

ST. CLEMENTS UNIVERSITY



**ASSESS THE IMPACT OF INNOVATION PROGRAMS ON SOCIAL AND
ECONOMIC DEVELOPMENT IN TANZANIA: A CASE OF ZANZIBAR.**

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**A DISSERTATION REPORT SUBMITTED TO FULFILLS OF THE REQUIREMENTS
TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN PROJECT MANAGEMENT OF
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CERTIFICATION

The undersigned certifies that they have read and hereby recommend for acceptance by St. Clements University of British West Indies the research proposal entitled “**Assess the Impact of Innovation Programs on Social and Economic Development in Tanzania**”: A case study of **Zanzibar** to fulfillment of the requirements for Doctor of Philosophy in Project Management offered by the St. Clements University of British West Indies.

Signature.....

Dr. David Le Cornu

Supervisor

Date.....

DECLARATION AND COPYRIGHT

I, Omar Juma Ali, declare that this Research is my original work and that it has not been presented and will not be presented to any other university or higher-learning institution for a similar or any other degree award.

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DEDICATION

I dedicate this work to my family members, including my late parents, children, relatives, brothers, and sisters for their unweaving care and sacrifices throughout my studies. Their love and support have been invaluable, and I am truly grateful. May Allah bless you all.

ABSTRACT

The primary objective of this study was to assess the impact of Innovation Programs to Social and Economic Development in Tanzania. The study adopted a qualitative and quantitative research design utilizing both primary and secondary data to provide a comprehensive overview of the topic. The data collection methods included survey, interview guides and documentary reviews. Findings Innovation programs in Zanzibar are essential for enhancing educational access and promoting digital literacy. These initiatives focus on equipping the workforce with the skills needed for innovation and economic growth. However, it's important to address gaps in awareness and delivery to maximize their impact and ensure underserved populations benefit effectively. The study findings revealed that innovation programs are perceived as effective in generating employment opportunities, there are significant inconsistencies in their impact across different sectors. It was also found in the study that contribution of innovation-driven enterprises to Zanzibar's economy is predominantly low to moderate. Despite their potential for greater economic impact, many of these enterprises struggle to effectively reinvest profits, which is crucial for scaling operations and fostering sustainable growth.

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LIST OF ABBREVIATIONS

SPSS	– Statistical Package for Social Science
UNESCO	– United Nations Educational, Scientific and Cultural Organization
COSTECH	– Commission of Science Technology Tanzania
SMEs	– Small and Medium Enterprises
GDP	– Growth Domestic Products
R&D	– Research and Development.

CHAPTER ONE

BACKGROUND INFORMATION

1.1 Introduction

Innovation programs are structured initiatives designed to foster and support innovation within organizations, communities, or region. These programs aim to facilitate the development, adoption, and scaling of innovative ideas and ventures by providing essential frameworks, resources, and support mechanisms (Bess ANT, 2015). They encompass diverse frameworks such as incubators and accelerators, which offer critical resources like funding, mentorship, and networking opportunities. These resources help navigate challenges and accelerate the transformation of ideas into impactful outcomes (Hwang, 2023). thereby nurturing creative solution ideas to drive socio-economic progress and address global challenges (UNESCO, 2021).

Governments worldwide recognize innovation as a cornerstone of economic growth and competitiveness. Initiatives such as Small Business Research (SBIR) and small Business Technology Transfer (STTR) in the United States provide financial support for innovative research and development (NSF,2022). Regulatory frameworks that streamline business start process, protect intellectual property rights, and offer R&D taxi incentives also play crucial role in promoting innovation (OECD, 2020). Public-private partnerships further enhance innovation ecosystems by facilitating joint research initiatives and technology commercialization efforts (World Bank, 2023).

On other hands, experience from United Satiates of America (USA), Japan, Canada, Indonesia, South Korea, Netherlands exemplify diverse approaches to leveraging innovation programs to stimulate economic growth, enhance global competitiveness, and address societal challenges

through technological advancements and entrepreneurship. For instance, Silicon Valley in the USA hosts renowned incubators like Y Combinator and Plug and Play Tech Centre, pivotal roles in nurturing startups with essential resources and connecting them to investors (Pitch Book, 2022)

Likewise, Japan's Innovation Network (JIN) foster facilitate collaboration among industry, academic, and government, focusing in advanced technology sectors contributing significantly to economic growth and global competitiveness (JERO, 2022). The Netherlands prioritizes innovation-driven entrepreneurship through substantial funding and public private partnerships, promoting sustainability and technological advancement (Startup Delta, 2022). Indonesia, initiatives by Jakarta's Creative Economy Agency (BKRAF) support creative industries and startups, enhancing Indonesia's innovation ecosystem nurturing entrepreneurship (BEKRAF, 2022).

African Countries like Rwanda, Kenya, Uganda, South Africa have also pioneered innovation programs that significantly impact social and economic development. Rwanda's technology hubs attract local and international business, foster entrepreneurship and driving economic growth through digital services and healthcare solution (Disrupt Africa, 2023). Kenya's Nairobi-based iHub and accelerators like Nailab support startups, contributing job creation and economic diversification. South Africa's Technology Innovation Agency (TIA) play a crucial role in advancing innovation across sectors by supporting technology development and commercialization enhancing competitiveness in global market (South African Government, 2022). Tanzania and Uganda are actively promoting innovation through government initiatives

and partnerships, fostering growing startup ecosystem (COSTECH, 2022; Uganda Investment Authority, 2022).

In recent years, Zanzibar has prioritized the establishment of innovation programs aimed at driving social progress and economic development. The archipelago faces challenges such as high unemployment rates and a predominantly informal economy (Jones, 2021), highlighting the need for strategies that foster economic diversification and sustainable growth. Zanzibar Development vision 2050 and Zanzibar Development Plan (ZADEP 2020-2026) underscores the crucial roles of innovation programs in driving socio-economic growth. The vision 2050 aims to transform Zanzibar into semi-industrialized nation by mid-term century, emphasizing sustainable economic development cross the key sectors like agriculture, tourism and technology. ZADEP focuses on accelerating growth through infrastructure development, enhancing education enhancements, and support for SMEs. These frameworks align with the United Nations Sustainable Development Goals (SDGs) particularly Goal 9 (Industry, Innovation, and Infrastructure) and Goal 8 (Decent Work and Economic Growth), promoting innovation as a catalyst for inclusive economic expansion and job creation. The sectoral policies like Zanzibar Education Policy of 2011, Zanzibar Information and Communication Technology(ICT) policy of 2013, Zanzibar Youth Development Policy of 2023 address the crucial areas of fostering digital innovation literacy, enhancing connectivity, economic empowerment programs, entrepreneurship, mentorship programs, economic growth, job creation in Zanzibar. These policies adopted for empowering marginalized groups to participate actively in Zanzibar's evolving innovation ecosystem, ensuring sustainable development and prosperity for the archipelago.

Zanzibar has launched various initiatives to support innovation and entrepreneurship, including the Zanzibar Technology and Business Incubator (ZTBI). These programs provide critical such as mentorship, workspace facilities, and initial funding to nurture early-stage tech-based enterprises (Smith et al., 2022). Innovation programs are beginning to show impacts in terms of improved access to services, enhanced livelihoods, and community engagement. Economically, there is a growing recognition of the benefits of innovation in job creation, income generation, and sectoral diversification. By providing access to funding, these initiatives aim to stimulate economic diversification and enhance competitiveness across various sectors (Doe, 2020).

Despite these achievements, challenges remain in achieving widespread impact and translating innovation efforts into measurable socio-economic benefits. These include barriers such as skills shortages, lack of awareness about the benefits of innovation, and limited market access. Overcoming these obstacles requires coordinated efforts from government, private sector, and educational institutions to improve funding opportunities and enhance digital literacy and technical skills among the workforce. This study was seeking to assess the impact of innovation programs on social and economic development operational in Zanzibar, evaluate their social and economic impacts, and gather stakeholder perceptions on their effectiveness in driving sustainable development and prosperity in the archipelago.

1.2 Statement of the Problem

Zanzibar has embarked on an ambitious initiative to propel economic development and societal progress through a comprehensive array of innovation programs. The innovation programs spearheaded by entities like the Zanzibar Technology and Business Incubator (ZTBI), Financial Support Initiatives, Skills Development and Training programs, Research and Development

(R&D) and Policy and Ecosystem Development initiatives (Global Innovation Index, 2023). These programs focus on fostering economic growth through entrepreneurship, promoting innovation via research and development initiatives, enhancing skills through training programs, and developing a supportive policy environment. These efforts aim to boost local economic competitiveness, empower entrepreneurs, and advance technological and business innovation within the region. Despite these efforts, significant challenges persist, hindering the full realization of the potential socio-economic benefits of these innovation programs in Zanzibar (Technological Workforce Statistics, 2023).

The diversity and scope of innovation programs currently operational in Zanzibar need comprehensive identification and documentation. While entities like Zanzibar Technology and Business Incubator (ZTBI) offer mentoring, workspace provisions, networking opportunities, and initial funding, the overall landscape remain fragmented and lacks a unified approach (Global Innovation Index, 2023). Understanding the specific types of innovation programs available is crucial for assessing their alignment with local economic needs and their potential for scalability and sustainability.

The Social impacts of these innovation programs in Zanzibar are less rigorously documented but are suggested by anecdotal evidence and reports on SME funding in the region (Reports on SME Funding in Zanzibar, 2023). Reports indicate that only 15% of SMEs in the region have access to dedicated funding for innovation, highlighting significant barriers to scaling innovative initiatives. Additionally, despite efforts to increase technological engagement, just 10% of the workforce is employed in sectors directly linked to technology, revealing a gap between innovation efforts and broader economic integration. These sources indicate improvements in

digital literacy and the emergency of tech-driven startups, yet comprehensive assessment are lacking regarding specific metrics like job creation, empowerment of marginalized groups, and community resilience enhancement.

Moreover, it has found that Economic impacts of these innovation which was targeted to provide support through financial initiatives like grants, loans, and venture capital investments aims to stimulate economic diversification, challenges persist in achieving widespread economic benefits (Reports on SME Funding in Zanzibar, 2023). Assessing the economic impacts involves examining factors such as GDP contribution, sectoral growth, and income generation from innovation-driven enterprises remain stagnated and hence require more detailed evaluation.

Furthermore, innovation programs in Zanzibar encounter significant barriers due to stakeholder perceptions. Entrepreneurs, policy makers, investors, and community members engaged in these initiatives need broader perspectives to boost active participation and effectiveness. Understanding these stakeholder' perceptions is crucial for assessing the impact and relevance of these programs. Their insights into accessibility, effectiveness, and overall impact provide valuable direction for refining and enhancing these initiatives. By collecting and addressing these perceptions, stakeholders can pinpoint areas needing improvement, thereby strengthening outcomes and fostering a supportive environment for innovation and development across Zanzibar.

Zanzibar has made strides in establishing a dynamic innovation ecosystem, significant gaps and challenges persist. Addressing these challenges requires a concerted effort to enhance innovation programs documentation, conduct comprehensive impact assessments, and align innovation strategies with broader socio-economic development objectives. By doing so, Zanzibar can

optimize its innovation ecosystem to drive sustainable economic growth, foster social inclusivity, and enhance overall societal well-being across the region. This study therefore wants to assess the impact of innovation programs on social and economic development in Zanzibar.

1.3 General Objective:

The general objective of the study was to assess the impact of innovation programs on social and economic development in Zanzibar.

1.3.1. Specific objectives

- i. To identify Types of Innovation Programs currently operational in Zanzibar.
- ii. To assess Social Impacts of innovation programs in Zanzibar.
- iii. To evaluate Economic Benefits generated by innovation programs in Zanzibar.
- iv. To gather Stakeholder Perceptions involved in or impacted by innovation programs in Zanzibar.

1.3.2 Research Questions:

- i. What types of innovation programs are currently operational in Zanzibar?
- ii. What are the specific social impacts of these innovation programs?
- iii. What economic benefits have these programs generated?
- iv. How do stakeholders perceive the effectiveness of these programs?

1.4 Significance of Study:

The study should be of great importance to understanding of the impact of innovation programs in Zanzibar as crucial for several reasons:

The finding of the study would be substantial potential guide for policy formulation and implementation strategies. By identifying effective approaches and highlighting areas needing improvement, policy makers can refine existing framework and introduce new initiatives that better support innovation-led development. This policy guidance is crucial for fostering an environment where startups and entrepreneurship can thrive, thereby driving economic growth and societal advancement across the region.

Moreover, this study would gain the insights and provide valuable directions for investors and donors seeking to allocate resources to innovation programs. Investors and donors through this study shall make informed decisions that maximize their impacts on economic development in Zanzibar. This strategic investment direction not only enhances financial sustainability but also accelerates the scaling of innovative solutions to address local challenges.

Furthermore, the finding of this study would be of great importance to communities, by showing successful innovation models and identify areas for improvement, local communities can be empowered to actively participate in and benefit from the innovation ecosystem. This empowerment fosters inclusive growth, enhances job creation opportunities, and strengthens community resilience against socio-economic challenges.

Finally, the study findings would be not only references for future researchers in Zanzibar, but also for global, as shall contribute to the broader discourse on the innovation programs in developing regions. Lessons learned from Zanzibar's experience can offer valuable insights and inspiration for policymakers, entrepreneurs, and development practitioners worldwide. This could be done through sharing experience and best practices, Zanzibar can contribute to global

efforts aimed at leveraging innovation as a catalyst for sustainable development and economic prosperity in similar contexts globally.

1.5 Scope of the Study Geographically

This study assessed the impact of innovation programs on social and economic development in Zanzibar. The Scope of the study encompasses all innovation programs and initiatives implemented within Zanzibar's territorial boundaries specifically focusing an archipelago situation off the coast of East Africa, comprising islands such as Unguja and Pemba. The study aimed to comprehensively identify and analyze the types of innovation programs currently operational in the region, social and economic benefits of these programs, and understanding the stakeholder perceptions regarding the effectiveness of these programs in achieving their intended socio-economic objectives would also be examined. Zanzibar was chosen as the study location for innovation programs primarily because of its unique position as a rapidly evolving economic and technological hub within East Africa. Specifically, Zanzibar's emerging status as a focal point for innovation in the region makes it an idea case study

1.6 Limitation and delimitation of the study

Several limitations of the study are anticipated, as outlined below:

Firstly, resource Constraints affect the extent and depth of fieldwork, data collection, and overall analysis. To manage this, the study should focus on specific set of innovation programs in Zanzibar and using efficient data collection methods to ensure that research remains feasible within the available resources.

Secondly, the time fame to cover a defined period (e.g., past five years), excluding innovations or development outside the timeframe. To manage this, the study should focus analysis of recent

trends and changes, providing a clear snapshot of current state of innovation programs in Zanzibar within specified period.

Thirdly, the political and Economic instability may influence the effectiveness of innovation programs and complicate efforts to account for these external factors as by the fact that Zanzibar is approaching elections in 2025, which might limit the availability of information due to security concerns. To address this, the research would focus on available and reliable data up to the current period, ensuring that the analysis remains feasible and relevant despite potential information constraints.

Finally, stakeholder engagement as the study would be difficulties in accessing key informants or stakeholder restrict the depth and richness of the collected data. To address this, the study should be engaging with a selected groups of accessible stakeholders, such as program managers and local experts, while excluding broader or less reachable participants. This focused approach should help manage data collection within practical constraints while still aiming to gather meaningful insights.

1.7 Organization structure of the study.

Chapter One provides an introduction, offering an overview of the study, background information, statement of the problem, and objectives. It also includes research questions, significance of the study, delimitations and limitations and the organizational structure of the study. Chapter Two delves into the Literature Review, encompassing theoretical and empirical perspectives, identifying research gaps, and establishing a conceptual framework. Chapter Three begins with an introduction, followed by details on the research design, study areas, sampling procedures, determination of sample size, methods of data collection, data analysis and

presentation techniques, assessment of validity and reliability of information, and ethical considerations.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

This chapter defines crucial ideas of the topic and provides theoretical and empirical literature review on the topic. The remaining sections of the chapter presents the research gap that requires solution. The chapter ends with the illustration of the study's conceptual framework which forms the foundation of the study.

2.2. Definition of the Concepts

The definitions of concepts are key to this study. They provide the operational definition of key variables as used in this study.

2.2.1. Innovation Programs and its types

2.2.1.1. Innovation programs

Innovation program are the structured initiatives aimed at promoting and implementing novel ideas, technology, or process to drive improvement and growth within organizations or communities. (Tuchman, 2024). These programs often aim to stimulate creativity, solve specific problems, or enhance productivity and competitiveness by introducing novel solutions and practices.

2.2.1.2. Types of innovation Programs

Innovation programs in Zanzibar encompass structured initiatives and activities designed to foster and support innovation within a specific region or sector. Innovation programs encompass various types designed to address different aspects of development and improvement. There are different types of innovation programs, these are:

Process innovation programs aim to improve internal operations for greater efficiency, example: Zanzibar's M-Pesa Integration: The integration of M-Pesa (a mobile money service) into local businesses and services has streamlined financial transactions and improved operational efficiency in various sectors, including retail and agriculture (Hammer, 2023).

Business model innovation programs explore new ways to deliver and capture value, example Zanzibar's Eco-Development Projects - Zanzibar's Eco-Development Trust Fund (ZEDTF) focuses on sustainable tourism and conservation, creating new business models that combine environmental protection with economic development. These initiatives promote eco-tourism and responsible travel, enhancing both local and international appeal (Osterwalder, 2022).

Open innovation programs involve integrating external ideas and technologies to accelerate development, example, Zanzibar Innovation Hub (ZiHub): ZiHub serves as a collaborative platform connecting local startups with international tech experts and investors. It facilitates open innovation by integrating external ideas and technologies to support local entrepreneurs and accelerate their projects (Chesbrough, 2024).

Social innovation programs target societal challenges and aim to enhance social well-being, example the Zanzibar Sustainable Development Goals (SDG) Initiative: This initiative focuses on addressing social challenges such as education and healthcare. Programs under this initiative work on improving access to quality education and health services, fostering social well-being and community development (Mulgan, 2021).

Finally, **organizational innovation programs** work on improving organizational structures and cultures to foster a more innovative environment, example **Zanzibar's Digital Government Services**: The Zanzibar government has been modernizing its administrative processes through digital platforms, including e-governance initiatives that improve public service delivery and streamline government operations, enhancing organizational efficiency (Tushman, 2020). Each

type plays a crucial role in advancing overall innovation strategies in Zanzibar to address specific local needs and contribute to broader development goals.

2.2.2 Social benefits of innovation Programs

Social benefits refer to the effects and outcomes of innovation programs on society and communities. These impacts can include improvements in social inclusion, access to services, quality of life enhancements, and empowerment of marginalized groups. Innovation programs can social inclusion by broadening access to services and opportunities for underserved populations. They can improve the quality of life by introducing new solutions that address pressing social needs, like health care and education (Doe,2020). Furthermore, these programs can empower marginalized groups by providing them with resources and support to overcome barriers and achieve greater social and economic participation. For instance, social innovation initiatives like microfinance programs have been shown to uplift disadvantaged communities by improving access to financial services and fostering economic self-sufficiency (Caulier-Grice, J, 2020)

2.2.3. Economic Benefits of innovation programs

Economic benefits denote the tangible and intangible gains for the economy resulting from innovation programs. These benefits include job creation, increased productivity, enhanced competitiveness of industries, attraction of investments, and stimulation of new business opportunities (Brown, 2020). For example, innovation programs can lead to job creation by stimulating new industries and expanding existing ones, thereby offering new employment opportunities across diverse sectors (Taylor, 2020). Additionally, these programs can enhance productivity by integrating advanced technologies and efficient processes, which improves

industry competitiveness on a global scale (Wang, 2020). Furthermore, innovation initiatives often attract investments by demonstrating growth potential and offering attractive returns, which stimulates further economic development and entrepreneurial ventures (Brown & Green, 2020).

2.2.4. Stakeholders perceptions on innovation programs

Stakeholders are individuals, groups, or organizations with an interest, role, or impact concerning innovation programs. This diverse group includes entrepreneurs, investors, policymakers, researchers, academic institutions, government agencies, non-governmental organizations (NGOs), communities, and the general public (Johnson, 2020). Entrepreneurs and investors often view innovation programs as crucial for creating new business opportunities and economic growth, while policymakers and government agencies see them as tools for advancing societal goals and economic development (White, 2020). Additionally, researchers and academic institutions value these programs for the opportunities they provide to advance knowledge and foster collaboration.

2.3 Theoretical Literature Review

This section explores relevant theories on innovation and development, with a focus on two key theories- diffusion of innovation theory and systems of innovation theory. These theories frame understanding of innovation impacts in developing contexts like Zanzibar.

2.3.1 Diffusion of innovation theory.

Diffusion Innovation theory is the theory developed by Everett Roger in 1962, analyzes how new ideas and technologies spread within societies. Rogers categorize adopters into five groups- innovators, early adopters, early majority, late majority, and laggards- based on their willingness

to embrace new concepts. The theory highlights key factors influencing adoption like communication channels, social norms, and perceived benefits, aiming to predict and enhance innovation acceptance (Kotler, 2024). This framework is crucial for business in formulating market strategies, assisting policy makers in effective change implementation, and guiding product developers in aligning design with user needs. Today, it remains relevant in fostering technology adoption, shaping educational programs, and navigating cultural shifts, thereby supporting strategic innovation integration (Keller, 2020).

2.3.2. The Systems of Innovation theory.

The systems of innovation theory are the theory developed by scholar such as Christopher Freeman in 1987 and Bengt-Åke Lundvall in 1992. The theory examines the broader ecosystem in which innovations emerge, evolve, and diffuse. Unlike the Diffusion of Innovation theory, it emphasizes the interactions among various actors—such as firms, universities, and government agencies—within a specific context or industry. This theory underscores how innovation processes are influenced by institutional frameworks, policies, and collaborative networks, aiming to enhance a system's innovative capacity through effective interactions, knowledge flows, and supportive environments (Nelson, 2020). In today's context, the theory is particularly relevant for innovation programs as it aids in creating environments that foster and sustain innovation ecosystems. By encouraging collaboration, knowledge sharing, and supportive policies, it assists regions and industries in boosting their competitive advantage and adapting to rapid technological changes

2.4. Empirical literature review

2.4.1 The review of Developed Countries

Sophie (2022), conducted a longitudinal study to investigate the impact of government innovation grants on the success of start-up businesses in Canada. The study tracked 200 start-ups over a five-year period, comparing those that received government innovation grants with a control group that did not. The study found that start-ups receiving innovation grants experienced significantly higher rates of survival and growth compared to those without grants. Specifically, grant recipients were more likely to introduce new products or services, expand their market reach, and attract additional investment. These findings suggest that government innovation programs play a crucial role in fostering entrepreneurial innovation and economic development in Canada.

Jan de Vries (2020), conducted a case study to assess the effectiveness of university-industry collaboration in fostering innovation in the Netherlands. The study examined partnerships between universities and businesses across various sectors, analyzing their impact on technological innovation and commercialization. The study found that collaborative projects between universities and industries significantly accelerated the development and adoption of new technologies. These partnerships facilitated knowledge exchange, enhanced research capabilities, and bridged the gap between academic research and practical application. The findings underscored the importance of collaborative innovation ecosystems in driving economic growth and competitiveness in the Netherlands.

Satoshi (2021), conducted a cross-sectional study to examine the impact of government research and development (R&D) funding on technological innovation in Japan. The study analyzed data from 100 technology firms receiving government grants, comparing their innovation output with

non-funded firms. The study found that firms receiving government R&D funding demonstrated higher rates of patent filings, product development, and technological advancements compared to their counterparts. The study highlighted the catalytic role of public funding in stimulating private sector innovation and enhancing Japan's technological capabilities. These findings suggest that targeted government support for R&D plays a critical role in fostering innovation-driven economic growth in Japan.

Grace (2019), conducted a qualitative study in 2019 to explore the impact of innovation hubs on entrepreneurial ecosystems in Australia. The study focused on several innovation hubs across different Australian cities, examining their role in fostering collaboration, knowledge sharing, and venture creation. The study found that innovation hubs provided critical infrastructure and support services that facilitated networking, mentoring, and access to funding for start-ups and small businesses. These hubs contributed to the creation of vibrant entrepreneurial communities, driving innovation across diverse sectors such as technology, healthcare, and sustainability. The findings underscored the importance of innovation hubs as catalysts for regional economic development and innovation in Australia.

Luca (2020), conducted a policy analysis to evaluate the effectiveness of regional innovation policies in Italy. The study reviewed government initiatives and funding programs aimed at promoting innovation and technological advancement in different regions of Italy. The study found that regions implementing targeted innovation policies, such as tax incentives, grants for research and development, and support for technology transfer, exhibited higher rates of innovation and economic growth. These policies encouraged collaboration between research institutions, businesses, and government agencies, fostering a conducive environment for

innovation-driven entrepreneurship. The findings highlighted the role of regional innovation policies in enhancing Italy's competitiveness and sustainable economic development.

2.4.2. The review of Developing Countries:

Fatima (2021), conducted a survey to investigate the impact of mobile banking technology on financial inclusion in Nigeria. The study surveyed 1,000 individuals across urban and rural areas, examining their access to and usage of mobile banking services. The study found that mobile banking technology significantly improved financial inclusion by providing convenient and affordable access to banking services, especially in underserved rural communities. Increased usage of mobile banking was associated with higher savings rates, improved financial management, and expanded economic opportunities for individuals previously excluded from the formal financial sector. These findings underscored the transformative potential of mobile banking technology in promoting financial inclusion and economic development in Nigeria.

Rajesh (2020), conducted a case study to examine the role of government incubation centers in supporting start-up ecosystems in India. The study analyzed several incubation centers across different states, evaluating their impact on entrepreneurial success and innovation.

The study found that government incubation centers provided critical support to start-ups through mentorship, networking opportunities, access to funding, and infrastructure facilities. These centers played a pivotal role in nurturing entrepreneurial talent, accelerating business growth, and promoting innovation across diverse sectors such as technology, healthcare, and agriculture. The findings highlighted the importance of supportive ecosystems and government initiatives in fostering a vibrant start-up culture and driving economic development in India.

Alice (2019), conducted a longitudinal study to assess the impact of renewable energy innovations on rural development in Kenya. The study tracked the adoption and socio-economic outcomes of renewable energy technologies among rural households over a five-year period. The study found that the introduction of renewable energy innovations, such as solar-powered systems and biogas digesters, significantly improved access to clean energy, enhanced household productivity, and reduced reliance on traditional biomass fuels. These innovations also stimulated local economic activities, created employment opportunities, and contributed to environmental sustainability. The findings underscored the transformative potential of renewable energy technologies in promoting inclusive rural development and improving living standards in Kenya.

2.4.3. The review of Tanzania:

Ibrahim (2023), conducted a qualitative study to evaluate the effectiveness of youth entrepreneurship programs in Tanzania. The study examined various government and non-governmental initiatives aimed at fostering entrepreneurial skills and promoting youth-led businesses. The study found that youth entrepreneurship programs contributed to job creation, income generation, and economic empowerment among young Tanzanians. These programs provided training, mentorship, access to finance, and market linkages, enabling youth to establish and sustain their enterprises. Successful outcomes included increased business start-ups, improved livelihoods, and enhanced community resilience. The findings highlighted the importance of targeted support for youth entrepreneurship in driving economic growth and social development in Tanzania.

Prof. John (2019), conducted an empirical review focusing on innovation hubs across Tanzania to assess their role in fostering technological innovation and economic growth. The study utilized a stratified sampling approach, selecting hubs from major cities like Dar es Salaam and Arusha, as well as rural areas, ensuring geographic diversity. Qualitative methods such as semi-structured interviews with hub managers, entrepreneurs, and government officials were combined with quantitative surveys among hub users and stakeholders. The findings highlighted that these hubs played a crucial role in catalyzing technological innovation, particularly in fintech, agriculture, and healthcare sectors. Moreover, they significantly contributed to job creation, skill development, and attracting investment into local economies.

2.4.4. The review of Zanzibar

Amina (2021) conducted a case study to investigate the impact of tourism innovation programs on sustainable development in Zanzibar. The study focused on initiatives aimed at promoting eco-tourism, cultural preservation, and community-based tourism practices. The study found that tourism innovation programs in Zanzibar contributed to environmental conservation, cultural heritage preservation, and socio-economic empowerment of local communities. These programs encouraged responsible tourism practices, supported small-scale enterprises, and enhanced tourist experiences. Positive outcomes included increased tourist arrivals, revenue generation, and improved livelihoods for residents involved in tourism-related activities. The findings underscored the role of innovation in fostering sustainable tourism development and inclusive growth in Zanzibar.

Rashid (2022), conducted a survey to explore the role of agricultural innovation in enhancing food security in Zanzibar. The study surveyed farmers and agricultural stakeholders across the

archipelago, assessing the adoption and impact of innovative farming practices and technologies. The study found that agricultural innovation initiatives, such as improved irrigation systems, climate-smart agriculture techniques, and crop diversification, played a crucial role in increasing agricultural productivity and resilience to climate change in Zanzibar. These innovations contributed to higher crop yields, reduced post-harvest losses, and improved nutritional outcomes for rural communities. The findings highlighted the potential of agricultural innovation to strengthen food security, alleviate poverty, and promote sustainable development in Zanzibar.

Dr. Fatma (2020), conducted a comprehensive empirical review focusing on innovation hubs in Zanzibar to evaluate their impact on local entrepreneurship and economic development. Employing a mixed-methods approach, the study included qualitative interviews with hub managers, entrepreneurs, and government officials, complemented by quantitative surveys among hub users and beneficiaries. The research selected 10 prominent innovation hubs for detailed analysis, aiming to understand their operational dynamics within Zanzibar's unique socio-economic context. Findings indicated that these hubs played a significant role in fostering entrepreneurship by offering essential resources such as mentorship, networking opportunities, and access to funding. However, challenges such as limited funding sustainability, inadequate infrastructure, and regulatory hurdles were identified as critical barriers to their effectiveness.

2.5. Research Gap

In Zanzibar, innovation initiatives face critical challenges that undermine their effectiveness. Only 15% of SMEs access dedicated financial support (Reports on SME Funding in Zanzibar, 2023), signaling barriers such as restrictive eligibility criteria, lack of awareness, and mismatched financial products. Despite digital literacy programs, only 10% of the workforce is

employed in technology sectors (Technological Workforce Statistics, 2023), highlighting a gap between training outcomes and industry needs.

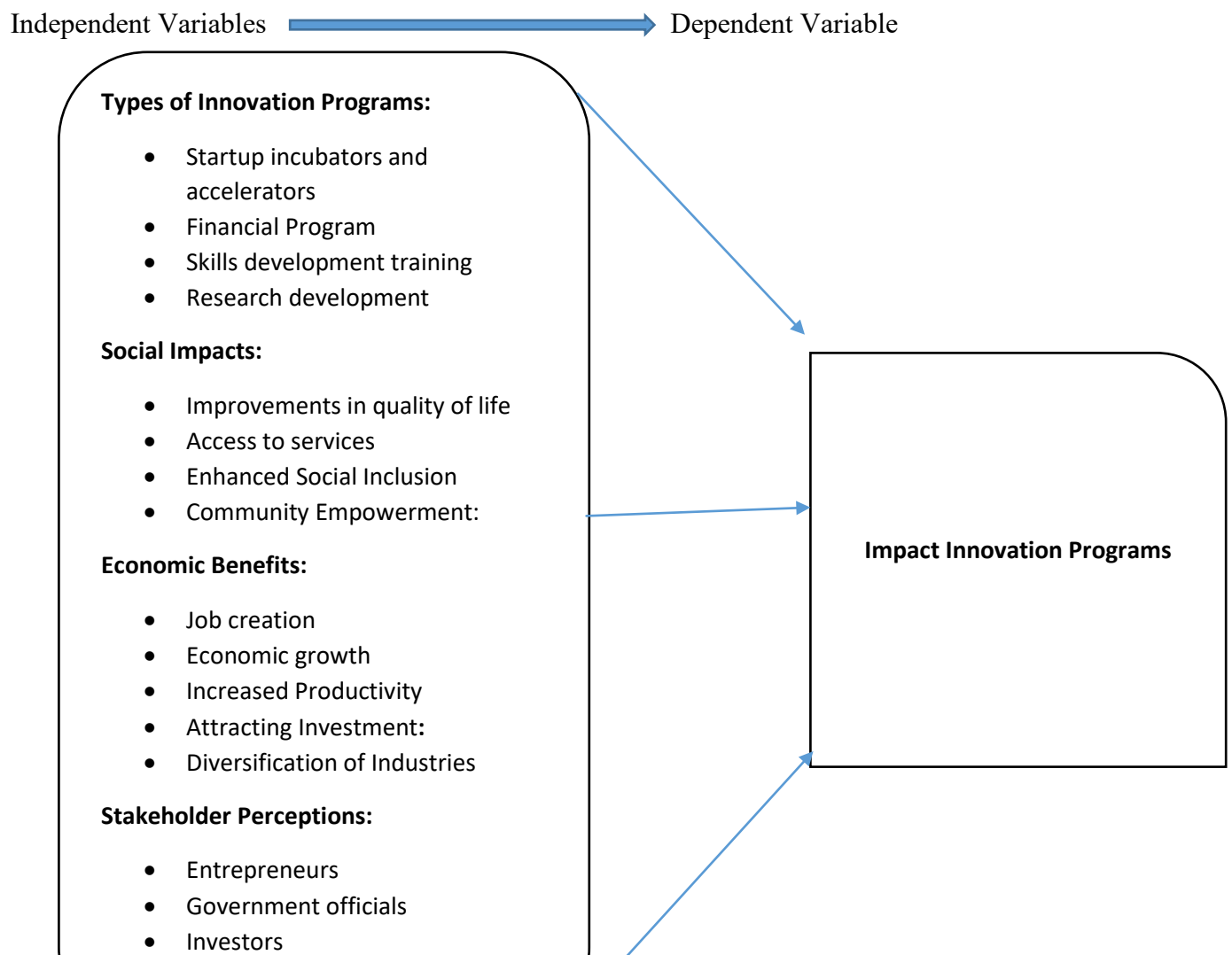
Additionally, there is a lack of comprehensive documentation and rigorous evaluations of innovation programs (Global Innovation Index, 2023). This gap hampers effective policy-making and targeted interventions. Assessing the socio-economic impacts of innovation programs is crucial to understanding their effectiveness and sustainability. Research should focus on evaluating the benefits of these programs, identifying barriers to success, and optimizing policy frameworks. By addressing these gaps, Zanzibar can enhance its innovation ecosystem, foster economic growth, and improve societal well-being.

1.6 Conceptual Framework

A conceptual framework outlines the structure of a study by defining key concepts, variables, and relationships between them. It serves as a roadmap for understanding how different factors interact within a research context (Saldana, 2016). The conceptual framework focuses on the Impact Assessment of Innovation Programs in Zanzibar as the overarching dependent variable. The study's specific objectives, treated as independent variables, include identifying Types of Innovation Programs currently operational in Zanzibar, assessing Social Impacts of these programs, evaluating their Social and Economic Benefits, and gathering Stakeholder Perceptions involved in or impacted by innovation initiatives. Types of Innovation Programs encompass various initiatives like startup incubators and accelerators, while Stakeholder Perceptions represent views from entrepreneurs, government officials, investors, and community members. Social Impacts consider improvements in quality of life and access to services, while Economic Benefits measure contributions such as job creation and economic growth. This framework aims

to analyze how these variables interrelate to comprehensively understand the effectiveness and outcomes of innovation efforts in Zanzibar's evolving innovation ecosystem as illustrated below:

Figure 1: The conceptual framework of the study.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an overview of the methodology employed to investigate the impact of innovation programs on social and economic development in Zanzibar. It outlines the research design, study areas, target population, sampling procedures, sample size, data collection methods, Data analysis and presentation methods, validity and Reliability of instruments and ethical consideration that was used in the study.

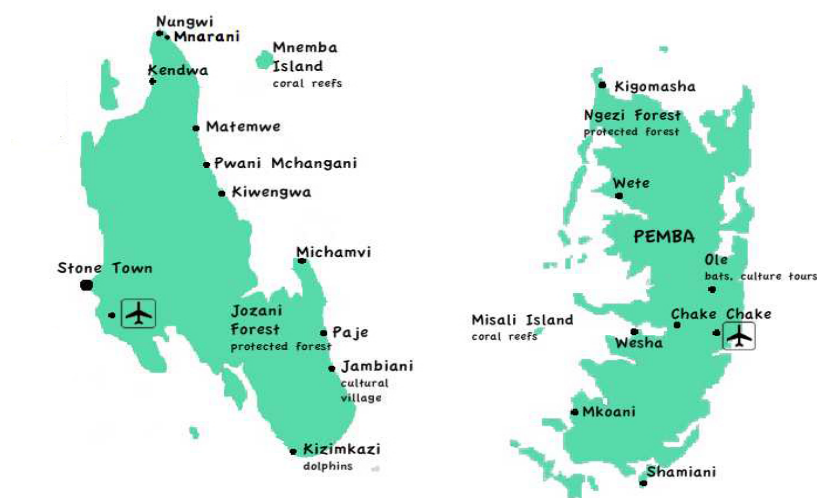
3.2 Research Design

Research design is a structured plan that outline the procedures and methods for conducting a research study. It serves as a blueprint for collecting, analyzing and interpreting data to answer specific research questions or test hypotheses (Creswell, 2018). The study employed mixed-methods approach which employed the qualitative and quantitative design, through the use of surveys, interview guides, observations and secondary data analysis. These techniques were used for providing detailed insights into the experiences, perceptions, and impacts of innovation programs in Zanzibar. Qualitative and quantitative design data helped uncover the underlying reasons behind observed phenomena and explore complex social process. These design was chosen for its ability to provide a comprehensive understanding of the multifaceted impacts of innovation programs in Zanzibar.

3.3 Study Area

The research was conducted in Zanzibar, which consists of two main islands: Unguja and Pemba with population of around 1.6 million people, based on the 2022 census. The geographical focus

allows for a detailed analysis of innovation programs across different regions of Zanzibar, providing insights into regional variations in program impacts. The study area was selected due to the fact that Zanzibar offers a rich and multifaceted perspective on the impact of innovation programs within a specified socio-economic and cultural context. The unique geographical, economic, and social characteristics of Zanzibar it a valuable case for understanding the broader implications of innovation in developing regions. This research could inform future strategies and policies aimed at fostering sustainable development and addressing local challenges effectively.



Unguja Island (Zanzibar)

Pemba Island.

3.3.1. Population

The population includes stakeholders directly involved in or impacted by innovation programs in Zanzibar. In this study the population was 1.6 million residents includes entrepreneurs, policymakers, investors, innovation program managers, researchers from universities, youth and

community members, small holder farmers, local business owners who interact with these programs.

3.3.2 Sampling specification/procedures

The study employed both probability and non-probability sampling techniques to ensure comprehensive data collection. Probability sampling was included a methodologically robust approach to sampling, integrating purposeful, stratified, to ensure comprehensive representation and insights into the impact of innovation programs. Purposeful sampling was facilitated the selection of key stakeholders with direct experience in innovation programs, ensuring a diverse range of perspectives and experiences are captured. Stratified sampling was further enhancing the study's breadth by systematically including stakeholders from various sectors such as technology, agriculture, and tourism, as well as different demographic groups, thereby improving the generalizability of findings across Zanzibar's diverse population. Non-probability sampling was utilizing snowball sampling to identify and include participants referred by initial respondents, particularly beneficial for reaching stakeholders who may not be readily identifiable through traditional sampling methods. These combined approaches aim to provide a comprehensive understanding of the effectiveness and impact of innovation initiatives in Zanzibar.

3.3.3. Sample size.

According to Adams (2019), the sample size is conceptualized as the totality of observations utilized to calculate or determine estimates from a population. In this study, the sample was 385 identified from a predetermined population. From this sample, 385 the participants will be randomly selected from the innovation programs. These sample size presented for 120 Entrepreneurs, 20 Policymakers, 15 Investors, 40 Innovation Program Managers, 50 Researchers

from Universities and colleges, 60 Students, 30 Community Members, 20 Smallholder Farmers and 30 Local Business Owners. This sample size provides a reasonable representation of the population and ensure that the findings of the study are statistically reliable and meaningful for the context of innovation programs in Zanzibar.

3.4 Data Collection Methods

This study was collected data using both primary and secondary sources. Primary data was gathered through fieldwork, involving site visits to the study area where surveys, interview guides, and documentary review with innovation program recipients.

3.4.1. Surveys:

Survey is a research methods used in gather information from a group of people through questions. It aims to collect data on options, behaviours or characteristics to understand trends, make decisions, or solve problems. Survey was conducted through various methods, including questionnaires, interviews and online forms (Krueger, 2015).

3.4.2. In-depth Interviews:

These was conducted with key informants such as policymakers, program managers, and successful entrepreneurs to gather nuanced insights into the impacts of innovation programs. Interviews were semi-structured to allow for probing into specific areas of interest (Seidman, 2013).

3.4.3. Documentary Review

Innovation programs are vital for driving progress across various sectors. By leveraging secondary data this review aims to synthesize existing knowledge on innovation programs, highlighting key trends, practices, and challenges observed across different sectors and

geographical regions. The researcher used documentary analysis by reviewing the secondary data sources, including government initiatives, policy papers, and case studies to innovation programs. It was encompassed various sectors and geographical context to provide a comprehensive overview.

3.5 Data Analysis

In conducting this study, both qualitative and quantitative data analyses are essential to comprehensively explore the impacts of innovation programs in Zanzibar. Qualitatively, thematic analysis following Braun (2006) systematic approach was employed to extract and examine patterns and themes from text –based information such as interview transcripts or open ended survey responses, using coding and thematic analysis. Either, the study used quantitative analysis summarizing the numerical information through descriptive statistics using survey or questionnaires. This methodical coding process was categorizing data into themes that highlight recurring ideas regarding social impacts, economic benefits, and stakeholder perceptions, thereby enriching our understanding of how these programs are perceived and their actual effects within the community. Descriptive statistics was summarizing and interpret the distribution and frequencies of responses, presenting findings through charts (such as bar charts, pie charts), histograms, percentages, and tables. This visual presentation was provided a clear snapshot of the overall sentiments and perspectives within the surveyed population.

3.6 Validity and Reliability

Validity and reliability are critical concepts in research that are essential for ensuring the credibility and trustworthiness of study findings. Here's how these concepts apply to a study on

innovation programs in Zanzibar, particularly focusing on stakeholders such as entrepreneurs, policymakers, investors, researchers, and community members.

3.6.1. Validity (Data Collection):

To ensure the validity of data collected for the study on innovation programs in Zanzibar, rigorous measures were implemented. Firstly, clear operational definitions of key variables such as program effectiveness and stakeholder impact was established. This clarity was guided the selection of appropriate data collection methods, including surveys and interviews tailored to capture diverse perspectives from stakeholders like entrepreneurs, policymakers, investors, researchers, and community members. By aligning questions closely with research objectives and ensuring they are culturally and contextually appropriate, the study aims to accurately measure the intended constructs without bias. Additionally, triangulation of data from multiple sources and member checking will further validate findings, enhancing the robustness and trustworthiness of the study outcomes.

3.6.2. Reliability (Data Collection):

Reliability in data collection assured through systematic procedures designed to minimize errors and inconsistencies. This includes employing standardized protocols for administering surveys and conducting interviews, ensuring consistency in data collection across different settings and respondents. Pilot testing of instruments with 10 respondents preceded full-scale implementation to identify and address any ambiguities or misunderstandings in questions. Moreover, inter-rater reliability checks conducted for qualitative data analysis, involving multiple researchers to assess and ensure agreement on coding and interpretation. Regular training and calibration sessions for data collectors and also be conducted to maintain uniformity in data collection techniques. These

efforts collectively aim to establish the reliability of data gathered, allowing for dependable conclusions regarding the impact of innovation programs in Zanzibar.

3.7 Ethical Considerations

Ethical approval was sought from relevant institutional review boards to ensure the study adheres to ethical guidelines and principles. Informed consent was obtained from all participants, emphasizing confidentiality and anonymity to protect their privacy and rights throughout the research process.

3.8 Chapter Summary

This chapter outlines the comprehensive approach employed to investigate the impact of innovation programs on social and economic development in Zanzibar. The chapter outline a research design, the study area, population of the study. Data collection methods combines with data analysis. The chapter ensure validity and reliability of the instrument and addresses ethical considerations by requiring institutional approval and informed consent to safeguard participant privacy.

CHAPTER FOUR

RESULTS AND DISCUSSION OF FINDINGS

4.1. Introduction

This chapter presents, discusses, and analyses the study findings presentation and interpretation of what has been observed, experienced, and extracted from the findings of the study and thus provides a logical picture of the general objectives of the study. The data were analyzed both qualitatively and quantitative, the presentation of the findings were descriptive or narrations of tables and graphs respectively. The results included in the qualitative and quantitative information were taken from the questionnaire and interview guides. The researcher after gathering opinions from different respondents who were entrepreneurs, policymakers, investors, innovation program managers, researchers from universities, youth and community members, small holder farmers and local business owners. The data of these results sorted for analysis. The data presented under various headings that constitute the different areas of the researcher. An appropriate interpretation had been then carried out coupled with supporting arguments. It was done following the four objectives and research questions that guided the study which intended the impact of tourism hotels to local surrounding communities in Zanzibar: A case study was done in Zanzibar. The specific objectives were: to identify Types of Innovation Programs currently operational in Zanzibar, to assess Social Impacts of innovation programs in Zanzibar, to evaluate Economic Benefits generated by innovation programs in Zanzibar and to gather Stakeholder Perceptions involved in or impacted by innovation programs in Zanzibar. The investigation was done and findings presented in tabular format, graphs, and narrative format. Data obtained from the questionnaire were analyzed using the Statistical Package for the Social Sciences (SPSS) software.

4.2. Demographic attributes of Respondents in the survey.

This section shows the background of the various respondents which was the main interest of the researcher. The respondents' background covered by Age, Gender, Marital status, education, Occupation, Income, Household size, Region and Access to Technology About 385 respondents were participated in the study.

4.2.1 Attributes of Respondents

The variable of various attributions of the respondents were investigated for this study. Data related to the attributions of the respondents presented in Table 4.1 below:

Table 4. 1: The demographic information of the respondents.

Variable	Frequency	%
Age		
18 - 24	64	16.7
24 – 34	32	8.3
34 – 44	112	29.2
44-54	144	37.3
54-64	29	7.5
64 and above	4	1
Gender		
Male	173	45.1
Female	212	54.9
Education level		
Primary Education	39	10
Secondary Education	135	35
Diploma	138	36
Bachelor Degree	54	14
Master's Degree	15	4
PhD	4	1
Current Occupation		
Unemployed	244	62.4
Employed (full-time)	37	9.6

Employed (part-time)	42	10.9
Self-employed	30	7.8
Retired	32	9.3
Monthly income		
5,000- 49,999 TZS	35	9.1
50,000 - 99,999 TZS	79	19
100,000 - 299,999 TZS	58	14
300,000 - 499,999 TZS	31	8
500,000 -999,999 TZS	84	19.4
1,000,000 - 1,999,999 TZS	59	15.3
2,999,999 TZS and above	15	5
Prefer not to say	24	10.2
Region of Residence		
Rural Area	73	18.8
Urban Area	312	81.2
Access to Technology		
No Access	38	9.9
Extensive Access	141	36.6
Limited Access (Occasional use)	27	7
Regular Access (e.g., daily use)	179	46.5

Source: Field Data, September (2024)

Source: Field Data, September (2024)

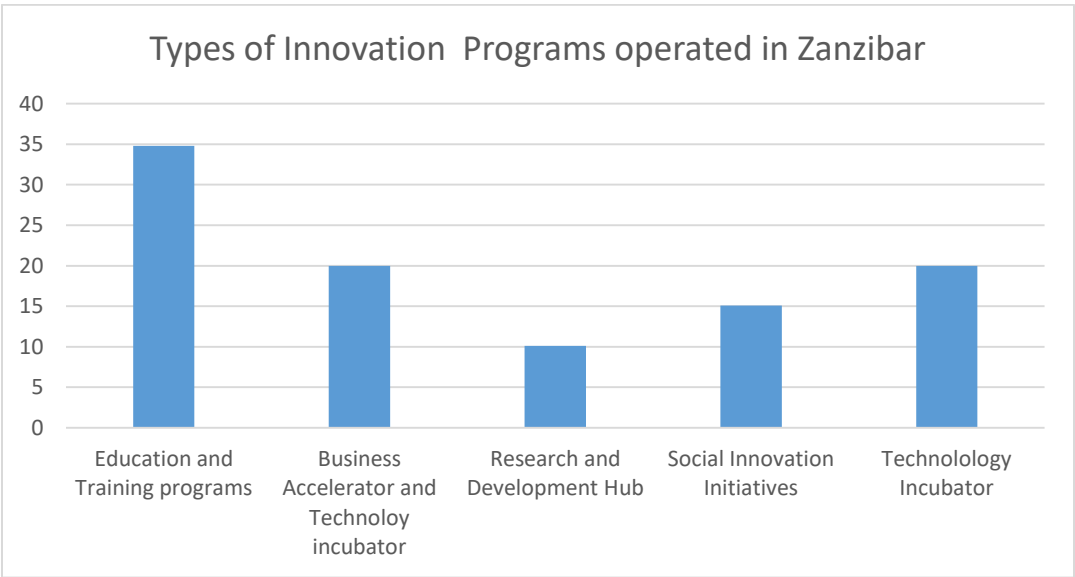
The survey collected response from 385 participants, revealing a diverse demographic landscape in Zanzibar. The majority of respondents were aged between 44 and 54 years (37.55%), followed by 34 to 44 years (29.2%). The gender distribution was slightly skewed toward female (54.9%) compare to male (45.1%). Most respondent were holding secondary education (35.0%) or college diploma (36.0%). Alarminglly, a high percentage (62.4%) reported unemployed, while only 9.6% were employed full-time. The data on monthly income indicate that a substantial portion of respondent (19.0%) earned between 50,000 and 99,999 TZS, with notable number (9.9%)lacking access to technology. Most respondent resided in rural area (81.2%)reflecting a potential gap in access resource that could enhance innovation programs. These finding imply significant socio-economic challenge in Zanzibar, particularly a high unemployment rate among

a predominantly education population aged 34 to 54. Despite their educational attainment, many respondents struggle to find employment, indicating a disconnect between skills and market needs. Additionally, the substantial rural population and those lacking access to technology highlight a digital divide that hinder innovation. These finding underscore the urgent need for targeted policies and program to bridge these gaps, enhance economic participation, and leverage the work force`s potential for sustainable development

4.2.2. Types of innovation programs operational in Zanzibar.

The respondents were asked to mention the types of innovation programs operational in Zanzibar and the results were indicted below:

Figure 4.1. Types of innovation programs operational in Zanzibar



Source: Field Data, September (2024).

The finding from figure 4.1 illustrate a significant 34.8% of respondents identified Educational/Training Programs as a key types of innovation program operational in Zanzibar. In comparison, Business Accelerator and Technology Incubator both received a notable 20.0% recognition, while Researcher and Development Hub accounted for 10.1% and Social Innovation

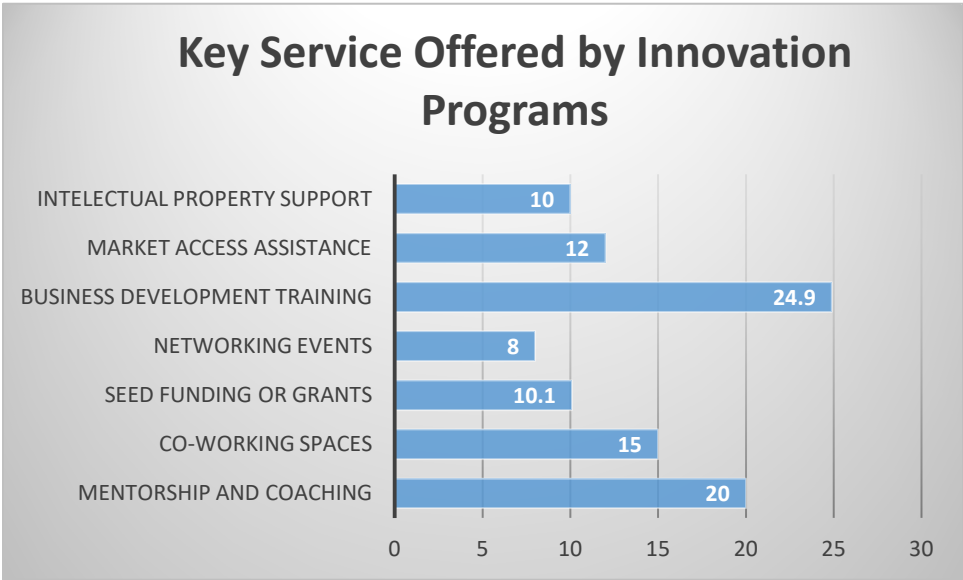
Initiatives garnered 15.1%. This distribution implies a strong emphasis on education and skill development as foundation components of Zanzibar’s innovation ecosystem.

These finding align with work of Mwita (2023), who indicate that fostering educational program is essential for equipping the workforce in Zanzibar and Tanzania, thereby driving innovation and economic growth. He emphasizes that targeted training initiative can significantly enhance entrepreneurial capacity, which is crucial for addressing the high unemployment rates and promoting sustainable development in region.

4.2.3. Key Service Offered by Innovation Programs.

The respondents were asked to mention the key service offered by innovation programs in Zanzibar and the results were indicted below:

Figure 4.2. Key Service Offered by Innovation Programs



Source: Field Data, September (2024).

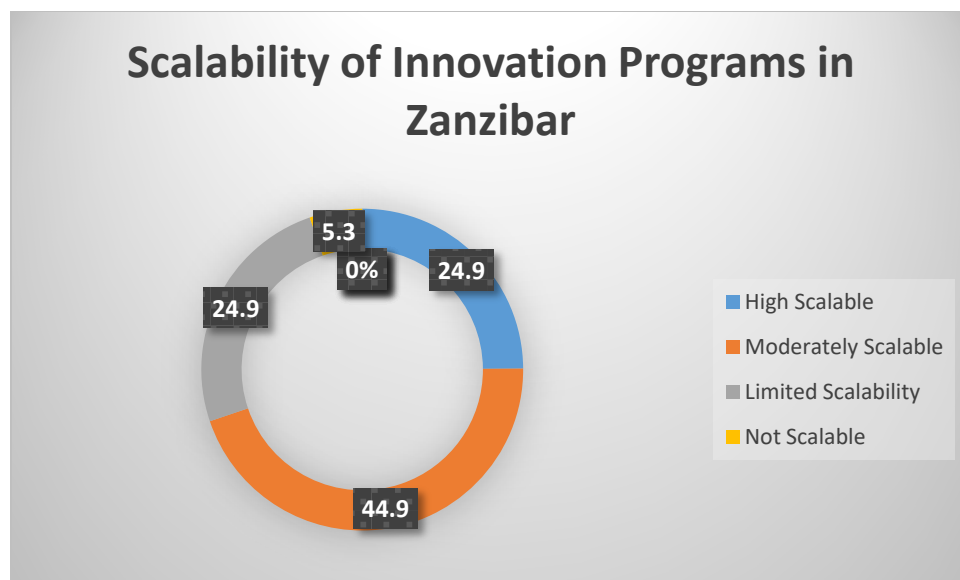
The analysis of key services offered by innovation programs in Zanzibar reveals a strong focus On support mechanisms for entrepreneurs. Business Development Training emerged as a critical resource, reported by 24.9% of respondents emphasizing the importance of equipping individuals

with essential business skills. Mentorship and Coaching was identified by 20.0% of participants, highlighting the role of guidance in fostering entrepreneurial success. The presence of Co-working Spaces among 15% of respondents reflects a trend towards collaborative environment that encourage networking. However, the lower recognition of Market Access Assistance and Seed Funding or Grants by only 12.0% and 10% of participants suggests gaps in resources needed for startups to overcome barriers and scale. Overall, while Zanzibar has established a supportive entrepreneurial framework, there is pressing need for enhanced funding mechanisms and market access initiatives to empower innovators and promote sustainable economic growth. These findings resonate with the insights of Kinyanjui (2022), who notes that effective support services, including business training and mentorship, are vital for enhancing the entrepreneurial ecosystem in Tanzania, emphasizes that such services not only empower entrepreneurs but also stimulate innovation, thereby contributing to broader economic development in the region.

4.2.4. Scalability of innovation programs in Zanzibar.

The respondents were asked to indicate the scalability of innovation programs in Zanzibar and the results were indicted below:

Figure 4.3. Scalability of innovation programs in Zanzibar



Source: Field Data, September (2024).

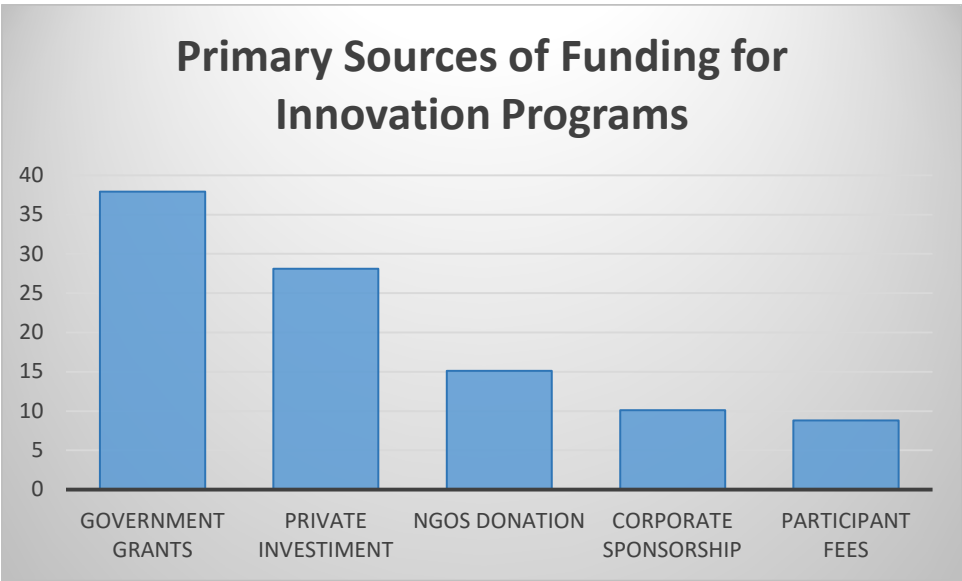
The analysis of the Scalability of innovation programs in Zanzibar reveals a mixed landscape. A notable 24.9% of respondents indicated that these programs are highly scalable, suggesting they can easily expand both locally and international. Additionally, 44.9% assess them as moderately scalable, indicating that expansion is feasible with some efforts. However, a significant portion, also 24.9 reported limited scalability, citing challenges in expanding operations, while 5.3% state that programs are not scalable at all, with no plans for expansion. These findings highlight the potential for growth within Zanzibar's innovation ecosystem, but also underscore the need to address the barriers that hinder broader expansion and impact. The findings regarding the scalability of innovation programs in Zanzibar align with existing literature on entrepreneurship in the region. For instance, Mshana (2022) emphasis that while many innovation initiatives show potential for growth, systemic challenges such as funding and infrastructure limitations often impede their expansion. This suggest that the while a significant portion of respondents' view

innovation programs as moderately or highly scalable, addressing these barriers is crucial for realizing their full potential and enhancing economic development in Zanzibar.

4.2.5. Primary Sources of Funding for Innovation Programs

The respondents were asked to indicate the primary sources of funding for innovation programs in Zanzibar and the results were indicted below:

Figure 4.4. Primary Sources of Funding for Innovation Programs



Source: Field Data, September (2024).

The analysis of primary sources of funding for innovation progress in Zanzibar indicates a reliance on various funding mechanisms. Government grants emerged as the most significant source, with 37.9% of respondents identifying them as crucial for sustainability. Private investments were also notable, with 28.1% indicating their importance. However, funding from NGOs (15.1%), corporate sponsorships (10.1%), participant fee (8.8%) were less prevalent, suggesting a potential over reliance on government support. This finding highlights the necessity

for diversifying sources to enhance the resilience and sustainability of innovation programs. As noted by Mshana (2022) developing a broader funding ecosystem is essential for fostering innovation and entrepreneurship in Zanzibar, thereby reducing vulnerability to fluctuations in government budget.

4.2.6. Main Challenges of Innovation Programs Regarding Integration.

The respondents were asked to indicate the main challenges of Innovation programs regarding integration in Zanzibar and the results were indicted below:

Figure 4.5. Main Challenges of Innovation Programs Regarding Integration.

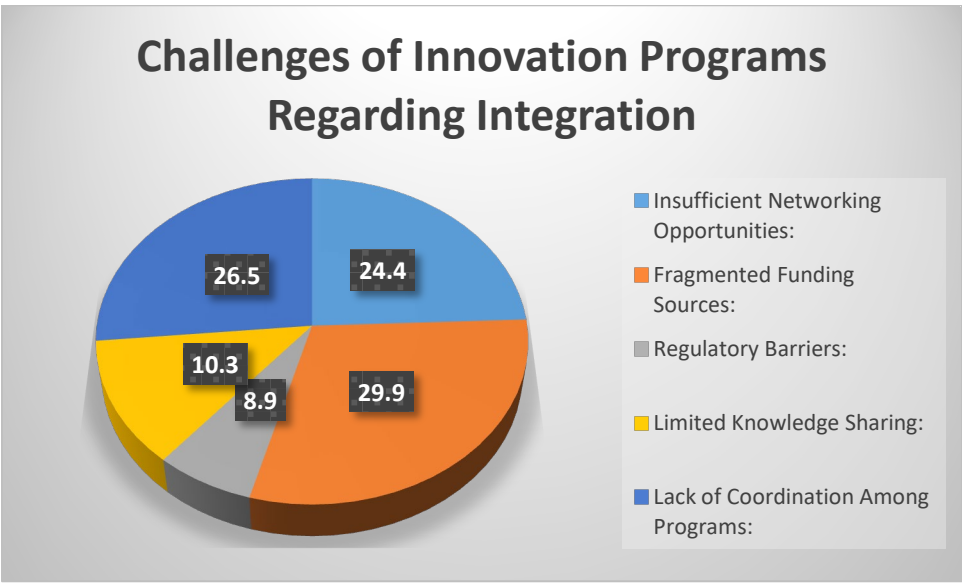


Figure 4.5. Source: Field Data, September (2024).

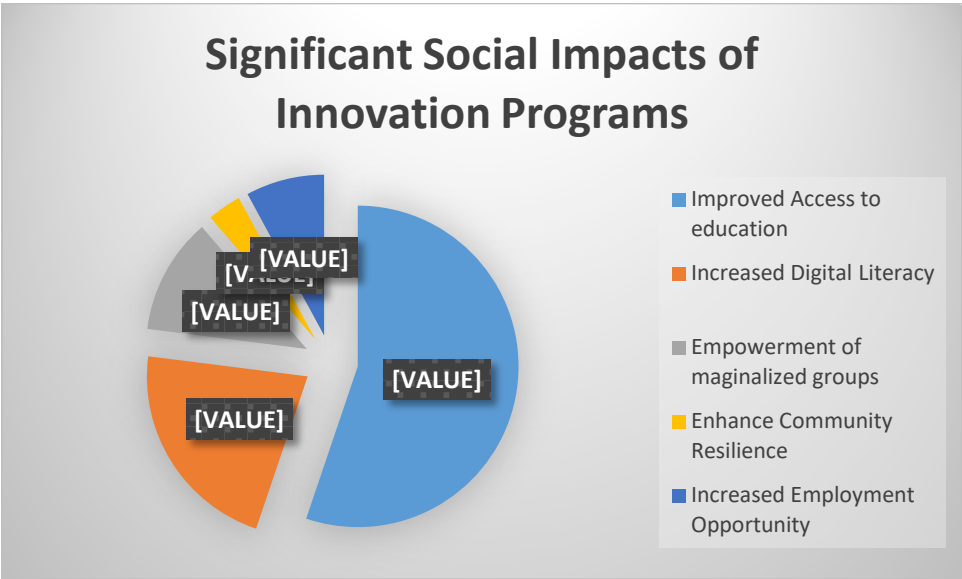
The analysis of the main challenges faced innovation programs in Zanzibar reveals several critical barriers to effective integration. Fragment funding sources were identified by 29.9 of respondents as a significant obstacle, highlighting the difficulty in securing consistent financial support for initiatives. Additionally, a lack of coordination among programs, reported by 26.5%,

indicates challenges in collaboration that could enhance overall program effectiveness. Insufficient networking opportunities, noted by 24.4%, further complicate efforts to foster connections among innovators. While regulatory barriers indicated as 10.3% and limited knowledge sharing were also mentioned to 8.9%, they appeared to be less prevalent challenges. These findings suggest that addressing coordination and funding issues is essential for strengthening the innovation ecosystem in Zanzibar. As emphasized by Khamis (2021), fostering an integrated approach among stakeholders can mitigate these challenges and enhance the impact of innovation programs.

4.3. Significant Social Impacts of Innovation Programs

The respondents were asked to indicate the significant social impacts have resulted from innovation programs in Zanzibar and the results were indicted below:

Figure 4.6. Significant Social Impacts of Innovation Programs



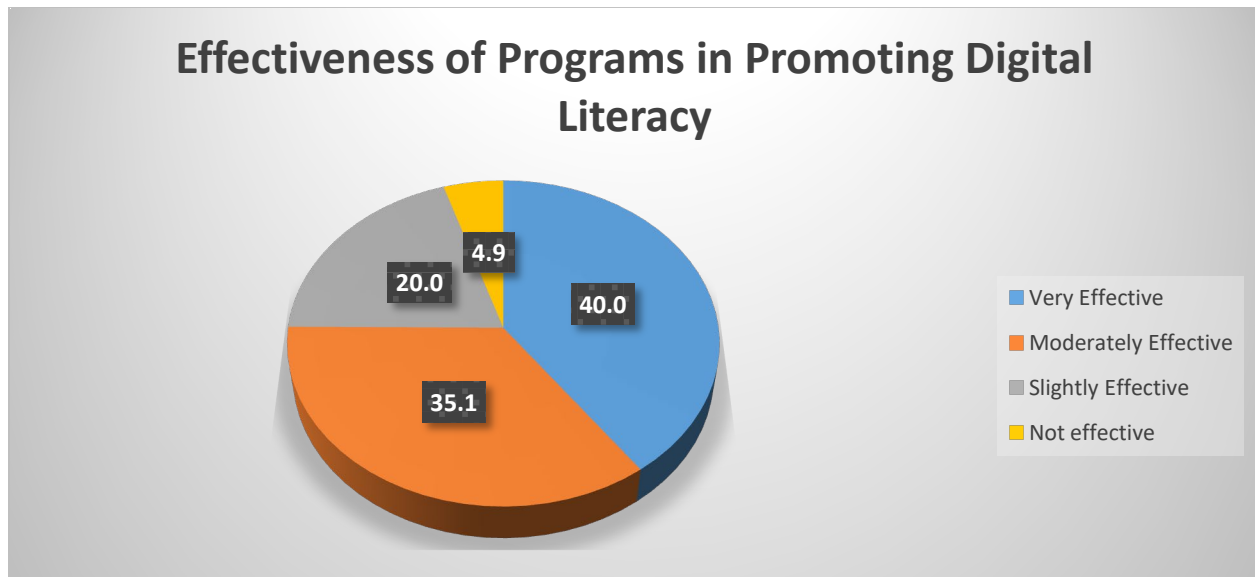
Source: Field Data, September (2024).

Respondents were asked to identify significant social impacts of innovation. Programs, with results indicating that improved access to education was the most recognized impact at 55.2%, educational initiatives within these programs. Increased digital literacy garnered 21.8% of responses, suggesting that while this is a recognized outcome, there may be gaps in awareness or delivery that warrant attention. Empowerment of marginalized groups received 11.7%, indicating a need for more targeted efforts engage underserved populations. Notably, enhanced community resilience was identified by only 3.4% of respondents, which suggests that programs might benefit from integrating training that focuses on building community strength and adaptability. Finally, increased employment opportunities were noted by 7.9% of participants, suggesting that while job outcomes are important, they may not currently be a primary focus of the programs. This finding implies that while improved access to education is recognized as the most significant social impact of innovation programs to enhance the overall effectiveness of these initiatives, program administrators should prioritize strategies that increase awareness and delivery of digital literacy, target outreach to marginalized groups, and incorporate training that fosters community resilience. This holistic approach can lead to broader and more impactful social outcomes. This aligns with Taylor (2021), who emphasized the necessity of ensuring that digital literacy initiatives are effectively communicated and implemented to maximize their impact.

4.3.1 Effectiveness of Programs in Promoting Digital Literacy

The respondents were asked to indicate how effective have innovation programs been in promoting digital literacy among different demographics and resulted from innovation programs in Zanzibar and the results were indicted below:

Figure 4.7. Effectiveness of Programs in Promoting Digital Literacy



Source: Field Data, September (2024).

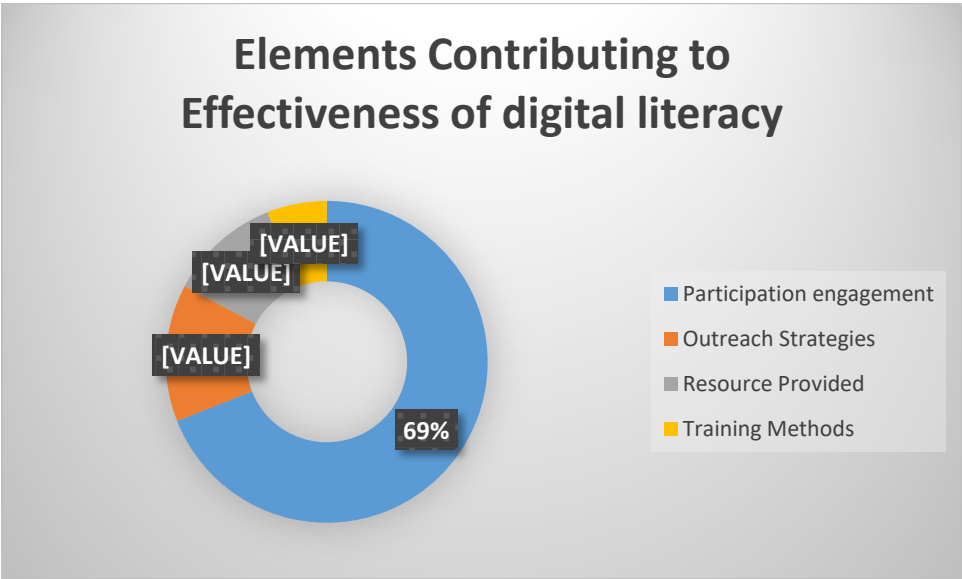
When evaluating the effectiveness of innovation programs in promoting digital literacy, the responses revealed that 40.0% of participants found the programs to be very effective, while 35.1% rated them as moderately effective. This cumulative indicates a strong general perception of the programs' capabilities in enhancing digital skills. However, 20.0% of respondents rated the programs as slightly effective, suggesting that some participants encountered barriers such as inadequate training resources or content relevance. A small proportion 4.9% reported the programs as not effective, indicating a disconnect for some individuals that should be explored further. This finding implies that while a majority of participants recognize the effectiveness of innovation programs in enhancing digital literacy, there is a significant portion who may not be fully benefiting from these initiatives. This analysis aligns with Joel (2023), who suggested that understanding participant feedback is crucial for identifying these obstacles. Joel emphasized the need for programs to be tailored to diverse needs and for ongoing assessments to adapt content

accordingly. To improve outcomes, it's essential to gather detailed feedback on training resources and content relevance. Addressing these concerns will foster an inclusive environment where all participants can effectively develop their digital skills, ultimately leading to more equitable digital literacy benefits.

4.3.2 Elements Contributing to Effectiveness in promoting digital Literacy,

The respondents were asked to indicate elements of these programs have contributed most to their effectiveness in promoting digital literacy and resulted from innovation programs in Zanzibar and the results were indicted below:

Figure 4.8. Elements Contributing to Effectiveness of digital literacy.



Source: Field Data, September (2024).

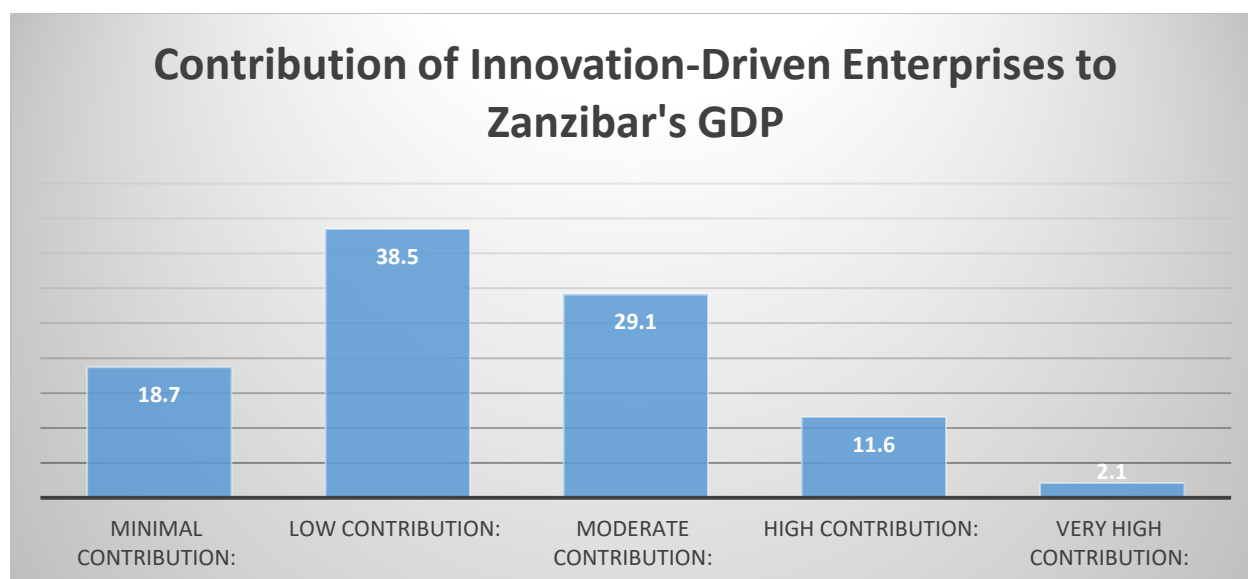
Participants were also asked to identify elements that contribute effectiveness of innovation programs. The results showed that participant engagement was the most critical factor, with 69% of respondents highlighting its importance. This indicates that programs should prioritize interactive and participatory learning environments to foster better engagement and learning

outcomes. Conversely, training methods (6.0%) received relatively low recognition, suggesting that these areas may need improvement to enhance overall effectiveness. Additionally, outreach strategies (13.8%) indicate that broader efforts are necessary to attract diverse participants and 11.2% indicates the resource provided to ensure inclusive program access. This finding implies that participant engagement is paramount to the effectiveness of innovation programs, to maximize effectiveness, program administrators should prioritize developing engaging learning experiences while also refining training approaches and expanding outreach efforts. This comprehensive strategy will help create a more inclusive environment, ultimately leading to improved digital literacy outcomes for all participants. This aligns with Smith (2022), who emphasized that fostering interactive and participatory learning environments is critical for enhancing engagement and improving educational outcomes.

4.4. Contribution of Innovation –Driven Enterprises to Zanzibar programs.

The respondents were asked to indicate the contribution of innovation –driven enterprises to programs in Zanzibar and the results were indicted below:

Figure 4.9. Contribution of Innovation –Driven Enterprises to Zanzibar programs



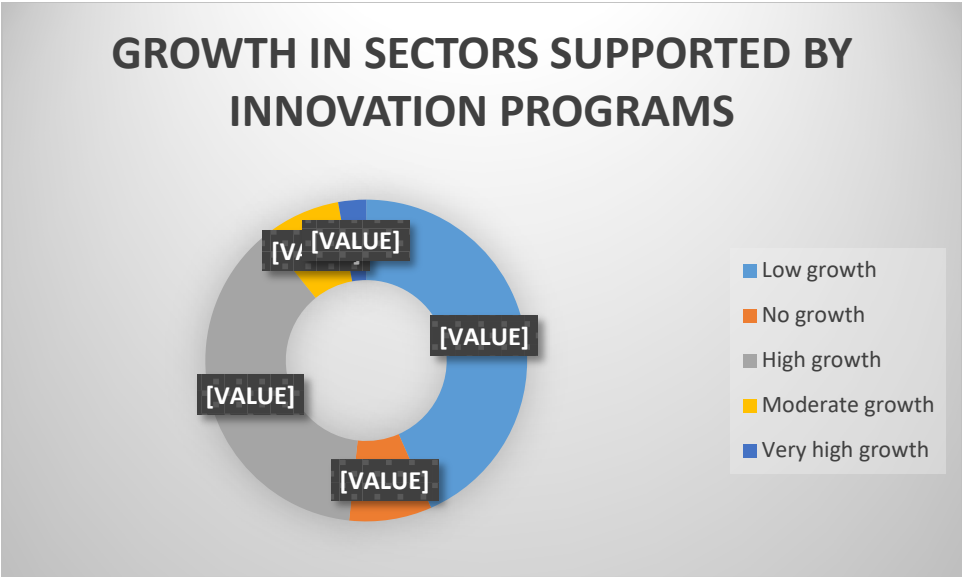
Source: Field Data, September (2024).

The analysis of the contribution of innovation-driven enterprises to Zanzibar's GDP reveals a predominantly low to moderate impact. A significant portion of respondents indicated that these enterprises make a minimal or low contribution, reflecting concerns about their current economic influence. Specifically, 38.5% reported a low contribution, while 18.7% highlighted a minimal impact. Conversely, a smaller segment, 29.1%, acknowledged a moderate contribution, and only 11.6% recognized a high contribution, with just 2.1% perceiving a very high impact. These findings suggest that while innovation – driven enterprises have the potential to contribute more significantly to Zanzibar's economy, their current influence is limited. As noted by Mwanga (2022), enhancing support for these enterprises could unlock their potential for greater economic contributions and drive sustainable development in the region.

4.4.1. Growth in Sectors Supported by Innovation Programs.

The respondents were asked to indicate the growth in sectors supported by innovation to programs in Zanzibar and the results were indicted below:

Figure 4.10. Growth in Sectors Supported by Innovation Programs.



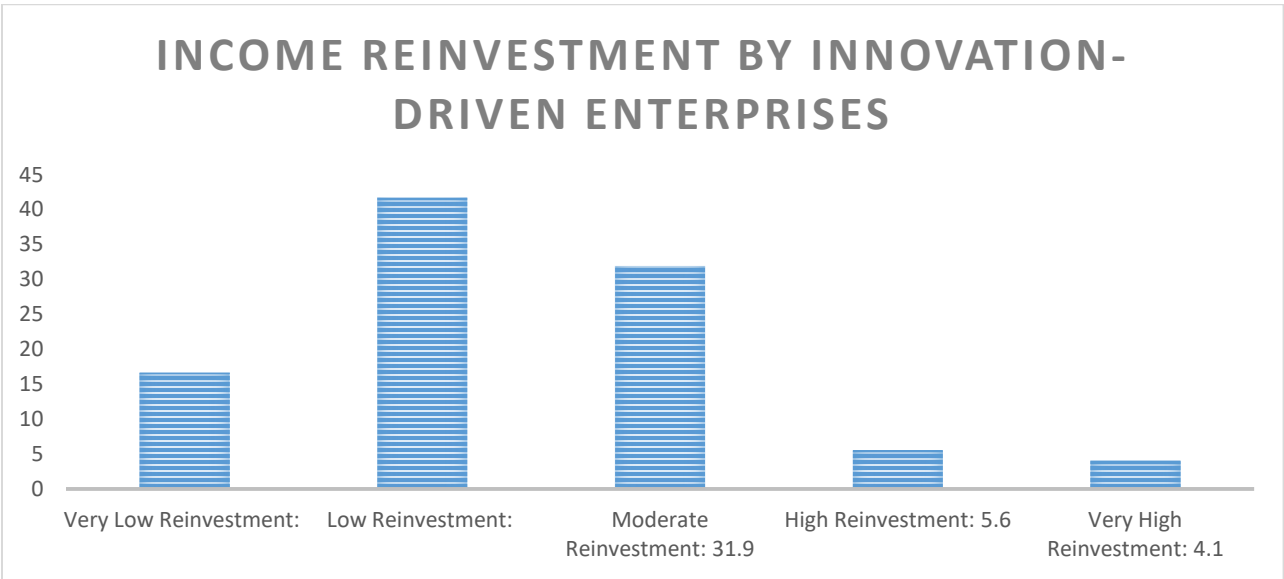
Source: Field Data, September (2024).

The analysis of growth in sectors supported by innovation programs in Zanzibar reveals a mixed picture. A significant portion of respondent reported low growth, indicating that many sectors are not realizing their full potential despite support from innovation programs. Specifically, 43.4% noted low growth, while 8.3% reported no growth and another 8% indicated moderate growth. In contrast, a more positive outlook is reflected in the 37.5% who identified high growth, though only 2.8% recognized very high growth. These findings suggest that while certain sectors are benefiting from innovation support, many are still struggling to expand effectively. As highlighted by Mchome (2021), targeted interventions and sustained investment in innovation could enhance growth outcomes across various sectors, ultimately fostering a more dynamic economic environment in Zanzibar.

4.4.2 Income Reinvestment by Innovation-Driven Enterprises.

The respondents were asked to indicate the income reinvestment by innovation-driven Enterprises programs in Zanzibar and the results were indicted below:

Figure 4.11. Income Reinvestment by Innovation-Driven Enterprises.



Source: Field Data, September (2024).

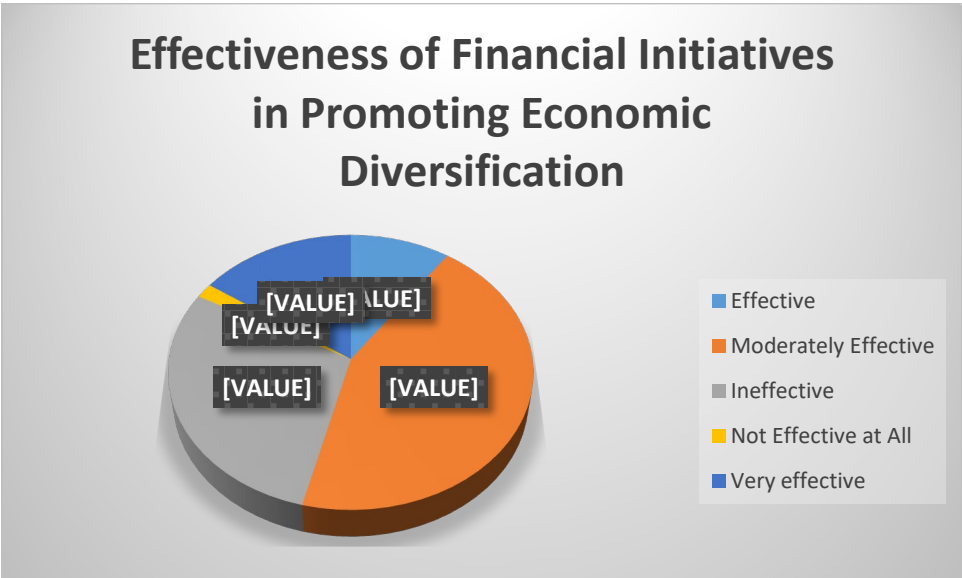
The findings on income reinvested by innovation-driven enterprises in Zanzibar indicate a concerning trend regarding the allocation of resources for growth. A substantially portion of respondents reported low reinvestment levels, with 41.7% indicating low and 16.7% reflecting very low reinvestment. Conversely, only 31.9% reported moderate reinvestment, while a mere 5.6% and 4.1% noted high and very high reinvestment, respectively. These results suggested that many enterprises may be struggling to reinvest profit effectively, which is crucial for scaling operations and fostering initiation. As noted by Mkumbwa (2022), the ability of business to

reinvest is essential for sustainable growth and development, highlighting the need for reinvestment in Zanzibar innovation ecosystem.

4.4.3 Effectiveness of Financial Initiatives in Promoting Economic Diversification.

The respondents were asked to indicate the effectiveness of financial initiatives in promoting economic diversification of innovation programs in Zanzibar and the results were indicted below:

Figure 4.12. Effectiveness of Financial Initiatives in Promoting Economic Diversification



Source: Field Data, September (2024).

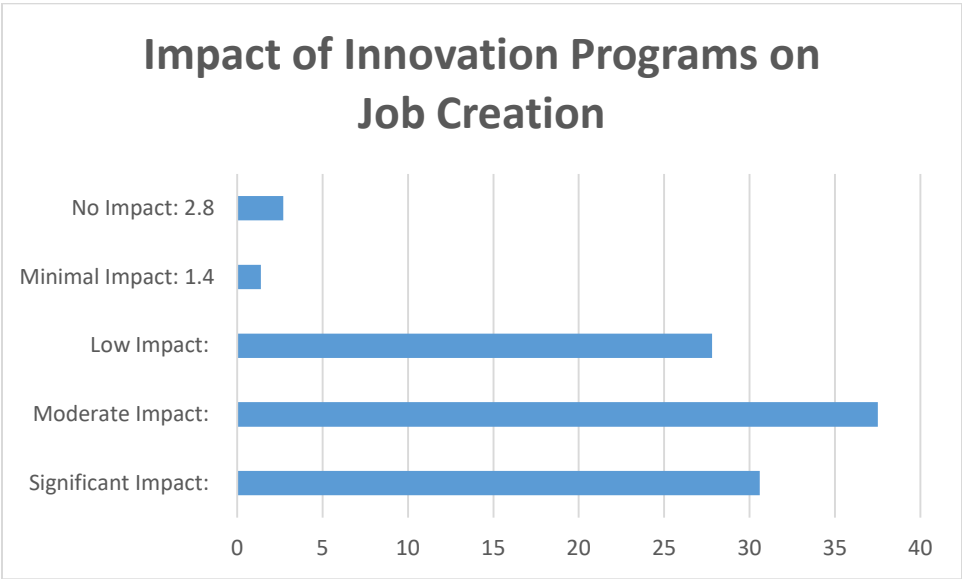
The findings regarding the effective of financial initiatives in promoting economic diversification in Zanzibar reveal mixed sentiments among respondents. A noted able portion 44.2% rated these initiatives as moderately effective, indicating some perceived benefits in promoting diversification. However, a significant percentage 29.1% deemed them ineffective, while only a small number 15.3% considered them very effective and 9.7% deemed to effective.

The small percentage 1.7% that felt these initiatives were not effective at all underscores potential shortcomings in the current financial strategies. This finding implies that while there is some recognition of the benefits of financial initiatives, there remains considerable room for improvement. This aligns with the observations of Juma (2023), who argues that while financial initiatives can support economic diversification, their impact is often limited by inadequate implementation and a lack of tailored approaches for local contexts. Thus, there is a critical need for more targeted and effective financial interventions in Zanzibar to fully harness the potential of these initiatives.

4.4.4. Impact of Innovation Programs on Job Creation

The respondents were asked to indicate the impact of innovation programs on job creation in Zanzibar and the results were indicted below:

Figure 4.13. Impact of Innovation Programs on Job Creation



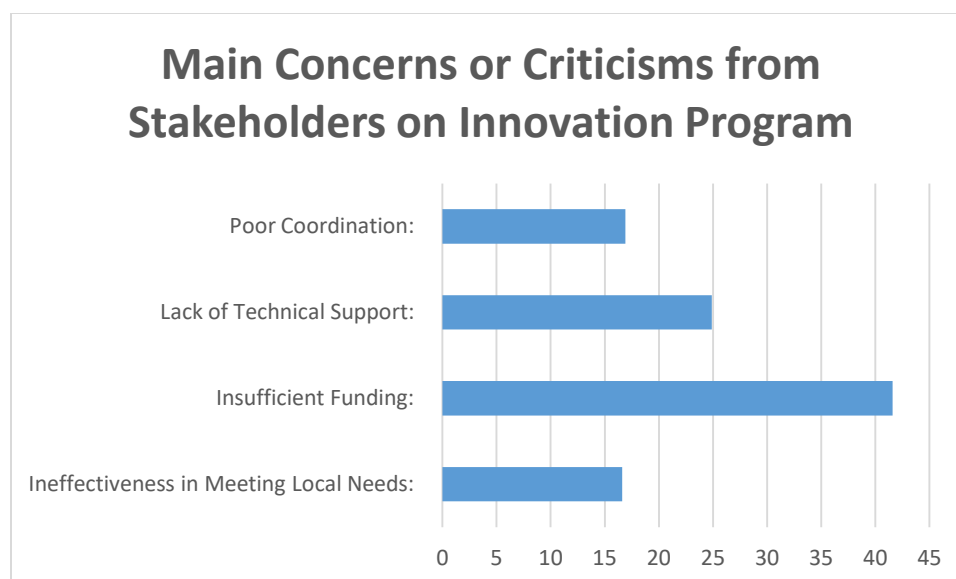
Source: Field Data, September (2024).

The analysis of the impact of innovation programs on job creation in Zanzibar indicates varying perceptions among respondents. A combined majority, 68.1%, recognized a significant or moderate impact, suggesting that these programs play a crucial role in generating employment opportunities. However, a notable portion, 27.8%, reported only low impact, while 1.4% and 2.7% felt there was minimal or no impact at all. This variability in responses highlights potential inconsistencies in the effectiveness of innovation programs in driving job creation across different sectors. The findings imply that while innovation programs have contributed positively to employment, there is still a substantial portion of the population that perceives limited benefits. This observation resonates with the work of Mhando (2022), who emphasizes that the success of such programs in job creation often depends on their alignment with local economic needs and the active involvement of the target communities. To enhance their effectiveness, it may be beneficial to tailor these programs more closely to local contexts and ensure that they address the specific barriers to employment in Zanzibar.

4.5. Main Concerns or Criticisms from Stakeholders on Innovation Program.

The respondents were asked to indicate the main Concerns or Criticisms from Stakeholders on Innovation Program in Zanzibar and the results were indicted below:

Figure 4.14. Main Concerns or Criticisms from Stakeholders on Innovation Program



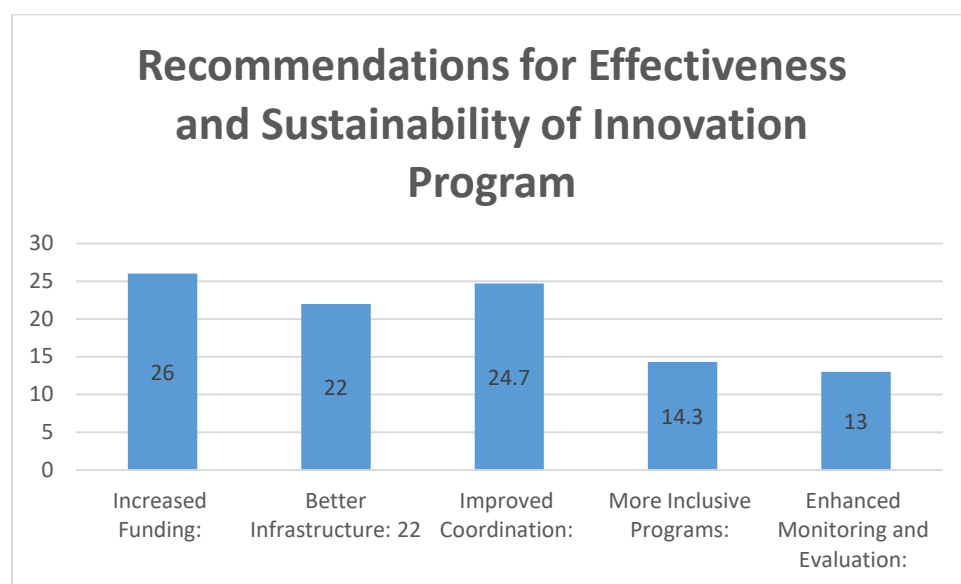
Source: Field Data, September (2024).

The findings regarding stakeholder concerns about innovation programs in Zanzibar reveal several critical challenges. A significant portion, 41.6%, highlighted insufficient funding as a primary issue, indicating a major barrier to the sustainability and expansion of these programs. Additionally, 24.9% of respondents cited a lack of technical support, suggesting that many programs may struggle to provide the necessary expertise and resources to participants. Concerns about ineffectiveness in meeting local needs and poor coordination were also raised, with 16.6% and 16.9% of respondents expressing these frustrations, respectively. These findings imply that while innovation programs exist, their impact is compromised by funding limitations and inadequate support systems. This aligns with the observations of Juma (2023), who points out that for innovation initiatives to be truly effective, they must not only secure adequate funding but also foster better collaboration and technical assistance tailored to the local context. Addressing these challenges could enhance the effectiveness and reach of innovation programs in Zanzibar.

4.5.1. Recommendations for Enhancing Effectiveness and Sustainability of Innovation Program

The respondents were asked to indicate recommendations for enhancing effectiveness and sustainability of innovation program in Zanzibar and the results were indicted below:

Figure 4.15. Recommendations for Effectiveness and Sustainability of Innovation Program



Source: Field Data, September (2024).

The recommendations for enhancing the effectiveness and sustainability of innovation programs in Zanzibar highlight several key areas for improvement. A notable 26% of respondents emphasized the need for increased funding, suggesting that financial support is crucial for the longevity and impact of these initiatives. Improved coordination was another critical recommendation, with 24.7% of participants advocating for better collaboration among programs to maximize resources and outcomes. Additionally, 22% of respondents called for better infrastructure to support innovation efforts, while 14.3% stressed the importance of making programs more inclusive to cater to a broader range of participants. Lastly, 13.0% highlighted

the need for enhanced monitoring and evaluation processes to assess program effectiveness continuously. These findings imply that addressing these areas could significantly improve the performance of innovation programs in Zanzibar. This aligns with Juma (2023), who underscores the importance of structured support systems, adequate funding, and robust evaluation frameworks to foster a thriving innovation ecosystem tailored to local needs. By implementing these recommendations, Zanzibar could enhance its capacity for innovation and economic growth.

4.5 Stakeholders Discussion

A part from the surveyed of the impact of social and economic benefits of the innovation programs in Zanzibar, the research also involved the discussion using interview to generate insight of innovation programs in Zanzibar. Key informant Interviews (KII) was conducted with stakeholders from both the public and private including Policymaker, Innovation Program Manager, Investors, Community Member, Smallholder Farmer, Researcher and Local Business Owner. The interview with these key informants provide the platform to explore the success, challenges and potential of these innovation program in fostering social and economic growth in Zanzibar. The interview finding reveal in that Zanzibar host a variety of innovation program designed to enhance sector such as agriculture, tourism and technology. These initiatives encompass incubator, accelerator, and funding opportunities aimed at fostering entrepreneurship and diving economics growth. By focusing on local strength and addressing community need, these programs are position to leverage the unique characteristic in Zanzibar's economy and environment promoting sustainable development

“we have seen a rise in tech startups and agricultural innovation programs that aim to modernize our traditional practices. This evolution is not just about technology; it’s about empowering our communities to harness their potential and create solution tailored to our unique context. As these programs grow, helping us to build a more resilient economy that can adapt to changing global conditions. “

The responses of interview revealed that the method of documenting and assessing innovation programs in Zanzibar are inconsistent. While some initiatives employ robust evaluation metric to track their effectiveness and outcomes others lack systematic approaches which hinder the ability to measure impact accurately. Effective documentation is vital not only for understanding current achievement but also for guiding future program development and attracting potential investors.

“Many programs are not rigorously documented, which makes it hard to gauge their true effectiveness. Without a clear assessment framework, we are left guessing about what works and what doesn’t. for us to grow and improve, we need data that can inform our strategies and attract investment. Effective documentation is the cornerstone of accountability and learning in our innovation landscape.”

The analysis of the revealed the coordination among the various innovation programs in Zanzibar is limited, often resulting in duplicated efforts and missed opportunities for collaboration. This lack of synergy can dilute the overall effectiveness of initiatives, as resources are spread thin across multiple, sometimes completing, efforts. Greater collaboration and shared goals could amplify the impact of individual programs, fostering a more cohesive innovation ecosystem.

“If we could align our goals resources better, the outcomes would be much stronger. Right now, many organizations are working in silos, which leads to overlap and confusion. By fostering greater communication and collaboration, we can leverage each other’s strengths and create a more comprehensive support system for innovators. Together, we can drive more significant impact and foster a vibrant ecosystem.”

Stakeholders from the community members during their interview revealed that Innovation programs in Zanzibar have had profound social impacts, particularly in fostering community engagement and promoting education. These initiatives have empowered marginalized groups, especially women and youth, by equipping them with the skills and resources needed to pursue entrepreneurial ventures. As results, a culture of entrepreneurship is beginning to take root, contributing to social mobility and community development.

“These programs have empowered local communities, especially women, to take charge of their economic futures. By providing training and resources, we are seeing a shift in mindset among people who previously felt trapped by their circumstances. The stories of women starting their business and contributing to their households are inspiring. This empowerment is vital for our community’s growth and resilience”

Moreover, the interview revealed that despite the potential for growth, many innovation initiatives in Zanzibar face substantial barriers to scaling, particularly related to funding and access to technology. Entrepreneurs often struggle to secure the necessary financial backing to expand their ventures or to integrate advanced technologies that could enhance their productivity. Addressing these challenges is crucial for realizing the full potential of innovative solutions within the local economy.

“Without adequate funding, even the best ideas struggle to take off. We have entrepreneurs with brilliant concepts, but they find it nearly impossible to attract the necessary investment to scale their operations. Additionally, access to the latest technology remains a challenge. If we want to nurture innovation and drive economic growth, we must create a supportive financial ecosystem that allows these ideas to flourish”

Either, the interview revealed that Innovation-driven enterprises are increasingly contributing to Zanzibar’s GDP, particularly within sectors like tourism and technology. As these enterprises grow and thrive, they generate economic activity that not only supports local jobs but also attracts external investment. This contribution could be amplified with better support systems and infrastructure to nurture innovation.

“We’re starting to see how these innovation companies are boosting our economy, but we need more support. The potential is enormous; when you look at how tech startups are driving tourism and other sectors, it’s clear that innovation can be a significant economic driver. However, to fully harness this potential, we need targeted policies and investment in infrastructure that support growth and sustainability.”

The analysis revealed that innovation programs have had a significant positive impact on job creation in Zanzibar, particularly for youth and women. These initiatives have opened up new employment opportunities, often in areas that were previously underserved or underdevelopment. While the immediate benefits are clear, there is still a concern about the sustainability of these jobs in the long term.

“These programs have provided my friends and me with jobs that we didn’t think were possible. I never imagined I could work in a tech company or start my own business. These opportunities have changed our lives and given us a sense of purpose. But we also worry about the future will these jobs last, or will they disappear as quickly as they appeared?”

Stakeholders have raised various concerns regarding the sustainability of innovation programs in Zanzibar. Common criticisms include insufficient funding, a lack of alignment with local needs, and the potential for programs to become disconnected from the communities they aim to serve. Addressing these concerns is vital for ensuring that innovation initiatives can deliver long-term benefits.

“There is a risk that many programs might not be sustainable if they don’t address the real needs of our communities. Too often, initiatives are designed without consulting local stakeholders, leading to misalignment with what people actually need. For innovation to be meaningful, it has to be rooted in the realities of our community. We must ensure that programs are adaptive and responsive to our local context.”

4.6 Documentary Review Analysis

4.6.1. Government Initiatives

This review analyzes key documents, government policies, and strategic frameworks that guide innovation programs and socio-economic development in Zanzibar, focusing on their alignment with broader goals such as the Zanzibar Vision 2050, the Zanzibar Development Plan (ZADEP) 2021-2026, the Sustainable Development Goals (SDGs) 2030, the African Agenda 2063, and the Zanzibar Manifesto 2020-2025.

Zanzibar vision 20250

Zanzibar vision 20250 serves as long –term blueprint for the socio-economic transformation of the region. It aims to create a prosperous and inclusive society through sustainable economic growth, social equity and environmental sustainability. This vision emphasis innovation program as a key driver of economic diversification, particularly in sectors such as tourism, agriculture and technology. The document highlights the need for investment in human capital, research and technology adoption, which aligns with the aspirations of fostering an innovation ecosystem in Zanzibar. However, the success of this vision relies on effective implementation strategies and stakeholder collaboration.

Zanzibar Development Plan (ZADEP) 2021-2026

ZADEP outlines short- to medium- term strategies aimed to achieving the goals set forth in the Zanzibar vision 2050. It prioritizes infrastructure development, job creation, and sustainable economic practices. ZADEP explicitly recognize the role of innovation in economic development and includes specific targets for enhancing technological adoption and entrepreneurship. The plan encourages partnerships between government, private sector, and academia to create an environment conducive to innovation. Nonetheless, challenges related to funding and resource allocation need to be addressed to realize these ambitions fully.

The Sustainable Development Goals (SDGs) 20230

the SDGS provide a global framework for achieving sustainable development, worth specific targets related to poverty reduction, gender equality, education and economic growth development strategies align closely with the SDGs, particularly in promoting inclusive and

sustainable economic growth (Goal 8) and fostering innovation (Goal 9). The government's commitment to achieving these goals indicates a recognition of the importance of innovation in addressing socio-economic challenges. However, progress monitoring and reporting mechanisms must be strengthened to ensure accountability and transparency.

African Agenda 2063

The continental framework aims to foster inclusive growth and sustainable development across Africa. The African Agenda 2063 complements Zanzibar's development strategies by emphasizing the need for innovation and technology to drive economic growth and reduce inequalities. It encourages member states to invest in education, research and capacity building, which resonates with Zanzibar's goals for enhancing its innovation ecosystem. Effective integration of these continental priorities into local policies is essential for maximizing their impact.

Zanzibar Manifesto 2020-2025

The Zanzibar Manifesto outlines the political and development priorities of the ruling party, emphasizing social justice, economic empowerment, and good governance. This document highlights the government's commitment to fostering an environment that promotes entrepreneurship and innovation. It emphasizes support for small and medium-size enterprises (SMEs) and seeks to create a regulatory framework that enhances business operations. However, the manifesto's success hinges on effective execution and stakeholder engagement to ensure that its promises translate into tangible outcomes.

Legal Framework

The legal framework governing innovation and business development in Zanzibar includes laws and regulations related to investment, trade, intellectual property, and business licensing. A robust legal framework is critical for fostering a conducive environment for innovation. Current laws must be continually assessed to ensure they support entrepreneurial activities and protect intellectual properties rights. Challenges remain in bureaucratic processes that may hinder startups and innovative enterprises. Streamlining regulations and enhancing access to legal resources for entrepreneurs could significantly bolster the innovation landscape.

4.4.2. Policy Directives

Zanzibar Youth Development Policy (2023)

Zanzibar Youth Development Policy aims to harness the potential of young people by providing them with access to resources, training and mentorship to foster entrepreneurial initiatives. BY prioritizing skill development and encouraging creative problem solving, the program seeks to enhance employability and drive economic growth. However, challenges such as insufficient funding, bureaucratic hurdles, and the need for effective partnership among government, NGOs, and the private sector may impede its success. By establishing strong collaborations with local businesses and educational institutions, the program can create pathways for internships and job opportunities, ultimately bridging the gap between education and employment.

Zanzibar Vocational Training Policy (2020)

The Zanzibar Vocational Training and Innovation Policy aims to strengthen technical and vocational education and training (TVET) by integrating innovative practices into curriculum development and training methodologies. By aligning training with market needs and promoting practical skill acquisition, the policy seeks to prepare youth for the workforce. However,

challenges such as inadequate funding and infrastructure, along with a shortage of qualified instructors, can impede effective implementation. Fostering partnerships with industry leaders for hands-on training and apprenticeships can enhance job readiness and help bridge the skills gap.

Zanzibar e-Government Policy (2016)

The Zanzibar E-Government policy seeks to enhance government efficiency and transparency through the digitization of public services. By improving access to government information and services, the program aims to empower citizens and encourage greater participation in governance. However, challenges such as limited internet access and digital literacy among citizens can hinder implementation. Strengthening digital infrastructure and promoting training programs for both government employees and citizens can maximize the program's effectiveness, ensuring broader access to e-government services

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION.

5.1. Introduction

This chapter discusses the conclusion reached, the various suggestions and comments given by the respondents in the questionnaire. Findings have been summarized alongside the objectives of the study, and conclusions have been drawn from the study and recommendations for action are also given.

5.2. Conclusion

It was prudent to conclude in the study that innovation programs in Zanzibar play a crucial role in enhancing educational access and promoting digital literacy. The strong emphasis on educational and training initiatives indicates that these programs are essential for equipping the workforce with the necessary skills to drive innovation and economic growth. However, addressing gaps in awareness and delivery is vital for maximizing their impact on digital literacy and ensuring that underserved populations benefit effectively. It was noted in the study that while innovation programs are perceived as effective in generating employment opportunities, there are significant inconsistencies in their impact across different sectors. Many respondents reported limited benefits, suggesting that tailoring these programs to align more closely with local economic needs and actively involving target communities could significantly enhance job creation efforts. This alignment is crucial for fostering a more robust connection between innovation initiatives and the local job market. It was examined in the study that the contribution of innovation driven enterprises to Zanzibar economy is predominately low moderate. Despite their potential for greater economic impact, many of these enterprises struggle to reinvest profit effectively, which is essential for scaling operation and fostering sustainable growth. Therefore,

enhancing support mechanism for these enterprises could unlock their potential and drive economic development in the region.

It was realized in the study that financial initiatives aimed at promoting economic diversification have mixed effectiveness, highlighting the needs for targeted and effective interventions. While some respondents recognize the benefits, substantial room for improvement remain in the implementation and adaption to local context. Tailoring financial strategies to the specific needs of the region will be critical for harnessing the full potential of these initiatives.

It was observed in the study that addressing key challenges such as insufficient funding, lack of technical support, and poor coordination among innovation programs is essential for improving their overall effectiveness and sustainability. By prioritizing increase funding, better collaboration, and enhanced monitoring processes, Zanzibar can foster a more integrated innovation ecosystem that nurtures economic growth and drives positive social outcomes.

5.3. Recommendations

From the results of the study, the following recommendations are made:

The government should allocate more financial resources to innovation programs, ensuring they are suitable and can reach a broader audience. This funding could support infrastructure development and operational cost, enhancing programs to expand their services.

Establishing partnerships between public entities and private business can enhance the effectiveness of innovation programs. The government should create frameworks that encourage collaboration, sharing of resources, and expertise between sectors.

Policy makers should create policies that address the unique challenges faced by different sectors in Zanzibar. This involves conducting regular assessments to ensure policies align with local.

Strengthening regulatory framework will facilitate smoother operations for innovation-driven enterprises. Clear guidelines and support for startups can create a more conducive environment for business growth and innovation.

Business incubators should prioritize the development of robust mentorship initiatives that connect entrepreneurs with experienced professionals. This support will help startups navigate challenges and enhance their growth potential.

Incubators should focus on providing startups with better access to market opportunities, including networking events and platforms for showcasing innovations. This will facilitate partnerships and potential collaborations that can drive growth.

Private companies should invest in training and development programs aimed at enhancing digital literacy and entrepreneurial skills among their employees. This not only benefits the workforce but also strengthens the overall innovation ecosystem.

Business should actively participate in CSR initiatives that support local innovation programs. This involvement can include funding, resources sharing, or mentorship, reinforcing community ties and fostering sustainable development.

Educational institutions should incorporate entrepreneurship and innovation-related subjects into their curriculums. This will equip students with the necessary skills and knowledge to contribute effectively to the local economy.

Universities and colleges should prioritize research initiatives that align with local economic needs. Collaborations between academia and industry can lead to practical solutions and innovations that directly benefit the community.

The government should regularly assess existing innovation programs and establish a centralized database to document these initiatives. This will facilitate better coordination among stakeholders, optimize resource allocation, and ensure transparency in program outcomes.

Involve various stakeholder- such as entrepreneurs, educators and community leaders- in the assessment and improve processes. Encouraging regular feedback and creating platforms for knowledge sharing will enhance relevance and effectiveness of innovation programs, driving sustainable economic growth in Zanzibar.

5.4. Further Research Studies

The study recommends further studies based on:

Further study is needed to investigate the effectiveness of different funding mechanisms for innovation programs. Analyzing how funding resources influence program outcomes can help identify strategies to diversify and stabilize financial support.

Further research should explore the role of technology adoption within innovation programs and its effect on productivity, competitiveness, and economic diversification.

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Appendix 1: QUESTIONNAIRE:

ASSESS THE IMPACT OF INNOVATION PROGRAMS ON SOCIAL AND ECONOMIC DEVELOPMENT IN TANZANIA- A CASE OF ZANZIBAR.

Place of Resident.....

Region.....

District.....

INSTRUCTIONS

Dear Respondent,

My name is Omar Juma Ali, a candidate at St Clements University in British West Indies pursuing of Doctor of Philosophy in Project Management. Iam conducting a research on **“Assessing the Impact of Innovation Programs on Social and Economic Development in Tanzania: A Case of Zanzibar.”** Your participation is crucial to the success of this study, and we greatly appreciate your cooperation. Please be assured that all responses will be kept confidential and will be used exclusively for research purposes.

SECTION A: PERSONAL PARTICULARS:

Date of Interview: _____

Name of Interviewer: _____

Please put tick mark where necessary:

1. Age of the Respondents:

- a. 18-24
- b. 24-34
- c. 34-44
- d. 44-54
- e. 54-64
- f. 64 and over

2. Gender of the Respondents:

- a. Male

- b. Female

3. Highest Level of Education Completed:

- a. Primary education
- b. Secondary education
- c. College (Certificate & Diploma)
- d. Bachelor's degree
- e. Master's degree
- f. Doctoral degree

4. Current Occupation:

- a. Unemployed
- b. Employed (Full-time)
- c. Employed (Part-time)
- d. Self-employed
- e. Retired

5. Monthly Income per month:

- a. 5000- 49,999 TZS
- b. 49,999-100,000 TZS
- c. 100,000 - 299,999 TZS
- d. 300,000 - 499,999 TZS
- e. 500,000 - 999,999 TZS
- f. 1,000,000 - 1,999,999 TZS
- g. 2,000,000 TZS and above
- h. Prefer not to say

6. Region of Residence:

- a. Urban area
- b. Rural area

7. Access to Technology:

- a. No access
- b. Limited access (e.g., occasional use)
- c. Regular access (e.g., daily use)
- d. Extensive access (e.g., multiple devices)

SECTION B: TYPES OF INNOVATION PROGRAMS

A: Types of Innovation Programs

1. **What types of innovation programs are currently operational in Zanzibar?** (Select all that apply)
 - a. Mentoring and Incubation
 - b. Funding and Grants
 - c. Skills Development and Training
 - d. Research and Development
 - e. Policy and Ecosystem Development
2. **Can you provide detailed descriptions of specific programs or initiatives within each of these categories?**
(Select one or more options for further details)
 - a. Program name
 - b. Category
 - c. Objectives
 - d. Target audience
 - e. Duration
3. **How are these innovation programs documented?** (Select all that apply)
 - a. Comprehensive reports
 - b. Annual reviews
 - c. Internal evaluations
 - d. No formal documentation
4. **How are these programs assessed for effectiveness and improvement?** (Select all that apply)
 - a. Surveys
 - b. Performance metrics

- c. Feedback mechanisms
- d. Peer reviews
- e. Other (Please specify): _____

5. What is the level of coordination among the different innovation programs?

- a. Highly coordinated
- b. Moderately coordinated
- c. Minimally coordinated
- d. Not coordinated at all

6. How does the level of coordination among programs impact their overall effectiveness? (Select all that apply)

- a. Improved resource sharing
- b. Better program integration
- c. Enhanced stakeholder engagement
- d. Increased efficiency
- e. No impact

B: Social Impacts

7. What significant social impacts have resulted from innovation programs? (Select all that apply)

- a. Increased digital literacy
- b. Empowerment of marginalized groups
- c. Enhanced community resilience
- d. Improved access to education
- e. Increased employment opportunities

8. **How effective have innovation programs been in promoting digital literacy among different demographics?**
- a. Very effective
 - b. Moderately effective
 - c. Slightly effective
 - d. Not effective
9. **Which elements of these programs have contributed most to their effectiveness in promoting digital literacy?** (Select all that apply)
- a. Training methods
 - b. Resources provided
 - c. Outreach strategies
 - d. Participant engagement

C: Economic Benefits

10. **How has the availability of funding (e.g., grants, loans, venture capital) influenced local entrepreneurs and SMEs?**
- a. Significant positive impact
 - b. Moderate positive impact
 - c. Minimal impact
 - d. No impact
11. **What types of funding have been most effective for innovation programs, and why?** (Select all that apply)
- a. Grants
 - b. Loans
 - c. Venture capital

- d. Crowdfunding
- e. Other (Please specify): _____

12. To what extent have innovation programs contributed to job creation in technology and related sectors?

- a. Significant contribution
- b. Moderate contribution
- c. Minimal contribution
- d. No contribution

13. Can you provide examples or data illustrating the job creation impact of innovation programs?

(Select all that apply)

- a. Example or data source
- b. Number of jobs created
- c. Sector
- d. Duration of impact
- e. Other (Please specify): _____

14. What are the primary economic benefits that innovation programs offer to local businesses? (Select all that apply)

- a. Increased revenue
- b. Market expansion
- c. Improved business operations
- d. Access to new technologies
- e. Other (Please specify): _____

15. How have these economic benefits translated into tangible outcomes for local businesses?

(Select all that apply)

- a. Increased sales
- b. Market entry
- c. Improved operational efficiency
- d. Adoption of new technologies
- e. Other (Please specify): _____

D: Stakeholder Perceptions

16. What are the main concerns or criticisms from stakeholders regarding current innovation programs? (Select all that apply)

- a. Ineffectiveness in meeting local needs
- b. Insufficient funding
- c. Lack of technical support
- d. Poor coordination
- e. Other (Please specify): _____

17. What specific improvements or strategies would you recommend to enhance the effectiveness and sustainability of innovation programs? (Select all that apply)

- a. Increased funding
- b. Better infrastructure
- c. Improved coordination
- d. More inclusive programs
- e. Enhanced monitoring and evaluation
- f. Other (Please specify): _____

I sincerely appreciate your time and cooperation in this survey. Your responses will provide valuable insights into the impact of innovation programs on social and economic development in Zanzibar.

THANK YOU.

Appendix 2: Interview Guides

1. What types of innovation programs are currently operational in Zanzibar?
2. Can you provide detailed descriptions of specific programs or initiatives within each of these categories?
3. How are these innovation programs documented?
4. How are these programs assessed for effectiveness and improvement?
Performance metrics
5. What is the level of coordination among the different innovation programs?
6. How does the level of coordination among programs impact their overall effectiveness?
7. What significant social impacts have resulted from innovation programs?
8. Can you provide specific examples or case studies that illustrate these social impacts?
9. How effective have innovation programs been in promoting digital literacy among different demographics?
10. Which elements of these programs have contributed most to their effectiveness in promoting digital literacy?
11. In what ways have innovation programs specifically empowered marginalized groups
12. Are there notable success stories or challenges faced in empowering marginalized groups through these programs?
13. How has the availability of funding (e.g., grants, loans, venture capital) influenced local entrepreneurs and SMEs?
14. What types of funding have been most effective for innovation programs, and why?
15. To what extent have innovation programs contributed to job creation in technology and related sectors?
16. Can you provide examples or data illustrating the job creation impact of innovation programs?
17. What are the primary economic benefits that innovation programs offer to local businesses?
18. How have these economic benefits translated into tangible outcomes for local businesses?
19. What are the main concerns or criticisms from stakeholders regarding current innovation programs?
20. What specific improvements or strategies would you recommend to enhance the effectiveness and sustainability of innovation programs?