttavuthisit, 2019). The size of a family and customer base is often classified as an external factor or variable because of its effect on available income per person (Rokhim et al., 2021). This section of the literature review discusses the influence of microeconomic and non-microeconomic factors on demand.

2.9.1 Price Effects

According to the theory of demand, there is a delicate balance between price and quantity. But rather than the absolute price of a commodity, the quantity demanded depends on the price difference with respect to traditional consumables. Price has reportedly been extensively studied by sensory, consumer, and food scientists as an extrinsic indication in food choice experiments. (Blanc et al., 2021). Ju and Lee (2020) assert that price perception by consumers is considered by many scholars as a dimensional construct. The theory of demand posits a strong negative relationship between price and quantity demanded of a good or service. However, rather than being based on the absolute price of a commodity, quantity demand is determined by the price

difference compared to traditional consumables. Higher costs are evaluated under unfavorable circumstances and lower prices are considered under favorable circumstances. His results support the tenet of economic rationalism that states consumers should demand more at lower prices and less at higher prices. According to a study by Xu et al. (2018) on customers' willingness to pay for local rice, among the seven criteria he took into account, price was the factor buyers looked at fourth when buying rice.

2.9.2 Price Effects of Related Substitutes

Economic theory states that the quantity demanded for a good is positively correlated with the cost of its substitute (Carvalho & Tahbaz-Salehi, 2019). Therefore, positive cross-price elasticities are anticipated in the case of a close substitute. The market will require more international rice in response to a price increase on domestic rice, which will reduce the amount demanded. That is, consumption of a brand of rice reduces or replaces the need for the other. However, the demand and pricing of substitute rice brand exhibit a positive correlation (Tanko, 2015). This means if the price of a rice brand increases, the demand for the substitute increases. In situations of several availability of substitutes products, business operators attempt to sell more through the use of pricing strategies. Thus, the prices of rice brands with many substitutes are highly volatile (Modzakah, 2019). Onumah et. Al, (2022), affirmed that local rice on the domestic market in Africa is faced with several substitutes on the domestic market. This means that, in cases where fewer substitute of rice brands is availability, there is a higher probability of higher profit earnings for rice farmers.

2.9.3 Disposable Income

Economic theory states that demand for a commodity is predicted to be positively and significantly influenced by disposable income. Disposable income may or may not be a factor in determining who is most likely to purchase goods and services made locally (Maraon & Kumral, 2021). Locally-produced foods or commodities often cost more than orthodoxy-grown foods and commodities, and one might anticipate higher patronage by high-income earners relative to low-income earners. However, Nyarunda (2016), affirmed that show that income does not distinguish between consumers of locally produced goods and those who do not consume local goods. Mgendi and Mujawamariya (2018) investigated consumer choice, knowledge, and preference for various types of fragrant rice in Ghana. The study's findings showed that income had a broad impact on rice demand, but they did not distinguish between the impact of income on locally produced versus imported goods.

2.9.4 The Size of Household

According to economic theory, the size of a household and product demand are correlated (Cirac et al., 2021). The need for food increases with household size. It is expected that when household size increases, the consumption of locally produced items tends to decline (either completely or as a share of food expenditures), as these goods are perceived more expensive than conventional ones (Orr et al., 2022). This is due to the increasing affluence, urbanization rate and the rapid spread of access to the internet and mobile phones on the Africa

continent (Signé, 2018). Studies by Haines and Haycraft (2019) have suggested that household size and many dependents partly influence food choices.

2.9.5 Non-Traditionnel Variables (Sensory Variables)

Sensory perception is a significant factor influencing consumers' choice of rice (Andam et al., 2019). Consumers place value on the flavor, aroma, and appearance of local rice over foreign-grown packaged rice (Ehiakpor et al, 2017). Therefore, a correlation exists between sensory appeal and the demand for local rice.

According to Fitzgerald (2017), a link exists between quality grain attributes and marketing. Thus, the quality of grain is determined by consumers' tastes. Hence the quality of grain usually varies from culture to culture. Fragrant rice is most preferred in some areas and is not accepted in some regions (Kordrostami et al., 2021; Ehiakpor et al., 2017). Consumers' willingness to pay a premium price for rice is influenced by quality characteristics which include appearance, milling and cooking qualities (Custodio et al., 2019)

2.9.6 Taste

One of the key qualities of rice that affects consumer decisions to buy food is taste (meaning feeling of flavor, as opposed to preference in general) (Hartley et al., 2021). Ragasa and Andam (2020) found that customers were willing to pay if the flavor of local rice could be improved.

2.9.7 Appearance

The appearance of a product plays a significant role in consumers' choice of computing products (Patrick et al 2019; Fumi et al, 2019). Literature on product

appearance reveals six key roles product appearance perform in relation to consumers' evaluation and patronage of the product. These include communication of aesthetic, symbolic, functional and ergonomic information, attention drawing and categorization (Fumi et al, 2019). The appearance of a product is considered to have aesthetic and symbolic value for consumers when it is able to effectively communicate functional features, creates quality impression (functional value), and give a detail description as in the ease of use (Ohazulike, 2018). It can also attract attention and influence the ease of categorization of the product (Bob-Alli, 2020).

The aesthetic value of a product relates to the desire gotten from seeing the product, regardless of consideration of utility (Ohazulike, 2018). A consumer may place high value just on the 'look' of a product just for its own sake, as looking at something beautiful is rewarding in itself. When there is a large number of substitute products available and price is almost same for each substitute, consumers always choose the substitute that is most appealing in terms of aesthetic (Etuk et al, 2021). Aesthetic responses are basically emotional, hence are usually personal (Ohazulike, 2018).

There is a tendency of consumers showing a like for a product but they may not wish to buy because the product appearance is not aesthetically fit into their home interior (Oaya, 2017)

Product appearance directly sends messages through symbols. These messages are usually 'cheerful', 'boring', 'friendly', 'expensive', 'rude', or 'childish. In certain situations, style of appearance may create a link to a certain time or place (Galdeano, 2019). Product appearance has proven to reinforce brand image.

This is so because brand identity is visually expressed in the appearance of products (Patrick et al, 2019). Consumers therefore identify a brand through the features of the physical appearance of products

The search for verbal product information by consumers means that they create impression about utilitarian functions and product quality on the basis of a product's appearance (Ashaduzzaman, M., & Mahbub, F. 2016). The utilitarian functions of a product directly reflect in its appearance. More significantly, product appearance provides inference for more important but less readily accessible product attributes (Adeola. 2017).

Physical product appearance is an important quality signal for consumers. Quality is usually difficult to define, however, it is usually reflected in the look, sound and feeling of a product (Okeke & Amobi, 2020). Therefore, impression about the ease of use or functional product value of a product largely depends on its appearance. Consumers may not have the opportunity to experience a product before judgement, hence, consumers judgement of ease of use or functional value is primarily based on appearance (Oaya, Newman and Ezie, 2017).

The appearance of a product creates ease of categorization, and the category to which it will be assigned. Product identification will be easier when there is a large number of similar products in the same category (Etuk, 2018).

In relation to verbal product descriptions, Etuk (2018) found that products that differ slightly differentiated products from the prototype have positive evaluation outcomes are evaluated more positively than products that are very typical or very atypical in nature. Adeola, (2017) affirmed that a slightly

atypical packaged appearance quickly attracts consumers' attention, while remaining acceptable to them. In effect, an appearance that differs slightly from the prototype is more likely to induce patronage.

For products for which prestige, exclusiveness or novelty are important, an atypical appearance is essentially good for novelty and prestigious product. With regards to such products, preference declines when it becomes more widely available and thus more typical, as uniqueness is valued (Adeola, 2017).

2.9.8 Milling Quality

Sandhu et al. 2018) explained milling as removing the husk, bran and embryo. The process starts when the paddy is converted into brown and white rice. This helps the endosperm to be devoid of damage (Nambi, Manickavasagan & Shahir 2017). Consequently, the white rice is broken and contains health values. The empirical investigation shows that consumers prefer white rice (Aung, 2017). The measurement of rice yield is determined by paddy or milled rice. The head rice recovery depends directly on brown rice and white rice yield. The attributes constitute the milling quality (Indrasari et al. 2019). Other studies confirm that consumers place a premium on white colour rice and explain the consumers' willingness to pay a higher price for white branded rice (Ehiakpor et al., 2017). Foreign brands usually exhibit such white colour appearance traits in the market. Empirical investigations, therefore, confirm that many consumers associate the high quality of rice brands with whiteness (Ehiakpor et al., 2017; Rose et al., 2013; Danquah & Egyir, 2014).

2.9.9 Cooking Quality

Cooking attributes are primarily dependent on the percentage of starch. White rice constitutes about 90% of improved cooking quality, which significantly induces consumer patronage (Gani et al. 2017). Evidence shows that long-grain rice often is stickless after cooking and maintains its shape qualities (Li et al. 2017; Mestres, Briffaz & Valentin 2019). Rice that usually retains its shape after cooking is unbreakable and stickless (Dorreshteh & Tarang, 2019). The cereal quality in rice is complex and very diverse depending on how it is consumed (Huggins et al. 2019). Cooking quality, as one of the essential components of rice quality, is affected by some physical and chemical properties of rice grains, especially starchy components (Li & Gilbert, 2018). Cooking quality, as one of the essential components of rice quality, is affected by some physical and chemical characteristics. The three physical and chemical characteristics of the starch in the seed endosperm play a major role in determining the cooking quality of rice grains. These are the gelatinization temperature (GT), gel consistency (GC), and amylose content (AC). The cooking quality is significantly influenced by the chemical components' amylose content and gelatinization temperature (Lou et al. 2009). Among the chemical components, amylose content and gelatinization temperature significantly affect the cooking quality (Gayin et al. 2017). Varieties with low levels of amylose stick together during cooking and break down quickly (Yu et al. 2017). In contrast, high-amylose cultivars do not stick together after cooking, elongate well and are not brittle after cooling (Ai & Jane, 2018).

2.10 CONSUMER ATTITUDE

Punyatoya (2018) maintains that consumer attitudes are composed of three components: cognitive information, affective information and information regarding customer's past behavior and future plans. According to Brand et al. (2020), the cognitive component of an attitude is an item's associated beliefs, thoughts, and attributes are referred to as the cognitive component of an attitude. It is the component of an attitude that conveys one's point of view or conviction. It speaks to the attitude a person has about their broad knowledge. Affective components refer to the emotional or feeling aspects of attitude.

The sort of feelings consumers acquire toward products has a significant impact on whether they like or dislike a product. Consumers respond following their beliefs and feelings/emotions towards items they have developed. Consumers' behavioral intentions are driven by their ideas and emotions, which govern the actions they conduct regarding the things being evaluated (Yang et al., 2021).

The behaviour aspect of attitude refers to a person's propensity to act in a certain way toward a specific object (Wang et al., 2018). Furthermore, it relates to those aspects of a person's attitude that indicates their short-term or long-term aim (Zhu et al., 2019). Therefore, an individual's decision to buy is determined by their beliefs and knowledge towards a product (cognitive) and their positive or negative feelings or emotions about the product (affection). Therefore, the components directly impact consumer behaviour and attitudes towards local and imported products.

Common examples include "all infants are cute," "smoking is harmful for your health," and other sweeping generalizations or clichés. In other words, a

person's ideas, feelings, behaviors, or intentions toward a certain object—in this case, typically a good or service—are referred to as their attitude (Kao et al., 2020). For example, an individual may have a favorable opinion about a product that causes happiness and will induce the intention to buy. Therefore, a change in consumer attitude is usually caused by a change in one or more of the attitudinal components (Kao et al., 2020). This happens when the consumer perceives the change as desirable because it gives him personal benefit.

The literature points to the linear relationship between attitude and behaviour (Mishra et al., 2021). Jacobs and Petersen et al. (2018) posit that attitude has a powerful influence on individual behaviour. Pandey et al, 2018 posit that attitude is the individual's ability to endure good or bad evaluations, emotional feelings and action possibilities towards something. Attitudes reflect a person's inner thoughts about something, such as a brand, a service, or a retail outlet, and they reflect whether a person favours or is negatively predisposed to it (Makri et al., 2020). Elran-Barak and Bar-Anan (2018) define attitude as the total of (positive and negative) beliefs weighted by evaluations of those beliefs. These descriptions are based on social psychologists Martin Fishbein and Icek Ajzen's ground-breaking attitude study.

The term "attitude" has also been used to describe learning propensities to react consistently favorably or unfavorably to a particular thing or group of objects. According to Nurjaya et al. (2022), attitude is the organization of one's beliefs and behavioral tendencies toward individuals, socially significant groups, things, events, or symbols.

Axt (2018) establishes that attitude can be measured by using an individual's preference for an item or the individual's favorability concerning the thing. The primary factor influencing the individual buying decision is the individual's attitude towards the product and the company. Individuals' choice among competing alternatives depends on a positive attitude toward the favored product (Mubarok, 2018).

2.10.1 Consumers' Attitude toward Local Products

Customers may feel either positively or negatively towards domestic items. Consumers with low levels of ethnocentrism are those whose opinions favor foreign goods over domestic ones. Kiriri (2019) avers those high xenophilia tendencies cause a preference for foreign items (xenocentrism). Xenocentrism is people's desire to adopt a superior foreign culture because they believe their culture is inferior (Diamantopoulos et al., 2019). Consumer xenocentrism leads to a preference for overseas' goods over local ones, even if local goods have proven to be superior to overseas products.

Banna et al. (2016) posited that Xenophilia had been suggested as a potential predecessor of the consumer affinity construct. The consumer affinity construct could lead to an emotional attachment to a foreign country's goods (Wongtada et al., 2012). Consumer xenocentrism is described as persons who prefer the products or services of a society other than their own in terms of marketing (Camacho et al., 2020). Consumers are drawn to foreign products due to underlying socio-psychological elements that naturally grant foreign countries and, by extension, their products a position of prestige (Swoboda et al., 2012). Mueller et al. (2015) discovered that urban consumers were more xenocentric

than rural folks. This could be due to income, product availability and access to knowledge about products and lifestyles in other nations.

2.11 CHALLENGES ASSOCIATED WITH DOMESTIC RICE

COMMERCIALISATION

Several studies point to the fact that determinants of agricultural commercialisation, particularly at the household level, include uncertain climatic conditions. Additionally, there are a number of factors that influence consumer preferences, such as increasing urbanization, adoption of new technologies, market creation and infrastructure, trade and macroeconomic policies, the size of the household's available space, access to resources, and the nature of the community's household resource endowment (Olwande et al., 2015; Atozou & Lawin, 2016; Fredriksson et al., 2017; Sili & Dürr, 2022).

Poor market accessibility is considered one of the most fundamental challenges to commercialisation. It exposes the local entrepreneurial rice farmer to higher risk, possibly resulting in their inability to pay off loads of invested funds in the African rice business (Stock, Forney, Emery & Wittman, 2014; Whitefield & Marshall, 2017). Small entrepreneurial rice farmers are individualistic and often distant from one another in rural areas. Because of their individualist nature, they cannot team up to negotiate for better market offers for their produce, a phenomenon that usually causes produce to go bad on the farm (Kopper & Jayne, 2019; Ghana Broadcasting corporation, 2019). On the contrary, traders enjoy monopolistic powers to control entrepreneurial farmers' farm produce price.

Consequently, the challenge of good sales revenue is to make a profit. This situation is made worse by globalisation which has resulted in the availability of overseas goods in the domestic scenes, leading to price volatility of domestic rice and relatively cheap imported product from Europe and Asia. This situation continuously affects local entrepreneurial rice to recoup investment and make returns to enhance livelihood (Boon & Anuga, 2016; Kopper & Jayne, 2019). As a result, some local rice entrepreneurs often cannot enter the urban markets and only sell their produce along the road at lower prices to persons who pass by (Kopper & Jayne, 2019).

Mumuni and Oladele (2016) posit that one of the critical challenges associated with commercialising local rice production is the lack of access to credit. This makes many local rice entrepreneurs fall on equity sources of financing, particularly on family and friends, to operate their businesses (Amanor & Chichava, 2016; Kyere, 2014). The nature of local rice entrepreneurship needs heavy investment to achieve production targets and other objectives.

However, evidence indicates that local rice entrepreneurs have limited access to finance due to the inability of local rice entrepreneurs to provide collateral (Mumuni & Oladele, 2016). Amanor and Chichava (2016) maintain that banks and other financial institutions usually refuse to give loans to local rice entrepreneurs because they cannot meet their loan requirements. As a result, local rice entrepreneurs have to buy certain inputs on credit and they are required to immediately sell their farm produce at lower prices to pay off the creditors. Consequently, local rice entrepreneurs cannot apply the necessary input to achieve a higher return on investment (Boon & Anuga, 2016).

To make matters worse, the high cost of packaging incurred by local cereal entrepreneurs causes many more commercialization barriers. Local rice entrepreneurs must additionally pay for packaging when selling their produce in market centers. Packaging materials for cereals, particularly rice and maize, include sacks, measuring cans and ropes. Instruments for measuring, such as scales and containers, may be included in the cost of packaging. Farmers must also incur the cost of market tolls for every bag of rice or corn. This packaging cost harms commercialisation (Osebeyo & Aye, 2014). Local rice entrepreneurs who cannot afford the cost of packaging are compelled to sell at the farm gate (Fafchamps & Hill, 2005), which negatively impacts them, making them less likely to engage in successful commercialisation.

Over the years, farmers and agricultural policymakers have struggled with the insecurity of smallholder farmers' income in developing nations due to fluctuating farm prices. The majority of countries lack long-term price stabilization tools. Output price support has been used in various countries to help stabilize incomes and encourage farmers to invest and increase production (Abokyi et al., 2020). Local cereal entrepreneurs' incomes in Asia and Sub-Saharan Africa are meager and subject to rapid changes (Fanzo, 2017). The availability of agricultural produce is influenced by several factors, including climatic fluctuations and biological crises such as disease outbreaks and pest invasions (Atozou & Lawin, 2016). Since agricultural output takes a long time to complete, the cyclical supply shortfall causes returns on investment to be uncertain (Gilbert & Morgan, 2010). As a result of the volatility in returns, local cereal entrepreneurs, consumers, and other actors in the agriculture value chain, such as providers of funds, are exposed to risk (Demeke & Balie, 2016).

More importantly, an inelastic supply of agricultural produce may induce an imbalance in agricultural output markets, resulting in output price volatility. That is, the rise or decrease of producer prices in both foreign and local markets beyond the expectations of consumers and local cereal entrepreneurs (Abokyi et al., 2018).

Market failures come from insecure property rights, limited market access, a lack of good roads and storage facilities, and imprecise market information exacerbating output price volatility in most developing nations (Demeke & Balie, 2016). Nevertheless, it should be emphasized that not all price changes are undesirable as long as they follow a well-defined pattern consistent with market fundamentals. In most underdeveloped countries, however, this is not the case (Arezki et al., 2016; Demeke & Balie, 2016). As a result, policymakers in developing nations face significant uncertainty about the prices of primary commodities.

Chipasha et al. (2017) believe that reliable market information poses one of the most significant challenges to commercialisation. Typically, in Africa and, for that matter, Ghana, local rice entrepreneurs are usually located in rural areas with a weak communication network; hence, local rice entrepreneurs are unable to communicate effectively with buyers. Gaining access to market information allows local rice entrepreneurs to identify buyers and become abreast with prevailing market prices. This gives local rice entrepreneurs an edge in bargaining power (Muamba, 2011).

Maertens and Velde (2017) and Morgan et al. (2019) affirm that the lack of infrastructure, such as bad roads and poor road networks, has become a major

barrier for local rice entrepreneurs to commercialise their produce. Therefore, local rice entrepreneurs find transporting their produce to the market difficult. Local rice entrepreneurs incur high transports cost due to bad roads and poor road networks connecting market centers and their farms (Asfaw, Amare, Lipper & Davis, 2012). Consequently, local rice entrepreneurs are compelled to sell off their farm produce at low prices at the farm gate to avoid transportation costs (Morgan et al., 2019)

More importantly, the information failures are likely to create exorbitant cost of transaction and possibly limit production and increase costs of inputs, credit and insurance to small-scale farmers (Barrett, 2021). The problem is not about conflict, but the evidence makes it difficult to determine the magnitude of it. In situations where many small-scale farmers maneuver to invest and innovate during times of high transaction costs, then, it is not essentially a complete barrier to growth, instead an obstacle. (Kouhizadeh & Saberi, 2021).

Lack of effective and poor institutional elements, particularly local rice entrepreneur's unions, agricultural extensions, and access funds, is a weak determinant of commercialisation (Aker & Ksoll, 2016; Mmbando et al., 2017). Institutional elements enhance capacity services that usually aim to improve agricultural production and marketing systems. Local rice entrepreneurs' unions and extension services help rice entrepreneurs with technical assistance and reliable information about production-enhancing technologies and marketing opportunities (Bahta & Bauer, 2012).

The aggregation actions of the various institutions, such as producer-corporations, contribute significantly to the commercialisation of agricultural

produce by disseminating information, refereeing transactions, lowering transaction costs and enhancing the efficiency of agricultural marketing through bargaining with retailers, and supplying inputs and technical assistance (Mmbando et al., 2017). Thus, a poorly institutional arrangement poses significant threats to local rice entrepreneurs regarding production, marketing, and value addition. This subsequently affects the levels of (Aker & Ksoll, 2016).

Urban population growth has increased the demand for land for buildings and other constructions. This has resulted in a reduction in landholdings, failures in input and out of the market, loss of soil fertility, increasing climate change and shocks, asset poverty, and influence of political power, thus failure to plan for successful commercialization (Jayne et al., 2019)

Therefore, one of Ghana's major concerns is figuring out an approach to produce enough domestic rice at a reasonable price that satisfies the desires of the country's rapidly expanding population.

Additionally, Ghana's local rice production must compete favourably against imported rice, which frequently is perceived to have superior quality grain attributes such as grain size, color, and aroma as well as a more appealing aesthetic appearance (Mgendi et al., 2018).

2.12 RESEARCH GAP

In relation to objectives one, two, three and four, little research has been conducted on local rice patronage, attitude, factors and ethnocentrism in the African and Ghanaian contexts. Likewise, no attempt has been made to assess the challenges local rice entrepreneurs encountered in Ghana. Therefore, this study considers patronage, attitude, factors and ethnocentrism of local rice and

assesses the challenges local rice entrepreneurs face in the Western Region of Ghana.

2.13 CHAPTER SUMMARY

This chapter reviewed the theories underpinning the study. The theory of consumer ethnocentrism is explained. Again, concepts and terms relating to the research topic and studies relating to each research objective were reviewed under the following sub-headings: conceptual frame work, local rice entrepreneurship, overview of rice commercialisation, definition of rice commercialisation, prevalence of local rice in Ghana, factors associated with patronage of local rice, consumers' attitude toward local products , challenges associated with local rice commercialisation and the research gaps based on previous studies.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The procedures and techniques used to conduct the study are described in this chapter. In the beginning, the chapter gives a brief overview of the research area, highlighting the economic activities, research design used, data sources, target population, sample, and sampling method. Additionally, the techniques used for data collection, the research tools used to gather primary data, the methods used to process, analyses, and present the data, as well as ethical concerns, are presented. Finally, the problems encountered during the data collection phase as well as the validity and reliability of the data were discussed.

3.2 RESEARCH PHILOSOPHY

The research paradigm forms the basis of the philosophical framework for the research study (Ramsberg, 2018). The three major approaches to research are Positivism, Constructivism and Pragmatism. The Positivist school of thought asserts that there is a single reality that could be measured and understood. The Positivist view relies on a hypothesis that can be tested to accept or reject a statement. It usually investigates the relationship between variables. Generally, Positivist uses the quantitative approach in research methods.

On the other hand, constructivist philosophy is based on multiple truths to explain realities. Constructivism focuses on understanding and interpreting the meaning of an action. It relies on a qualitative approach to research. Constructivists are interested in answering the question of ‘why’ rather than investigating the existing relationship between variables.

The pragmatism school of thought asserts that reality is continually interpreted and renegotiated against new and unpredictable situations. Consequently, the philosophical application is based on the research question. Pragmatism applies both positivism and constructivism philosophies in a study, thus using qualitative and quantitative approaches to investigate different aspects of a research problem (Žukauskas, Vveinhardt & Andriukaitienė. et al., 2018)

The pragmatism paradigm was deemed appropriate given the preceding approaches put forward by Crotty (1998) and Neuman (2000) and the objectives and research questions guiding the study. This is because the study aimed at local rice entrepreneurship and patronage behaviour using the mixed approach method

3.3 RESEARCH DESIGN

The adoption of pragmatism has a link with the research design, methodology, data collection, sample size and the validity of the measurement. According to Thakur (2021), a vital part of a research design is the logical sequence of connecting empirical data to the initial question or problem of the study and, most importantly, concluding. The research design should be in line with the adopted paradigm. Implicitly, consideration of the research questions, the objectives of the study and the research philosophy, the exploratory and descriptive cross-sectional design are relevant in choosing a research paradigm.

The purpose of an exploratory research design is to investigate the phenomenon. Before a strategy can be developed, it is used in situations where the problem needs to be defined more precisely and new information obtained. It is frequently not used to come up with a plan of action for making decisions

(Pawar, 2020). The information is hazily defined during the exploratory design phase. A formal or informal, unstructured interpretation process is used to collect secondary or primary data in an exploratory research design. Due to its goals and structure, this research design employs the least amount of scientific method and rigour.

A descriptive cross-sectional study applies to situations where different sections belonging to the same group are studied (Setia, 2016).

The rationale for adopting both exploratory and descriptive design was to explore challenges associated with local rice entrepreneurs through focus group discussion and investigate the residents' patronage behaviour across different sections of the western region.

3.4 TARGET POPULATION

Hall et al. (2021) define the study population as the largest group of potential study participants. Thus, critical questions usually center on a large number of people or things. The term "target population" describes the entire group of people to whom researchers are interested in extrapolating the findings (Yarkoni, 2022). The target population for this study was 15 local rice entrepreneurs who had registered with the local rice processing factory and unknown adult residents in the Western Region of Ghana with the decision power over what food items, specifically rice, should be purchased for the household. However, the study population for households that patronize rice was unknown due to the different patronage and consumption patterns of individual behaviors.

The study included only local rice entrepreneurs with three years and above experience in local rice production in the study region. This is because three years and above experience in operation of rice farm business is enough to understand the dynamism, challenges and operations in the industry and would be able to provide in depth information for the study. Also, adult residents with household purchasing decisions who have lived in the region for more than six years were considered for the study. Targeting such residents' adults was because there is a high tendency of understanding the changes in terms of brand availability, price, income fluctuations and supply, hence, were considered to have had details information to share for the study. However, local rice farmers and residents who were unavailable during data collection were also excluded from the study.

3.5 SAMPLE SIZE DETERMINATION

The sample for this study is based on a 95% confidence level. The margin of error is ± 0.10 .

Therefore, the sample size can be calculated as

$$n \geq \frac{Z^2}{4E^2}$$

Since the population standard deviation is unknown.

Where; Z (standard normal deviation set at 95% confidence level) = $Z_{\alpha/2}$

Where α is 5% (100%-95%), in this study $Z_{\alpha/2} = Z_{0.05/2} = Z_{0.025}$ which can be located at 0.475 (0.5-0.025) on the half Z distribution table, which is 1.96.

E is the margin of error the researcher will tolerate (0.10).

The sample size is (n) is $\geq \frac{(1.96)^2}{4(0.1)^2}$, $n \geq 99.621 \approx 100$

Therefore, the sample size for the study is 100.

In addition, 15 local rice entrepreneurs were purposively sampled and a census was conducted.

3.6 SAMPLING TECHNIQUE AND PROCEDURE

In total, 15 local rice entrepreneurs were purposively sampled to form 3 different groups. Each group consisted of 5 farmers that participated in the focus group discussion (FGD) (Nyumba, Wilson, Derrick & Mukherjee, 2018).

Regarding the selection of residents, a multi-stage sampling technique was employed to select the respondents (Akinbami et al., 2019). Berger (2020) defines multi-stage sampling as a more complex cluster sampling in which smaller groups are successively selected from a large population to form a sample population for a study. The multi-stage sampling procedure involved a balloting technique to select 4 districts from the 13 districts in the Western Region (Feng et al., 2018). This was done by writing the names of each district on a piece of paper, rolling them into balls and putting them in a bowl. The bowl was then shaken, and 4 paper balls were picked randomly. These then represented the four districts where the study respondents were selected.

Again, this technique was applied to select two communities from each of the four districts (AbdulRahaman, 2018). At the community level, the Cluster Sampling Method of the World Health Organization was used (Pandey et al., 2019). This was done by selecting landmarks such as schools, markets or community centers by spinning a bottle (Amu et al., 2021). The first household to be sampled will be the one toward which the bottle's mouth points, and every other fourth household was chosen. Based on the population sampling percentage, the number four was selected (Pandey et al., 2021).

3.7 DATA COLLECTION INSTRUMENTS

This study applied two instruments to gather primary data from participants. First, the study employed the survey instrument, namely the questionnaire and the interview design, to solicit the data. Below are detailed descriptions of all the instruments applied throughout the study.

3.7.1 Qualitative Study

In qualitative research, social phenomena are understood and explained utilizing qualitative data from participant observation, interviews, and documents (Dhir et al., 2022).

There has been a broad movement in the research from qualitative survey to quantitative survey concerns in regards to challenges faced by local rice entrepreneurs, leading to an increased interest in using qualitative research methods. By examining the viewpoints, actions, and context of the people in these circumstances, qualitative research aims to comprehend the issues at hand. Consequently, qualitative research is carried out in natural situations and employs verbal data rather than numerical data (Dhir et al., 2022).

During the qualitative study, the researcher used an interview to solicit participants' views on the various challenges they encountered during rice production.

Omar (2018) defines interviews as an important tool of qualitative research information. This is because interviews give idea into the complexities of research phenomena that involve the interrelation between the local rice farmer and the researcher. Krosnick (2017) asserts that interviewing is one of the approaches of research involving the researcher posing relevant questions to

individuals participating in the interviewing sections. It can be deduced from Krosnick point of view that, the method of interviewing seems simpler and easier, however, the reverse is the case. Instead, skills and knowledge are the pre-requisite requirement to guarantee standard interview practices. (Robson, 2011).

One of the main methods for gathering data for the study was the semi-structured interview. To ensure that relevant topics were covered during the interview and the study objectives were met, interview guides were created. The open-ended interview questions promoted conversation between the researcher and the respondents and validated that they provided their own words as an explanation for their answers. For simple transcription and analysis, all interviews were conducted in both English and Twi (one of the major indigenous languages of the region).

Three focus group interviews were carried out and included three entrepreneur association heads and twelve local rice farmers; four from each association unit. Depending on the respondent and how they felt about the system's introduction and implementation, the interviews' content and length varied. However, the interviews had a consistent format, main headings (based on goals of the study), and a set of common questions (see Appendix I). The time frame was between 50 and 60 minutes (interview with the first focus group). The second interview lasted for approximately an hour and five minutes, and questions regarding how decisions were made regarding some of the farming issues that the nearby rice farmers faced were asked.

The heads of all local associations of rice farmers were intended to be interviewed, but due to their busy schedules, the study was only able to speak with the three heads. As a result, more tools for gathering data were employed among the local rice farmers. With the necessary consent from the interviewees, all interviews were tape-recorded and later transcribed.

3.8 QUANTITATIVE STUDY

The study used a structured questionnaire to generate the information for the analysis. Though questionnaires are primarily used because of their strength, using them has its own weaknesses. Questionnaires usually produce low response rates (Omar, 2018). Generally, return rate of questionnaires are low, with some questions unanswered. On these grounds, the researcher personally administered the questionnaires and convinced the respondents in order to achieve a high response rate. The questionnaire contained only close-ended questions. The close-ended questions restrict respondents in their responses by providing a set of predetermined or coded answers for them to choose from.

Questions on the questionnaire were designed to address each specific objective appropriately. The questionnaires were categorized into headings. Heading one looks at the socio-demographic characteristics of the respondents, such as their gender, age, religion, marital status, educational level, occupation, the average income of the participant and the percentage of average income spent on food. The second section looks at local rice patronage. The third section pays attention to the attitude towards local rice patronage and the final section examines the ethnocentrism in the patronage of local rice. Each section tackled a specific area relating to local rice patronage in Ghana.

3.8.1 Questionnaire

Krosnick (2017) defines a questionnaire as a document containing a list of questions to be answered by respondents. A questionnaire can be printed or electronic (Babbie, 2010). In a research endeavor, a questionnaire is an instrument used to collect primary data. Hyman and Sterra (2016) iterated that in designing a questionnaire, one must ensure that it is unambiguous, reliable and valid. Generally, most questionnaires fall into one of two categories: closed-ended or structured questionnaires, open-ended or unstructured questionnaires, or a combination of both. The close-ended questionnaire is designed to aid the respondent in choosing an answer from a list of items given by the researcher. Close-ended questionnaires are uniform in terms of responses provided and are more easily processed than that of the open-ended questionnaire (Hyman and Sterra, 2016)

On the other hand, an open-ended questionnaire allows the respondents to provide free responses rather than limiting them to specific alternatives. However, responses from the open-ended questionnaire are more difficult to be grouped and discourage respondents because it takes longer to finish answering the questions posed (Cobblah, 2015).

As the main method for gathering data, open-ended questionnaires were employed. The local rice business leaders were given questionnaires to complete, asking them to describe the difficulties they faced while performing their duties. Due to their busy schedules at home, the researcher only included this group of participants in the questionnaires. However, because of the high turn-up rate among different heads, the researcher gave them plenty of time to respond during their free time. Since interviews with this group of participants

were also likely to produce similar results, open-ended questionnaires were used to encourage potential variations in participant responses.

3.8.2 Questionnaire Design

The questionnaire used for the study comprises close-ended items or questions. A 5-point Likert scale questionnaire was used to assess the participants' opinions on the objects that characterize the variable or construct included in this study. The questionnaire comprised 41 items grouped under four sections - A, B, C and D. Section A sought to elicit background information from the respondents. Section B produced information about local rice patronage. Nine (9) items were used to determine the local rice patronage involved in the study. Section C section paid attention to the attitude towards local rice patronage. All five (5) items were used to examine the attitude toward local rice patronage involved in the study. Finally, section D examines the ethnocentrism in the patronage of local rice. Sixteen (15) items were used to determine the ethnocentrism in the patronage of local rice involved in the study.

3.9 PRE-TESTING

The research instruments were pretested to ensure their reliability and validity. The FGD guide was pre-tested among four local rice entrepreneurs in the Western-North Region, and whiles questionnaire was pre-tested among ten households. This region was selected because having been carved out of the Western Region in 2017, it shares similar settings and characteristics with the study site. The Cronbach Alpha reliability score of the questionnaire was determined after the pre-testing. The instruments were then modified based on the outcomes of the pre-test before their applications to gather the final primary

data. The outcomes achieved appeared to be similar. The results of the study reveals that the data is reliable. Again, the results proofs that, most of the households' participants can read and write. Also, respondent who were at post were willing and able to answer the questionnaire before any distractions. Hence the researcher selected 100 household for the study.

Again, this study ensured that the indicators on the questionnaire have a minimum Cronbach alpha of 0.7; the indicators utilized as a measure of variables are well accepted in the literature. In addition, it was done to ensure the content validity and reliability of the research instrument.

3.10 QUALITATIVE DATA COLLECTION

With the Focus Group Discussion (FGD), the researcher was guided by Klagge's (2018) steps for conducting FGD. The session was opened by the researcher using the written scripts. That is, the researcher reads the rules to the participants and further states the purpose of the questionnaires. Clarification would be given when the need arises. Ensuring that participants have equal chances of asking questions and finally, the session was closed using the written scripts. The FGD size of local rice entrepreneurs was eight (8) (Krueger & Casey, 2000). That is, local rice farmers constituted the participants for the FGD. The venue for the FGD was the local community centers in the various selected communities. The time for the FGD section was started from 2:00-4:00 pm on Tuesday. Tuesday was chosen because it is a day usually observed as holy; hence farmers do not go to work. The FGD section was not exceeding two hours. The researcher anticipated language barrier because, predominately, local rice farmers cannot speak and understand English. Therefore, the language for the FGD was translated from English to Akan. The researcher

visited the venue a day before the FGD to ensure that the community centers were free from any noise that may disrupt the session. Recruitment contact was purposely done, and the researcher engaged the head of the local rice association and potential participants after the meeting.

3.11 QUANTITATIVE DATA COLLECTION

In the case of quantitative data collection, it was done with the support of four research assistants who were given a day's training on the study purpose and the instrument. These assistants greeted respondents, introduced themselves and told them their purpose for approaching them. After obtaining consent from the respondents, the questionnaires were administered with the help of the interviewer, and it took about 15 minutes. However, respondents who could read and understand English were allowed to fill out their questionnaires. The questionnaires were checked for completeness and validity of responses after every data collection section.

3.11.1 Measurement of Variables

The average score was used as a guide in generating the scores for each statement pose by the researcher. To generate the composite for consumer attitudes and ethnocentrism in the patronage of local rice, the study uses a rating scale of subjective criteria developed by Burch, Burman, Cooper and Hennessey (2015), Peters, Tijdens and Wetzels (2004) and other scholars on scale of measurement served as the foundation for the interpretation of the mean and standard deviation such 0 – 0.9=strongly disagree; 1.0-1.9= Disagree; 2.0 – 2.9= indifferent; 3.0-3.9=Agree and 4.0 – 5= strongly agree. Five (5) questions were used to assess consumer attitudes towards local rice in this study and to get the

composite consumers score, responses 'Neutral' and 'Disagree' to all questions were combined to be 'Disagree'. An average score which will be found to be below 3.0 score will be considered to have had poor attitude towards local rice and those who scored 3.0 and above will be considered to have had a better attitude towards local rice. Also, sixteen (16) questions were used to assess ethnocentrism in the patronage of local rice. An average score which will be found to be below 3.0 score will be considered to have had no ethnocentrism in the patronage of local rice and those who scored 3.0 and above will be considered to have had an ethnocentrism in the patronage of local rice.

Again, to generate the composite score for consumer patronage of local rice, all 'No' and 'don't know' responses were combined as 'NO'. Seven (7) items were used to generate the score of the response questions and the most scores were considered. Therefore, respondents who scored no and don't know will be considered to have had low patronage of local rice, and those who scored yes will be considered to have high patronage of local rice.

Finally, in relation to the factors associated with local rice patronage in Western Region, Ghana, the socio-demographic variables were associated with local rice patronage. Logistic regression analysis was used to find the association between demographic variables and local rice patronage. A test of probability value less than 5% (0.05) was considered statistically significant at 95% confidence interval. Additionally, a test of Adjusted Odd Ratios (AOR) was considered a test of likelihood or number of times a factor or the consumer will patronize the local rice.

3.12 DATA ANALYSIS

As explained by Conradie (2012), data analysis entails the ability of the researcher not only to understand the insight of data interpretation but also to determine how data was collected and analyzed. The following sections explained how quantitative and qualitative data were analyzed aided by evidence to answer research questions and through numerical data (Kumar, Garg & Gerg, 2011).

3.12.1 Qualitative Data Analysis

Regarding the qualitative aspect, the audios from the FGDs were transcribed verbatim from Akan to English and prepared for thematic analysis. The thematic analysis framework was employed (Appau et al., 2019). In order to do this, the researcher first became familiar with the data by reading and re-reading the transcripts to detect codes. Additionally, related sub-themes were combined with common codes to create common themes. Themes were, however, generated based on literature and emerging issues. Quotes from participants were used to substantiate the explanations and thematic report.

3.12.2 Quantitative Data Analysis

Quantitative data was entered into a template on SPSS version 22.0, cleaned, and analyzed using the same statistical tool. The analysis used descriptive statistics, such as frequency, percentage, and mean, and inferential statistics, like chi-square and logistic regression (Maat et al., 2022). Statistical significance was set at a p-value less than 0.05 at 95% confidence interval. A response measured the dependent variable, patronage of local rice (*always, sometimes, and not at all*), to the question: “*How often do you buy local rice?*”

Associations between the patronage of local rice and independent variables such as socio-demographic characteristics, attitude towards local rice and ethnocentric behaviour towards rice were tested using both chi-square and regression analyses. As appropriate, the results were presented in tables and charts (Smith, 2021).

3.13 DELIMITATIONS

A delimitation delimits a study by geographical location, age, sex, population traits, population size or other considerations (Dantoft et al., 2022). A delimitation establishes boundaries for a study based on factors such as location, age, gender, population characteristics, size, or other factors, Delimitation is used to improve and increase the viability of the study, not just for the researcher's personal interest. It also points out the limitations or flaws of the study that are beyond the researcher's control (Theofanidis & Fountouki, 2018). The study was limited to the Western Region due to the closeness of the researcher's location and because there are rice farmers in the region (Zakaria et al., 2020). Since the study cannot be conducted for the entire western region population, the target population size was 403 individual household heads who make the final decision about the food item to be consumed.

3.14.1 VALIDITY

The degree of accuracy with which a concept is measured in a quantitative study is known as validity. For example, a survey measuring anxiety but intended to study depression would not be accepted as valid. The second criterion for quality in a quantitative study is an instrument's consistency or

reliability. Or, to put it another way, the extent to which a research tool reliably yields the same outcomes when used in similar circumstances.

A simple example of validity and reliability is an alarm clock that goes off at 7:00 a.m. but is set for 6:30.

Although it consistently rings at the same hour every day, it is not reliable (it is not ringing at the desired time).

Cronbach's alpha is a statistic that researchers frequently employ to demonstrate the appropriateness of tests and scales developed or approved for use in research projects. The degree to which an instrument measures what it is intended to measure and functions in the manner intended by its designers is referred to as validity. Since 100% validity of an instrument is extremely uncommon and practically unattainable, validity is typically expressed as a percentage. The study's findings were examined to see if they agreed with other conceptual measures and accepted theories. Results were quantifiable and generally trustworthy.

3.14.2 Reliability

Reliability within a study can be thought of as reliability. Does the instrument accurately measure the variables it is designed to? Although reliability cannot be measured, four general estimators can be found when reading research. To ensure that each objective was met, the research was conducted using a method that was carefully planned. The reliability of the instrument will be determined through pre-testing. A Cronbach Alpha Reliability score of 0.7 or more was considered high reliability.

3.15 ETHICAL CONSIDERATIONS

Ethical approval for this study was obtained from the IREC of the Durban University of Technology. Prior to inclusion in the study, verbal and written informed consent was sought from the potential participants. This was done by first explaining the study process and purpose and addressing any questions or concerns of the participants. Only those consenting to participate voluntarily were included. The researcher assured participants of the highest standards of anonymity and confidentiality. Pseudonyms containing a combination of letters and numbers were used instead of the personal identifying information of the participants. At the same time, the collected data was not shared with any third parties without identifying the data (Mamo et al., 2020). The soft copies of the data were kept on the principal investigator's password-protected personal computer and hard copies were destroyed after electronically capturing the data. The data will be stored on the researcher's Gmail address and would be used for writing articles for publications

3.16 PROFILE OF THE STUDY AREA

This study was done in the Western Region of Ghana, whose capital is Secondi-Takoradi. The Region comprises 23 administrative districts containing one metropolitan, three municipal and 18 districts after being divided into the Western and Western-North regions.

The Western Region covers about 2,39,221 square kilometers, or 10% of Ghana's total land area. Ghana's high forest zone, which is situated in an equatorial climate region with mild temperatures, is home to about 75% of the area's vegetation. With 1,600mm of annual precipitation on average, it is also

Ghana's wettest region. The Western Region shares borders with the Ashanti and Brong-Ahafo Regions on the north, the Ivory Coast (Côte d'Ivoire) in the west, the Central Region in the east, and the Gulf of Guinea in the south. The region contains the Ahanta West District of Busua, also referred to as the Cape Three Points (MOFA,2019)

In the region, there are 17 agricultural districts. The Regional Directorate of Agriculture is in Sekondi-Takoradi, which also acts as the region's capital. The region is home to 1,924,577 people, or 10% of the country's total population of farmers. Population growth in 2010 was 3.2%, according to the census. Specifically, 58% of the region's jobs are in agriculture, fishing, and animal husbandry.

Due to its abundant natural resources, the region has a significant economic significance in terms of the development of the country. It is one of the main oil palm producers and the country that has produced cocoa, rubber, and coconuts the longest. In addition, drilling has begun after finding oil in commercial quantities. It is one of the top producers of raw and sawn timber as well as processed wood goods due to its extensive tropical forest. A wide range of minerals are also being exploited or have the potential to be exploited, including gold, bauxite, iron, diamond and manganese.

The Ankasa Conservation Area, which includes Nini-Snhie National Park and the Ankasa Resource Reserve, is the most well-known forest reserve in the area. 500 km² or so roughly. 17,641 km² (73.8% of the total area) of the land is arable, and 6,720 km² (38.1%) of that area is under cultivation. Crop production, which accounts for 74% of regional agricultural output, is one of

the main agricultural activities. Starchy crops include rice, maize, cassava, plantains, yams, and cocoyam.

Table 3. 1: Estimated Area and Production of Major Food Crops – 2010

Crops	Area (Ha).	Production (Mt)
Maize	56,094	79,887
Rice	15,439	20,513
Cassava	74,429	735,792
Yam	12,329	94,848
Cocoyam	39,393	229,736
Plantain	58,137	567,530

Source: Mofa, (2011)

Special Projects are Inland Valleys Rice Development, Root and Tuber Improvement and Marketing Programme (RTMP) and Block Farming

3.16.1 Rationale for Selecting the Study Setting

The rationale for the selection of the area for the research was due to several reasons. First, the region forms part of the area where research is very low on local rice entrepreneurship, though there is evidence of local rice production and consumption of rice.

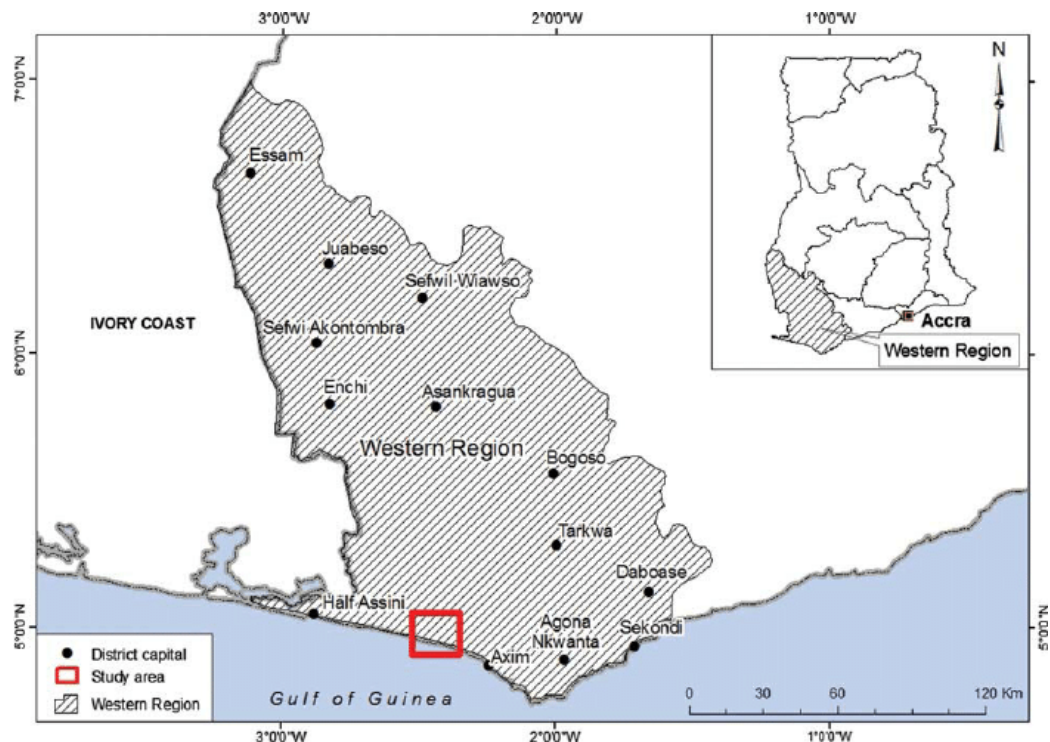
Secondly, this is a region with high prospects for rice production. For the last decade, the region has experienced a successive increase in local rice production.

Thirdly, the area features well-known hotels and eateries and is anticipated to draw both domestic and international tourists who will require a place to stay

and food to eat. Additionally, a wide variety of non-governmental organizations and companies have made the area a business destination for many international and Ghanaian businesses that had previously restricted their operations to other regions of Ghana.

The fourth reason is that, the region has undergone a very big increase in rice consumption, physical infrastructure, commercial activity, and other human activities in all aspects of the local economy for about a decade now. This is the fourth reason for the increase in population. Consequently, the area has one of the West African Sub-region's quickest rates of growth.

Figure 3.1: Map of the Western Region of Ghana



Source: Geography & Tourism Departments, Remote Sensing and Cartography Unit, University of Cape Coast, (2018).

3.17 CHAPTER SUMMARY

The chapter looked at the following sub-headings: research philosophy, research design, target population, sample size determination, sampling techniques and procedures, data collection method, pre-testing, measurement of variables, data analysis and the study area. The chapter discussed the pragmatism paradigm and provided justification for considering both exploratory and descriptive designs. The target population included all heads of households and rice farmers in Western Region of Ghana. A sample size of 100 heads of households was drawn and 15 local rice farmers were purposively sampled. The chapter also discussed the multi-stage sampling procedure and provided reasons for the adoption of the multi-stage sampling. The chapter also highlighted data collection procedures and adopted questionnaires and focus group discussion to capture data from household heads and local rice farmers respectively. Pre-testing was done among four local rice farmers and 10 households in Western North Region. The chapter also provided discussion on Burch, Burman, Cooper and Hennessey (2015) and Peter & Wetzels (2004) scale of measurements. The Adjusted old ratio (AOR) was also considered in the chapter. Validity and reliability based on Cronbach Alpha were also highlighted in the chapter. The chapter also addressed how ethical clearances was obtained. Finally, a profile of the study area was also provided in the chapter.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents data analysis and results of the study. The chapter begins with the demographic data of both rice farmers and households in the Western Region. The chapter then proceeds to analyses of data and presents results based on the research questions. The data analysis and presentation are categorized into the following sub-headings sections: rate of patronage of local rice, resident's attitudes toward local rice, consumer ethnocentrism in local rice patronage, factors influence the patronage of local and challenges are associated with local rice entrepreneurship in Western Region

4.2 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

This section presents the demographic results of the study. The demographic results focus on gender, age, religion, marital status, educational level, occupation of the respondent, income level, and the percentage of income spent on buying foodstuffs.

4.3 CATEGORY OF RESPONDENTS

The survey collected data from two main sources: household respondents and local rice farmers. Per the focus of the research, household respondents who patronise local rice were given questionnaires to ascertain their opinion on the two types of rice consumed in Ghana (local and foreign rice). Their responses allowed the researcher to provide recommendations for future policies on local rice production in Ghana. Demographic data collected from local rice farmers, helped the researcher to build on the information regarding the challenges local

rice farmers encountered. Table 1 presents the demographic data of household respondents.

Table 4.1: Socio-Demographic Characteristics of the households (n= 100)

Characteristics		Frequency	Percent
Gender	Male	65	65.0
	Female	35	35.0
Age	Up to 29 years	27	27.0
	30-39 years	44	44.0
	40-49 years	29	29.0
	50 years and above	0	0.0
Religion	Christianity	80	80.0
	Islamic	20	20.0
	Others	0	0.0
Marital status	Never married	21	21.0
	Married	22	22.0
	Co-habiting	39	39.0
	Divorced	11	11.0
	Widowed/widower	7	7.0
Educational level	No formal education	12	12.0
	Primary	13	13.0
	JSS/JHS	22	22.0
	SSS/SHS/Vocational/NVTI	26	26.0
	Tertiary	27	27.0
Occupation	Unemployed	1	1.0
	Employed (private/public)	23	23.0
	Trader	46	46.0
	Farmer/breeder/fishmonger	11	11.0
	Artisan/skilled work	19	19.0
Average income	Up to 500gh	12	12.0
	600-1000gh	68	68.0
	Above 1000gh	20	20.0
Percentage of average monthly income spent on buying foodstuffs			
	Up to 10%	56	56.0
	11-25%	35	35.0
	Above 25%	9	9.0

Source: Field Survey, Ofosu-Appiah (2022)

A total of 100 households in the Western Region of Ghana was studied. Of these, 65(65.0%) respondents were males and 35(35.0%) were females. Again, the data showed that, out of 100 respondents, 27(27.0%) of them were between the ages of 29 years and below, 44(44.0%) of them were between the ages of 30-39 years, 29(29.0%) respondents were between the ages of 40-49 years and none 0(0.0%) were between the ages of 50 years and above. More so, out of the 100 respondents studied, 80(80.0%) were Christians, 20(20%) respondents were Islam and none 0(0.0%) were from other religion. In addition, 21(21.0%) of household respondents were single/never married, 22(22.0%) were married, 39(39.0%) were co-habiting, 11(11.0%) were divorced and 7(7.0%) were widow/widowers. With regards to the educational level of respondents, 12 (12.0%) had no formal education, 13(13.0%) completed primary school, 26(26.0%) had completed senior high school and 27(27.0%) had completed tertiary education. Furthermore, out of 100 respondents from households in Western Region sampled, 1(1.0%) was unemployed, 23(23.0%) were employed, 46(46.0%) were traders, 11(11.0%) were farmers/breeder/fishmongers and 19(19.0%) were Artisan/skilled workers. Last but not least, 12(12.0%) of the household respondents earn an average income between 500 Ghana cedis and below, 68(68.0%) earn between 600-1000 Ghana Cedis and 20(20.0%) earn an average income of 1000 Ghana cedis and above. Finally, 56(56.0%) of the household respondent spent an average income of 10% and below on foodstuff, 35(35.0%) spent 11-25%, while 9(9.0%) spent above 25% on their average monthly income on foodstuffs (Table 4.1).

It is obvious from table 4.1 that large number of respondents falls within the active working population. This may have implications on the patronage of rice.

Due to urbanization, active working population usually have busy work schedules coupled with high growth of urbanization, making respondents desiring to choose foods that involve less time in their consumption. Therefore, since the preparation of rice is much easy and requires less time, a lot of households choose it over other cereal and foods. This situation is in line with the findings of Ehiakpor et al, (2017)

Table 4.2 presents the demographic characteristics of local rice farmers. The following basic characteristics of the respondents were captured: gender, age, educational level, marital status and family size that enables more straightforward interpretation and decision-making.

Table 4.2: Demographic Results on Local Rice Farmers (n= 15)

Characteristics		Frequency	Percent
Gender	Male	14	93.3
	Female	1	6.7
Age of Respondents	Up to 30 years	3	20.0
	31-40 years	5	33.3
	41 and above years	7	46.7
Level of Education	No education	1	6.7
	Basic education	11	73.3
	A' Level/SSCE/WASSCE	3	20.0
	Post-secondary	0	0.0
Marital status	Married	14	93.3
	Single	1	6.7
Family size	Small (Below 5 members)	4	26.7
	Medium (5-10 members)	9	60.0
	Large (above 10 members)	2	13.3
Span of farming operation	5 years and below	3	20.0
	Above 5 years	12	80.0

Source: Field survey, Ofosu-Appiah (2022)

From Table 4.2, out of 15 local rice farmers interviewed, 14(93.3%) of the respondents were males, while 1(6.7%) of the respondents were female. The implication of this finding to challenges of local rice entrepreneurship is that nature of business activities requires a lot of man-power, therefore, not considered ideal for involvement of women. Again, out of the 15 rice farmers sampled for focus group discussion, 3 (20.0%) of them fall within the ages of 30 years, below 35 (33.3%) were between the ages of 31 - 40, while 7(46.7%) fall within 41 years and above. This data reveals that a large number of the respondents falls within the active working population. This buttresses the fact that operators require high level of energy, thus making their business operations less mechanized. These findings conform to some previous study (Olwande et al., 2015; Atozou & Lawin, 2016; Fredriksson et al., 2017; Sili & Dürr, 2022).

More so, out of 15 rice farmers sampled for focus group discussion, 1(6.7%) had no education, 11(73.3%) had basic education, 3(20.0%) had completed A level or West Africa Senior Secondary School (WASSCE) and none 0(0.0%) having a postsecondary certificate. The study also reviewed that 14(93.3%) rice farmers were married while 1(6.7%) were single. Last but not least, out of 15 respondents interviewed during focus group discussion, 4(26.7%) had a family size of 10 members, 9(60.0%) had 5- 10 family members, while 2(13.3%) had a family size above 10. This may also imply that farmers usually involve family members as labourers in their operation of the farm business. Finally, out of 15 sampled respondents, 3(20.0%) of the respondents had been in the rice farming operation for 5 years, while 12(80.0%) had over 5 years.

4.4 PATRONAGE RATE OF LOCAL RICE

In relation to the patronage of local rice in the economy of Western Region of Ghana, it was found that the majority, 89(89.0%) of the respondents, were aware of the two types of rice on the market; 53(53.0%) prefer any of the two kinds of rice, but the majority 58(58.0%) prefer the type of rice based on better taste. The majority, 63(63.0%) of the respondents, indicated that foreign rice was the rice they bought from the market for consumption at home last time. They buy foreign rice due to better taste 42(42.0%) and the majority 60(60.0%) also indicated that local rice is more expensive, and this is a challenge affecting their decision to patronise local rice (Table 4.3)

Table 4.3: Patronage of Local Rice

Variable	Frequency(n=100)	Percentage (%)
Are you aware of the two types of rice on the market?		
Yes	89	89.0
No	11	11.0
What type of rice (local or foreign) do you prefer?		
Foreign rice	27	43.0
Local rice	20	34.0
Any of them	53	53.0
Why do you prefer this type of rice?		
Taste better	58	58.0
Cheaper	19	19.0
Family preference	9	9.0
Availability	12	12.0
Others	2	2.0
The last time you bought rice from the market for consumption at home, which type did you buy?		
Foreign rice	63	63.0
Local rice	3	3.0
Can't tell	34	34.0
Why did you buy this (local or foreign rice) type?		
Taste better	40	40.0
Cheaper	30	30.0
Family preference	8	8.0
Always available	22	22.0
How often do you buy this (local or foreign rice) type?		
Always	42	42.0

Most times	30	30.0
Sometimes	24	24.0
Seldom	4	4.0
What are some of the challenges affecting one's decision to buy local rice?		
More expensive	60	60.0
Unavailable most/sometimes	9	9.0
Poor taste	5	5.0
Not perfumed	24	24.0
Others	2	2.0

Source: Field survey, Ofosu- Appiah (2022)

4.5 ATTITUDES TOWARDS LOCAL RICE

The constructs of the various statements posed by the researcher were descriptively measured using mean (M) and standard deviation (SD) to determine how people in the study area felt about local rice. These criteria, which were based on the research of Burch, Burman, Cooper and Hennessey (2015), Peters, Tijdens and Wetzels (2004) and other scholars with scale of measurement 0 – 0.9=strongly disagree; 1.0-1.9= Disagree; 2.0 – 2.9= indifferent; 3.0-3.9=Agree and 4.0 – 5= strongly agree.

Table 4.4: Descriptive statistics of attitudes toward local rice

Statements	Mean	Std. Deviation
I will prefer consuming local rice to foreign rice.	4.08	1.35
I think it is better to buy local rice than foreign rice.	4.09	1.24
I will always recommend local rice to relatives and friends.	3.86	1.16
More attention/advertisement should be given to local rice.	4.44	0.80
I believe local rice are healthier than foreign rice.	4.16	1.11
Grand mean	4.13	1.66

Source: Field survey, Ofosu-Appiah (2022)

Table 4 shows Western Region's households' attitudes toward local rice constructs. The results of the study show that the respondents strongly agreed that they prefer consuming local rice to foreign rice (M= 4.08; SD= 1.35); it is better to buy local rice than foreign rice (M= 4.09, SD= 1.24); more attention/advertisement should be given to local rice (M= 4.44, SD= 0.80) and they believe local rice is healthier than foreign rice (M=4.16; SD=1.11). Again, household participants agreed they would always recommend local rice to relatives and friends (M=3.86; SD=1.16). Overall, household respondents had a better attitude towards local rice (M=4.13; SD= 1.66) (Table 4).

4.6 ETHNOCENTRISM IN LOCAL RICE PATRONAGE

To assess consumer ethnocentrism in the patronage of local rice, the constructs of the various statements posed by the researcher were also descriptively measured with the means (M) and standard deviation (SD). The interpretation of the mean was based on these subjectively created criteria as informed by studies of Burch, Burman, Cooper and Hennessey (2015), Peters, Tijdens and Wetzels (2004) and other scholars with scale of measurement 0 – 0.9=strongly disagree; 1.0-1.9= Disagree; 2.0 – 2.9= indifferent; 3.0-3.9=Agree and 4.0 – 5= strongly agree.

Table 4.5: Descriptive statistics of factors associated with the patronage of local rice

Statements	Mean	Std. Deviation
A real Ghanaian should always buy Ghana-made rice.	2.49	1.05
Purchasing foreign-made rice is un-Ghanaian	2.54	0.82
Curbs should be placed on rice imports.	2.66	1.04
Ghanaian consumers who purchase rice made in other countries are responsible for putting their fellow Ghanaians out of work.	2.83	1.16
Foreigners should not be allowed to put their rice on our markets	2.33	0.91
It is not right to purchase foreign rice because it puts Ghanaians out of jobs	2.79	1.00
We should purchase rice grown in Ghana instead of letting other countries get rich off us	3.33	1.00
Ghanaians should not buy foreign rice because this hurts Ghanaian business and causes unemployment and harm the economy	3.21	1.14
Foreign rice should be taxed heavily to reduce their entry into Ghana market.	2.56	1.10
I will consider Ghanaian rice first, last, and foremost	2.88	0.87
Ghanaians should always buy Ghana-made rice instead of imported	2.59	0.78

Buying Ghana-made rice keeps Ghana working	2.97	0.94
It is always best to purchase Ghanaian rice.	3.06	0.92
We should buy from foreign countries only those rice that we cannot obtain within our own country	3.25	0.93
There should be very little trading or purchasing of rice from other countries unless out of necessity	3.42	0.90
Only those rice that are unavailable in Ghana should be imported	3.51	0.93
Grand mean	2.90	0.97

Source: Field survey, Ofosu-Appiah (2022)

With regards to consumer ethnocentrism in the patronage of local rice constructs, the respondents were indifferent whether a real Ghanaian should always buy Ghana-made rice ($M= 2.49$, $SD= 1.05$); purchasing foreign-made rice is un-Chilean ($M= 2.54$, $SD= 0.82$); curbs should be placed on rice imports ($M= 2.66$, $SD= 1.04$); Ghanaian consumers who buy rice from other nations create unemployment for some Ghanaians ($M=2.83$, $SD=1.16$); foreigners should be stopped from making their rice available on the Ghanaian markets ($M=2.33$; $SD=0.91$); it is not right to purchase foreign rice, because it puts Ghanaians out of jobs ($M=2.79$, $SD=1.00$); it may cost them in the long-run but they prefer to support foreign rice ($M=2.79$, $SD=0.99$); foreign rice should be taxed heavily to reduce their entry into Ghana market ($M=2.56$, $SD=1.10$); they will consider Ghanaian rice first, last, and foremost ($M=2.88$, $SD=0.87$), Ghanaians should always buy Ghana-made rice instead of imported ($M=2.59$, $SD=0.78$) and buying Ghana-made rice, keep Ghana working ($M=2.97$; $SD=0.94$). Respondents also concurred that Ghanaians should buy rice produced in Ghana rather than letting other nations profit off of us ($M=3.33$; $SD=1.00$); Ghanaians should not buy foreign rice because doing so hurts Ghanaian businesses and leads to unemployment, which hurts the economy ($M=3.21$, $SD=1.14$). Therefore, it is always best to purchase Ghanaian rice ($M=3.06$, $SD=0.92$). Only imported rice that is unavailable domestically should

be purchased by Ghanaians ($M=3.25$, $SD=0.93$). Rice from other nations should only be traded or purchased when absolutely necessary ($M=3.42$, $SD=0.90$) and only those rice that is unavailable in Ghana should be imported ($M=3.51$; $SD=0.93$). Overall, most local rice consumers were unsure whether there is ethnocentrism in the patronage of local rice ($M=2.89$; $SD= 0.97$) (Table 5).

4.7 FACTORS ASSOCIATED WITH THE PATRONAGE OF LOCAL RICE

In relation to the factors associated with local rice patronage in Western Region, Ghana, the study looked at socio-demographic variables associated with local rice patronage. The results obtained reveal that, generally, gender, marital status, occupation and the average percentage of income spent on food were significant factors associated with the local rice patronage in the Western Region of Ghana. From the perspective of the adjusted odd ratios (AORs), it can be deduced that household heads who were females were 1.3 times more likely to patronise local rice compared to the males [$AOR=1.33$ (C.I: 0.110, 2.106); $p = 0.020$]. Also, households who are single were 89.7% less likely to patronise local rice compared with those who are married and others [$AOR=0.29$ (C.I: 0.0.098, 1.021); $p = 0.007$]; those who were employed in either private or public institution were 61.5% less likely to patronize local rice compared with those who are unemployed, traders, farmers or fishmongers and skilled workers [$AOR=0.385$ (C.I: 0.036, 0.360); $p = 0.031$] and those household respondents who spent an average income above 25% were 78.3% less likely to patronage local rice compare to those who spent an average income of 1% to 25% [$AOR=0.217$ (C.I: 0.34, 2.55); $p = 0.008$] (Table 7)

Table 4.6: Association between sociodemographic variables and patronage of local rice

Variables	Patronage level		(χ^2)(p-value)	COR (95% C.I) (p-value)	(AOR, (95% C.I) (p-value)
	High n (%)	Low n (%)			
Gender					
Male	15(75.0)	12(53.3)		Ref	Ref
Female	5(25.0)	15(66.7)	6.94(\leq 0.031)	2.47(0.101-2.264), <0.026	1.33 (0.110-2.106), 0.038
Age					
Up to 29 years	5(7.1)	6(22.5)			
30-39 years	7(29.4)	9(31.0)			
40-49 years	8(27.9)	12(26.2)			
50 and above	0(5.6)	0(2.6)	8.158(\leq 0.086)		
Marital status					
Married	5(25)	7(25.9)		Ref	Ref
Single	4(20.0)	8(29.6)	20.41(\leq 0.009)	0.073(0.095-0.727), <0.001	0.103 (0.098-1.021), 0.007
Others	11(55.0)	12(44.5)		2.58(0.25-28.27),0.379	0.935(0.06-6.51),0.466
Religion					
Christian	13(65.0)	20(74.1)			
Others	7(35.0)	7(25.9)	5.90(0.052)		
Respondent occupation					
Unemployed	1(5)	0(0.0)		Ref	Ref
Employed	8(40.0)	4(14.8)		2.57(0.24-2.11),0.008	0.385 (0.036-0.360), 0.031
Trader	3(15.0)	15(55.6)	17.439(\leq 0.026)	0.27(0.095-0.271),0.002	0.131 (0.43-1.221), 0.561
Farmer/fishmonger	5(25.0)	2(7.4)		0.34(0.09-1.32),0.087	0.28 (0.06-1.25), 0.095
Skilled work	3((15.0)	6(22.2)		0.47(0.21-0.99),0.421	0.37 (0.100-1.69), 0.208
Educational level					
No education	3(15.0)	4(14.8)			
Primary	3(15.0)	5(18.5)			
JHS/JSS	3(15.0)	5(18.5)			
SSS/SHS/Voc/NVTI	3(15.0)	8(29.6)			
Tertiary	8(40.0)	5(18.5)	6.049(0.642)		
Average income					
Up to 500GH	3(15.0)	3(11.1)			
600-1000GH	11(55.0)	20(74.1)			

Above 1000GH	6(30.0)	4(14.8)	2.254(\leq 0.689)		
% of income spent					
Up to 10%	11(79.7)	12(66.3)		Ref	Ref
11-25%	6(4.1)	9(5.9)		0.329(0.095-2.706),0.004	0.264 (0.089-2.981), 0.009
Above 25%	2(16.2)	6(27.8)	12.11(0.017)	0.217(0.34-2.55),0.008	0.089 (0.39-2.78), 0.030

JHS= Junior High School, JSS= Junior Secondary School, SHS= Senior High School, Voc= Vocational

4.8 THE CHALLENGES ASSOCIATED WITH LOCAL RICE

ENTREPRENEURSHIP (LRE)

The challenges local rice farmers encountered were revealed through focus group discussions involving three groups. First, the researcher used an open-ended questionnaire to investigate local rice entrepreneurs' challenges. Then, the major ideas of local rice participants in each section were organized and properly grouped into three “themes,” which include materials/equipment challenges, human factors and political issues.

4.8.1 Material/equipment challenges

4.8.1.1 Land issues

Land for cultivating the local rice in large quantities or for commercial production was inadequate. The farmers could sometimes not get large land farm sizes for cultivation. Therefore, they mostly used few lands available for cultivation. The first and second groups pointed out that “they mostly hired land for cultivating, but such lands were not adequate for producing enough rice or large quantity.” However, in the third group, one of the participants noted that one piece of land could be used concurrently for over five years, which in most cases was less fertile to produce enough rice in the subsequent years. They

further added that poor rainfall destroys their crops due to the site of the land (dry land or waterlog area).

4.8.1.2 Farming materials

The high cost of farming makes it challenging to get all the necessary materials to produce a large quantity of local rice. The local rice entrepreneurs noted that they mostly hired equipment to clear the site, which is highly costly. They added that bad seeds or cereals for cultivating were also other challenges they encountered. They elaborated that, in most cases, cereals/seeds for cultivation sometimes turned into bad seeds due to poor storage at the market. Also, two participants from the second group discussion noted the high cost of weedicides, spraying machines and other farming tools, such as cutlass, net, etc. due to economic hardships.

4.8.1.3 Nursing/Cultivation of Cereals

In one of the focus group discussions, three participants observed that, during cultivation, getting enough laborers was also a challenge. They said that nursing that can be done in a week can sometimes be three to one month due to inadequate labour. Also, one participant noted lack of equipment for transplanting or nursing makes it difficult to cultivate in large quantities.

4.8.1.4 Harvesting and Storing of Local Rice

During the three-focus group discussion, participants noted that birds and rodents disturbed them in their farmlands. Sometimes buying materials to cover the rice during the time of harvest to prevent birds and rodents was costly, and they added a challenge. Also, there is inadequate labor for harvesting cereals. The first and the third groups noted that materials for storing cereals were also

challenging. They sometimes store the rice for a few months and sell all to prevent them from getting spoilt. Storing the rice for a long time may mean processing it, which demands a high cost of materials and tools.

4.8.2 Human Factors

4.8.2.1 Processing of the Local Rice

Many local rice entrepreneurs face a challenge in processing. Processing the local rice may mean having factory machines and technicians process the rice, but most factory machines were found far from the farmer's location. A participant noted that the farmers must travel long distances before getting a factory machine for processing. This is due to the lack of rice processing machines in most of the rice farming areas in the country.

4.8.2.2 Marketing and Competition of Foreign and Local Rice

Local rice entrepreneurs who feel that Ghanaian prefer foreign rice to local rice turn to produce less local rice. Many participants noted that the price of local rice at the market is primarily low due to customer patronage. Participants claimed that buyers decide the price of the local rice after processing, which mostly affects their earnings. The cost of local rice is mostly low and may be due to poor packages and customer preferences.

4.8.3 Political Issues

4.8.3.1 Lack of Government Support

The majority of politicians who run the government and decide on financial allocations are not concerned with providing the resources required for regional rice production. During the focus group discussion, one participant noted that

access to government support requires an association and association leaders with an outline proof before the government aid. They added that forming an association of local rice farmers was highly challenging.

4.8.3.2 Corruption

One of the issues, according to the respondents, is corruption. It became apparent that, in the majority of cases, inadequate equipment was provided or awarded materials were not executed. Most often, the designated leaders in charge of supplying materials cut corners and deliver out-of-date machinery or sell the material to the farmers, turning them into a landfill in their effort to make a profit. The actual rice farmers who needed the tools and materials were left out as party leaders were forced to distribute them to party members.

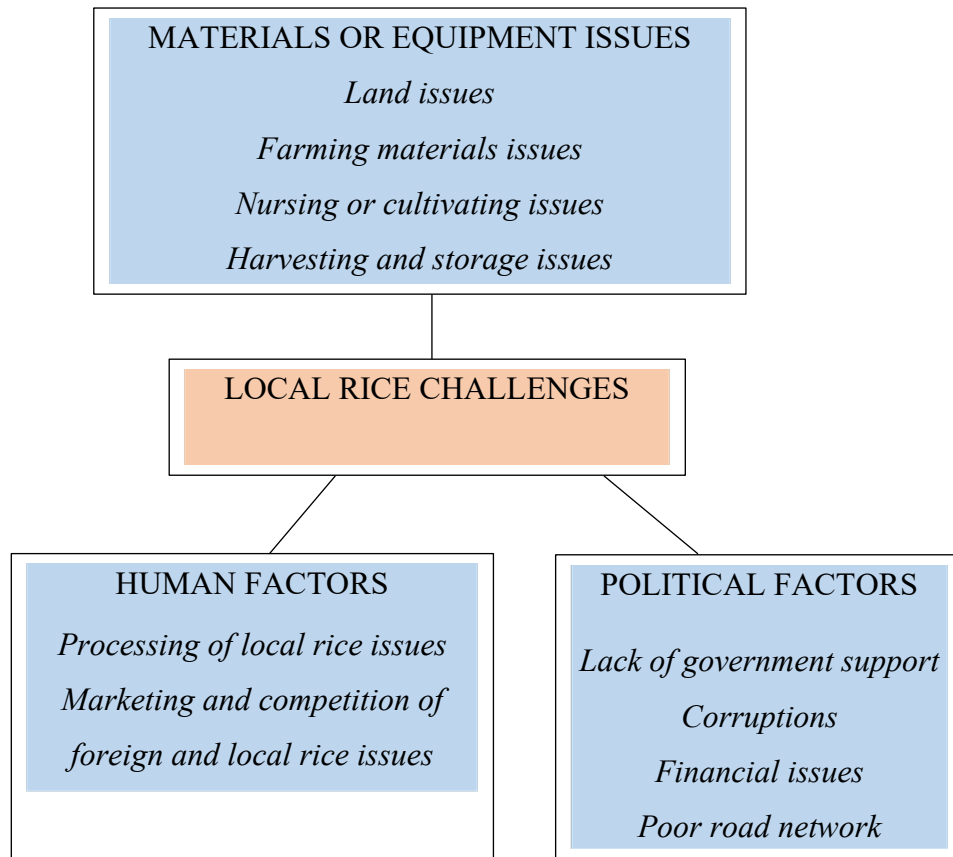
4.8.3.3 Financial Issues

This was identified as one of the major challenges for general local rice entrepreneurs, and all farmers are grossly underfunded. Rice cannot be produced in large quantities due to a lack of resources, but there are still enough to meet their needs.

4.8.3.4 Poor Road Network

Also, this was noted as the overall second major challenge local rice farmer encountered. According to participants (rice farmers) the road to the processing factory was very bad, and in most cases, it takes them longer days to reach the destination. Local rice farmers added that rice sometimes gets spoilt on the road when unexpected rain falls on the way to the processing factory. Finally, local rice farmers noted that a road that can take a day to reach the processing factory might take two to three days.

Figure 4.1: Challenges local rice farmers encountered.



Source: Fieldwork, Ofosu-Appiah (2022)

4.9 RECOMMENDATIONS FROM THE PARTICIPANTS

The local rice farmers made these recommendations in order to address the problems mentioned. The researcher took note of this information when it was brought up during the discussions. However, it was not covered in the following chapter because it is not the study's primary focus. A participant suggested that only qualified and visionary district chief executive officers should be appointed into the office to overcome the lack of government support.

They also gave an analogy to support his claim:

“Development will be aided when the president and agricultural minister are in favour of rice farming initiatives because then resources can be redirected.

For instance, the current minister's interest in a factory in a particular district has caused resources to be diverted to creative suggestions meant to end the export of raw materials. Therefore, 2016 will be "the year of accelerated development in factories and planting for food and jobs," according to the agricultural minister. In addition to building factories, a lot of resources have been directed toward the planting of food crops like sugar cane and pineapples over the past two years. This is because the minister has made sure that resources are being channeled and because the planting for food programme is so dear to his heart. The right policymakers must be chosen in order for any programme to be implemented successfully. They are the ones who really count. From experience, it is the only programme that reaches the appropriate policymakers and is made public. Politicians should be able to understand the policymakers' programme and what they stand to gain in terms of public support for their political positions. No matter how beneficial a programme is, politicians won't support it unless it is explained to them in a manner they can understand.

According to one participant, there is always a way if there is a will. Even though the current budgetary allocation for the agricultural sector is insufficient, he proposed, it might be possible to divert funds to the project for local rice production if the management of the agricultural ministries is willing. He continued by saying that anything can be accomplished if people are willing to put in the necessary effort. Although challenging, it is not insurmountable. He suggested using a specific rice-farming entrepreneur to review the local rice industry. The findings of the pilot study may serve as a catalyst to promote

attitude modification and a shift in perspective for those who do not think that growing rice locally is more advantageous.

One participant also suggested that the ministries in charge of providing general training for rice cultivation should regularly come to their aid to provide modern skills and training to the farmers on the importance and advantages of such forms that they do not know. This may aid them in redirecting funds into producing more local rice with a small land size. It was also suggested that the agricultural extension officers involved in supplying materials should remember local rice farmers need the support of materials and funds for large-scale production.

4.10 DISCUSSION OF FINDINGS

The study assesses local rice entrepreneurship and patronage behaviours among residents in the western region of Ghana. Lack of patronage of local rice is more likely to reduce the country's GDP and increase importation into the country, affecting the lives of local rice entrepreneurs in the industry. On the other hand, promoting local rice patronage will improve the standard of living and the lives of common Ghanaians. Therefore, the intention to create awareness and examine the patronage of local rice, attitude, ethnocentrism, common factors and challenges has by far influenced the behavior of a population.

4.11 THE PATRONAGE OF LOCAL RICE

The first objective looks at the patronage of local rice. It was found that 89(89.0%) of the households in the Western Region of Ghana were aware of the two types of rice at the market, 53(53.0%) prefer any of the two types of rice, 58(58.0%) prefer local or foreign rice base on better taste. Also, 63(63.0%)

point out that foreign rice was the rice they bought from the market for consumption at home last time. 42(42.0%) buy foreign rice due to better taste and higher local rice prices which is a challenge affecting their decision to patronize local rice 60(60.0%).

The results of the present study are comparable to the findings of Oppong's (2020) study, which found that consumers perceived higher prices as a barrier to buying particular types of rice they preferred. Additionally, it supports research by Carvalho and Tahbaz-Salehi (2019) and Xu et al. (2018), which found that most Asian consumers preferred to buy cheaper local rice.

4.12 ATTITUDES TOWARDS LOCAL RICE

The second objective sought to examine the attitude of Western Region of Ghana households towards local rice. It was found that, generally, Western Region households had a better attitude towards local rice (M=4.13). Households prefer consuming local rice to foreign rice (M= 4.08); recommended that it is better to buy local rice than foreign rice (M= 4.09), suggested more attention/advertisement should be given to local rice (M= 4.44), believe local rice is healthier than foreign rice (M=4.16) and they will always recommend local rice to relatives and friends (M=3.86). The study's findings contradict with Abukari et al.'s. (2019), which reported that only non-urban residents in northern Ghana are loyal to local made rice. A study by Ndindeng et al. (2021) also noted that Ghanaians choose rice grown in foreign countries over domestic rice due to its aromatic nature (perfumed), better cleaned, de-stoned and polished.

4.13 ETHNOCENTRISM IN THE PATRONAGE OF LOCA RICE

In relation to ethnocentrism in the purchase of domestic rice, it was found that generally, there is barely or moderate ethnocentrism in the patronage of local rice ($M=2.89$). However, Ghanaians should purchase rice grown in Ghana rather than making other countries richer by buying rice from those countries us ($M=3.33$); discard buying foreign rice because it causes harm to Ghanaian businesses and result in loss of jobs which harms the economy ($M=3.21$); it is always best to purchase Ghanaian rice ($M=3.06$), only purchase from other nations because of non-availability of those rice in the country ($M=3.25$); Rice from other nations should only be traded or bought when absolutely necessary. ($M=3.42$) and only those rice that is unavailable in Ghana should be imported ($M=3.51$).

The current study contradicts with Kiriri (2019) study, which found that consumers who favor imported products to home-made products are less ethnocentric. However, studies by Mueller et al (2015) confirm the current study by stating that consumers are more exocentric.

4.14 FACTORS ASSOCIATED WITH THE PATRONAGE OF LOCAL RICE

Regarding factors associated with patronage of local rice in the Western Region of Ghana, it was found that gender, marital status, occupation and the average percentage of income spent on food were significantly associated with local rice patronage. Also, it was found that female households were 1.3 times more likely to patronise local rice ($AOR=1.33$, $p = 0.020$). More so, households who are single, employed in either private or public institutions, and spent an average income above 25% were 89.7%, 61.5% and 78.3% less likely to patronise local

rice (AOR=0.29, $p = 0.007$), (AOR=0.385, $p = 0.031$) and (AOR=0.217, $p = 0.008$) respectively. The current study contradicts studies by Vives et al. (2018) in Ghana and Haines and Haycraft et al. (2019), which point out four major factors, such as product price, income, population and cost of substitute, determine the patronage of local rice. Also, Andam et al. (2019) added that sensory perception is a major factor influencing consumers' choice of rice. Hartley et al. (2021) further added that taste is the most crucial aspect of rice that affects consumers' decisions to buy food,

4.15 CHALLENGES ASSOCIATED WITH LOCAL RICE

ENTREPRENEURSHIP

The study revealed that land issues, farming materials, nursing or cultivating issues, harvesting and storing problems processing issues, marketing and competition issues, lack of government support, corruptions, financial constraints and poor road network are the major challenges local rice entrepreneurs face. Generally, local rice entrepreneurs encountered three main challenges: material or equipment, human factors, and political issues.

The current study is in line with studies by Demeke and Balie (2016) and Arezki et al. (2016), which found that output price volatility is exacerbated by market failures caused by uncertain property rights, restricted market access, a lack of efficient roads and storage facilities, and inaccurate market information. These are significant obstacles for developing nations. Again, studies by Maertens and Velde (2017) and Anthony k Morgan et al. (2019) also confirm that the lack of infrastructure, such as bad roads and poor road networks, has become a significant barrier for local rice entrepreneurs. The study of Asfaw, Amare, Lipper and Davis (2012) affirmed that Local rice entrepreneurs incur high

transports cost due to bad roads and poor road networks connecting market centers and their farms. The studies of Aker and Ksoll (2016) and Mmbando et al. (2017) added that lack of adequate and poor institutional elements, particularly local rice entrepreneurs' unions, agricultural extensions and accessing funds, is a weak determinant of commercialisation. Jayne et al. (2019) reported that loss of soil fertility, increasing climate change and shocks, asset poverty, and influence of political power are the most failures to plan for the successful commercialisation of local rice production.

4.16 SUMMARY OF FINDINGS

The study's key findings are summarized as follows; First, there is a high level of patronage for local rice among Western Region households. Again, households in the Western Region of Ghana had a better attitude toward local rice. However, there is a neutrality of consumer ethnocentrism in the patronage of local rice. In addition, gender, marital status, occupation and the average percentage of income spent on food were significant factors associated with the local rice patronage in Western region of Ghana. Finally, local rice entrepreneurs face material or equipment, human and political issues.

4.17 CHAPTER SUMMARY

The chapter looked at data analysis and interpretation on both socio demographic characteristics of households and local rice farmers in Western Region of Ghana. It also considered patronage of local rice, attitude of residents toward local rice, ethnocentrism in patronage of local rice and factors associated with patronage of local rice. Finally, the chapter also presented analysis and interpretation of data on challenges of local rice farmers.

The study's main findings are summarized as follows; there is a high level of patronage for local rice among Western Region households. Also, households in the Western Region of Ghana had a better attitude toward local rice. However, there is a neutrality of consumer ethnocentrism in the patronage of local rice. In addition, gender, marital status, occupation and the average percentage of income spent on food were significant factors associated with the local rice patronage in Western region of Ghana. Finally, local rice entrepreneurs face material or equipment, human and political issues.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION

A summary of the study, inferences from the study, and recommendations based on the outcomes for each objective are presented in this chapter. A summary of the study's findings, a summary of its main findings, and a conclusion follows. It also highlighted participant recommendations and ideas for further research.

5.1 SUMMARY OF THE STUDY

The study aimed to assess local rice entrepreneurship and patronage behaviours among residents in the Western Region of Ghana. The study's objectives were to: examine the patronage rate of local rice in the economy of the Western Region of Ghana. Again, to explore the residents' attitude towards local rice. Also, to determine consumer ethnocentrism in the patronage of local rice. More so, to determine the factors associated with local rice patronage and investigate the challenges associated with the local rice farmers in the Western Region of Ghana.

The study employed a mixed research approach and descriptive research design. The study used a sample of 100 household respondents and 15 local rice farmers in the Western Region of Ghana. The study adopted a multi-stage technique in selecting the participants from the Western Region of Ghana household. A questionnaire and interview guide were used as data collection instruments. A frequency table was used to measure local rice patronage and descriptive statistics such as mean and standard deviation were used to test the attitude and

ethnocentrism of local rice patronage. However, a regression test was used to the factors associated with local rice patronage.

5.2 SUMMARY OF KEY FINDINGS

In relation to the patronage of local rice in the economy of Western Region Ghana, it was found that most of the households were aware of the two types of rice at the market, prefer any of the two types of rice but prefer the type of rice based on better taste. However, foreign rice was the rice they bought from the market for consumption at home last time. Therefore, household heads buy foreign rice due to the better taste. Higher price of local rice is a major factor that affect household heads' decision to patronise local rice.

Also, studies on the attitude of households towards local rice indicated that Western Region households had a better attitude towards local rice. Household heads prefer local rice over foreign rice and buy local rice over foreign rice. Household heads suggested more attention/advertisement should be given to local rice. It's believed local rice is healthier than foreign rice and always recommend local rice to relatives and friends.

More so, findings on consumer ethnocentrism in the patronage of local rice indicated that, overall, there is indifference to ethnocentrism in the patronage of local rice; however, Ghanaians should purchase local rice rather than making to boost the Ghanaian economy rather than buying foreign rice to make other nation economies wealthier. Purchasing foreign rice hurts Ghana rice businesses and results in loss of jobs and harm the economy. Ghanaian may only buy from other nations when local rice is unavailable in Ghanaian markey. Unless

absolutely necessary, there should be very minimal trade or buying of rice from foreign nations.

The study also assesses factors associated with local rice patronage in the Western Region of Ghana and found that, overall, gender, marital status, occupation and an average percentage of income spent on food were significant factors associated with the local rice patronage. For example, the study found that households with females were 1.3 times more likely to patronize local rice. Also, single households employed in either private or public institutions spent an average income above 25% and were less likely to patronise local rice.

Finally, the challenges local rice farmers encounter includes land issues, farming materials, nursing or cultivating issues, harvesting and storing issues, processing issues, marketing and competition issues, lack of government support, corruption, financial problems and poor road network. Generally, local rice entrepreneurs encountered three main challenges: material or equipment, human factors, and political issues.

5.3 CONCLUSION

Based on the empirical results, the following conclusions can be drawn:

There is a high level of patronage of local rice among the Western Region households. This is because Ghanaian households knew the two types of rice at the market. Ghanaians prefer rice base on better taste. However, they buy foreign rice due to its better taste, but high cost of local rice is also a challenge affecting their decision to patronize local rice.

Also, households in the Western Region of Ghana had a better attitude toward local rice. They prefer local rice to foreign rice, buy local rice over foreign rice

and even suggest that more attention/advertisement should be given to local rice since it is believed local rice is healthier than foreign rice and always recommend local rice to relatives and friends.

More so, there is a neutrality of consumer ethnocentrism in the patronage of local rice. It is suggested that Ghanaians purchase local rice instead of letting other countries get rich off us. They should not buy foreign rice because this hurts Ghanaian businesses and causes unemployment, harming the economy. Furthermore, it is always best to purchase Ghanaian rice and only buy from foreign countries when that rice cannot be obtained within the country. There should be very little trading or purchasing of rice from other countries unless out of necessity and only the rice unavailable in Ghana should be imported.

Additionally, there are factors associated with local rice patronage in the Western Region of Ghana. Gender, marital status, occupation and the average percentage of income spent on food were significant factors associated with the local rice patronage in Western region of Ghana. Households that were females were more likely to patronize local rice. Also, single households employed in either private or public institutions spent an average income above 25% and were less likely to patronize local rice.

Local rice entrepreneurs face material or equipment, human, and political issues. Land issues, farming materials, nursing or cultivating issues, harvesting and storing issues, processing issues, marketing and competition issues, lack of government support, corruptions, financial issues and poor road network are the challenges local rice entrepreneurs face in the Western Region of Ghana.

5.4 RECOMMENDATIONS

Based on the findings and conclusion from the current study, the following recommendations were made to increase the patronage of local rice and entrepreneurs' patronage.

1. Local rice should be well packaged and advertised to raise awareness or patronage of households in the Western Region of Ghana.
2. Households in the Western Region who developed one taste for foreign goods should patronise Ghanaian-produced goods such as local rice since it produces a better taste.
3. Ghanaians should always consider local rice first in the market before other foreign rice and this will help boost local production and hence create jobs and increase Ghana's GDP.
4. Government and other state agencies should support and help local rice farmers financially.
5. The government plan to establish one district factory should also target local rice production.
6. Government and road ministers should consider and construct roads leading to various remote areas in the Western Region of Ghana, where local rice is produced

5.5 SUGGESTION FOR FURTHER STUDIES

Drawing from the facts, the findings from this study were based on the opinions of only rice farmers in the Western Region of Ghana. Therefore, it is suggested that further studies should include other farmers in all Regions across Africa to

get their views which may be contrary to those expressed by the farmers in the Western Region of Ghana.

Given the limitations of the method utilized in this study, it is recommended that future research use qualitative methods to examine household perspectives on local rice and measure some of the replies provided by the study's participants.

5.6 CHAPTER SUMMARY

The chapter highlighted the objectives of the study and outlined the methods used in collecting data. It also presented a summary of the findings and drew conclusion from the findings. Recommendations were made based on the findings, Finally, the chapter made suggestion for further studies.

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APPENDIX I

DURBAN UNIVERSITY OF TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF BUSINESS ADMINISTRATION

QUESTIONNAIRE ON LOCAL RICE ENTREPRENEURSHIP AND

PATRONAGE BEHAVIOUR AMONG GHANAIS

QUESTIONNAIRES FOR LOCAL RICE FARMERS

Focus Group Discussion Guide for Local Rice Farmers.

SECTION A: Socio-Demographic Information

<u>Group ID</u>	<u>SEX</u>	<u>AGE</u>	<u>EDUCATION</u>	<u>MARITAL</u> <u>STATUS</u>	<u>Family</u> <u>Size</u>

SECTION B: What are your perceptions and experiences of local rice commercialization?

SECTION C: Discuss the challenges you face in commercializing your rice produce.

APPENDIX II

DURBAN UNIVERSITY OF TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF BUSINESS ADMINISTRATION

**TOPIC: LOCAL RICE ENTREPRENEURSHIP AND PATRONAGE
BEHAVIOUR AMONG GHANAIS**

QUESTIONNAIRES FOR RESIDENTS ON PATRONAGE OF LOCAL RICE

Dear Sir/Madam,

This study is being conducted in partial fulfilment of the requirements for the award of degree in MPhil in Entrepreneur. All information received would be used for academic purposes only and treated in the strictest of confidence.

Kindly tick or answer where appropriate.

SECTION A: PERSONAL INFORMATION

Please TICK [☐] the appropriate box/complete the entry where applicable/ that is true about you

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

Question	Response		Tick (✓)
1. What is your gender?	1.	Male	
	2.	Female	
2. How old are you?	1.	Up to 29 years	
	2.	30-39 years	
	3.	40- 49 years	
	4.	50 years and above	
3. What type of residence do you live?	1.	Rural	
	2.	Urban	
	3.	Peri-urban	
5. Which religion do you practice?	1.	Christianity	
	2.	Islam	
	3.	Other (specify): _____	
6. What is your marital status?	1.	Never married	
	2.	Married	
	3.	Co-habiting	
	4.	Divorced/separated	
	5.	Widowed	
7. What is your level of education?	1.	No formal education	
	2.	Primary	
	3.	JSS/JHS	

	4.	SSS/SHS/vocational/NVTI	
	5.	Tertiary	
8. What is your main occupation?	1.	Unemployed	
	2.	Employed (private/public service)	
	3.	Trader/businessman	
	4.	Farmer/breeder/fisherman	
	5.	Artisan/skilled work	
	6.	Other (specify): _____	
9. What is your average monthly income?	1.	Up to ₱500	
	2.	₱600-₱1000	
	3.	Above ₱1000	
10. What percentage of your average monthly income do you spend on buying food stuffs?	1.	Up to 10%	
	2.	11-25%	
	3.	Above 25%	

SECTION B: LOCAL RICE

PATRONAGE

Please TICK [✓] the appropriate box/complete the entry where applicable/ that is true about you

Question	Response		Tick (√)
11. Are you aware of the two types of rice on the market?	1.	Yes	
	2.	No	
12. What are these two types?	1.	Foreign rice	
	2.	Local rice	
	3.	Don't know	
13. What type of rice (local or foreign) do you prefer?	1.	Foreign rice	
	2.	Local rice	
	3.	Any of them	
14. Why do you prefer this type of rice?	1.	Taste better	
	2.	Cheaper	
	3.	Family preference	
	4.	Always available	
	5.	Other (specify) _____	
15. The last time you bought rice from the market for consumption at home, which type did you buy?	1.	Foreign rice	
	2.	Local rice	
	3.	Not sure	
16. Why did you buy this (local or foreign rice) type?	1.	Taste better	
	2.	Cheaper	
	3.	Family preference	

	4.	Always available	
	5.	Other (specify).....	
17. How often do you buy this (local or foreign rice) type?	1.	Always	
	2.	Most times	
	3.	Sometimes	
	4.	Seldom	
18. What is the most significant factor to your decision on the type of rice to buy?	1.	Taste better	
	2.	Cheaper	
	3.	Family preference	
	4.	Always available	
	5.	Other (specify)	
19. What are some of the challenges affecting one's decision to buy local rice?	1.	More expensive	
	2.	Unavailable most/sometimes	
	3.	Poor taste	
	4.	Not perfumed	
	5. Other (specify).....		

SECTION C: ATTITUDES TOWARDS LOCAL RICE

Note: There is no right or wrong answer, you are requested to put your opinion on a “5 Point likert Scale.” Where: 5= very great extent, 4= greater extent, 3= moderate extent, 2= smaller extent and 1=very low extent. Please tick (√) only one option that best describes your opinion in each of the statements

Statement	1	2	3	4	5
20. I will prefer consuming local rice to foreign rice.					
21. I think it is better to buy local rice than foreign rice.					
22. I will always recommend local rice to relatives and friends.					
23. More attention/advertisement should be given to local rice.					
24. I believe local rice are healthier than foreign rice.					

SECTION D: ETHNOCENTRISM IN THE PATRONAGE OF LOCAL RICE (CETSCALE by Shimp and Sharma (1987))

Kindly indicate by ticking (√), your agreement or disagreement to the statements below on the ethnocentrism in the local rice within the context of the patronage. This five-point scale is applicable: 5=SA (completely Agree); 4=A (Agree); 3=N (Neutral); 2=D (Disagree); 1=SD (completely Disagree).

Statement	1	2	3	4	5
25. A real Ghanaian should always buy Ghana-made rice.					
26. Purchasing foreign-made rice is un-Chilean.					
27. Curbs should be placed on rice imports.					
28. Ghanaian consumers who purchase rice made in other countries are responsible for putting their fellow Ghanaians out of work.					
29. Foreigners should not be allowed to put their rice on our markets.					
30. It is not right to purchase foreign rice, because it puts Ghanaians out of jobs.					

31. We should purchase rice <u>grown</u> in Ghana instead of letting other countries get rich off us.				
32. Ghanaians should not buy foreign rice, because this hurts Ghanaian business and causes unemployment and harm the economy				
33. It may cost me in the long-run but I prefer to support foreign rice.				
34. Foreign rice should be taxed heavily to reduce their entry into Ghana <u>market</u> .				
35. <u>I will consider</u> Ghanaian rice first, last, and foremost.				
36. Ghanaians should always buy Ghana-made rice instead of imported.				
37. Buy Ghana-made rice. Keep Ghana working?				
38. It is always best to purchase Ghanaian rice.				
39. We should buy from foreign countries only those rice that we cannot obtain within our own country.				
40. There should be very little trading or purchasing of rice from other countries unless out of necessity.				
41. Only those rice that are unavailable in Ghana should be imported.				

APPENDIX III



LETTER OF INFORMATION

Title of the Research Study: Local rice entrepreneurship and patronage behaviours among residents in the western Region of Ghana

Principal Investigator/s/researcher: (Samuel Ofosu-Appiah/Master of Business Administration)

Supervisor/s: (Prof Albert Tchey Agbenyegah)

Brief Introduction and Purpose of the Study:

Greeting: Good Day, how are you?

Introduce yourself to the participant (My name is Samuel Ofosu-Appiah. I'm a master's student in Business Administration and currently doing my research.

Invitation to the potential participant: As a partial fulfilment for the award of master's degree, I'm required to write undertake research. I would like to invite you to participate in the research.

What is Research: Research is a systematic quest or inquiry for broad new knowledge. This research will look into local rice consumption and its associated factors. You are free to talk to your family and friends about this study because you are not obligated to join at this time. You are free to ask as many questions as you want

Outline of the Procedures: The main aim of the study is to examine the challenges associated with local rice entrepreneurs and suggest ways of enhancing patronage. 36 local rice entrepreneurs will be purposively sampled to form four different groups in a focus group discussion. You will be asked to provide answers to a structured questionnaire. This will be done at your own

convenient time and place. Note that, you're free to withdraw from the study without any form of punishment,

The expected duration for completing the question is about 10 minutes. In all, there are 403 participants. The study will include only local rice entrepreneurs who have engaged in rice production for more than one season will be purposively included. Also, adult residents in the Western Region with household purchasing decision who have lived in the region for more than six months will be included. However, adult residents who are unavailable at the time of the data collection will be excluded. You are free to withdraw from this study at any time without any form of punishment. The above language will also be translated into Akan for the benefit of participants who don't understand English.

Risks or Discomforts to the Participant: The study does not anticipate any form of discomfort or risk.

Explain to the participant the reasons he/she may be withdraw from the Study: You may be withdrawn from the study at the early stage when it's discovered that you're not the head of household (making final decision about which food item to be consumed) or local rice entrepreneur. Under circumstances that may result in your withdrawal illness or when for some reasons you are not available at the time of the interview.

Benefits: The expected benefit of the study is to boost the sale of local rice, so that the lives of local rice entrepreneurs and other stakeholders in the rice industry would be improved. This would intend increase GDP and boost the local economy

Remuneration: There no monetary or any physical reward during and after for participating in the study.

Costs of the Study: You won't incur any cost for participating in the study

Confidentiality: You're assured of highest standards of anonymity and confidentiality. Pseudonyms containing combination of letters and numbers will be used instead of the personal identifying information of the participants while

the data collected will not be shared with any third parties without deidentifying the data. The soft copies of the data will be kept on a password protected personal computer of the principal investigator and hard copies destroyed after electronically capturing the data.

Results: The outcome of the research would be shared to participants interested in the research finding before findings are published

Research-related Injury: There is no expected physical injury as participants will not be involved in any movement or require to perform as act

Storage of all electronic and hard copies including tape recordings Tape recorded interviews will be kept in a secure safe at the researcher's residence for a period of 5 years before being destroyed

Persons to contact in the Event of Any Problems or Queries contact the researcher (+233243724025.), my supervisor (072 3139423.) or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L Linganiso on 031 373 2577 or researchdirector@dut.ac.za.

A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.

APPENDIX IV



CONSENT

Full Title of the Study: Local Rice Entrepreneurship and Residents' Patronage Behaviour

Name of Researcher: Samuel Ofosu-Appiah

Statement of Agreement to Participants in the Research Study:

- I hereby confirm that I have been informed by the researcher **Samuel Ofosu-Appiah** about the nature, conduct, benefits and risks of this study-Research Ethics Clearance Number **IREC 191/22.**
- I have also received, read and understood the above written information) Participant Letter of information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously proceeded into a study report.
- In view of the requirements of research, I agree that the data to be collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

<u>Obed Walator Tudzi</u>	<u>30/07/2021</u>	<u>08:55am</u>	_____
Name of Participant	Date	Time	Signature

I Samuel Ofosu-Appiah herewith confirm that the above participant has been fully informed about the nature, conduct and risk of the above study

Samuel Ofosu-Appiah 30/07-2021

Full Name of Researcher, Date

Signature

Full Name of Witness (If applicable).
Signature

Date

Full Name of Legal Guardian

**UNIVERSITY OF CAPE COAST
COLLEGE OF HUMANITIES AND LEGAL STUDIES
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OUR REF: **ED/T/2/Vol 2//32**

University of Cape Coast
Cape Coast, Ghana



25th October, 2022

Dear Sir/Madam,

PROOFREADING AND EDITING OF THESIS

I write to prove that I have proofread, and edited Mr. Samuel Ofofu-Appiah's thesis titled "Local Rice Entrepreneurship and Patronage Behaviour Among Residents of Western Region."

As a second-year MPhil student majoring in English Language and a demonstrator with the Department of English, University Cape Coast, assigned to proofread and edit this thesis, I have thoroughly reviewed the work to rework the infelicities found. Therefore, I deem this work no or less devoid of grammatical and structural errors that might hinder your assessment. For further information, you can contact me through my email below.

Thank you.

Yours Faithfully

(hannah.deheer001@stu,ucc.edu.gh)

Hannah Deloris De-Heer

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