

**THE IMPLICATIONS OF THE KINONDONI INTEGRATED COASTAL  
AREA MANAGEMENT PROGRAMME ON LIVELIHOODS IN  
KINONDONI DAR ES SALAAM-TANZANIA**

**EVANS JOHN EVANS**

**A DISSERTATION SUBMITTED IN PARTIAL FULFULMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN  
MONITORING AND EVALUATION  
DEPARTMENT OF ECONOMICS AND COMMUNITY ECONOMICS  
DEVELOPMENTS  
OF THE OPEN UNIVERSITY OF TANZANIA**

**2023**

**CERTIFICATION**

The undersigned certifies that the has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitle, The Implications of the Kinondoni Integrated Coastal Area Management Programme on Livelihoods in Kinondoni Dar es Salaam-Tanzania. In partial fulfilment of the requirements for the award of Master of Arts in Monitoring and Evaluation (MAME) of the Open University of Tanzania.

.....

Prof. Magreth Bushesha

(Supervisor)

.....

Date

**COPYRIGHT**

This dissertation is a copyright material. 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 prior written permission of the author or the Open University of Tanzania on that behalf.

**DECLARATION**

I, **Evans John Evans**, 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 requirement for the Degree of Master of Arts in Monitoring and Evaluation (MAME) of the Open University of Tanzania.

.....

Signature

.....

Date

**DEDICATION**

This dissertation is dedicated to my late beloved mother Mary Mathew Senga and my late beloved sister Cleopatra J. Mahende May their souls rest in peace.

## ACKNOWLEDGEMENT

First of all, I would like to thank God for his sympathy having protected me in dissertation activities and enable me to use my knowledge and skills to cover the research proposal and research report write-up.

Many people contributed to this study and their contributions are gratefully acknowledged I would like to start with my supervisor Prof. Magreth Bushesha from the Open University of Tanzania for her assistance from the starting to the end of this study. As well as Miss Janeth Gwimile from Open University of Tanzania for her contribution towards supporting back and forward of my work to supervisor.

I would like to thank my family, my parents John J. Evans & Dorothy A. Mwaluko, my sister Suzana Senga, young sister Evelyn J. Evans, and my young brother Edmund J. Evans for their tireless efforts, assistance, patience and moral support which enable me to finish the work on time.

Moreover, I would like to extend my gratitude to Dr. Daniel Sabai, the former KICAMP secretary, for his cooperation and willingness to help me get the necessary information about the KICAMP needed. Furthermore, I would like to give special thanks to Ward Executive Officers for Kunduchi and Mbweni wards for their cooperation, hospitality, guidance and tireless assistance of helping me to obtain data from community members in the areas of their jurisdiction.

Finally, I would like to give special thanks to my classmates who encourage and provided valuable contributions whenever needed towards the accomplishment of this work. Thank you all.

## ABSTRACT

The study assessed the implications of the Kinondoni Integrated Coastal Area Management Programme on livelihoods in Kinondoni, Dar es Salaam-Tanzania. It examined the local community's awareness of the KICAMP, their involvement in the implementation of the KICAMP, and the contribution of the KICAMP to the local community's livelihoods. The study used a mixed-methods research approach. The target population was the KICAMP Coordinator, Workers, Heads of Households, Community Members, Ward Executive Officers and Street Chairpersons, with a sample size of 109 respondents. The data was collected through a questionnaire survey, in-depth interviews and documentary review. While qualitative data was analyzed through thematic analysis approach, numerical data on the other hand was analyzed using descriptive statistical analysis approach. The study found that 94% of the community members were aware of KICAMP and participated in its implementation through activities such as planting mangrove trees, environmental conservation, fishing, vegetable gardening and beekeeping. The KICAMP had a significant positive impact on local community livelihoods by creating physical, social, human, financial and political assets. However, some financial groups formed during the implementation of the program failed after the phase-out of the program due to lack of funds and proper management from KICAMP. The study recommends the revival of government financial and technical support to revamp the KICAMP so that the community can continue to benefit from the program.

**Keywords:** *KICAMP, Implication, Livelihoods, Local Community, Environmental impact, Evaluation, Sustainability, Financial support and Revamp*



## TABLE OF CONTENTS

<b>CERTIFICATION .....</b>	<b>ii</b>
<b>COPYRIGHT .....</b>	<b>iii</b>
<b>DECLARATION.....</b>	<b>iv</b>
<b>DEDICATION.....</b>	<b>v</b>
<b>ACKNOWLEDGEMENT .....</b>	<b>vi</b>
<b>ABSTRACT.....</b>	<b>viii</b>
<b>LIST OF TABLES .....</b>	<b>xv</b>
<b>LIST OF FIGURES .....</b>	<b>xvi</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>xvii</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.0 Introduction .....	1
1.1 Background to the Study .....	1
1.2 Statement of the Problem .....	3
1.3 Objectives of the Study .....	4
1.3.1 General Objective .....	4
1.3.2 Specific Objectives .....	4
1.4 Research Questions .....	5
1.5 Significance of the Study.....	5
1.6 Organization of the Study.....	6
<b>CHAPTER TWO .....</b>	<b>7</b>
<b>LITERATURE REVIEW.....</b>	<b>7</b>
2.0 Overview .....	7

2.1	Conceptual Definition .....	7
2.1.1	Integrated Coastal Area Management (ICAM): .....	7
2.1.2	KICAMP: .....	7
2.1.3	A livelihood .....	7
2.2	Overview of KICAMP .....	7
2.2.1	Background of KICAMP.....	7
2.2.2	Areas of Formal Operation, Supervision and Activities Conducted by the KICAMP.....	9
2.3	Theoretical Framework.....	9
2.3.1	Environmental Kuznets Curve (EKC).....	9
2.3.2	Boserup Population Theory of 1965.....	10
2.4	Empirical Analysis of Relevant Studies .....	11
2.4.1	Empirical studies conducted in America and Europe.....	11
2.4.3	Empirical Studies Conducted in Africa .....	12
2.4.1	Empirical Studies Conducted in Tanzania .....	13
2.5	Research Gap.....	14
2.6	Conceptual Framework.....	15
	<b>CHAPTER THREE .....</b>	<b>17</b>
	<b>RESEARCH METHODOLOGY .....</b>	<b>17</b>
3.0	Overview .....	17
3.1	The Study Area.....	17
3.1.1	Justification of the Choice of the Research Area .....	18
3.2	Research Approach.....	18
3.3	Research Design .....	18

3.4	Target Population .....	20
3.4.1	The KICAMP coordinator and workers .....	20
3.4.2	WEOs and Street chairpersons .....	20
3.4.3	The household heads .....	20
3.4.4	Other Selected members .....	21
3.5	Sample Size, Sampling Techniques and Procedure .....	21
3.5.1	Sample Size .....	21
3.5.2	Quantitative Research Sample Size .....	22
3.5.3	Qualitative Research Sample Size .....	23
3.6	Sampling, Sampling Techniques and Procedures .....	23
3.6.1	Proportional Sampling .....	23
3.6.2	Purposive Sampling Technique .....	24
3.6.3	Stratified Random Sampling Technique .....	25
3.6.4	Purposive Random Sampling Technique .....	25
3.6.5	Snowball Sampling Technique .....	25
3.7	Data Collection Methods and Procedures .....	25
3.7.1	Questionnaire Survey .....	26
3.7.2	In-depth interview .....	26
3.7.3	Documentary Review .....	27
3.8	Data Process and Analysis .....	27
3.8.1	Data Processing .....	27
3.8.2	Data Analysis .....	28
3.8.2.1	Analysis of Quantitative Data .....	29
3.8.2.2	Analysis of Qualitative Data .....	29

3.8.3	Data Presentation.....	30
3.9	Validity, Reliability and Trustworthiness of the qualitative Study .....	31
3.9.1	Validity and reliability of the quantitative study .....	31
3.9.1.1	Validity of the quantitative study .....	31
3.9.1.2	Reliability .....	31
3.9.2	Trustworthiness of the qualitative Study.....	32
3.9.2.1	Ensuring credibility .....	32
3.9.2.2	Ensuring dependability .....	33
3.9.2.3	Ensuring transferability .....	33
3.9.2.4	Ensuring confirmability.....	33
3.10	Ethical Considerations of the Study .....	34
	<b>CHAPTER FOUR.....</b>	<b>36</b>
	<b>FINDINGS AND DISCUSSION .....</b>	<b>36</b>
4.0	Introduction .....	36
4.1	Respondents' Profile .....	36
4.1.1	Sex .....	36
4.1.2	Age .....	37
4.1.3	Education.....	39
4.1.4	Occupation.....	40
4.2	Determine environmental, social and economic factors that contribute to local communities' livelihoods from KICAMP .....	41
4.2.1	The Local Community's Awareness of the KICAMP.....	41
4.2.2	Sources of knowing the KICAMP.....	43

4.3	Examine environmental, social and economic challenges of local communities' livelihood from KICAMP.....	45
4.3.1	Local Community's Participation in the Implementation of the KICAMP.....	45
4.3.2	Ways the community implemented the KICAMP.....	45
4.3.2.1	Seminars and workshops .....	47
4.3.2.2	Public Meetings .....	48
4.3.2.3	Other Education Media.....	49
4.3.3	Formation of KICAMP Community Groups.....	51
4.3.4	Activities implemented through the KICAMP .....	52
4.4	Examine of the environmental, social and economical sustainability aspect of local communities' livelihood from KICAMP.....	53
4.4.1	Contribution of the KICAMP to the local community's livelihoods.....	53
4.4.2	Creation of physical/natural/ human assets .....	55
4.4.2.1	Planting of trees which led to the creation of mangrove forests .....	55
4.4.2.2	Improved management and utilization of the coastal resources.....	56
4.4.2.3	Creation of environmental awareness in the community .....	60
4.4.3	Creation of social assets .....	61
4.4.3.1	Increased awareness among people on the conservation of the environment .....	61
4.4.4	Creation of political assets.....	64
4.4.4.1	Improved people's security .....	64
4.4.5	Creation of financial assets.....	65
4.4.5.1	Provision of credits to small groups of people .....	65
4.4.5.2	Creation of employment .....	67

4.4.5.2.1	Sustainable fishing.....	67
4.4.5.2.2	Vegetable gardening.....	68
4.4.5.2.3	Sea Salt making.....	69
4.4.5.2.4	Beekeeping.....	70
<b>CHAPTER FIVE.....</b>		<b>74</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>		<b>74</b>
5.0	Introduction.....	74
5.1	Summary of the Study.....	74
5.2	Conclusions.....	76
5.3	Recommendations for Action and Further Studies.....	77
5.3.1	Recommendations for Action.....	77
5.3.2	Recommendation for Further Studies.....	77
<b>REFERENCES.....</b>		<b>79</b>
<b>APPENDICES.....</b>		<b>85</b>

## LIST OF TABLES

Table 3.1: Summarizes the sample composition of the research respondents .....	22
Table 4. 1: Sex of Respondents (N=109) .....	37
Table 4.2: Age of Respondents (N=109) .....	39
Table 4.3: Educational Level of Respondents (N=109).....	40
Table 4.4: Occupation of Respondents (N=109) .....	41
Table 4.5: Awareness of the KICAMP within wards of respondents (N =92) .....	42
Table 4.6: Interview responses on the awareness of the KICAMP (N=14).....	42
Table 4.7: Sources of knowing the KICAMP (N=92) .....	44
Table 4.8: Ways used to implement the KICAMP (N =17).....	46
Table 4.9: Community Members' Activities' involvement (N=109) .....	52
Table 4.10: Contribution of the KICAMP on local communities' livelihoods (N=109) .	54

## LIST OF FIGURES

Figure 2.1: EKC for Environmental Degradation .....	10
Figure 3.1: Map of Kinondoni District .....	18
Figure 4.1: The Convergent Parallel Mixed Methods Research Design (QUAN+QUAL) for guiding an assessment of the study.....	20
Figure 4.2: A pie chart showing ways used to implement the KICAMP.....	46
Figure 4.3: Protected mangrove forest in Kunduchi ward and a portion of land that has been turned into animal keeping .....	59
Figure 4.4: Signboard showing reserved mangrove area in Mbweni ward.....	61
Figure 4.5.: A signboard showing the reserved mangrove area Kunduchi ward .....	62



## LIST OF ABBREVIATIONS

CBO	-	Community-Based Organization
C1- C10	-	Community Member Number One-Community Member Number Ten
CMCP	-	Coastal Management and Conservation Project
EC	-	European Commission
EKC	-	Environmental Kuznets Curve Theory
ICAM	-	Integrated Coastal Area Management
ICAMP	-	Integrated Coastal Area Management Programme
IFRC	-	International Federation of Red Cross and Red Crescent Societies
KICAMP	-	Kinondoni Integrated Coastal Area Management Programme
KMMCECP-	-	Kilwa-Mafia Island-Mtwara Coastal and Environmental Conservation Project
KMDC	-	Kilwa-Mtwara Delta Complex
MIMP	-	Mafia Island Marine Park
MIRDC	-	Mafia Island-Rufiji Delta Complex
MMP	-	Mangrove Management Project
MPA	-	Marine Protected Areas
MPRU	-	Marine Parks and Reserves Unit
NEMC	-	National Environmental Management Council
NICEMS	-	National Integrated Coastal Environment Management Strategy
NMMP	-	National Mangrove Management Plan
REMP	-	Rufiji Environmental Management Project
RISP	-	Rural Integrated Project Support
RMKS	-	Rufiji-Mafia-Kilwa Seascape

- SACCOS - Savings and Credit Cooperative Society
- SIDA - Swedish International Development Agency
- SPSS - Statistical Package for Social Sciences
- TCMPSU - Tanzania Coastal Management Partnership Support Unit
- TCMP - Tanzania Coastal Management Partnership
- TCZCDP - Tanga Coastal Zone Conservation and Development Programme
- TDCP - Turtle and Dugong Conservation Programme
- UK - United Kingdom
- USA - United States of America
- USAID - United States Agency for International Development
- VICOBA - Village Community Banks

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

This chapter has explained the background of the research which has enabled the researcher to understand the objectives of the research.

#### **1.1 Background to the Study**

The concept of Integrated Coastal Area Management (ICAM) originated from the United Nations Earth Summit on Environment and Development held in Rio de Janeiro, Brazil in 1992. Globally, the European Commission describes ICAM as a dynamic, continuous, multidisciplinary and iterative process intended to promote sustainable management of coastal areas (European Commission, 2013).

The ICAM aims to assess the societal goals in a given coastal area and take appropriate measures towards achieving the set goals. It uses the informed participation and cooperation of all stakeholders to assess socio-societal goals. It aims to make a coordinated application of the different policies affecting the coastal areas. These policies include nature protection, agriculture, aquaculture, fisheries, tourism, development of infrastructure offshore wind energy, industry, shipping and mitigation and adaptation to climate change (European Commission, 2013).

ICAM seeks to balance the benefits from human uses of the coastal zone and economic development; from protecting, preserving and restoring the coastal environment; as well as the profits resulting from minimizing loss of human life, all within the limits set by natural dynamics (ibid).

ICAM seeks to balance the benefits from human uses of the coastal zone and economic development; from protecting, preserving and restoring the coastal environment; as well as the profits resulting from minimizing loss of human life, all within the limits set by natural dynamics (The European Commission, 2016). In Africa, the implementation of ICAM programmes has achieved several successes across the continent. Conservation of coastal and marine resources improves the well-being of people as well as provides employment (USAID, 2010).

ICAM principles in developing countries, including African countries, are often not realized owing to a combination of several challenges. These include heavy dependence on donors' funds and insufficient integration among different sectors. Poverty among communities leads to unsustainable exploitation of coastal and marine resources through dynamite fishing, coastal deforestation and the like (UNESCO, 2011).

FAO (2012) maintains that ICAM strengthens and harmonizes sectoral management and facilitates conflict resolution in the coastal zone. The government of Tanzania has been taking deliberate initiatives to manage, protect and conserve coastal and marine natural resources for the well-being of the Tanzanians. In 1992, the government adopted an integrated approach to the management of the coastal and sea resources that involves different stakeholders including the coastal communities. Tanzanian coastal zone is endowed with abundant natural resources that are of great ecological significance. These include mangrove forests, seagrass beds, salt, dunes coral reefs, estuaries and fish. The success and sustainability of socioeconomic

activities of coastal communities depend on maintaining a healthy coastal and marine environment (URT, 2003).

The coastal resources of Tanzania have been under increasing pressure due to a rapidly growing population. Urbanization, increased demand for goods and services, as well as industrialization, put pressure on coastal resources. This has called for a deliberate effort to alleviate the situation and ensure sustainable development. MPRU aims to improve the quality of life of communities which depend on coastal resources while maintaining the biological diversity and productivity of coastal ecosystems (MPRU, 2014).

According to MPRU (2014), implementing the ICAM approach in managing coastal and marine areas and resources in Tanzania, these include, among others, the following: TCZCDP; MIMP; RIPS; REMP; MMP; NMMP; TDCP; MIRDC; RMKS; and KICAMP. In Dar es Salaam there is specifically the establishment of KICAMP in 2001 which is managed by the Kinondoni Municipality in Kinondoni District where it has focused on an area where the government of URT initiated the programme supported by SIDA both financially and technically. The KICAMP was established to improve awareness and management of marine and coastal area resources in the district. Although the concept and approach still there are implications on livelihood. These challenges have led a researcher to seek and understand the problem that causes these challenges to emerge (TCMPSU, 2003).

## **1.2 Statement of the Problem**

Despite the importance of the coastal zone resources to community welfare, experience show that participation of local people in the supervision of these

resources has been poor (NEMC, 2014). This was one reason why in Tanzania the government established coastal and marine management and conservation programmes aiming to improve management of related resources as well as the wellbeing of surrounding communities. One of such programs is the Kinondoni Integrated Coastal Area Management Programme (KICAMP) which aimed at improving the livelihoods of the local community, particularly by increasing awareness to understand how effectively and efficiently community members can participate in the conservation and sustainable utilization of coastal resources. Unfortunately, so far there is a lack of established information explaining the extent to which the program in question has been a success or failure. This is why this research attempted to assess the KICAMP's impact on livelihoods in Kinondoni District (TCMPSU, 2003).

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The general objective of this study was to examine the implications of KICAMP on livelihoods in Kinondoni, Dar es Salaam-Tanzania.

#### **1.3.2 Specific Objectives**

This study was sought to achieve the following specific objectives:

1. To determine environmental, social and economic factors that contribute to local communities' livelihoods from KICAMP.
2. To examine environmental, social and economic challenges of local communities' livelihoods from KICAMP.

3. To examine environmental, social and economic sustainability aspects of local communities' livelihood on implementation of the existing KICAMP.

#### **1.4 Research Questions**

This study was be guided by the following study questions;

1. What were the environmental, social and economic factors that contribute to local communities' livelihoods from the existing KICAMP?
2. What were the environmental, social and economic challenges to local communities' livelihoods from the existing KICAMP?
3. What were the environmental and social-economic sustainability aspects of local communities' livelihood on implementation and involvement of the existing KICAMP?

#### **1.5 Significance of the Study**

A study was being carried out on the impact of the KICAMP on livelihoods in the Kinondoni, District. The study will significantly serve as a platform for stimulating researchers' interests in further inquiries in the area under investigation. It will also provide accurate reference material for providing accurate information relevant to the implications for livelihoods. The study will open the light and inspire environmental policymakers and development planners to realize the need towards developing policies and improvement of the existing ones to enhance more opportunities for proper integration in the conservation of coastal areas. The findings of the study will provide the ministry responsible for natural resources with the basis for understanding the need for ensuring that all the coastal areas in Tanzania are well

conserved. Besides, the study will be useful specifically to the local communities in Kinondoni District as it provides the community with a basis for awareness on how the KICAMP was created towards conserving the coastal area.

### **1.6 Organization of the Study**

This study has comprised five chapters. Chapter one represented the background of the study objectives. Chapter two has constituted the literature review of the study and Chapter three has described the research methodology that will be employed in the study. Chapter four presented the results of the study that explored the implication of the (KICAMP) on the livelihoods of people. Lastly Chapter five presented the summary, conclusions and recommendations of the study that encompasses key findings, conclusions of the major findings, and recommendations for actions and further studies.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Overview**

#### **2.1 Conceptual Definition**

##### **2.1.1 Integrated Coastal Area Management (ICAM):**

Is a dynamic, continuous, multidisciplinary and iterative process intended to promote sustainable management of coastal areas (EC, 2013).

##### **2.1.2 KICAMP:**

A programme specially designed by the government of URT for the protection and conservation of the coastal and marine resources in Kinondoni District (MPRU, 2014).

##### **2.1.3 A livelihood**

Means of making a living. It encompasses people's capabilities, assets, income and activities required to secure the necessities of life.

#### **2.2 Overview of KICAMP**

##### **2.2.1 Background of KICAMP**

ICAM originated from the United Nations Earth Summit on Environment and Development held in Rio de Janeiro, Brazil in 1992. The conference called for a new approach to marine and coastal areas management and development at the national, sub-regional, regional and global levels (EC, 2013). From that conference, various ICAM policies, programmes, projects, initiatives and activities were developed at each level in an attempt to implement them (UNCED, 2020).

ICAM aims to overcome the fragmentation inherent in a single-sector approach to coastal and marine resources management in Tanzania. In 1992 the plan was initiated in Tanzania, during a national workshop and policy conference on ICAM held in Arusha. Its overarching goal is to achieve sustainable coastal and sea resource development and management (Yanda, 2013).

ICAM is aimed at promoting sustainable approaches to the development of major economic uses of coastal resources and provides mechanisms to balance local and national interests. It also aims to support the conservation and restoration of critical habitats while ensuring coastal people continue to benefit from sustainable resource use (Ibid).

KICAMP was a programme concerned with the management, conservation and sustainable utilization of coastal and marine resources. The overall goal was to improve understanding and management of marine and coastal area resources in Kinondoni District through self-prepared water and land use physical planning. (MPRU, 2014).

The Kinondoni Coast Management Programme (KICAMP) was launched in 2001. The main stakeholders for the implementation of the KICAMP were the government of URT and Sweden through SIDA. In the year 2000, the Swedish government accepted the proposal and agreed to carry out the programme (Ibidi).

The SIDA (Swedish government) and the government of Tanzania contributed funds for the programme. The two governments agreed to finance the programme until it

could sustain itself. Following its sustainability, the programme was then left to be managed by Kinondoni Municipality (Wagner, 2015).

### **2.2.2 Areas of Formal Operation, Supervision and Activities Conducted by the KICAMP**

The KICAMP operated in two wards of Kinondoni District; Mbweni and Kunduchi. It is supervised by the programme coordinator. In each ward, the programme established CBOs with official leadership to undertake programme activities. CBOs worked in close cooperation with WEOs and street chairpersons (Wagner, 2015).

According to Wagner (2015), activities that KICAMP planned to implement were: Coral reef rehabilitation and protection in the coastal areas; Coastline management and rehabilitation using trees and grasses; Wetland rehabilitation; Mangroves rehabilitation through planting resilient seedlings; Beach nourishment and Coastline reforestation; and applying ecosystem-based integrated coastal management plan for Kinondoni coastal area.

## **2.3 Theoretical Framework**

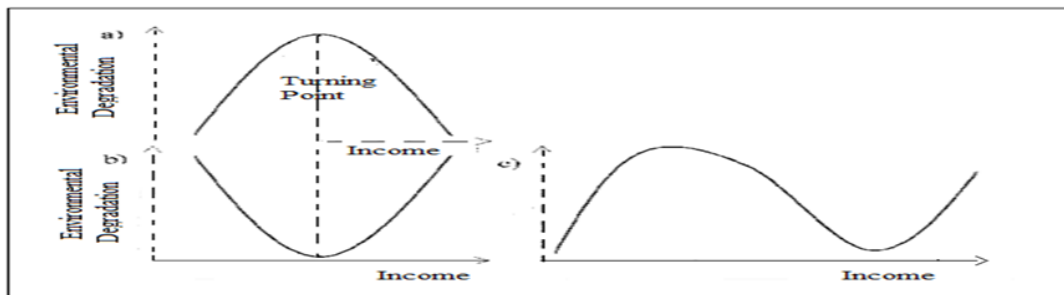
This study has been guided by the Environmental Kuznets Curve (EKC) Theory and Boserup (1965) population growth theory:

### **2.3.1 Environmental Kuznets Curve (EKC)**

The Environmental Kuznets Curve (EKC) is a theory which focuses on the relation between the sources of income and the level of quality. An initial effort in examining the EKC application is done by Grossman & Krueger (1991) who investigates the environmental impacts of trade liberalization.

As income growth rises, environmental resources will be declined when the stock effects of environmental resources on agricultural production are internalized. Theoretically, the concept of the ECK for environmental degradation factor was discussed by López (1994) and has been applied in the natural resource sector.

Environmental degradation is a function of income growth forming an inverted U-shaped curve (Figure 2.3.1). In the early stages of development, increasing income per capita will accelerate the environmental degradation rate.



**Figure 2.3.1: EKC for Environmental Degradation**

**Source:** A researcher, (2023)

### 2.3.2 Boserup Population Theory of 1965

Ester Boserup (1910-1999) developed a theory of agricultural intensification in 1803. The theory states that "population change drives the intensity of agricultural production". In this theory, when population density is low, land tends to be used intermittently allowing for restoration of fertility.

Kinondoni District's coastal resources became at risk due to population growth, as a resource over and misused. To alleviate the situation, an approach to coastal resource management, the KICAMP, was established.

## **2.4 Empirical Analysis of Relevant Studies**

Related empirical studies from both developed countries (America and Europe) and developing countries in Africa (Tanzania and other African nations) have been reviewed.

### **2.4.1 Empirical studies conducted in America and Europe**

ICAM programmes aimed at strategic strengthening of human resources utilization in the USA. Capacity-building programmes advanced awareness and enhanced understanding of issues in the law of the sea. Such measures supported both the protection and conservation of the coastal environment and contributed to poverty eradication, food security and the well-being of local communities (IMO, 2008).

Brown et al, (2008) in a study that sought to evaluate the role of marine and coastal ecosystem for poverty eradication in Canada portrayed that coastal environmental management that adopted ICAM approach and principles provided ecosystem services to people such as provision of food and water; supporting soil formation and nutrient cycling; regulating food, drought, land degradation and diseases; and cultural services like recreational, spiritual, religious and other non-material benefits. Moreover, ecosystem services had the role of providing employment and earnings to coastal communities in Canada.

Ireland (2004) in a study about "Sustainable Livelihoods for Coastal Communities in the UK", Coastal and marine protection and conservation programmes have greatly contributed to the creation of employment opportunities. Most coastal people in the UK got employment in fishing, fish trading, mangrove harvesting, beekeeping and

the like. From this, they generated income to improve their standards of living and socio-economic development.

### **2.4.3 Empirical Studies Conducted in Africa**

Ringim et al, (2016), the ICAM approach was used to mobilize various stakeholders, including the coastal community, to participate in different activities related to coastal management and conservation in Niger Delta. Various measures are taken immensely benefitted through secured oil and gas exploration, improved economic and sustainable development, and recreation and tourism development in the region.

In the study of conservation of wetland resources in South Africa, including mangroves and other trees, contributes significantly to the household economy of local people through the availability of economic activities such as market gardening, forestry, salt works and fishing. Conservation of coastal resources also improves both the life and food security of the surrounding coastal communities (Lamsal et al, 2015).

USAID (2013) in a study conducted in the coastal zone of Somalia, Kenya, Mozambique and South Africa observed that the integrated coastal and marine programmes largely employed training and public meetings to encourage local communities to participate in coastal resources protection and conservation initiatives. Such initiatives resulted in improvements in peoples' welfare like the capacity to meet household food needs, improved dietary intake, the ability to purchase new assets and others.

Inadequate financial commitment, unclear governance relations and power struggles are cited as key challenges to the sustainability of coastal management in the region. The study recommended that for coastal and marine conservation-based livelihood programmes to prosper, an interplay of various factors ought to exist which include supportive governance, effective community engagement and capacity building.

#### **2.4.1 Empirical Studies Conducted in Tanzania**

Effective management of marine and coastal resources helped to improve and maintain the livelihoods of the local coastal communities in Tanzania. For instance, they resulted in increased income from the restoration of mangrove and coral reef ecosystems, which led to increased fishery products and coastal tourism opportunities (NEMC, 2014).

Samoilys and Kanyange (2008) Education is the main way employed by TCZCDP to create awareness on proper ways of managing and conserving coastal resources. The study revealed that marine resources management activities involved the protection of coral reefs from destruction, the un-using of dynamite fishing and mangroves protection.

A study conducted by Mkama et al (2010) revealed that CMCP establishment has improved fishing as an alternative livelihood for coastal people, control of mangrove and coastal forests from cutting down for charcoal production, pole building and fuel wood which affected marine and coastal ecosystems.

The reclamation of submerged coastal areas of about 6.2 km<sup>2</sup> such reclaimed areas were used for human settlements, and the construction of beaches, hotels and other

tourist resorts. Wagner (2015) found that established coastal and marine programmes in the Dar es Salaam region led to sustainable fishing, tourism, and education development.

Established KICAMP brought about some constructive effects such as the creation of employment, improvement of socio-economic well-being and prevention of coastal deforestation. The study revealed that the programme was not sustainable as it lacked funds for implementing planned activities and also had poor management led to failure (Mangora *et al*, 2014).

## **2.5 Research Gap**

A review of related studies from developed countries conducted by Ringim *et al*, (2016), Lamsal *et al*, (2015), and other studies have uncovered the establishment of ICAM programmes had significant positive impacts on the improvement of local communities' livelihoods. However, the findings of these studies cannot be used to generalize the situation in the whole of Tanzania considering differences in operational contexts and environmental, socio-economic issues.

Although there are several empirical studies on ICAM programs in Tanzania, such as those conducted by Wagner (2015), Mkama (2010), Mangora *et al*. (2014), and Muthinga (2010), no research has been carried out in Tanzania to assess the impact of KICAMP on livelihoods in Kinondoni, Dar es Salaam. This lack of research makes Kinondoni an important case study for investigating the implications of KICAMP on livelihoods in Tanzania. Therefore, this study was sought to fill this gap of knowledge.

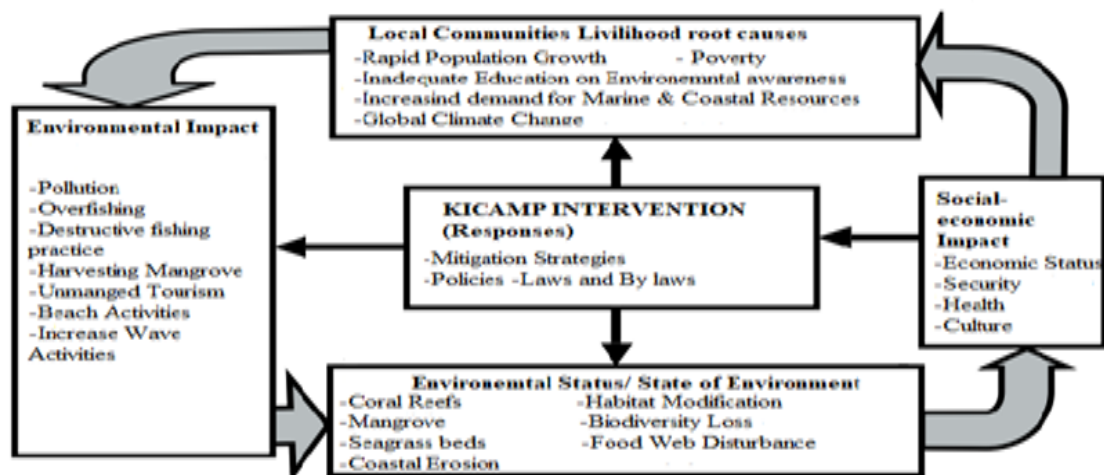


## 2.6 Conceptual Framework

This study has been guided by a conceptual framework adapted and modified from Wagner, open system model which describes likely intervention resulting out of change in independent variables. The model allows researchers to explore and analyze dynamic relationships between variables under research (Wagner, 2007).

The model is exploratory, allowed the researcher to explore more issues, aims at finding answers to the research problem and adaptation of assessing the implication of KICAMP towards livelihoods of the community will facilitate an easy understanding of the interdependent nature and relationships between variables (Brown et al, 2008).

According to Bercovitch (2015), effective implementation of the ICAMP activities through the set intervention results in the creation of livelihood status as summarized below:



**Figure 2.1: Conceptual framework guiding the implications of the KICAMP on livelihoods in Kinondoni**

**Source:** Adopted and modified from Wagner, 2007

The main root causes of environmental degradation are poverty and unequal distribution of wealth, inadequate awareness of resource users, etc. as shown in figure 2.5.1. Chen, De Bruyne et al, (2020) concluded that the loss and modification of marine ecosystems in Tanzania are largely due to socioeconomic factors.

The main impacts on the coastal and marine environment of coastal areas have been anthropogenic and include destructive fishing practices of various types, mangrove harvesting or clear-cutting, etc. as shown in figure 2.5.1 (Wagner, 2007).

There is a reciprocal cause-and-effect relationship between poverty and environmental state change. Poverty engenders inappropriate resource use patterns, which lead to environmental degradation and, in turn, environmental degradation generates further poverty (Satterthwaite, 2000).

The impact of environmental state changes on social-economic impact will feed back into root causes such as poverty and poor education. This is particularly true where people have a strong dependence on marine and coastal resources, such as the fishing communities around coastal areas. It is a vicious cycle that is difficult to break (UNCED, 2020).

Interventions address issues of vulnerability to both people and the environment. They can be directed towards addressing the root causes, mitigating the impacts or protecting/restoring the state of the environment. This considers a brief account of management before the management of KICAMP and is followed by a more detailed account of the subsequent era of integrated coastal management (Wagner, 2007).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

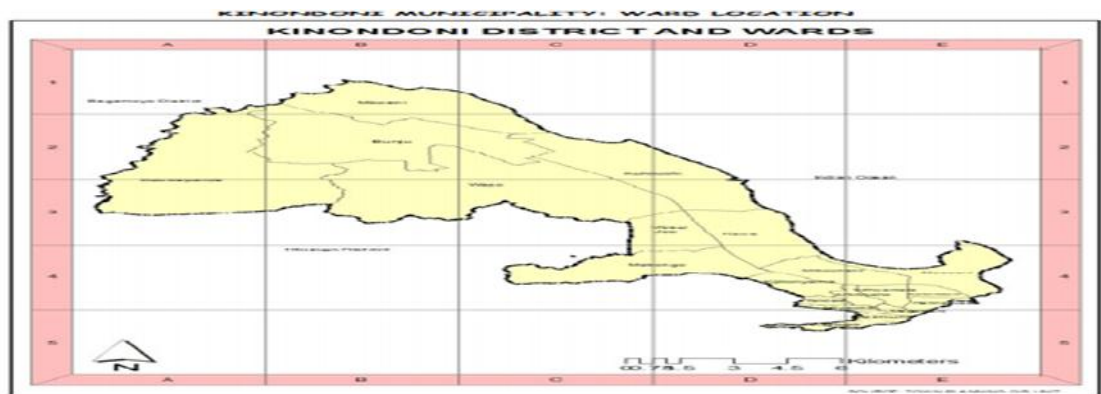
#### **3.0 Overview**

This chapter explains the research methodology adopted in this study that enabled the researcher to achieve objectives of the study. The methodology explains the entire process of the study as well as analysis of the various research methods employed during the research. Specifically, this chapter highlights the research approach and design, target population, sample selection and sampling procedures, sources of data, data collection methods, data analysis procedures, validity and reliability of the research instruments, trustworthiness of the study and research ethical considerations.

#### **3.1 The Study Area**

The study has been carried out in Kinondoni District, which covers an area of 537km<sup>2</sup> and is bordered Indian Ocean to the North and Bagamoyo District to the North East to North West, Ilala District to the South, and Ubungo District to the West (Kinondoni District, 2018).

According to the 2012 census, Kinondoni District has a population of 1,775,049 of which 860,802 are males and 914,247 are females. Mbweni ward is located at latitude 6°47'42"S with a population size is 3,475 people and a longitude of 39°15'58"E and Kunduchi ward is located at latitude 6°40'S and longitude 39°13'E with a population size is 75,016 people.



**Figure 3.1: Map of Kinondoni District**

**Source:** Kinondoni District Profile, (2019)

### **3.1.1 Justification of the Choice of the Research Area**

The choice of Kinondoni District for the study, because was the only district where KICAMP is implemented and operated in Mbweni and Kunduchi wards located in Kinondoni. Hence, information has been gained from household heads and other beneficiaries who live in areas of Mbweni and Kunduchi.

### **3.2 Research Approach**

This study has adopted a mixed methods research approach, as a triangulation of qualitative and quantitative approaches. A mixed method approach allowed the use of evidence from different sources of data that led to greater validity, to avoid gaps in data collection and to corroborate findings of the study. The approaches within a study has helped to mix the strengths and offset weaknesses of one research method with that of many others (Plano-Clark and Creswell, 2015).

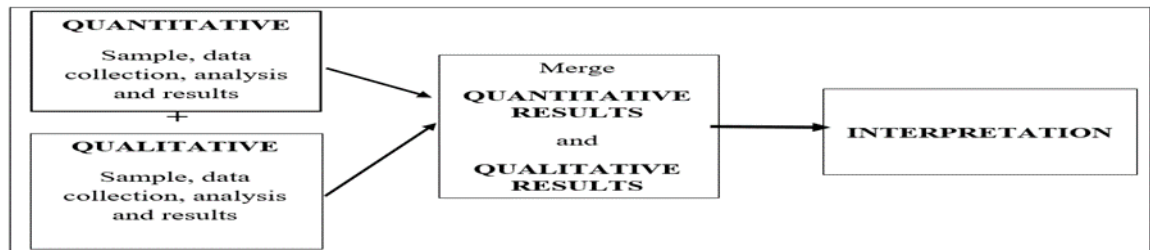
### **3.3 Research Design**

A research design is a systematic planning, organizing and executing a research within specified time and resources limits. It provides suitable framework that indicates the type of data to be collected (primary data or secondary data or both) and methods and procedures to be followed in data collection and analysis (Ghauri and Gronhang, 2005). This study employed parallel mixed methods research design. In this design, quantitative and qualitative studies were concurrently carried out and the results were merged in some ways to develop a comprehensive, complete and valid understanding of the phenomenon under scrutiny.

The parallel mixed methods research design was opted for in this study because the design enabled the researcher to collect, analyze and interpret both qualitative and quantitative types of data at the same time. Moreover, the design was deemed suitable as it allowed the researcher to produce findings that have equal weight. In addition, the design helped the researcher to carefully combine the quantitative and qualitative forms of data and develop research results and conclusions on the impact of Kinondoni Integrated Coastal Area Management Programme to local community's livelihood in Kinondoni district that are more complete and valid as the design involved the use of different methods to investigate different aspects of the study's topic (Creswell, 2015).

In implementing the parallel mixed methods research design in this study, the researcher adopted a model by Plano-Clark and Creswell (2015) with four procedural design specifications. Firstly, the researcher concurrently collected both quantitative and qualitative data. Secondly, the researcher analyzed the two datasets separately. Thirdly, the researcher compared the two sets of separate results. And finally, the

researcher made an overall interpretation as to the extent to which the separate results confirm and/or complement each other. Figure 3.3.1 describes the research design adopted in this study



**Figure 3.3.1: The Convergent Parallel Mixed Methods Research Design (QUAN+QUAL) for guiding an assessment of the study.**

Source: Adapted from Plano-Clark and Creswell (2015:392)

### 3.4 Target Population

The target population for this study was the KICAMP coordinator, workers, household heads per ward, other selected beneficiaries' members, WEOs and Street chairpersons.

#### 3.4.1 The KICAMP coordinator and workers

Were purposely selected because they are responsible for coordinating and implementing all the activities of the programme.

#### 3.4.2 WEOs and Street chairpersons

Were purposely selected to participate in this study because KICAMP activities were carried out in the respective areas of their jurisdiction.

#### 3.4.3 The household heads

From each ward were selected for this study because they are part of the beneficiaries of KICAMP. Thus, they had a lot of information about the impact of the programme that the researcher wants.

#### **3.4.4 Other Selected members**

Each ward has provided such businessmen, fishers, etc. who were purposefully selected for this study because they were the implementers and direct beneficiaries of the KICAMP.

### **3.5 Sample Size, Sampling Techniques and Procedure**

#### **3.5.1 Sample Size**

The sample size of 112 for this study appeared to be determined through a combination of criteria. The study considered the large population of KICAMP who were involved with the programme and sought to reflect the proportional distribution of this population in Mbweni and Kunduchi wards. Practical constraints, including the greater area of implementation in Mbweni ward, likely influenced the final sample size decision. Additionally, the study used of both quantitative (95 respondents) and qualitative (17 key informants) methods meant that the sample size needed to accommodate the requirements of both research approaches. The allocation of respondents to specific wards were 56.2% (63 respondents) in Mbweni and 42.8% (48 respondents) in Kunduchi while 1% was KICAMP Coordination, seems to have been driven by the proportion of the KICAMP population in these areas, ensuring a comprehensive and representative study in light of these considerations. A sample is a strategic and purposive category of respondents who has provided relevant information on a given research (Cohen et al 2009).

**Table 3.1: Summarizes the sample composition of the research respondents**

Category of the sample	The number of respondents projected
Heads of Households	95
KICAMP Coordinator	01
Ward Executive Officers	02
Street Chairpersons	02
KICAMP workers	02
Other Selected Members	10
Total	112

**Source:** Field Data, (2022)

### 3.5.2 Quantitative Research Sample Size

The sample size for quantitative data for this study was 95 heads of households; were by 5732 heads of households from the Mbweni ward and 4168 heads of households from the Kunduchi ward who were randomly drawn using the following formula by Krejcie and Morgan (1970):

$$\text{Sample Size} = \frac{X^2 NP (1-P)}{C^2 (N-1) + X^2 P (1-P)}$$

Where,

X<sup>2</sup> = Chi-Square formula for 1 degree of freedom (X<sup>2</sup> = 3.841)

N = Total Population Size, which was 9,900 heads of households of the two selected wards

P = Population parameter of a variable (P = 0.5)



C = Confidence Interval (10% = 0.12)

$$\text{Hence, Sample Size} = \frac{3.841 \times 9900 \times 0.5 (1-0.5)}{0.1^2 \times (9900-1) + 3.841 \times 0.5 (1-0.5)} = 95$$

Therefore, from the calculation above, the sample size for this study was 95 heads of households.

### **3.5.3 Qualitative Research Sample Size**

The study drew a sample of 17 respondents for qualitative data collection, including one (1) KICAMP coordinator, two (2) WEOs one from each ward, two (2) Street chairpersons each from one street for each ward, two (2) KICAMP workers and 10 other selected members beneficiaries 5 each from both wards.

## **3.6 Sampling, Sampling Techniques and Procedures**

### **3.6.1 Proportional Sampling**

Proportional sampling, also known as stratified proportional sampling, is a sampling technique used in research and statistics to ensure that the sample collected from a population accurately represents the proportions of different subgroups within that population. In this method, the population is divided into distinct subgroups, called strata, based on certain characteristics or attributes. Then, a proportionate number of samples is drawn from each stratum based on its relative size within the overall population. This approach is valuable when certain subgroups are of particular interest or importance and need to be adequately represented in the sample. Proportional sampling helps mitigate the risk of underrepresenting or overrepresenting specific subgroups, leading to more accurate and representative research outcomes.

Hence that by using the stratified proportional sampling to get sampling number of respondents from each ward

$$\text{Proportional Sampling} = \frac{\text{Population of Subgroup} \times 100\%}{\text{Total Population of Group}}$$

Where as:

$$\text{Proportional Sampling for Mbweni Ward} = \frac{5732 \times 100\%}{9900} = 57.9\%$$

$$\text{Proportional Sampling for Kunduchi Ward} = \frac{4168 \times 100\%}{9900} = 41.1\%$$

Sample Sizes for Mbweni and Kunduchi were Multiplied the proportions by the total desired sample size (95) to determine the target sample size for each ward. For Mbweni Ward:  $57.9\% \times 95 = 55.005$ , and for Kunduchi Ward:  $42.1\% \times 95 = 39.995 \approx 40$ .

The selection of participants for this study has been involved the use of both probability and non-probability sampling techniques. Sampling techniques has been employed, including purposive sampling, stratified random sampling, purposive random sampling and snowball sampling.

### **3.6.2 Purposive Sampling Technique**

In this study, purposive sampling will be used to select Kinondoni District particularly Kunduchi and Mbweni wards because these are the areas where the KICAMP project was implemented both WEO and KICAMP coordinators are selected. The technique has been employed based on its strength of helping the researcher to select information-rich cases or sample elements and it is relatively less costly (Hair *et al.*, 2003).

### **3.6.3 Stratified Random Sampling Technique**

A stratified random sampling technique has been used to draw 95 households' heads whereas 57 males and 38 females from wards participated in this study. This technique has ensured representativeness in terms of sex, age, etc in selecting a large number of 9,900 households head to get a small number who possess the same characteristics but differ in sex or age (Creswell, 2013).

### **3.6.4 Purposive Random Sampling Technique**

The study employed the purposive random technique to select two Street Chairpersons one from the streets found in each ward. Selection of samples based upon picking a marked piece of paper which was marked "YOU ARE INCLUDED" done to each ward and the two streets that their Street Chairman picked.

### **3.6.5 Snowball Sampling Technique**

Snowball Sampling is a sampling procedure whereby participants are used to identifying other potential participants for the study. In this study, snowball sampling has been used to select ten (10) beneficiaries who were involved in the implementation of the KICAMP, the sampling found and recruited hidden informants which aren't easily accessible by the researcher through other sampling techniques (Andale, 2015).

## **3.7 Data Collection Methods and Procedures**

According to Bryman (2012), the technique for collecting data that involve the use of a specific instrument, such as observation, questionnaire, interviews, etc. In this study, the data has been collected from both primary and secondary sources of data

by using questionnaires, interviews and documentary reviews. A triangulation of data collection methods has been employed to improve the validity, reliability and trustworthiness of the study findings.

### **3.7.1 Questionnaire Survey**

Questionnaire Survey; Open and closed questionnaires have been used in this study to collect quantitative data from 95 heads of households. These questionnaires can be designed to capture information related to environmental, social, and economic factors that contribute to local communities' livelihoods from KICAMP, as well as to uncover challenges faced in these aspects. Closed questions can provide structured data on various factors, while open-ended questions can yield more detailed insights into participants' perceptions and experiences, helping you meet the specific objectives of understanding these factors and challenges. The rationale for using both open and closed questionnaires is convenience in capturing more information from a large number of respondents within a relatively quick time and high reliability, given limited time and large numbers of respondents (Orodho, 2012).

### **3.7.2 In-depth interview**

An in-depth interview is a verbal interaction between an interviewer and an interviewee designed to collect information from the participants' ideas, perceptions, etc. on the subject under study. In-depth interviews with participants offer a valuable opportunity to delve deeper into their ideas, perceptions, and experiences regarding the environmental, social, and economic aspects of local communities' livelihoods from KICAMP. Through flexible questioning and probing, you can specifically explore the sustainability aspects of these livelihoods as they relate to the objectives.

The in-depth interview method allows for a comprehensive exploration of these factors and can provide rich, qualitative data. The method was flexible and allowed adjustment of questions and probes to ensure data needed and required (Bolderston, 2012).

### **3.7.3 Documentary Review**

The researcher employed this technique in this study to allow for counterchecking the authenticity of the data obtained through interviews. The documentary review entails viewing, hearing or making intensive reading of various printed materials related to what the researcher was investigating (McCulloch, 2004). This method connects to the objectives by ensuring the credibility and reliability of the information gathered. By examining existing documents related to KICAMP and the local communities' livelihoods, the findings from interviews and surveys, providing a well-rounded view of the environmental, social, and economic sustainability aspects, as well as the challenges associated with these livelihoods.

## **3.8 Data Process and Analysis**

Data analysis is the process of editing, coding classification and tabulation of the collected research data (Kumar, 2005). This study has involved the collection of both qualitative and quantitative data; the analysis process has employed the two approaches.

### **3.8.1 Data Processing**

Data processing refers to the systematic transformation of raw data into meaningful and valuable information through various operations and techniques. It involves a

sequence of steps that encompass data collection, preparation, transformation, analysis, and presentation (Kothari, 2004).

### **3.8.2 Data Analysis**

Data analysis refers to the systematic examination and interpretation of collected data to derive meaningful insights, patterns, and conclusions. It involves applying statistical techniques, computational tools, and qualitative methods to uncover relationships, trends, and correlations within the data. This process aids researchers in drawing valid conclusions, supporting or refuting hypotheses, and making informed decisions. As stated by Creswell "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches," data analysis is a crucial phase that transforms raw data into valuable knowledge, enhancing the rigor and credibility of research outcomes (Creswell, J. W., 2013).

Data analysis, as a fundamental component of this study, serves the dual purpose of unraveling the multifaceted dynamics of local communities' livelihoods resulting from KICAMP's activities. It systematically scrutinizes collected data to pinpoint the intricate web of environmental, social, and economic factors underpinning these livelihoods, thereby addressing the objective of determining their contributing elements. Statistical techniques and qualitative methods provide a comprehensive understanding of these factors. Simultaneously, data analysis facilitates an in-depth exploration of the environmental, social, and economic challenges that these communities confront as a result of their involvement with KICAMP. Through quantitative assessments and qualitative insights, uncovered the nuances and extent of these challenges, shedding light on implications for the communities. Data

analysis proved instrumental in not only identified the core elements of these livelihoods but also in elucidated the obstacles faced in pursuit of sustainability and well-being.

### **3.8.2.1 Analysis of Quantitative Data**

Data has been analyzed by the outline laid down for the purpose at the time (Kothari, 2004). Quantitative data collected through questionnaires were analyzed both manually and with the assistance of the computer software. The questionnaire data were firstly cross-checked for completeness, consistency and homogeneity. Thereafter, the quantitative data collected has been organized and analyzed by using Statistical Packaging for Social Science (SPSS) version 20 for computing frequencies and percentages. Finally, the quantitative data analyzed were summarized and presented in terms of frequencies and percentages using frequency distribution tables and charts as per the research objectives.

### **3.8.2.2 Analysis of Qualitative Data**

Data that has been collected and transcribed and translated without losing their meanings and coded, organized and summarized by using ATLAS.ti 8 a computer software to create themes. Both thematic and content data analysis procedures were employed in analyzing the qualitative data for this study. Qualitative data gathered through interviews and documentary review were subjected to thematic analysis in order to generate meaningful information in the form of categories, patterns and themes, and for verifications and illustrations of the findings (Kombo and Tromp, 2006). The data collected from interviews were firstly reduced by re-examining the verbatim transcriptions and compressing them without losing their meanings. Then,

the data were coded, organized and summarized into descriptive data display sheets to identify emerging themes, compare them with those from a similar category of respondents and verify them through information from observation and documentary review before drawing conclusions.

Moreover, the researcher picked out relevant data from observation and documentary review, compressed and organized them before drawing up conclusions. The observation and documentary review data were used to support the data collected from interviews. Lastly, the qualitative data were presented in descriptive form using direct quotes in accordance with the emerging themes as per the research objectives.

In addition, the data collected from pictures were subjected to visual content analysis. The researcher examined the content material contained in the pictures and added contextual information for descriptive purposes. The data from pictures were used to supplement the interview and questionnaire data. Also, photographs were presented as study findings so as to depict the real situation of the coastal areas before and after the adjustments made through the KICAMP activities.

### **3.8.3 Data Presentation**

Data presentation involves conveying the analyzed data in a clear and organized manner, using appropriate visualizations, tables, graphs, and narratives to effectively communicate findings to the intended audience. It enhances the accessibility and understanding of complex information. According to Kvale "Doing Interviews," effective data presentation is crucial for ensuring the transparency and credibility of research outcomes, allowing readers to grasp the significance of results and interpretations (Kvale, S. (2007). *Doing Interviews*. Sage Publications).



### **3.9 Validity, Reliability and Trustworthiness of the qualitative Study**

Since this study employed mixed methods research approach, both criteria for ensuring quality of quantitative study (validity and reliability) and those for enhancing trustworthiness in qualitative studies were used.

#### **3.9.1 Validity and reliability of the quantitative study**

In this study, validity and reliability were the criteria used to ensure and promote quality of the quantitative research instruments and findings as suggested by Creswell (2009) and Cohen et al. (2000).

##### **3.9.1.1 Validity of the quantitative study**

Validity in quantitative research refers to the degree to which a data collection procedure or method is accurate, correct, meaningful, true, and measures what it is intended to measure (Kombo and Tromp, 2006). To ensure validity, this study conducted a pilot study to pre-test the questionnaires. The questionnaires were tested with five heads of households who were not part of the actual study respondents, prior to administering them to the targeted heads of households. The results of the pilot study were used to refine, rectify, and redesign the questions, thereby ensuring a successful data collection process in the actual study field. Additionally, to improve the external validity of this study, the researcher purposefully selected respondents who had information related to the KICAMP.

##### **3.9.1.2 Reliability**

In the context of quantitative research, reliability refers to the ability to obtain consistent and stable study findings over time and across different research studies (Jeanne et al., 2000). This means that the same object, trait or construct should yield similar results when measured using independent but comparable methods. To ensure reliability, this study utilized multiple data collection methods, including questionnaires, interviews, observations, and documentary reviews. By cross-checking the data obtained from these different methods, the researcher was able to establish the internal consistency and stability of the study findings.

### **3.9.2 Trustworthiness of the qualitative Study**

In qualitative research, trustworthiness refers to the accuracy, validity, reliability, and truthfulness of the data collection instruments and findings (Yin, 2011). To ensure the trustworthiness of the qualitative findings in this study, four criteria were used, namely credibility, dependability, transferability, and confirmability, as outlined by Lincoln and Guba (1989). These criteria helped to establish the quality of the research by ensuring that the findings were credible, dependable, transferable to other contexts, and confirmed by multiple sources.

#### **3.9.2.1 Ensuring credibility**

The credibility of qualitative research data refers to how realistic and truthful the findings are, representing the cultural worlds of the people being investigated (Graneheim and Lundman, 2004). This study ensured credibility through a triangulation of three data collection methods, including questionnaire, interview and documentary review, which helped cross-check the data and achieve corroboration.

This study's credibility was improved by peer debriefing, which involved seeking guidance and support from the research supervisor and colleagues during data analysis and presentation of the findings. Additionally, peer review was conducted by discussing the researcher's data interpretations and conclusions with colleagues, who provided comments to assist in making necessary modifications prior to and during report writing.

### **3.9.2.2 Ensuring dependability**

Dependability in qualitative research means stability or consistency of findings over time and across conditions (Ary et al, 2010). This study ensured dependability by defining key variables and observing them using consistent methods and settings. In-depth information on the research process was also provided to ensure trust in the findings.

### **3.9.2.3 Ensuring transferability**

The researcher ensured transferability in this qualitative research study by providing a detailed description of the research methodology, sites, and context, as well as establishing thick and detailed descriptions of the study findings, which allows for comparisons to be made. Transferability refers to the ability to replicate research findings in other contexts with respondents who have similar characteristics to the previous participants (Lincoln and Guba, 1989).

### **3.9.2.4 Ensuring confirmability**

This paragraph discusses confirmability in qualitative research, which refers to the extent to which findings can be corroborated by others. To ensure confirmability in this study, the researcher employed triangulation of data collection methods and used both narrative accounts and direct quotations from respondents during reporting to provide actual evidence of the findings.

### **3.10 Ethical Considerations of the Study**

Throughout the study, the researcher adhered to all the required research rules and regulations, particularly ethical issues. To ensure ethical considerations, the researcher obtained an official research permit from the office of the Vice-Chancellor (Research) Open University of Tanzania, which allowed her to collect data in the Dar es Salaam region. The permit was submitted to the Regional Administrative Secretary (RAS) of Dar es Salaam region, who introduced the researcher to the District Executive Director (DED) for Kinondoni District. The DED granted permission for the researcher to conduct the study among proposed individuals, offices, and areas in Kinondoni District.

During the data collection process in the field, the researcher introduced herself and stated the purpose and objectives of the study to the participants. Informed consent was obtained from the respondents who voluntarily agreed to participate, be tape recorded where necessary, and photographed where required. Additionally, the researcher assured the research participants of confidentiality of the information provided.

To protect the anonymity of the study respondents, the researcher used symbols to represent their names, and only acknowledged the community members who

participated as key informants in the study. The researcher also acknowledged all the sources of information used in the study to avoid any plagiarism cases when reporting the findings.

## **CHAPTER FOUR**

### **FINDINGS AND DISCUSSION**

#### **4.0 Introduction**

The purpose of this chapter is to present the results of the study that explored the implication of the Kinondoni Integrated Coastal Area Management Programme (KICAMP) on the livelihoods of people in the Kinondoni District of Dar es Salaam, Tanzania. The chapter includes details about the individuals who participated in the study, such as their location, gender, age, level of education, and occupation. The chapter also presents and discusses the findings of the study, on three main research objectives: determining environmental, social and economic factors that contribute to local communities' livelihoods from KICAMP, examining environmental, social and economic challenges of local communities' livelihoods from KICAMP, and examining environmental, social and economic sustainability aspects of local communities' livelihood on implementation of the existing KICAMP in the Kinondoni District.

#### **4.1 Respondents' Profile**

##### **4.1.1 Sex**

Table 4.1.1 indicates that both male and female respondents were included in this study. Male respondents were 60 (55%), while female respondents were 49 (45%). This implies that both sexes had great influence in the KICAMP in Kinondoni District. While most of the men highlighted that a large number of people around the Kinondoni coast had poor awareness of KICAMP especially women since they did not participate fully in coastal activities because in most cases they were close to

domestic activities and other issues related to women group hence they had little awareness of KICAMP compared to men who were seemed to be aware of KICAMP because most of them were engaged in activities like fishing, vegetable gardening and small business along the coast where KICAMP took place.

**Table 4. 1: Sex of Respondents (N=109)**

Sex	Frequency	Per cent
Male	60	55%
Female	49	45%
Total	109	100%

**Source:** Field data (2023)

#### 4.1.2 Age

Table 4.1.2 indicates that the ages of the respondents in this study ranged between 21-60 years. The respondents in the age group of 21-30 were 21.1%, 31-40 were 34.9%, 41-50 were 34.9% and the last age group of 51-60 was 9.2%. However, the results suggested that the involvement of all respondents was important and necessary as well because they had different and crucial information to be obtained in the study. Whereas those who were between 21-50 years mostly were working age group that's why they were much aware of KICAMP because they were involved in its implementation due to their presence severally along the coast. And those above 51 years suggest that there has been an absence of sound community rules in local societies that would result in marine and coast areas being managed sustainably. Additionally, the conditions imposed by donor agencies and the government on conservation funding generally stipulate some forms of community involvement in the conservation of marine and coast resources.





**Table 4.1: Age of Respondents (N=109)**

Age	Frequency	Per cent
21-30	23	21.1%
31-40	38	34.9%
41-50	38	34.9%
51-60	10	9.2%
Total	109	100%

**Source:** Field data (2023)

### 4.1.3 Education

Table 4.1.3 indicates that the majority (45.8%) of the respondents employed in this study had primary education, followed by those with secondary education (29.4%), tertiary education (20.2%) and the ones with non-formal education (4.6%). With this education level attained, those from primary to tertiary education were of opinion that KICAMP contributed to empowering the local community in Kinondoni District to undertake collaborative management of the coastal and marine resources and involvement in conservation campaigns and activities. Those with non-formal education (4.6%) state that some community members destructed mangroves and local fisherpersons used stone anchors in fishing activities but fortunately, the KICAMP succeeded to create awareness and involved the local community in Kinondoni District in various activities related to protection and conservation of the coastal and marine resources.

**Table 4.2: Educational Level of Respondents (N=109)**

Educational Level	Frequency	Per cent
Primary Education	50	45.9%
Secondary Education	32	29.4%
Tertiary Education	22	20.2%
Non-Formal Education	05	4.6%
Total	109	100%

**Source:** Field data (2023)

#### **4.1.4 Occupation**

Table 4.1.4 indicates that 54.1% of respondents were private sector employees, 37.6% were public sector employees, and 8.3% were self-employed including businessmen/women, vegetable gardeners, sea salt makers, beekeepers and fisherpersons. Those from public sector employees (37.6%) believed that KICAMP succeeded to increase awareness in the community and contributed to improving people's livelihoods because the restoration of mangrove and coral reef ecosystems led to increased fishery products and coastal tourism opportunities consequently raising peoples' income. Moreover, those from private and self-employed were of opinion that KICAMP had a positive contribution to communities' livelihoods in Kinondoni District even though the programme was not sustainable enough as its existence was not continuous and its benefits were short-lived, for instance, all the financial groups formed have now collapsed soon after the programme handed over to Kinondoni Municipal Council.

**Table 4.3: Occupation of Respondents (N=109)**

Occupation	Frequency	Per cent
Public Employed	41	37.6%
Private Employed	59	54.1%
Self-Employed	09	8.3%
Total	109	100%

**Source:** Field data (2023)

## **4.2 Determine environmental, social and economic factors that contribute to local communities' livelihoods from KICAMP**

### **4.2.1 The Local Community's Awareness of the KICAMP**

The first research objective examined the local community's awareness of the KICAMP. For effective involvement in the activities of the KICAMP, the local community in Kinondoni had to understand what the KICAMP entailed in terms of meaning, overall purpose and objectives, management/organizational structure, activities, and the predetermined outcomes of the project. Findings regarding this objective were collected through questionnaires and in-depth interviews.

The quantitative data from questionnaires administered to heads of households as summarized in Table 4.2.1 indicate that 90.4% of the respondents in the Mbweni ward were aware of the KICAMP, while 9.6% said that they were not aware of the programme. In the Kunduchi ward, the majority of 85% of the respondents said that they were aware of KICAMP, and only 15% of the respondents revealed that they were not aware of the programme. This implies that the community's awareness of the KICAMP was higher in both wards as indicated by 88% of the respondents.

However, the findings indicated that community awareness was relatively higher in Mbweni because most of the programme's activities were carried out there.

**Table 4.5: Awareness of the KICAMP within wards of respondents (N =92)**

Awareness of the KICAMP	Wards					
	Mbweni		Kunduchi		Overall	
	Frequency	%	Frequency	%	Frequency	%
Yes	47	90%	34	85%	81	88%
No	5	10%	6	15%	11	12%
Total	52	100%	40	100%	92	100%

**Source:** Field data (2023)

Concerning qualitative data on the awareness of the KICAMP, in-depth interviews with Ward Executive Officers (WEOs), Street Chairpersons and Community Members indicated that 14 (100%) out of 14 respondents said that they were aware of the KICAMP in terms of its meaning, purpose, objectives, organizational structure, activities as well as its outcomes. Table 4.2.2 summarizes the interview findings.

**Table 4.6: Interview responses on the awareness of the KICAMP (N=14)**

Category of Respondent	Number of respondents	Responses		Frequency	Per cent
		Yes	No		
Ward Executive Officers	02	02	---	02	100
Street Chairpersons	02	02	---	02	100
Community Members	10	10	---	10	100
Total	14	14	---	14	100

**Source:** Field data (2023)

In line with the above findings, one Community Member argued:

*“I know the KICAMP was a coastal project that dealt with issues related to the protection and conservation of coastal resources. It involved the coastal community in the Kinondoni district. The project was very helpful as it improved our socio-economic status by engaging us in various economic activities such as fishing and vegetable gardening” (In-depth interview, C3, Mbwani Ward, 02.01.2023).*

Also, another Community Member added:

*“When you talk of the KICAMP you refer to a programme that integrated the local community in Kinondoni district in the management and conservation of the coastal resources. The programme was established in Mbwani and Kunduchi wards. Through the programme, we planted mangrove trees and engaged in the cleanliness of the coastal environment” (In-depth interview, C7, Kunduchi Ward, 06.01.2023).*

The preceding quotations imply that the local community in Kinondoni district was aware of the KICAMP and its impact on the said community. This further suggests that the community's awareness of the KICAMP led to active participation in the implementation of the programme's activities.

Therefore, in general, the community awareness of the KICAMP was 94%. This resulted from computing average results of 88% of quantitative findings through questionnaire surveys and 100% of qualitative findings generated through interviews.

#### **4.2.2 Sources of knowing the KICAMP**

Respondents were asked through questionnaires to mention the sources of knowing the KICAMP. 37% of the respondents said they knew the KICAMP through meetings organized by ward executive officers in their areas, 29.3% reported that they knew the programme through a publication like fliers, posters and handouts,

19.6% through their fellow community members, and 14.1% knew the KICAMP through their regular visits to the mangrove programme implementers. Table 4.3.1 summarizes the findings.

**Table 4.7: Sources of knowing the KICAMP (N=92)**

Source	Frequency	Per cent
Visiting the mangrove programme implementers	13	14.1%
Fellow community members	18	19.6%
Ward and Street Government Officials' Meetings	34	37.0%
Publications like fliers, posters and handouts	27	29.3%
Total	92	100%

**Source:** Field data (2023)

Sounding on a similar note, through interviews, it was revealed that there were different sources through which the local communities at Kunduchi and Mbweni Wards knew the KICAMP. In particular, meetings, seminars and workshops were pointed out as the main sources. In that regard, during one of the in-depth interviews at Mbweni, one Community Member said:

*"I knew the Kinondoni Integrated Coastal Area Management Programme through my friends who were involved in it. They always went to seminars and when they came back, they told me about the programme" (In-depth interview, C5, Mbweni Ward, 06.01.2023).*

Also, another Community Member noted:

*"I knew the KICAMP through meetings conducted by our local leaders. Through such meetings, we were informed about what the KICAMP was all about, its goal, objectives and activities. By so doing, we were inspired to participate*

*in the implementation of the programme" (In-depth interview, C3, Mbweni Ward, 02.01.2023).*

The foregoing statements imply that there were several ways through which the local community members were informed about KICAMP. Also, this suggests that those ways helped to actively engage community members in the Kinondoni district in the implementation of the programme.

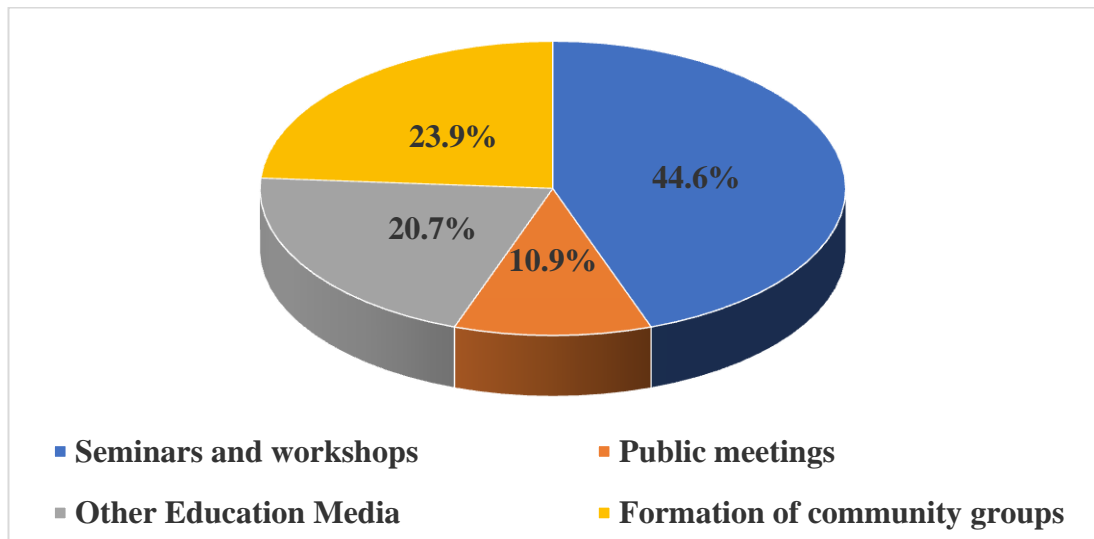
### **4.3 Examine environmental, social and economic challenges of local communities' livelihood from KICAMP**

#### **4.3.1 Local Community's Participation in the Implementation of the KICAMP**

This second objective sought to examine the local community's involvement in the implementation of the KICAMP. In this objective, the researcher wanted to measure two variables, namely ways of community participation in the KICAMP and the activities they did in the implementation of the programme.

#### **4.3.2 Ways the community implemented the KICAMP**

This research examined ways through which the communities at Kunduchi and Mbweni Wards were involved in the implementation of the Kinondoni Integrated Coastal Area Management Programme. Findings from questionnaires revealed that the majority of respondents 41 (44.6%) said that training in form of seminars and workshops was the main way used to implement the KICAMP. On the other hand, 22 (23.9%) of the respondents cited public meetings, whereas 19 (20.7%) said other educational media and only 10 (10.9%) respondents said the formation of community groups. Figure 4.4.1 summarizes the questionnaire findings.



Source: Field data (2023)

**Figure 4.2: A pie chart showing ways used to implement the KICAMP**

From the thematic analysis of qualitative data, the major themes that emerged were seminars and workshops, public meetings, education media and the formation of KICAMP community groups as summarized in table 4.3.2.

**Table 4.8: Ways used to implement the KICAMP (N =17)**

Category of ways	Number of respondents = 17					Total	Per cent
	KC	KWs	WEOs	SCPs	CMs		
Seminars and workshops	01	02	02	02	10	17	100
Public meetings	01	02	02	02	10	17	100
Other education media	01	02	02	02	08	15	88.2
Formation of KICAMP community groups	01	02	02	02	06	13	76.5

Key: KC = KICAMP Coordinator, KWs = KICAMP Workers, WEOs = Ward Executive Officers, SCPs = Street Chairpersons, CMs = Community Members

Source: Field data (2023)



The data in table 4.3.2 indicate that 17 (100%) out of 17 respondents reported that seminars/workshops and public meetings were the main ways used to cultivate the local community's readiness to participate in the implementation of the KICAMP. On the other hand, 15 (88.2%) respondents cited other education media, while 13 (76.5%) cited the formation of KICAMP community groups. These findings imply that all the ways cited played a significant role in preparing the grounds for the community's active participation in the implementation of the KICAMP. The themed data in table 4.8 are presented and discussed in the following subsections:

#### **4.3.2.1 Seminars and workshops**

From in-depth interviews held with the KICAMP coordinator, the KICAMP workers, Ward Executive Officers, Street chairpersons and Community Members, it was revealed that the programme conducted seminars and workshops for community members which aimed at providing knowledge and skills to them for nurturing effective participation in the programme as indicated by 100% of the respondents.

The KICAMP Coordinator, for instance, said:

*"We conducted seminars and workshops as means to create community awareness and encourage their active involvement in the programme activities related to the protection of the coastal environment, conservation and sustainable utilization of coastal resources. We conducted one seminar/workshop after every three months" (In-depth interview, KICAMP Coordinator, 05.01.2023).*

Moreover, one Community Member added:

*"We used to select some of our fellow community members to attend seminars and workshops related to KICAMP. The selection was done democratically during meetings organized by the KICAMP officials and no criteria were used during selection. The seminars/workshops provided training to community members on how to protect and*

*conserve the coastal environment, how to sustainably utilize the coastal natural resources and how to engage in livelihood projects such as fishing, beekeeping and vegetable gardening. When they came back, they disseminated what they had learned to us" (In-depth interview, C8, Kunduchi Ward, 11.01.2023).*

To consolidate the interview data, the researcher reviewed files on seminars and workshops conducted to the local community by the KICAMP. The files indicated several pieces of training on KICAMP provided to the community. Thus, seminars and workshops were useful means for capacity building for community members in the Kinondoni district as they helped them to participate effectively in the implementation of KICAMP.

#### **4.3.2.2 Public Meetings**

Similar to seminars and workshops, it was established that the KICAMP employed public meetings as a means to get community members involved in the implementation of the programme. This was reported by 17 (100%) respondents through in-depth interviews. Findings revealed that the programme officials in collaboration with the ward executive officers and street chairpersons often conducted public meetings with the community members to mutually discuss and make mutual decisions on important issues related to the implementation of the KICAMP. The decisions made were on when to engage in mangrove planting and environmental cleanliness activities. The meetings were as well used to inform community members of the progress the programme made. It was reported by the respondents that there were two meetings held per month. For instance, one Ward Executive Officer (WEO) pointed out:

*"Community members were involved in the programme through public meetings. We used to conduct two meetings every month. The meetings were used for awareness creation. They also made them feel that they owned the programme and that it was for their betterment" (In-depth interview, WEO, Mbweni ward, 05.01.2023).*

In the same vein, one Community Member said:

*"We used to participate in meetings regularly conducted by the KICAMP leaders in collaboration with our ward executive officer and the street chairperson. In the meetings, we were discussing several issues related to KICAMP, including how to undertake various economic activities offered by the coastal resources in our area" (In-depth interview, C1, Mbweni Ward, 09.01.2023).*

Moreover, the documentary review was used to supplement the questionnaire and interview data. The findings indicated that the KICAMP officials in collaboration with the government officials such as ward executive officers and street chairpersons held regular public meetings with the community on issues related to KICAMP. Hence, the meetings conducted created and raised awareness among people, providing knowledge for the effective undertaking of coastal productive economic activities, as well as knowledge on proper ways of protecting and conserving the coastal resources. The findings correspond with what USAID (2013) noted that integrated coastal and marine programmes established in Kenya, Mozambique, South Africa and Somalia largely used public meetings and training in the form of seminars and workshops to encourage local communities to participate in coastal and marine resources protection and conservation initiatives.

#### **4.3.2.3 Other Education Media**

Education media played an instrumental role in creating awareness and mobilizing the community to participate in various KICAMP activities as far as the

implementation of the programme was concerned. Through in-depth interviews, it was reported by 15 (88.2%) out of 17 study respondents that KICAMP used mass communication media such as newspapers, radio and television, fliers, posters, handouts, papers, journals as well as sports and games bonanza to disseminate environmental education to the coastal people of Kunduchi and Mbweni areas.

Correspondingly, it was further observed that such education media educated people on how to undertake various economic activities such as beekeeping, vegetable gardening and fishing. Moreover, they provided knowledge on why to avoid dynamite fishing and cutting down of mangrove trees, as well as on proper cleanliness of the coastal environment and planting of mangroves. In that way, people were inspired to participate in the programme activities. Mbweni Chairperson said that:

*"I was given some handouts by the KICAMP leaders to distribute to people. It contained information about the programme. Most people who read the handouts got knowledge on planned KICAMP activities" (In-depth interview, Mbweni Street Chairperson, 06.01.2023).*

In addition, one Community Member noted that:

*"We were encouraged to participate in implementing the KICAMP through different social activities organized by the programme such as sports and games bonanza which brought together a lot of people across this ward and beyond. Sports and games carried and communicated an important message about environment protection and conservation including planting mangroves and cleaning the coastal environment" (In-depth interview, C3, Mbweni Ward, 02.01.2023).*

The provision of education to the people of Kunduchi and Mbweni Wards on proper ways of protecting and conserving coastal resources encouraged them to engage

themselves in the implementation of the KICAMP. These results correspond with those by Samoily and Kanyange (2008) who discovered that provision of education through radio, handouts and posters to coastal communities in the Tanga region, Tanzania enabled those communities to effectively and efficiently participate in different activities related to the implementation of the established marine resources management projects/programmes. Similarly, the findings concur with those of Ringim et al (2016) who found that various means of mass communication such as newspapers, radio and television were employed to mobilize the coastal communities in the Niger Delta in Nigeria to participate in coastal management and conservation activities.

#### **4.3.3 Formation of KICAMP Community Groups**

As reported by 13 (76.5%) of the respondents through in-depth interviews, formulation of community social groups served as another important way employed by the KICAMP to involve people in the implementation of the programme. The study findings revealed that the KICAMP established different social groups at Kunduchi and Mbweni wards, which brought people together to exchange ideas, knowledge and experiences related to the programme implementation. Thus, one Community Member through an in-depth interview said:

*"The KICAMP established one social group in our area. The group used to deliver knowledge to our community that helped us to actively participate in the implementation of the programme. We also used the group to share and exchange ideas and experiences on issues related to KICAMP" (In-depth interview, C6, Kunduchi Ward, 19.01.2023).*

#### 4.3.4 Activities implemented through the KICAMP

In this research task, respondents were asked to identify the activities that the local community engaged (performed) in the actual implementation of the KICAMP. The data in table 4.3.4 indicate that 49 (45%) respondents said that the community engaged in planting mangroves, 35 (32.1%) respondents reported involvement in environmental protection, 11 (10.1%) respondents pointed out involvement in fishing, 8 (7.3%) in vegetable gardening, and only 6 (5.5%) said involvement in beekeeping activity. Thus, community members in the Kinondoni district, particularly those at Kunduchi and Mbweni wards where the KICAMP was established, were very much involved in the implementation of the programme activities.

**Table 4.9: Community Members' Activities' involvement (N=109)**

Activity Participated	Frequency (N=109)	Per Cent (%)
Planting mangroves	49	45.0%
Environmental protection	35	32.1%
Fishing	11	10.1%
Vegetable gardening	08	7.3%
Beekeeping	06	5.5%
Total	109	100%

**Source:** Field Data, (2023)

As a matter of evidence to corroborate the findings above, the researcher reviewed some files from the KICAMP coordinator's office that documented different activities the programme designed and engaged the community in their implementation. During the review, it was observed that several activities such as planting mangrove trees, cleaning the coastal areas, sustainable fishing and vegetable

gardening were initiated by the KICAMP and were conducted by the local communities in Kunduchi and Mbweni coastal areas in managing, protecting and conserving the coastal environment and in utilizing the coastal resources. The findings are similar to those of Jayawera (2009) who revealed that coastal communities in Zanzibar were engaged in activities related to vegetable gardening and protection of the coral reefs from destruction and extinction as part of initiatives for integrated coastal and marine resources management and conservation.

#### **4.4 Examine of the environmental, social and economical sustainability aspect of local communities' livelihood from KICAMP**

##### **4.4.1 Contribution of the KICAMP to the local community's livelihoods**

The third objective sought to evaluate the contribution of the KICAMP to the local community's livelihoods in the Kinondoni District. Questionnaires, in-depth interviews, observation and documentary review were concurrently used to collect information relevant to this objective.

The study findings indicated that the main contributions of the KICAMP were the provision of physical assets that encompassed planting of mangrove trees, improved management and of coastal resources, and increased valuable coastal land for different socio-economic activities; social assets that involved improved environmental cleanliness and formation of small social groups; and human asset that involved the creation of awareness of environmental conservation issues to people who were engaged in various socio-economic activities. Another benefit was the availability of political assets to the community members that encompassed the improvement of security for people.

Table 4.4.1 shows that the majority of 31 (28.4%) respondents reported planting trees as a major contribution of the KICAMP to the community's livelihood followed by 22 (20.2%) respondents who cited improved management and utilization of the coastal resources by the community. On the other hand, 19 (17.4%) respondents said the creation of employment opportunities for the community, 12 (11.0%) respondents opted for increased awareness on the protection and conservation of the environment, 10 (9.2%) cited improvement of security to people, and only 8 (7.3%) respondents said provision of credits to people. These findings suggest that the KICAMP had a contribution of 93.5% to the local community's livelihoods. Moreover, the findings convey an impression that the KICAMP had a variety of contributions to the local community's livelihoods in the Kinondoni district.

**Table 4.10: Contribution of the KICAMP on local communities' livelihoods (N=109)**

Category of Contribution	Male (N=60)		Female (N=49)		Overall	
	N	%	N	%	N	%
Planting of trees for wood fuel, building materials, shed, calming extreme hot weather	19/20	32.0%	12/14	24.5%	31	28.4%
Improved management and utilization of the coastal resources for proper management of resource found in the area so as to have sustainability on livelihood	11/13	18.3%	11	22.4%	22	20.2%
Increased awareness on the protection and conservation of the environment	07	11.7%	05	10.2%	12	11.0%
Creation of employment to people	10	16.6%	9/11	18.4%	19	17.4%



Provision of credits to people	04	6.7%	04	08.2%	08	7.3%
Improved people's security	06	10.0%	04	08.2%	10	9.2%
Total	57	95.3%	45	92.2%	102	93.5%

**Source:** Field data (2023)

#### **4.4.2 Creation of physical/natural/ human assets**

##### **4.4.2.1 Planting of trees which led to the creation of mangrove forests**

The majority of 34 (31.2%) respondents reported through in-depth interviews and self-administered questionnaires that planting mangroves along the coastal areas of Mbweni and Kunduchi, especially along the beaches and far from coastal strips was an important contribution of the KICAMP to the local community.

Through questionnaires administered to the heads of households, it was revealed that before planting the mangroves, people were first provided with an education that helped them to actively engage in tree-planting activity as part of the intervention to the KICAMP initiatives. The heads of households further disclosed that planting of mangroves in Mbweni and Kunduchi wards was done twice a year; during the March-May rain season and the October-December rain season.

The questionnaire responses were enhanced by the interview responses. Findings from in-depth interviews held with the KICAMP coordinator, KICAMP workers, ward executive officers, street chairpersons and community members pointed out that the KICAMP management created awareness to people on tree planting and conservation, supplied the mangrove seedlings to people, supervised planting at the beginning of each rain season and ensured constant monitoring to facilitate the

growth of those trees. In that regard, one community member from the Mbweni ward, for instance, said:

*"The KICAMP cultivated in us the readiness to participate in planting mangroves in the coastal areas. By so doing, we managed to control coastal soil erosion to a great extent" (In-depth interview, C2, Mbweni Ward, 20.01.2023).*

Moreover, one Ward Executive Officer (WEO) pointed out:

*"As part of natural resources management, every household and institution in our ward was required to participate in mangrove tree-planting and their protection programme initiated by the KICAMP" (In-depth interview, WEO, Kunduchi Ward, 05.01.2023).*

Hence, people in Kunduchi and Mbweni areas were largely involved in the implementation of the KICAMP through the initiative of planting mangroves and ensuring their protection and sustainability. These findings concur with the findings by Yona and Mmochi (2010) who found that the coastal conservation and sustainable land use-related measures introduced in Kilwa and Mtwara Districts Tanzania greatly improved the growth of mangrove and coastal forests, and biodiversity and habitat protection and restoration.

#### **4.4.2.2 Improved management and utilization of the coastal resources**

When the respondents were asked through self-administered questionnaires and interviews if the establishment of the KICAMP enabled them to properly manage and sustainably utilize the coastal resources, 103 (94.2%) respondents said yes and only 6 (5.8%) said no. This implies that the KICAMP greatly improved the local community's ability to manage and utilize the coastal and marine resources. Hence,

during one of the in-depth interviews, one community member from the Kunduchi Ward had this to report:

*"The contribution made by the KICAMP on the effective utilization of the coastal resources cannot be forgotten here at Kunduchi. The programme facilitated appropriate and sustainable use of the coastal natural resources such as water and land. Before this programme, we experienced misuse and depletion of these resources through dynamite fishing, indiscriminate cutting down of mangrove trees and uncontrolled waste disposal and sewage discharges" (In-depth interview, C10, Kunduchi Ward, 24.01.2023).*

Moreover, another Community Member added:

*"With my fellows, formed a small group of ten members through the support of the KICAMP. Through this group, the village government in our area apportioned us a piece of the reclaimed land along the coast which we used for planting vegetables like tomatoes, cabbages and spinach" (In-depth interview, C7, Kunduchi ward, 06.01.2023).*

The statements above imply that before the launching of the KICAMP, people misused the coastal natural resources due to a lack of knowledge, but the formation of that programme was a blessing to the community of Kinondoni district as it made them aware of ways of managing and utilizing the coastal natural resources sustainably.

Correspondingly, to consolidate the questionnaire and interview findings, an observation of several mangrove trees planted and protected by the community was conducted. Figure 4.4.2.2.1 indicates a depleted area by waste disposal on the Mbweni coast before and the initiatives taken by the KICAMP.



**Figure 4.1:** Photograph on the left showing mangrove area in Mbweni coast depleted by waste disposal before the establishment of the KICAMP and photo on the right is the same area on Mbweni coast where by progress of the growing mangrove trees in replanted through the KICAMP initiative after the damage.

Thus, planting mangroves helped in conserving the coastal environment and make proper land use at the coast. Similarly, it led to the provision of wildlife habitats essential for the ecosystem. Moreover, mangroves provided a suitable home to a variety of fish, coral, shrimp, crab and mollusc species which were vitally important for commercial fishing. Most importantly, mangrove forests helped the community to benefit from beekeeping and protection of the coastal areas against natural hazards such as storms and coastal erosion.

Also, the researcher observed that the KICAMP succeeded to do land reclamation of the coastal areas which were encroached by the ocean water whereby an area of about 3.6 square kilometers in both wards was reclaimed through covering quarry pits with soil and trees and the construction of seawalls and groins along the beaches. The Kunduchi-Salasala quarry area is a good example. Part of the reclaimed land

was used for the creation of settlements and the other one turned into arable land for productive socio-economic activities such as vegetable gardening (horticulture) growing mangroves for the creation of fish catchment areas and production of the tree for building and construction of, conducting beekeeping in mangroves, and creation of beaches for tourist activities. Figure 4.4.2.2 indicates some land use and management on the Kunduchi coast.



**Figure 4.2: Protected mangrove forest in Kunduchi ward and a portion of land that has been turned into animal keeping**

The Swahili words written on the signboard in Figure 4.4.2.2 read, "Onyo: Ni marufuku kutupa takataka, kukata miti au kufanya uharibifu wowote katika eneo hili. Atakayevunja amri hii atapigwa faini ya shilingi 50,000 au kifungo cha miezi 6. [Warning: It is strictly prohibited to throw garbage, cut trees or do any destructive activity in this area. If you are caught disobeying this warning, you will be charged a fine of 50,000 Tanzanian shillings or sentenced 6 months-Researcher translation]."

These findings concur with the conceptual framework's livelihood impact variable of proper management and utilization of coastal and marine resources. The findings also concur with those of the Tanzania Coastal Management Partnership Support Unit (TCMPSU) (2003) contributed to the maintenance of the ecosystem and developed economic activities which helped to reduce pressure on the ecosystems by ensuring that all the natural resources within the coastal areas were sustainably used.

#### **4.4.2.3 Creation of environmental awareness in the community**

The establishment of KICAMP created awareness among people on environmental protection and conservation. Through in-depth interviews held with various respondents, it was portrayed that the programme extended knowledge on proper ways of protecting and conserving the coastal environment, including knowledge on how to avoid destructive activities like dynamite fishing and cutting down of mangrove trees. Likewise, it established knowledge on proper ways of keeping the coastal environment clean, on planting trees, and knowledge that prepared people to undertake various economic activities offered by the coastal resources such as sustainable fishing, salt making, vegetable gardening and beekeeping. One community member, for instance, disclosed that:

*"The KICAMP provided multiple knowledge to us. This included knowledge of conserving the coastal areas and engaging in productive coastal economic activities. Myself, for instance, I engage effectively in fishing through that knowledge" (In-depth interview, C9, Kunduchi Ward, 13.01.2023).*

These results are similar to those of the Institute of Marine Organization (2008) which established that capacity-building programmes for people on ocean and sea

helped to advance awareness and enhance understanding of local communities on effective protection and conservation of the coastal areas whose gains were endless.

#### 4.4.3 Creation of social assets

##### 4.4.3.1 Increased awareness among people on the conservation of the environment

Increased awareness to people on the protection and conservation of the environment was another contribution of the KICAMP as reported by 91 (98.9%) respondents through questionnaires. Heads of households revealed that through the KICAMP people got knowledge on proper ways of keeping the environment clean and safe.

Likewise, through observation, the researcher observed the initiatives for protecting and preserving the environment introduced by the KICAMP in Kunduchi and Mbweni coastal areas. The conservation methods involved, among others, cleanliness of the coastal environment and controlling coastal deforestation and dynamite fishing. In addition, signboards and posters that warned people not to destruct the protected coastal environment and resources were observed in the study.



Figure 4.3: Signboard showing reserved mangrove area in Mbweni ward

The signboard in Figure 4.4.3.1 reads, "Wizara ya Maliasili na Utalii. Wakala wa misitu (TZ). Hifadhi ya mikoko. Onyo: Eneo hili la hifadhi ya mikoko linalindwa kwa mujibu wa sharia za misitu ya mwaka 2002 na ardhi ya mwaka 1999. Hairuhusiwi kufanya shughuli yoyote bila kibali toka mamlaka husika. Hatua kali za kisheria zitachukuliwa kwa atakayekiuka [Ministry of Natural Resources and Tourism. Tanzania Forest Agency. Mangrove Reserve. Warning: This mangrove reserve area is protected under the Forest Ordinance of 2002 and the Land Ordinance of 1999. It is strictly prohibited to conduct any activity without prior permission from the concerned authority. Strict lawful measures will be taken against anyone who will violate this warning]."



**Figure 4.4.:** A signboard showing the reserved mangrove area Kunduchi ward

The signboard on the tree in Figure 4.4.3.2 reads, "Wizara ya Maliasili na Utalii. Tunza hifadhi hii ya mikoko pwani ya Dar es Salaam [Ministry of Natural Resources



and Tourism. Protect this reserved mangrove area on the coast of Dar es Salaam-  
Researcher translation]."

Moreover, findings from in-depth interviews established that the KICAMP made most people in the Kinondoni district aware of environmental conservation and its importance to society due to the knowledge the programme provided. It was revealed that the community adopted the culture of keeping the ocean and its surroundings clean as well as planting mangroves and protecting them from being cut down. Cleaning the environment helped people to control air pollution and avoid the eruption of diseases. One Community Member, for instance, reported that:

*"We participated effectively in cleaning rubbishes along the coast of Kunduchi. We used to make cleanliness every Saturday. We also delivered knowledge to each other on the importance of keeping our home environment clean for the betterment of our health" (In-depth interview, C9, Kunduchi Ward, 13.01.2023).*

The KICAMP environmental conservation initiatives had positively impacted the local community's livelihood in Kinondoni District. Participation in environmental protection was a mandatory and endless activity for all community members who resided along the coastal areas of Kunduchi and Mbweni where the programme was conducted. Different strategies for environmental protection and conservation introduced by the programme were pointed out.

These results agree with those by Lamsal et al, (2015) who found out that coastal programmes and projects helped to cultivate in people positive attitude towards coastal land conservation. In addition, Samoilys and Kanyange (2008) observed that one of the contributions of the Tanga Marine Resource Management Programme was

community involvement in the protection and conservation of the surrounding coastal areas.

#### **4.4.4 Creation of political assets**

##### **4.4.4.1 Improved people's security**

The introduction of the KICAMP contributed to 9.2% of the improvement of people's security in Kinondoni District, particularly those who lived along the coast of Mbweni and Kunduchi. From 92 questionnaires administered to heads of households, 91 (99.9%) revealed that the KICAMP managed to prevent the ocean water that had been flooding into the residential areas.

Similarly, in-depth interviews with the KICAMP workers, street chairpersons, ward executive officers, the KICAMP coordinator and community members established that the KICAMP improved the security of the coastal community by 94.1%. It indicated that planting trees along the coast and cleanliness of the coastal areas through the KICAMP improved the lives of the communities as they lived in a clean environment. Thus, with the establishment of the KICAMP, the community around enjoyed the fresh air, and use of clean and safe water. In addition, the study ascertained that the creation of beaches and hotels increased the size of the settlement and hence, the need for the establishment of police posts which ensured the security of the people and their properties. Thus, the Ward Executive Officer for Mbweni remarked:

*"I thank the KICAMP for improving the security of the coastal people and their properties. I acknowledge the support of the government for establishing police stations which guarantee people maximum security" (In-depth interview, WEO, Mbweni Ward, 05.01.2023).*

Also, one Community Member from Mbweni claimed that:

*"Formerly, we had no security of lives and properties. Bad people such as thieves and robbers threatened our lives. But following the establishment of this programme in our area security was improved" (In-depth interview, C4, Mbweni Ward, 25.01.2023).*

The KICAMP led to the improvement of security for people and their properties in the Kinondoni district. These findings correspond with the study's conceptual framework livelihood impact of improved security to coastal communities through the ICAM programmes and projects.

#### **4.4.5 Creation of financial assets**

##### **4.4.5.1 Provision of credits to small groups of people**

As indicated by 7.3% of the respondents, the provision of credits to small groups of people was a direct contribution of the KICAMP to the community of Kinondoni District, specifically those households that resided along the coast of Mbweni and Kunduchi wards where the programme was implemented. Through in-depth interviews and a review of related documents, the researcher learned that the programme provided soft loans to 19 small groups of people; 11 groups from the Mbweni ward and 8 groups from the Kunduchi ward. The same groups formed Village Community Banks (VICOBA) and Savings and Credit Cooperative Organizations (SACCOS) which promoted the economic lives of the people. The credits/loans provided were used for creating small projects such as petty businesses, buying fish gear needed for fishing and buying different agricultural implements needed for effective engagement in vegetable gardening. For example, through an in-depth interview, the Chumvini village chairperson noted:

*"Three groups of people in this village; two women groups and one men group were given loans by the KICAMP. The women groups used the loan to engage in small businesses such as selling food, fruits, clothes and shoes. The men's group invested the capital in fishing" (In-depth interview, Chumvini Street Chairperson, Kunduchi ward, 05.01.2023).*

In addition, one Community Member said:

*"Through our small group, the KICAMP provided us with a loan. We used such loan to buy tools for growing vegetables for our domestic consumption and selling" (In-depth interview, C6, Chumvini Street, Kunduchi Ward, 19.01.2023).*

Hence, the KICAMP had been an essential tool for improving the livelihood of the community in Kinondoni District, owing to the soft loans the programme provided to different people via their small groups. These results correspond with the conceptual framework's livelihood impacts of generation of income and sustainable development to coastal communities through the establishment of integrated coastal and marine programmes.

Moreover, the results concur with those of Mkama et al (2010) who revealed that the Coastal Management and Conservation Project (CMCP) established in Bagamoyo District, Tanzania enhanced investments and savings by the coastal communities. The project encouraged the formation of Village Community Banks (VICOBA) and Savings and Credit Cooperative Organizations (SACCOS) which promoted the economic lives of the people. In addition, Yona and Mmochi (2010) observed that a total of 13 VICOBA and SACCOS groups were formed in the Kilwa district and 15 groups were formed in the Mtwara district as was the case with the KICAMP where VICOBA and SACCOS groups were established.

#### **4.4.5.2 Creation of employment**

The research findings indicated that the KICAMP played an important role in generating employment opportunities for the community in the Kinondoni district. 19.3% of the respondents said that the programme served as a source of employment for coastal people. In that way, the programme acted as a source of financial capital (income) for people. The findings showed that about 902 people in Kunduchi and Mbwani wards got self-employment through the KICAMP initiatives.

Furthermore, from questionnaires with the heads of households and the in-depth interviews with various respondents, it was revealed that the KICAMP provided knowledge on how to use ocean resources that enabled people to employ themselves in fishing, vegetable gardening, salt making, beekeeping and like. From such activities, people generated income (money) which was used to improve their standards of living. The activities are presented and discussed hereunder.

##### **4.4.5.2.1 Sustainable fishing**

It was revealed by 10.1% of the respondents that the community was engaged in fishing as a means of generating income for livelihood. From the questionnaire surveys, the heads of households disclosed that the KICAMP provided useful knowledge to the community that enabled them to effectively engage in fishing. They argued that from their engagement in fishing, they accumulated some cash that immensely supported and significantly improved their standard of living.

It was further pointed out through in-depth interviews that from fishing the local community got money which they spent for getting various needs, including paying

school fees for their children and buying food and clothes for their families. In that regard, one Community Member reported:

*"The KICAMP introduced various economic activities at the coast. However, fishing formed the principal economic activity and source of income for most coastal people at Kunduchi and Mbwani. The programme supported us with capacity building and physical facilities for carrying out sustainable fishing" (In-depth interview, C2, Mbwani Ward, 20.01.2023).*

In addition, one Street Chairperson said:

*"Though the KICAM has collapsed, its benefits still exist to date. For example, the programme has left us with a modern kind of fishing that neither pollutes the ocean nor kills unwanted fish. No dynamite fishing exists today in Mbwani coast" (In-depth interview, Mbwani Street Chairperson, 06.01.2023).*

Fishing has been improved by the KICAMP. As a result, most coastal people in Kunduchi and Mbwani wards engage in fishing for their survival.

#### **4.4.5.2.2 Vegetable gardening**

As pointed out by 7.3% of the respondents, the community in Kunduchi and Mbwani coastal areas was involved in vegetable gardening as part of the implementation of KICAMP initiatives. Vegetable gardening dealt with horticultural activities whereby tomatoes, cabbages, spinach, onions and others were grown. Through observation in the field, the researcher observed several small plots planted with vegetables. Moreover, through interviews, it was pointed out that vegetable gardening was carried out by organized small groups of people who lived in the coastal areas subjected to KICAMP activities. In proving this, one Community Member had this to say:

*"Through our small groups, the KICAMP engaged us in planting vegetables for domestic and commercial purposes. This was done to make people self-employed." (In-depth interview, C2, Mbweni Ward 20.01.2023).*

Similarly, another Community Member proved that:

*"I engaged in vegetable gardening, I grew tomato and cabbages. Through this activity, I managed to buy 45 iron sheets for roofing my house. Also, life at home in terms of food and other basic needs was significantly improved through this activity. All this was a result of the knowledge I acquired from the KICAMP." (In-depth interview, C5, Mbweni Ward, 06.01.2023).*

The foregoing quotes suggest that the KICAMP was an important agency for the improvement of people's standards of living following different sources of employment the programme created that earned them income for their survival. The same results were found by Jayaweera (2009) who revealed that coastal conservation measures/activities people of Zanzibar participated in included vegetable gardening. They are also similar to what UNESCO (2011) observed that marine-related programmes created employment opportunities by improving coastal tourism, market gardening activities, fishing and aquaculture which contributed to the generation of income and eradication of poverty.

#### **4.4.5.2.3 Sea Salt making**

It was found through questionnaire responses that through the knowledge provided by the KICAMP, people were able to tap ocean water for salt making. The salt produced was used for commercial purposes to generate income and for domestic purposes.

Furthermore, through a review of related documents from the KICAMP office, ward executive officers and village chairpersons' offices in Mbweni and Kunduchi, the study found out that about 198 people who lived in Kunduchi and Mbweni wards engaged in the salt-making activity. The salt produced was for commercial purposes as well as for domestic use.

#### **4.4.5.2.4 Beekeeping**

From questionnaires administered to 92 heads of households, 52 (56.5%) pointed out that people who lived along the coastal areas where the KICAMP was conducted engaged in beekeeping activity. The findings indicated that beekeeping was conducted along the beaches in both Mbweni and Kunduchi, especially within the mangrove trees by people who got seminars related to beekeeping organised by the KICAMP.

Similarly, findings from interviews corroborated those from questionnaires. During in-depth interviews, 12 (70.6%) out of 17 respondents pointed out that the KICAMP established beekeeping activity in the community and that some community members adopted it as one of their economic activities. For instance, one of the respondents (beekeeper) said:

*"We were mobilized and supported by the KICAMP to undertake beekeeping. The project management made a constant follow-up to ensure that knowledge and skills of beekeeping provided were properly utilized." (In-depth interview, C4, Mbweni Ward, 25.01.2023).*

The foregoing quote suggests that through the support of KICAMP, the community engaged effectively in beekeeping activity to earn income. These results correspond with those by Ireland (2004) who pointed out that beekeeping was one of the coastal



conservation activities that communities in the United Kingdom participated in as part of the intervention in the implementation of established coastal/marine conservation projects and programmes.

These results concur with the conceptual framework's livelihood impact variables of creation of employment, generation of more income and improvement of standards of living of the coastal communities following as a result of the establishment of ICAM programmes.

Finally, the respondents were asked to state the degree/amount to which the KICAMP has contributed to the improvement of the livelihoods of the community in the Kinondoni district. The rating responses were "Very large", "Large", "Very small" and "Medium". The findings in table 4.4.5.2.4 indicated that 14.7 of the respondents said that the KICAMP had a very large contribution to the improvement of the community's livelihood, while 24.8% of the respondents said it to a large extent. On the other hand, 53.2% of the respondents said medium and 7.3 % said to a very small extent. This suggests that 92.7% of the respondents indicated that the KICAMP had achieved its objective of improving the livelihoods of the targeted community in the Kinondoni district although 7.3% indicated that it was very small.

**Table 4.9: The KICAMP improved the community's livelihoods (N=109)**

Extent	Frequency (N=109)	Per cent (%)
Very large	16	14.7%
Large	27	24.8%
Medium	58	53.2%
Very small	08	07.3%
Total	109	100.0%

**Source:** Field data (2023)

The findings correspond with the findings by Wagner (2015) who found out that the establishment of coastal and marine programmes in the Dar es Salaam region, including the KICAMP, greatly improved peoples' livelihoods through sustainable fishing, tourism and development of education. Wagner (ibid) further observed that the programmes increased areas for human settlements and the establishment of economic activities such as the development of industries, and the construction of beaches and tourist resorts. Also, the findings concur with what Mangora et al (2014) noted in their study on the "Examining the Contribution of Kinondoni Integrated Coastal Area Management Programme" that the programme succeeded to create more employment opportunities and improved the well-being of the local communities in Kinondoni district.

#### **4.4.6 Sustainability of People's Livelihoods in Kinondoni District**

In fact, following the programme, 93.5% of the local community's livelihoods had physical, social, human, financial and political assets such as planting of trees (28.4%), improved management and utilisation of the coastal resources by the community (20.2%), creation of employment to people (17.4%), increased community's awareness on the protection and conservation of the environment (11%), improvement of security to the community (9.2%) and provision of credits to people (7.3%).

Therefore, during the implementation of the KICAMP, there were several positive contributions towards communities' livelihoods in Kinondoni District even though they did not last for a long time which means its benefits in communities' livelihoods were short-lived and many financial groups formed throughout the implementation

of the programme failed to withstand few years after phase-out the programme. Therefore, the greatest strategy the government particularly the Kinondoni municipal council should apply to conserve the environment and improves communities' livelihoods is; to provide education through capacity building campaign to raise public awareness about environmental conservation and sustainable utilization of marine and coastal resources and their impacts on the communities. This will help people have sustainable utilization of these resources and even other private institutions invested alongside the Kinondoni coast will utilize the coast and its resources for the betterment of future generations while conserving the environment.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

This chapter presents the summary, conclusions and recommendations of the study. It encompasses a summary of the study, a summary of the key findings, conclusions of the major findings, and recommendations for actions and further studies.

#### **5.1 Summary of the Study**

This study aimed to assess the implication of KICAMP on local communities' livelihoods in Kinondoni District, Tanzania. It aimed to achieve three specific objectives which were to determine environmental, social and economic factors that contribute to local communities' livelihoods from KICAMP, examine environmental, social and economic challenges of local communities' livelihoods from KICAMP, and examine environmental, social and economic sustainability aspects of local communities' livelihood on implementation of the existing KICAMP in the Kinondoni. The study was guided by a conceptual framework Adopted and modified by Wagner (2007). It employed mixed methods research approach informed by the convergent parallel mixed methods research design. The sample of this study was drawn from six categories of respondents, namely local community members, heads of households, KICAMP coordinators, Street chairpersons, KICAMP workers and ward executive officers. Purposive, quota and snowball sampling techniques were employed to get a sample of 109 study respondents. Research data were collected through in-depth interviews, questionnaires, observations and documentary review.

The qualitative data collected were subjected to thematic analysis procedures while quantitative data were subjected to descriptive analysis procedures.

Based on the specific objectives, this study revealed the following major findings: The study revealed that 94% of the local community members in Mbweni and Kunduchi coastal areas in the Kinondoni district understood the factors that contribute to local communities' livelihood from KICAMP and its initiatives for coastal resources management and conservation. Seminars, workshops, public meetings, visiting the mangrove programme implementers, information from fellows, and publications in the form of fliers, posters and handouts were pointed out as local the community's sources of knowing the KICAMP.

The challenges of KICAMP in managing and conserving coastal natural resources was considered important to the community's livelihoods. The study found that the majority of the community members participated in the implementation of the KICAMP through the programme's established activities, notably planting mangrove trees (45.0%), environmental conservation activities (32.1%), fishing (10.1%), vegetable gardening (7.3%) and beekeeping (5.5%).

The findings also portrayed that the KICAMP contributed 93.5% of the local community's livelihoods hence led to sustainable aspect of the local communities' livelihood from KICAMP. It led to the creation of physical, social, human, financial and political assets such as planting of trees (28.4%), improved management and utilization of the coastal resources by the community (20.2%), creation of employment to people (17.4%), increased community's awareness on the protection

and conservation of the environment (11%), improvement of security to the community (9.2%) and provision of credits to people (7.3%).

## **5.2 Conclusions**

Based on the major findings of this study, the following conclusions can be drawn:

The study concludes that despite inadequate and unreliable funding from the government, the KICAMP helped to empower the local community in Kinondoni district to undertake collaborative management of the coastal resources and involvement in conservation campaign and activities.

The study concludes that notwithstanding the challenges related to the destruction of the natural resources by some community members who engaged in mangrove cutting and destructive fishing that involved the use of stone anchors by local fisherpersons, the KICAMP succeeded to create awareness and involved the local community in Kinondoni district in various activities related to protection and conservation of the coastal natural resources.

Also, the study concludes that to a great extent, the KICAMP succeeded to increase people's income from the restoration of mangrove and coral reef ecosystems leading to increased fishery products and coastal tourism opportunities. It also promoted beekeeping, vegetable gardening and other economic activities in the local community in the Kinondoni district.

Finally, the study concludes that although the KICAMP had a positive contribution to the community's livelihoods in the Kinondoni district, the programme was not sustainable enough as its existence was not continuous and its benefits were short-

lived. For instance, all the financial groups formed have now collapsed they lasted for not more than six years after closing the programme.

### **5.3 Recommendations for Action and Further Studies**

Based on the study findings and conclusions made, the following are recommendations for action and further studies:

#### **5.3.1 Recommendations for Action**

The government through the ministry of natural resources and environment in collaboration with the Kinondoni municipal council should raise public awareness on the conservation and sustainable utilization of coastal natural resources and their impact on society. This will enable society to make sustainable utilization of such resources.

The government should strengthen the capacity of Kinondoni municipality through the provision of enough funds to enable it to manage all the affairs of the KICAMP which is currently stagnant and approaching liquidation.

Kinondoni municipal council should strengthen security on the protected and conserved coastal resources such as mangrove forests to ensure that no further destruction is done.

#### **5.3.2 Recommendation for Further Studies**

This study assessed the implications of the Kinondoni Integrated Coastal Area Management Programme (KICAMP) in improving the local communities' livelihood in the Kinondoni District. To have generalized findings about the impacts of

KICAMP, this study recommends another study to be conducted in other areas in Tanzania where coastal and marine programmes are/were implemented.

Since this study was only confined to the implications of KICAMP in improving the community's livelihood, another study could be carried out to examine the challenges faced that KICAMP in carrying out its activities.



## REFERENCES

- Andale, T. Y. (2015). Snowball sampling: Definition, advantages and disadvantages. (Retrieved at [www.statisticshowto.com/snowball-sampling](http://www.statisticshowto.com/snowball-sampling) on 18<sup>th</sup> March, 2022).
- Ary, D., Lucy, C. J., Chris, S., and Asghar, R. (2010). Introduction to research in education (8thEd.). New York, NY: Wadsworth Cengage Learning.
- Bercovitch, J. (2015). Relationships between variables: A framework for research. New York, NY: McGraw Hall.
- Bolderston, A. (2012). Sample size estimation in radiation oncology trials. Radiation Oncology
- Boserup, E. (1965). The conditions of agricultural growth: The economics of agrarian change under population pressure. London, England: Allen and Unwin.
- Brown, K., Dawt, T., Rosendo, S., Bunce, M., and Cherrett, N. (2008). Marine and coastal ecosystem services for poverty alleviation. International Journal of Social Sciences, 3 (2), 123-149.
- Chen, S., De Bruyne, C. and Bollempalli, M. (2020) 'Blue economy: Community case studies addressing the poverty-environment nexus in ocean and coastal management', Sustainability (Switzerland), 12 (11).
- Cohen, L., Manion, L., and Marrison, K. (2000). Research methods in education (5th Ed.). London, England: Routledge Falmer.
- Cohen, L., Manion, L. and Morrison, K. (2009). Research methods in education. London, England: Routledge Falmer.

- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, 3, 95-108.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th Ed.). California, CA: SAGE Publications.
- EC [The European Commission], (2013). A new initiative on maritime spatial planning and integrated coastal management. (Retrieved and accessed at [www.ec.europa.eu/environment/iczmm/index-en.htm](http://www.ec.europa.eu/environment/iczmm/index-en.htm) on 19<sup>th</sup> Feb, 2022).
- Ghauri, P., and Gronhaug, T. A. (2005). *Research methods in business studies: A practical guide* (3rd Ed.). Manchester, UK: Prentice Hall.
- Graneheim, U. H., and Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24 (2), 105-112.
- Grossman, G. M., & Krueger, A. B. (1991), *Environmental Impacts of a North American Free Trade Agreement* (No. 3914), Cambridge.
- Hair, J. F., Money, A. H., and Samouel, P. (2003). *Essentials of business research methods*. Hoboken, N.J. (England): Wiley.
- IMO [The Institute of Marine Organization], (2008). *ICAM initiatives in the United States of America: Coastal and marine resources conservation and sustainable utilization*. New York, NY: McGraw Hill.
- Ireland, C. Y. (2004). *Alternative sustainable livelihoods for coastal communities: A review of experience and guide to best practice*. London, UK: The World Conservation Union.
- Jayawera, I. (2009). *Livelihood and diversification in rural coastal communities in Zanzibar, Tanzania*. Stockholm, Sweden: Stockholm University Press.

- Jeanne, S. Z., John, J. S., and Eugene, B. Z. (2000). *Research methods in psychology* (5th Ed.). New York, NY: McGraw Hill.
- Kinondoni District Commissioner's Office (2018). *Kinondoni District Profile* (Retrieved and accessed at [www.kinondonimc.go.tz](http://www.kinondonimc.go.tz) on 29<sup>th</sup> April, 2022)
- Kombo, D. K., and Tromp, D. L. A. (2006). *Proposal and thesis writing: An introduction*. Nairobi, Kenya: Pauline's Publications Africa.
- Kothari, C.R. (2004). *Research methods and techniques*. New Delhi, India: Wiley Eastern Publishers Ltd.
- Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Journal of Educational and Psychological Measurement*, 3 (30), 607-610.
- Kumar, R. (2005). *Research methodology (2<sup>nd</sup> Ed.)*. London, UK: SAGE Publications Ltd.
- Kvale, S. (2007). "Doing Interviews." Sage Publications.
- Lamsal, P., Pant, K. P., Kumar, L., and Atreya, K. (2015). Sustainable livelihood through conservation of wetland resources in South Africa. *Journal of Ecology and Society*, 20 (1), 10-24.
- Lincoln, Y. S., and Guba, E. G. (1989). *Fourth generation evaluation*. Washington, DC: SAGE Publications.
- López, R. (1994), The environment as a factor of production: The effects of economic growth and trade liberalization, *Journal of Environmental Economics and Management*, 27(2), 163-184.

- Mangora, M. M., Mclean, B., and Shalli, M. S. (2014). Examining the contribution of the Kinondoni Integrated Coastal Area Management Programme. Dar es Salaam, Tanzania: MoLFD.
- McCulloch, G. (2004) Documentary research: In education, history and the social sciences, *Documentary Research: In Education, History and the Social Sciences*.
- Mkama, W., Mposo, A., Mselem, M., Tobay, J., and Daffa, J. (2010). Fisheries value chain analysis in Bagamoyo district, Tanzania. Dar es Salaam, Tanzania: DUP.
- MPRU [Marine Parks and Reserves Unit], (2014). Strategic plan 2014-2019. Dar es Salaam, Tanzania: Ministry of Livestock and Fisheries Development.
- Muthinga, N. (2010). Examining the sustainability of Kinondoni Integrated Coastal Area Management Programme. Dar es Salaam, Tanzania: Tanzania Institute of Marine Science.
- NEMC [National Environmental Management Council], (2014). Policy brief climate change and marine and coastal environment in Tanzania. New York, NY: UNDP.
- Orodho, J. A. (2012). Proposal and thesis writing. Nairobi, Kenya: Masola Publishers.
- Plano-Clark, L.V. and Creswell, W. J. (2015). Understanding research: A consumer's guide (2<sup>nd</sup> Ed.). New York, U.S.A: PEARSON.
- Ringim, A. S., Sulaiman, I. M., and Lyakurwa, J. V. (2016). Implementation of integrated coastal zone management approach in the Niger Delta, Nigeria:

- A review. *International Research Journal of Environmental Sciences and Studies*, 1 (3), 43-55.
- Samoilys, M. A., and Kanyange, N. W. (2008). Assessing links between marine resources and coastal peoples' livelihoods: Perceptions from Tanga, Tanzania. Dar es Salaam, Tanzania: CORDIO Publication East Africa.
- Satterthwaite, D. (2000) 'The Ten and a Half Myths that may Distort the urban Policies of Governments and International Agencies', *Crisis*, 10(2), pp. 75–78.
- Tanzania Coastal Management Partnership Support Unit, (2003). Proceedings of Tanzania coastal management partnership retreat and local ICM programmes meeting. Tanzania Episcopal Conference 30 November to 1 December, 2003, Dar es Salaam, Tanzania.
- UNCED, Earth Summit: Sustainable Development Knowledge Platform (2020). (Retrieved at <https://sustainabledevelopment.un.org/milestones/unced> on 1<sup>st</sup> May 2022).
- United Republic of Tanzania, (2003). National integrated coastal environment management strategy. Dar es Salaam, Tanzania: Vice President's Office.
- URT (2012). National Population and housing census-DPG Tanzania. Dar es Salaam, Tanzania: National Bureau of Statistics.
- UNESCO (2011). An inter-agency paper towards the preparation of the UN conference on sustainable development (Rio+20). New York, NY: UNESCO.
- USAID (2013). Assessment of the conservation-based livelihood programmes in the Indian Ocean coast of Africa. New York: USAID.

- Wagner, G, M (2007) The Dar es Salaam Seascape: A Case Study of an Environmental Management 'Hotspot'. *Western Indian Ocean Journal. Mar. Sci.* Vol. 6, No. 1, pp. 85–109, 2007 (Retrieved and accessed at [www.taccire.suanet.ac.tz](http://www.taccire.suanet.ac.tz) on 14<sup>th</sup> April, 2022)
- Wagner, G. M. (2015). Coastal areas and their management in Tanzania. *Western Indian Ocean Journal of Marine Science*, 3 (20), 227-243.
- Yanda, P. Z. (2013). Coastal and marine ecosystems in a changing climate: The case of Tanzania. Dar es Salaam, Tanzania: DUP.
- Yona, G., and Mmochi, A. J. (2010). Development of mariculture activities as alternative livelihoods for coastal communities: Milkfish farming in Kilwa and Mtwara districts, Tanzania. Dar es Salaam, Tanzania: Tanzania Fisheries Research Institute and Institute of Marine Science.
- Yin, K. R. (2011). *Qualitative research from start to finish*. New York, NY: The Guilford Press.

## APPENDICES

### APPENDIX 1

#### QUESTIONNAIRE SURVEY FOR HEADS OF HOUSEHOLDS

##### Section A: Introduction

Dear head of household,

My name is Evans John Evans. I am a student at the Open University of Tanzania in the Faculty of Art and Social Science. I am pursuing degree course in Master of Arts in Monitoring and Evaluation. As part of the course requirement, I am conducting a research titled: *“The Implications of the Integrated Coastal Area Management Programme on Livelihoods in Kinondoni, Dar es Salaam-Tanzania”*. Specifically, the research seeks to examine environmental and social-economic impact that has been an outcome of the programme towards daily local communities’ livelihood, and their involvement in the implementation of the programme, and the contribution of the programme to the local community’s livelihoods.

This interview guide is divided into three sections, A, B and C. You are kindly requested to give some personal information about yourself in section B. In section C, you will respond to the specific questions about the research. May I assure you that all information you will give in this interview will remain confidential. There is no wrong answer; all information you will give will be useful. Please, be honest to the best of your knowledge. I would like to go through each of the following sections with you.





(iii).....

.....

.....

(iv).....

.....

.....

(v).....

.....

.....

6. How did you participate in the KICAMP activities?

.....

....

.....

.....

7. Who made decisions regarding to the coastal resources management in your street/ward?

- (a) Community members
- (b) Ward and street government officials
- (c) District government officials
- (d) KICAMP officials
- (e) All the above

8. What was the state of the coastal areas before and after the introduction of the KICAMP?

9. What were the benefits of the KICAMP on coastal resources' management, protection and conservation?

10. What were the benefits of the KICAMP on local communities' livelihoods in Kinondoni district?

11. To what extent has the KICAMP been able to help you and the entire community in Kinondoni district?

.....

.....

.....

12. Was the KICAMP sustainable? (a) Yes (b) No

(a) If yes, explain how:

.....  
.....  
.....

(b) If no, explain why:

.....  
.....  
.....

13. As the head of household, what are your recommendations on the KICAMP?

**Thank you for your time and cooperation**

## **APPENDIX 2**

### **INTERVIEW GUIDE FOR OTHER SELECTED MEMBERS**

#### **Section A: Introduction**

Dear participant,

My name is Evans John Evans. I am a student at the Open University of Tanzania in the Faculty of Art and Social Science. I am pursuing degree course in Master of Arts in Monitoring and Evaluation. As part of the course requirement, I am conducting a research titled: *“The Implications of the Integrated Coastal Area Management Programme on Livelihoods in Kinondoni, Dar es Salaam-Tanzania”*. Specifically, the research seeks to examine environmental and social-economic impact that has been an outcome of the programme towards daily local communities’ livelihood, and their involvement in the implementation of the programme, and the contribution of the programme to the local community’s livelihoods.

This interview guide is divided into three sections, A, B and C. You are kindly requested to give some personal information about yourself in section B. In section C, you will respond to the specific questions about the research. May I assure you that all information you will give in this interview will remain confidential. There is no wrong answer; all information you will give will be useful. Please, be honest to the best of your knowledge. I would like to go through each of the following sections with you.

### **Section B: Background information of the informant**

1. Sex: Male  Female .
2. Age: ..... years
3. Educational level: Primary , Secondary , Tertiary , Non-Formal .
4. Occupation: Public employed , Private employed , Self-employed .
5. Ward: ..... Date: .....

### **Section C: Interview schedule**

1. For how long have you been living here?
2. What are the coastal resources found around this area?
3. What are the coastal economic activities that people who live here conduct?
2. What do you know about Kinondoni Integrated Coastal Area Management Programme?
3. How were the community members aware of Kinondoni Integrated Coastal Area Management Programme?
4. How did the programme create awareness to people living here on coastal and marine resources' management, protection and conservation?
6. What were the coastal and marine resources that the KICAMP protected and conserved?
7. Did the coastal people in this area get enough knowledge on the importance of coastal management? If yes, how? If no, why?
8. Briefly explain how the local people in this area were involved in the following stages of the KICAMP undertakings?  
(i) Planning (ii) Implementation (iii) Monitoring (iv) Evaluation
9. Briefly, explain the main activities for implementing the KICAMP.
10. In what ways were the local communities in Kunduchi/Mbweni ward involved in the implementation of the KICAMP activities?
11. How often did KICAMP officials visit the local people around here to advise them on issues related to coastal management? What strategies did the officials employ?

12. What was the state of the coastal areas before and after the introduction of the KICAMP?
13. What were the benefits brought about by the KICAMP on coastal resources' management, protection and conservation?
14. What were the benefits of the KICAMP on local community's livelihoods in this area?
15. Why was the KICAMP not sustainable?
16. Do you think there is any need for the KICAMP to be rejuvenated? Why do you think so?

**Thank you for your time and cooperation**

## **APPENDIX 3**

### **INTERVIEW GUIDE FOR STREET CHAIRPERSONS AND WARD EXECUTIVE OFFICERS**

#### **Section A: Introduction**

Dear Ward executive officer/Street chairperson,

My name is Evans John Evans. I am a student at the Open University of Tanzania in the Faculty of Art and Social Science. I am pursuing degree course in Master of Arts in Monitoring and Evaluation. As part of the course requirement, I am conducting a research titled: *“The Implications of the Integrated Coastal Area Management Programme on Livelihoods in Kinondoni, Dar es Salaam-Tanzania”*. Specifically, the research seeks to examine environmental and social-economic impact that has been an outcome of the programme towards daily local communities’ livelihood, and their involvement in the implementation of the programme, and the contribution of the programme to the local community’s livelihoods.

This interview guide is divided into three sections, A, B and C. You are kindly requested to give some personal information about yourself in section B. In section C, you will respond to the specific questions about the research. May I assure you that all information you will give in this interview will remain confidential. There is no wrong answer; all information you will give will be useful. Please, be honest to the best of your knowledge. I would like to go through each of the following sections with you.

### **Section B: Background information of the informant**

1. Sex: Male  Female .
2. Age: ..... years.
3. Educational level: Primary , Secondary , Tertiary , Non-Formal .
4. Occupation: Public employed , Private employed , Self-employed .
5. Ward: ..... Date: .....

### **Section C: Interview questions**

1. What are the coastal resources found around this area?
2. What do you know about the Kinondoni Integrated Coastal Area Management Programme?
3. How were the community members aware of Kinondoni Integrated Coastal Area Management Programme?
2. How did the programme create awareness to people on coastal and marine resources' management, protection and conservation?
3. What were the coastal and marine resources the KICAMP protected and conserved?
4. Did the coastal people get enough knowledge on the importance of coastal management? If yes, how? If no, why?
5. How the local people were involved in the following stages of the KICAMP undertakings?  
(i) Planning (ii) Implementation (iii) Monitoring (iv) Evaluation
6. Briefly, explain the main activities for implementing the KICAMP.
7. In what ways were the local communities in Kunduchi and Mbweni wards involved in the implementation of the KICAMP activities?
8. How often did you visit the local people to advise them on coastal management? What strategies did you employ?
9. What was the state of the coastal areas before and after the introduction of the KICAMP?
10. What were the benefits brought about by the KICAMP on coastal resources' management, protection and conservation?

11. What were the benefits of the KICAMP on local communities' livelihoods in Kinondoni district?
12. Was the KICAMP sustainable? If yes, explain how. If no, explain why.
13. As a government official, what are your recommendations on revamping the KICAMP?

**Thank you for your time and cooperation**



## **APPENDIX 4**

### **INTERVIEW GUIDE FOR KICAMP WORKERS**

#### **Section A: Introduction**

Dear participant,

My name is Evans John Evans. I am a student at the Open University of Tanzania in the Faculty of Art and Social Science. I am pursuing degree course in Master of Arts in Monitoring and Evaluation. As part of the course requirement, I am conducting a research titled: “*The Implications of the Integrated Coastal Area Management Programme on Livelihoods in Kinondoni, Dar es Salaam-Tanzania*”. Specifically, the research seeks to examine environmental and social-economic impact that has been an outcome of the programme towards daily local communities’ livelihood, and their involvement in the implementation of the programme, and the contribution of the programme to the local community’s livelihoods.

This interview guide is divided into three sections, A, B and C. You are kindly requested to give some personal information about yourself in section B. In section C, you will respond to the specific questions about the research. May I assure you that all information you will give in this interview will remain confidential. There is no wrong answer; all information you will give will be useful. Please, be honest to the best of your knowledge. I would like to go through each of the following sections with you.

### **Section B: Background information of the informant**

1. Sex: Male  Female
2. Age: ..... years
3. Educational level: Primary , Secondary , Tertiary , Non-Formal
4. Occupation: Public employed , Private employed , Self-employed
5. Ward: ..... Date: .....

### **Section C: Interview questions**

1. For how long did you serve as a KICAMP worker? .....years. What was your official position in the KICAMP?
2. Briefly, explain what the KICAMP was, when and why it was established and issues it dealt with.
3. As a KICAMP worker, what were your responsibilities?
4. Did the local communities have enough understanding on the KICAMP? If yes, how? If no, why?
5. How did the programme create awareness to people on coastal and marine resources' management, protection and conservation?
6. What were the coastal and marine resources that the KICAMP protected and conserved?
7. Briefly, explain the main activities for implementing the KICAMP.
8. In what ways were the local communities in Kunduchi and Mbweni wards involved in the implementation of the KICAMP activities?
9. How often did you visit the local people to advise them on coastal management? What strategies did you employ?
10. What was the state of the coastal areas before and after the establishment of the KICAMP?
11. Explain the impact of the KICAMP to the local communities in Kinondoni district.
12. To what extent did the KICAMP impact on coastal people's livelihoods?
13. Was the KICAMP sustainable? If yes, explain how. If no, explain why.
14. What are your recommendations on the declining of the KICAMP?

**Thank you for your time and cooperation**

## **APPENDIX 5**

### **INTERVIEW GUIDE FOR THE KICAMP COORDINATOR**

#### **Section A: Introduction**

Dear the KICAMP coordinator,

My name is Evans John Evans. I am a student at the Open University of Tanzania in the Faculty of Art and Social Science. I am pursuing degree course in Master of Arts in Monitoring and Evaluation. As part of the course requirement, I am conducting a research titled: “*The Implications of the Integrated Coastal Area Management Programme on Livelihoods in Kinondoni, Dar es Salaam-Tanzania*”. Specifically, the research seeks to examine environmental and social-economic impact that has been an outcome of the programme towards daily local communities’ livelihood, and their involvement in the implementation of the programme, and the contribution of the programme to the local community’s livelihoods.

This interview guide is divided into three sections, A, B and C. You are kindly requested to give some personal information about yourself in section B. In section C, you will respond to the specific questions about the research. May I assure you that all information you will give in this interview will remain confidential. There is no wrong answer; all information you will give will be useful. Please, be honest to the best of your knowledge. I would like to go through each of the following sections with you.

### **Section B: Background information of the informant**

1. Sex: Male  Female
2. Age: ..... years
3. Educational level: Primary , Secondary , Tertiary , Non-Formal
4. Occupation: Public employed , Private Employed , Self-employed
5. Ward: ..... Date: .....

### **Section C: Interview questions**

1. For how long did you serve as a KICAMP coordinator? .....years.
2. What were your official responsibilities in the KICAMP?
3. Briefly, what do you understand about the KICAMP on the following aspects:
  - i. Meaning of the KICAMP
  - ii. Year the KICAMP was established
  - iii. Owner (s) of the KICAMP
  - iv. Purpose and objectives of the KICAMP
  - v. Participants of the KICAMP
  - vi. Areas the KICAMP operated
  - vii. Important issues the KICAMP dealt with
  - viii. Activities the KICAMP carried out
  - ix. Year the KICAMP collapsed
4. Did the local communities have enough understanding on the KICAMP? If yes, explain  
how. If no, explain why.
5. How did the KICAMP create awareness to people on coastal and marine resources?  
management, protection and conservation?
6. What were the coastal and marine resources that the KICAMP protected and conserved?
7. Briefly explain the main activities used for implementing the KICAMP.
8. In what ways were the local communities in Kunduchi and Mbweni wards involved in the implementation of the KICAMP activities?

9. How often did you visit the local people to educate them on coastal management?  
What strategies did you employ?
10. Explain the state of the coastal areas before and after the establishment of the KICAMP?
11. Explain the impact of the KICAMP to the local communities in Kinondoni district.
12. To what extent did the KICAMP impact on coastal people's livelihoods?
13. Was the KICAMP sustainable? If yes, explain how. If no, explain why.
14. Why did the KICAMP collapse?
15. What are your recommendations on the declining of the KICAMP?

**Thank you for your time and cooperation**

**APPENDIX 6****DOCUMENTARY REVIEW SCHEDULE**

Ward: ..... Street: .....

Designation: ..... Date: .....

<b>S/N</b>	<b>DOCUMENT REVIEWED</b>	<b>SOURCE OF INFORMATION</b>	<b>REMARK</b>
1.	File on KICAMP that contains its meaning, establishment, purpose, objectives, organizational structure and focus.	KICAMP Coordinator	
2.	File (s) containing minutes of public meetings held between the KICAMP officials, ward executive officers, street chairpersons and community members.	KICAMP Coordinator, ward executive officers and street chairpersons	
3.	Records on training (seminars and workshops) conducted to community members to educate them about the KICAMP and its related activities.	KICAMP Coordinator	
4.	Records of the initiatives for the protection and conservation of the coastal environment taken by the KICAMP.	KICAMP Coordinator, ward executive officers and street chairpersons	
5.	Records of the activities community members were involved in implementing the KICAMP.	KICAMP Coordinator, ward executive officers and street chairpersons	
6.	Records of the livelihood benefits of the KICAMP on local community.	KICAMP Coordinator, ward executive officers and street chairpersons	

## APPENDIX 7

## RESEARCH BUDGET

No	Item	Days	Quantity	Unit Price (Tshs)	Total Cost (Tshs)
<b>Labor</b>					
1	Field Assistants in primary data collection	40	1	10,000	400,000
2	Local leader allowances	40	1	10,000	400,000
3	Time value for respondents		112	10,000	1,120,000
	<b>Sub Total</b>				<b>1,920,000</b>
<b>Accommodation, Meals, Travel</b>					
4	Transport (fuel)	40	1	20,000	800,000
5	Researcher per diem	40	1	20,000	800,000
	<b>Sub Total</b>				<b>1,600,000</b>
<b>Stationaries</b>					
6	Printing questionnaire (5pg)		95	250	23,750
7	Interview guide community member (3pg)		10	150	1,500
8	Interview guide Ward officers (3pg)		2	150	300
9	Interview guide KICAMP workers (2pg)		2	100	200
10	Interview guide KICAMP coordinator (3pg)		2	150	300
11	Observation check list (1pg)		2	50	100
12	Documentary Review Schedule (1pg)		1	50	50
13	Note books		4	1,000	4,000
14	Pen		4	200	800
15	Pencils		4	200	800
	<b>Sub Total</b>				<b>31,800</b>
	<b>Budget Total</b>				<b>3,551,800</b>

**APPENDIX 8****SCHEDULE OF ACTIVITY**

Schedule of activity or activity plan indicates various activities and their respective duration

**Table 2: Schedule of activity**

YEAR	2022				
Months/activities	Sep	Oct	Nov	Dec	Jan
Proposal development					
Literature review					
Proposal submission					
Questionnaire development					
Pre-testing of questionnaire					
Data collection					
Data entry and cleaning					
Data analysis					
Report writing					
Report presentation					
Dissertation submission					



**APPENDIX 9**

**ETHICAL PERMISSION**



Ref. No OUT/ PG2017997679

19<sup>th</sup> December, 2022

Regional Administrative Secretary,  
Dar es salaam Region,  
P.O Box 5429,  
**DAR ES SALAAM.**

Dear Regional Administrative Secretary,

**RE: RESEARCH CLEARANCE FOR MR. EVANS JOHN EVANS REG NO:  
PG2017997679**

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

3. To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief

background, the purpose of this letter is to introduce to you Ms, Reg. No: PG2017997679) pursuing Master of Arts in Monitoring and Evaluation (MAME). We here by grant this clearance to conduct a research titled "Assessing the Implication of Kinondoni Integrated Coastal Area Management Programme on Livelihoods in Kinondoni Dar es Salaam". He will collect her data as indicated in Appendix 1 from 20<sup>th</sup> December to 15<sup>th</sup> February 2023.

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

Yours sincerely,

**THE OPEN UNIVERSITY OF TANZANIA**

Prof. Magreth S. Bushesha  
For: **VICE CHANCELLOR**

Kinondoni Bafra, Kawawa Road, P.O 23409; Dar es Salaam; Tel: +255 22 2668 445;  
E-Mail: [vc@out.ac.tz](mailto:vc@out.ac.tz) | Website: [www.out.ac.tz](http://www.out.ac.tz)

Appendix 1

DATA COLLECTION INSTITUTIONS/ORGANIZATIONS TO BE VISITED.

SN	INSTITUTION /ORGANIZATION NAME
1	Kinondoni Municipal Council

**JAMHURI YA MUUNGANO WA TANZANIA  
OFISI YA RAIS  
TAWALA ZA MIKOA NA SERIKALI ZA MITAA**

**MKOA WA DAR ES SALAAM**  
Anwani ya Simu:  
Simu: 2203156/2203158/286371  
Barua pepe [ras@dsm.go.tz](mailto:ras@dsm.go.tz)



**OFISI YA MKUU WA MKOA,**  
3 Barabara ya Rashidi Kawawa  
S.L.P 5429,  
12880 DAR ES SALAAM.

Unapojibu Tafadhali taja:

**Kumb. Na. EA.260/307/02B/78**


04 Aprili, 2023

Mkurugenzi wa Manispaa,  
Halmashauri ya Manispaa Kinondoni,  
S. L. P. 31902,  
**Dar es Salaam.**

Yah: **KUMTAMBULISHA BW. EVANS JOHN EVANS  
KUFANYA UTAFITI**

Tafadhali husika na somo tajwa hapo juu.

2. Ofisi ya Mkuu wa Mkoa wa Dar es Salaam imepokea barua **Kumb. Na. OUT/PG2017997679** ya tarehe **19 Desemba, 2022** kutoka Chuo Kikuu Huria ikimtambulisha na kumuomba kibali cha utafiti Bw. Evans John Evans katika Halmashauri yako.
3. Mwanafunzi huyu anafanya utafiti kuhusu *“Assessing the Implication of Kinondoni Integrated Coastal Area Management Programme on Livelihoods in Kinondoni Dar es Salaam.”*
4. Kwa barua hii, kibali kimetolewa kuanzia 20 Desemba, 2022 hadi 15 Februari, 2023.
5. Asante kwa ushirikiano wako.

  
Samwel R. Magweiga  
Kny: **KATIBU TAWALA MKOA  
DAR ES SALAAM**

**Nakala:** Makamu Mkuu wa Chuo,  
Chuo Kikuu Huria,  
S.L.P 5429,  
**Dar es Salaam.**

Bw. Evans John Evans

## JAMHURI YA MUUNGANO WA TANZANIA



OFISI YA RAIS,  
TAWALA ZA MIKOA NA SERIKALI ZA MITAA

HALMASHAURI YA MANISPAA YA KINONDONI



*Unapojibu tafadhali taja:*

Kumb. Na. HA.249/345/01

Tarehe: 02 Mei, 2023

**Bw. Evans John Evans,**  
Chuo Kikuu Huria,  
S.L.P 5429,  
**DAR ES SALAAM.**

Yah: KIBALI CHA KUFANYA UTAFITI.

Kichwa cha habari hapo juu chahusika.

2. Ofisi ya Mkurugenzi imepokea barua toka ofisi ya Katibu Tawala Mkoa yenye Kumb. Na. EA.260/307/02B/78 ya tarehe 04/04/2023 ikimtambulisha mtajwa hapo juu toka "Chuo Kikuu Huria" kwa ajili kufanya utafiti.
3. Kwa barua hii, Kibali kimetolewa cha kufanya Utafiti kuanzia 20/12/2023 hadi 15/02/2023 utafiti huu unahusu "Assessing the Implication of Kinondoni Integrated Area Management Programme on Livelihoods in Kinondoni Dar es Salaam".

Maria Masimbusi

Kny: MKURUGENZI WA MANISPAA

**Nakala:**

Mkurugenzi wa Manispasa  
**KINONDONI**

- aione kwenye Jalada

Watendaji wa Kata  
Kata ya Mweni,  
Kata ya Kunduchi  
**Manispaa ya Kinondoni**

- Mpokee na kumpa ushirikiano