

**INFLUENCE OF INSTITUTIONAL FORCES IN CREATING
EMPLOYMENT THROUGH CATFISH FARMING IN RUKWA, TANZANIA**

KASPAR ROBERT MILLINGA

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
REQUIREMENTS FOR THE DEGREE OF MASTER OF PROJECT
MANAGEMENT (MPM) OF THE OPEN UNIVERSITY OF TANZANIA**

2019

CERTIFICATION

The undersigned certifies that he has read and here by recommends for acceptance by the Open University of Tanzania a dissertation entitled, **Influence of Institutional Forces in Creating Employment through Catfish Farming in Rukwa, Tanzania**, in partial fulfillment of the requirements for the award of Degree of Masters in Project Management (MPM).

í í í í í í í í í í í í í í í í

DR. BUKAZA CHACHAGE.

(SUPERVISOR)

í í í í í í í í í í í í í í .

DATE

COPYRIGHT

No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise without a prior written permission of the author or the Open University of Tanzania (OUT) in that behalf.

DECLARATION

I, **KASPAR ROBERT MILLINGA** declare that, the work presented in this dissertation is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirements for the Degree of Master of Project Management (MPM).

í í í í í í í í í í í í í í í

Signature

í í í í í í í í í í í í í í í

Date

DEDICATION

This work is dedicated to my lovely mother Serafina Lugongo, wife Victoria Kaspar Millinga, daughters Herbetha Kaspar Millinga and Serafina Kaspar Milllinga and sons Agrey Kaspar Millinga and Herbert Kaspar Millinga whose contributions and supports are highly considered and appreciated.

ACKNOWLEDGEMENT

I gratefully acknowledge highly Dr. Bukaza Chachage for his kind supervision with encouragements and recommendations that motivated me to this point. I also recognize Dr. Adam Namamba, Dr. Juma Matonya, Upendo Nombo, Ezechiel Malunda, Kassim Mnyengema and other staff members of the Open University of Tanzania (OUT) Rukwa branch for their kind encouragements and assistances towards my studies.

I also kindly appreciate all staff members of the Faculty of Business Management of the OUT for their encouragements, contributions and support during the course of my studies to the point I am this time.

I recognize the contributions of my mother Serafina Lugongo and my late father Robert K. Millinga. I also recognize the contributions of my wife Victoria Kaspar Millinga, my daughters Herbetha Kaspar Millinga, Serafina Kaspar Millinga, my sons Agrey Kaspar Millinga and Herbert Kaspar Milllinga for their kind curiosity of demanding to know the progress of the course and the dissertation in general.

ABSTRACT

The aim of this study was to examine the influence of institutional forces in creating employment through catfish farming in Rukwa, Tanzania. This study was guided by three objectives (i) to examine the historical facts about employment opportunities through catfish to the community, (ii) to assess isomorphic pressure to use catfish as opportunity for employment and (iii) to examine catfish employments logic and catfish employment opportunities legitimacy. The study used survey study method and questionnaires were used in collecting data. The survey data were analyzed by the use of Statistical Package for Social Sciences (SPSS) version 22 with descriptive statistics and multiple linear regression. The results were presented using tables. The multiple regression results found that the isomorphic pressure (coercive and normative), legitimacy and logic were found significantly influencing created catfish farming employments while memory and mimetic construct were found to have insignificant prediction. Specifically the findings indicated the following: memory ($\beta = -0.046$, $t = 0.499$), coercive ($\beta = -0.159$, $t = 0.043$), mimetic ($\beta = 0.103$, $t = 0.255$) and normative ($\beta = 0.334$, $t = 0.001$), legitimacy ($\beta = 0.239$, $t = 0.002$), and logic ($\beta = 0.203$, $t = 0.038$), since $p < 0.05$. The findings from this study were found to support the theory. The study recommends that the specific items in the constructs which were found to influence the catfish farming employments must be fostered in various ways and those which were found to have insignificant influence be discouraged to create sustainable employment from catfish farming. Similar research can also be conducted in other areas to justify and verify the generation of the findings of this study.

TABLE OF CONTENTS

CERTIFICATION	i
COPYRIGHT.....	ii
DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF APPENDICES.....	xv
LIST OF ABBREVIATIONS	xvi
CHAPTER ONE	1
1.0 Introduction	1
1.1 Background to the Study.....	1
1.2 Statement of the Research Problem	4
1.3 Research Objectives.....	5
1.3.1 General Research Objective.....	5
1.3.2 Specific Research Objectives.....	5
1.4 Research Questions	5

1.4.1	General Research Question	5
1.4.2	Specific Research Questions	6
1.5	Relevance of the Research.....	6
1.6	Scope and Delimitation of the Study.....	7
1.7	Organization of the Dissertation	7
CHAPTER TWO		9
LITERATURE REVIEW		9
2.1	Overviews	9
2.2	Conceptual Definitions	9
2.2.1	Employment.....	9
2.2.2	Isomorphic Pleasure	10
2.2.3	Legitimacy	10
2.2.4	Aquaculture.....	10
2.2.5	Catfish.....	11
2.2.6	Project.....	11
2.2.7	Investment	11
2.3	Critical Review of Supporting Theories.....	12
2.3.1	Institutional Theory	12
2.3.2	Application of the Institutional Theory to the Study.....	13

2.3.2.2	Mimetic Pressure in Relation to the Study	13
2.4	Empirical Analysis of Relevant Studies	15
2.4.1	General Studies.....	15
2.4.2	Studies in African Countries	17
2.4.3	Empirical Studies in Tanzania.....	20
2.5	Legal Framework	21
2.6	Research Gap Identified	22
2.7	Conceptual Framework	23
2.8	Brief Discussion of Variable Supporting the Study.....	23
2.9	Theoretical Framework	25
2.10	Summary.....	26
CHAPTER THREE		27
RESEARCH METHODOLOGY		27
3.1	Overview	27
3.2	Research Paradigm.....	27
3.3	Research Strategies	28
3.3.1	Survey Population	28
3.3.2	Area of the Research or Survey.....	29
3.4	Sampling Design and Procedure	29

3.5	Variables and Measurement Procedure	30
3.6	Methods of Data Collection	31
3.6.1	Questionnaires.....	32
3.7	Data Processing and Analysis	32
3.8	Validity and Reliability of Data	34
3.8.1	Validity	34
3.8.2	Reliability	35
3.9	Expected Results of the Study.....	35
3.10	Research Ethics	36
CHAPTER FOUR.....		37
FINDINGS AND DISCUSSION.....		37
4.1	Introduction	37
4.2	Description of Biographic Information Applied	38
4.2.1	Gender of the Respondents.....	38
4.2.2	Age of Respondents.....	39
4.2.3	Education Levels of Respondents	39
4.2.4	Respondents Employment Status.....	40
4.3	Findings According to Specific Research Objectives.....	40

4.3.1 Research Objective 1: To Examine the Historical Facts About Employment Opportunities Through Catfish to the Community.....	40
4.3.2 Research Objective 2: To Assess Isomorphic Pleasure to Use Catfish as Opportunity for Employment.....	43
4.3.3 Research Objective 3: To Examine Catfish Employment logic and Catfish Employment Opportunities Legitimacy.....	50
4.3.3.1 Legitimacy	50
4.3.3.2 Respondents' view on logic	52
4.5 Inferential Analysis of Data.....	59
4.5.1 Validity.....	59
4.5.2 Reliability	59
4.6 Multiple Regression Analysis	61
4.7.1 Test for Autocorrelation Assumption.....	64
4.7.2 Test for Normality Assumption	65
4.7.3 Test for Multicollinearity Assumption.....	65
4.7.4 Test for Homoscedasticity Assumption.....	66
4.8 Discussion of the Findings According to Objectives	68
4.8.1 Historical Facts about Employment Opportunities through Catfish Farming to the Community	68
4.8.2 Isomorphic Pleasure to Use Catfish as Opportunity for Employment	69

4.8.3	The Extent of Legitimacy In Creation of Potential Catfish Employment	
	Opportunities	71
4.8.4	Potential Creation of Catfish Farming Employments	72
	CHAPTER FIVE	75
	CONCLUSION AND RECOMMENDATION.....	75
5.1	Introduction	75
5.1.1	Objective 1: To Examine The Historical Facts About Employment	
	Opportunities Through Catfish To The Community.	75
5.1.2	Objective 2: To Assess Isomorphic Pleasure To Use Catfish As Opportunity	
	For Employment.	76
5.1.3	Objective 3: To Examine Catfish Employment Logic and Catfish Employment	
	Opportunities Legitimacy.....	76
5.2	Conclusion.....	77
5.3	Recommendation	78
5.4	Suggestion for Future Research.....	79
	REFERENCES	81
	APPENDIX	89

LIST OF TABLES

Table 4. 1: Demographic Characteristics of the Study Sample.....	38
Table 4. 2: Displaying responses on memory with frequency and percentages.....	42
Table 4. 3: Indicates Opinions of Respondents on Influence of Coercive.....	45
Table 4. 4: Indicating Respondents' Opinions on Mimetic Influence	47
Table 4. 5: Indicating Respondents' opinions on Influence of Normative	49
Table 4. 6: Indicating Respondents' Opinions on Influence of Legitimacy	51
Table 4. 7: Indicating Respondents' Opinions on Influence of Logic	54
Table 4. 8: Improved Employment for Catfish	56
Table 4. 9: Summary of the Findings/Results	58
Table 4. 10: Cronbach's Alpha () Reliability Analysis Results	61
Table 4. 11: Showing Model Summary Relationship of variables.....	62
Table 4. 12: Showing Coefficients	63
Table 4. 13 Model Summary ^b for Autocorrelation Assumption Test.....	65
Table 4. 14 Test of Normality Distribution.....	65
Table 4. 15 Multicollinearity Test	66
Table 4. 16 Collinearity Diagnostics	66
Table 4. 17 Pearson Correlations of Homoscedasticity Test	67
Table 4. 18 Spearman's rho Correlations Coefficient after Homoscedasticity Test	68
Table 5. 1: Summary of the Findings.....	77

LIST OF FIGURES

Figure 2.1 Displaying Study Conceptual Framework	25
--	----

LIST OF APPENDICES

APPENDIX 1: QUESTIONNAIRE SURVEY	89
--	----

LIST OF ABBREVIATIONS

DV	Dependent Variable
EIA	Environmental Impact Assessment
FAO	Food and Agricultural Organization
FETA	Fisheries Education Training Agency
GDP	Gross Domestic Product
ILO	International Labour Organization
IV	Independent Variable
NGO	Non-Governmental Organization
OUT	Open University of Tanzania
SPSS	Statistical Packages for Social Sciences
TAFIRI	Tanzania Fisheries Research Institute
URT	United Republic of Tanzania

CHAPTER ONE

1.0 Introduction

1.1 Background to the Study

Rukwa region is found in Tanzania mainland blessed with several natural resources. Many of the community dwellers are unemployed and not engaged in economic creativities and idles leading to the community survive in poverty conditions though they have fertile land and fertile wetlands which are not benefiting them economically. Globalization requires people, ideas and products to move for meeting their local needs in societies (Armstrong 2006), employments. The community people are not committed to work for their progress but they just wait and find those God given resources for their survival without developing them as resources for their future. The natural things or resources are not reliable for the time being because the number of people in villages is rapidly increasing daily. The community has a lot of wetlands blessed with a lot of natural catfish and other species of fish which are naturally found in the low grounds ~~-(mabondeni)~~ rivers and waters beside the river. The available resources such as catfishes, other species of fish, fertile wetlands and reasonable conducive environment of the community, are the information if made known will allure investors to invest in fish farming projects especially the catfish farming (Itika 2011 and Armstrong 2006).

Currently, there is a Non- Government Organization (NGO) known as Plan International which has established different projects in Rukwa region. However, these projects are unsustainable and benefit only few people in the surrounding community. The NGO trains people in tailoring and buying sewing machines to few

people using large amount of capital for the few individuals in the community. In my knowledge training people in tailoring and buying sewing machines to few people is using large amount of capital for the few. However, if catfish farming projects are introduced they would involve majority of people of the locality and outside the locality which will improve economic development within and out of the district and will be a conclusive solution to idles, lazy and jobless people who have nothing to do in the studied population of the community as an alternative. This research work was meant to stimulate sustainable catfish farming projects in Rukwa region which consume little capital, create employments and benefit the majority for a long time sustainably.

Currently the community people are catching these fishes without regarding the quality of the fishes and types of fish. They catch these fishes without selecting big size, medium size, or small size to be caught for just their meal consumption without taking consideration of their economy. The ability to harness community's natural resources the powerful is the community and remain competitive in the market (Itika 2011). Logically, if you deal with these young fishes of which if these people were organized and make their own standing orders to govern them in fish industry, they could have to create employment opportunities and earnings for long.

Tanzania is a richest country by virtue of having various resources including fertile land, natural or wild animals, minerals, and fishes such as those God given fishes found locally and without caring that these resources are declining following the increase in population and environmental changes as days are numbering. The community people are catching young fishes, destroying the reproduction places to

where fishes may lay eggs for increasing their generations of which if they mature they can get high quality fishes which will save the high number of young or immature fishes to be caught for satisfying their meals for survival. It should be noted however that, catching immature fishes demands a higher number of fishes to satisfy the needs of these people per day. But if they let the fishes to grow and mature, they can catch a small number of high quality fishes and leaving others to survive and reproduce for the future. This technique could solve a lot of their needs known and unknown to the community and more.

This is a real problem for future generation of the community if no measures are to be taken into consideration for sustainable use of the natural resources (Clayton 2002). For this therefore, there is a gap existing between available undeveloped resources which are people, wetlands, various fish species, and good farming environments into sustainable employments opportunities in the studied community in Rukwa region at large. Thus there is high need of finding ideas, knowledge, and effort on how to develop these available undeveloped resources. The unknown are ideas and special pressures on how to convert or develop these available resources for establishing employments with all its benefits.

This research work was purported to make these people understand and think of their future on how they will create employment from rearing fishes in their low grounds for future pleasure. According to Armstrong (2006) effective actions to get the community to work is highly needed. However, special pressures for them are of necessity and should be acted upon the community to make them engage into catfish

farming activities. Potentially, this will also contribute in knowledge of where to start for further research and educationally will be a point of teaching on how to establish catfish farming for employment opportunities creation and other benefits attached to.

For this therefore, there is a need of establishing employments through catfish farming especially the catfish which are easy to farm, cost effective, and the studied areas are reasonable enough. The study proposed coercive pressure, normative, mimetic, legitimacy, memory and logic as important factors in influencing catfish farming in the studied area.

1.2 Statement of the Research Problem

Historically the community is suffering from unemployment but rich in natural resources which need to be implemented for the provision of employment opportunities, earnings, good living standards, raising economy, investments, reliable market, and individual creativity. The community lack ideas and capital for instituting sustainable investment projects creating employments (Mullins 2010). The local leaders of the communities take personal responsibility to give young men and women that feeling of opportunity by giving them the necessary skills, knowledge and, most importantly, the confidence to choose from alternative economic activities for them to undertake (Sinek, 2009). In these communities the government, NGOs and investors need to think of either developing or converting the available resources sustainably for employments to the community dwellers and more. A problem is a situation where a gap is found to exist between the actual state of unemployment and the desired ideal state of employment to the community (Sekaran, 2003). Thus this study aims at examining the institutional forces that influences the potential creation

of catfish farming employments in the studied area to address the normal situation from unemployment to employments.

1.3 Research Objectives

The study comprises general and specific objectives as follows;

1.3.1 General Research Objective

The general objective of this study was to examine the institutional forces in creating employment opportunities for the community through catfish farming in Rukwa region.

1.3.2 Specific Research Objectives

- (i) To examine the historical facts about employment opportunities through catfish to the community.
- (ii) To assess isomorphic pleasure (viz. coercive, mimetic and normative) to use catfish as opportunity for employment.
- (iii) To examine catfish employments logic and catfish employment opportunities legitimacy.

1.4 Research Questions

1.4.1 General Research Question

The general question was how catfish farming project will establish employments to the community people?

1.4.2 Specific Research Questions

- (i) What are the historical facts about employment opportunities through catfish to the community?
- (ii) What is the isomorphic pleasure (viz. coercive, mimetic and normative) to use of catfish as opportunity for employment?
- (iii) What is the logic and to what extent legitimacy is created in the catfish employment potential opportunities?

1.5 Relevance of the Research

This particular study intends to create chances of employment to the poor and jobless societies through instituting catfish farming projects for developing these poor and low income societies which they think the very particular reason is unemployment caused by the government which is not true by virtue of the available natural resources they have. The study is very important to be conducted due to the following strong reasons;

Firstly, to the society catfish farming is a new and reliable project among other projects for employing a good number of people desires and poverty reduction in Tanzania context which is a major problem worldwide. According to the report of the Ministry of Agriculture, Livestock and Fisheries of the United Republic of Tanzania (URT, 2016) reported the aquaculture in Tanzania started in 1950s with experiments done in tilapia fish ponds and for these days the fisheries sector added other types of fishes namely catfish and trout in fresh water.

Secondly, is to the government and investors. The study expect to provide knowledge on instituting of sustainable projects through using the available

resources around the target area which will allure the government, investors and the NGOs instituting and running such development projects by free financing or loaning.

Thirdly, is to Instructors, teachers and researchers will teach their students to rear fish as an alternative employment instead of just relying on education to as capital for employment in government, companies and organizations waiting being paid salaries from these employers.

1.6 Scope and Delimitation of the Study

The study was of the value of institutional perspective. This study was conducted in Rukwa region with the focus on examining the institutional forces in creation of employment opportunities to the community people through establishment of catfish farming projects. Other researchers conducted their studies in other types of fishes other than catfishes and out of my study area, Rukwa. The study area was selected due to the reasons of been experienced by the researcher, the available resources, the wetlands, the conducive and fertile environments, and easy of the researcher in attending the particular study area and easy of accessing the data.

1.7 Organization of the Dissertation

This particular study comprised of five important chapters to its ending. Chapter one deals with the introduction and background of the study, chapter two carry the literature review in which the relevant theory and literatures are cited and referenced accordingly, chapter three was dealing with methods and processes for data

collection and analysis of the collected data, chapter four consist of data interpretation, analysis of the interpreted data and discussion of the findings of this particular study, and the final chapter is chapter five which comprised of the summary of the study findings with implications to the societies, the conclusion, recommendations, limitations of the particular study and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overviews

This chapter covers the conceptual definition of key terms, reviews of previous studies and governing theory relevant to the study and identifies the gap existing which is the cause of this study. ACF International (2011) has provided that fish farming should provide employment and food security to the growing population. The employment opportunities generated from aquaculture development expects to control the rural people to flow to urban and as well will pave the chance for the government in financing the existing projects (Pillay and Kutty, 2005, and Boyd and McNevin, 2015). The Institutional Theory is relevant in governing this study focusing in creation of employment opportunities.

2.2 Conceptual Definitions

Key terms and concepts in this study are employment, isomorphic pressure, legitimacy, aquaculture, catfish, project, and investment.

2.2.1 Employment

Employment means the activities which the people of the community are to do for their economic benefits. According to Senyucel (2009) in his study concluded that, ÷employment now means more than having a job and it is not just something an individual does, but a combination of shared responsibilities and duties between the organization and the individualø

Unemployment means to lack something to do to keep busy instead of being idle in streets without jobs to do for gaining various economic benefits.

2.2.2 Isomorphic Pleasure

According to Merriam ó Webster (Since 1828) dictionary, Isomorphic is being of identical or similar form, shape, or structure. In the Cambridge English dictionary, pleasure is enjoyment, happiness, or satisfaction, or something that gives this. Isomorphic pleasure in this study is the feeling of happy satisfaction and enjoyment by being of identical or similar form or shape or structure as that of a successful one in the same way as the original by imitation or influence resulted due to the influences of institutions like coercive, mimetic and normative.

2.2.3 Legitimacy

According to Vocabrary.com dictionary, Legitimacy is lawfulness of something because of meeting specified requirements or conditions of the law. Legitimacy is the perception that power is exercised in a rightful, justified and acceptable manner. In this study legitimacy is the achievement of justification, the authority to have the rightfulness for instituting something.

2.2.4 Aquaculture

Aquaculture is agriculture or farming, but selectively depends on where you decide to culture or farm your plants and animals, if in aqua or water is aquaculture for aquatic organisms and if in land is termed as agriculture by virtue of culturing in land (Harrell, Undated). According to FAO (2017), Aquaculture is the cultivation of aquatic organisms including fish, mollusks, crustaceans and aquatic plants. For the

purpose of this study aquaculture will mean fish farming especially catfish (*clarias gariepinus*) farming. In this particular study, aquaculture is synonymous to Catfish farming which is the process of keeping fish especially catfish in wetland developed ponds.

2.2.5 Catfish

Catfish botanically or scientifically known as *clarias gariepinus* coming from a general group with a general name siluriformes which comprises of three species, these are *clarias gariepinus*, *heterobranchus longifilis*, and *chrysichthys nigrodigitatus* (ACF International, 2011). Catfish is a bony fish without scales living in all temperature and even in hard conditions and is commonly known as 'kambare' also bogobogo in Ruvuma, and *kamongo* in Mwanza.

2.2.6 Project

Project is the whole activities from ideas generation, planning, execution of the ideas and strategic plan purporting to meet the expectations of catfish farming at that particular community. Project is a temporary endeavor in nature undertaken for creation of, unique products, services, or results, having definite starting and ending dates, and are completed when their goals and objectives have been met and signed off by the stakeholders after being satisfied their needs and expectations (Heldman ,2005, and PMI, 2008).

2.2.7 Investment

Investment is finding improvements for solving existing scarcities through sacrifices in terms of efforts, time and resources at present time in order to reap the benefits in

the future in projects (Andersen *et al*, 2009, and Darnall and Preston, 2012). For this study investment mean the people are to give their efforts, time and resources in the institution of catfish projects purporting at providing employment and other associating benefits.

2.3 Critical Review of Supporting Theories

There are several studies done for instituting employments in various ways with several theories. This study applied Institutional Theory due to its flexibility and nature of the study objectives.

2.3.1 Institutional Theory

According to Mean That 2015 propounded that, Institutional theory is a theory that studies how organizations can increase their ability and survive in a competitive environment by satisfying their stakeholders. This theory is based on stability and change for development and survival of the society/community. Societies are developing through engaging in social activities that produce, reproduce and transforms them as these are kept repeatedly as a cycle (Bruton *et al* 2010). In the same way this is to be practiced by the society in implementation of the catfish farming for employment creation. The institutional theory under normative pressure is all about justification of anything before its institution/establishment it need be acceptable legally, environmentally, socially, politically, culturally and logically. The theory directs further from these constrains the institutors of the investment projects to keep these in routine so as to escape unnecessary conflicts on the course of attaining and holding the desired goals. According to DiMaggio and Powell (1983) isomorphism is a constraining process that forces one unit in a population to

resemble other units that face the same set of environmental conditions through any of the three mechanisms or pressures which are coercive, mimetic and normative. The institutional theory is based on stability, change and justification and in the same way of the guiding theory of this study, the study aimed at providing employments to the community for the sake of making community resemble other successful communities with the same environments and resources to commit themselves to provide their efforts in catfish farming which is the expected change from unemployment to sustainable employments. The institutional theory provides pressures or mechanisms necessary for driving or influencing community members to meet the desired requirements for achieving legality and stability necessary for institution of sustainable catfish investment projects for employment opportunities creation.

2.3.2 Application of the Institutional Theory to the Study

2.3.2.1 Coercive Pressure in Relation to the Study

Coercive pressure/isomorphism will have to drive the society in meeting the requirements for catfish farming projects to meet the study goal. The institutional theory provides necessary driving force for the society to contribute their effort in achieving legality and stability for the same (DiMaggio and Powell, 1983).

2.3.2.2 Mimetic Pressure in Relation to the Study

Mimetic pressure is the imitation or consultation or any mean that helps an organization to adopt the same approach of performing in the same as the original or more successful organization or institution (DiMaggio and Powell, 1983) therefore

the community will be directed to imitate from other successful catfish farming communities.

2.3.2.3 Normative Pressure in Relation to the Study

According to the institutional theory, normative pressure is an act of performing professionally due to having acquired skills in the same kind of professions or by way of interactions leading to have uniformity in strategies. Normative represent individual and organizational behavior based on obligatory dimensions of social, professional and organizational interactions and having the same educational backgrounds leading to activities in being of the same conformity (Bruton *et al*, 2010, and DiMaggio and Powell, 1983).

2.3.2.4 Relevancy of the Theory to the Study

This theory applies to this study for the reason that we expect to establish employment opportunities through catfish farming projects to be run by the community after adopting skills and strategies from other successful communities which is the effect of the constraints of the institutional theory. Taking into consideration of the institutional theory's constraints, the study was purporting to examine in detail on the establishment of employment through catfish farming that will be logical to the community focusing on the important potentials of the project deliverables which will be sustainable employments, trade and nutrition.

2.4 Empirical Analysis of Relevant Studies

2.4.1 General Studies

Alawode *et al* (2016) conducted a study on effect of catfish production on welfare of smallholder farmers in Osum state, Nigeria. The study examined the effect of catfish production on the welfare of smallholder farmers in Osum state in Nigeria. The area of the study was Odo-otin Local government area of Osum state. The reason for selecting the study area was catfish farming was one of the main livelihood activities the residents were engaged in. In their study structured questionnaires were used in collecting primary data from the selected area of their study. The welfare was measured by the food expenditure of catfish farmers.

The results of the effect of catfish production, from the results, the quantity of catfish harvested and the number of catfish sold had a significant positive relationship with the amount spent on food in 1%. The results from respondents of the study area who are catfish farmers found that the constraints of production was theft and high cost of inputs. The study recommends on three issues first is to the government to ensure inputs for catfish farmers are available for increasing production, second was to build capacity in catfish farming with purpose of increasing production and income, and third was on controlling birth in catfish farmers families so as to increase per capita income and reduce the expenditure of food due to increase of households sizes. Their study is relevant to mine by virtue of catfish dealt and questionnaires method in data collection. Their study differs to mine because they conducted in Nigeria examining the effect of catfish production on welfare of smallholder farmers and my study is in Tanzania purported for employments creation.

Patrick and Kagiri (2016) in Kenya conducted a study on An Evaluation of Factors Affecting Sustainability of Fish Farming Projects in Public Secondary Schools in Kiambu County. Their study aimed at establishing factors that affect sustainability of fish farming projects in public secondary schools in Kiambu County. Their study used descriptive research design for providing the whole picture as naturally happens as it answers the question with who, what and why nature. The target population was 75 respondents, project managers and fisheries offices of Kiambu public secondary schools. Data were collected using questionnaires and analyzed descriptively and the relationship was measured using correlation and regression analysis. In the findings of their study, fish farming inputs were found to be higher which has an effect on fish farming sustainability. The recommendation of their study was to the government to control the costs of inputs, availability of technology and extension of services and enhancing eat more fish campaign and involving more women in the projects. The study is relevant to my study because they used descriptive statistics, questionnaire survey, regression analysis and fish farming the same to my study. Also, this study differs from my study because their study was conducted in Kenya, Kiambu County while my study conducted in Tanzania, Rukwa region, their study generalized in fish farming while my study specified to catfish for creating employments.

Issa *et al* (2014) in Nigeria conducted a study on Profitability Analysis of Small Scale Catfish Farming in Kaduna State. The study mainly aimed at assessing the profitability of catfish farming in Kaduna state. The sampling technique they used was random sampling and the sample size was 60. They collected data using an interview schedule from 60 respondents of the target population. The results show

that the increase in invested capital the higher the income realized from catfish. The analysis of gross margin indicated that catfish farming is profitable and contributed total income to the respondents. Their study recommended the government should provide adequate and standard inputs for fish farming at subsidized, catfish farmers should be encouraged in formulating and manage cooperatives, extension agencies should link fish farmers to business development and microcredit service providers. Their study is relevant to my study because they dealt with catfish farming, their study dealt with profitability analysis of the small scale catfish farmers which is the same as employment and its benefits as my study is investigating. The study differs from my study because their study was conducted in Nigeria and they used random probability sampling method while my study used non-probability sampling method.

2.4.2 Studies in African Countries

Wuyep and Rampedi (2018) in Nigeria the study titled Urban Fish Farming in Jos, Nigeria: Contributions Towards Employment Opportunities, Income Generation, and Poverty Alleviation for Improved Livelihoods. In their study, they used quantitative and qualitative methods in data collection thus mixed research method and sample size used was 50 respondents randomly selected in Jos city of Nigeria. The findings were the spatial distribution of farming practices and demographic attributes of the farmers, lack of reliable water supplies and high production costs and poor marketing and preservation facilities were the constraining problems to operational effectiveness and efficiency. Their study recommended that more integrated local development planning in addressing the infrastructural and resource needs of practicing farmers for achieving long term sustainability in small scale fish farming.

This study is relevant to the current study since all deals with two major things namely fish farming for employment generating and second is the sample size used not less than 30 and not exceeding 100 respondents. The study differs from my study in that it was conducted in Nigeria and mine is in Tanzania another reason of difference was the generalization of the fish whereas mine was specific to catfish farming in creating employment.

Shava and Gunhidzirai (2017) the study examines the implementation of fish farming as an innovative strategy for promoting food security in drought risk regions of Zimbabwe. The researcher used a qualitative research design to understand the views of fish farmers and whether employments were generated to improve their livelihoods. In sampling, they used purposive sampling technique for acquiring information/data. The result of the study found that NGOs in Mwenezi district were playing a vital role in fish farming projects that were generating employment. The study recommended NGOs in Zimbabwe need to improve on their research culture to widen the scope of fish farming, the Public Private Partnership is vital for NGOs to subsidize in fish farming, provide trainings in fish farming and offer incentives for improving food security, nutrition and employment creation and the government need to support fish farmers.

This study is relevant to my study for the reason that their study used purposive sampling that is synonymous to convenience sampling used in my study, in addition to that reason the aims are to find understanding whether employments were generated to improve their livelihood and also dealt with fish farming benefits which is the same as it is in my study. The study is different from my study for the reason

that their study conducted in Zimbabwe while mine is in Tanzania and, their study used qualitative design while mine is quantitative.

Munyi and Kiruja (2016) conducted a study on determinants of sustainability for fish farming project initiative under the economic stimulus programme in Kenya. The study aimed at exploring project strategies, implementation process, availability of capital, and support services. The design of the research was descriptive. Sample technique used was stratified random sampling. Their study collected data using questionnaires from the respondents sampled. They analyzed the available collected data with the help of the SPSS version 21.

The findings of their study were fish feeds found to be most expensive in the fish farming in Kenya and worldwide. Following their findings the study recommended that for attaining the sustainable fish farming only areas with enough water resources and raw materials should be considered for fish farming and the Kenya government may partner with the county government to address on how to make fish feeds. This study is relevant to mine for the reason that it finds out the determinants for sustainability of fish farming which is most important for fish farming in creation of employments, they used questionnaires in data collection the same as my study, and also they used a computer program in data analysis the SPSS, in the same was to my study.

This study differs from my study on sampling, they used stratified random sampling while my study used convenience non-probability sampling, and they conducted their study in Kenya whereas my study conducted in Tanzania.

2.4.3 Empirical Studies in Tanzania

Mwaijande and Lugendo (2015) their study examined the constraints that limit transformation of fish farming from subsistence to commercial farming in Tanzania. The study objective was to identify constraints facing fish farming in Tanzania with explored question why fish farming sub-sector is underdeveloped in Tanzania. The method used was survey design in collecting primary data. Their study applied random sampling in 8 regions namely Coastal, Dar es salaam, Ruvuma, Kagera, Morogoro, Mbeya, Njombe and Kilimanjaro. They collected and applied primary and secondary data.

The data analysis was done using the SPSS version 17 for descriptive analysis. The results of the study indicated that fish farming in Tanzania is constrained by lack of inputs, supply, technologies, capacity of fish farmers, policy related issues and fish value chain. Their study recommended that, for the fish farming subsector to transform from subsistence to commercial fish farming in Tanzania to happen, the actions to undertake are to strengthen the Public Private Partnerships in the value chain, to provide capacity building programmes, provide extension services and to establish fish farming subsidy programme. Their study is relevant to my study in the following reasons; it dealt with fish farming as mine, it dealt with underdeveloped fish farming subsector so as to develop and the use of SPSS a computer program in data analysis. The study differs from my study in the following reasons; their study conducted outside Rukwa region and is based on the transformation of the fish farming from subsistence to commercial while my study aimed at creation of employments through catfish farming.

2.5 Legal Framework

The fishery industry in Tanzania is governed with the Fisheries Act of 2003, the Fisheries Regulations Act of 2009, the TAFIRI Act of 2016 and the Constitution of the United Republic of Tanzania (URT) of 1977. Also the Tanzania Fisheries Policies of time to time help in reforming the fisheries sector in Tanzania.

The fisheries sector has three known institutions to date which are TAFIRI, FETA, and the Ministry of Agriculture, Livestock and Fisheries of Tanzania. TAFIRI and FETA are institutions responsible for research and advice the government following their research finding results.

The government of Tanzania in consideration of the existing employment problem, it aimed at developing a sustainable, competitive, vibrant and more efficient commercialized fisheries and aquaculture industry for contributing to the national economy (The Tanzania National Fisheries Policy, 2015). Also in supporting the International Labour Organization (ILO) and other organizations the Tanzania government aimed at creation of more and better employment opportunities in the fisheries and aquaculture sectors (The Tanzania National Fisheries Policy, 2015).

The Constitution of the URT (1977) and the Employment and Labour Relations Act of 2004 provides for the right of the employees to be paid with just remunerations as entitled to the measure and tune of work done. Schwalbe (2012 and 2014) projects have processes which are initiation, planning, execution, monitoring and control, having trainings in these processes will render the catfish farming be run successfully resulting in employments. The aqua farmers are to be advised in aqua farming

activities for sustainability of the created employments in consideration of the environment and the available resources (The Tanzania Fisheries Regulations, 2009), this is following the government in considering her increasing population in solving the unemployment problem in order to create employments to the Tanzania societies. Success in fisheries investment plan is being hinged with the extent to which an investment friendly environment creation such as regulatory barriers (Bunda District FIP 2015 ó 2020). The opportunity for catfish farming for creation of employment is available by virtue of having no competition in the sector. It is found that in Tanzania no competition in the fish market (Rothuis *et al*, 2014), the fish market will be a catalyst in investment in the sector that will lead to creation of employments. Tanzania mining and agriculture are the mainstays of the country's economy the majority depends mainly on agriculture and fisheries as main source of employment in Tanzania (Budeba, 2016).

2.6 Research Gap Identified

Unanswered questions and gaps are identified through passing in literatures, theories and journals of relevant study (Kumar, 2011). Various studies have been conducted but not in Rukwa suffering from a disease of developing the available natural resources which are for the time being are over exploited without regarding of their future and sustainability of the resources. The identified gap was that no study has been conducted in catfish farming for employments creation. Employments via catfish farming will change their minds and economical situations provided they positively perceive fish farming projects with them in their virgin fertile wetlands in the low grounds and more. This study expected to cover the existing gap by

providing mechanisms which will drive the society to be pressured to resemble the more successful catfish farmers holding the same environments and resources. For this to be successful the government and NGOs supports are highly required in subsidies, education, experts and policies.

2.7 Conceptual Framework

Conceptual framework is the basis of research problem which stems from theoretical framework consisting of issues a study embeds and is purporting to describe the selected aspects from theoretical framework to become the basis of researcher's inquiry or investigation (Kumar, 2011). The conceptual framework of the study used institutional theory from which the independent and dependent variables were considered. A dependent or criterion variable is a variable of primary interest, a viable factor to researcher needs to understand and perform investigation for finding answers or solutions to research problem (Sekaran, 2003). For this study, the dependent variable is potential creation of catfish farming employments. Independent variable (IV) is a variable that influence a dependent variable (DV) to have affected positively or negatively (Sekaran, 2003; Cohen, Manion and Morrison, 2007; and Walliman, 2011). The IVs were memory, isomorphic pleasure (coercive, mimetic and normative), legitimacy and logic which lead to the potential creation of catfish farming employments.

2.8 Brief Discussion of Variable Supporting the Study

For the theory to work properly there is a need of being supported or accompanied with other variables following the target of the study in connection to the institutional theory. The factors selected to support the institutional theory constraints were

memory, legitimacy and logic. Memory is synonymous to history and for anything to be established it is better to look on its history/memory so as to get warned for the establishment in terms of easiness and hardness and manageability of the project (Soderlund and Lenfle, 2013). Memory/history lets relate the background and transfer to the potential issue to be addressed (Walliman, 2011). Legitimacy was included so as to test the legality of the things to be established to the community for the community. The laws of the country strictly forbid illegal things to be established and on the other hand if legal the laws allow its establishment and development. For the success of project instituting legitimacy need be focused otherwise should face legal negations and hence failure of the development projects and loss incurred (Marshall and Cole, 2014 and Marall and Marshall, 2017). The logic was included so as to answer a question of importance to the community; should the catfish farming to the community for employment creation logical or illogical, obviously was found logical due to its positive results to the community. Coercive has a function of driving the community people to engage in catfish farming, mimetic isomorphism drive the community people to imitate and cope from others and the normative due to its nature of involving behavior. So the all six variables have connection to each and meet the value of influencing the DV.

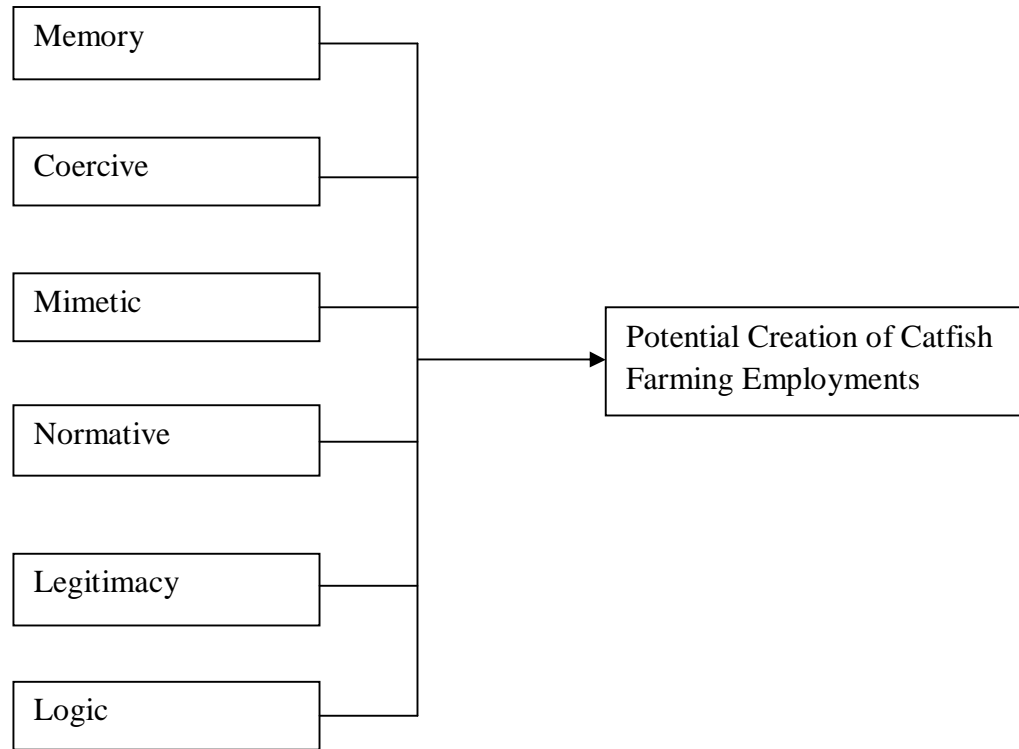
INDEPENDENT VARIABLES ‘IV’**DEPENDENT VARIABLE ‘DV’**

Figure 2.1 Displaying Study Conceptual Framework

Source: Constructed by Researcher 2019.

2.9 Theoretical Framework

The identified factors from various literatures are to be expressed in theoretical framework purporting to make clear and easy of understanding the expected relationship of the relevant variables (Burns and Burns, 2008 and Sekaran, 2003), this will let audiences know what is going on. This study dealt with two types of variables which were IVs and DV. The IVs were memory, coercive, mimetic and normative, legitimacy and logic. Potential creation of catfish farming employments was a DV which was the focus of this study. These two variables were kept into a relation to each other in which the IVs were found to have an impact to the DV,

which was potential creation of catfish farming employments that were influenced positively in attaining the desired goal of the study. According to Adams et al (2007) IVs are variables which have expectations to have influence on DV of the research study. Simply the IVs are the resources or inputs in successfully attaining the needs and expectations of the community, which was the main objective of the study.

2.10 Summary

According to the reviews of literature, there is a link or relation between the identified and selected factors and employment. For employment to be created it depends on the influences of IVs which were memory, coercive, mimetic and normative, legitimacy and logic. The memory, coercive, mimetic and normative, legitimacy and logic leads to catfish farming ideas which causes institution of investment projects, the investment projects need employees for running the invested projects activities, the interested society would go for employments, employees need to have trainings for skills and knowledge of their responsibilities for good performance, employment need individuals with abilities to do the job, conducive environment conditions would make employees to think of employment and the available resources would easy the investors to invest and thus the problem would meet a conclusive solution which is creation of employments.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter covers research strategies, survey population, and area of the research or survey, sampling design and procedure, variables and measurements procedure, methods of data collection, data processing and analysis, and expected results of the study.

3.2 Research Paradigm

This study employed positivism philosophy. The study paradigm or philosophy is the way of describing the world view that informed by philosophical assumptions about the nature of the study that involves the ontology that tells on the reality, epistemology tells on how to know the reality (Walliman, 2011). Theoretical perspective is about the approaches to be used for getting the knowledge of the study (Sekaran, 2003), this study therefore applied study variables both IVs and a DV to enhance getting knowledge of the study easily. Methodology is about procedures to be used to acquire the knowledge of the study, this study used quantitative method and the study is quantitative. Methods involves the possible tools to apply for getting the relevant knowledge required for the study (Walliman, 2011) this study applied questionnaires in primary data collection. The researcher used survey research with the help of questionnaires constructed in Likert scale of 5 points for easy of primary data collection. The study applied quantitative method. The data was primary data and was quantitative. The researcher used questionnaire forms for primary data collection. In knowing the reality of the study the researcher tested through reliability

and validity tests in the analysis and multiple linear regression model tests done by researcher in proving the assumptions. Tables were used for presenting the analyzed results.

3.3 Research Strategies

This study is an exploratory and used a survey study for the reason that it covered a specific area with regard to the questions and objectives of the research at hand. Case research or case study is a method of intensively empirical investigation or studying a phenomenon over time within its natural setting in one or a few sites (Bhattacharjee, 2012, and Porta and Keating, 2008). Also, the case study answers the what, why, and how questions (Saunders et al 2007 and Yin 2003), this study have questions of such a nature hence used the case study. Driscoll (2011) Surveys can contain quantitative which imply numerical and qualitative which involve written answers and descriptions of data. This study used the quantitative method because numerical data from the targeted applied to satisfy the study requirements. Due to the stated reasons and by virtue of exploratory and case study the research applied survey for data collection as naturally required to be logical.

3.3.1 Survey Population

The target population of the study was about 2,513 people of the society including employed and unemployed in Rukwa region. The survey was conducted to people of the society males and females without regarding their education level were considered and they responded effectively. According to Kothari (2004) survey in data collection can use one or more of the ways which are observation, personal interview, telephone interview, questionnaires and schedules. People of the

community were involved for the reason that they are the affected. Fisheries officers at Nkasi district council involved because they are concerned with fisheries issues and are the experts within the district. Leaders from Kate, Nchenje, Ntemba, Ntalamila, Myula, Chonga and Chalatila villages included in responding to the questionnaires and for gathering the other respondents within their communities.

3.3.2 Area of the Research or Survey

The survey conducted both in rural and urban for some strong reasons. Rural and urban surveys to stakeholders and Nkasi district council fisheries officers at Nkasi, Rukwa. The special area of my study was Rukwa where the problem of unemployment is suffered and need a solution by creation of employment opportunities to the whole society of the community. Another reason for the area was availability of the conducive and suitable environments, availability of resources such as fingerlings and the wetlands which stays wet and with water for long time of the year almost the whole year.

3.4 Sampling Design and Procedure

Walliman (2011) defines sample as small number of the whole population selected to show what the whole population is like. Sampling is a process of selecting a group from a large group of individuals whose representation is of the same as those unselected (Walliman, 2011). According to Charmaz (2006) sufficing sample size for research is 25 respondents. A sample size of 50 and preferably 100 observations for most research situations and should not be less than 30 are adequate in research (Hair *et al*, 2014). Yurdugul (2008) the adequate minimum sample size for Cronbach's

Coefficient alpha () should be between $n = 30$ and $n = 100$ for unbiased Cronbach's coefficient alpha (). Due to these reasons, from the target population the sample size of 100 people of the community were taken whereby males were 62 and females 38 making the summation of 100 respondents of the study. The sample size of 100 sufficing the study since it is four times the proposed amount by Charmaz (2006). Non- probability sampling was employed for the reason that people are not stagnant, they are movable and for saving time and effort in the course of the study. Opportunity sampling also known as convenience sampling method is found to be the easiest to access participants, costs and time savers (Walliman, 2011) was employed in data collection. The questionnaire surveys in the form of Likert scale of 1 to 5 points scale were applied in the study for the respondents to express freely their opinions on particular statements. Interviewees were identified by having involved in fish collections, people who hate unemployment effects of the localities, fish product dealers, having interest with development projects and involving in projects dealings, jobless societies and fishery officers who are the experts in the field of the study. Interviewees were of all genders ranging from 18 years and above. I sampled the population for limiting the number of people who would make the study not to get completed in time and cost plan and others having nothing they know of the study such as minors and people of unsound minds.

3.5 Variables and Measurement Procedure

The kinds of data or information used were quantitative data. Primary data obtained by surveys. Variables for data collection were memory, coercive, mimetic, normative, legitimacy, logic and improved employments for catfish with codes ME,

CO, MI, NO, LE, LO, and IEFC respectively. Questions in Likert scale form in five scale points were used in measuring the variables for the purpose of obtaining data enhancing to show the existence of the relationship between IVs and DV of the study. This study used questionnaires in data collection. Reasons for using questionnaires were gathering standardized data, data results can be generalized to the whole population of the study, enables comparison to be made year after year longitudinally and cross-sectionally using the same questions or statements, the data are easily entered in a computer for analyzing, easy analysis, data gathered in the same way from all respondents or cases, data can be easily gathered from large numbers (Matthews and Ross 2010). Also, since using questionnaires are not necessitating names of respondents this automatically fits the ethical requirements for confidentiality issues.

3.6 Methods of Data Collection

In this study primary data were collected using surveys. Questionnaires forms were applied. Questionnaires, observation and interview are the main three data collection methods (Sekaran 2003) questionnaires were used in this study. Matthews and Ross (2010) and Kothari (2004) defines primary data are the data collected afresh and for the first time and are original in character differing from secondary data which are ready collected data for previous works or studies. Data are collected aiming at making fair and reasonable decisions of the study regardless of the interests of the interviewees or the researcher that will affect the meaning of the research (Kumar 2011).

3.6.1 Questionnaires

Questionnaires were distributed to the study community respondents and requested the respondents to answer them with free consent according to their attitudes without any undue influences from the researcher or any other person. Every person was free to select the answer in accordance to personal opinions or choice of the statements put as per the variables or dimensions of the study.

The questionnaires were designed in conformity to the research objectives and the questions were put in form of statements in which the respondents were asked to circle the number of their choice selected to be their personal opinion to each particular statement. This method was easy in collecting data within a short time and was also cost effective. Swahili language was used in conversations between the researcher and respondents on face to face and others in mobile phones for the reason that Swahili is the most applicable and easy for mutual understanding which facilitates in responding to the questionnaires in time.

3.7 Data Processing and Analysis

According to Pandey and Pandey (2015) advocates that data analysis carries a whole range of activities of both types which are qualitative and quantitative. The statistical methods and techniques give out the answers to the problem questions of the study (Pandey and Pandey, 2015). Cohen *et al* (2007) provides two logical considerations for data analysis which are first is what needs to be done with the data after being collected, how will they get processed and analyzed for the study at hand, and second is on how will the analyzed results be verified and validated. This study applied quantitative methods/approaches in analyzing the collected data because the study

comprised quantitative data. In supporting the process of data analysis the study used SPSS technology as a tool. This study used a case study method for the reason of deeply examining to find out the positive helpful results to the community. The results of analysis were interpreted by descriptions/explanations. Carefully scrutinizing documented case studies, the manager is in a position to obtain several clues as to what factors a problem might be operating in the current situation and how a problem might be solved (Sekaran, 2003). Case research or case study is a method of intensively empirical investigation or studying a phenomenon over a time within its natural setting in one or a few sites (Bhattacharjee, 2012, and Porta and Keating, 2008).

This study employed multiple regression analysis purporting to study the relationship between variables. The multiple regressions have assumptions as a checklist for trusting the validity of the regression results which are normality, multicollinearity, linearity, homoscedasticity and outliers (Almquist *et al*, Undated). According to Almquist *et al* (Undated) for normality it need be normally distributed, for outliers it need all individuals follow the overall pattern of data, linearity need be linearly that is the effect of X on Y, homoscedasticity the variance around the regression line should be constant to all independent variables and for multicollinearity, very high collinearity between independent variables is synonymous to multicollinearity. Burns and Burns (2008) posit that very high collinearity which is also known as multicollinearity is to be avoided in linear regression analysis.

The study multiple regression models used was;

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + e$$

Wherefore;

Y = Potential Creation of catfish farming employments

a = Constant

B₁₋₆ = Coefficients of the predictor/independent variables 1, 2, 3, 4, 5 and 6.

X = Independent variables (X1 = Memory, X2 = Coercive, X3 = mimetic,

X4= Normative, X5= Legitimacy, X6 = Logic)

e = Standard error

Potential Creation of Catfish Farming Employments =

$$a + B_1(ME) + B_2(CO) + B_3(MI) + B_4(NO) + B_5(LE) + B_6(LO) + e$$

3.8 Validity and Reliability of Data

3.8.1 Validity

Validity is the indication of accuracy (Cronk, 2016). Validity is synonymous to credibility in quantitative research (Kumar, 2011). Validity is the ability of a research instrument to measure what is desired to be measured and the findings are based on the aim for worthiness of the research work (Kumar, 2011). Validity is divided into two according to its dealing these are internal validity and external validity. When dealing with cause and effect relationship in validity sense is termed as internal validity and when dealing with environmental that is generalizing the results in the

wide situation, cases and or population is external validity (Sekaran, 2003 and Cohen, *et al*, 2007).

3.8.2 Reliability

Reliability is an indication of consistency and stability for ensuring error free that assist in assessing the goodness of a measure (Cronk, 2016 and Sekaran, 2003). According to Burns and Burns (2008) reliability is the degree of free measurement error. Reliability is a measure of scale between 0 and +1; these are for positive reliability the measures are near to positive 1 and 0 where there is no reliability. Reliability is looked for just two concepts which are how reliable instrument is and how unreliable is an instrument (Kumar, 2011). In testing for the reliability in this study the reliability analysis was done by using an SPSS program technique the Cronbach's Alpha (). In the reliability analysis 32 items were used.

3.9 Expected Results of the Study

This study was expected to highlight and potentially attempt to solve the problem of unemployment by creating employment opportunities together with other associated chances to the community. Picking the right cases for study, understanding and correctly translating the dynamics to one's own situation, are critical for successful problem solving (Sekaran, 2003). This help the community and the investors, Rukwa municipal and districts council and the government depending on how they perceive the problem and the effects to the future of Tanzania's prevailing peace. All these are to be with regard to the rules of environmental impact assessment (EIA), according to Smith (2002) the actions of people to the earth and the effects of the

projects should not injure the environment which is a habitat. This study was likely to find a conclusive solution by instituting community employments.

3.10 Research Ethics

The researcher in the course of this study adhered to the research ethics. Since the study used convenience under non probability sampling, the respondents were with free consent and with their consent after been requested to respond to the questionnaires. The respondents were informed on the aim of the study, confidentiality of the information given to the researcher, the aim and strictly use of the information they provided just for academic purpose only and confidential. The works of other persons were all acknowledged with due respect. The researcher created good friendship communications with the respondents purporting to access the information as desired.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents data analysis findings and discussions. The results and discussions presented in this chapter are based on objectives of the study. Mainly the study aimed at examining the influence of institutional forces in creating employments through catfish farming in Rukwa, Tanzania. Specifically it aimed at examining the historical facts about employment opportunities through catfish to the community, to assess isomorphic pleasure to use catfish as an opportunity for employment, and to examine catfish employment logic and catfish employment opportunities legitimacy. The results presented in form of texts and tables for ease of the reader to understand. The descriptive statistics and multiple regressions have been used in data analysis with the use of computer program known as the SPSS technological analyzing tool.

A total of 100 questionnaires were distributed to 100 respondents and all of them completed due to personal face to face dealing survey by providing instructions to them for ease of the respondents to respond.

4.2 Description of Biographic Information Applied

Table 4. 1: Demographic Characteristics of the Study Sample

Variable	Category	Percentage %	Frequency
Gender	Male	62	62
	Female	38	38
Age	18 ó 20 Years	10	10
	21 ó 25 Years	17	17
	26 ó 30 Years	17	17
	31 ó 35 Years	15	15
	36 ó Above Years	41	41
Education Level	Primary School	43	43
	Secondary School	36	36
	Diploma	12	12
	Degree	5	5
	Masters	3	3
	PhD	0	0
Employment	Employed	34	34
Status	Unemployed	66	66

Source: Research Data (2019)

4.2.1 Gender of the Respondents

The study was conducted to both males and females at different ratios according to ease of being found, willingness and readiness in responding to the questionnaire statements. The respondents were 100 among them males were 62 which are equal to

62% and females were 38 which are equal to 38 %. These have been illustrated in table 4.1 below.

It is therefore that the findings shows that there was gender balanced basing on all males and females of the study community. Thus, there was no bias in gender consideration since the opinions from both were taken regardless of the gender.

4.2.2 Age of Respondents

The study dealt with respondents aged from 18 and above in categories of 18 ó 20 years, 21 ó 25 years, 26 ó 30 years, 31 -35 years and 36 years and above. Table 4.1 reveals that 10% of the community respondents aged from 18 ó 20 years, 17% aged 21 ó 25 years, 17% aged 26 -30 years, 15% aged 31 ó 35 years and 41% of the community respondents aged 36 years and above which are the older people. According to the findings it was revealed that the community have 59% youth compared to 41% of the aged people of the community. This proves that the community can afford to farm catfish due to having high percentage of the people aged below 35 years who are energetic and can get involved in catfish farming for the benefit of the society in the surrounding community and the region at large at a rate of $100\% - 41\% \text{ (age go)} = 59\% \text{ (youth)}$. This has been illustrated above in table 4.1.

4.2.3 Education Levels of Respondents

Table 4.1 displays that, the survey community had 43% of people with primary education level and 36% with secondary school education level. On the other hand, only few respondents had above secondary level of education which were diploma

level 12%, first degree 5%, Masters 3% and no one had PhD in the study community. From the findings, 79% of the community holds primary and secondary education levels. This logically shows that the community people holds low levels of education to be employed in public sectors but there is a need of instituting the catfish farming employments for the activities at large need low level education to fit the activities in the industry.

4.2.4 Respondents Employment Status

Table 4.1 shows that 66% of the community populations were unemployed and only 34% are employed. The findings of this study vividly evidence that the institution of the catfish farming for employment is of necessity for serving the majority of the community people who are the unemployed to have employments.

4.3 Findings According to Specific Research Objectives

The study had three specific objectives as developed in chapter one. The results were presented specifically according to particular objective mentioned. The dimensions were memory, coercive, mimetic, normative, legitimacy and logic.

4.3.1 Research Objective 1: To Examine the Historical Facts About Employment Opportunities Through Catfish to the Community.

In this objective the aim was to find out the effect of historical facts in creating employment through catfish farming in Rukwa, Tanzania. The researcher formulated a questionnaire with statements coded ME1, ME2, ME3, ME4, ME5 and ME6 illustrated in appendix I purporting to find responses from the respondents as to whether history have effects or not in the created catfish farming employments. The

researcher presented the findings in summarized form by combining fully agreed and agreed to as agreed and disagreed and fully disagreed were combined to as disagreed whereas neutral remained the same.

According to the findings in table 4.2 below, it shows that, 48% of the respondents agreed whereas 28% disagreed and 24% of the respondents were neutral on the statement with code ME1 that stated in the past years catfish farming created a number of activities. On the memory statement with code ME2 that stated in the past years catfish farming activities demanded employees, the respondents were of the view that 38% agreed, 43% disagreed and only 19% were neutral. On the memory statement coded ME3 that stated in early years communities cultured quality catfish for employment the findings were 21% agreed, 55% disagreed and 24% were neutral on the statement. The findings on the statement with code ME4 was 26% agreed, 51% disagreed and 23% were neutral on the statement that stated in the past years farmed catfish created community employments. For the statement coded ME5 that stated in early years catfish employments benefited the community the findings were like this 39% agreed, 45% disagreed and 16% were neutral on the statement. Lastly on the statement with code ME6 stated in the past years farmed catfish employments created by the market the findings were 19% agreed, 58% disagreed and 23% were neutral.

Taking in consideration of the results on the memory facts it was evidenced that the majority of the respondents disagreed to the memory to influence catfish farming to create employments which was a negative influence to the created catfish farming employments.

Table 4. 2: Displaying responses on memory with frequency and percentages

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	F	%	f	%	f	%
In the past years catfish farming created a number of activities	15	15	33	33	24	24	18	18	10	10	100	100
In the past years catfish farming activities demanded employees	17	17	21	21	19	19	32	32	11	11	100	100
In early years communities cultured quality catfish for employment	9	9	12	12	24	24	31	31	24	24	100	100
In the past years farmed catfish created community employments	7	7	19	19	23	23	26	26	25	25	100	100
In early years catfish employments benefited the community	17	17	22	22	16	16	26	26	19	19	100	100
In the past years farmed catfish employments created by the market	4	4	15	15	23	23	32	32	26	26	100	100

Source: Research Data 2019.

4.3.2 Research Objective 2: To Assess Isomorphic Pleasure to Use Catfish as Opportunity for Employment.

The current objective two was to assess isomorphic pleasure to use catfish as opportunity for employment. The isomorphic pleasure has three mechanisms which are coercive isomorphism/pressure, mimetic isomorphism/pressure and normative isomorphism/pressure which were subjected to the questionnaire for the respondents to give their opinions on whether they are significant towards created catfish farming employments.

4.3.2.1 Coercive Pressure/Isomorphism

The study examined the influence of coercive pressure/isomorphism in the creation of employments through catfish farming. In compliance to the objective two of this study, the researcher formulated a questionnaire with statements coded CO1, CO2, CO3, CO4, CO5 and CO6 as shown in appendix I purporting to find responses from the respondents as to whether coercive isomorphism/pressure have effects or not in the created catfish farming employments. Table 4.3 below clearly indicates the responses vividly. The researcher presented the findings in summarized form by combining fully agreed and agreed to as agreed and disagreed and fully disagreed were combined to as disagreed.

In table 4.3 below reveals that 56% of the respondents agreed whereas 32% of the respondents disagreed and 12% were neutral on the coercive statement coded CO1 that stated penal laws of Tanzania coerces the community to catfish activities. The findings of the second statement with code CO2 were 69% agreed whereas 14% disagreed and 17% were neutral on the statement that stated enacting laws coercing

communities to employments is necessary. The responses were 41% agreed, 44% disagreed and 15% were neutral on the statement with code CO3 that stated fishery regulations are barriers to catfish employment opportunities. On the other hand, 70% agreed, 14% disagreed and 16% were neutral on the statement coded CO4 stated law enforcers are to coerce the idle in the community for working. Moreover, 84% of the respondents agreed whereas 8% disagreed and 8% were neutral on the statement coded CO5 that stated the Constitution of Tanzania provides for the right to work and pay. The response weighed 38% agreed, 35% disagreed and 27% were neutral on the statement with code CO6 that stated rules defeats political negations to community catfish employment. These findings imply automatically that, the community needs the coercive pressure for working to the creation of catfish farming employment activities.

Table 4. 3: Indicates Opinions of Respondents on Influence of Coercive

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	F	%	f	%	f	%
Penal laws of Tanzania coerces the community to catfish activities	27	27	29	29	12	12	28	28	4	4	100	100
Enacting laws coercing communities to employments is necessary	40	40	29	29	17	17	11	11	3	3	100	100
Fishery regulations are barriers to catfish employment opportunities	20	20	21	21	15	15	34	34	10	10	100	100
Law enforcers are to coerce the idles in the community for working	48	48	22	22	16	16	11	11	3	3	100	100
The Constitution of Tanzania provides for the right to work and pay	44	44	40	40	8	8	3	3	5	5	100	100
Rules defeats political negations to community catfish employment	16	16	22	22	27	27	17	17	18	18	100	100

Source: Research Data (2019)

4.3.2.2 Mimetic Isomorphism/Pressure

The study aimed at finding out if mimetic was necessary to the community in creation of employments through catfish farming. In compliance to the objective two of this study, the researcher formulated a questionnaire with statements with codes MI1, MI2, MI3, MI4, MI5 and MI6 as found in appendix I purporting to solicit

responses from the respondents as to whether mimetic isomorphism/pressure have effects or not in the creation of catfish farming employments. The researcher presented the findings in summarized form by combining fully agreed and agreed to as agreed and disagreed and fully disagreed were combined to as disagreed.

The findings in table 4.4 below shows that 92% of the respondents agreed while 2% disagreed and 6% were neutral on the questionnaire statement coded MI1 that stated the community needs to learn from others who farm catfish. Table 4.4 also reveals that, 89% of the respondents agreed, 8% disagreed and 3% were neutral on the statement coded MI2 that stated trainings in catfish farming is highly needed for employments. It was found also that, 92% of the respondents agreed while 4% disagreed and 4% were neutral on the questionnaire statement with code MI3 which stated that community need to have catfish farming experience from others. In the same way of response, 83% agreed whereas 8% disagreed and 9% were neutral on the statement with code MI4 that stated sharing ideas with experienced drive the community to do the same. Moreover, 93% of the respondents agreed 5% disagreed and 2% were neutral on the statement with code MI5 that stated training will make the community produce high quality catfish. Besides, 93% of the respondents agreed on the statement, 6% of the respondents disagreed on the statement and 11% of the respondents were neutral on the statement with code MI6 that stated confidence in catfish farming will create sustainable employments.

According to the findings, it showed that the majority of the respondents were aware of the mimetic pressure and knows its importance in the industry at hand. From the results, it suggests that mimetic pressure was of important in catfish farming

employment creation in the community for benefiting the community in various ways. This means the mimetic isomorphism has a positive influence on the potential creation of catfish farming employments.

Table 4. 4: Indicating Respondents' Opinions on Mimetic Influence

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
The community need to Learn from others who farm catfish	64	64	28	28	6	6	1	1	1	1	100	100
Trainings in catfish farming is highly needed for employments	56	56	33	33	3	3	4	4	4	4	100	100
Community need to have Catfish farming experience from others	58	58	34	34	4	4	3	3	1	1	100	100
Sharing ideas with Experienced drive the community to do the same	45	45	38	38	9	9	4	4	4	4	100	100
Training will make the community produce high quality catfish	67	67	26	26	2	2	1	1	4	4	100	100
Confidence in catfish farming will create sustainable employments	49	49	34	34	11	11	4	4	2	2	100	100

Source: Research Data (2019)

4.3.2.3 Normative Pressure

The study also aimed at determining the influence of normative pressure in creation of employments through catfish farming. In compliance to the objective two of this study, the researcher formulated a questionnaire with 6 statements with codes NO1, NO2, NO3, NO4, NO5 and NO6 as found in appendix I purporting to find responses from the respondents as to whether normative isomorphism/pressure have effects in the creation of catfish farming employments. The researcher presented the findings in summarized form by combining fully agreed and agreed to as agreed and disagreed and fully disagreed were combined to as disagreed.

The findings in table 4.5 below reveals that, 64% of the respondents agreed, 21% disagreed and 15% not agreed or not disagreed (neutral) on the statement coded NO1 with the statement that stated communities have rules or norms for adherence in conformity. The findings reveals that, 50% of the respondents agreed while 21% of the respondents disagreed and 15%% of the respondents were neutral on the statement with code NO2 with a statement stating existing rules/norms lead to community catfish employments. Table 4.5 also indicates that, 84% of the respondents agreed on the statement 6% disagreed and 10% were neutral to a statement with code NO3 that stated the catfish farming activities smoothly done raise production. On the other hand, 85% of the respondents agreed whereas 10% disagreed and 5% were neutral to the statement with code NO4 stating special trainings in catfish farming projects is highly required. To the statement coded NO5, the respondents responded as follows; 73% agreed while 13% disagreed and 14% were neutral on the statement stated that lacking catfish farming skills will lead to

communities cope others. Out of 100% of the respondents, 88% agreed while 7% disagreed and neutral were 5% to a statement coded NO6 stating strategies to produce high quality catfish is very important to apply. The findings revealed that the respondents are aware with and know the importance of the isomorphic pleasure in the industry for successfulness in their communities and hence the normative isomorphism was found to have positive influence to the creation of catfish farming employments.

Table 4. 5: Indicating Respondents' opinions on Influence of Normative

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	F	%	f	%	f	%
Communities have rules or norms for adherence in conformity	40	40	24	24	15	15	16	16	5	5	100	100
Existing rules/norms lead to community catfish employments	21	21	29	29	25	25	19	19	6	6	100	100
The catfish farming activities smoothly done raise production	48	48	36	36	10	10	5	5	1	1	100	100
Special trainings in catfish farming projects is highly required	56	56	29	29	5	5	8	8	2	2	100	100
Lacking catfish farming skills will lead to communities cope others	36	36	37	37	14	14	7	7	6	6	100	100
Strategies to produce high quality catfish is very important to apply	65	65	23	23	5	5	5	5	2	2	100	100

Source: Research Data (2019)

4.3.3 Research Objective 3: To Examine Catfish Employment logic and Catfish Employment Opportunities Legitimacy.

This objective has been discussed in three sections which are legitimacy, logic and improved employment for catfish.

4.3.3.1 Legitimacy

Objective three aimed at finding out the legitimacy in catfish employment opportunities. Legitimacy had 6 statements with codes LE1, LE2, LE3, LE4, LE5 and LE6 each with its own question/statement as put in the questionnaire in appendix I. The researcher presented the findings in summarized form by combining fully agreed and agreed to as agreed and disagreed and fully disagreed were combined to as disagreed.

The results in table 4.6 below indicate that, 72% agreed while 9% disagreed and neutral were 19% on the statement of legitimacy with code LE1 that stated legitimacy of catfish employment opportunities bases on benefits. Table 4.6 also reveals that, 44% of the respondents agreed whereas 37% disagreed and 19% neutral to a statement coded LE2 that stated strict laws are barriers to catfish farming projects for employments. Moreover, table 4.6 show that 29% of the respondents agreed whereas 55% disagreed and 16% of the respondents were neutral to a statement coded LE3 that stated catfish farming activities are affected by government laws. Furthermore, it was found 71% of the respondents agreed whereas 17% disagreed and 12% of the respondents were neutral to a statement coded LE4 that stated rigidity in projects creating sustainable employments need changes. Nevertheless, 81% of the respondents agreed whereas 11% disagreed and 8% of the

respondents were neutral to a statement coded LE5 that stated the parliament are to make laws favoring the community needs. Besides, 55% of the respondents agreed whereas 20% disagreed and 25% of the respondents were neutral to a statement coded LE6 that stated catfish farming employments eliminate offences in the community.

Table 4. 6: Indicating Respondents' Opinions on Influence of Legitimacy

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	F	%	f	%	f	%
Legitimacy of catfish employment opportunities bases on benefits	34	34	38	38	19	19	5	5	4	4	100	100
Strict laws are barriers to catfish farming projects for employments	21	21	23	23	19	19	21	21	16	16	100	100
Catfish farming activities are affected by government laws	18	18	11	11	16	16	29	29	26	26	100	100
Rigidity in projects creating sustainable employments need changes	32	32	39	39	12	12	10	10	7	7	100	100
The parliament are to make laws favoring the community needs	59	59	22	22	8	8	10	10	1	1	100	100
Catfish farming employments eliminate offences in the community	23	23	32	32	25	25	11	11	9	9	100	100

Source: Research Data 2019

4.3.3.2 Respondents' view on logic

The study objective three aimed to get the opinions from respondents on the statements concerning logic to find out if logic was necessary for the creation of employments through catfish farming. In compliance to the objective three of the study, the researcher formulated a questionnaire with 6 statements with codes LO1, LO2, LO3, LO4, LO5 and LO6 as found in appendix I. The researcher presented the findings in summarized form by combining fully agreed and agreed to as agreed and disagreed and fully disagreed were combined to as disagreed.

The findings in table 4.7 below shows that 81% of the respondents agreed while 9% disagreed and 10% were neutral to the statement of the questionnaire coded LO1 which stated that, catfish farming employments is logical to the community. Besides, 82% of the respondents agreed while 9% disagreed and 9% were neutral to the statement of the questionnaire coded LO2 which stated that catfish farming project will employ the majority of the community. In table 4.7 below it was revealed that, 79% of the respondents agreed while 11% disagreed and 10% were neutral to the statement of the questionnaire coded LO3 which stated that catfish farming will provide sustainable community employments. Moreover, 90% of the respondents agreed while 5% disagreed and 5% were neutral to the statement of the questionnaire coded LO4 which stated that the community will benefit from catfish by gaining earnings. Further in table 4.7 it was revealed that, 82% of the respondents agreed whereas 5% disagreed and 13% were neutral to the statement of the questionnaire coded LO5 which stated that the catfish activities will create reliable markets to raise economy. Furthermore, 82% of the respondents agreed whereas 13% disagreed and

5% were neutral to the statement of the questionnaire coded LO6 which stated that created catfish farming employments will change the life standards.

Generally, the results of the study suggest that the respondents within the community agreed on the fact that logic was necessary for the creation of employments through catfish farming.

Table 4. 7: Indicating Respondents' Opinions on Influence of Logic

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Catfish farming employments is logical to the community	51	51	30	30	10	10	4	4	5	5	100	100
Catfish farming project will employ the majority of the community	44	44	38	38	9	9	5	5	4	4	100	100
Catfish farming will provide sustainable community employments	36	36	43	43	10	10	7	7	4	4	100	100
The community will benefit from catfish by gaining earnings	59	59	31	31	5	5	3	3	2	2	100	100
The catfish activities will create reliable markets to raise economy	50	50	32	32	13	13	3	3	2	2	100	100
Created catfish farming employments will change the life standards	48	48	34	34	5	5	7	7	6	6	100	100

Source: Research Data (2019).

4.3.3.3 Improved Employment for Catfish

The study also gathered responses to respondents' views about improved employments through catfish. It was found as per table 4.8 that 78% of the respondents agreed whereas 11% disagreed and 11% were neutral on the statement

coded IEFC1 that stated support of employers creates improved employments for catfish. Table 4.8 indicates that 90% of the respondents agreed whereas 4% disagreed and 6% were neutral on the statement coded IEFC2 that stated improved catfish employments will change community economy. Table 4.8 also reveals that 70% of the respondents agreed whereas 18% disagreed and 12% were neutral on the statement coded IEFC3 that stated life standards of the community will change rapidly due to salary. On the other hand, 80% of the respondents agreed whereas 7% disagreed and 13% were neutral on the statement coded IEFC4 that stated Sustainable employments assures the economy of the community. Moreover, 82% of the respondents agreed whereas 7% disagreed and 11% were neutral on the statement coded IEFC5 that stated sustainable employments need high commitment to work skillfully. Furthermore, 87% of the respondents agreed whereas 5% disagreed and 8% were neutral on the statement coded IEFC6 that stated improved employments for catfish let community cycling economy.

Table 4. 8: Improved Employment for Catfish

Factor/Statement	FA		A		N		D		FD		Total	
	f	%	f	%	f	%	F	%	f	%	f	%
Support of employers creates improved employments for catfish	41	41	37	37	11	11	9	9	2	2	100	100
Improved catfish employments will change community economy	57	57	33	33	6	6	0	0	4	4	100	100
Life standards of the community will change rapidly due to salary	37	37	33	33	12	12	15	15	3	3	100	100
Sustainable employments assures the economy of the community	34	34	46	46	13	13	6	6	1	1	100	100
Sustainable employments need high commitment to work skillfully	55	55	27	27	11	11	6	6	1	1	100	100
Improved employments for catfish let community cycling economy	42	42	45	45	8	8	2	2	3	3	100	100

Source: Research Data (2019)

4.4 The Summary of the Study Findings

In this study, the findings were presented in accordance to their particular study objectives and questions first to the third and then summarized and conclusion given as per table 4.9 below.

In summary the study findings to an objective and question concerning memory it was statistically revealed that the majority of the respondents 46.67% disagreed and the rest 31.83% agreed on memory to influence in the creation of catfish employments through catfish farming. However, in the multiple regressions analysis

it was found that, memory had a negative influence on the creation of employments through catfish farming. For the second objective and question respectively, that was concerning with isomorphic pleasure, under constructs which were coercive, mimetic, and normative the study statistically found that coercive was agreed at a rate of 59.67% of the respondents whereas others 24.33% disagreed as per table 4.9 below. In multiple regression analysis, coercive isomorphism was found to positively influence the creation of employments through catfish farming.

For mimetic isomorphism displayed in table 4.9 below it was revealed that the majority of the respondents 88.67% agreed and the rest 5.50% disagreed on mimetic isomorphism to influence creation of catfish employments through catfish farming. However, in the multiple regressions analysis it was found that mimetic isomorphism had a negative influence on the creation of employments through catfish farming. Normative isomorphism on the other hand in table 4.9 below revealed that, the majority of the respondents 74.00% agreed and the rest 13.67% disagreed on normative isomorphism to influence creation of catfish employments through catfish farming. On the other hand, in the multiple regressions analysis, it was found that normative isomorphism had a positive influence on the creation of employments through catfish farming. For the third objective and third question of the study concerning legitimacy and logic, it was revealed in table 4.9 below that the majority of the respondents 58.67% agreed and the rest 24.83% disagreed on legitimacy to influence creation of catfish employments through catfish farming. However, in the multiple regressions analysis it was found that legitimacy had a positive influence on the creation of employments through catfish farming. And lastly, for the logic in the

third study objective and question in table 4.9 below revealed that the majority of the respondents 74.34% agreed and the rest 8.66% disagreed on logic to influence the creation of catfish employments through catfish farming. However, in the multiple regressions analysis, it was found that logic had a positive influence on the creation of employments through catfish farming.

Conclusively considering descriptive statistics and the multiple regressions analysis done, the study found that memory had negative influence, coercive had positive influence to the DV, mimetic had negative influence, normative had positive influence, legitimacy had positive influence, and logic had positive influence to the DV, potential creation of catfish farming employments. Therefore in this study memory and mimetic had found to have negative influence to the DV.

Table 4. 9: Summary of the Findings/Results

Code	Influence of Institutional Forces in Creating Employment Through Catfish Farming	Percentage %					Total Agree and Disagree	
		FA	A	N	D	FD	FA + A	D+ FD
ME	Memory	11.50	20.33	21.50	27.50	19.17	31.83	46.67
CO	Coercive	32.50	27.17	15.83	17.33	7.00	59.67	24.33
MI	Mimetic	56.50	32.17	5.83	2.83	2.67	88.67	5.50
NO	Normative	44.33	29.67	12.33	10.00	3.67	74.00	13.67
LE	Legitimacy	31.17	27.50	16.50	14.33	10.50	58.67	24.83
LO	Logic	39.67	34.67	8.67	4.83	3.83	74.34	8.66

Source: Research Data 2019.

4.5 Inferential Analysis of Data

4.5.1 Validity

Validity is the indication of accuracy on how well ideas fit the reality (Cronk, 2016 and Neuman, 2014). Validity is synonymous to credibility in quantitative research (Kumar, 2011). Validity is the ability of a research instrument to measure what is desired to be measured and the findings are based to the aim for worthiness of the research work (Kumar, 2011). Validity is divided into two according to its dealing these are internal validity and external validity. When dealing with cause and effect relationship in validity sense is termed as internal validity and when dealing with environmental that is generalizing the results in wide situation, cases and or population is external validity (Sekaran, 2003 and Cohen, *et al* 2007).

4.5.2 Reliability

Reliability is an indication of consistency and stability for ensuring error free that assist in assessing the goodness of a measure (Cronk, 2016, and Sekaran, 2003). According to Burns and Burns (2008) reliability is the degree of free measurement error. The coefficient of reliability is a measure of scale between 0 and 1, if the measures are nearly to 1 is considered as perfect reliable and when it is 0 there is no reliability (Mohajan, 2017). Reliability is looked for just two concepts which are how reliable an instrument is and how unreliable is an instrument (Kumar, 2011).

In testing internal consistency for the reliability in this study the reliability analysis was done by using an SPSS program technique, the Cronbach's coefficient Alpha (). According to Madan and Kensinger (2017) and Hair *et al* (2016) a reliable research instrument should have a Cronbach's coefficient Alpha () values of 0.7 and

above. The results in table 4.10 below indicates that, it worth mentioning that all the variables had Cronbach's coefficient which ranges from 0.7 to 0.9. This confirms that the research instrument had internal consistency enough to capture the information required by this study.

In the reliability analysis 36 items were used. The results were like this, the first variable was memory which had 6 items with codes ME1, ME2, ME3, ME4, ME5, and ME6 as in the questionnaire (appendix I) provided the Cronbach's Alpha () of 0.760 (76%) obtained after removing 3 items ME1, ME5 and ME6 for meeting the grounds required in reliability test for acceptance. The Cronbach's Alpha () for attitude scale ranging 0.7 and above is acceptable (Burns and Burns, 2008). The second, third and fourth variables to be analyzed for reliability were isomorphic pleasure measured with Coercive, Mimetic and Normative. For this then, the second variable was coercive with items coded CO1, CO2, CO3, CO4, CO5 and CO6 wherefore 2 items CO3 and CO6 were deleted to meet a Cronbach's Alpha () of 0.678 which is acceptable under the thumb rule. The third variable was mimetic had 6 items with codes MI1, MI2, MI3, MI4, MI5, and MI6 all were used and the Cronbach Alpha () of 0.800 were obtained which is acceptable. The fourth variable was normative had 6 items coded NO1, NO2, NO3, NO4, NO5 and NO6 all were used and the Cronbach Alpha 0.718 which is acceptable. The fifth variable in the reliability analysis was legitimacy that had 6 items with codes LE1, LE2, LE3, LE4, LE5 and LE6, out of them all 3 were used and 3 deleted which were LE2, LE3 and LE 6 for the purpose of meeting the acceptance grounds in the reliability analysis came out with its Cronbach Alpha () output of 0.661 which is acceptable since been

rounded off it approaches to 0.7 for acceptance with regard to the thumb rule of Cronbach's Alpha () attitude scale. The sixth variable in the reliability analysis was logic which had 6 items coded LO1, LO2, LO3, LO4, LO5, and LO6 with its Cronbach Alpha () was 0.867 which is acceptable. These all are verified in table 4.10 below and appendix I.

Table 4. 10: Cronbach's Alpha (α) Reliability Analysis Results

S/N	Variables	Number of Items	Cronbach's Alpha()	Percentage(%)
1	Memory	3	0.760	76.0%
2	Coercive	4	0.678	67.8%
3	Mimetic	6	0.800	80.0%
4	Normative	6	0.718	71.8%
5	Legitimacy	3	0.661	66.1%
6	Logic	6	0.867	86.7%

Source: Research data 2019.

4.6 Multiple Regression Analysis

Regression is a conceptually simple method for investigating the functional relationships among research independent or predictor variables and dependent or criterion variable (Chatterjee and Hadi, 2012). Regression is categorized according to the number of variables to deal with, (Cronk, 2016 and Chatterjee and Hadi, 2012) when dealing with just a single predictor variable versus a single criterion variable the regression is simple regression whereas when dealing with two or more predictor variables against a single criterion variable is known as multiple regressions. In this study the independent or predictor variables used for regression were memory,

coercive, mimetic, normative, legitimacy and logic to predict the relationship against created catfish farming employments which is a dependent or criterion variable. Following having more than two IVs, therefore, multiple linear regressions were applied in finding the relationship.

The result from the multiple regressions analysis shown in table 4.11 indicates that R^2 value = 0.629 which is 63% of the variations in the DV were explained by the variation in the memory, coercive, normative, legitimacy, mimetic and logic. The remaining variation of 37% was explained by other factors not included in the model. In other words, if the influences of mimetic, coercive, normative, legitimacy and logic are properly utilized in the studied area can contribute largely to the creation of catfish employments. Also table 4.11 shows the relationship of the variables used as represented by the value of $R = 0.793$ which is equal to 79.3%. This shows that the study variables have a significant positive relationship of 79.3% which is significant to the study.

Table 4. 11: Showing Model Summary Relationship of variables

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.793	0.629	0.605	0.06961

Source: Researcher data 2019.

On the other hand, table 4.12 indicates the coefficients of the IVs. It reveals that both coercive, normative, legitimacy and logic positively and significantly influences the creation of catfish farming employments. For example when you increase the unit value of IVs by 10, the potentiality of creating catfish farming employments would

significantly increase by 16.5%, 10.7%, 31.7%, and 16.9% for coercive, normative, legitimacy, and logic respectively. In the implementation, legitimacy should be given high priority as it has shown to be more powerful than other variables in creating catfish farming employments. Unlikely these variables, a 10 increase in unit value of memory will lead a decrease in potential for the creation of catfish farming employments in the studied area by 3.7%. However, the decrease is non-significant. Table 4.12 below indicates significant statistical relationship of memory, coercive, mimetic, normative, legitimacy and logic. It indicates that memory with code ME had beta value ($\beta = -0.046$), coercive with code CO had beta value ($\beta = 0.159$), mimetic with code MI had beta value ($\beta = 0.103$), normative coded NO had beta value ($\beta = 0.334$), legitimacy LE had beta value ($\beta = 0.239$) and logic coded LO had beta value ($\beta = 0.203$).

Table 4. 12: Showing Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t (t -test)	Sig. (P-Value or β)
	Beta(B)	Std. Error	Beta(β)		
1 (Constant)	0.025	0.039		0.649	0.518
ME	-0.037	0.055	-0.046	-0.679	0.499
CO	0.165	0.080	0.159	2.056	0.043
MI	0.107	0.093	0.103	1.145	0.255
NO	0.317	0.088	0.334	3.592	0.001
LE	0.253	0.080	0.239	3.168	0.002
LO	0.169	0.080	0.203	2.103	0.038

Source: Research Data 2019.

The multiple regression results are also been explained in the following model;

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + e$$

Potential Creation of Catfish Farming Employments =

$$0.025 - 0.037ME + 0.165CO + 0.107MI + 0.317NO + 0.253LE + 0.169LO + e .$$

4.7 The Multiple Regression Model Tests for Validity Assumptions

Since the researcher used the multiple linear regression research model among other models, the researcher has tested four important assumptions for validity of the model applied in the study. The assumption tests done by the researcher were autocorrelation assumption test, normality assumption test, multicollinearity assumption test, and homoscedasticity assumption test.

4.7.1 Test for Autocorrelation Assumption

The test for autocorrelation in multiple linear regression analysis is done for finding out the fitness of the correlation as to whether positive or negative or no autocorrelation. In table 4.13 below it shows that the Durbin Watson value is 1.447, the thumb rule propounds that the Durbin Watson value required to fit the model is 2 if exceeds 2 it means is negative and if it is less than 2 it is a positive autocorrelation. Therefore, since the Durbin Watson of this study is 1.447 hence the variables have positive correlation as verified by the table 4.13 below.

Table 4. 13 Model Summary^b for Autocorrelation Assumption Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	0.793 ^a	0.629	0.605	0.06961	1.447

Source: Researcher 2019

4.7.2 Test for Normality Assumption

The test have been done to test the assumption either normally distributed or not so as to fit the multiple linear regression model. The thumb rule propounds that for normal distribution the Shapiro Wilk Test requires significance value to be greater than 0.05 for the normal distribution. Table 4.14 below reveals that the Sig. Value is 0.483 this test proves that the variables are normally distributed and the model is accepted.

Table 4. 14 Test of Normality Distribution

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	statistic	df	Sig.
CO	0.073	100	0.200	0.988	100	0.483

Source: Researcher 2019

4.7.3 Test for Multicollinearity Assumption

Variance Inflation Factor (VIF) for multicollinearity requires VIF to be not greater than 5 and if $VIF > 5$ it means there is a highly correlation which is not desired (Daoud, 2017). The test for multicollinearity requires the coefficients value for VIF to be < 10 . In this study it was revealed in table 4.15 below that, the multicollinearity

test done resulted with the VIF value of 1.225 and 1.225 for consecutive variables LE and LO respectively, hence met the requirements and not suspected this means no multicollinearity thus not harmful.

However, in table 4.16 below revealed that the conditional index is not exceeding 15, these below 1.000, 5.559 and 9.853 which are not exceeding 15 as illustrated in table 4.16 below.

Table 4. 15 Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (constant)	0.033	0.032		1.008	0.316		
LE	0.382	0.084	0.360	4.549	0.000	0.816	1.225
LO	0.396	0.066	0.476	6.012	0.000	0.816	1.225

Source: Researcher's Data 2019

Table 4. 16 Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	LE	LO
1	1	2.877	1.000	0.01	0.01	0.01
	2	0.093	5.559	0.15	0.05	0.93
	3	0.030	9.853	0.84	0.94	0.05

Source: Research Data 2019

4.7.4 Test for Homoscedasticity Assumption

Homoscedasticity is a label for constant variation of variables (Greene, 2003). Homoscedasticity test is for testing the variability of scores for an individual variable should be similar with other variable values around the regression line (Burns and Burns, 2008 and Almquist *et al*, Undated). Homoscedasticity is a test done for

proving the assumption that the variation of residuals is constant, almost the same at any given point of the model of the study. Table 4.17 reveals after conducting the homoscedasticity test in the SPSS that the significance value of the residuals is 0.022 which is positive significance by virtue of meeting the thumb rule that correlation is significant at the 0.05 level. This study model meets the requirements of the homoscedasticity assumption for the multiple linear regression model used. However table 4.18 below reveals is an alternative for correlation coefficient testing the homoscedasticity if and only if the Pearson correlation fails the Spearman's rho should be taken into consideration.

Table 4. 17 Pearson Correlations of Homoscedasticity Test

Standardized value Pearson correlation		Standardized Predicted Value	ABS_ZRE 1
Standardized Predicted Value	Pearson Correlation	1	0.229
	Sig. (2-tailed)		0.022
	N	100	100
ABS_ZRE 1	Pearson Correlation	0.229	1
	Sig.(2 - tailed)	0.022	
	N	100	100

Source: Researcher 2019

Table 4.18 Spearman's rho Correlations Coefficient after Homoscedasticity Test

			Standardized Predicted Value	ABS_ZRE1
Spearson's rho	Standardized Predicted Value	Coefficient Correlation	1.000	0.172
				0.087
			100	100
	ABS_ZRE 1	Correlation Coefficient	0.172	1.000
		Sig. (2_tailed)	0.087	
		N	100	100

Source: Researcher 2019

4.8 Discussion of the Findings According to Objectives

The study had three specific objectives discussed. The results of each objective were discussed and presented specifically as follows.

4.8.1 Historical Facts about Employment Opportunities through Catfish Farming to the Community

Memory after been subjected in multiple regression in finding its relationship with the DV was found to have a negative relationship and statistically insignificant to the criterion variable potential creation of catfish farming employments. Its significant value was $= 0.499$ which is insignificantly related because its probability value > 0.05 was contrary to the thumb rule.

Historical facts on employment creation through catfish in Tanzania have been evidenced that there were efforts done in fisheries activities aimed at employments through fishery. Over decades before the 1980s there were development and transformation in the fisheries which lead to the campaigns on environmental

awareness and illegal fishing activities following the illegal fishing activities and destruction of the environments emerged from fundamental changes done (Katikiro *et al* 2014).

In my study I discovered that farmers were toiling doing their activities without employing others to work for guarding and other activities. This is because in history some of the respondents were farming fishes but failed to continuously maintain their fish farming projects sustainably. There is a need of the government to send fisheries officers to these communities for training them on how to farm and fight against birds eating fishes. However, because the government has a lot of tasks and focus in alternative the community people who are interested and ready with aquaculture are to find trainings on fish keeping on their own in various colleges such as Vocational Education Training Authority (VETA) and from others who farm fishes in other communities who have experience in fish farming.

4.8.2 Isomorphic Pleasure to Use Catfish as Opportunity for Employment

The isomorphic pleasure is divided in three specific mechanisms which are coercive, mimetic and normative isomorphism which were used as IVs. The multiple regression analysis conducted found that among the three IVs, coercive, mimetic and normative, the coercive and normative had a positive and statistically significant relationship with the potentiality of creating catfish farming employments, the DV of the study. Coercive had $\beta = 0.043$ and normative had $\beta = 0.001$ fitting the thumb rule that suggests probability value be less than 0.05, that is ($\alpha = 0.05$). These two IVs have influenced the DV which is potential creation of catfish farming employments. Unlike coercive and normative variables, the opposite is found on mimetic which is

an IV that had the positive but statistically insignificant potentiality of creating catfish farming employments as it had $\beta = 0.255$ contrary to the thumb rule requirement of probability value to be less than 0.05, $p < 0.05$.

If the community engages in employments will reduce conflicts or criminality in the community and peace will be maintained when everyone has employment for personal and for the benefit of the community. From coercive, the community people will acquire drive force towards working in the catfish farming projects since projects create various activities. Schwalbe (2012 and 2014) projects have processes which are initiation, planning, execution, monitoring and control, these all need people to effect and hence employments.

The respondents were asked a question to find their opinions on mimetic. For this therefore, from mimetic isomorphism the community will gain knowledge, skills, and experience in the catfish farming projects and can run them successfully to meet the desired goals of the community. Putting efforts conforming to the existing rules and norms in doing legal things, it implies that when investors invest in conformity to existing laws they stay confident with their projects generating profits knowingly that engaging in illegal investments leads to total loss and wastage of time. From normative, the community people will gain or enjoy in engaging their endeavors in lawful activities and others to invest in legally recognized projects to avoid loss and maximize profits. Doing this the investors in catfish farming will be free from criminal, civil suits and thus free from loss. Instituting catfish farming projects is an isomorphic pleasure, initiating catfish activities for people to work on them and for

them is an isomorphic pleasure, working for being paid is an isomorphic pleasure, gaining earnings is an isomorphic pleasure and so many other benefits to the community are considered to be the isomorphic pleasures coming from instituted employments through catfish farming projects.

4.8.3 The Extent of Legitimacy In Creation of Potential Catfish Employment Opportunities

Legitimacy was found to be positively and statistically significant related to potential creation of catfish farming employments which is the DV of the study by virtue of probability value of $p = 0.002$ which conforms to the thumb rule requirement that $p < 0.05$. For this evidence it is clear legitimacy influence the DV.

Legitimacy is a legal term its source is legal, and legal according to Black's law dictionary (1989) which means conforming to the law, according to law, required or permitted by law, not forbidden by law, good and effectual to law, proper or sufficient to be recognized by the law, cognizable in the courts, construed and of law. In my view from the study and in accordance to the nature of law, the laws are to balance between the needs and the reality basing mainly on effects to the community and the government at large. This view is supported by the study conducted by Katikero et al (2014) illegal fishery activities conducted for ages though were primarily for subsistence needs and income undertaken without any legal control lead to diminish the resources rendered the government to come out with the law, the Tanzania fisheries Act of 2003 and other fisheries governing laws. The laws are in balance aimed to make communities undertake legally authorized economic activities in the alternative like farming catfish instead of just waiting for

natural resources with the increasing number of population which is economically harmful.

4.8.4 Potential Creation of Catfish Farming Employments

The study examined the influence of the IVs namely memory, coercive, mimetic, normative, legitimacy, and logic on the potential creation of catfish farming employments, the DV. The researcher conducted linear regression for determining the significance relationships either positive or negative. It was found that, the linear regression analysis results for memory were $\beta = -0.046$ and $t = 0.499$ this shows that the increase in memory variable reduces the potential to the creation of catfish farming employments. However, the decrease is not significant because $t = 0.499$ exceeds the thumb rule requirement of t -Value should not exceed 0.05, the t -Value should be less than 0.05 ($p < 0.05$).

For the coercive isomorphism the linear regression results were $\beta = 0.159$ and $t = 0.043$ this finding shows that there is a positive significant relationship with the DV, potential creation of catfish farming employments. This implies that the increase in coercive isomorphism increases the potential to the creation of catfish farming employments. This IV met the acceptance condition measured with t Value that t -value is less than 0.05 ($p < 0.05$).

Linear regression analysis results for mimetic isomorphism were $\beta = 0.103$ and $t = 0.255$, this shows that the t -value is greater than 0.05 and hence exceeds the requirement of the thumb rule for acceptance t -value need be less than 0.05 that is $p < 0.05$. These findings suggest that the increase in mimetic isomorphism also

increases the potentiality of creating employments through catfish farming; nevertheless the increase is not significant.

The linear regression analysis results for normative isomorphism were $\beta = 0.334$ and $p = 0.001$ this finding shows that there is a positive significant relationship with the DV, potential creation of catfish farming employments because the IV met the acceptance condition measured with α Value that p -value is less than 0.05 ($p < 0.05$).

The results of linear regression analysis for legitimacy were $\beta = 0.239$ and $p = 0.002$ this finding shows that there is a positive significant relationship with the DV, potential creation of catfish farming employments because the IV met the acceptance condition measured with α Value that p -value is less than 0.05 ($p < 0.05$). This connotes that for increasing employment through catfish farming in the study area, people have to invest in legitimacy.

On the other hand, the results of linear regression analysis for logic were $\beta = 0.203$ and $p = 0.038$ this finding suggest that there is a positive significant relationship between logic and DV, the potential creation of catfish farming employments because the IV met the acceptance condition measured with α Value that p -value is less than 0.05 ($p < 0.05$). In other words, if the community is logically organized, there would be more employments created by catfish farming in the studied community. In conclusion among the six IVs studied namely memory, coercive isomorphism, mimetic isomorphism, normative isomorphism, legitimacy and logic. Among them coercive isomorphism, normative isomorphism, legitimacy and logic

were positively and significant related to the potential creation of catfish farming employments. In other words, both of these variables have the potential to create employments through catfish farming in Rukwa region particularly in the community studied. However, normative isomorphism has more influence than other variables followed by legitimacy, coercive, and the least was logic. Contrary to these variables, memory had a negative influence on the potential for the creation of catfish farming employments though was not significant. On the other hand, mimetic isomorphism was positively associated with the creation of catfish farming employments but the association was not significant. Table 4.12 above shows only two IVs measured in linear regression analysis found to exceed the thumb rule that is having the p -value greater than 0.05. Memory and mimetic had p -values greater than 0.05, $p = 0.499$ and $p = 0.255$ respectively.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary, conclusion, and recommendations for further studies or research based on the study findings. This study was aimed at examining the influence of institutional forces in creating employment through catfish farming in Rukwa, Tanzania. The study was guided with three specific objectives which are, first to examine the historical facts about employment opportunities through catfish to the community, second is to assess isomorphic pleasure to use catfish as opportunity for employment and third is to examine to what extent legitimacy is created in the catfish employments opportunities.

5.1.1 Objective 1: To Examine The Historical Facts About Employment Opportunities Through Catfish To The Community.

Basing on the first specific objective of the study, it was found that there was negative influence of memory on the creation of catfish farming employments. Historical facts are important in the creation of catfish employments through catfish farming. Knowing the history of the place or community helps in the establishment of the projects though the majority of the respondents disagreed on memory. Taking in consideration of the first issue of memory that stated in the past years catfish farming created many activities the majority agreed for the catfish to create many activities but in other statements the majority disagreed. Having activities to be done it means there is a need of asking a question of who is to do the created activities and The answer is people, deploying people to these activities hence employments in the

community.

5.1.2 Objective 2: To Assess Isomorphic Pleasure To Use Catfish As Opportunity For Employment.

The isomorphic pleasure was measured using its three mechanisms coercive, mimetic and normative isomorphism. Starting with coercive isomorphism was found to have a positive influence in the potential creation of catfish farming employments to the community of the study. The next mechanism found to have a positive influence on the potential creation of catfish farming employments was normative. The mimetic isomorphism had a negative influence on the use of catfish as an opportunity for employments. These three mechanisms are important in their application. For instance, with coercive the community will be influenced or induced, for mimetic the community will be experienced from experienced and for normative the community will do good in face of the legal arena and left aside illegal free from their endeavors.

5.1.3 Objective 3: To Examine Catfish Employment Logic and Catfish Employment Opportunities Legitimacy.

Legitimacy was found to have positive significance to the created catfish farming employments. In the study, I discovered that the respondents, the majority of them know that for them to undergo anything it must be legitimate and legally recognized and moreover logical to the community, for acceptance and authorization. For this then, the catfish farming projects though was aimed at providing employment opportunities must be found logical and legally accepted and authorized to be instituted in the community.

Table 5. 1: Summary of the Findings

Code	Influence of Institutional Forces in Creating Employment Through Catfish Farming	Percentage (%)					Total Agree and Disagree	
		FA	A	N	D	FD	FA + A	D + FD
ME	Memory	11.50	20.33	21.50	27.50	19.17	31.83	46.67
CO	Coercive	32.50	27.17	15.83	17.33	7.00	59.67	24.33
MI	Mimetic	56.50	32.17	5.83	2.83	2.67	88.67	5.50
NO	Normative	44.33	29.67	12.33	10.00	3.67	74.00	13.67
LE	Legitimacy	31.17	27.50	16.50	14.33	10.50	58.67	24.83
LO	Logic	39.67	34.67	8.67	4.83	3.83	74.34	8.66

Source: Research Data 2019.

5.2 Conclusion

The study had three specific objectives and three specific questions which were answered using the study dimensions namely memory, coercive, mimetic, normative, logic, and legitimacy.

The first objective aimed to examine the historical facts about employment opportunities through catfish to the community. Success of any instituted project depends much in the history of the same thing in a particular community for deciding in investing. The history of anything is of important in any establishments for the established projects to sustainable existing. A lot of projects fails or come to an end before meeting its goals for failure to adhere to historical facts before the establishment.

The second objective was to assess isomorphic pleasure to use catfish as opportunity for employment. Catfish employments are possible in Rukwa due to techniques or mechanisms available under coercive, mimetic and normative. The community need be influenced, ready to acquire experience and adhere to the existing norms. The unemployed are thirsty to have isomorphic pleasure mechanisms with them to have catfish employments.

The third objective was to examine to what extent legitimacy is created in the catfish employments opportunities. There are laws and regulations governing fisheries in Tanzania making catfish farming legitimate in the country and the study area. The fishery industry is legal and is acceptable in the study area and going a mile further on the aim of instituting catfish farming which is the provision of employment is legitimate to legitimate purpose. It is clearly known that anything smoothly done need be legal and logical.

5.3 Recommendation

Based on the specific objectives and the major findings of this study the researcher, therefore, recommends the following:

Firstly, following the nature and history of the study area, it has been shown that catfish are suitable for being farmed within the wet lands of low grounds. Therefore, it is recommended that the government, district and municipal council should provide support to communities for catfish farming with purposes of generating employments and improve government revenues from the studied community in turn. Secondly, the government and district councils should send experts for surveying the

wetlands of Rukwa region and advice the councils and the government on the proper use of the wetlands and raise the Gross Domestic Product (GDP).

Thirdly, the NGOs in Rukwa region should support the surrounding communities by instituting catfish farming projects which will expects to involve a large number of people who will work to the created activities in catfish farming. A good example is Plan International, an NGO having its branch in Rukwa region Nkasi district to engage in supporting the majority of the people by establishing catfish farming projects instead of dealing with few people in the community by buying and training them sewing machines which benefits just few of the society and leaving the majority of the same society un-benefited.

Fourthly, the fisheries experts allocated in the ministry of fisheries are suppose to provide special training to the community people on how to farm catfish to reduce unemployment problem.

Lastly, the legislators are to make laws balancing interests between the government and needs of the citizens especially on development projects benefiting individuals and the government.

5.4 Suggestion for Future Research

This study examined the influence of institutional forces in creating employment through catfish farming in Rukwa, Tanzania. Future researchers are advised to conduct the same study in other localities.

The study based on catfish farming for providing employment opportunities to the community. This study applied quantitative techniques for collecting data, future

research needs to be conducted with the same purpose of catfish farming for providing employment opportunities to the community in serving idles and vagrants in Tanzania using the qualitative method.

REFERENCES

BOOKS:

- Adams, J., Khan, H. T. A, and Raeside, R., and White, D. (2007). *Research Methods: For Graduate Business and Social Science Students*. New Delhi: Vivek Mehra.
- ACF International. (2011). *Subsistence Fish Farming in Africa: A Technical Manual*.
- Almquist, Y. B., Ashir, S and Brannstrom, L. (Undated). *A Guide to Quantitative Methods*. Sweden: Stockholm University.
- Andersen, E.S., Grude, K.V., and Haug, T. (2009). *Goal Directed Project Management; Effective Techniques and Strategies*. 4th Edition. Philadelphia, USA. Kogan Page.
- Armstrong, M. (2006). *A Hand Book of Human Resource Management Practice*. 10th Edition. London and Philadelphia, USA & UK. Cogan Page.
- Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods and Practices*. USA: USF Tampa Library Open Access Collections.
- Black, H. C. (1989). *Blackø Law Dictionary*. USA
- Boyd C. E., and McNevin, A. A. (2015). *Aquaculture, Resource Use, and the Environment*: Hoboken, New Jersey. John Wiley & Sons.
- Budeba, Y. L. (2016). *The Tanzania Fisheries Sector: Challenges and Opportunities*. Dsm. The United Republic of Tanzania Ministry of Agriculture, Livestock and Fisheries.
- Burns, R. B., and Burns, R. A. (2008). *Business Research Methods and Statistics Using SPSS*: Great Britain. Sage Publications Ltd.

- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. India. Sage Publications, Inc.
- Chatterjee, S., and Hadi, A. S. (2012). *Regression Analysis by Examples*, 5th Edition. USA: John Wiley & Sons, Inc.
- Clayton, B. D. and Bass, S. (2002). *Sustainable Development Strategies. A Resource Book*. Organization for Economic Co-operation and Development, Paris and United Nations Development Programme, New York. USA. Earthscan Publications Ltd.
- Cohen, L., Manion, L., and Morrison, K. (2007). *Research Methods in Education*. USA: Routledge.
- Cronk, B. C. (2016). *How to Use SPSS: A step by Step Guide Analysis and Interpretation*. USA: Taylor & Francis.
- Darnall, R. W., and Preston, J. M. (2012). *Beginning Project management*. Retrived 13.12.2018 at <http://2012books.lardbuckets.org/>
- Greene, W. H. (2003). *Econometric Analysis*, 5th Edition. New Jersey. USA: Pearson Education Limited.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2014). *Multivariate Data Analysis: Pearson New International Edition*, 7th Edition. USA: Pearson Education Limited.
- Hair, J. F., Celsi, M., Money, A., Samoul, P. and Page, M. (2016). *Essentials of business research methods*, 3rd Edition, New York: Routledge.
- Heldman, K. (2005). *PMP: Project Management Professional; Study Guide*. Hoboken, New Jersey Canada: Wiley Publishing, Inc.
- Itika, J. S. (2011). *Fundamentals of Human Resource Management. Emerging*

- Experiences from Africa*. University of Groningen/Mzumbe University. African Studies Centre.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International (P) Limited.
- Kumar, R. (2011). *Research Methodology: A Step By Step Guide For Beginners*. Great Britain: Sage Publications Ltd.
- Metthews, B. and Ross, L. (2010). *Research Methods: A Practical Guide for Social Sciences*. Italy. Pearson Education Limited.
- Mullins, L. J. (2010). *Management & Organisational Behaviour*, 9th Edition. England. Pearson Education Limited.
- Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*, 7th Edition. USA. Pearson Education Limited.
- Pandey, P., and Pandey, M. M. (2015). *Research Methodology: Tools and Techniques*. Romania: Bridge Center.
- Pillay, T. V. R., and Kutty, M. N. (2005). *Aquaculture Principles and Practice*, 2nd Edition. UK. Blackwell Publishing Ltd.
- Porta, D. D., and Keating, M. (2008). *Approaches And Methodologies in the Social Science*. USA: Cambridge University Press.
- Project Management Institute. (2008). *A Guide To The Project Management Body of Knowledge (PMBOK® Guide)*. Newtown Square, Pennsylvania USA. Project management Institute, Inc.
- Rothuis, A., et al. (2014). *FoodTechAfrica: Aquaculture in East Africa; A Regional Approach*. The Netherlands, Wageningen.
- Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research Methods for Business*

- Students (4th edition). Spain: Pearson Education Limited.
- Schwalbe, K. (2012). *An Introduction to Project Management*. Minneapolis, Minnesota: Kathy Schwalbe.
- Schwalbe, K. (2014). *Information Technology Project Management*. United State of America: Cengage Learning.
- Sekaran, U. (2003). *Research Methods For Business: A Skill Building Approach*, 4th Edition. USA: John Wiley & Sons.
- Senyucel, Z. (2009). *Managing The Human Resource In The 21st Century*.UK. Zorlu Senyucel & Ventus Publishing Aps.
- Smith, N. J. (2002). *Engineering Project Management*. United Kingdom: Blackwell Science Ltd.
- Sinek, S. (2009). *START WITH WHY: How Great Leaders Inspire Everyone To Take Action*. USA: Penguin Group(USA) Inc. p167-168.
- Yin, R. K. (2003). *Case Study Research: Designs and Methods*. New Delhi: Sage Publications.
- Walliman, N. (2011). *Research Methods The Basics*. New York, USA: Taylor & Francis e- Library.

CHAPTERS:

- Bunda District: (2015). *Fisheries Investment Plan 2015 -2020*. Tanzania.
- Driscoll, D. L. (2011). *Introduction to Primary Research: Observations, Surveys and Interviews*.

JOURNAL ARTICALS:

Alawode, O. O., Oluwatayo, I. B., and Adebowale, O. A. (2016). Effect of Catfish

Production on Welfare of Smallholder Farmers in Osun State, Nigeria.

Journal of Agribusiness and Rural Development 4(42) 2016, 471 – 481.

Bruton, G. D., Ahlstrom, D., and Li, H. (2010). Institutional Theory and

Entrepreneurship: Where Are We Now and Where Do We Need To Move in

The Future? Baylor University.

Daoud, J. I. (2017). Multicollinearity and Regression Analysis: Journal of Physics:

Press Series. 949012009

DiMaggio, P. J. and Powell, W. (1983). "The Iron Cage Revisited" Institutional

Isomorphism Collected Rationality in Organizational Fields, American Social

Review, 48(1983), 147 – 160.

FAO, (2017). Doing Aquaculture As a Business for Small and Medium Scale

Farmers Practical Training Manual. United Nations, Rome.

Harrell, R. M, Maryland Sea Grant Extension, (Undated). Cooperative Extension

Service, Maryland Institute For Agriculture and Natural Resources, 6,

Maryland Sea Grant Extension, Finfish Aquaculture Workbook Series

Publication number UM-SG-MAP-91-01.

Issa, F. O., Abdulazeez, M. O., Kezi, D. M., Dare, J. S., and Umar, R. (2014).

Profitability Analysis of Small-scale Catfish Farming in Kaduna, Nigeria. Academicjournals, Journal of Agricultural Extension and Development. Vol. 6(8) 267 ó 273.

Katikiro, R., Macusi, E., and Deepananda, K. H. M. A. (2014). Changes in Fisheries and Social Dynamics in Tanzania Coastal Fishing Communities. Western Indian Ocean J. Mar. Sci. Vol. 12(2), pp. 95 ó 110, 2013.

Madan, C. R. and Kensinger, E. A. (2017). TestóRetest Reliability of Brain Morphology Estimates. Brain Informatics, 4, 107ó121.

Marshall, M. G. and Cole, B. R. (2014). Global Report on Conflict, Governance and State Fragility accessed on 11.08.2019 at www.academia.edu

Marshall, M. G., and Marshall, G. E. (2017). Conflict, Governance, and State Fragility Global Report 2017 accessed at www.systemicpeace.org on 11.08.2019

MeanThat, (2015), The Institutional Theory of Organizational Growth MeanThat, at <http://www.google.com> Accessed on 19th December, 2018.

Merriam ó Webster (Since 1828), found at <http://www.merriam-webster.com/dictionary/isomorphic> Accessed on 19th December, 2018.

Mohajan, H. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. Bangladesh. Annals of Spiru Haret University, 17(3): 58-82.

Munyi, N. B. and Kiruja, E. (2016). Determinatn of Sustainability for Fish Farming

Project Initiative under the Economic Stimulus programme in Kenya ó A Case of the Central Constituency of Kirinyaga County. Global Journal of Commerce and Management Perspectives. Global Institute for Research and Education- G. J. C. M. P., vol. 5(5) 1-8.

Mwaijande, F. A. and Lugendo, P. (2015). Fish Farming Value Chain Analysis. Policy Implications for Transformations and Robust Growth In Tanzania. The Journal of Rural and Community Development, 10(2), 47-62.

Patrick, E. W., and Kagiri, A. (2016). An Evaluation of Factors Affecting Sustainability of Fish Farming Projects in Public Secondary Schools in Kiambu County. International Journal Of Scientific and Research Publications, volume 6(10) 488 ó 507.

Shava, E and Gunhidzirai, C. (2017). Fish farming as an Innovative strategy for Promoting Food Security in Drought Risk Regions of Zimbabwe, Jamba: Journal of Disaster Risk Studies 9(1), a491.

Soderlund, J and Lenfle, S. (2013). Making Project History: Revisiting the Past, Creating the Future, International Journal of Project Management, <http://dx.doi.org/10.1016/j.ijproman.2013.02.005>

Vocabulary.com, at <http://www.vocabulary.com/dictionary/legitimacy> Accessed on 14th February, 2019.

Wuyep, S. Z., and Rampedi, I. T. (2018). Urban Fish Farming in Jos, Nigeria:

Contributions Towards Employment Opportunities, Income Generation, and Poverty Alleviation for Improved Livelihoods. Agriculture Journal. Switzerland, 8(110).

Yurdugul, H. (2008). Minimum Sample Size for Cronbach's Coefficient Alpha: A Monte Carlo Stud. Journal of Education 35: 397 ó 405.

STATUTES AND POLICIES:

The Constitution of the URT. (1977). Tanzania.

The Employment and Labour Relations Act (2004). URT. Tanzania.

The Fisheries Act of the URT. (2003). Tanzania.

The Fisheries Regulations Act of the URT (2009). Tanzania.

The TAFIRI Act. (2016). Tanzania.

The Tanzania National Fisheries Policy. (2015). URT. Ministry of Livestock and Fisheries Development. Tanzania.

APPENDIX

APPENDIX 1: QUESTIONNAIRE SURVEY

Influence of Institutional Forces in Creating Employment through Catfish Farming in Rukwa, Tanzania

Dear respondents,

Thank you for your interest in this study. This study is aiming at surveying the current practice of influence of institutional forces in creating employment through catfish farming in Rukwa, Tanzania. Your participation in this study is voluntary. The study consists of 42 questions and it takes about 15 minutes to answer them. You may choose to skip some of the questions and quit the questionnaire participation at any stage. Your answer is anonymous, and only general pieces of personal information are asked.

By returning this survey you agree that the collected data can be used for academic purposes of the Open University of Tanzania. Only the researcher of this study and the Open University of Tanzania will have access to the answer sheets. If you have any question concerning this study, please do not hesitate to contact the researcher, Kaspar Millinga on mobile phone numbers +255621149017/+255756208373 or email address Kasparmillinga@gmail.com.

SECTION A:

General biographic information: Please tick (V) to an appropriate answer of yours.

Age	18-20 Yeas (), 21-25 Years (), 26-30 Years (), 31-35 Years (), 36 Years- above ().
Gender	Male (), Female ().
Highest Education Level	Primary (), Secondary School (), Diploma (), Degree (), Masters (), PhD ().
Occupation or Employment Status	Employed (), Unemployed ().
Region	Rukwa (), Other region ().
Years Worked in Public Sectors	0-5 Years (), 6-10 Years (), 11-15 Years (), 16-20 Years (), 21 Years and above ().
Years worked in this Organization	0-5 Years (), 6-10 Years (), 11-15 Years (), 16-20 Years (), 21 Years and above ().

**SECTION 'B': INFLUENCE OF INSTITUTIONAL FORCES IN CREATING
EMPLOYMENT THROUGH CATFISH FARMING IN RUKWA, TANZANIA**

In the following table there are 42 statements concerning/about different aspects on influence of institutional forces in creating employment through catfish farming in Rukwa, Tanzania. Please circle your answer to rate your level of agreement or disagreement by using the scale 1 to 5 to the right of each statement. Wherefore; 1 =

Fully Agree, 2 = Agree, 3 = Not Agree or Not Disagree, 4 = Disagree, and 5 = Fully Disagree.

CODE	ITEM/STATEMENT	FA	A	N	D	FD
	MEMORY/HISTORY					
ME1	In the past years catfish farming created a number of activities	1	2	3	4	5
ME2	In the past years catfish farming activities demanded employees	1	2	3	4	5
ME3	In early years communities cultured quality catfish for employment	1	2	3	4	5
ME4	In the past years farmed catfish created community employments	1	2	3	4	5
ME5	In early years catfish employments benefited the community	1	2	3	4	5
ME6	In the past years farmed catfish employments created by the market	1	2	3	4	5
	COERCIVE					
CO1	Penal laws of Tanzania coerces the community to catfish activities	1	2	3	4	5
CO2	Enacting laws coercing communities to employments is necessary	1	2	3	4	5
CO3	Fishery regulations are barriers to catfish employment opportunities	1	2	3	4	5

CO4	Law enforcers are to coerce the idles in the community for working	1	2	3	4	5
CO5	The Constitution of Tanzania provides for the right to work and pay	1	2	3	4	5
CO6	Rules defeats political negations to community catfish employment	1	2	3	4	5
	MIMETIC					
MI1	The community need to learn from others who farm catfish	1	2	3	4	5
MI2	Trainings in catfish farming is highly needed for employments	1	2	3	4	5
MI3	Community need to have catfish farming experience from others	1	2	3	4	5
MI4	Sharing ideas with experienced drive the community to do the same	1	2	3	4	5
MI5	Training will make the community produce high quality catfish	1	2	3	4	5
MI6	Confidence in catfish farming will create sustainable employments	1	2	3	4	5
	NORMATIVE					
NO1	Communities have rules or norms for adherence in conformity	1	2	3	4	5
NO2	Existing rules/norms lead to community	1	2	3	4	5

	catfish employments					
NO3	The catfish farming activities smoothly done raise production	1	2	3	4	5
NO4	Special trainings in catfish farming projects is highly required	1	2	3	4	5
NO5	Lacking catfish farming skills will lead to communities cope others	1	2	3	4	5
NO6	Strategies to produce high quality catfish is very important to apply	1	2	3	4	5
	LEGITIMACY					
LE1	Legitimacy of catfish employment opportunities bases on benefits	1	2	3	4	5
LE2	Strict laws are barriers to catfish farming projects for employments	1	2	3	4	5
LE3	Catfish farming activities are affected by government laws	1	2	3	4	5
LE4	Rigidity in projects creating sustainable employments need changes	1	2	3	4	5
LE5	The parliament are to make laws favoring the community needs	1	2	3	4	5
LE6	Catfish farming employments eliminate offences in the community	1	2	3	4	5
	LOGIC					

LO1	Catfish farming employments is logical to the community	1	2	3	4	5
LO2	Catfish farming project will employ the majority of the community	1	2	3	4	5
LO3	Catfish farming will provide sustainable community employments	1	2	3	4	5
LO4	The community will benefit from catfish by gaining earnings	1	2	3	4	5
LO5	The catfish activities will create reliable markets to raise economy	1	2	3	4	5
LO6	Created catfish farming employments will change the life standards	1	2	3	4	5
	IMPROVED EMPLOYMENT FOR CATFISH					
IEFC1	Support of employers creates improved employments for catfish	1	2	3	4	5
IEFC2	Improved catfish employments will change community economy	1	2	3	4	5
IEFC3	Life standards of the community will change rapidly due to salary	1	2	3	4	5
IEFC4	Sustainable employments assures the economy of the community	1	2	3	4	5
IEFC5	Sustainable employments need high commitment	1	2	3	4	5

	to work skillfully					
IEFC6	Improved employments for catfish let community cycling economy	1	2	3	4	5

Thank you for your time. I greatly appreciate your participation in this study.

Kaspar Robert Millinga (MPM Student)

The Open University of Tanzania

Email address; kasparmillinga@gmail.com

Mobile; +255621149017, +255756208373