AN ANALYSIS OF THE EFFECT OF INSTITUTIONAL ARRANGEMENT ON CASHEW NUT FARMING BUSINESS SUSTAINABILITY IN TANZANIA: THE MEDIATION ROLE OF MARKET STAKEHOLDERS' ACTION

VICENT M. FELEX

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by the Open University of Tanzania a thesis titled; **"An Analysis of the Effect of Institutional Arrangement on Cashew Nut Farming Business Sustainability in Tanzania: The Mediation Role of Market Stakeholders' Action"** in fulfilment of the requirements for the award of the Degree of Doctor of Philosophy in Supply Chain Management (PhD).

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Dr. Abdiel Abayo

(Superviosr)

……..

Date

.....

Dr. Bukaza Chachage

(Supervisor)

28/07/2023

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Date

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DECLARATION

I, **Vicent M. Felex,** do declare that, the work presented in this dissertation is my original work. It has not and will never be presented to any other university or Institution for the same or similar award. Where other people's works have been used, due references have been provided. It is in this regard that I declare this work as originally mine and is hereby presented in partial fulfillment of the requirement for award of the degree of Doctor of Philosophy (PhD) of the Open University of Tanzania.

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Signature

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Date

DEDICATION

This work is dedicated to my family which gave me moral and material support throughout my study period.

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ABSTRACT

Business sustainability has been a global problem experiencing a number of trials. In a bid to address it, the Government of Tanzania has established different institutions. However, the contribution of institutional arrangement to business sustainability is not yet documented. The objectives of this study were; to examine the effect of institutional legitimacy, isomorphism, and logic together with market stakeholders' actions on business sustainability in Tanzania. The mediating effect of market stakeholders' actions was also examined. The study was explanatory and involved data from 430 cashew nut farmers from Mtwara, Lindi, Ruvuma, Coast, and Tanga region selected using simple random sampling. Descriptive and inferential analysis followed by exploratory and confirmatory factor analysis performed. Assumptions of structural equation modeling were tested whereby a significant relationship was reported if $p<.05$. SPSS version 25 and IBM SPSS Amos version 23 were applied. Results revealed that: - legitimacy, isomorphism, logic together with market stakeholder's action had a positive and significant direct effect on business sustainability at $p < .001$. Market stakeholder's actions mediated the relationship between legitimacy, isomorphism, and logic on business sustainability. Therefore, it is recommended that: - institutions should enhance their legitimacy to all business players to stay sustainable. Applied isomorphic pressure must cut across both direct and indirect business players for continuity, and institutional logic which takes into account only direct business players can be more useful.

Keywords: *Business Sustainability, Institutional Arrangement, Legitimacy, Isomorphism.*

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LIST OF ABBREVIATIONS AND ACRONOMYS

AMOS	Analysis of Moment Structures
ASQ	Ask Same Question
AVE	Average Variance Extracted
BET	Board of External Trade
BSS	Business Sustainability
CBT	Cashew nut Board of Tanzania
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Composite Reliability
EFA	Exploratory Factor Analysis
GFI	Goodness of Fit Index
ISO	Institutional Isomorphism
KMO	Kaiser – Meyer – Olkin
LEG	Institutional Legitimacy
LOG	Institutional Logic
LGA	Local Government Authority
MAR	Missing at Random
MCAR	Missing completely at random
MLE	Maximum Like hood estimate
MSA	Market stakeholder’s action
NFI	Normed Fit Index
NMP	Normative Pressure
RMSEA	Root Mean Square Error of Approximation

SEM Structural Equation Modeling

SPSS Statistical package for Social Sciences

SRMR Standardized Root Mean Residual

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

This chapter contains a background to the study problem, the statement of research problem, research objectives, relevance of the research and organization of the report.

1.2 Background to the Study Problem

Research on business sustainability has become increasingly incremental and is mostly failing to ask bold and important questions that address fundamental sustainability issues the world is facing (Cundy *et al*., 2013). A truly sustainable business reflects on questions such as "How can business use their resources, competencies and experiences in such way as to make them useful for addressing some of the big economic, social and environmental challenges that society is confronted with" (Dyllick & Muff, 2016).

Ideally, sustainable business seeks to have a positive social impact, a reduced negative environmental impact and a positive economic impact (Bocken *et al.,* 2019; Cundy *et al*., 2013). Businesses practicing sustainability; improve their image and reputation, reduce costs and help boost the local economy (Evans *et al*., 2017). Sustainability requires system thinking which involves awareness and understanding that everything is related in some way and that nothing exists in isolation (Cundy *et al*., 2013). That being the case, attainment of business sustainability needs strong institutional arrangements that take into account welfare of all business stakeholders. Morioka and Carvalho (2017) argued that, sustainability in agribusiness is concerned

with involving people in decision making on respective business, complying with standards guiding the business, educating people on the concept of sustainability practices, providing support for social inclusion through sponsorship of events and to communicate social and environmental concerns.

According to Antonio and Griffith (2017), cashew nut business should incorporate the following practices to gain sustainability; research in all aspects of the cashew nut business, collect information on the local and export market (who is buying, how much are they paying, what quality/quantity the buyer prefers), contact stakeholders in the market to find buyers, seek to produce and maintain a high-quality product, develop and adapt new skills and technologies, strive to make your product different/better than others, maintain proper packaging and storage for the product, advertise and promote sales through various market channels (collective sale or pre-negotiated sales), keep updating market information (are there new buyers, is there a different quality getting a higher price). Authors further emphasized that, for cashew nut business to be sustainable, it must utilize the cashew nut business opportunities such as; good climate for cashew nut farming, availability of land, availability of market, low cost of production, institutional support (Government, Non - Government Organizations, etc.) and existence of financial institutions.

The need to analyze effect of institutional arrangement on cashew nut farming business sustainability in Tanzania with mediation role of market stakeholder's action was triggered by the fact that, researchers (Barreiro-Hurle & Nkonya, 2019; Kadigi, *et al.*, 2017) have reported a number of unresolved challenges facing cashew

nut farming business in Tanzania since independence. Some of them being; high price of inputs and handling costs charged by cooperatives which to a great extent tend to affect economic growth of farmers. Cashew nut tree diseases are also mentioned as immense challenge which in the effort to combat it, cooperative unions introduced sulfur dust but later was discovered to cause great negative environmental effect (Nene *et al.,*2022). Weak institutional arrangement which does not take care welfare of cashew nut farmers at the required level is mentioned as another challenge that is threatening future of the business (Barreiro-Hurle & Nkonya, 2019).

To date, cashew nut is sold through warehouse receipt system whereby farmers send their cashew to the nearby cooperatives and receive some advance amount of money based on the loans obtained from banks by these primary cooperatives such as Agricultural Marketing Cooperative Society (AMCOS). The remaining sum is paid to the farmer after selling cashew nut through auction conducted in the warehouses under the supervision of Cashewnut Board of Tanzania (CBT) and regional cooperative societies (Mgonja & Shausi, 2022). This system discourages farmers, since most of the time they are paid less than the actual cost incurred in the entire farming activities despite the delays in the payment process (Lukurugu *et al.*, 2022). All these tend to endanger future of the cashew nut farming in the country.

Institutional arrangement of cashew nut business in Tanzania is composed of two interlinked systems; the first and upper organizational institution is composed of the institutional relationship and linkages between government systems, the ministries, Board of External Trade (BET) and the CBT. The second institutional arrangement is composed of stakeholders which include; Cashew nut Growers of Tanzania, Local

Government Authorities (LGA's) growing cashew nut, primary cooperative societies, transporters, warehouse operators and exporters (Akyoo & Mpenda, 2014). Despite the existence of all these institutions, still challenges facing cashew nut farmers as mentioned above are not addressed at the required level which in turn tend to risk future of the business.

While the existing literature makes a very convincing case for the importance of institutional arrangement in the process of building relationships between individual and collective stakeholders of the business, there is no clear understanding of how institutional arrangement precisely finds their way into the decisions and actions of potential stakeholders (Kumar *et al.,* 2017). However, institution create common orientations and are capable of channeling interactions between two (or more) stakeholders into foreseeable patterns, both by providing explicit rules incorporated in institutional arrangement and tacit knowledge embodied in routines and practices (Min, *et al.,* 2020).

Implementation of certain institutional practices is mainly based on social effect, norms and values along with the desire to gain legitimacy. These social effect and legitimacy originate from diverse stakeholder groups in the industry (Baah *et al.,* 2021). Stakeholder action depends to a considerable degree on the extent to which entity's actions promote or facilitate the fulfilment of the goals or desires of stakeholder concern (Hayibor, 2017). Moreover, entities depend on institutional arrangement in adopting and implementing practices that are considered acceptable within the norms, values and beliefs framework of stakeholders (Deephouse, *et al.,* 2016).

Institutionalist approach in the socio-economic analysis of business sustainability, which has flourished since the early 1990s, emphasizes institutional arrangement that both enables and restricts stakeholder's behaviour (Scott, 1995). Among institutionalist's key notions are what they call; institutional legitimacy, institutional isomorphism and institutional logic (Scott, 2005).

The scholar suggested the need for legitimacy of institutions from entities under their jurisdiction as a way towards sustainability (Dimaggio & Powell., 2004 and Scott, 2005). They further argued that, entities which choose to abide by institutional requirements would be legitimate in front of stakeholders (Suchman,1995). Legitimate entities such as individuals or firms in a society should comply with the institutional requirements in which they are embedded (Kumar *et al.*, 2017). An entity that does not comply with it is associated institutional requirements cannot be said to have achieved legitimacy and as a result would not stay long in the business (Suchman, 1995).

According to Dimaggio and Powell (2004), institutional isomorphism refers to the coercing forces that influence entities to resemble others which operate in similar industry. The author proposed three isomorphic pressures that affect entities' survival which are; - coercive, mimetic, and normative pressure. Coercive pressures occur through the effect exerted by those in power (Huang & Chen, 2023). Mimetic pressures occur when an entity mimics the actions of successful competitors (Kumari, *et al.*, 2022). Normative pressure emanates from best practices from individuals of similar occupations to describe the ways and processes of their work to stay sustainable (Bananuka, *et al.*, 2021).

The theory informs that: - business is embedded in inter-institutional relationships which influence their logic (Thornton *et al.,* 2015). It further emphasizes that: - the existence of any business depends on its ability to make sense in front of regulatory institutions and other stakeholders (Groenewegen, *et al.*, 2019). This logic provides the link between individual understandings, socially constructed institutional practices, and rule structures (Kurtmollaiev, *et al.,* 2018). Failure of any business to cope with this logic can subject it to several conflicts which might affect its survival (Laasch, 2018).

On the other hand, stakeholder theory promotes various conducts businesses can adopt to create value and enhance their sustainability (Fontaine *et al.,* 2006). Among others, responses to stakeholders' actions were mentioned (Fobbe & Hilletofth, 2021). The positive or negative response should be treated carefully by business entities as it determines their survival/death (Pohlmann *et al.,* 2023). According to Svensson *et al.* (2016) behaviour of entities is a consequence of stakeholder's effect. The scholar argued that, entities might achieve sustainability of their business through actions of market stakeholders. Therefore, this study posits that, for the cashew nut farmers to achieve sustainability of their business, there should be effect of institutional legitimacy, isomorphism and logic through market stakeholder's action.

1.3 Statement of the Research Problem

Business sustainability is one of the burning issues in the modern commercial environment (Dagilienė, *et al.,* 2022). Entities struggle to meet sustainability aspects (economic, social, and environmental) as institutional requirement and to make sense

in front of stakeholders (Thounaojam, *et al.,* 2022). The major institutionalist concern is how to become legitimate to business players by making user friendly isomorphic pressure which makes sense (Scott, 2005). Cashew nut farming business in Tanzania as other global business is facing a number of social, economic and environmental challenges despite institutions established since independence to boost it (Kadigi, *et al.,* 2017).

Anagnostou, *et al.,* (2015) contended that institutional legitimacy is realized by adhering to rules, norms and practices pertaining to institutions. legitimacy of institutions dealing with cashew nut farming in Tanzania toward farmers is questionable as they did not manage to address environmental, economic and social issues which endanger continuity of the business (Krepl et al., 2016). In order to be legitimate to stakeholders, entities should take on board all business sustainability features established by relevant institutions (Glover, *et al.,* 2014).

Isomorphic pressure applied by these institutions to protect environmental pollution and boost economy are not clear to farmers (Barreiro-Hurle & Nkonya, 2019). Lack of clarity on enforced isomorphic pressures is one of the factors which impair continuity of the business (Kadigi, *et al.,* 2017). As a result, farmers non – compliance led to lower their earnings and environmental degradation as time goes on (Lukurugu, *et al.,* 2022). Institutional logic provides the connection to understand social, cultural and structures which the business is embedded to (Kurtmollaiev *et al.,* 2018). Understanding this connection can make sense and enhance continuity of the business (Groenewegen, *et al.,* 2019). It is the role of institutions to ensure

continuity of the business under their jurisdiction by developing logical rules and regulations which can lower cost and increase earnings of players (Dagilienė *et al.*, 2022).

Market stakeholder's action as pointed out in stakeholder theory, has a great deal to play in value creation for business sustainability (Baah *et al.*, 2021). Tanzania cashew nut market procedure known as warehouse receipt system endanger future of the business (Mgonja & Shausi, 2022). The system does not involve market stakeholders to obtain best ideas on how to operate cashew nut market (Chimbyangu, 2020; Likwata & Venkatakrishnan, 2014). As a result, market stakeholder's actions are likely to endanger future of the business (Mgonja & Shausi, 2022).

Studies have suspected possibility of intervening role of market stakeholder's action on institutional arrangement in attaining business sustainability (Baah *et al.*, 2021; Bananuka *et al.*, 2021; Famiyeh & Kwarteng, 2018; Fayez *et al.*, 2018) although it was not tested. These studies used institutional theory constructs in establishing relationship between institutional arrangement and business sustainability. During their discussion, they mentioned role of market stakeholder's action but they did not provide sufficient information.

Building from this claim, the current study tested effect of institutional arrangement using institutional theory constructs (legitimacy, isomorphism and logic) on business sustainability through market stakeholder's action (construct from stakeholder theory) to contribute to institutional theory. Therefore, the major issue addressed by this study was to test mediation effect of one of stakeholder theory construct on

institutional theory constructs to fil the theoretical gape and contribute to the body of knowledge.

1.4 Research Objectives

1.4.1 General Research Objective

To analyze the effect of institutional arrangement mediated by market stakeholder's action on cashew nut farming business sustainability in Tanzania.

1.4.2 Specific Research Objectives

i. To examine the effect of institutional legitimacy on cashew nut farming business sustainability in Tanzania.
ii. To examine the effect of institutional isomorphism on cashew nut farming business sustainability in Tanzania.
iii. To examine the effect of institutional logic on cashew nut farming business sustainability in Tanzania.
iv. To examine the effect of market stakeholder's action on cashew nut farming business sustainability in Tanzania
v. To examine the mediating effect of market stakeholder's actions in the relationship between institutional legitimacy and cashew nut farming business sustainability in Tanzania
vi. To examine the mediating effect of market stakeholder's actions in the relationship between institutional isomorphism and cashew nut farming business sustainability in Tanzania
vii. To examine the mediating effect of market stakeholder's actions in the relationship between institutional logic and cashew nut farming business

sustainability in Tanzania

1.5 Relevance of the Research

This study employed institutional and stakeholder theories to test effect of institutional theory constructs (legitimacy, isomorphism and logic) on cashew nut farming business sustainability through market stakeholder's action. Results confirmed mediation effect of market stakeholder's action (the construct from stakeholder theory) on the relationship between institutional theory constructs and business sustainability. This finding extended our understanding of institution theory, which to the best of the researcher's knowledge is not yet documented.

Policy makers should apply this finding to formulate isomorphic pressure which encourage cashew nut farmers to continue with their business. The formulated isomorphic pressure should equally apply to market stakeholders. Besides, as indicated in the study findings, created policy should make sense to farmers in terms of enabling them to meet their needs, enhancing their competitive advantage, increasing their earnings and meeting their goals. Doing it successfully will enhance legitimacy of institutions dealing with cashewnut farming business to both farmers and market stakeholders than before.

Findings also opened an avenue for researchers to conduct more study on the mediation role of market stakeholder's action (one of stakeholder theory construct) together with other constructs on the effect of institutional theory construct on business sustainability. As studies in this area are scant, more research is required to shed light and overcome this shortage.

1.6 Organization of the Report

This report is comprised of six chapters. Chapter one covers the background to the study, statement of the research problem, research objectives and relevance of the research. Chapter two is on literature review and contains conceptual definitions, theoretical analysis, empirical analysis of relevant studies, conceptual framework, theoretical framework and statement of hypotheses. Chapter three entails research methodology which includes research strategies, survey population, area of the research, sampling design and procedures, variables and measurement procedures, methods of data collection, data processing and analysis together with expected results of the study. Chapter four is about research findings which include descriptive analysis, SEM assumptions test, validity and reliability tests, exploratory and confirmatory factor analysis together with hypothesis test.

Chapter five contains discussion of findings which include results of hypothesis test discussion and revised model. Chapter six is all about conclusion and recommendations which give theoretical contribution of the study, policy and practical implications, fulfilment of contextual gap and limitations of the study together with suggestion for future research. Lastly, the report contains lists of references and appendices which include data collection permission letters, study questionnaire, research activity schedule, estimated research budget, code book and data analysis tables.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter presents conceptual definitions which guide how terms are to be understood in this study. It also discusses the theoretical and empirical analysis of relevant studies as well as conceptual framework and statement of hypotheses.

2.2 Conceptual Definitions

2.2.1 Business Sustainability

According to Al Kaabi (2014) business sustainability refers to the way of representing business continuity over time. Sustainable business is the one that operates in the interest of all current and future stakeholders in a manner that ensures the long-term health and survival of the business and its associated economic, social, and environmental systems (Dyllick & Muff, 2016). Business sustainability in the context of this study means the ability of cashew nut farmers to continue with farming business over time.

2.2.2 Institutional Arrangement

Institutional arrangement refers to the formal and informal cooperation structures that support and link public and private institutions to help them fulfill their mandate and which are used to establish legal organizational and productive frameworks to allow for sustainable management (Hollingsworth, 2000; Kumar *et al.,* 2017). Formal institutions represent government defined and enforced controls while informal institutions capture private controls (Williamson, 2009). To attain sustainable cashew nut farming business, there must be a clear institutional arrangement with

sufficient resources to fulfil their duties. In this study, institutional arrangement means formal institutional structure with specific role to play in cashew nut farming business in Tanzania.

2.2.3 Institutional Legitimacy

Institutional legitimacy as defined by DiMaggio and Powell (2004) refers to the adherence to rules, norms and practices pertaining to institutions. The concept of legitimacy within the context of business is defined as the conformity to the forms, procedures, rules and practices within the widely accepted social norms and legal structures (Suchman, 1995). Legitimacy is a generalized perception or assumption that the actions of an institution or organization are desirable, proper or appropriate within some socially constructed system of norms (Snelson-Powell, *et al.*, 2016).

2.2.4 Institutional Isomorphism

According to Dimaggio and Powell (2004), institutional isomorphism refers to the coercing process that forces one unit in a group of institutions to resemble other units that face the same set of environmental conditions. The authors proposed three isomorphic pressures that influence entity boundaries which are; coercive, mimetic and normative pressure. Coercive isomorphism is the pressure applied by institutions on other entities that are dependent on them. Mimetic isomorphism is observed when an entity copies from the most successful or legitimate or reputable or status firms, ideas, business models or processes in order to combat uncertainty (Haveman, 1993). Normative isomorphism is observed when an entity tends to adopt best practices or employ professionals to run an entity.

2.2.5 Institutional Logic

Thornton, *et al.,* (2015) defined institutional logic as 'the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which institutions produce their material subsistence, organize time and space and provide meaning to their social reality.' According to this definition institutional logic provide link between individual understandings, socially constructed institutional practices and rule structures. Institutional logic in the context of this study means the ability of institutions to do things that make sense to entities and individuals for their survival.

2.2.6 Market Stakeholders

According to Svensson *et al.* (2016) market stakeholders are those market participants having interest over the products under the particular market setting. These stakeholders include but not limited to; market place sellers, customers, end users and the surrounding society. Actions of these stakeholders have a great role to play in deciding fate of the entities' survival (Svensson *et al.,* 2018). Therefore, market stakeholder's action in context to this study, refers to those positive actions undertaken by cashew nut business market stakeholders to enhance sustainability of the produce.

2.3 Theoretical Literature Review

2.3.1 Institutional Theory

Institutional theory was found in 1963 by two prominent Austrians living in exile; the sociologist Paul F. Lazarsfeld and the economist Oskar Morgenstern (Peters, 2000). The theory suggests that, adoption of entity practices and environmental

alignment is an institutional process subject to legitimacy, isomorphic pressure and logic (DiMaggio & Powell, 2004; Meyer & Rowan, 1977; Scott, 2005).

Institutional theory was traditionally concerned with how individuals, groups and organizations better secure their positions and legitimacy by conforming to the rules (such as regulatory structures, governmental agencies laws, professional standards and other societal and cultural practices that apply conformance pressures) together with norms of institutional environment (Glover, *et al.,* 2014). Consequently, neo - institutionalists regard institutions as the external rules or controls that shape behaviour which is known as isomorphic pressure (Brignall & Modell, 2000). One of the assumptions of neo-institutionalists recognizes that institutions operate in a specific social setting in which institutionalized rules and values shape behaviour (Scapens, 1994). DiMaggio and Powell (2004); Meyer and Rowan (1977) argued that, an entity can secure legitimacy through adhering to rules, norms and practices pertaining to institutions.

A fundamental premise of institutional theory is that, it explains why entities often adopt similar responses and practices (Glover *et al.,* 2014). Institutionalist view in explaining drivers for business sustainability, assumes that, for the most businesses, actions are the result of external pressure of coercive, normative and mimetic nature (Larrinaga, 2007). The theory provides a useful lens to describe the sources of pressure that analyze a firm's sustainability practice. Models derived from institutional theory can be used as a framework to understand the different responses an entity adopts to transform institutional pressure into specific sustainability initiatives (Brammer, *et al.,* 2012; Campbell, 2007).

According to Thornton *et al*. (2015) individuals and organizations are embedded in multi-institutional fabrics which relate to their decision making, sense making and social networks. This leads individuals and organizations to have multiple logics towards decision making and strategizing. This idea of multi-level institutional fabrics relating to entity processes and choices is known as institutional logic.

2.3.1.1 Institutional Theory and Legitimacy

The most appropriate theoretical viewpoint to analyze legitimacy issue in a social context is institutional theory which tries to explain how to abide with the rule of game (North, 1990). Social actors that choose to abide with the rule of game would be considered legitimate and granted status of legitimacy by the majority of social group (Scott, 1987). Legitimate social actors such as individuals or organization in a society should accept rules of a social system in which they are embedded (Scott & Davis, 2015). A social actor that is not accepted by the social system with which it is associated cannot be said to have achieved legitimacy and as a result would not survive for a long period of time (Zucker, 1987).

The theory is concerned with the rules for the behaviour of organizations and individuals, and they are both formal (legal rules that apply to all) and informal (norms and customs that apply to specific groups). Compliance is promoted through clarifying and specifying the rules by removing the barriers to compliance (Wijk, *et al.,* 2010). Institutional theory seeks to explain the rules and requirements to which organizations and individuals must comply if they are to receive support and legitimacy. The strength of this perspective today may flow from the fact that the world is awash with rules and requirements in every business sector, industry and nation-state

(McCormack & Weinberger, 2013). Complying with institutionalized business rules is considered a means for gaining legitimacy, decreases uncertainty and increases intelligibility of organization's actions and business activities (Scott, 2005).

2.3.1.2 Institutional Theory and Isomorphism

Institutional theory describes three mechanisms that create isomorphism in organizational strategies, structures and processes. These drivers are coercive, normative, and mimetic (Glover *et al.,* 2014). Coercive drivers occur from influences exerted by those in powerful positions (Byers & Gilmer, 2018). In the case of cashew nut farming business in Tanzania, coercive pressures from Ministry of Agriculture, BET and CBT are crucial to be complied with in order to attain sustainability. Normative mechanism ensures that entities conform in order to be perceived as partaking legitimate actions (Zhu *et al.,* 2013). Mimetic isomorphic mechanism occurs when enterprises imitate the actions of successful competitors in the industry in an attempt to replicate the path to success and hence legitimacy (Aerts, *et al*., 2006).

However, institutions in the business environment can and do play a big role in shaping institutional policies and attitudes towards the environment (Child & Tsai, 2005). Managing business activities acts as institutionalized coordination mechanism between stakeholders (Jackson & Apostolakou, 2010). Formation of institutional mechanism of the agricultural sector should be based on agents of business in terms of individual institutions and the development of a single mechanism of effect to agrarian relations. Effective institutional mechanism of the agricultural sector development creates an effective system of rules that in the best way combines the

elements formed naturally in the historical development with the elements introduced deliberately at the current stage of agricultural development (Kyfyak, 2015).

2.3.1.3 Institutional Theory and Logic

Scholars of institutional theory are increasingly interested in how institutional logics (the material practices, assumptions, values, beliefs and rules) that define a particular social world form and coordinate action (Thornton, *et al.,* 2015). They have demonstrated how changes in logic can lead to shifts in organizational practices and creation of new industry associations (Lounsbury, 2002; Thornton, 2004). Institutional logic perspective suggests that institutional contexts provide individuals with understandings of normative behavior and repertoires of potential action that shape their individual preferences and interests (Pache & Santos, 2013).

Entities are embedded in inter-institutional fabrics which influence their decision making, sense making and social networks. This idea of inter-institutional fabrics influencing entities' processes and choices is known as institutional logic (Thornton *et al.,* 2015). Institutional theory has become very prominent in studies aiming at understanding why and how individuals, groups and organizations adopt processes and structures for their meaning rather than their productive value. Institutions are observable through the structure and practices associated with them and are enacted through institutional logics (Groenewegen, *et al.,* 2019).

2.4 Stakeholder Theory

Stakeholder theory was developed in the mid – 1980 by Richard Edward Freeman (Fontaine *et al.,* 2006). The theory explains how business can create value through

the effect of stakeholder's actions, major ones being market stakeholders (Freeman & Edward, 2010). For entities to really make an impact, the efforts of various stakeholders in business networks and marketplace, need to be combined so as to enable them optimize their efforts of sustainable business practices (Walker & Laplume, 2014).

Success in any business is built with the aid of interconnection between entities and stakeholders whose actions are very important to achieve sustainability. This interconnectedness through stakeholders leads to the creation of value which enhances business survival (Fobbe & Hilletofth, 2021). The growing nature of stakeholder's powers and actions coupled with diverse institutional pressures for entities to be socially and environmentally responsible have to some extent pressured them to engage in sustainability practices (Sayed, *et al.,* 2017).Consequently, institutional arrangements are concerned with managing market dynamics for which the basic elements are how the business can create value and exchange these values with others who have a stake in the business (Svensson, *et al.,* 2018)**.**

2.4.1 Stakeholder Theory and Market Stakeholder's Action

Stakeholders are the ones who determine survival or death of any business through their actions (Hayibor, 2017; Litrico & Lee, 2018; Walker & Laplume, 2014). Although most of the business scholars appreciate the importance of stakeholder's engagement in attaining business survival, they do not explain in details on how it is achieved (Evans, *et al.*, 2017; Fobbe & Hilletofth, 2021; Min, *et al.*, 2020; Morioka & Carvalho, 2017). Other scholars (Litrico & Lee, 2018; Svensson, *et al.*, 2016;

Svensson, et al., 2018) go further and classify stakeholders according to their dominant power, of which they consider market stakeholders to be most persuasive.

Stakeholder theory promotes a practical and efficient way to operate business in a highly complex and competitive environment (Freeman *et al.,* 2007). The theory acknowledges the importance of market stakeholders in the survival of the business (Fobbe & Hilletofth, 2021). Market stakeholders that are treated well tend to reciprocate with positive action towards the entity through buying, selling and consuming its products (Ferro, *et al.,* 2019). Due to the nature of market stakeholder's important power, there is a possibility of having both direct and indirect effect on any business practice (Venkatesh, *et al.,* 2020).

2.5 Mediation Effect of Stakeholder Theory on Institutional Theory Constructs

There is limited insight into the extent to which different stakeholder's actions across industries and sectors are considered in entities' sustainability effort (Evans & Sawyer, 2010). Shubham, *et al.,* (2018) emphasize that survival of any business depends on market stakeholder's optimistic accomplishment. According to Baah *et al.* (2021) market stakeholder engagements in modern business settings have typically taken sustainability at its fundamental. Business market stakeholders who are affected by the ongoing business practice can and often do take action with respect to issues of concern (Hayibor, 2017).

Hayibor (2017) further emphasize that an understanding of the elements underlying diverse market stakeholder actions which might facilitate the development of general

principles for guiding entity's interactions in different business practices has seldom been sought. Walker and Laplume (2014) propose that individual market stakeholder does not have the ability to significantly influence business sustainability. Therefore, to bring about significant effect, market stakeholders have to combine their efforts to enhance sustainability (Svensson, *et al.*, 2018).

Institutional theory constructs are widely known for explaining various institutional aspects in relation to entities practices (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). According to the theory, entities respond to institutional pressures by acting in generally accepted ways to gain legitimacy in the face of their stakeholders in sense making conducts (Aerts, *et al.*, 2006). Institutional pressures are known to have an upper hand in shaping sustainability practices of an entity (Famiyeh & Kwarteng, 2018). On the other hand, stakeholder theory categorizes business stakeholders to gain an understanding of how they influence various practices into the environment in which they operate (Mainardes, *et al.*, 2012). Among others, market stakeholder actions in most of the business studies are considered to be supremely influential in achieving the practice (Baah, *et al.*, 2021).

Basing on the intertwined relationship between institutional and stakeholder theories, institutional theory constructs coupled with market stakeholder actions can be viewed as a means of enhancing business entities to attain sustainability practice (Bananuka, *et al.*, 2021). The theories provide an essential framework for analyzing the interplay between institutional arrangements and entities' desire to achieve sustainability in different business sectors (Fayez, *et al.*, 2018).

2.6 Empirical Literature Review

Business sustainability is currently the area of interest for a number of researchers (Evans et al., 2017). Most of the researchers try to test the concept in relation to key institutional theory ideas (legitimacy, isomorphism and logic) in various perspectives as follows:

2.6.1 Institutional Legitimacy and Business Sustainability

Anagnostou, *et al.* (2015) published a research paper titled 'sustainability labelling as a challenge to legitimacy: spillover effects of organic fair-trade coffee on consumer perceptions of mainstream products and retailers. The study was carried out in Netherlands using the population of all university students with a sample size of 23 respondents from each university consisting of 3 experimental groups. Data for this study was collected using questionnaire and analyzed using analysis of variance.

Results of the study indicated that there is a negative spillover effect on the retailers engaging in sustainability labelling by branding coffee and their assortment in the organic fair-trade coffee, a practice that impair their legitimacy to consumers. Results also indicated a negative spillover effect to the mainstream producing company which did not engage in sustainability labeling and display its coffee brand in the organic fair-trade claiming that organic fair-trade product signals that the mainstream product does not adhere to what should be the ruling norm – to be perceived as a legitimate offering in the institutional market environment.

One of the great limitations of this study was that it used experimental approach which may be strong in its internal validity but brings limitations in external validity.

Therefore, the study recommended future research to complement the findings with research designs that are strong in external validity. Different from the above study, the current study was carried out in Tanzania using large population with a sample size of 430 farmers which made the results to be more generalizable. The study used SEM in data analysis which is more powerful multivariate analysis technique unlike analysis of variance method used in the previous study. The current study also introduced mediation variable to test the effect of institutional legitimacy on business sustainability.

Schaltegger and Hörisch (2017) carried out the survey research titled 'In search of the dominant rationale in sustainability management: legitimacy- or profit-seeking?'. The population of the study was large companies in economically developed countries in the world where a sample of 10 countries was selected. Data for this study was collected using online questionnaire and analyzed using IBM SPSS statistics version 21. Results of this study revealed that sustainability management practices of large companies are neither strongly profit-oriented nor a means of opportunistic economic thinking but are primarily characterized by legitimacy-seeking. The findings of this study are limited to the economically developed countries only due to advanced technology and hence further studies were recommended for developing countries to investigate in depth how legitimacy enhances entities' sustainability.

Dissimilar from the above, the current study was undertaken in one of the developing countries (Tanzania) using the population of farmers with large sample size which offered the chance of its results to be generalizable. Also, different from

the previous study which used online questionnaire in data collection, the current study used drop and collect technique which was relevant due to technological limitation in the developing countries.

Snelson-Powell, et al., (2016) conducted a qualitative study on 'Business school legitimacy and the challenge of sustainability: a fuzzy set analysis of institutional decoupling'. The study covered 122 business schools in UK where 68 faculty deans in business school were interviewed forming the response rate of 56%. Collected data was analyzed using fuzzy set qualitative comparative analysis (fs/QCA). Results of the study revealed that, implementing sustainability commitments in practice is increasingly relevant as a means for business schools to maintain and build their legitimacy. Results of this study was limited to business schools in UK, therefore further studies were recommended to other countries and sectors to analyze the relationship between legitimacy and sustainability using a different methodology.

Diverse from the above study, this research was conducted in the agricultural sector in Tanzania using quantitative method whereby data was collected using structured questionnaire and analyzed using structural equation modeling. The application of mediating variable in the current study assisted in theory testing to extend understanding of previous study.

Hatanaka and Konefal (2017) undertook qualitative research on 'Legitimation and de-legitimation in non-state governance: leo-4000 and sustainable agriculture in the United States'. Data for this research was collected through interviews and

participants observation. Results of the research indicated that due to absence of taken for granted authority of states; non-state governance sustainability is compromised by their institutional standard development which might hamper their legitimacy. Further studies on sustainable agriculture were recommended in other countries using a different methodology.

In response to the above recommendation, the present study was conducted in Tanzania which is one of the developing countries. The study was carried out in agricultural sector using quantitative method which is more focused and objective compared to the qualitative method used in the previous study.

Liang, *et al.*, (2017) published the paper titled 'in search of sustainable legitimacy of private firms in China'. The study integrated stakeholder perspective and institutional theory to provide a framework of building sustainability. Results of the study indicated that a private company can build sustainable legitimacy through compliance with standards and rules and being attached to the external institutional environment and stakeholders hence portray positive relationship between legitimacy and sustainability. The study was limited to private firms in China and therefore further studies were recommended to other countries in different contexts. Basing on the discussion and recommendation of this study, the researcher decided to analyze the effect of institutional legitimacy on business sustainability through market stakeholder actions.

Ciszewska-Mlinarič and Trąpczyński (2019) carried out a mixed study titled 'When does adaptation to foreign markets matter? An institutional approach to the

internationalization of post-transition economy firms. Quantitative data was collected from 284 firms and qualitative data from 8 firms in Poland. Findings of the study provide evidence that adaptation increases legitimacy in foreign market and hence improves foreign market sustainability. The current study was conducted in developing country (Tanzania) using quantitative method only as a response to the recommendation made by the previous study to shed light on the role of location in this interplay.

Gauthier and Kappen (2020) published the research paper titled 'Rhetoric and propriety judgments: reflections from bottled water'. The study focused on three leading bottled water producers; Coca-Cola Company's Dasani, PepsiCo's Aquafina and Nestle´ Waters (a division of the Nestle´ Group) for the purpose of examining the rhetorical strategies used by organizations in support of propriety judgments concerning their products. The study analyzed the concept of legitimacy in relation to triple bottom line of business sustainability (economic, social and environmental) of these organizations with consideration of stakeholders, whereby legitimacy was found to have negative relationship with environmental sustainability. However, the effect of stakeholders was not well discussed in this study.

Results revealed that, rhetorical strategies do not compel firms to legitimize their sustainable practices (economic, environmental and social). The limitation of this research was its impossibility of generalization. Authors claimed that, although the bottled water industry presents a context in which stakeholders have voiced concerns regarding environmental, social and economic impacts, additional sectors should be examined in future research.

2.6.2 Institutional Isomorphism and Business Sustainability

Wijethilake, *et al.,* (2017) published a research paper on 'using qualitative case study on strategic responses to institutional pressures for sustainability: the role of management control systems at apparel manufacturing organization in Sri Lanka. This study revealed that the organization responds strategically to institutional pressures (coercive, mimetic and coercive) for sustainability through management control systems. Mimetic pressure was found to have positive relationship with sustainability. However, results of the study were limited in terms of generalizability due to the limited scope (case study) and hence further studies to test the relationship were recommended in broader contexts.

Basing on the weaknesses and recommendations of the above study, the current study was conducted in Tanzania using quantitative method (survey) in agricultural sector. Survey study by its nature is so objective and hence results can be generalized and used in broader agricultural context.

Kauppi and Hannibal (2017) published a qualitative research paper on institutional pressures and sustainability assessment. Data for this study was collected through interview and publicly available materials. Results showed limited evidence on how normative and mimetic pressure influence supply chain sustainability. The study further provided strong evidence that coercive pressure influence sustainability of supply chains. At last, the study concluded by claiming that, there is a shortage of empirical studies on business sustainability in supply chains and hence recommended the need of institutional theory – oriented research on supply chain management to examine how institutional pressures influence the adoption of

sustainability practices.

The study recognized the importance of stakeholder actions on institutional pressure towards enhancing sustainability practices but did not give enough details on how it works. From this point of view, the current study used market stakeholder actions as a mediating variable to test the effect of isomorphism on business sustainability in the agricultural sector using quantitative method. Abdalla and Siti-Nabiha (2015) published a paper titled 'Pressures for sustainability practices in an oil and gas companies: evidence from Sudan'. Data for this study was collected through interviews, informal conversations, observations and documentary materials. Findings of the study revealed that; coercive pressures are negatively related to sustainability practices in an organization. However, the study did not test the said relationship with other institutional pressures such as mimetic and normative.

The study acknowledged the role of stakeholders in sharping entities decisions in adopting sustainability practices. Consequently, grounding from this research, the current study was conducted in Tanzania in the agricultural sector where market stakeholders' action was used as mediating variable and all isomorphic pressures (coercive, mimetic, normative) were included to test the said effect different from previous study which tested only coercive pressure. Also, the current study used quantitative method which offers the advantage of its results to be generalized unlike the previous qualitative study.

Venkatesh, *et al.,* (2020) carried out a mixed-methods study on 'Drivers of sub-supplier social sustainability compliance: an emerging economy perspective in

India'. Qualitative data was collected using structured interview from 24 senior manufacturing professionals whereas quantitative data was collected using survey questionnaire from 159 apparel suppliers based in India. All collected data were analyzed using hierarchical regression. Findings revealed that institutional pressure on sub – supplier in India to comply with social sustainability was insignificant.

Building from the findings of the study, recent study tested the effect of institutional isomorphic pressure on business sustainability in agricultural sector to see whether it will remain insignificant or not. Apart from being a different sector and location as compared to the previous study, the current study used a single method which is quantitative and analyzed collected data using structural equation modeling.

Fayezi, *et al.,* (2019) published a paper titled 'Paradoxes in supplier's uptake of Green Supply Chain Management (GSCM) practices: institutional drivers and buyer dependency in Australian manufacturing sector'. Data for this study was collected through online questionnaire from 108 middle and senior managers of manufacturing supplier firms based in Australia and analyzed using partial least squares structural equation modeling. Results confirm that suppliers develop GSCM practices of green sourcing and eco-design to enhance their sustainability in response to coercive forces of their institutional environment. The study did not test mimetic and normative pressure on the ground that there is no literature to support the test in its context.

The study recognized the position of external actors (stakeholders) in realization of sustainability in the supply chain but did not provide sufficient details. Basing on the findings and observations of the study, the current study was carried in Tanzania in

agricultural sector with inclusion of all isomorphic pressure (coercive, mimetic and normative) to test its effect on sustainability through market stakeholder action. Different from the previous study whose data was collected using online questionnaire, data for the current study was collected through drop and collect technique.

Juárez-Luis, *et al.* (2018) published a research paper on "Institutional pressures and green practices in small agricultural businesses in Mexico: the mediating effect of farmers' environmental concern'. Data for this study was collected from130 small businesses in the agricultural sector in Oaxaca, Mexico through questionnaire and analyzed through multiple regression equation. Findings of the study revealed that institutional pressures influence green practices directly. Further, the findings revealed that farmers' environmental concern partially mediates the relationship between these variables.

The study recommended further studies in the broader context using different methods. Taking into account the results and recommendations of the study under consideration, the current study was conducted in Tanzania to test effect of institutional pressure on farming business sustainability through market stakeholders' action. Different from the previous study, the current study analyzed collected data using structural equation modeling which is the most powerful multivariate technique.

In line with the above study, Charan and Murty (2018) conducted a quantitative study on 'Institutional pressure and the implementation of corporate environment practices: examining the mediating role of absorptive capacity in India'. Data for this

study was collected through survey questionnaire from 193 industries in India and analyzed using partial least square structural equation modeling. Results of the study supported the mediating role of absorptive capacity in the relationship between institutional pressure and implementation of corporate environmental practices. One of the limitations of this study which called for future research is that all measures used were self-reported and were thus allowed for a social desirability bias.

Different from those studies, recent study analyzed the effect of isomorphic pressure on business sustainability in Tanzania through market stakeholder's action. All measures used in this study were statistically validated in different context and hence ensured objectivity of the findings. Nath, *et al.,* (2020) published a research paper titled 'The hidden side of sub-supplier firms' sustainability – an empirical analysis. Qualitative data was collected from major exporting regions of Bangladesh apparel sector and analyzed using thematic method. Results of the study reported positive relationship between both coercive and mimetic pressure with business sustainability. Building from the reported findings, the current study was carried out in agricultural sector using quantitative technique whereby collected data using structured questionnaire was analyzed using structural equation modeling. Also, the current study took into account all isomorphic pressure.

Famiyeh and Kwarteng (2018) published a research paper titled 'Implementation of environmental management practices in the Ghanaian mining and manufacturing supply chains. Data for this study was collected from extractive and manufacturing firms in Ghana using structured questionnaire. Collected data was analyzed using structural equation modeling in which findings indicated that coercive and mimetic

pressures had positive and significant association with environmental aspect of business sustainability while normative pressure portrayed insignificant association between the variables.

One limitation of this work was the use of data from extractive and manufacturing firms in Ghana, therefore it was recommended for other researchers to assess these relationships using data from other geographical area in a different sector. Basing on this limitation, the current study was carried out in Tanzania in agricultural sector to test effect of institutional pressures on business sustainability. Bananuka, *et al.*, (2021) published a quantitative research paper titled, institutional pressures, environmental management practices, firm characteristics and environmental performance. Data for the study was collected from 303 manufacturing firms in Uganda. Findings proved negative and insignificant relationship between coercive, mimetic and normative pressures with business sustainability.

The study was only focused on manufacturing firms in Uganda and it is highly possible that the results may be generalized to the Ugandan manufacturing firms. Therefore, future studies were recommended to other sectors other than manufacturing either in Uganda or other countries. Building on this recommendation, the current study was conducted in agricultural sector in Tanzania whereby collected quantitative data were analyzed using structural equation modeling to test effect of institutional isomorphism on business sustainability.

Ahmed, *et al.*. (2020) published a research paper titled ‘Examining the impact of institutional pressures and green supply chain management practices on firm

performance'. Data for the study were collected from 110 manufacturing firms from different developing countries and analyzed using structural equation modeling. Findings revealed a positive and significant relationship between institutional pressures and environmental aspect of business sustainability. Moreover, negative and insignificant association between the pressures and economic aspect of business sustainability was also revealed.

This study did not test the relationship between institutional pressures and social aspect which is another element of triple bottom line (TPL) of business sustainability. Therefore, the current study tested the effect of institutional pressures on business sustainability taking into account all TPL aspects which are economic, environmental and social aspects. Yang (2018) published an article titled, an analysis of institutional pressures, green supply chain management and green performance. Data for the study was collected from 129 container shipping companies and agencies in Taiwan and analyzed using structural equation modeling. Results of the study indicated that institutional pressures are negatively related to environmental aspect of the supply chain.

In this study, data collection was restricted to container shipping companies and agencies in Taiwan. Therefore, sample from other industries and different countries were recommended to verify the findings. Grounding on this recommendation, the current study was conducted in agricultural sector in Tanzania whereby collected quantitative data was analyzed using structural equation modeling to test effect of institutional pressures on business sustainability.

Ahmed, *et al.,* (2019) published a research paper titled ‘Exploring firm performance by institutional pressures driven green supply chain management practices. Data for this study were collected from 229 respondents working as supply chain management professionals in various manufacturing firms in Pakistan and analyzed using partial least square structural equation modeling (PLS-SEM). Results indicated that institutional pressures are positively and significantly related with environmental aspect of supply chain known as green supply chain.

The study tested association of institutional pressures with a single aspect of TPL and therefore it was recommended to test these pressures with all elements of TPL in the future studies. Basing on this recommendation, the current study tested the effect of institutional pressures on business sustainability by considering all three aspects of TPL which are economic, social and environmental. Saeed, *et al.,* (2018) published an article titled ‘Institutional pressures, green supply chain management practices on environmental and economic performance’. Data for the study was collected from 207 executives in the manufacturing industry in Pakistan through structured questionnaire and analyzed using partial least squares structural equation modeling (PLS-SEM) method. Results indicated that normative, coercive and mimetic pressures are positively and significantly associated with both environmental and economic aspects of supply chain sustainability which is referred to as green supply chain.

One of the recommendations made by this study is to test the relationship between institutional pressures and supply chain sustainability in another context along with some mechanisms (mediation or moderation). Basing on this recommendation, the

current study was conducted in agricultural sector in Tanzania to test effect of institutional pressures on business sustainability through market stakeholder's action.

2.6.3 Institutional Logic and Business Sustainability

De Clercq and Voronov (2011) published a journal article titled 'Sustainability in entrepreneurship: A tale of two logics. The article theorized on how the characteristics of the field as well as entrepreneur characteristics and actions influence the legitimacy derived from adhering to the field-prescribed balance between sustainability and profitability logics. Results of the study indicated that field-imposed expectations may influence and constrain entrepreneurial legitimacy with respect to balancing sustainability and profitability. The study acknowledged the importance of entrepreneurs to consider the effect of stakeholder's action while thinking of achieving sustainability as their business operate within the interest of external actors too. However, the study did not provide sufficient insights as to how the stakeholder's actions influence entrepreneurs to achieve their business sustainability logic. Basing on this weakness, the current study took into account the effect of market stakeholder's action as a mediator variable to analyze the effect of institutional logic on business sustainability.

Laasch (2018) published a paper titled 'Beyond the purely commercial business model: organizational value, logics and the heterogeneity of sustainability business models. Findings of the study revealed that homogeneous value logics are dominantly shaped by individual institutional logics such that the value logic of businesses is shaped by an institutional logic of the commercial market. Further, the results revealed that heterogeneous value logics are co-shaped by two or more

institutional logics. Therefore, the study concluded that the application of these concepts is exemplified in the context of sustainability business models which is built on a heterogeneous value logic that combines elements from commercial, sustainability, welfare and government logics. Future studies were recommended to confirm or improve the model.

Based on the recommendations of the study, the recent study tried to improve homogeneous business sustainability model which extended institutional theory by taking into account the mediation effect of market stakeholder's action in testing the effect of logic on farming business sustainability. Groenewegen, et al., (2019) carried out longitudinal inductive case study of 43 months on 'Sustainability struggles: conflicting cultures and incompatible logics in Dutch bank'. Findings of the study indicated that individuals interpret logics as informed by their subcultural values, beliefs and assumptions but organizations' experience on heterogeneity responses to institutional logics and subcultures can determine how actors can be selective in adhering to a particular logic. Further results indicated that actors prioritize logics based on the interest they have in that logic as a group. Continued interaction caused individuals from different subcultures to struggle for and over sustainability. This struggle further magnified differences between subcultures and logic enactment, making the two relevant logics seem incompatible.

The study highlighted the role of external factors in determining individual business logics but did not provide enough explanation of their contribution. Building on this shortcoming, recent study considered mediation effect of external actors (market stakeholder's action) in individual farmer business on attaining sustainability. In so

doing, survey study was conducted in agricultural sector.

Alexander, *et al.,* (2019) published a research paper titled 'Understanding how hybrid organizations tackle social challenges: an institutional logics approach'. Data for this study was collected through structured interview from 6 organizations in India with a total of 14 field visits and was later analyzed using template analysis. Findings indicated that integrating the institutional logics approach with social entrepreneurship enhances organization's chance to attain sustainability. Major limitation of this study was that all cases were selected from India with the same social and economic condition hence lacked the qualification for generalizability.

The study recommended further studies in different context and sector using different institutional logic approach and methodology to tackle social challenges while considering insights from stakeholders. Based on the weaknesses and recommendations of the study, the recent study focused on the agricultural sector in Tanzania to analyze the effect of institutional logic on business sustainability taking into consideration mediating effect of market stakeholders' action.

Glover, *et al.,* (2014) published a journal article titled, "An institutional theory perspective on sustainable practices" Data for this study was collected through 70 semi-structured telephone interviews with various firms across UK diary supply chain and were analyzed using constant comparison techniques. Findings revealed negative relationship between institutional logics and sustainable practices across the diary supply chain. The study highlighted the effect of stakeholders' action in the dairy supply chain sustainability but did not provide enough details on how this

effect is significant on the relationship of the observed institutional logics and supply chain sustainability. The study recommended further studies in different location and industry using different methodology to extend institutional theory. Based on the findings and recommendation of the study, the present study was carried out in Tanzania's agricultural sector to test the effect of institutional logic on business sustainability through market stakeholders' action.

Litrico and Lee (2018) published inductive qualitative research paper titled 'Naturalizing sustainability: how industry actors make sense of a threatening concept, sustainability, stakeholder governance and corporate social responsibility'. Data for this study was collected through structured interview from 135 respondents. Findings of the study revealed that the concept of sustainability is interpreted through a process of naturalization which at the end makes sense.

The study discussed the contribution of various stakeholders in aviation industry in achieving sustainability. This is a controversial concept given the fact that this industry's activities are environmentally hazardous and affect the society. Despite the recognition of the importance of stakeholder's concerns, the study did not show the influence of those stakeholders in achieving sustainability. Centered on the conclusion and recommendation made in this study, the recent study considered the mediation effect of market stakeholder's action to analyze the effect of institutional logic on sustainability of agricultural sector in Tanzania.

Nath, *et al.,* (2020) published exploratory qualitative paper titled the hidden side of sub-supplier firms' sustainability for the purpose of investigating how sub-suppliers

decouple the implementation of sustainable supply management practices in supply chains and what institutional logics permit these suppliers to do so. Results of this paper identified multiple institutional types of conflicting logics: instrumental logic, legitimacy logic complexity and gaps in normative logic, which interplay amongst sub-suppliers whereby permit to decouple the implementation of sustainable supply management practices.

The study clarified the influence of sub – supplier firms who are stakeholders in implementation of sustainable supply management practices in supply chain of apparel products. Built on the findings and recommendations of this study, the current study analyzed the effect of market stakeholders' action as a mediating variable in the effect of institutional logic on business sustainability in cashew nut farming business in Tanzania. Different from previous study, this study was quantitative and explanatory in nature and hence produced better explained results.

2.6.4 Market Stakeholder's Action and Business Sustainability

Svensson, *et al.,* (2018) published a quantitative research paper titled 'Developing a theory of focal company business sustainability efforts in connection with supply chain stakeholders. Data for this study was collected through structured questionnaire from 250 respondents from Norway and Spain. Collected data were analyzed using partial least squares– structural equation modelling (PLS-SEM). Findings of the study revealed a significant relationship between market stakeholders and supply chain sustainability.

The study was limited to companies in developed countries to which supply chain is associated with high level of technology. Therefore, it recommended further studies

in different location and industry. Lee *et al.* (2021) published a quantitative research paper titled ‘A framework of firms' business sustainability endeavors with internal and external stakeholders through time across oriental and occidental business contexts. Data for this study were collected through survey questionnaire from respondents in Taiwan and attained 68.5% response rate. Collected data was analyzed using multiple linear regressions. Findings of the study proved significant relationship between market stakeholder’s action and business sustainability.

One of the recommendations made by this study is to test relationship between market stakeholder’s action and business sustainability in another context. Basing on this recommendation, the current study was conducted in agricultural sector in Tanzania whereby collected quantitative data was analyzed using structural equation modeling to test the effect of market stakeholder’s action on business sustainability. Meixell and Luoma (2015) conducted a systematic review study titled ‘Stakeholder pressure in sustainable supply chain management’. The study provided evidence that market stakeholders pressure has significant influence in sustainable supply chain implementation. The study recommended further studies in specific industry to prove the obtained results. Based on the recommendation of the study, the present study was carried out in Tanzania in agricultural sector to test effect of market stakeholder’s action on business sustainability.

Fobbe and Hilletofth (2021) carried out a systematic literature review study on the role of stakeholder interaction in sustainable business models. The developed model provided suggestion that market stakeholders have a significant influence on sustainability of any business. The study recommended further studies in various

sectors to extend the results.

2.6.5 Mediation Effect of Market Stakeholder's Actions on the Relationship between Institutional Legitimacy and Business Sustainability

Research on the relationship between institutional legitimacy and business sustainability has been producing divergent results (Snelson – Powell *et al*., 2016; Hatanaka & Konefal.,2017). Subsequently, Baah *et al.* (2021) and Svensson *et al.* (2016) pointed out that the application of mediating or moderating variables should help to reduce those inconsistencies. The importance of using mediating variables in this study is to assist in explaining situations in which the effect of institutional legitimacy on business sustainability can be significant or insignificant through considering market stakeholder's action.

According to Baah and Jin (2019), market stakeholder's demands in recent business environments have sustainability at its core, as such diverse entities in one way or another have been coerced to adopt business sustainability logic in order to gain legitimacy. Within the framework of institutional theory, entities are driven by the need to gain legitimacy, thus they depend on institutional arrangement in adopting and implementing practices that are considered acceptable within the norms, values and beliefs framework of an industry (Deephouse *et al.,* 2016). Entities carefully manage relationships with their market stakeholders in order to create value (Svensson *et al.,* 2016). Therefore, there is a need to consider the effect of market stakeholder's action in determining the significance of relationships between institutional legitimacy and proposed business practices.

2.6.6 Mediation Effect of Market Stakeholder's Actions on the Relationship between Institutional Isomorphism and Business Sustainability

Contradictory outcomes of the studies carried out to scrutinize relationships between institutional isomorphism and business sustainability triggered a demand for more studies in the subject matter in order to unlock the mysteries (Kauppi & Hannibal, 2017; Venkatesh *et al.,* 2020). Among other ways proposed by researchers in this area, is the application of mediating or moderating variables in testing the relationships (Liang *et al.,* 2017). Current business practices affect the whole market and, therefore, entities demand market stakeholder's actions in order to compete and stay sustainable (Baah, *et al.,* 2021).

The strength of institutional theory is that it offers explanations as to why certain practices are chosen and necessary pressure applied to achieve the selected practice (Glover *et al.,* 2014). The researcher accentuated on the legitimacy obtained by entities through compliance with isomorphic pressure which is supported by market stakeholders. Contemporary business entities consider the effects of market stakeholders in their sustainability initiative believing that actions of those stakeholders have a lot to do on the success of the initiative (Svensson *et al.,* 2018).

2.6.7 Mediation Effect of Market Stakeholder's Actions on the Relationship between Institutional Logic and Business Sustainability

Most of the studies undertaken to analyze the relationship between institutional logic and business sustainability came with varying results (Alexander *et al.,* 2019; Laurell *et al.,* 2019; Nath, *et al.,* 2020). Due to these inconsistencies, other researchers proposed the use of mediating or moderating variables in testing the relationships as

a way of addressing the identified variations (Groenewegen, *et al.,* 2019; Litrico & Lee, 2018). Institutional logics scholars claimed that achievement of business sustainability logics will never be realized without taking on board actions of various market stakeholders (Glover, *et al.,* 2014; Laasch, 2018).

Achieved sustainability logic is a valuable construction that helps entities or individuals to gain market stakeholders acceptance (Laurell, *et al.,* 2019). Glover, *et al.,* (2014) theorized about logics that influence stakeholder's actions in a given market environment. Litrico and Lee (2018) extend the work of Glover, *et al.,* (2014) by theorizing the logic that makes entities or individuals behave similarly in a given market environment, and proposed that the reaction of market stakeholders was a source of entities or individuals to behave either equally or differently.

2.7 Research Gap Identification

The meaning of research is to find facts from existing study gaps and add to the body of knowledge (Catal, *et al.,* 2022). After rigorous theoretical and empirical literature review, the following contextual and theoretical gaps in relation to the effects of institutional arrangement on business sustainability were identified;

Contextual gap: As most studies (Glover *et al.,* 2014; Hatanaka & Konetal, 2017; Juarez – Luis, 2018; Liang, *et al.,* 2017) on the relationship between institutional constructs and business sustainability were conducted outside Tanzania and shown divergent results, this study tested the same effect in Tanzanian context in cashew nut farming business which to the researcher's best knowledge is not yet documented.

Theoretical gap: The study utilized market stakeholder' actions (a construct from stakeholder theory) as a mediator of the effect of institutional theory constructs on business sustainability. To the researcher's best knowledge, this effect has never been tested before. The curiosity of testing mediation effect was developed from previous scholars (Afum, *et al.*, 2021; Fayezi, *et al.*, 2018; Jackson & Apostolakou, 2010; Litrico & Lee, 2018) who highlighted the need for involving stakeholders in realizing the entity desire to attain business sustainability. Although they did not mention clearly the means by which stakeholders are involved, this study found it prudent to use market stakeholder's action as a mediator of the said effect given the nature of cashew nut farming business in Tanzania.

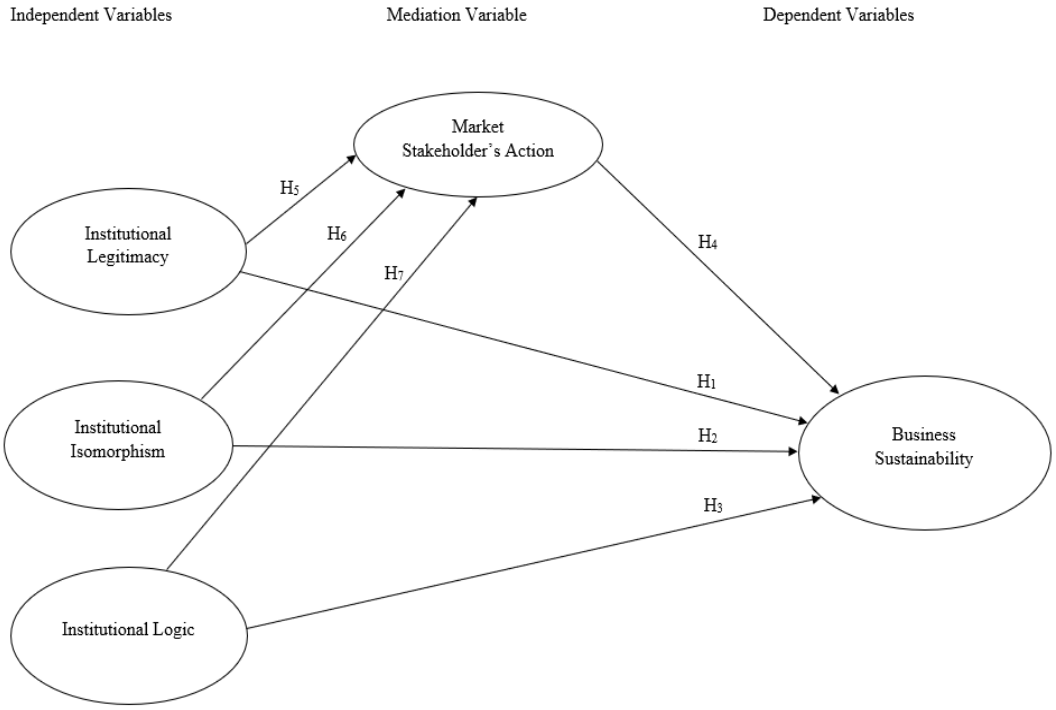

Figure 2.1: Conceptual Framework
Source: Scott (2005) and Svensson, et al., (2016).

Utilization of market stakeholder's action alongside the institutional theory constructs would assist to bridge the existing research gap and make a contribution

to institutional theory. Therefore, upcoming researchers will apply findings of this study as a stepping stone to conduct further research which blends institutional and stakeholder theories.

2.8 Hypothesis Development

From the theoretical and empirical literature review, the following are the processes used by the researcher to develop hypothesis of the study:

2.8.1 Institutional Legitimacy and Business Sustainability

Institutional theory is traditionally concerned with how individuals, groups and organizations better secure their positions and legitimacy by conforming to the rules such as regulatory structures, governmental agencies, professions, standards and other societal and cultural practices that exert conformance pressures together with norms of the institutional business environment (Bruton *et al.,* 2010). The process of rules, standards and regulation development should be known by all actors and take into account the norms of the business environment so as to be acceptable and enhance continuity of the business (Schaltegger & Hörisch, 2017). Therefore, this study hypothesizes that:

H 1: Institutional legitimacy has positive and significant effect on business sustainability.

2.8.2 Institutional Isomorphism and Business Sustainability

Institutional theory describes three mechanisms that create isomorphism in entities' strategies and practices. These mechanisms are coercive, normative, and mimetic (Glover *et al.,* 2014). It is problematic for an entity or organization to work alone and stay longer in its business without external pressures that force or influence it to

behave in a certain way (Wijethilake *et al.,* 2017). Consequently, this study hypothesizes as follow:

H 2: Institutional isomorphism has positive and significant effect on business sustainability.

2.8.3 Institutional Logic and Business Sustainability

Scholars of institutional theory are increasingly interested in how institutional logic (the material practices, assumptions, values, beliefs and rules) define a particular social world form and coordinate action (Kurtmollaiev *et al.,* 2018). According to Laasch (2018) institutional logics perspective suggests that, for any organization or entity engaged in business undertakings to be sustainable, it should act in a way that socially, economically and environmentally makes sense. Thus, this study hypothesizes that:

H 3: Institutional logic has positive and significant effect on business sustainability.

2.8.4 Market Stakeholder's Action and Business Sustainability

While most of business sustainability scholars appreciated importance of stakeholder's engagement in attaining the practice, they did not explain in detail how it can be achieved (Evans *et al.,* 2017; Fobbe & Hilletofth, 2021). Others went further and classified stakeholders according to their effect on business sustainability (Baah & Jin, 2019), of which, market stakeholder's actions are suspected to have more effect in achieving business sustainability practice (Kauppi & Hannibal, 2017; Venkatesh *et al.,* 2020). Sayed, *et al.,* (2017) added that, there is no way the business can stay sustainable without taking into account effect that might be brought by actions of market stakeholders.

As business sustainability takes into account social, economic and environmental aspects, it is important to consider market stakeholder's actions influence on its implementation simply because ignoring one of these aspects could impair the practice in one way or another (Ferro *et al.,* 2019; Svensson *et al.,*2018).Each market stakeholder weather a final consumer or middlemen has an equal role of ensuring that all sustainability aspects are duly considered in fulfilling their need (Evans *et al.,* 2017; Min *et al.,* 2020).Therefore, this study hypothesizes that:

H 4: Market stakeholder's action has positive and significant effect on business sustainability.

2.8.5 Mediating Effect of Market Stakeholder's Action on the Relationship between Institutional Legitimacy and Business Sustainability

Institutional theory attempts to clarify rules and rations to which individuals and entities must comply if they are to receive support and legitimacy (Mc Cormack & Weinberger, 2013). The forte of this standpoint today flows from the fact that, the world is crammed with rules and requirements in every business sector, industry and nation-state. Complying with institutionalized business rules is considered a means of gaining legitimacy (Scott, 2005). The theory emphasizes how individuals, groups and entities can better secure their positions and legitimacy by conforming to the regulatory structures, governmental agencies, professions, standards and cultural practices (Bruton, *et al.,* 2010).

According to Fayezi, et al., (2018), market stakeholders' demands in recent business environments have sustainability at its core and as such, various entities in one way or another have adopted business sustainability practice in order to gain legitimacy. The

best means for an entity to achieve sustainability is to collaborate with all market stakeholders in the business environment (Varsei, *et al.,* 2014). Within the context of institutional theory, entities are motivated by the need to gain legitimacy (Baah *et al.,* 2021). Accordingly, this study hypothesizes that:

H 5: There is mediation effect of market stakeholder's action on the relationship between institutional legitimacy and business sustainability.

2.8.6 Mediating Effect of Market Stakeholder's Action on the Relationship between Institutional Isomorphism and Business Sustainability

Institutions in the business environment play a big role in determining institutional policies with which individuals and groups operating in the environment must comply (Child & Tsai, 2005). Managing business activities acts as institutionalized coordination mechanism between stakeholders (Jackson & Apostolakou, 2010). Institutional theory gives descriptions of why certain practices are chosen and isomorphic pressure to be used for its achievement (Afum *et al.,* 2021). The researcher emphasized the legitimacy obtained by entities through compliance with isomorphic pressure which is supported by market stakeholders.

Institutionalist approach in business analysis which has flourished since the early 1990s, emphasizes the institutional pressures that both enable and restrict stakeholders' behaviour (Scott, 2005). While the theorist emphasizes the importance of individuals and entities to respond to institutional isomorphic pressure as a way of achieving sustainability, Svensson *et al.* (2016) highlighted the role of market stakeholders' action in any business survival. Hence, the study hypothesizes as follows:

H 6: There is mediation effect of market stakeholder's action on the relationship between institutional isomorphism and business sustainability.

2.8.7 Mediating Effect of Market Stakeholder's Action on the Relationship between Institutional Logic and Business Sustainability

Institutional theory has become famous in entities studies aimed at understanding why and how individuals, groups and entities adopt processes and structures for their logic (Groenewegen, *et al.,* 2019). Institutional logics viewpoint proposes institutional settings that provide individuals, groups and entities with understandings of normative behavior and repertoires of potential action that shape their preferences and interests (Pache & Santos, 2013). Entities are embedded in inter-institutional fabrics which influence their decision making, sense making and social networks known as logics (Groenewegen, *et al.,* 2019).

Institutional theory scholars claimed that achievement of business sustainability logics will never be attained without due consideration of actions of various market stakeholders (Glover, *et al.,* 2014; Laasch, 2018). Achieved sustainability logic is a precious creation that supports entities or individuals to increase market stakeholders' acceptance (Laurell, *et al.,* 2019). Glover, *et al.,* (2014); Litrico and Lee (2018) theorized about logics that influence stakeholder's actions in a given market environment whereby they proposed action of market stakeholders as a source. Therefore, this study hypothesizes that:

H 7: There is mediation effect of market stakeholder's action on the relationship between institutional logic and business sustainability.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This chapter elaborates the methodological process for the study and contains the explanation of research philosophy, research strategies, survey population, and area of the survey. The chapter further covers other aspects like sampling design and procedures, variables and measurement procedures, methods of data collection, data processing and analysis, and expected results of the study.

3.2 Research Philosophy and Approach

3.2.1 Research Philosophy

This study used positivism research philosophy. Positivism philosophy states that "only phenomena which we can know through our senses can really produce knowledge and it is usually associated with empirical testing" (Greener & Martelli, 2018). Authors further argued that, positivism assumes that an objective reality exists which is independent of human behaviour. This means that the researcher and researched are separate and independent units.

According to Scotland (2012), positivism philosophy is aimed at explaining relationships through identification of causes that influence outcomes. The critical aim is to devise laws and form a basis for prediction and generalization. Therefore, the use of positivism philosophy in this study is justified by the fact that the researcher tested the effect of institutional theory constructs on business sustainability through market stakeholder's action.

3.2.2 Research Approach

This study used the deductive approach. According to Saunders, Lewis & Thornhill (2009), the deductive approach is the one under which, theory-based hypotheses are developed and a research strategy is designed to test them. Bhattacherjee (2012) added that deductive approach is a typical approach to positivism philosophy and it employs empirical data. Deductive approach often involves empirical testing, random sampling technique and controlled variables (Scotland, 2012).

3.3 Research Design and Strategies

Research design can be regarded as a plan on how the researcher will be able to address the research objectives. It involves the identification of the research strategy, operationalization of the involved constructs and identification of the data collection and analysis method (Bhattacharjee, 2012; Creswell, 2009). This study followed an explanatory design. According to Saunders *et al.* (2009), explanatory research design is referred to as an attempt to study cause and effect. Rademaker (2011) argued that the main purpose of explanatory research is to identify any causal relations between the factors or variables relevant to the research problem. This study attempted to explain the effect of institutional arrangements on business sustainability through market stakeholder's action using structural equation modeling technique.

Structural equation modeling was selected because unlike other quantitative statistical models, it can be used to study the relationships among latent constructs that are indicated by multiple measures (Byrne, 2010). Byrne further argued that SEM provides explicit estimates of measurement errors in the parameters and that unlike other multivariate procedures, SEM measures both unobserved and observed

variables.

This study used survey research strategy. This strategy allows researchers to collect quantitative data which can be analyzed quantitatively using descriptive and inferential statistics and is usually associated with deductive approach (Saunders *et al.,* 2009). Data collection tool for this study was developed in English language but was later translated into Kiswahili language which was more familiar to the respondents who are farmers.

Forsyth, *et al.* (2006) argued that in order to obtain data of good quality, it is necessary to use data collection instrument whose language is familiar to the respondents. Authors further argued that translation should be done in a team where members with complementary expertise can work together through the translation process. In this study, the researcher teamed up with an experienced translator from the department of foreign languages and linguistics of the University of Dar es Salaam whose specialization is on interpretation and translation with a view to translating the instruments.

An adaptation approach was considered during the translation process as it accommodates differences that exist across different languages (Zevala – Rojas, 2014). The ASQ (Ask the same Question) model guided the translation. Under the ASQ model, the instrument is translated to the targeted language directly from the original language. At the same time, things were kept the same in the sense that translators tried as much as possible to trigger the same effect in a different context, population and language (Pan, *et al.*, 2013).

3.4 Study Area and Population

According to Sekaran and Bougie (2016), population is a group of individuals, objects or items from which samples are taken for measurement. Population of interest in this study was 273,663 registered cashew nut farmers in Tanzania from 5 regions of Mtwara, Lindi, Ruvuma, Coast and Tanga as per CBT registration statistics of 2019.The number of registered farmers per region were as follows: Mtwara – 99,672, Lindi – 73,206, Ruvuma – 39,708, Coast – 49,847 and Tanga – 11,230. Farmers were drawn from the above-mentioned regions because more than 97% of cashew nut produced in Tanzania is from them.

The study's target population was adults aged 18 years and above. According to Bardasi *et al.* (2011), an adult is any person of 18 years of age and above. The population was selected believing that they possess sufficient experience in cashew nut farming business and are aware of the institutional arrangement governing the business as well as stakeholders who take part in one way or another in cashew nut farming. That being the case, the researcher believed also that the target population was right to give opinions on sustainability of cashew nut farming business in Tanzania.

3.5 Sampling Technique and Sample Size

Jackson (2003) referred to the N: q rule as a rule of thumb when Structural Equation Modeling (SEM) is used and proposed that an ideal sample size to parameter would be 20:1 or at least 10: 1. In this study the total number of items was twenty-seven (27). Therefore, basing on 10:1 rule, the sample size was at least 270 farmers. The use of SEM requires large sample size, hence, the sample size used in this study

exceeded the recommended minimum sample size of 200 which is a typical average in many studies where SEM was used (Byrne, 2010).

Furthermore, the provision for non-response was considered based on the suggestion from various scholars who stated that paper-based survey delivered through drop and collect techniques on average achieves a response rate of up to 60% (Bernard, 2017). Different from Bernard, Nulty (2008) argued that paper- based surveys achieve an average response rate of 56.5%. That notwithstanding, the researcher anticipated a response rate of 60% in this study as suggested by (Bernard, 2017). This rate was used to compute the actual number of questionnaires that was distributed in order to receive back at least 270 filled questionnaires. Thus:

Let N = Sample size

R = Response rate

N_s = Number of questionnaires to be distributed at a given sample size

Then, from the formula

$N = N_S \times R$

Therefore;

$270 = N_S \times 0.6$

$N_S = 270/0.6$

$= 450$

Hence, the total number of questionnaires distributed in this study was 450.The actual farmers to be administered with questionnaires were selected using simple random sampling.

As long as the study involved five regions in Tanzania, it was important to establish proportional allocation for questionnaire to be distributed at each region. According to Kothari and Gard (2014), proportional allocation allows sample to be kept proportionate to the established area of the research. Calculations which led to the arrival of proportional allocation of questionnaire to be distributed in each region in this study were as follows: Mtwara – 99,672/273,663x450=164; Lindi – 73,206/273,663x450=120; Ruvuma–39,708/273,663x450= 65, Coast – 49,847/273,663x450 = 82; Tanga – 11,230/273,663x450 = 19.

Therefore, the actual sample size used in this study were 430 returned questionnaires which after data screening and cleaning all were found appropriate for analysis. Returned and appropriate questionnaires formed response rate of 95.5% (430/450x100).

3.6 Variables and their Measurements

3.6.1 Dependent Variable

The dependent variable in this study was the business sustainability which is measured by nine items as adopted from Ferro *et al.* (2019) and Laurell *et al* (2019) which are; profitability, cost reduction, whole business network, and appreciation by stakeholders. Others are; substantial investment, long-term business perspectives, impact of business partners on the natural environment, implemented in response to the on-going climate change and address activities related to the environmental impact. Statements of all indicator items in this variable were ranked using a five-point Likert-like scale from 1 (strongly disagree) to 5 (strongly agree).

3.6.2 Independent Variables

Independent variables in this study were institutional legitimacy, isomorphism and logic. Legitimacy was measured using five indicator items; namely, activities conducting example setting, meeting standards, genuinely listening, behaving example setting, and following acceptable guidelines as adopted from (Chaney, *et al.*, 2016; Handelman & Arnold, 1999; Kim, *et al.*, 2014). Isomorphism was measured using five items as adapted from Colwell & Joshi (2013); Charan & Murty (2018) and Juárez-Luis *et al.* (2018) which are legislated standards, environmental infraction, environmental preservation promoting practice, environment- responsible habit and environment-responsible requirement to become part of industry.

Logic was also measured using four indicator items which are increased earnings, ability to succeed in the competitive environment, ability to meet basic necessities of life and meeting goals as adopted from De Clercq & Voronov (2011); Glaser *et al.* (2016) and Laasch (2018). All statements formed using indicator items in independent variables were ranked using five-point Likert-like scale from 1 (strongly disagree) to 5 (strongly agree).

3.6.3 Mediator Variable

In this study, the effects of independent variables on dependent variable were mediated by market stakeholder's actions. Market stakeholder's actions was measured using four items: customers action, end user action, surrounding society action and market place sellers' action as adopted from Høgevold & Svensson (2012); Svensson, *et al.*, (2016) and Svensson, *et al.*, (2018). Five-point Likert-like scale from 1 (strongly disagree) to 5 (strongly agree) was used to rank respondents'

response.

Table 3.1: Summary of the Constructs and their Measurement Items with Abbreviations

Variable	Measurement item
BSS: Business Sustainability (Dependent Variable)	BS1: Profitability
	BS2: Cost reduction
	BS3: Whole business network
	BS4: Appreciation by stakeholders
	BS5: Substantial investment
	BS6: Long-term business perspectives
	BS7: Impact of business partners on the natural environment
	BS8: Implemented in response to the on-going climate change
	BS9: Address activities related to the environmental impact
LEG: Institutional Legitimacy (Independent Variable)	LEG1: Activities conducting example setting
	LEG2: Meeting standards
	LEG3: Genuinely listening
	LEG4: Behaving example setting
	LEG5: Following acceptable guidelines
ISO: Institutional Isomorphism (Independent Variable)	ISO1: Legislated standards
	ISO2: Environmental infraction
	ISO3: Environmental preservation promoting practice
	ISO4: Environment responsible habit
	ISO5: Environment responsible requirement to become part of industry
LOG: Institutional Logic (Independent Variable)	LOG1: Increase earnings
	LOG2: Ability to succeed in the competitive environment
	LOG3: Ability to meet basic necessities of life
	LOG4: Meeting goals
MSA: Market stakeholder's action (Mediating Variable)	MSA1: Customers action
	MSA2: End user action
	MSA3: Surrounding society action
	MSA4: Market place sellers' action

3.7 Method of Data Collection and Unit of Analysis

3.7.1 Method of Data Collection

This study involved collection of primary data using structured questionnaire from December, 2020 to February, 2021. A questionnaire refers to a survey instrument with a list of questions (items) that have been set in a manner which allows for

relevant responses to be captured from the targeted respondents (Bhattachejree, 2012). Structured questionnaires were appropriate since they allowed the researcher to obtain data that were easily to be quantified.

Self-administered questionnaire through drop and collect method was used in this study. This method involves leaving the questionnaires with the respondent and collecting them later after being filled. According to Bernard (2017), drop and pick technique allows researchers to gather data from a large representative sample of respondents at relatively low cost with a response rate of up to 60%.

3.7.2 Unit of Analysis

Unit of analysis refers to the person or object that is the target for investigation (Bhattacherjee, 2012). The unit of analysis for this study was individual cashew nut farmer.

3.8 Data Processing and Analysis

This study followed quantitative approach whereby collected data were coded and entered into SPSS software version 25. IBM AMOS software version 23 was used to run the CFA and SEM models. Descriptive and inferential analysis were also carried out.

3.8.1 Descriptive Analysis

Descriptive analysis is the method that aims at organizing, summarizing and presenting data in an informative way (Keller & Gaciu, 2012). In this study, the analysis involved percentages presentation of the number of respondents in terms of gender, age, education level, experience, awareness of institutional arrangements,

awareness of sustainable cashew nut farming business concept, awareness of stakeholders of cashew nut farming business and response of each item in the study constructs. This analysis provided a general picture of the sample representativeness which in turn made discussion of findings valid.

3.8.2 Inferential Analysis

Inferential analysis in this study involved testing of hypothesis whereby Structural Equation Modeling was used. SEM was preferred as it allows to test relationships whether there is one or multiple independent and dependent variables which are either continuous or discrete and can either be latent or observed variables (Ulman, 2006). This means that the researcher used inferential analysis to determine the effect of independent on dependent variables as well as the underlying strength of the relationships whereby P – value of < or = to 0.05 was considered. Also, Confirmatory Factor Analysis (CFA) was conducted to test the hypotheses to see if relations exist between the observed variables and their underlying latent constructs using modification index (MI) estimation method.

SEM involves two stages of assessment which are; measurement and structural model assessment. Measurement model assessment involves checking goodness of model fit indices. It assists to make analysis of how well the observed variables represent latent variables. Structural model assessment involves the assessment of hypothesized relationships among constructs (Ullman, 2006).

3.8.2.1 Measurement Model Assessment

After running a confirmatory factor analysis, the goodness of model fit was assessed through the assessment of goodness of fit indices. The goodness of fit indices is

divided into different categories which include absolute fit indices, incremental fit indices and parsimonious fit indices (Hooper *et al.,* 2008). It is essential to report a variety of indices because they represent different features of model fit (Ullman, 2006; Hooper *et al.,* 2008).

The assessed indices in this study were CMIN/DF, RMSEA, CFI, PCFI, TLI, GFI, RMR, NFI and RFI (Hooper *et al.,* 2008; Gupta, 2015).

3.8.2.2 Reported Goodness of Fit Indices

3.8.2.2.1 Root Mean Square Error of Approximation (RMSEA)

RMSEA is an absolute fit index which is non-centrally chi-square distribution. It measures how the model reasonably fits well to the population instead of assessing if the model holds precisely in the population (Kline, 2015).

RMSEA decreases as the degree of freedom increases, the more RMSEA approaches zero the best fit is the model (Brown, 2015; Kline, 2015). RMSEA was chosen to be among reported index in this study because it considers model complexity which means it is sensitive to the number of parameters in a particular model (Gupta, 2015). As it is population based, it is also less affected by the population size (Hoofs et al., 2018).

3.8.2.2.2 Goodness of Fit Index (GFI)

GFI is an absolute fit index that estimates the proportion of covariances in the sample data matrix explained by the model (Kline, 2015). It always takes values between 0 to 1 and estimates how much better the researcher's model fits the data. It is preferred for studies with both large and small sample size (Gunawan, 2016).

3.8.2.2.3 Comparative Fit Index (CFI)

CFI compares the sample covariance matrix with a restrictive baseline model which is null as it assumes that the latent variables are uncorrelated. It takes values from 0 to 1. A good fit is implied by values closer to 1 (Hooper *et al.,* 2008). It is preferred for studies with both large and small sample as it is relatively independent from sample size (Gunawan, 2016). It was preferred in this study because it consisted of a large sample.

3.8.2.2.4 Tucker Lewis Index (TLI)

TLI is also known as Non-Normed Fit Index (NNFI) in LISREL. It compares the proposed model against the null model. TLI value can fall outside the range of 0 to 1 but the interpretation fashion is similar to CFI. Thus, values closer to 1 implies good fit (Hooper *et al.,* 2008). Features of TLI accounts for effects which result due to the complexity of the model (Brown, 2015).

3.8.2.2.5 The Ratio of Minimum Discrepancy to Degree of Freedom (CMIN/DF)

CMIN/DF is the minimum discrepancy divided by its degree of freedom which is one of the indices developed to account for the sensitivity of chi-square statistics when a large sample is involved (Hooper *et al.,* 2008). For large sample size when the chi-square is not divided by its degree of freedom, it is most likely to reject the model (Gupta, 2015).

3.8.2.2.6 Normed Fit Index (NFI)

NFI is one of the original incremental fit indices which is not affected by the number of parameters (Gupta, 2015). It takes values from 0 to 1. A good fit is implied by values closer to 1 (Hair, *et al.*, 2006).

3.8.2.2.7 Parsimony Comparative Fit Index (PCFI)

Parsimony comparative fit index is based on CFI and is, in most cases, used to asses fitness in the complex models. PCFI is always greater than or equal to 0.5 (Malhotra, *et al.,* 2017). According to Gupta (2015), the accepted range is greater than or equal to 0.8.

3.8.2.2.8 Root Mean Square Residual (RMR)

Root mean square residual is the square root of the difference between residual of sample covariance matrix and hypothesized covariance model (Malhotra *et al.,* 2017; Gupta, 2015). Range of RMR is computed using scales of each indicator whereby in this study was 1 – 5. The accepted range is less than or equal to 0.08.

3.8.2.2.9 Relative Fit Index (RFI)

Relative fit index represents derivative of value of NFI. To obtain RFI, relative chi-square of estimated model is divided by relative chi-square of baseline model and then the ration is subtracted from one (Gupta, 2015). It indicates perfect fit when calculated value is greater than 0.9.

Table 3.2: Goodness of fit indices with their acceptable threshold levels

Fit index	Acceptable threshold levels
Absolute Fit Indices	
CMIN/DF(X^2/df)	≤3
RMR	≤ 0.08
GFI	≥0.90
Incremental Fit Indices	
CFI	≥0.95
NFI	≥0.90
TLI	≥0.90
RFI	≥0.90
PCFI	≥0.50
Standalone Fit Index	
RMSEA	≤ 0.08

Source: Hooper *et al.* (2008); Gupta, (2015)**;** Hair *et al.* (2006); Malhotra *et al.* (2017).

3.8.2.3 The Structural Model Assessment

The structural model was formulated using SPSS AMOS version 23. Relationship was deemed to be significant given that the p-value is below the cutoff point of 0.05. Decision on if the variable mediates the relationship between independent and dependent variable was based on two aspects. The first aspect was based on the consideration of four basic requirements for a variable to be categorized as a mediator. These are (i) if the independent variable significantly relates with the mediator (ii) if the independent variable significantly relates with the dependent variable in the absence of the mediator (iii) if the mediator variable has a significant unique effect on the dependent variable (iv) if the effect of independent variable on dependent variable shrinks upon the addition of the mediator to the model (MacKinnon & Dwyer, 1993).

The second aspect was based on statistical tests whereby different tests for mediation are considered. These are the Sobel test, Goodman and Aroian tests (Preacher & Hayes, 2008), and SPSS and SAS procedures (Preacher & Hayes 2004). This study used Sobel test whereby free internet calculator for Sobel test statistic available at http://quantpsy.org/sobel/sobel.htm was used for computation of mediation effects with their corresponding estimates. The determination of the level of statistical significance of the results was based on P – value of < or = 0.05.

3.8.3 Assumptions Underlying Structural Equation Modeling

To avoid wrong conclusion, testing for multivariate assumptions was inevitable. The following assumptions were taken care:

3.8.3.1 Multivariate Normality

Measures of skewness and Kurtosis were used in this study to test for normality of collected data. In order to make a conclusion on the data distribution, multivariate outliers as well as skewness and kurtosis must be examined (Kline, 2015). Cook's distance was used to check outlier whereby values ranging between zero and one signified absence of outliers.

3.8.3.2 Linearity

In this study linearity was tested through checking the relationship between indicator variables and their underlying constructs as well as between one construct and another to assure their linearity. This was achieved by creating bivariate scatter plots for all variables. In order to ensure linearity, Scatterplot matrix must be used to determine the association between variables by showing the trend, shape and strength through graphical presentation (Hair *et al.,* 2010; Kline, 2015).

3.8.3.3 Multicollinearity

Multicollinearity can occur because what appears to be separate variables actually measure the same thing (Kline, 2015). In this study, the application of SEM by design resolved the problem of multicollinearity because multiple measures are required to describe a latent construct (unobserved variable). This was reflected in the factor analysis procedures. According to Blunch (2012), multicollinearity cannot occur because distinct latent constructs are represented by a set of observed variables.

3.8.3.4 Missing Data and Outliers

Many reasons exist for missing data in survey research. These include respondents

ignoring a few or all questions, questions being irrelevant to the respondent's situation and inability of data collectors to locate the respondent (Cheema, 2014). Selected method of handling missing data takes a substantial impact on the conclusions that are drawn from the study (Rhoads, 2012). Therefore, understanding how missing data was handled is important for appreciating the implication of the study. According to Byrne (2010), outliers refer to cases whose scores are substantially different from others in a particular set of data.

Collected data in this study using structured questionnaire was entered in IBM SPSS version 25. After this, data cleaning involved assessment of missing values, variable labeling, coding and recoding into new variables as well as evaluation of extreme values. For entries with missing as well as extreme values, the questionnaire for a specific participant was identified using the unique identifiers. Data coding and recoding was done for both categorical and continuous variables. After making sure that data cleaning issues were all settled, further analysis was carried out.

3.9 Test for Validity and Reliability of the Study

3.9.1 Convergent and Discriminant Validity

3.9.1.1 Convergent Validity

According to Bhattacherjee (2012), convergent validity determines the closeness with which a measure relates to the construct that it is purported to measure. In convergent validity, we evaluate if the measured variables for a construct are correlated and represent and measure a construct in particular (Palos – Sanchez & Saura, 2018). Average Variance Extracted (AVE) provides information on the sum of the variance that results due to the construct compared to the amount of variance

caused by measurement error (Fornell & Larker, 1981).

When the calculated value of AVE is < 0.50, it indicates that, variance due to measurement error is larger than the variance representing the construct. That is to say, AVE is regarded as adequate if its value is > or = 0.50 (Fornell & Larker, 1981; Palos – Sanchez & Saura, 2018). However, Lam (2012) contended that as long as composite reliability (CR) of a construct is above the required level, even if its AVE is below the recommended cut off point, the internal reliability of the measurement items is still acceptable. Exploratory and Confirmatory factor analysis also are used to determine evidence of convergent validity (Tharenou et al., 2007). This is done by dropping or constraining the redundant items.

3.9.1.2 Discriminant Validity

Discriminant validity refers to the degree to which specific measure of a specific construct does not measure other constructs that it is not supposed to measure. That is to say, it has a low correlation with other constructs (Bhattacherjee, 2012). Discriminant validity as it is in convergent validity is also determined by AVE whereby the confirmation of discriminant validity occurs if the square root of the AVE is greater than the correlation coefficient of the two constructs (Palos – Sanchez & Saura, 2018). In this study, the value of both AVE and square root of AVE was calculated by using IBM SPSS version 25.

3.9.2 Internal and External Validity

3.9.2.1 Internal Validity

Internal validity relates to whether the outcome effect on the dependent variable is the results of a particular independent construct. That is to say, it demonstrates the

cause and effect (Bhattacherjee, 2012; Mohajan, 2017). This implies the researcher's ability to eliminate alternative explanation of the dependent variable (Greener & Martelli, 2018). The use of random selection method in obtaining unit of analysis in this study helped to improve internal validity because in random selection, all units have an equal chance of being selected, a fact which reduces sampling bias (Malhotra *et al.,* 2014). Moreover, convergent and discriminant validity observed proved the presence of internal validity.

3.9.2.2 External Validity

External validity indicates the extent to which results of the experiment are applicable in the real world. In survey research where data is sourced from a wide variety of individuals, firms or other units of analysis it tends to have broader generalizability (Bhattacherjee, 2012). On top of that, external validity demonstrates if results obtained from one study can be used for prediction in another group of interest (Mohajan, 2017). It is for this reason that this study adopted survey design in order to ensure external validity.

3.9.3 Test for Reliability

Reliability refers to the extent to which data collection techniques and analysis procedures yield consistent findings (Saunders *et al.,* 2009). To measure internal consistency (construct reliability) in this study, both Cronbach alpha and composite reliability were used. Cronbach Alpha measures how the respondents' answers to the questionnaire items are correlated and takes values from 0.00 to 1.00. As the correlation between items increases the value of Alpha increases too (Chronbach, 1951). According to Vaske *et al.* (2017) an alpha of 0.65 to 0.8 is regarded as

adequate. On the other hand, Palos-Sanchez and Saura (2018) argued that a minimum value of Alpha that ranges between 0.6 and 0.7 is acceptable.

According to Brunner and SÜβ, (2005), composite reliability is the sum of true scores variance in relation to total scale score variance. Composite reliability from 0.6 and above is regarded as high enough to show the reliability of the instrument (Yin, 2015). Therefore, Cronbach alpha in this study was used to check the reliability of instrument items and the reliability of the retained items after exploratory factor analysis test. Composite reliability was used to confirm the reliability of measurements before the assessment of the structural model.

The pilot study was conducted to assess usability of the questionnaire. The study was conducted at Mtwara region, Newala district. The choice of this district was based on the fact that it is producing large volume of cashew nut as compared to other districts within the region. The pilot study used 80 respondents. According to Stopher *et al.* (2006), the minimum number of respondents to participate in a pilot study should be at least 30. The questionnaires were correctly filled as no missing values were observed. Furthermore, assessment of extreme values, and multiple selection for each item were assessed. No question had more than one answer selection and no extreme values were observed. The pilot study did not assess the advanced assumptions of SEM and multiple linear regression as whole.

3.10 Ethical Issues

Ethics are the moral principles set and agreed as a code of conduct by a particular community (Bhattacherjee, 2012). Bhattacherjee further argued that it is essential to

allow the presentation of valid findings and avoid being accounted for misconduct. To ensure ethical standards in this study, the researcher observed the following principles, namely, voluntary participation, informed consent, anonymity, confidentiality as well as disclosure.

Introduction letters were sought from postgraduate office of the Open University of Tanzania which allowed the researcher's access to data. The purpose of the study was disclosed to the respondents so as to give them the freedom to participate out of their free consent. Collected information was kept confidential and anonymous by not exposing the respondents' identity in the report. Also, plagiarism issues were taken care of by making appropriate citation and referencing.

CHAPTER FOUR

RESULTS OF THE STUDY

4.1 Chapter Overview

This chapter explains the participant demographic characteristics, descriptive statistics for each construct, exploratory factor analysis as well as SEM in which the multiple linear regression modelling techniques are built in. Assumptions of SEM were well considered whereby; linearity was checked using scatter plot diagrams, absence of outliers was taken care of using frequency tabulation and number of observations in each category and cook's distance; absence of multicollinearity was evaluated using VIF and tolerance level while presence of homoscedacity was evaluated using graphs of regression standardized residuals against regression standardized predicted residuals.

4.2 Demographic Information Analysis

4.2.1 Participant Demographic Characteristics

The study involved 430 participants of which 372(86.5%) were males. Majority of the respondents 295(68.6%) were aged 48-62 years, 250(58.1%) had primary education, and 195(45.3%) had experience of working in cashew nut for 15-29 years.

Table 4.1: Distribution of Participation Demographic Characteristics (N=430)

Variable	N (%)
Sex	
Male	372 (86.5)
Female	58 (13.5)
Age	
18 - 32	7 (1.6)
33 - 47	80 (18.6)
48 - 62	295 (68.6)
63+	48 (11.2)
Education	
Primary	250 (58.1)
Secondary	118 (27.4)
Tertiary	62(14.5)
Experience in years	
0 - 14	85 (19.8)
15 – 29	195 (45.3)
30 – 44	147 (34.2)
45+	3 (0.7)

Source: Researcher, (2023).

4.2.2 Participant Awareness in Cashew nut Farming Basic Concepts

The study identified three basic concepts based on this research. These are institutional arrangement awareness, sustainability concept awareness and cashew nut stakeholder awareness. Majority 316 (73.5%) had average knowledge on institutional arrangement awareness**.** Furthermore, 300 (69.8%) had average knowledge on sustainability concept awareness while 312 (72.6%) had average knowledge on cashew nut stakeholder's awareness. The mean score for institutional arrangement awareness was 2.27 out of 3 (SD = 0.442), 2.09 out of 3 (SD = 0.54) for sustainability concept awareness and 2.26 out of 3 (SD = 0.455) for the cashew nut stakeholder's awareness. These mean score values of cashew nut stakeholder's awareness, sustainability concept awareness and institutional arrangement awareness imply that participants had overall knowledge of above average on the subject matter.

Table 4.2: Participation Awareness on Cashew – Nuts Farming Concept (N=430)

Cashew nut farming concepts	N (%)	Mean (SD)
Institutional arrangement awareness		
Average	316 (73.5)	2.27
Above average	114 (26.5)	(0.442)
Sustainability concept awareness		
Below average	45 (10.5)	2.09 (0.54)
Average	300 (69.8)	
Above average	85 (19.7)	
Cashew nuts stakeholders' awareness		
Below average	29 (6.7)	2.26 (0.455)
Average	312 (72.6)	
Above average	89(20.7)	

Source: Researcher, 2023

4.3 Descriptive Analysis of Study Constructs

4.3.1 Descriptive Analysis of Business Sustainability

Business sustainability was measured by nine items. Of these items, BS9 had the highest mean score of 4.01 with the standard deviation of 0.833 while BS4 had the lowest mean score of 3.80 with the standard deviation of 0.993. Generally, each item had approximately a mean score of 4 and their standard deviations were as lower as compared to the particular mean. This signifies that there was no significant variation between respondent's choices.

Table 4.3: Descriptive Analysis of Business Sustainability

Items/Construct	N	Minimum	Maximum	Mean	Std. Deviation
BS1	430	1	5	3.92	1.044
BS2	430	1	5	3.81	.977
BS3	430	1	5	3.96	1.003
BS4	430	1	5	3.80	.993
BS5	430	1	5	3.97	.959
BS6	430	1	5	3.97	1.004
BS7	430	1	5	3.97	.881
BS8	430	1	5	4.00	.819
BS9	430	1	5	4.01	.833
BSS	*430*	*1.17*	*5.00*	*3.9058*	*.82351*

Source: Researcher, (2023).

4.3.2 Descriptive Analysis of Isomorphism

Institutional isomorphism was measured by five items of which ISO1 had the highest mean score of 3.89, followed by ISO5 with mean score of 3.81. The study revealed that for each of the five items, there was at least a mean score of 3.8 and the standard deviation was below one. This result suggests that respondent choices were very close to each other.

Table 4.4 D:escriptive analysis of isomorphism

Items/construct	N	Minimum	Maximum	Mean	Std. Deviation
ISO1	430	1	5	3.89	.823
ISO2	430	1	5	3.80	.885
ISO3	430	1	5	3.77	.938
ISO4	430	1	5	3.78	.903
ISO5	430	1	5	3.81	.917
ISO	*430*	*1.25*	*5.00*	*3.7890*	*.70551*

Source: Researcher, (2023).

4.3.3 Descriptive Analysis of Legitimacy

Institutional legitimacy was defined by five distinct items. Each of these items had a minimum score of 1 suggesting strong disagreement and a maximum score of 5 signifying strong agreement. The study revealed that the mean score was almost the same, being approximately 4 and the standard variation in each item was below the mean. The latent variable LEG had the mean score of 3.9 with the standard deviation of 0.66. As observed, the standard deviation of the latent variable was below the standard deviation of each item implying that these items defined this construct efficiently.

Table 4.5: Descriptive Analysis of Legitimacy

Item/Construct	N	Minimum	Maximum	Mean	Std. Deviation
LEG1	430	1	5	3.83	.889
LEG2	430	1	5	3.88	.929
LEG3	430	1	5	4.08	.817
LEG4	430	1	5	3.98	.854
LEG5	430	1	5	3.87	.866
LEG	430	1.75	5.00	3.9430	.66239

Source: Researcher, (2023).

4.3.4 Descriptive Analysis of Logic

Institutional logic was measured by four distinct observed variables. Majority of the respondents chose to agree in each of the observable variable and all variables had

approximated mean score of 4. While there was no observed huge difference in mean score across observed variables, LOG3 had the lowest mean score of 3.81 out of 5 (SD = 0.853) while LOG4 had the highest mean score 3.86 out of 5 (SD = 0.925).

Table 4.6: Descriptive Analysis for Logic

Items/construct	N	Minimum	Maximum	Mean	Std. Deviation
LOG1	430	1	5	3.84	.847
LOG2	430	1	5	3.83	.815
LOG3	430	1	5	3.81	.853
LOG4	430	1	5	3.86	.925
LOG	430	1.75	5.00	3.8349	.66598

Source: Researcher, (2023).

4.3.5 Descriptive Analysis of Market Stakeholder's Action

Market stakeholder's action (MSA) was defined by four items. In each item, at least one respondent had a 'strongly disagree' and a 'strongly agree' option. There were no many differences in mean score contributed from each observable variable to the latent variable (MSA) as all items had approximately the mean score of 4. The latent variable had a mean score of 3.9 with the standard deviation of 0.69 which was below the corresponding mean and hence signifying absence of much variations between items forming the latent variable MSA.

Table 4.7: Descriptive analysis of Market Stakeholder's Action

Items/construct	N	Minimum	Maximum	Mean	Std. Deviation
MSA1	430	1	5	3.92	.797
MSA2	430	1	5	4.02	.904
MSA3	430	1	5	3.77	.893
MSA4	430	1	5	3.91	.882
MSA	430	1.00	5.00	3.9058	.69327

Source: Researcher, (2023)

4.4 Assumptions of Structural Equation Modeling

4.4.1 Linear Relationship between Dependent and Independent Variables

Assessment of linear relationship between dependent and independent variables were evaluated using scatter plot. The dependent variable was BSS while independent variables were, LEG, ISO and LOG whereas MSA was the mediating variable.

4.4.1.1 Linear Relationship between BSS and LEG

Using scatter plot, the study revealed a positive linear relationship between LEG and BSS. Thus, when the values for LEG were increasing similar increase was observed among the values for BSS. Generally, the study observed an increasing trend of values between BSS and LEG. The coefficient of determination was about 22% with the slope coefficient of 0.58.

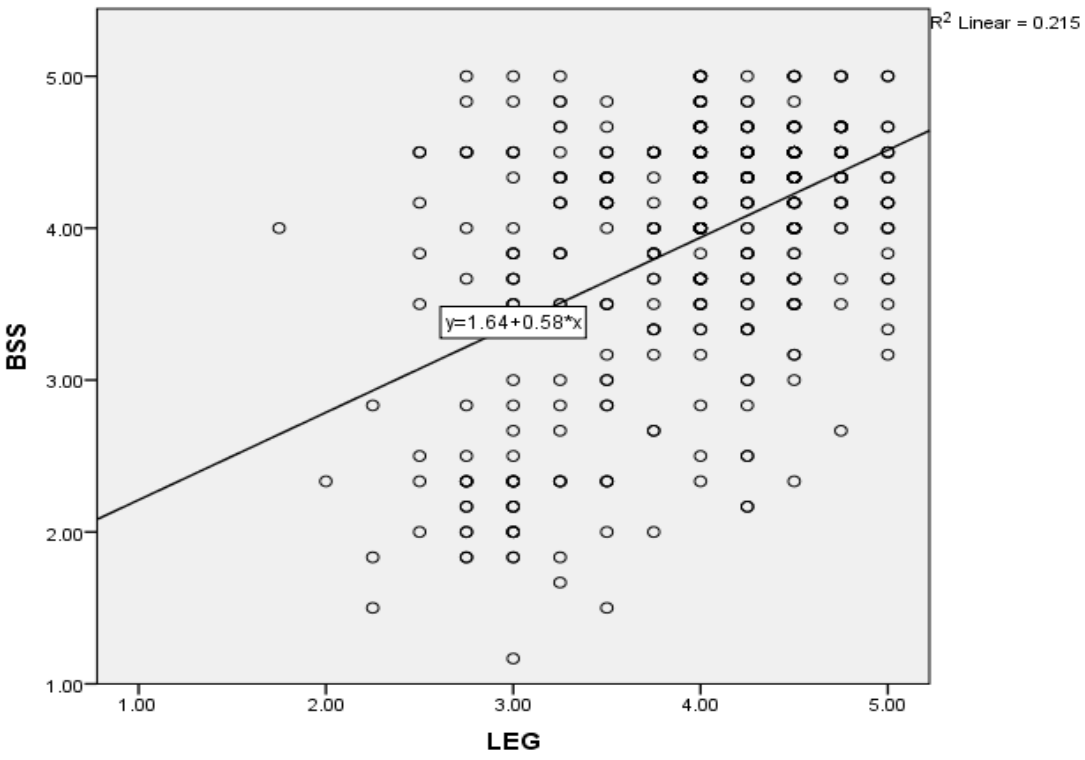

Figure 4.1: Linear Relationship between BSS and LEG

4.4.1.2 Linear Relationship between BSS and ISO

The study observed positive relationship between ISO and BSS. As the values of ISO increased, the values of BSS were also increasing. The coefficient of determination was about 33% with the slope coefficient of 0.67.

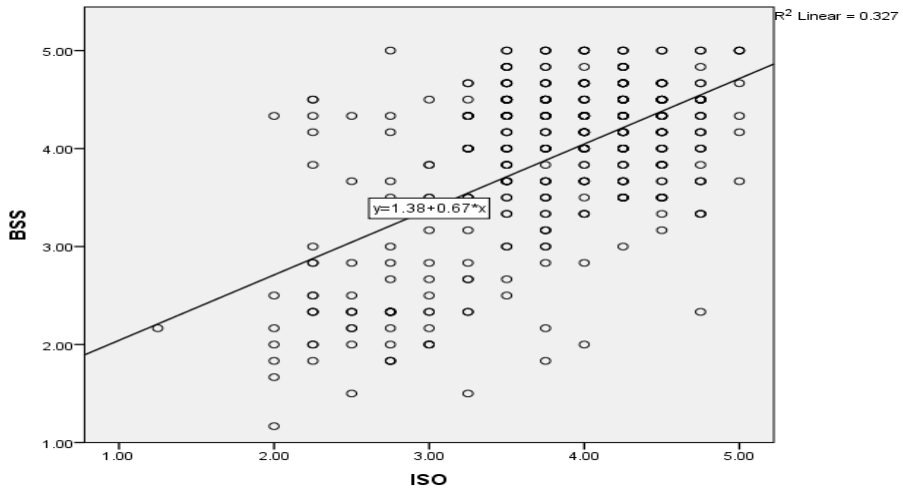

Figure 4.2: Linear Relationship between BSS and ISO

4.4.1.3 Linear Relationship between BSS and LOG

The study revealed that when scores of LOG increased the scores of BSS increased, hence signifying the positive relationship between variables under consideration. The slope coefficient was 0.71 while the coefficient of determination was 33%.

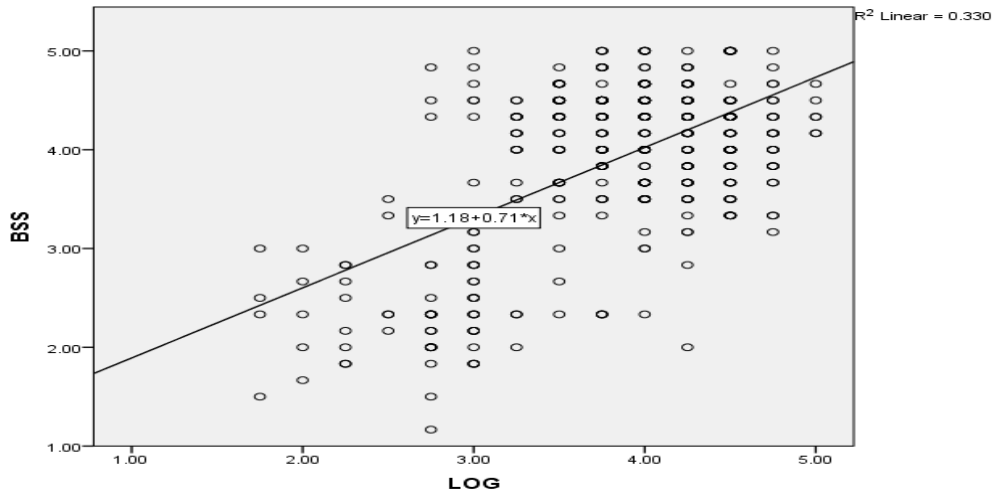

Figure 4.3: Linear Relationship between BSS and LOG

4.4.1.4 Linear Relationship between BSS and MSA

The scatter plot revealed positive linear relationship between BSS and MSA. As the values for BSS increased, the MSA values also increased. Similarly, as the values for MSA decreased, the values for BSS decreased too. The slope coefficient was 0.8 and the coefficient of determination was about 46%.

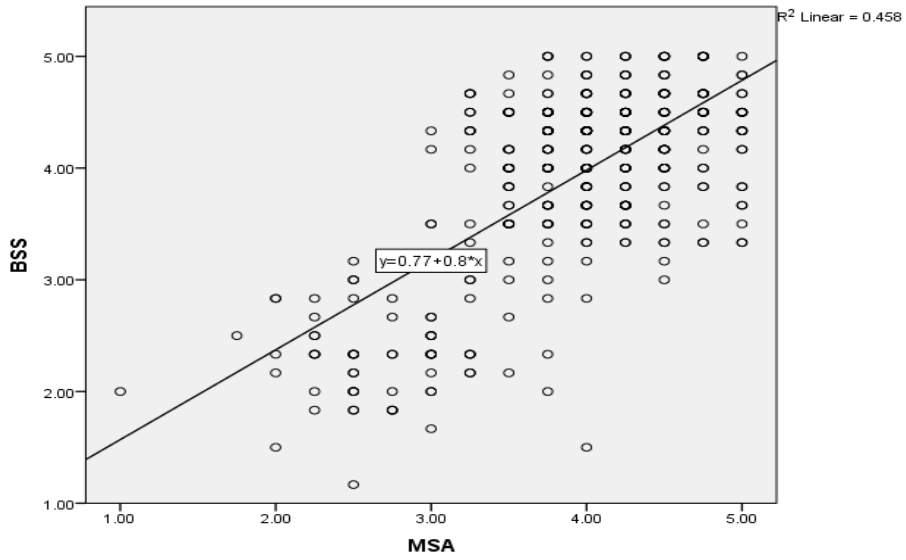

Figure 4.4: Linear Relationship between BSS and MSA

4.4.2 Absence of Outliers

The study revealed the absence of outliers. This was checked using three distinct methods. With simple analysis of each variable and frequency tabulation, all variables had ranks within the stipulated range, thus no outliers were detected. Furthermore, based on the frequency distribution of observations within each variable, we observed the absence of outliers as each category in a variable had a sufficient number of respondents in a manner that neither of the category had a very lower number of observations as compared to the other category. On top of that, the Cook's distance had values below 1 after estimating the model which means that no influence of outlier was identified.

Table 4.8: Descriptive Statistics for Cook's Distance

Statistic	N	Minimum	Maximum	Mean	Std. Deviation
Cook's Distance	430	.00000	.09203	.0025528	.00570561

Source: Researcher, (2023).

4.4.3 Multivariate Normality

The study revealed that data were normally distributed as their skewness values were within the acceptable range of -2 and +2 and the kurtosis values were between -5 and +5. The minimum values for skewness and kurtosis were -1.064 and -0.01 respectively while the maximum values were -0.495 and 1.038 respectively. See appendix V.

4.4.4 Absence of Multicollinearity

Absence of Multicollinearity was evaluated using two measures which are Variance Inflation Factor (VIF) and the level of tolerance. The study revealed that VIF values were below 5 which is the acceptable range. Furthermore, the levels of tolerance were between 0 and 1 which is also the acceptable cutoff points (James et al., 2013).

Table 4.9: Multicollinearity Tests for the Model

Variable	Tolerance	VIF
LEG	.782	1.279
ISO	.621	1.610
LOG	.588	1.700
MSA	.556	1.799

Source: Researcher, (2023).

4.4.5 Presence of Homoscedacity

The presence of homoscedasticity was evaluated using the graphs of regression standardized residuals versus the regression standardized predicted value. The study revealed the presence of homoscedasticity. The figure did not form tunnel shape

which implied presence of homoscedasticity for both models.

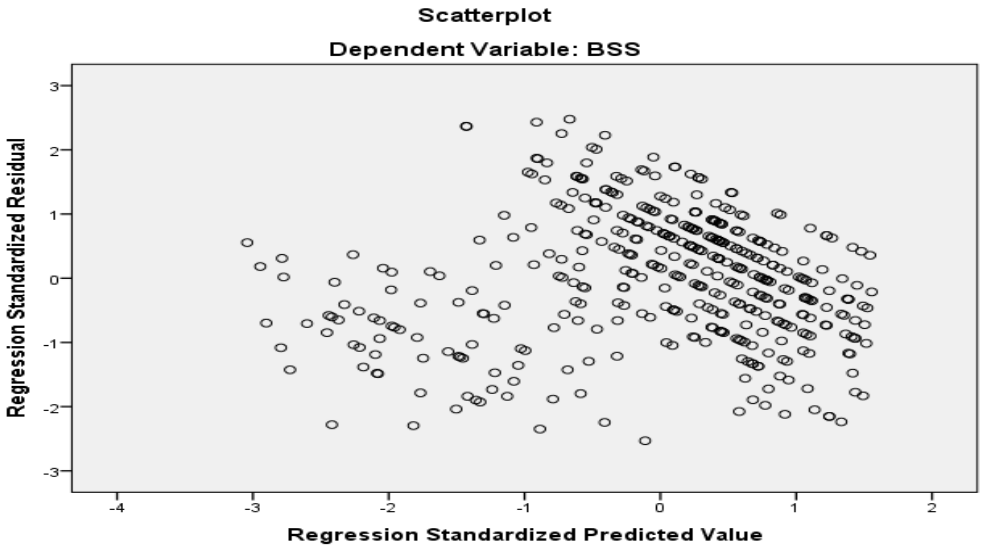

Figure 4.5: Evaluation of Homoscedasticity Assumption

4.4.6 Normality of Residuals

The study revealed that the residuals were normally distributed as evidenced by the distribution of residuals around the line of normality. All residuals were found to lie within the line of normality.

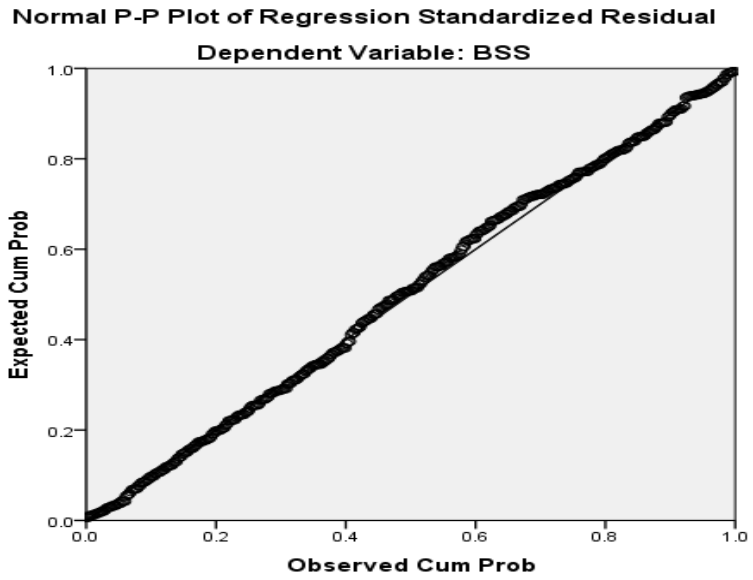

Figure 4.6: Evaluation of Normality of Residual Assumption

4.5 Validity and Reliability Test

4.5.1 Reliability

Construct reliability as measured by Cronbach's alpha revealed that all constructs had values above 0.7 which is the recommended level to conclude that the variable was reliable. The items forming BSS had highest reliability of 0.907 while that of LEG had the lowest reliability of 0.754 as compared to other constructs.

Table 4.10: Construct Reliability and Validity

Construct	No. of items	Reliability	AVE	CR	√AVE	1 - CR
BSS	6	0.907	0.503	0.858	0.71	0.14
ISO	4	0.778	0.483	0.788	0.69	0.21
LEG	4	0.754	0.503	0.798	0.71	0.20
LOG	4	0.774	0.463	0.774	0.68	0.23
MSA	4	0.808	0.450	0.765	0.67	0.24

Source: Researcher, (2023).
Key: √AVE means square root of AVE
1 – CR means Error variance

4.5.2 Convergent Validity

Based on AVE, the study revealed that all constructs had values above or approximated to 0.5; the latent variables BSS and ISO had the same AVE amounting to 0.503 while other constructs had AVE values below but approximately equal to 0.5. Lam (2012) contended that as long as composite reliability (CR) of a construct is above the required level, even if its AVE is below the recommended cut off point, the internal reliability of the measurement items is acceptable.

4.5.3 Discriminant Validity

Discriminant validity is the square root of AVE. Discriminant validity is met when the square root of AVE is greater than the inter-factor correlation. The highest correlation observed was 0.71 while the lowest was 0.67 (Table 4.10). These results revealed that constructs were discriminated accordingly.

4.6 Exploratory Factor Analysis

Exploratory factor analysis is aimed to evaluate if items defining a certain construct fit for the particular construct given a set of items and identifying number of items forming the particular construct. Similarly, construct explained variances, number of formulated components and factor loadings were expressed.

4.6.1 KMO and Batlet's Test of Sphericity

We determined if items forming a certain construct fit for EFA using the KMO and Batlet's test of sphericity. The study revealed that of the five latent variables under consideration, all observed variables defining a given construct fitted for EFA as their KMO was above 0.7 which implies good sampling adequacy. Similarly, the determinants for each construct were above 0.0001 which is the recommended cut off. Furthermore, the Batlet's test was large enough to reject the null hypothesis that the correlation matrix was identical. This was evidenced by the smallest p-values below 0.001 for each construct.

Table 4.11: Contrust's KMO and Batlet's test of sphericity

Construct	Number of items	Determinant	KMO	Bartlett's Test
BSS	9	0.008	0.940	2076.338 (p<0.001)
ISO	5	0.304	0.822	507.916 (P<0.001)
LEG	5	0.311	0.798	497.453 (P<0.001)
LOG	4	0.359	0.782	436.908 (P<0.001)
MSA	4	0.282	0.794	540.038 (P<0.001)
Overall	27	2.216E-6	0.957	5457.519 (P<0.001)

Source: Researcher, (2023).

4.6.2 Sum of Squared Loadings Explained

The study used EFA to determine the number of constructs formed from a given set of observed variables. This procedure was done for each variable under the principal component method of variable deduction. The method employed varimax

minimization approach whereby the variable was retained in the model if the eigen values were above 1 and the factor loadings were at least 0.5 which is the recommended cut off point for SEM.

The study consisted of 27 items which were supposed to form 5 constructs. As expected, these items formed five components/constructs although with observed overlapping of some items. The percentage of variance due to the extraction sum of squared loadings increased from 39.876 to 59.87 from the first to the fifth component. Only five items were considered based on the initial eigenvalues cutoff point of at least one.

Table 4.12: Total Variance Explained for Business Sustainability Items

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% Of Variance	Cumulative %	Total	% Of Variance	Cumulative %	Total	% Of Variance	Cumulative %
1	10.766	39.876	39.876	10.766	39.876	39.876	4.035	14.943	14.943
2	1.767	6.546	46.422	1.767	6.546	46.422	3.844	14.235	29.178
3	1.371	5.078	51.500	1.371	5.078	51.500	3.140	11.629	40.806
4	1.215	4.501	56.001	1.215	4.501	56.001	2.611	9.672	50.478
5	1.043	3.865	59.866	1.043	3.865	59.866	2.535	9.388	59.866
6	.763	2.828	62.694						
7	.727	2.692	65.385						
8	.712	2.639	68.024						
9	.653	2.420	70.443						
10	.619	2.293	72.736						
11	.586	2.169	74.905						
12	.554	2.051	76.956						
13	.546	2.022	78.979						
14	.531	1.966	80.945						
15	.522	1.932	82.877						
16	.487	1.805	84.681						
17	.475	1.759	86.440						
18	.446	1.652	88.092						
19	.435	1.612	89.705						
20	.420	1.556	91.260						
21	.411	1.521	92.781						
22	.388	1.438	94.219						
23	.362	1.340	95.559						
24	.344	1.273	96.833						
25	.326	1.207	98.040						
26	.267	.989	99.029						
27	.262	.971	100.000						

Source: Researcher, (2023).

4.6.3 Item's Factor Loadings in each Construct

The study revealed that some items overlapped contrary to expectations. Out of 9 items forming BSS, three (BS7, BS8 and BS9) overlapped to MSA construct and thus were dropped from further analysis; hence BSS was formed by six items. Similar observation was evident in LEG and ISO constructs, of which LEG5 and ISO1 overlapped to LOG. Thus, one item from LEG (LEG5) was dropped and hence the construct remained with 4 items. Likewise, ISO1 was dropped from 5 items forming construct ISO and thus it remained with 4 items. Otherwise, all items had factor loadings above 0.5 which is the recommended cut off point for SEM where sample size is greater than or equal to 350 (Hair *et al.*,2014). According to Yong and Pearce. (2013) factor loading of 0.3 and above for large sample size above 300 is sufficient to proceed with analysis.

Table 4.13: Description of Constructs and Items Forming Business Sustainability

	Component				
	1	2	3	4	5
BS6	.743				
BS4	.733				
BS1	.725				
BS2	.713				
BS5	.707				
BS3	.626				
MSA4		.711			
MSA2		.661			
MSA1		.660			
MSA3		.648			
BS7		.635			
BS9		.551			
BS8		.537			
LOG1			.766		
LOG4			.701		
LOG2			.668		
LOG3			.574		
LEG5			.571		
ISO1			.450		
ISO5				.769	
ISO4				.696	
ISO2				.664	
ISO3				.644	
LEG1					.790
LEG2					.780
LEG4					.717
LEG3					.515

Source: Researcher, (2023).

4.7 Confirmatory Factor Analysis

Confirmatory factor analysis was undertaken to evaluate the effectiveness of measurement model. The structural model was drawn using SPSS-AMOS version 23 and important estimates for evaluating measurement model fitness were checked. Parameter estimation method was based on the likelihood ratio test which was given by default.

4.7.1 Measurement Model and Confirmatory Factor Analysis Results

After removing some items due to overlapping problem, a Confirmatory Factor Analysis (CFA) to examine the theoretical constructs by measuring the loadings of the items, error variances and covariance of the developed measurement model was carried out (Civelek, 2018). CFA was evaluated in terms of measures of fit indices and statistical significance of coefficients. The choice of measures of fit in this study was based on Hooper (2008) who recommended the use of combined indices in model fitting.

4.7.1.1 BSS Measurement Model

Business sustainability was measured by nine items but only six remained after explolatory factor analysis. Figure 4.7 below summarizes the results of each item contribution on BSS. The BSS measurement model met SEM model fit indices as evidenced by the overall model fit under Chi-square p - value to be non statistically significant implying that the data fitted the model.

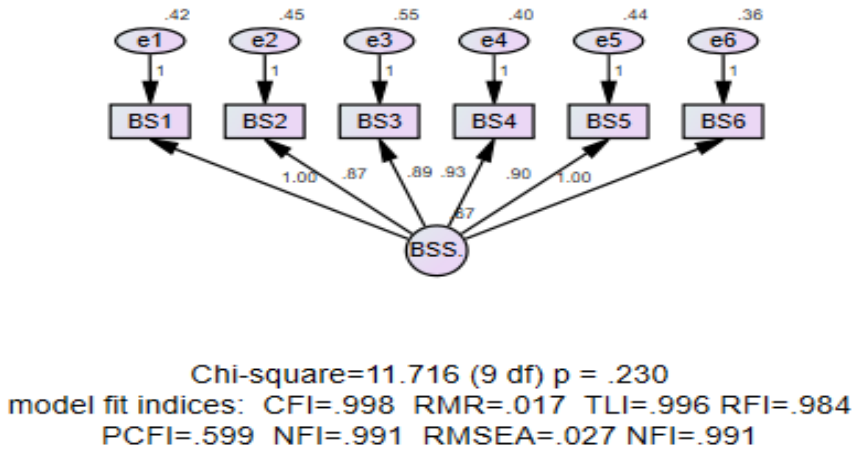

Figure 4.7: BSS Measurement Model

BSS was observed to have a positive and statistical significant relationship with all six items at 5% level. Table 4.14 summarizes this information.

Table 4.14: Standardized and Un-Standardized Regression Weights for BSS

	Unstandardized Estimate	Standardized Estimate	S.E.	C.R.	P	Label
BS1 <--- BSS.	1.000	0.784				
BS2 <--- BSS.	.866	0.727	.056	15.471	<0.001	par_1
BS3 <--- BSS.	.891	0.700	.060	14.796	<0.001	par_2
BS4 <--- BSS.	.927	0.767	.056	16.475	<0.001	par_3
BS5 <--- BSS.	.899	0.742	.057	15.857	<0.001	par_4
BS6 <--- BSS.	1.004	0.809	.057	17.517	<0.001	par_5

Source: Researcher, (2023).

4.7.1.2 LEG Measurement Model

The latent variable LEG was measured by four items. Measurement model in Figure 4.8 revealed that these items fitted the data as evidenced by the chi-square p - value being non-statistically significant at 5% level.

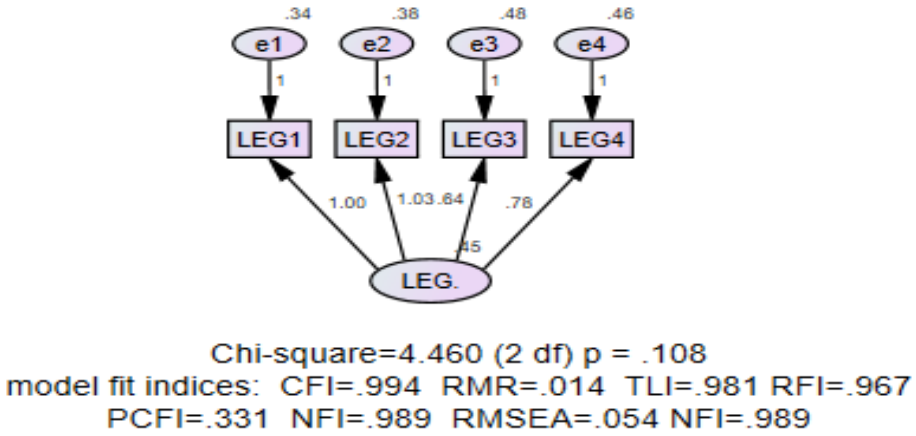

Figure 4.8: LEG Measurement Model

The items measuring LEG had a positive and statistically significant relationship with LEG at 5% level. Table 4.15.

Table 4.15: Standardized and Un-standardized Regression Weights for LEG

	Unstandardized Estimate	Standardized Estimates	S.E.	C.R.	P	Label
LEG1 <--- LEG.	1.000	0.779				
LEG2 <--- LEG.	1.034	0.696	.089	11.610	<0.001	par_1
LEG3 <--- LEG.	.641	0.712	.069	9.218	<0.001	par_2
LEG4 <--- LEG.	.775	0.95	.074	10.456	<0.001	par_3

Source: Researcher, (2023).

4.7.1.3 ISO Measurement Model

ISO1 was removed from being used for further analysis during exlolatory factor analysis, thus we remained with four items measuring ISO. Figure 4.9 below summarizes the model fit indices, whereby the overall Chi-square p - value was not statistically significant at 5% level of significance which implies that the data fitted the model. Other model fit indexes qualified given the cutoff points.

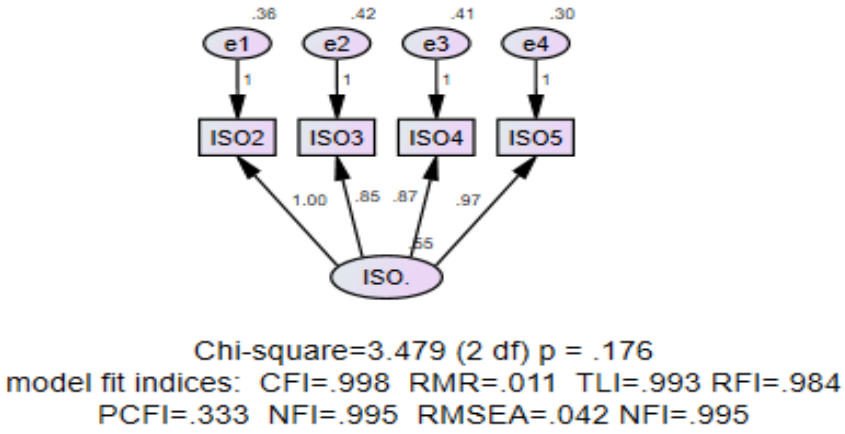

Figure 4.9: ISO Measurement Model

All items measuring ISO had a positive and statistically significant relationship with ISO at 5% level. see Table 4.16.

Table 4.16: Standardized and Un-standardized Regression Weights for ISO

	Unstandardized Estimate	Standardized Estimates	S.E.	C.R.	P	Label
ISO2 <--- ISO.	1.000	0.779				
ISO3 <--- ISO.	.846	0.696	.062	13.602	<0.001	par_1
ISO4 <--- ISO.	.873	0.712	.063	13.909	<0.001	par_2
ISO5 <--- ISO.	.971	0.975	.064	15.216	<0.001	par_3

Source: Researcher, (2023).

4.7.1.4 LOG Measurement Model

The study observed that four items measuring LOG fitted well the model as evidenced by the model fit indices and the overall chi-square p value. The chi-square p - value was not statistically significant at 5% level, signifying that the data fitted well the model. See Figure 4.10.

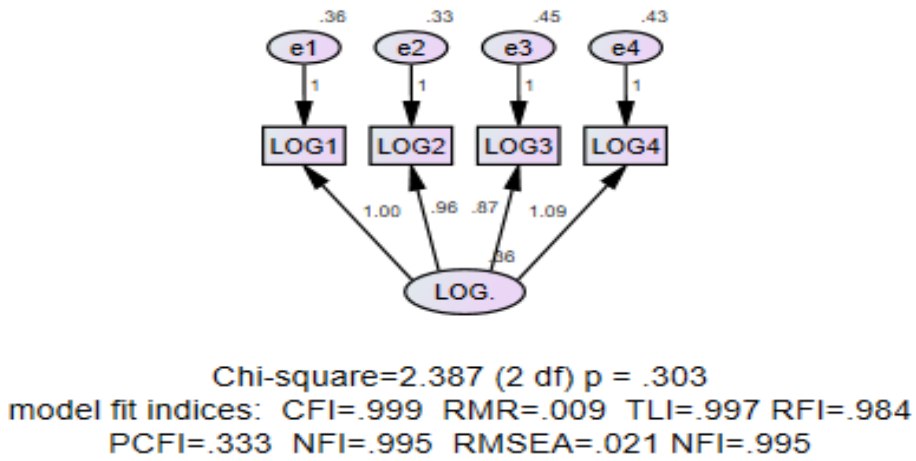

Figure 4.10: LOG Measurement Model

Table 4.17 summarizes the relationship between LOG and its corresponding observable items. All items had a positive and statistically significant contribution on LOG at 5% level.

Table 4.17: Standardized and Un-standardized Regression Weights for LOG

	Unstandardized Estimate	Standardized Estimate	S.E.	C.R.	P	Label
LOG1 <--- LOG	1.000	0.708				
LOG2 <--- LOG	.957	0.704	.084	11.435	<0.001	par_1
LOG3 <--- LOG	.874	0.614	.084	10.401	<0.001	par_2
LOG4 <--- LOG	1.088	0.705	.095	11.448	<0.001	par_3

Source: Researcher, (2023).

4.7.1.5 MSA Measurement Model

Four observable items were used to measure MSA; measurement model for MSA revealed that data fitted the model well as evidenced by model fit indices to be within the specified range. Furthermore, chi-square p-value was statistically insignificant at 5% level signifying that the data fitted well the model. See Figure 4.11.

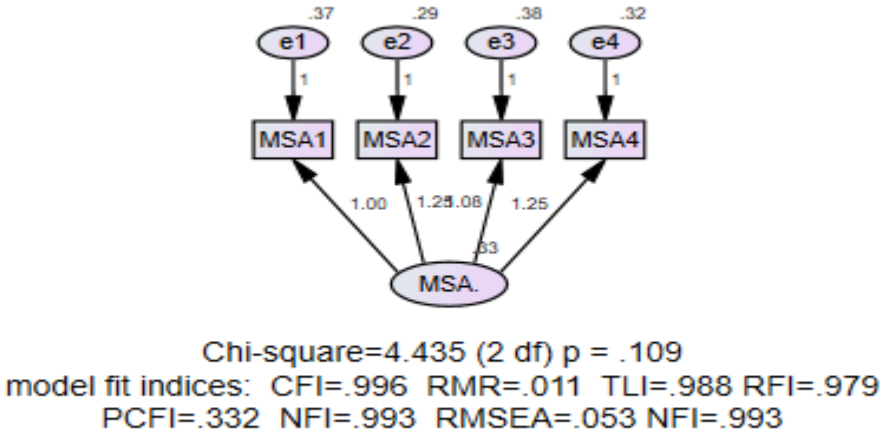

Figure 4.11: MSA Measurement Model

Table 4.18: Standardized and Un-standardized Regression Weights for MSA

		Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P	Label
MSA1	<--- MSA.	1.000		0.685			
MSA2	<--- MSA.	1.251	.092	0.799	13.618	<0.001	par_1
MSA3	<--- MSA.	1.081	.086	0.709	12.506	<0.001	par_2
MSA4	<--- MSA.	1.254	.093	0.787	13.499	<0.001	par_3

Source: Researcher, (2023)

4.7.1.6 Overall Measurement Model

An assessment of model fit to the data preceded other tests under CFA. The assessment was done through examination of Goodness of Fit Indices (GOFI). Researcher employed several fit indices to provide proof of how well the model fitted the data. GOFI used to assess model fit were; CMIN/DF(X^2/df), RMR, GFI, CFI, NFI, TLI, RFI, PCFI and RMSEA. The CFA was run with few adjustments through covarying some of error terms that were highly correlated based on modification indices whereby a good model fit was obtained. All the covarried error terms were within construct – error covariance that means, covariance was among error terms of items which represented the same construct. Therefore, the validity of

measurement was not affected (Hair, *et al.,* 2014).

The good model fit was evidenced by; chi – square = 204.447(197df) p = .343, CFI of .998, RMR of ,029, TLI of .998, RFI of .994, PCFI of .0851, NFI of .952, RMSEA of .009 and NFI of .952 as shown in Figure 4.12 below. All obtained fit indices met cutoff points as provided by (Gupta, 2015; Hair *et al.,* 2006; Hooper *et al.,* 2008; Malhotra *et al.,* 2017) who proposed the following cutoff points; CMIN/DF(X^2/df) ≤3, RMR ≤ .08, GFI ≥ 0.90 CFI ≥ 0.90, NFI ≥ 0.90 TLI ≥ 0.90 RFI ≥ 0.90, PCFI ≥0.50 and RMSEA ≤ .08.

As presented in Figure 4.12 below, correlation coefficients were all less than 0.8 as shown by double – pointed lines that connect the latent variables. This means there was a discriminant validity (Brown, 2006). For the reliability purpose, the standardized factor loading for each item in the construct should be ≥ 0.5 (Hair *et al.,* 2014). All loadings as shown by arrows from latent variables to the indicators were above 0.5 which verified reliability of indicators.

All produced standardized regression estimate weights as shown in Table 4.19 were above 0.5 and significant at p ≤ .005 within the acceptable critical ratio (CR) of plus or minus 1.96 (Hair *et el.,* 2010). This was another evidence that the model was well fitted.

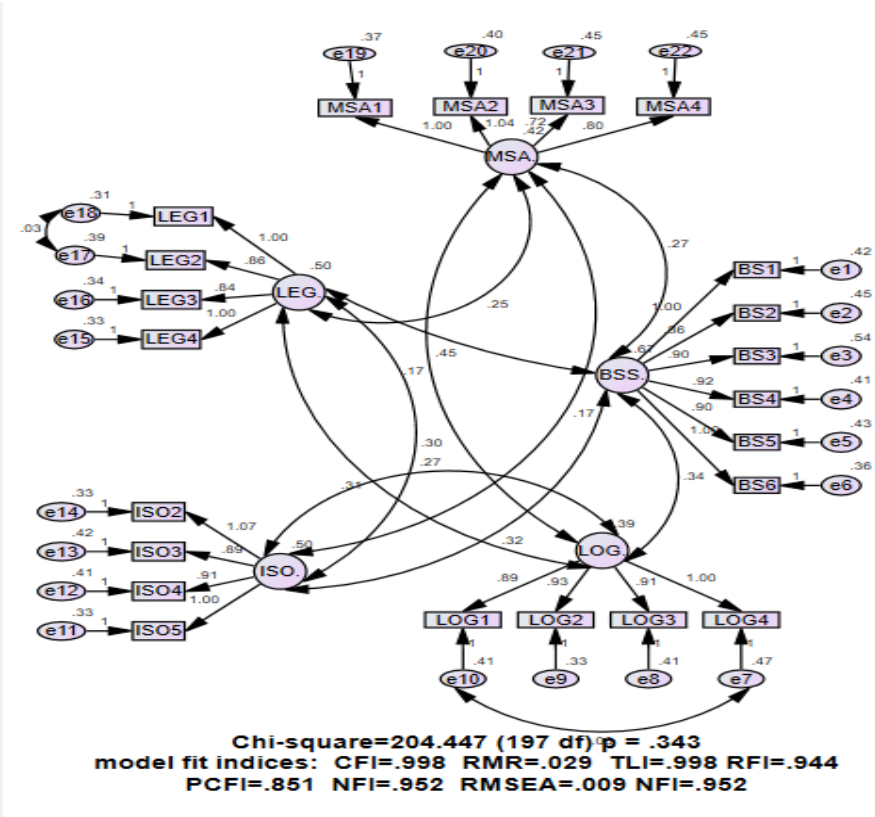

Figure 4.12: Overall Measurement Model

Table 4.19: Standardized Estimates for Overall Measurement Model

			Estimate	S.E.	C.R.	P	Label
BS1	<---	BSS.	1.000				
BS2	<---	BSS.	.864	.055	15.702	<0.001	par_1
BS3	<---	BSS.	.903	.059	15.299	<0.001	par_2
BS4	<---	BSS.	.916	.055	16.554	<0.001	par_3
BS5	<---	BSS.	.903	.056	16.227	<0.001	par_4
BS6	<---	BSS.	.998	.056	17.794	<0.001	par_5
LOG4	<---	LOG.	1.000				
LOG3	<---	LOG.	.909	.083	10.974	<0.001	par_6
LOG2	<---	LOG.	.926	.081	11.451	<0.001	par_7
LOG1	<---	LOG.	.888	.074	11.960	<0.001	par_8
ISO5	<---	ISO.	1.000				
ISO4	<---	ISO.	.914	.064	14.207	<0.001	par_9
ISO3	<---	ISO.	.893	.064	14.000	<0.001	par_10
ISO2	<---	ISO.	1.074	.068	15.898	<0.001	par_11
LEG4	<---	LEG.	1.000				
LEG3	<---	LEG.	.842	.058	14.531	<0.001	par_12
LEG2	<---	LEG.	.860	.063	13.752	<0.001	par_13
MSA1	<---	MSA.	1.000				
MSA2	<---	MSA.	1.039	.086	12.103	<0.001	par_14
MSA3	<---	MSA.	.718	.071	10.101	<0.001	par_15
MSA4	<---	MSA.	.803	.075	10.701	<0.001	par_16
LEG1	<---	LEG.	.998	.063	15.831	<0.001	par_18

Source: Researcher, (2023).

4.8 Structural Model Results

Full structural model comprising of direct and indirect relationship between study variables was developed and analyzed to determine the goodness of fit between the hypothesized model and sample data. Modification indices were applied to obtain good model. Findings of model fit as portrayed in Figure 4.13 below were as follows; chi – square p value was .248 which signified model fit (Hooper *et al.*, 2008), CFI of .997 met the recommended cutoff point of ≥ 0.90 (Gupta, 2015), RMR of .025 was within the suggested cuttoff point of ≤ .08 (Malhotra, *et al.,* 2017).

Moreover, TLI of .996 was above the recommended point of ≥ 0.90 (Gupta, 2015), RFI of .943 were above the suggested cut-off point of ≥ 0.90 (Hair, *et al.,* 2006) and PCFI of .850 were above the recommended point ≥ 0.50 (Hooper, *et al.,* 2008). Also, GFI of .958 was above the suggest point of ≥ 0.90 (Gupta, 2015), RMSEA of .012 within the suggested point of ≤ .08 (Malhotra, *et al.,* 2017) and NFI of .951 above the recommended point ≥ .90 (Hooper, *et al.,* 2008).

All loadings as shown by arrows from latent variables to the indicators were above 0.5 which proved reliability of indicators. Produced standardized regression estimate weights as shown in Table 4.20 were above 0.5 and significant at p ≤ .005 within the acceptable critical ratio (CR) of plus or minus 1.96 (Hair *et el.,* 2014). Having established model that indicates good structural fitness, the researcher now was confident to test the prior developed hypothesis.

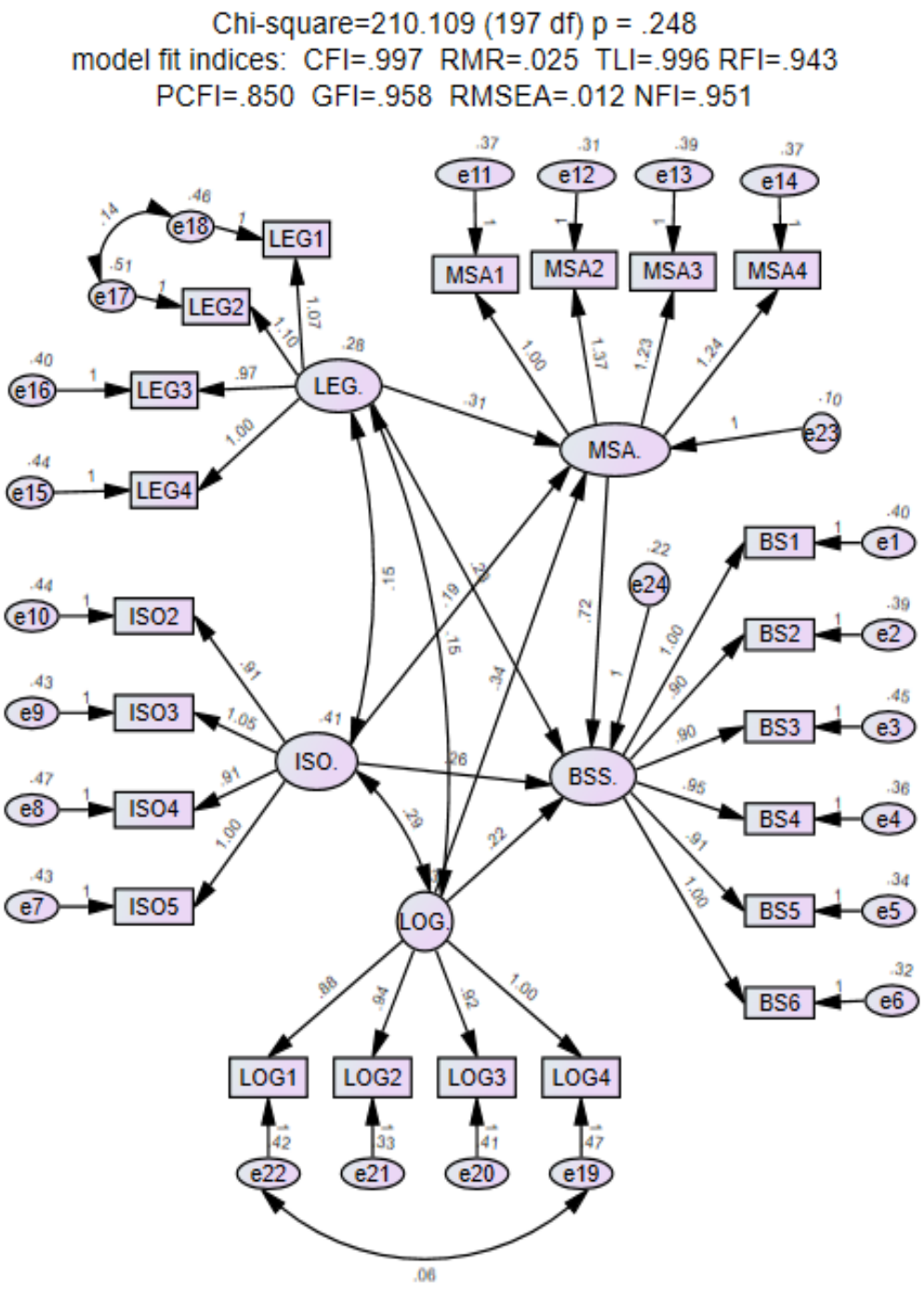

Figure 4.13: Structural Model

Table 4.20: Standardized Estimates for Structural Model

			Estimate	S.E.	C.R.	P	Label
MSA.	<---	ISO.	0.193	0.069	2.793	0.005	par_18
MSA.	<---	LOG.	0.341	0.078	4.387	<0.001	par_19
MSA.	<---	LEG.	0.289	0.062	4.654	<0.001	par_21
BSS.	<---	MSA.	0.72	0.132	5.457	<0.001	par_17
BSS.	<---	LEG.	0.242	0.087	2.775	0.006	par_20
BSS.	<---	ISO.	0.25	0.093	2.676	0.007	par_24
BSS.	<---	LOG.	0.216	0.109	1.976	0.078	par_25
BS1	<---	BSS.	1				
BS2	<---	BSS.	0.901	0.052	17.288	<0.001	par_1
BS3	<---	BSS.	0.9	0.054	16.69	<0.001	par_2
BS4	<---	BSS.	0.954	0.052	18.221	<0.001	par_3
BS5	<---	BSS.	0.914	0.051	18.033	<0.001	par_4
BS6	<---	BSS.	1.001	0.052	19.133	<0.001	par_5
ISO5	<---	ISO.	1				
ISO4	<---	ISO.	0.911	0.079	11.589	<0.001	par_6
ISO3	<---	ISO.	1.045	0.083	12.574	<0.001	par_7
ISO2	<---	ISO.	0.913	0.077	11.805	<0.001	par_8
MSA1	<---	MSA.	1				
MSA2	<---	MSA.	1.368	0.104	13.162	<0.001	par_9
MSA3	<---	MSA.	1.228	0.1	12.268	<0.001	par_10
MSA4	<---	MSA.	1.207	0.098	12.326	<0.001	par_11
LEG4	<---	LEG.	1				
LEG3	<---	LEG.	0.953	0.102	9.34	<0.001	par_12
LEG2	<---	LEG.	1.115	0.123	9.036	<0.001	par_13
LOG4	<---	LOG.	1				
LOG3	<---	LOG.	0.918	0.082	11.126	<0.001	par_14
LOG2	<---	LOG.	0.941	0.08	11.687	<0.001	par_15
LOG1	<---	LOG.	0.879	0.074	11.957	<0.001	par_16
LEG1	<---	LEG.	1.083	0.119	9.132	<0.001	par_22

Source: Researcher, (2023).

4.9 Effect of LEG, ISO, LOG, MSA on BSS

The effect of each independent variable on dependent variable was assessed based

on two aspects, that is to say, when the mediating variable (MSA) is absent and when is present.

4.9.1 Effect of LEG on BSS

When mediating variable was excluded in the model, the study revealed that controlling for LOG and ISO, LEG had a positive and statistically significant effect of 0.438 (p <.001) on BSS. Thus, for one unit score increase in LEG, BSS increased by 0.44 units. Therefore, we had statistical evidence to reject null hypothesis and concluding that LEG had a positive and statistically significant effect on BSS as shown in Table 4.21.

Table 4.21: Determinants of BSS before Controlling for MSA

Relationship			Estimate	S.E.	C.R.	P	Label
BSS.	<---	LEG.	0.438	0.087	5.011	<0.001	par_15
BSS.	<---	ISO.	0.386	0.102	3.803	<0.001	par_16
BSS.	<---	LOG.	0.465	0.111	4.193	<0.001	par_17

Source: Researcher, (2023).

Controlling for mediating variable in the model, the study revealed that for each score increase in LEG, BSS increased by 0.24 and the effect was still statistically significant at 5% level. The inclusion of mediating variable (MSA) led to a decline in the effect of LEG on BSS from 0.44 to 0.24 but the relationship remained significant at 5% level. See Table 4.22.

Table 4.22 Determinants of BSS after Controlling for MSA

Relationship			Estimate	S.E.	C.R.	P	Label
MSA.	<---	ISO.	0.193	0.069	2.793	0.005	par_18
MSA.	<---	LOG.	0.341	0.078	4.387	<0.001	par_19
MSA.	<---	LEG.	0.289	0.062	4.654	<0.001	par_21
BSS.	<---	MSA.	0.72	0.132	5.457	<0.001	par_17

BSS.	<---	LEG.	0.242	0.087	2.775	0.006	par_20
BSS.	<---	ISO.	0.25	0.093	2.676	0.007	par_24
BSS.	<---	LOG.	0.216	0.109	1.976	0.078	par_25

Source: Researcher, (2023).

4.9.2 Effect of ISO on BSS

The study revealed that controlling for LEG and LOG, each unit score increases in ISO caused BSS to increase by 0.38 and the effect was statistically significant at p<.001 as shown in Table 4.21. Based on this aspect, we had statistical evidence to reject null hypothesis and hence concluding that ISO had a positive and statistically significant effect on BSS.

Controlling for the effect of LEG, LOG and MSA, we found that, for each score increase in ISO, BSS increases by 0.25 and the effect was still statistically significant at 5% level. The inclusion of mediating variable led to the effect of ISO on BSS to decline from 0.39 to 0.25. Nevertheless, the effect was still statistically significant as shown in Table 4.22.

4.9.3 Effect of LOG on BSS

Controlling for LEG and ISO, the study discovered that for each score increase in LOG, BSS increased by 0.46 and this increase was statistically significant at 5% level as shown in Table 4.21. Based on these findings, we had statistical evidence for rejecting the null hypothesis and thus concluding that LOG had a positive and statistically significant effect on BSS. Furthermore, controlling for the effect of LEG, ISO and MSA, we revealed that for each score increase in LOG, BSS increased by 0.22 but the effect was not statistically significant at 5% level as shown

in Table 4.22. The inclusion of the mediating variable led to the effect of LOG on BSS to decline from 0.46 to 0.22 but it was not statistically significant at 5% level.

4.9.4 Effect of MSA on BSS

The study revealed that controlling for LEG, ISO and LOG in the model, MSA had a positive and statistically significant effect of 0.72 ($p < .001$) on BSS as shown in Table 4.22. Therefore, we had statistical evidence to reject the null hypothesis and conclude that MSA had a positive and statistically significant effect on BSS.

4.9.5 Mediation Effect of MSA on the Relationship between LEG and BSS

Direct and indirect effect of LEG on BSS was 0.24 and 0.21 respectively and total effect was 0.45 as shown in Table 4.23. Direct effect of LEG on BSS as well as that of LEG on MSA was positive and statistically significant at $p<.001$ each as shown in Tables 4.21 and 4.22 respectively. After controlling for LEG, the effect of MSA on BSS was also significant at $p < .001$. Again, controlling for MSA made the effect of LEG on BSS to be reduced but still remained significant at 5% level.

Initially, this study hypothesized that there is mediation effect of market stakeholder's action on the relationship between institutional legitimacy and business sustainability. Therefore, the study realized that MSA had a partial mediation effect on the relationship between LEG and BSS as it fulfils the partial mediation condition. This means that after controlling for MSA, the effect of LEG on BSS was reduced but still remained statistically significant.

Table 4.23: Direct, Indirect and Total effect of Independent Variables on BSS

Effect category	LOG.	LEG.	ISO.	MSA.
Direct effect				
MSA	0.341	0.289	0.193	0

BSS	0.216	0.242	0.25	0.72
Indirect effect				
BSS	0.245	0.208	0.139	0
Total effects				
MSA	0.341	0.289	0.193	0
BSS	0.461	0.451	0.388	0.72

Source: Researcher, (2023).

4.9.6 Mediation Effect of MSA on the Relationship between ISO and BSS

Direct and indirect effect of ISO on BSS was 0.25 and 0.14 respectively and total effect was 0.39 (Table 4.23). At the commencement of this study, it was hypothesized that there is mediation effect of market stakeholder's action on the relationship between institutional isomorphism and business sustainability. Findings indicated that, direct effect of ISO on BSS as well as that of ISO on MSA was positive and statistically significant at 5% level $p < .001$ as indicated in Table 4.21 and Table 4.22. After controlling for ISO, the effect of MSA on BSS was found to be significant at $p < .001$. Subsequently, controlling for MSA made the direct effect of ISO on BSS to be reduced but continued to be significant at 5% level. Therefore, the study comprehended that MSA had a partial mediation effect on the relationship between ISO and BSS as it fulfils the partial mediation condition.

4.9.7 Mediation Effect of MSA on the Relationship between LOG and BSS

Direct and indirect effect of LOG on BSS was 0.22 and 0.24 respectively and total effect was 0.46 as indicated in Table 4.23. The study found positive and significant effect of LOG on BSS as well as LOG on MSA at $p < .001$each (Table 4.21 and Table 4.22). Likewise, after controlling for LOG, the effect of MSA on BSS remained significant at $p < .001$. Then, controlling for MSA made the effect of LOG on BSS to be reduced and became insignificant at $p = .078$.

At the start, this study hypothesized that there is mediation effect of market stakeholder's action on the relationship between institutional logic and business sustainability. Therefore, results of this study testified that MSA had a full mediation effect on the relationship between LOG and BSS as it fulfils the full mediation condition, that is to say, after controlling for MSA the effect of LOG on BSS was reduced and became insignificant.

4.10 Summary of Hypothesis Tests

This study had seven hypotheses which tested and produced the following results:

H1: Institutional legitimacy has positive and significant effect on business sustainability.

P-value showing the effect of LEG on BSS was <.001 as presented in Table 4.21 which signifies statistical effect of LEG on BSS. Thus, we had strong statistical evidence of rejecting the null hypothesis and hence concluding that LEG had a positive and statistically significant effect on BSS at 5% level.

This result informs that, the attainment of business sustainability depends on legitimacy that various institutions dealing with the particular business are having on the business players. When governing institutions succeed to set reasonable business standards which encourage players to continue with the business, it enhances its legitimacy to business players. Similarly, development of good regulations communicating operating procedures that could not cause difficulties to business players can increase legitimacy of governing institutions. Gained legitimacy as found in this study can improve survival of the business.

H2: Institutional isomorphism has positive and significant effect on business sustainability.

P-value showing the effect of ISO on BSS was <.001 as revealed in Table 4.21 which implies the statistical effect of ISO on BSS. Thus, we have statistical evidence for rejecting the null hypothesis and hence concluding that ISO had a positive and statistically significant effect on BSS at 5% level.

Findings confirmed that the business cannot achieve sustainability without isomorphic pressure from different governing institutions dealing with the specific business. This institutional pressure can force and persuade business players to comply with legislated business standards, promote environmental preservation practices, comply with professional advices and abide to the market analyst recommendations. As per the study results, compliance with all these pressures by business players can enhance sustainability.

H 3: Institutional logic has positive and significant effect on business sustainability.

The study revealed that p-value showing the effect of LOG on BSS was <.001 as shown in Table 4.21. Thus, we had enough statistical evidence for rejecting the null hypothesis and hence concluding that LOG had positive and statistically significant effect on BSS at 5% level.

This result enlightens that the attainment of business sustainability depends on logic issues brought by various institutions dealing with a certain business towards the players. Once governing institutions bring sense making issues which increase

players earnings, enhance players to survive in a highly competitive environment, and assure them to meet their goals and become self-sufficient, business acceptability may be achieved. These logic issues will encourage players to continue with business overtime which consequently enhances sustainability.

H4: Market stakeholder's action has positive and significant effect on business sustainability.

P-value showing the effect of MSA on BSS was <.001 as indicated in Table 4.22 which suggests statistical effect of MSA on BSS. Thus, we had statistical evidence for rejecting the null hypothesis and hence concluding that MSA had a positive and statistically significant effect on BSS at 5% level.

The obtained results prove that for an entity to attain business sustainability, it must consider actions of market stakeholders in its undertakings. Positive actions of sellers, buyers, final consumers and the surrounding society at large can encourage entities to proceed with the business endlessly.

H 5: There is mediation effect of market stakeholder's action on the relationship between institutional legitimacy and business sustainability.

Sobel test revealed that, direct effect of LEG on BSS as well as LEG on MSA were positive and statistically significant at p<.001 each as shown in Table 4.21 and Table 4.22 respectively. After controlling for LEG, the effect of MSA on BSS was also significant at p < .001. Again, controlling for MSA made the effect of LEG on BSS to be reduced but still remained significant at 5% level (p = .006). Therefore, this

result signifies that, partial mediation was supported.

This result notifies business entities that accomplishment of sustainability can be reached directly by accepting and complying with governing institutions dealing with their business. Alternatively, taking into account the actions of market stakeholders in their activities alongside the accepted standards and regulations developed by governing institutions can also bring sustainability. Therefore, nature of the business and existing business governing institutions can guide entities to make choice towards attaining sustainability.

H 6: There is mediation effect of market stakeholder's action on the relationship between institutional isomorphism and business sustainability.

Sobel test revealed that direct effect of ISO on BSS as well as ISO on MSA were positive and statistically significant at 5% level $p < .001$ as presented in Table 4.21 and Table 4.22. After controlling for ISO, the effect of MSA on BSS was found to be significant at $p < .001$. Afterward, controlling for MSA made the direct effect of ISO on BSS to be reduced but continued to be significant at 5% level ($p = .007$). Therefore, the study supported partial mediation effect of MSA on the relationship between ISO and BSS.

This outcome advises the firms that the accomplishment of sustainability can be grasped directly by complying with institutional pressure which forces and persuades them to abide by legislated business standards, promote environmental preservation practices and observe professional advices. On the other hand, considering the actions of market stakeholders in their activities and complying with various institutional isomorphic pressure can be another means of attaining sustainability.

Thus, business environment together with prevailing isomorphic pressure can lead firms to make choices on the way to achieve sustainability.

H 7: There is mediation effect of market stakeholder's action on the relationship between institutional logic and business sustainability.

Sobel test discovered positive and significant effect of LOG on BSS as well as LOG on MSA at $p < .001$each (Table 4.21 and Table 4.22). Likewise, after controlling for LOG, the effect of MSA on BSS remained significant at $p < .001$. Subsequently, controlling for MSA made the effect of LOG on BSS to be reduced and became insignificant at $p = 0.078$. Therefore, the study supported full mediation effect of MSA on the relationship between ISO and BSS.

This result advises businesses that the only method of attaining sustainability is observing logic issues brought by various institutions dealing with their business which increase their earnings, enhance their survival in a highly competitive environment, assure them of meeting their goals and become self-sufficient by taking into account the effect of market stakeholder's action.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Chapter Overview

This chapter discusses the findings of the study. It provides a synthesis of the information generated in the previous chapter on findings. Also, it compares and contrasts the current findings with what have been observed in the previous related studies. This helped to develop an in-depth understanding of direct and indirect effect of institutional arrangements on business sustainability. The chapter is presented in sub-sections in the following sequence: effect of institutional legitimacy on business sustainability, effect of institutional isomorphism on business sustainability, effect of institutional logic on business sustainability and effect of market stakeholder's action on business sustainability.

On top of that, the chapter also presents the mediation effect of market stakeholder's action on the relationship between institutional legitimacy and business sustainability, institutional isomorphism and business sustainability together with institutional logic and business sustainability. At the end of discussion, the revised model given these findings is provided.

5.2 Effect of Institutional Legitimacy on Business Sustainability

From the analysis section, institutional legitimacy (LEG) was one of the independent variables used to determine its effect on business sustainability. It was hypothesized in this study that institutional legitimacy has positive and significant effect on business sustainability. Findings confirmed that, LEG has a positive and statistically significant direct effect of 0.438 ($p<.001$) on BSS as shown in Table 4.21. This

means that one way of attaining sustainability in any business is to create legitimacy of governing institutions to players of the particular business. In order for Tanzania cashew nut farming business to be sustainable, it requires CBT and LGAs where cashew nut is grown to come up with rules and guidelines which can enhance their acceptability in front of farmers.

This finding complemented and contradicted several previous related studies as deliberated herein. Schaltegger and Hörisch (2017) reported positive and significant relationship between legitimacy and sustainability of large companies in ten companies across the world. The study considered companies from developed countries only. In spite of the current study being carried out in agricultural sector in a developing country, it still confirmed the theoretical postulation made at the beginning of the study. Although the preceding study used company as a unit of analysis, this study used individual farmers but the theoretical hypotheses made earlier were still confirmed.

Liang *et al.* (2017) identified direct relationship between institutional legitimacy and sustainability of private firms in China. The author built from Scott (1987) that actors who choose to tolerate rules from superior institutions can stay longer in the game. Legitimate institutions are responsible for supporting the business of actors under their jurisdiction in order to be sustainable (Scott & Davis, 2015). The actor who is not recognized by legitimized institutions cannot not survive (Zucker, 1987). Sustainable legitimation takes place as individuals and organizational members create an internal environment that enables them to abide with external institutions (Yang, 2004). Basically, the individual understanding and acceptance of external

institutions could create legitimacy in its social setting as suggested by contemporary institutional theory (Drori & Honig, 2013). Results of the current study support the preceding study results and hence cement the theoretical relationship suspected earlier.

Gauthier and Kappen (2020) found negative relationship between legitimacy and sustainability of leading bottled water producers in the world. This result is different from the current study and does not support theoretical hypothesis made at the beginning. The difference might be due to different sector where studies were conducted.

On top of that, Anagnostou *et al.* (2015) reported a negative effect of legitimacy on organic fair-trade coffee sustainability at Netherlands. This result is contrary to the current study which reported a positive and significant effect of institutional legitimacy on business sustainability. These inconsistencies were the motive behind conducting this study so as shed more light on the relationship between institutional legitimacy and business sustainability concept.

The above discussion is based on the hypothesis developed from institutional theory that there is a positive and significant effect of legitimacy on business sustainability is now confirmed in cashew nut farming business in Tanzania. Therefore, it is high time for all institutions dealing with cashew nut farming business in Tanzania to enhance their legitimacy in front of cashew nut farmers. Attained legitimacy will persuade farmers to comply with their guidance and achieve sustainability. The established theoretical domain will pave its way to the existing and upcoming

policies regarding cashew nut farming business in Tanzania to be complied with for the survival of the business. This means that once these institutions are acceptable to the society it can minimize reluctance to follow their directives.

5.3 Effect of Institutional Isomorphism on Business Sustainability

This study hypothesized that institutional isomorphism has positive and significant effect on business sustainability. Findings supported the hypothesis whereby ISO was reported to have positive and statistically significant effect of 0.386 ($p<.001$) on BSS as indicated in Table 4.21. This result signifies that for an entity to be sustainable, it should comply with isomorphic pressure exerted to it by governing institutions. Coercive pressure from CBT and LGAs where cashew nut is grown in Tanzania can be applied to cashew nut farmers to make them comply with various developed rules and guidelines so as to accomplish survival of the business.

Cashew nut farmers should be encouraged by these institutions to imitate practices from successful farmers in the industry as another means of attaining sustainability. Moreover, cashew nut farmers should utilize findings of research from Tanzania Agriculture Research Institute (TARI) located at Naliendele in Mtwara region. As long as the institute is specialized in cashew nut farming research, providing their research findings in the simple language which is understood by common farmers will inspire them to work on those findings. The combination of all these isomorphic pressures will enhance sustainability of the business in Tanzania.

This finding complemented and contradicted several previous related studies as follows: Wijethilake, *et al.*, (2017) who carried out a qualitative case study and

reported positive and significant relationship between isomorphic pressure and sustainability. The recent study was quantitative which also reported positive and statistically significant effect of isomorphic pressure on business sustainability. Although all studies produced similar results in terms of theoretical foundation, the preceding study findings cannot be generalized as it suffers from the weakness of design used (qualitative) whereas the findings of current study can be generalized because it capitalizes on the strength of quantitative design which is believed to be unbiased.

Abdalla and Siti-Nabiha (2015) reported negative relationship between isomorphic pressure and sustainability. Data for the study were collected through interviews and informal conversations from purposively selected respondents, observations and documentary materials. Contrary to the existing study in which data was collected through structured questionnaire, it is evident that isomorphic pressure is positively and significantly related with business sustainability. Results of the current study are more reliable compared to the previous study because it used non-biased sampling technique (random sampling) which gives all respondents equal chance of giving opinion.

Famiyeh and Kwarteng (2018) testified positive and significant relationship between isomorphic pressure and business sustainability. In spite of preceding and current studies using structured questionnaire in data collection and applying structural equation modeling for data analysis, the preceding study was carried out at mining and manufacturing industry in Ghana whereby the unit of analysis were organizations. The recent study was conducted in agricultural sector in Tanzania

using individual farmer as unit of analysis. Having positive relationship between the variables in both contexts is a proof that items used to measure them is crosscutting and hence prove theoretical premise made by this study from the beginning.

Bananuka, *et al.,* (2021) testified negative and insignificant relationship between isomorphic pressure and business sustainability. This result is dissimilar to the contemporary study which attested positive and significant effect of institutional isomorphism on cashew nut farming business sustainability. The preceding study used firms as unit of analysis while the current used individual farmers. The difference in findings might be due to different analysis method used, unit of analysis and the sector in which the study was carried out.

Ahmed, *et al.,* (2020) informed positive and significant relationship between isomorphic pressure and business sustainability in manufacturing firms from different developing countries. Same results were obtained in the current study. Despite both studies being quantitative, the preceding study used purposive sampling technique while the current utilized simple random sampling. Difference in adopted sampling technique can give the current study's findings more confidence of generalizability as is believed to be free from bias.

Yang (2018) described negative relationship between isomorphism and business sustainability. Conflicting to the preceding study, the current study reported positive and significant relationship among variables. The preceding study used purposive sampling technique and unit of analysis were shipping companies and agent while the current utilized simple random sampling technique and unit of analysis were

individual farmers. The difference in findings might be due to diverse sampling techniques and unit of analysis utilized. As the current study used free biased sampling technique, its results can strongly support the theoretical hypothesis made earlier.

Ahmed, *et al.,* (2019) and Saeed *et al.* (2018) reported positive and significant relationship between isomorphic pressure and business sustainability. This result was arrived at after the collected data from purposively selected respondents were analyzed using partial least square structural equation modeling (PLS-SEM) whereby the unit of analysis was firms. The result is similar with the current study finding which applied simple random sampling technique to select respondents. Gathered information were analyzed using structural equation modeling AMOS (SEM -AMOS) whereby individual farmer was used as unit of analysis. Obtaining similar results in the information collected from respondents selected using different sampling technique and analyzed using different unit of analysis is a way of proving the theoretical idea made by this study.

To sum up discussion of this objective we can say that having a positive and significant effect of institutional isomorphism on business sustainability as it was hypothesized earlier provides a proof of the idea. As it was stipulated in the theoretical literature review in chapter two, coercive pressure exerted by those in power has superior effect on shaping sustainability practices of an entity (Famiyeh & Kwarteng, 2018). Government organs are examples of powerful groups that affect the actions of entities (Rivera, 2004). Application of this theoretical evidence in the modern business can enhance sustainability because no business could operate in a

vacuum and flourish. That means we need strong and focused institutions which can develop policies, rules and regulations to guide players of business for survival.

Previous research by Famiyeh and Kwarteng (2018); Fitriasari and Kawahara (2018), like this study, confirmed that entities mimic practices of successful leading fellows in order to cope and survive. That means, mimetic pressures encourage entities to imitate the successful business practices of others in the industry (Zhu, *et al.,* 2013). Therefore, attainment of sustainability needs inspiration from referred individual or group in the society. It is important to identify and expose best performers of business in an industry whereby others will get a reference point and imitate their practices. The inspiration from successful to upcoming players will enable the entire business to be sustainable. Cashew nut Board of Tanzania therefore needs to establish a program which can recognize best cashew nut farmers and make them known to others as a way of encouraging other farmers copy best practices from them.

Normative pressure emanates from collective efforts by individuals of similar occupation to describe the ways and processes of their work and also establish a legitimate cognitive base for their occupational autonomy (Charan & Murty, 2018). Normative pressures call entities to implement programs which enhance sustainability of their industry (Bananuka, *et al.,* 2021). Therefore, guidance from work-related experts and researchers being one form of isomorphic pressure in this sense, has a direct role to play in achieving business sustainability. Tanzania research institute allocated at Naliendele in Mtwara region has the role of communicating findings of their research to cashew nut farmers in order to assist

them improve their farming practices and hence attain sustainability. Therefore, as it was clarified in institutional theory literature reviewed earlier in this study, cashew nut farming business in Tanzania needs all isomorphic pressure to attain sustainability.

5.4 Effect of Institutional Logic on Business Sustainability

Institutional logic (LOG) was one of the independent variables used to determine its effect on business sustainability (BSS). This study hypothesized that institutional logic has positive and significant effect on business sustainability. Results proved that LOG had a positive and statistically significant effect of 0.465 ($p<.001$) on BSS as shown in Table 4.21. The findings imply that sense making practices initiated by governing institutions which can enable business members to increase their earnings and competitive advantage, being self-sufficient and meet their goals can encourage them to work hard to make sure that their business stays sustainable. Institutional logics as derived from institutional theory explain how entities can produce things that provide meaning to the social reality (Thornton *et al.*, 2015). Therefore, results of this study supported the theoretical foundation.

This finding complemented and contracted several previous related studies as shown here under. De Clercq and Voronov (2011) reported contradicting influence of logic on sustainability of business firms whereby a positive relationship between these variables was found to exist in established firms but limited evidence for newcomer firms was reported. Results of the current study cleared the previous contradiction by reporting positive and significant effect of institutional logic on business sustainability. Regardless of the difference in research design used by these studies,

these results can be used to establish theoretical relationship in another setting as a way of confirming institutional theory.

Laasch (2018) testified the positive influence of institutional and individual value logic on commercial sustainability in their developed model which was guided by institutional theory constructs. Although this study did not adopt the model, it used institutional theory construct (logic) which was also used during the development of the model in order to test the effect of institutional logic on business sustainability. Results of the study confirmed positive and significant relationship between these variables. Given the fact that the same constructs were used in different scenarios and produced somewhat related outcomes, it can be referred to as one way of confirming a theory.

Groenewegen, *et al.,* (2019) explanations were consistent with the current study despite the fact that the previous study employed an inductive approach that was aimed at theory development whereas the current study reverted to a deductive approach for purposes of confirming the theory. The previous study was done in Dutch banking industry while the current was carried out in agricultural sector in Tanzania. Using different approaches and producing similar explanations gives more academic confidence on the reliability of items used to measure the study constructs. Therefore, institutional theory-based studies will utilize the foundation made by the current study to extend understanding of the theory and possibly come up with new insight which was not disclosed by this study.

Alexander, *et al.,* (2019) attested relationship between institutional logic and sustainability in a case study. One of the weaknesses of case studies is the limitation

of results in the context under consideration. Although these results complemented the current study which was survey design, results of this study can be generalized across contexts as it takes advantage of the strength of quantitative method. Conceptualization made at the beginning of this study was geared towards testing the effect of institutional logic on business sustainability; therefore obtained results tend to prove the theoretical articulation made and hence supports the theoretical underpinnings of the study.

Glover *et al.* (2014) informed negative relationship between institutional logics and business sustainability practices of UK's diary supply chain. Data for the study was collected through semi-structured telephone interviews and analyzed using constant comparison techniques. These results contradicted the current study' outcomes which reported positive and significant relationship between variables. The current study's data was collected using structured questionnaire and analyzed using SEM. Difference of qualitative study results which is mainly designed to discover what happens in the real life, with quantitative study which is designed to establish causal relationships, can be used as a good stepping stone in the coming research which intends to use institutional theory so as to extend or otherwise criticize what is known so far.

5.5 Effect of Market Stakeholder's Action on Business Sustainability

Direct effect of MSA on BSS was positive and statistically significant at 5% level ($p<.001$) as shown in Table 4.22. This result suggests that in order to achieve sustainability of the business, it is important to persuade market stakeholders to act positively towards the business under consideration. Failure to convince market

stakeholders to buy, sell and consume products offered by an entity could endanger its survival. In the previous decades, entities were not taking trouble to incorporate interest of market stakeholders in their undertakings. This practice made many entities survive for a short period of time and perished (Walker & Laplume, 2014). As a result, most of the businesses in the modern world have started to consider the effect of stakeholders in their activities though it is still a new concept that needs more research. Results of this study support hypothesis made earlier that there is positive and significant effect of MSA on BSS. This finding complemented a number of previous related studies as detailed hereunder.

Svensson *et al.* (2018) observed a positive and significant relationship between stakeholder theory constructs (market stakeholders) and business sustainability in their developed model. Although this study did not adopt the model, it used market stakeholder construct to test its effect on business sustainability. Provided the same constructs were used in different scenarios and produced similar outcomes, it can be generalized that market stakeholder's action has a positive effect on business sustainability.

Lee, *et al.,* (2021), validated a framework for firms' business sustainability endeavors with internal and external stakeholders. This study applied one of the framework ideas (market stakeholder) which is external stakeholders in cashew nut farming in Tanzania to test its effect on business sustainability. Findings proved positive and significant effect of market stakeholder's action on business sustainability. Different from this study, data for framework development were analyzed using multiple linear regressions. Both studies ended up reporting

significant relationship between market stakeholders' action and business sustainability. This similarity proves applicability of stakeholder theory to explain business sustainability.

Fobbe and Hilletofth (2021), developed a model explaining stakeholder interaction in sustainable business through systematic literature review. All reviewed articles supported existence of significant relationship between various stakeholders and business sustainability. These results were also supported by findings of the current study which went further to test specifically the effect of market stakeholder's action on business sustainability in cashew nut farming in Tanzania and reported positive and significant effect. Therefore, it is high time for business entities in the modern world to consider the role of market stakeholders in their dealings. Also, these findings encourage upcoming business sustainability scholars to apply stakeholder theory as it has shown academic compatibility.

Meixell and Luoma (2015), among other things, suspected that stakeholder pressure may result into the adoption and implementation of sustainability practices in supply chain. After a thorough testing of hypothesis developed in this study, it was established that a positive and significant relationship between stakeholders' action and sustainability existed. Building from the obtained finding, this study analyzed the effect of market stakeholder action on business sustainability whereby positive and significant effect is reported. Similar results from both studies tend to prove application of stakeholder theory in explaining business sustainability in different contexts.

5.6 Mediation Effect of Market Stakeholder's Action on the Relationship between Institutional Legitimacy and Business Sustainability

Direct effect of LEG on BSS as well as that of LEG on MSA were positive and statistically significant at p<.001 each as shown in Table 4.21 and Table 4.22. After controlling for LEG, the effect of MSA on BSS was also significant at p<.001. Again, controlling for MSA made the effect of LEG on BSS to be reduced but still remained significant at 5% level (p = .006). These results indicate that legitimized relationship between governing institutions and entities under their control can bring sustainability of the business. Legitimacy of governing institution to market stakeholders was also proved to bring sustainability. Therefore, results of this study emphasize the importance of legitimacy of business governing institutions to both business players and market stakeholders so as to attain sustainability.

Initially, this study hypothesized that there is mediation effect of market stakeholder's action on the relationship between institutional legitimacy and business sustainability. Findings realized that MSA had a partial mediation effect on the relationship between LEG and BSS as it fulfils the partial mediation condition. That means, legitimacy of business governing institutions to both cashew nut farmers and market stakeholders needs to be in place in order to attain cashew nut farming sustainability in Tanzania.

This finding complemented the prior idea developed basing on the theoretical and empirical literature review from Fayezi, *et al.,* (2018) who highlighted the importance of incorporating the effect of market stakeholder's action on studying relationship between legitimacy and business sustainability. Although the

researchers did not test the relationship, they opened up an avenue on which this study was built on. Likewise, Varsei, *et al.,* (2014) recognized the value of market stakeholder's action effect on the relationship between legitimacy and supply chain sustainability. Even though the effect was not well discussed in that study, this research found it prudent to take steps to study this effect basing on the claim made. As the results depict, the study opened the room for more research in this area. Moreover, Baah, *et al.,* (2021) emphasized the position of key stakeholder's effect in sharpening the relationship between legitimacy and sustainability. The researchers went further documenting that there is no way market stakeholder's action can be left behind if the entity is aspiring to attain sustainability.

Building on this claim, the current study tested the effect of institutional legitimacy on business sustainability through market stakeholder's action and found that there is a partial mediation effect. From this finding, it is theoretically confirmed that apart from having the direct effect of institutional theory construct (legitimacy) on business sustainability, one of the stakeholder theory constructs (market stakeholder action) can intervene in these variables and strengthen the relationship. This is a new theoretical contribution made by this study.

5.7 Mediation Effect of Market Stakeholder's Action on the Relationship between Institutional Isomorphism and Business Sustainability

At the commencement of this study, it was hypothesized that there is mediation effect of market stakeholder's action on the relationship between institutional isomorphism and business sustainability. Findings indicated that direct effect of ISO on BSS as well as that of ISO on MSA was positive and statistically significant at5%

level ($p < .001$) as indicated in Table 4.21 and Table 4.22. After controlling for ISO, the effect of MSA on BSS was found to be significant at $p < .001$. Controlling for MSA made the direct effect of ISO on BSS to be reduced but continued to be significant at 5% level ($p = 0.007$).

Therefore, the study comprehended that MSA had a partial mediation effect on the relationship between ISO and BSS as it fulfils the partial mediation condition. This result informs governing institutions to consider market stakeholder's action while casting isomorphic pressure especially coercive pressure to be complied with by all players of the business under their jurisdiction. The essence of doing this is to avoid negative actions of market stakeholders which might impair sustainability. Even though direct exerted coercive pressure can be positively acknowledged by entities dealing with the business, it could not bring sustainability if market stakeholders can act negatively. Therefore, this study suggests the need of considering actions of market stakeholders while the institutions are developing rules of the business under their control. Likewise, the effect of leading business players in the industry and occupational institutions should also be considered.

This finding complemented the prior predicted theoretical ideas from Acquah, *et al*., (2021) who tried to shed light on how entity's sustainability goal can be achieved through considering major market stakeholder's action in complying with institutional pressure to bring about legitimacy. Even though the researchers did not provide a full detail on how the effect of these stakeholder's is taken on board, this study extended prior researchers idea by testing the predicted effect. Also, Bananuka, *et al.* (2021) recognized the need of market stakeholder's action effect in

scrutinizing relationship between isomorphism and business sustainability. The researcher showed concerns on market stakeholders action effect in debating the above relationship, despite the fact that they did not test them. Their concerns opened the door for this study to test the underlined effect.

Wardhani and Rahadian (2021) emphasized the importance of blending institutional and stakeholder theories to see how best they can aid in explaining their effects towards achieving sustainability. The same argument was made by Erin and Bamigboye (2021); Sofyani *et al.* (2021) without giving the clear explanation. These underscored ideas rose the curiosity for this study to be undertaken. Taking into account the claims made by previous scholars, this study tested the effect of institutional isomorphism on business sustainability through market stakeholder's action and found that there is a partial mediation effect. This result is the best proof that isomorphism can affect business sustainability both directly and indirectly. Indirect effect reported here, is the new insight that was never reported before to the researcher's best knowledge and hence brings the new theoretical contribution.

5.8 Mediation Effect of Market Stakeholder's Action on the Relationship between Institutional Logic and Business Sustainability

The study found positive and significant effect of LOG on BSS as well as LOG on MSA at $p < .001$each (Table 4.21 and Table 4.22). Likewise, after controlling for LOG, the effect of MSA on BSS remained significant at $p < .001$. Subsequently, controlling for MSA made the effect of LOG on BSS to be reduced and became insignificant at $p = 0.078$. Therefore, the results of this study testified that MSA had a full mediation effect on the relationship between LOG and BSS as it fulfils the full

mediation condition. That is to say, the only way of attaining business sustainability is for business governing institutions to bring sense making issues that can stimulate market stakeholder's positive action.

This finding accentuates institutions to consider the effect of market stakeholder's action in developing various guidelines and rules governing businesses under their jurisdiction. These sense making rules and guidelines can enhance the attainment of sustainability. That means, involving market stakeholders can assist in achieving sustainability rather than dealing directly with business players. Therefore, based on this finding, governing institutions should consider the effect of market stakeholders in whatever decision they make on the business under their dominion as it is found to be the only way of attaining sustainability. Thus, CBT and BET should consider the interest of market stakeholders in all decision making in order to attain cashew nut farming sustainability in Tanzania. Findings of this study complemented the prior idea developed basing on theoretical and empirical literature review (Kumar *et al.,* 2017).

In this regard, Charmahali, *et al.,* (2021) appreciated the contribution of market stakeholder's action in scrutinizing the relationship between institutional logic and business sustainability. Although the study did not test the suspected relationships, it went further to show the need for analyzing the same relationship with mediation or moderation of stakeholder's action particularly market stakeholders. Similarly, Kumar, *et al.,* (2017) recognized the impact of various stakeholders in enhancing relationships between institutional logic and business sustainability. Although the scholars were not focused on analyzing the stakeholder's impact, they highlighted

the market stakeholder's action as one of the variables through which the above relationship can be viewed.

Pullman and Wikoff (2017), shed some light on the effect of stakeholder's action by studying the connection between logic and sustainability. Despite the fact that the researchers did not spend good time in their discussion to give details on how this can be done, the shown light was sufficient enough to open boulevard for this study. Full mediation effect found after testing mediation of MSA on the relationship between LOG and BSS using institutional theory construct (logic) and stakeholder theory construct (market stakeholder action). This result proved mediation effect of market stakeholder's action on the said relationship and hence brought new insight of mediation effect of stakeholder theory on institutional theory.

5.9 Revised Conceptual Framework

This study hypothesized that BSS is explained by three independent variables, namely, LEG, ISO, and LOG and being mediated by MSA. To prove this, both direct and indirect hypotheses were put forward during analysis. The conceptual framework was revised based on the fact that, some of the prior set hypothesis as shown in Figure 2.1 was not fully supported. It was hypothesized that LEG, ISO, LOG and MSA have significant effects on BSS. The same was revealed during analysis as shown in the revised framework in Figure 5.1. This means that business governing institutions being acceptable by entities under their jurisdiction triggers attainment of sustainability. The result further informs that isomorphic pressures from governing institutions, successful entities in the industry and professionals are having direct effect in achieving sustainability. Also, sense making issues like

increasing earnings of business entities, being self-sufficient and meeting goals among other things, has the direct effect on sustainability.

The study also hypothesized that MSA has mediation effect on the relationship between LEG, ISO and LOG towards BSS. At the end of the study, it was revealed that, MSA has partial mediation effect on the relationship between LEG and BSS as well as ISO and BSS. This result implies that for the business to attain sustainability, governing institutions must be acceptable by players of the business as well as market stakeholders. Being legitimate to the direct business players is not the only way of attaining sustainability, but according to the results of this study, indirect relationship is also having effect in achieving sustainability. That being the case, it has now come to the attention of business governing institutions to consider the intervening effect of market stakeholders in establishing isomorphic pressure aimed at reassuring sustainability of business different from what they were doing before.

Further analysis exposed full mediation effect of MSA on the relationship between LOG and BSS as it is shown in the revised conceptual framework in Figure 5.1. This result suggests that the only way of attaining business sustainability is for the business governing institutions to come up with sense making issues for market stakeholders. Ignoring the effect of market stakeholders and dealing directly with business players alone could not bring sustainability.

The revised conceptual framework informs institutions which are given authority to govern business in a particular area to be careful in formulating guidelines to make sure that the effect of market stakeholders is given priority. The major reason here is

that ignoring them can cause reluctance in their dealings which might, at the end of the day, impair sustainability. Therefore, apart from formulated guidelines and rules being acceptable to the direct players of the business, they should also be acceptable by market stakeholders and make sense.

Theoretically, the framework provides a stepping stone for upcoming researchers to blend institutional and stakeholder theories in studying business sustainability. This will expand understanding of this study, which to the researcher's best knowledge is shown for the first time. Upcoming researchers also should think of testing other stakeholder theory construct alongside institutional theory constructs as a way of extending understanding of institutional theory. Moreover, the framework reminds policy makers of the importance of accommodating market stakeholders affairs in casting any business policy. According to the results of this study and revised framework, no matter how good formulated policy is, if the effect of market stakeholder's action is not be taken into account, there is immense chance for the policy failure. As long as any formulated business policy aspires to attain sustainability, findings of this study as depicted in the revised framework are paramount.

To the researchers, revised conceptual framework proves the existence of mediation effect of stakeholder theory construct (MSA) on the relationship between institutional theory constructs and business sustainability. Therefore, avenue is open for more research in this area to confirm the findings and extend the understanding of institutional theory. To the business governing institutions and practicing entities at large, it is high time to utilize the findings of this study in rules and guidelines

development as well as strategizing for the business. The new insight shown in revised conceptual framework will enable them to attain sustainability of business.

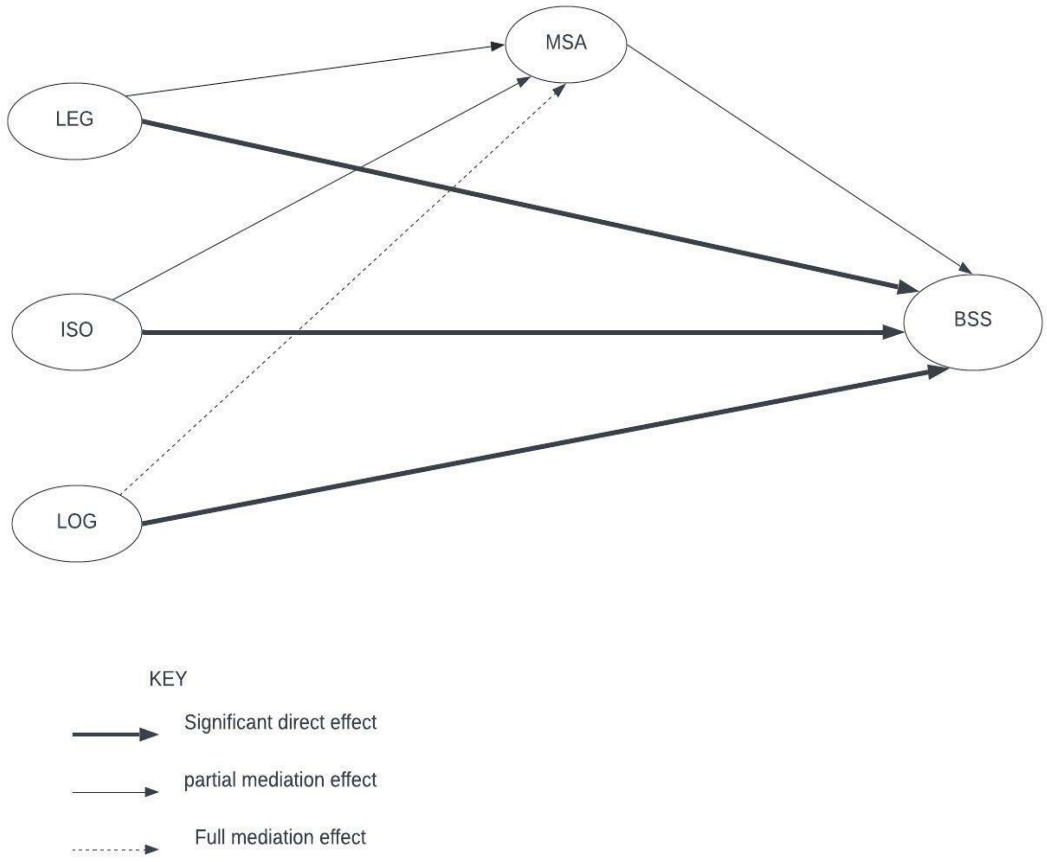

Figure 5.1: Revised Frame for Determinant of BSS

Source: Author, 2023

CHAPTER SIX

CONCLUSION AND RECOOMENDATIONS

6.1 Chapter Overview

This chapter presents key conclusions, recommendations and suggestions for future research. It provides conclusions of findings and discussions on each of the objectives of the study as per chapters four and five. In addition, the chapter delivers contextual, practical and policy implications of the study together with fulfillment of theoretical gap which was the main concern of this study. The chapter further offers recommendations to institutions dealing with cashew nut farming and researchers in Tanzania and explains various limitations encountered during the study period and proposes areas of future research.

6.2 Conclusion

The study analyzed the effect of institutional arrangement on cashew nut farming business sustainability in Tanzania, taking into account the mediation role of market stakeholder's actions. Analysis was based on cashew nut farmer's perspective on their business whereby the effect of institutional theory constructs, legitimacy, isomorphism and logic on business sustainability through market stakeholder's actions were examined. Results of the study revealed that LEG, ISO, LOG together with MSA had a positive and statistically significant direct effect on BSS as it was hypothesized in H1, H2, H3 and H4. This implies that, attainment of sustainability in cashew nut farming in Tanzania depends on acceptability of governing institutions to the farmers. Being acceptable to the farmers could inspire them to comply with any isomorphic pressure exerted by those institutions. As long as applied pressure could

make sense to the farmer's undertakings, it is obvious that there could not be any reluctance in its implementation.

Mediation analysis exposed partial mediation effect of MSA on the relationship between LEG and BSS as well as ISO and BSS, while full mediation effect on the relationship between LOG and BSS was observed. The finding suggests that accomplishment of cashew nut farming sustainability can be realized directly by assuring legitimacy of the business governing institutions to farmers and through market stakeholders. That means, for cashew nut farming business in Tanzania to be sustainable, the produce governing institutions must be legitimate to both farmers and market stakeholders.

Furthermore, isomorphic pressure that leads to the achievement of cashew nut farming in Tanzania should be directly applied by governing institutions to farmers as well as through market stakeholders. This calls for cashew nut governing institutions to make sure that applied isomorphic pressure particularly coercive pressure to both farmers and market stakeholders is friendly in order to avoid resistance. Any resistance during its application might harm sustainability of the business. Moreover, sense making issues that focus to achieve cashew nut farming sustainability from governing institutions can only work perfectly when it considers the effect of market stakeholder's action. The results of this study emphasize that, the only way of attaining sustainability is to make sure that, whatever the governing institutions are doing on cashew nut farming take care the interests of market stakeholders.

Therefore, in order for cashew nut farming business in Tanzania to attain sustainability, it requires governing institutions particularly cashew nut board of Tanzania, apart from enhancing its legitimacy to cashew nut farmers alone, to make sure that what it is doing is acceptable by market stakeholders. Any developed rules and guidelines must be focused on both cashew nut farmers and market stakeholders. This is because acceptance of the rules and guidelines by one party alone and rejection by the other may still harm sustainability.

6.3 Theoretical Implication

Theoretical implication derived from the findings and discussions of this study indicated the contribution to institutional theory as the multidimensionality of its constructs on business sustainability is ascertained with three constructs whereby LEG, ISO and LOG indicated positive and significant direct effect on BSS. MSA shown partial mediation effect on the relationship between LEG and BSS as well as ISO and BSS. Also, MSA revealed full mediation effect on the relationship between LOG and BSS. Therefore, from the theoretical point of view, the study concluded that market stakeholder's action mediates the relationship between institutional constructs (legitimacy, isomorphism and logic) on business sustainability.

Mediation effect of stakeholder theory construct (market stakeholders) on institutional theory constructs (legitimacy, isomorphism and logic) is a new contribution brought by this study. Research Boulevard is now open to institutional theory scholars to think of the best way of blending these two theories so as to extend understanding of institutional theory. This suggestion will contribute more to the theoretical domain and application of its knowledge will lead to the revolution of

various business undertakings. The theoretically stated problem in this study is a scorching issue in the existing business environment; therefore, putting the obtained theoretical understanding in practice will add value.

6.4 Fulfillment of the Contextual Gap

As per the researcher's review of literature and to the best of his knowledge, there is no study which had been conducted in Tanzania to analyze the effect of institutional arrangements on business sustainability through market stakeholder's action. Most of the researches carried out in other countries tried to study the relationship between institutional constructs and business sustainability on different sectors as shown by Alexander, *et al.,* (2019), Charan and Murty (2018), Groenewegen, *et al.,* (2019), Kauppi and Hannibal (2017), Snelson-Powell *et al.* (2016) and Schaltegger and Hörisch (2017). However, very few researchers such as Hatanaka and Konefal (2017) in UK and Juárez-Luis, *et al.,* (2018) in Mexico focused on the relationship between institutional constructs and agriculture sustainability. Therefore, this study helped to unlock the contextual gap by creating a starting point for future researchers in Tanzania to study the effect of institutional theory constructs on business sustainability.

6.5 Practical Implication

The findings of this study will help cashew nut farming related institutions in Tanzania to acquire the best way of attaining sustainability. As revealed from the findings, achievement of business sustainability can be met directly by involving governing institutions and cashew nut farmers as well as considering intervening effect of market stakeholder's actions. Therefore, the Ministry of Agriculture in

Tanzania, Cashew nut Board of Tanzania, Local Government Authorities where cashew nut crop is grown, Tanzania Research Institute and the Board of External Trade should make sure that cashew nut farmers are well informed of whatever they are doing regarding the development of cashew nut farming activity in the country. Being informed of the position of these institutions in bringing cashew nut farming to the next level will enhance legitimacy of these institutions to the farmers.

The acquired legitimacy will make farmers accept sense making rules and regulations developed by them which, in turn, will lead to realization of sustainability of cashew nut farming in Tanzania. Failure of these institutions to earn legitimacy from cashew nut farmers will cause resistance in compliance with rules developed by them. Farmers might have a notion that the rules are not developed in their favor but for the institution's benefit. Such kind of a mindset will hinder accomplishment of cashew nut farming sustainability in Tanzania.

Market stakeholder's action was also found to play intervening role in attaining cashew nut farming sustainability in Tanzania. That means, instead of governing institutions obtaining legitimacy from farmers alone, legitimacy from market stakeholders is also inevitable when seeking to attain cashew nut farming sustainability. Once governing institutions become acceptable by both cashew nut farmers and market stakeholders, the attainment of sustainability will be simplified due to the positive actions and responses towards formulated rules. Without acceptance of the institutions by the market stakeholders, there will be a possibility of farmers producing a lot of cashew nut but fail to get ready market. This will demoralize their efforts and in the long run they might quit the business.

6.6 Policy Implication

The study confirmed direct effect of institutional legitimacy, isomorphism and logic in attaining sustainability of cashew nut farming in Tanzania. This calls for policies that could stimulate the formulation of strong institutions or strengthen the existing ones to come up with sense making issues which touch the interests of farmers directly. The articulated logic matters will enhance acceptability of those institutions by the farmers. Being legitimate will make farmers comply with guidelines issued by those institutions which at the end of the day will galvanize sustainability of cashew nut farming in Tanzania.

Further results confirmed the intervening role of market stakeholder's action on the relationship between legitimacy and business sustainability, isomorphism and business sustainability as well as logic and business sustainability. This new insight exposed by the current study needs to be reflected in Tanzania National Agricultural Policy. Although the National Agricultural Policy (2013) together with various initiatives formulated to support its implementation like Southern Agricultural Growth Corridor (SAGCOT) and Agricultural Sector Development Program (ASDP II) were geared towards attaining sustainability of agriculture in the country but to date the sector is still in dilemma.

The conflicting interests between SAGCOT which is driven by wealthy foreign investors aimed at large scale agriculture and ASDP II which is driven by government to protect interests of smallholder farmers, will be addressed by the findings of this study through modification of the policy which will lead to formulation of strong institutions that will apply same isomorphic pressure to all. As

long as the two initiatives were policy driven, modification of the policy will resolve the conflict by creating strong legitimate institutions. Establishment of strong institutions that will recognize the role of market stakeholders and taking them into account while casting sectorial rules and guidelines will enhance cashew nut farming sustainability in Tanzania. The policy should also inform farmers of, among other things, the importance of market stakeholder's action towards attaining sustainability of their business.

6.7 Recommendations

As it is depicted in the findings of this study, there is a positive and significant effect of institutional legitimacy on business sustainability. It is hereby recommended for institutions dealing with cashew nut farming in Tanzania like Cashew nut Board of Tanzania, Local Government Authorities (LGA's) where the cashew nut is grown and Board of External Trade to enhance their legitimacy to farmers by developing user friendly guidelines that are easily understood by farmers and enable them to enjoy the benefit of cashew nut farming.

Further results also showed a positive and significant effect of institutional isomorphism on business sustainability. Therefore, the study recommends proper coercive pressure to be applied with institutions like CBT and LGA's to cashew nut farmers so as to control unethical behaviour like environmental degradation which might impair the future of cashew nut farming. Farmers should also be encouraged by these institutions to copy practices of successful members in the industry so as to improve their farming practices. It is similarly recommended for professional research institutions like TARI to conduct more research and communicate its

findings in simple language that is understood by farmers. Proper application of all these isomorphic pressures will assure sustainability of cashew nut farming in Tanzania.

Likewise, the study revealed a positive and significant effect of institutional logic on business sustainability. Basing on this finding, it is recommended for all institutions with a role to play in cashew nut farming in Tanzania like CBT, LGA, TAR, BET and Ministry of Agriculture at large to come up with sense making issues that reduce the cost of cashew nut farming and increase profit to farmers. Implementation of this recommendation will bring bright future of cashew nut farming in Tanzania.

Mediation analysis reported market stakeholder's action effect on the relationship between institutional legitimacy, isomorphism and logic toward business sustainability. Therefore, to attain cashew nut farming sustainability in Tanzania, it is recommended that institutions dealing with the business to increase their legitimacy to both farmers and market stakeholders. That means, in additional to the legitimacy gained directly from farmers, CBT, LGA's and BET should consider the interests of market stakeholders in developing various guidelines for governing cashew nut farming. This will avert the resistance from market stakeholders which might endanger the future of the business.

Furthermore, it was recommended that coercive pressure exerted by CBT, LGA's and BET to market stakeholders should not discourage them from buying or consuming cashew nut from Tanzania. Any discouragement of market stakeholders from buying or consuming cashew nut produced in Tanzania will jeopardize the

survival of cashew nut farming in the country. The study suggests that same institutions should encourage cashew nut farmers to mimic good practices from leading farmers in the industry. This will enable farmers to produce best quality cashew nut and thereby encourage market stakeholders to continue buying and consuming the produce of Tanzania.

Moreover, the study recommends that CBT, BET and LGAs should come up with a sense making practice on selling cashew nut produce. This practice should replace warehouse receipt system used recently which poses a number of challenges to both market stakeholders and farmers. To the great extent, the system is not acceptable to market stakeholders, a fact causing them to delay or reject to participate in auctions. As it is found in this study, the only logical way of attaining cashew nut farming sustainability in Tanzania is to consider the effect of market stakeholder's action.

The study also recommends to the institutional theory scholars to conduct more research on the relationship between its constructs and business sustainability by considering either mediation or moderation of stakeholder theory constructs. The current study shades some light on the mediation effect of market stakeholder's action on the said relationship. The future studies should consider the same relationship using another stakeholder theory construct as a mediator or moderator.

To Ministry of Agriculture in Tanzania, the study recommends modification of Tanzania Agricultural Policy (2013) to include, among other things, improved or new institutions dealing with cashew nut farming. The improved or new institutions should put more emphasis on the role of market stakeholders in achieving cashew

nut farming sustainability within the country. As it is reported in the findings of this study, market stakeholder's action plays a significant mediation role in the survival of cashew nut farming.

6.8 Limitation of the Study and Suggestion for Future Research

Three limitations were encountered by this study. First, research participants were limited to Tanzanian context. Respondents from other countries where cashew nut is grown might have different perspectives about institutional arrangements and cashew nut farming business sustainability of their countries. These countries might have different institutional arrangements to take care of cashew nut farming business whereby farmers might have quite a different perspective from the ones revealed in this study. Therefore, it is hereby recommended for the same study to be replicated in other contexts so as to gain more power of generalizing findings across cashew nut farming business.

Second, the study was limited in analyzing the mediating effect of market stakeholder's action (one of stakeholder theory construct) on the relationship between institutional theory constructs and business sustainability. Future studies should consider either mediation or moderation effect of other stakeholder theory constructs on the relationship between institutional theory and business sustainability.

Third, the study employed purely quantitative approach due to limited time and financial resources. In order to gain an in-depth understanding of the effect of institutional arrangement (which is built on institutional theory) on business

sustainability through market stakeholder's action (construct from stakeholder theory) the future research should employ qualitative research approach.

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APPENDICES

Appendix I (A): Survey Questionnaire – English Version

My name is Felex, Vicent M. a postgraduate student pursuing a PhD program at the Open University of Tanzania. I am conducting research titled; **analysis of effect of institutional arrangements on cashew nut farming business sustainability in Tanzania: Mediation role of market stakeholder's action**. This research will be carried out in; Mtwara, Lindi, Ruvuma, Coast and Tanga regions. I kindly ask you to participate in my research by providing required information. Outcomes of this study will be presented in aggregate terms and no specific details will be disclosed.

Part A: Demographic Information

Please tick (√) the appropriate response from the following statements;

1. My gender is;

   1. Male ☐ 2. Female ☐

2. My age range between;

   18 – 32 years ☐ 2. 33 – 47 years ☐

   3. 48 – 62 years ☐ 4. 63 – 77 years ☐

   5. 78 – 92 years ☐

3. My education level is;

   1. Primary school education ☐ 2. Secondary school ☐ education

   3. Tertiary education ☐

4. My experience in cashew nut farming business range between;

   1. 0 – 14 years ☐ 2. 15 – 29 years ☐

3. 30 – 44 years ☐ 4. 45 – 59 years ☐

5. 60 – 74 years ☐

5. My awareness on Institutional Arrangements governing cashew nut farming business in Tanzania is;

1. Below average ☐ 2. Average ☐

2 Above average ☐

6. My awareness on the concept of sustainable cashew nut farming business is;

1. Below average ☐ 2. Average ☐

3. Above average ☐

7. My awareness about various stakeholders of cashew nut farming business in Tanzania is;

2. Below average ☐ 2. Average ☐

3. Above average ☐

Part B:

Please indicate your level of agreement or disagreement based on the scale of 1 to 5 by providing a tick (√) to the appropriate box where: -

SD – Strongly Disagree (1), D – Disagree (2), N – Neutral (3), A– Agree (4), SA – Strongly Agree (5)

Section 1: Business sustainability

Items		SD (1)	D (2)	N (3)	A (4)	SA (5)
i.	My sustainable cashew nut farming business practice is profit - oriented					
ii.	My sustainable cashew nut farming business practice contribute to cost reduction					
iii.	My sustainable cashew nut farming business practice need to be the united ambition with the whole business network					
iv.	My sustainable cashew nut farming business practice is appreciated by all stakeholders					
v.	My sustainable cashew nut farming business practice need substantial investment					
vi.	My sustainable cashew nut farming business practice is based upon a long – term business perspectives					
vii.	My sustainable cashew nut farming business practice take into account the impact of business partners on the natural environment					
viii.	My sustainable cashew nut farming business practice is implemented in response to the on – going climate change					
ix.	My sustainable cashew nut farming business practice address activities related to the environmental impact					

Section 2: Legitimacy

	Items	SD (1)	D (2)	N (3)	A (4)	SA (5)
i.	As a cashew nut farmer, I set an example of how local farmers should behave					
ii.	As a cashew nut farmer, I'm committed to meet standards that my community expects from local farmers					
iii.	As a cashew nut farmer, I genuinely listen to the demands from the community					
iv.	As a cashew nut farmer, I follow government regulations for operating procedures in the cashew nut farming industry					
v.	As a cashew nut farmer, I set an example of how other farmers should operate their cashew nut farming business					

Section 3: Isomorphism

	Items	SD (1)	D (2)	N (3)	A (4)	SA (5)
i.	As a cashew nut farmer, I personally prosecuted when failing to meet legislated standards for pollution control					
ii.	If I commit an environmental infraction as a cashew nut farmer, the consequences are likely to have negative reports by industry market analysts					
iii.	As a cashew nut farmer, I promote environmental preservation practices shown by the leading farmers					
iv.	I'm expected by cashew nut farming industry to be environmentally responsible like all other cashew nut farmers					
v.	Being environmentally responsible is a requirement for me to be part of cashew nut farming industry					

Section 4: Logic

	Items	SD (1)	D (2)	N (3)	A (4)	SA (5)
i.	Cashew nut farming increase my earnings					
ii.	Sustainable cashew nut farming practice demonstrate my ability to succeed in a highly competitive environment					
iii.	Cashew nut farming make me to become self – sufficient person not relying on others for basic necessities of life					
iv.	Cashew nut farming assures me to meet my goals					

Section 5: Market Stakeholders' actions

	Items	SD (1)	D (2)	N (3)	A (4)	SA (5)
i.	Customers of cashew nut induce me to proceed with cashew nut farming business through buying my products					
ii.	End users of cashew nut induce me to proceed with cashew nut farming business through consuming my products					
iii.	Surrounding society induce me to proceed with cashew nut farming business through supporting my business					
iv.	Marketplace sellers induce me to proceed with cashew nut farming business through selling my products					

Thank you for your time

Felex, Vicent M.

Open University of Tanzania

Email: vicentfelix40@yahoo.co.uk

Mobile: 0713 407613

Appendix I (B): Survey Questionnaire – Swahili Version

Jina langu ni Felex, Vicent M., mwanafunzi wa shahada ya Uzamivu katika Chuo Kikuu Huria cha Tanzania.Nafanya utafiti wenye jina; **uchambuzi wa ushawishi wa mipangilio ya kitaasisi juu ya uendelevu wa kilimo cha korosho Tanzania kwa kuzingatia mchango wa wadau wa masoko**. Utafiti huu unafanywa katika mikoa ya; Mtwara, Lindi, Ruvuma, Pwani na Tanga.Hivyo basi, ninaomba ushiriki katika utafiti huu kwa kutoa taarifa zinazohitajika. Matokeo ya utafiti huu yatawasilishwa kwa jumla na wala taarifa zako hazitawekwa bayana.

Kipengele A: Taarifa za kidemografia

Tafadhali weka alama ya vema (√) katika jibu linalofaa kutoka kwenye maswali yafuatayo

1. Jinsia yangu ni;

   1. Mwanaume ☐ 2. Mwanamke ☐

2. Umri wangu ni kati ya;

   1. Miaka 18 – 32 ☐ 2. Miaka 33 – 47 ☐

   3. Miaka 48 – 62 ☐ 4. Miaka 63 – 77 ☐

   5. Miaka 78 – 92 ☐

3. Kiwango changu cha elimu ni;

   1 Elimu ya msingi ☐ 2. Elimu ya sekondari ☐

   3. Elimu ya juu ☐

4. Uzoefu wangu katika kilimo cha korosho ni kati ya;

   1. Miaka 5 – 19 ☐ 2. Miaka 20 – 34 ☐

3. Miaka 35 – 49 ☐ 4. Miaka 50 – 64 ☐

5. Miaka 65 – 79 ☐

5. Ufahamu wangu juu ya mipangilio ya kitaasisi zinazosimamia kilimo cha korosho nchini Tanzania ni;

1 Chini ya wastani ☐ 2. Wastani ☐

3. Juu ya wastani ☐

6. Ufahamu wangu juu ya dhana ya kilimo endelevu cha korosho ni;

1. Chini ya wastani ☐ 2. Wastani ☐

3. Juu ya wastani ☐

7. Ufahamu wangu kuhusu wadau mbalimbali wa kilimo cha korosho nchini Tanzania ni;

1. Chini ya wastani ☐ 2. Wastani ☐

3. Juu ya wastani ☐

Kipengele B:

Tafadhali onyesha kiwango chako cha kukubali au kutokubali maelezo yaliyotolewa kulingana na kiwango cha 1 hadi 5 kwa kuweka alama ya vema (√) kwenye sanduku linalofaa, ambapo: -

SK – Sikubali kabisa (1), **S** – Sikubali (2), **SWS** – Sikubali wala Sikatai (3), **N** – Nakubali (4), **NK** – Nakubali kabisa (5)

Sehemu ya 1: Uendelevu wa biashara

	Vitu	SK (1)	S (2)	SWS (3)	N (4)	NK (5)
i	Kilimo endelevu cha korosho ninachofanya kinalenga kupata faida					
ii	Kilimo endelevu cha korosho ninachofanya huchangia kupunguza gharama					
iii	Kilimo endelevu cha korosho ninachofanya kinapaswa kuwa matarajio ya pamoja ya mtandao mzima wa kilimo cha korosho					
iv	Kilimo endelevu cha korosho ninachofanya kinathaminiwa na wadau wote wa korosho					
v	Kilimo endelevu cha korosho ninachofanya kinahitaji uwekezaji mkubwa					
vi	Kilimo endelevu cha korosho ninachofanya kimejengwa katika misingi ya mitazamo ya kilimo cha korosho ya muda mrefu					
vii	Kilimo endelevu cha korosho ninachofanya hujali ushawishi wa washirika wengine katika kutunza mazingira asilia					
viii	Kilimo endelevu cha korosho ninachofanya hufanyika kulingana na mabadiliko ya hali ya hewa yanayoendelea					
ix	Kilimo endelevu cha korosho ninachofanya kinajali shughuli zinazohusiana na athari za mazingira					

Sehemu ya 2: Uhalali

	Vitu	SK (1)	S (2)	SWS (3)	N (4)	NK (5)
i	Kama mkulima wa korosho naonyesha mfano wa tabia njema wanazopaswa kuwa nazo wkulima wa korosho hapa nchini					
ii	Kama mkulima wa korosho nimejikita kufikia viwango ambavyo jamii yangu inatarajia kutoka kwa wakulima wa korosho hapa nchini					
iii	Kama mkulima wa korosho nazingatia kwa dhati matakwa kutoka kwenye jamii					
iv	Kama mkulima wa korosho nafuata kanuni za uendeshaji zilizowekwa na serikali kuhusu kilimo cha korosho					
v	Kama mkulima wa korosho naonyesha mfano wa jinsi wakulima wengine wanavyopaswa kufanya katika kilimo cha korosho					

Sehemu ya 3: Misukumo ya ufanano

	Vitu	SK (1)	S (2)	SWS (3)	N (4)	NK (5)
i	Kama mkulima wa korosho nashitakiwa ninaposhindwa kufikia viwango vya kudhibiti uchafuzi wa mazingira vilivyowekwa kisheria					
ii	Ninapokiuka taratibu za utunzaji wa mazingira kama mkulima wa korosho, athari yake ni ripoti mbaya kutoka kwa wachambuzi wa soko la korosho					
iii	Kama mkulima wa korosho naendeleza mwenendo mzuri wa utunzaji wa mazingira kutoka kwa wakulima wa korosho waliofanikiwa					
iv	Natarajiwa kuwajibika katika utunzaji wa mazingira kama ilivyo kwa wakulima wote wa sekta ya korosho					
v	Kuwajibika katika utunzaji wa mazingira ni sharti kwangu ili kuweza kuwa sehemu ya sekta ya kilimo cha korosho					

Sehemu ya 4: Mantiki

	Vitu	SK (1)	S (2)	SWS (3)	N (4)	NK (5)
i	Kilimo cha korosho huongeza kipato changu					
ii	Kilimo endelevu cha korosho ninachofanya kinathihirisha uwezo wangu wa kufanikiwa katika mazingira yenye ushindani mkubwa					
iii	Kilimo cha korosho kinaniwezesha kujitosheleza binafsi pasipo kutegemea watu wengine kwa mahitaji yangu muhimu					
iv	Kilimo cha korosho kinaniwezesha kufikia malengo yangu					

Sehemu ya 5: Matendo ya wadau wa masoko

	Vitu	**SK (1)**	**S (2)**	**SWS (3)**	**N (4)**	**NK (5)**
i	Wanunuzi wa korosho wananihamasisha kuendelea kufanya kilimo cha korosho kwa kuendelea kununua bidhaa zangu					
ii	Walaji wa korosho wananihamasisha kuendelea kufanya kilimo cha korosho kwa kuendelea kula korosho ninazolima					
iii	Jamii inayonizunguka inanihamasisha kuendelea kufanya kilimo cha korosho kwa kuendelea kuwezesha kilimo changu					
iv	Wauzaji wa korosho sokoni wananihamasisha kuendelea kufanya kilimo cha korosho kwa kuendelea kuuza korosho ninazolima					

Asante kwa muda wako

Felex, Vicent M.

Chuo Kikuu Huria cha Tanzania

Barua pepe: vicentfelix40@yahoo.co.uk:

Rununu: 0713 407613

Appendix II: Code Book

FULL NAME OF A VARIABLE	SPSS VARIABLE NAME	CODING INSTRUCTION
Gender	GN	1. Male
		2. Female
Age	AG	1. 18 – 32 years
		2. 33 – 47 years
		3. 48 – 62 years
		4. 63 – 77 years
		5. 78 – 92 years
Education	ED	1. Primary school
		2. Secondary school
		3. Tertiary education
		4. University education
Experience	EXP	1. 0 – 14 years
		2. 15 – 29 years
		3. 30 – 44 years
		4. 45 – 59 years
		5. 60 – 74 years
Institutional Arrangements Awareness	IAA	1. Below average
		2. Average
		3. Above average
Sustainable cashew nut farming concept awareness	SCA	1. Below average
		2. Average
		3. Above average
Cashew nut farming business stakeholder's awareness	CSA	1. Below average
		2. Average
		3. Above average
Business Sustainability	BSS	
Profitability	BS1	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Cost reduction	BS2	1. Strongly disagree
		2. Disagree
		3. Neutral

FULL NAME OF A VARIABLE	SPSS VARIABLE NAME	CODING INSTRUCTION
		4. Agree
		5. Strongly agree
Whole business network	BS3	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Appreciation by stakeholders	BS4	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Substantial investment	BS5	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Long – term business perspectives	BS6	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Impact of business partners on the natural environment	BS7	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Implemented in response to the on – going climate change	BS8	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Address activities related to the environmental impact	BS9	Strongly disagree
		1. Disagree
		2. Neutral

FULL NAME OF A VARIABLE	SPSS VARIABLE NAME	CODING INSTRUCTION
		3. Agree
		4. Strongly agree
Institutional Legitimacy	**LEG**	
Activities conducting example seting	LEG1	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Meet standards	LEG2	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Genuinely listening	LEG3	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Behaving example seting	LEG4	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Following acceptable guidelines	LEG5	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Institutional Isomorphism	**ISO**	
Legislated standards	ISO1	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Environmental infraction	ISO2	1. Strongly disagree

FULL NAME OF A VARIABLE	SPSS VARIABLE NAME	CODING INSTRUCTION
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Environmental preservation promoting practice	ISO3	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Environment responsible habit	ISO4	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Environment responsible requirement to become part of industry	ISO5	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Institutional Logic	**LOG**	
Increase earnings	LOG1	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Ability to succeed in a highly competitive environment	LOG2	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Ability to meet basic necessities of life	LOG3	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree

FULL NAME OF A VARIABLE	SPSS VARIABLE NAME	CODING INSTRUCTION
Meeting goals	LOG4	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Market Stakeholder's Action	**MSA**	
Customers action	MSA1	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
End user's action	MSA2	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Surrounding society action	MSA3	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree
Marketplace seller's action	MSA4	1. Strongly disagree
		2. Disagree
		3. Neutral
		4. Agree
		5. Strongly agree

Appendix III: Schedule of Activities

ACTIVITY	TIME FRAME																												
	2018/2019 – 2019/2020											2020/2021 – 2021/2022											2022 - 2023						
Literature review																													
Proposal development and presentation																													
Data collection and analysis																													
Report writing																													
Report presentation																													
Viva voce examination																													

Appendix IV: Estimated Budget for the Study

Item	Quantity	Rate (TZS)	Amount (TZS)
Stationeries and secretarial costs			
Paper rims	20 rims	12,000@	240,000
Cartridge	5 PC	200,000	1,000,000
Questionnaire photocopying expenses	Lump sum	600,000	600,000
Documents binding	Lump sum	500,000	500,000
Sub total			**2,340,000**
Transport allowances			
Bus fare	5 people	40,000 x 2@	400,000
Local transport	5 people	20,000 @day x 60 days	6,000,000
Sub total			**6,400,000**
Field costs			
Awareness creation and planning	10 days	50,000 @ day x 5 people	2,500,000
Perdiem for research assistant in data collection	5 people	50,000 @ day x 60 days	15,000,000
Sub total			**17,500,000**
Data processing and analysis			
Data entry	240 questionnaires	5000	1,200,000
Data coding	Lump sum	800,000	800,000
Data analysis	Lump sum	1,000,000	1,000,000
Sub total			**3,000,000**
Grand total			**29,240,000**

Appendix V: Normality test for determinants of BSS model

Variable	min	max	skew	c.r.	kurtosis	c.r.
LOG1	1	5	-0.495	-4.191	0.194	0.822
LOG2	1	5	-0.553	-4.683	0.374	1.582
LOG3	1	5	-0.707	-5.988	0.577	2.442
LOG4	1	5	-0.823	-6.965	0.719	3.044
LEG1	1	5	-0.667	-5.646	0.296	1.255
LEG2	1	5	-0.713	-6.037	-0.01	-0.044
LEG3	1	5	-0.896	-7.583	0.769	3.255
LEG4	1	5	-0.882	-7.468	0.658	2.786
MSA4	1	5	-0.824	-6.975	0.731	3.093
MSA3	1	5	-0.535	-4.531	0.16	0.676
MSA2	1	5	-0.969	-8.203	1.038	4.395
MSA1	1	5	-0.526	-4.453	0.141	0.598
ISO2	1	5	-0.512	-4.337	0.002	0.008
ISO3	1	5	-0.706	-5.979	0.312	1.32
ISO4	1	5	-0.795	-6.727	0.936	3.964
ISO5	1	5	-0.698	-5.909	0.397	1.681
BS6	1	5	-1.004	-8.501	0.653	2.764
BS5	1	5	-1.019	-8.626	0.939	3.973
BS4	1	5	-0.794	-6.722	0.29	1.226
BS3	1	5	-1.064	-9.009	0.992	4.201
BS2	1	5	-0.726	-6.15	0.253	1.073
BS1	1	5	-1.061	-8.983	0.712	3.012
Multivariate					41.647	13.288
Minimum values			-1.064		-0.01	
Maximum value			-0.495		1.038	

Appendix VI: Research Clearance Letter

THE OPEN UNIVERSITY OF TANZANIA

DIRECTORATE OF POSTGRADUATE STUDIES

P.O. Box 23409
Dar es Salaam, Tanzania
http://www.openuniversity.ac.tz

Tel: 255-22-2668992/2668445
ext.2101
Fax: 255-22-2668759
E-mail: dpgs@out.ac.tz

Our Ref: PG201800649

25th November 2020

Region Administrative Secretary (RAS),

Ruvuma Region,

P.O.Box 74,

RUVUMA.

RE: RESEARCH CLEARANCE

The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Mr. FELIX, Vicent M. Reg No: PG201800649** pursuing **Doctor of Philosophy (PhD).**We here by grant this clearance to conduct a research titled **"Influence of Institutional Arrangements on Business Sustainability. Analysis of Cashewnuts Farmers Perspective in Tanzania".** He will collect his data at Madaba, Mbinga, Nyasa, Tunduru, and Namtumbo Districts from 1st December 2020 to February 2021.

In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam.Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours,
THE OPEN UNIVERSITY OF TANZANIA

Prof. Magreth Bushesha
DIRECTOR OF POSTGRADUATE STUDIES.

THE OPEN UNIVERSITY OF TANZANIA

DIRECTORATE OF POSTGRADUATE STUDIES

P.O. Box 23409
Dar es Salaam, Tanzania
http://www.openuniversity.ac.tz

Tel: 255-22-2668992/2668445
ext.2101
Fax: 255-22-2668759
E-mail: dpgs@out.ac.tz

Our Ref: PG201800649

25th November 2020

Region Administrative Secretary (RAS),

Coast Region,

P.O.Box Box 30080,

COAST.

RE: RESEARCH CLEARANCE

The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Mr. FELIX, Vicent M. Reg No: PG201800649** pursuing **Doctor of Philosophy (PhD).**We here by grant this clearance to conduct a research titled **"Influence of Institutional Arrangements on Business Sustainability. Analysis of Cashewnuts Farmers Perspective in Tanzania".** He will collect his data at Kibiti, Bagamoyo, Kibaha, Maili Moja, Kisarawe, Mkuranga, Rufiji,and Mafia Districts from 1st December 2020 to February 2021.

In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam.Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours,
THE OPEN UNIVERSITY OF TANZANIA

Prof. Magreth Bushesha
DIRECTOR OF POSTGRADUATE STUDIES.

THE OPEN UNIVERSITY OF TANZANIA

DIRECTORATE OF POSTGRADUATE STUDIES

P.O. Box 23409
Dar es Salaam, Tanzania
http://www.openuniversity.ac.tz

Tel: 255-22-2668992/2668445
ext.2101
Fax: 255-22-2668759
E-mail: dpgs@out.ac.tz

Our Ref: PG201800649

25th November 2020

Region Administrative Secretary (RAS),

Lindi Region,

P.O.Box 1054,

LINDI.

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Our Ref: PG201800649

25th November 2020

Region Administrative Secretary (RAS),

Mtwara Region,

P.O.Box 544,

MTWARA.

RE: RESEARCH CLEARANCE

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In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam.Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

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Dar es Salaam, Tanzania
http://www.openuniversity.ac.tz

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ext.2101
Fax: 255-22-2668759
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Our Ref: PG201800649

25th November 2020

Region Administrative Secretary (RAS),

Tanga Region,

P.O.Box Box 30080,

TANGA.

RE: RESEARCH CLEARANCE

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