



## **INCLEMENT ENTREPRENEURIAL GAPS IN COMMUNITY WILDLIFE MANAGEMENT BUSINESS MODEL: A CASE OF MBARANG'ANDU AND TUNDURU WMAS IN SOUTHERN TANZANIA.**

**Mashenene, R. G.<sup>1</sup>, and Mawi, F. A.<sup>2</sup>**

<sup>1</sup>*Department of Business Administration and Marketing, College of Business Education, P. O. Box 3168, Mwanza, Tanzania.*

<sup>2</sup>*Wildlife Management Firm, Tanzania.*

<sup>1</sup>*mashenenerg@gmail.com*

<sup>2</sup>*frankmawi@gmail.com*

### **ABSTRACT**

**Purpose:** This study examined entrepreneurial gaps in Mbarang'andu and Tunduru Wildlife Management Areas (WMAs) since their establishment during the 5 years of business plan operations and implications thereafter.

**Design/Methodology/Approach:** The population of this study was five WMAs that formed the cases for the study, and for the case of WMA leaders, the population was 40 leaders. The sample size for the WMAs selected as the cases for the study were two (2), Tunduru and Mbarang'andu purposefully selected. Further, the sample size for WMA leaders was 20 (50% of the population) purposefully selected. Descriptive analysis was used to summarise demographic and revenue data, and a Pearson Chi-square test was performed on the demographic data. A paired samples T-test was used to compare the required business start-up and available funds to reveal the equity gap in the two WMAs and compare the level of implementation of planned business activities in the two WMAs.

**Research Limitation:** The research was limited to two WMAs and a small sample size since the client determined its size, given that this paper emanated from the consultancy project.

**Findings:** Findings indicate that both WMAs have a high potential for carbon trading, photographic tourism, beekeeping, fish farming, and heritage tourism. The difference in the required funding and available funds for various expenditures in business start-ups was found to be statistically significant in both WMAs. The difference in the level of implementation of planned business activities was also found to be statistically significant in the two WMAs.

**Practical implications:** To bridge the entrepreneurial gaps in the WMAs, proactive fundraising, diversification of income-generating activities, including carbon trading, human resource capacity building, and appropriate marketing of tourism and nature-based products are needed.

**Social Implications:** The results of this research will form the basis for bridging entrepreneurial gaps in the WMAs, hence fueling optimal exploitation of entrepreneurial opportunities in wildlife that benefit the community at large in return.

**Originality:** This paper is original; only some extracts were used in the conference proceedings for the University of Dodoma (UDOM) 2019. Its novelty is inclined to expose entrepreneurial gaps and the framework for bridging such gaps in wildlife businesses.

**Keywords:** *Community. entrepreneurial. gaps. management. wildlife*



## **INTRODUCTION**

The Wildlife Policy and Tanzania Wildlife Management Areas (WMAs) Regulations (URT, 2020; URT, 2012; URT, 2007) have deliberated with the local communities through Authorized Associations (AAs) to venture into the wildlife business with assumptions that the local communities can do so (Songorwa, Buhrs & Hughey, 2000). Furthermore, in the National Wildlife Management Strategy (2023-2033), the WMAs are visioned as social businesses and anticipated to contribute to economic and enterprise opportunities development for the local communities (URT, 2023). Contrary to that expectation, the majority of WMAs have remained economically marginally viable, generating unsustainable income inclusive of Mbarang'andu and Tunduru WMAs (Acacia Natural Resources Consultants, 2016).

Wildlife Management Areas (WMAs) are financially burdened with gross revenue earned from tourism or hunting operations going to national and district governments but receive very limited institutional or infrastructural support or investment in return (Nelson, Schouten, & Davie, 2018). Subsequently, the WMAs have been on an uphill struggle to kick off business ventures, hampered by different forms of entrepreneurial incapacity, leaving behind unrealised benefits to the local communities (ESPA, 2017). It takes time for local communities to build the capacity to manage these institutions, something that often gets undervalued but is critical for success (Nelson, Schouten, & Davie, 2018).

Wildlife Management Areas (WMAs) businesses are rural entrepreneurial creativities in areas set aside by local communities to manage wildlife resources in village lands. Rural areas are faced with low entrepreneurial levels compared to urban areas (Ellis & Willams, 2011; Gadi, Danladi, & Bogobiri, 2014; Gómez-Araujo & Bayon, 2017; Kani & Helan, 2017). The low level of rural entrepreneurship results from the slower pace of change, resource constraints, and poor social networks for fostering enterprise associated with geographical proximity to facilitative factors (Kedmenec, Šebjan, & Tominic, 2015). WMAs rely on the wildlife tourism business, but location-specific disadvantages of attractions (URT, 2023) and infrastructure development (Matinyi, Shutzer, Jones, & Doughrtry, 2015; World Bank, 2017) have left the WMAs in Southern Tanzania, including Mbarang'andu and Tunduru, rather less performing compared to the WMAs in Northern Tanzania, where tourism infrastructure is more developed and hence disposed to entrepreneurial incapacity and prone to entrepreneurial gaps.

To ensure maximum involvement of the local communities in utilisation and henceforth benefiting from the existence of wildlife as natural resources, through initiatives, the government of Tanzania formulated a policy and legal framework for WMA to operate entrepreneurially as a business enterprise while prioritising conservation of wildlife (URT, 2012). The government initiatives aimed at fostering the conservation of wildlife and empowering the local communities to exploit profitable business opportunities that accrue from wildlife; hence, entrepreneurial intervention by the government of Tanzania was inevitable. The initiatives to establish WMAs as a business model in Tanzania originated in 2003 after WMA regulations were formulated in 2002, and thereafter, 16 model WMAs were launched; in 2006, gazetting of the first WMA was undertaken. Up to 2023, 37 WMAs were already established, whereas 21 WMAs were in full operation, and 16 were in various establishment stages (URT, 2023). During the establishment of WMAs, the first WMAs that were gazetted, Mbarang'andu in Namtumbo district (2006) and Tunduru (2007) were among

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them. Currently and historically, Tanzania is a nation rich in wildlife resources, but the translation of wealth accruing from wildlife does not reflect the local community's economic well-being (ESPA, 2017). The governance and management of natural resources, as reflected in numerous policies and national strategies, are central to achieving economic growth and alleviating poverty in Tanzania. As a strategy to empower local communities to participate in entrepreneurial and tourism in wildlife activities outside the main protected areas, WMAs were established to curter the need. (URT, 2007).

The Mbarang'andu and Tunduru WMAs are confronted with rapid economic growth following the discovery of abundant natural resources in Southern areas of Tanzania (WWF-CEAI, 2014) and hence posing a conservation challenge. Operationalisation of WMAs' entrepreneurial profitability is an innovative strategy for addressing threats concerning socio-economics and conservation in association with expected developments in such areas. Connectedly, some unaddressed main questions are emerging that pose a puzzle originating from communities' expectations for the WMAs to operate profitably under such a situation with prevailing entrepreneurial gaps. Given the focus of WMAs, entrepreneurship is concerned with bringing the WMAs into existence, earmarking business opportunities, and forming several enterprises operating wildlife and other natural resources businesses innovatively. In the reflection of Simons (2013), the WMA Regulations (URT, 2020; URT, 2012) assign the local communities greater accountability but with limited resources to run the business, implying a low span of control. Regarding this context, WMAs are confronted with three main entrepreneurial gaps, namely socio-capital (insufficiently skilled workforce), equity (inadequate funding) and intention-action (failure to execute anticipated activities for the business into the desired action). Therefore, this study attempts to address this enigma, determine the extent of existence of entrepreneurial gaps which hamper the full exploitation of business opportunities existing in the Tunduru and Mbarang'andu WMAs, frame out the business performance in the two WMAs and in which ways the entrepreneurial gaps are interlinked and, how the gaps can be bridged for entrepreneurial performance in the two WMAs.

## **THEORIES UNDERPINNING THE STUDY**

This study was underpinned by Baumol's theory, which was developed by Baumol in 1990 and describes the relationship that exists between economic development and entrepreneurship (Boettke & Pianno, 2016). Further, it argues why, entrepreneurially, some countries are more developed than others or why some enterprises perform better than others (Sautet, 2013). According to the framework, economic performance is determined by various entrepreneurial paths, which are supported by allocating talents and resources to such paths. Therefore, desired economic performance is derived from available resources properly allocated. This framework comprises three components. The first one is economic inputs (for instance, skilled labour force, technology, availability of capital, etc.). The second component is institutional quality or rule of the game (for instance, tax policy, business regulations, economic freedom/secure property rights, etc.), and the third one is entrepreneurial outcomes (e.g. formation of new enterprises, development of new goods and services, etc.)



In the current study, the resources referred to as inputs in Baumol's framework are human and financial. Baumol's framework emphasises allocating such resources is necessary for better economic performance. In this regard, improper allocation of such resources, e.g., failure of the enterprise to recruit the right human resources, leads to a human resources gap, referred to as the socio-capital gap in this study. Furthermore, improper allocation of financial resources, such as inadequate funding, leads to the financial gap, known as the equity gap, in this study. As a result of equity and socio-capital gaps, enterprises fail to make sound decisions that result in better-desired outcomes. For instance, the socio-capital gap emanates from recruiting incompetent human resources regarding knowledge, skills, and attitude, leading to inappropriate decisions made by such incompetent human resources. Connectedly, the equity gap emanating from inadequate funding to the enterprise is a stumbling block for business managers to allocate such inadequate funds, leading to improved outcomes properly. In this view, equity and socio-capital gaps contribute to the intention-action gap, which essentially is the failure of managers to implement the planned business activities due to limited financial resources and a lack of competent human resources.

The requirement for WMAs to run as a business entity is stipulated in the Tanzania Wildlife Policy (URT, 2007), suggests innovation as an integral component of entrepreneurship. The operations of such WMAs are under the assumption that both financial and human resources are available in the local communities, inferring autonomy to run the business (Songorwa, Buhrs, & Hughey, 2000). The establishment of Tunduru and Mbarang'andu WMAs is traced back from 2003, and official gazetting in 2010 and 2009, respectively, are defined as major areas of wildlife being part of the Selous-Niassa Wildlife Corridor and stand potential for wildlife-related businesses in Southern Tanzania. As the current situation, Tunduru and Mbarang'andu WMAs are considered comparatively unexploited for active business and present diverse opportunities. Trophy hunting has been the core business activity of the two WMAs since their establishment (Acacia Natural Resources Consultants, 2016; WWF, 2012). However, several other underutilised business potentials exist nature-based tourism, undamaged forests for beekeeping and other associated products, fish farming from available rivers and heritage sites, camping in numerous areas, and beautiful scenery for walking safaris.

The focus of entrepreneurship is inclined towards two crucial features: sensing and formation of new ventures and the introduction of a novel idea into the market in the face of uncertainty (Wennekers & Thurik, 1999), which includes the formation of new activities that generate revenue in a pre-existing enterprise or formation of a joint venture that leads to acquisition process of new skills (Gartner, 1985). Under this argument, entrepreneurship results from the actions of individuals who act in and are shaped by the enterprises and regional environment in which they work and live (Gartner, 1985). This infers that entrepreneurship is concerned with a situation of conception and a high level of creativity in finding and implementing the right actions under a defined period and in a dynamic context. Lack of it culminates in entrepreneurial gaps (Oliveira & Rua, 2018) when people are given bigger accountability than the ability to execute (Simons, 2013). Under the circumstance of the existence of gaps related to entrepreneurial undertaking, if the potential and viable activities in the earmarked businesses in question are not implemented, there is a great possibility of limitation of development both socially and economically. Entrepreneurial skills are required for the prosperity of an enterprise



and demonstrate a positive outcome on the success of an entrepreneurial venture (Chatterjee & Das, 2016).

## **METHODOLOGY**

### **The Study Area**

Two WMAs purposefully selected, Tunduru and Mbarang'andu WMAs in Tunduru and Namtumbo districts in the Southern part of Tanzania, were involved in the study. The two WMAs are within wildlife areas in the Selous-Niassa wildlife corridor, linking the Tanzanian Selous Game Reserve and the Mozambican Niassa Reserve. This corridor is mostly covered with widespread Miombo woodland and is recognised as one of the remnant area wildernesses and the home for elephants counted as the second area with the largest population of elephants in Africa (WWF-CEAI, 2014), this poses wide-ranging entrepreneurial opportunities. The two WMAs were selected for the study because both are the oldest WMAs pronounced in the history of WMAs in the Southern part of Tanzania. Aligned with this, the initiatives of both WMAs have largely focused on one category of business, tourist hunting, despite several entrepreneurial potentials in the selected WMAs. Furthermore, the government and development partners have made huge investments in the said WMAs through many intervention programmes, namely capacity building, business planning and conservation education. However, such WMAs have remained in a non-full operational status in exploiting business opportunities profitably. The population of WMAs for this study was five WMAs, namely Tunduru, Mbarang'andu, Kimbanda, Kisungule and Chingoli, from which Tunduru and Mbarang'andu were selected. Regarding primary data from WMA leaders, the study population was 40 WMA leaders from Tunduru and Namtumbo WMAs, and the sample size of 20 WMA leaders from both WMAs was established and pre-determined by the project's client.

### **Sampling and Data Collection**

This study employed data from primary and secondary sources collected from 15<sup>th</sup> to 20<sup>th</sup> November 2018, and 7<sup>th</sup> to 12<sup>th</sup> January 2019 in telephone interviews and discussions for key members missed in the first round of data collection. Data from primary sources were collected through the use of a questionnaire and focus group discussions (FGDs). Semi-structured questionnaires were administered to 20 WMA leaders purposefully selected from both WMAs, 50% of whom were leaders. WMA leaders who participated in the study included WMA chairpersons, secretaries, treasurers, committees' chairpersons and secretaries, and ordinary members from different committees. Focus group discussion (FGD) was conducted purposefully (who did not participate in the questionnaire survey) and selected WMAs leaders and members of the District Natural Resources Advisory Boards (DNRAB) of Tunduru and Namtumbo Districts. The DNRAB Regulations define the WMA members (URT, 2012). Selection of WMA leaders for the study was based on the responsibilities vested onto them in the everyday running of WMAs; the DNRAB members, on the other side, as defined in WMA Regulations, were included in FGDs given the technical expertise they possess that helps in providing management support to WMAs based on their availability. Three FGDs from each WMA, comprising six FGDs from both WMAs, were carried out with one FGD with DNRAB



and two with village and WMA leaders. Members of DNRAB who participated in FGD in Namtumbo District were 11; on the other side, seven DNRAB were from Tunduru district, making a total of 18 members of DNRAB from both districts. The range of participants of the village and WMA leaders in FGDs was from seven to ten based on their availability. The duration for all FGDs was between 1hr to 1hr and 30min. Execution of FGDs was under the guidance of a checklist that was prepared containing main items to focus on, recording of data was undertaken after consent from participants, and voice recorders and notebooks were used to record data. For researchers to establish the reality in the study areas, the observation method through physical visits was employed. Preparation of a kit for observation with several items under observation was accomplished. The items that formed a kit for observation consisted of ongoing activities exploiting entrepreneurial opportunities in respective WMA during operation as business ventures. Data was documented using physical observation, carried out with notepads and in the form of photographs captured using smartphones.

Further, a documentary review with a checklist comprising various aspects to be reviewed was adopted in secondary data collection. In the two WMAs, the documents that were reviewed comprised the Conservation Business Plans (2010-2015), Resource Zone Management Plans (2009-2013), revenue records, and expenditure books (2011-2018). The WMA leaders permitted researchers to photocopy the listed documents.

### **Data Analysis**

FDG Qualitative data was analysed using content analysis, examined and categorised, transcribed, and relevant themes were formulated. Finally, the qualitative findings obtained after content analysis matched the theory and the literature elsewhere. The analytical process for quantitative data was undertaken using the Statistical Package for Social Sciences (SPSS) Ver. 25 and MS. Excel as analytical tools. Descriptive statistics such as frequency, percent, and means were performed, and the results were summarised in tables. Cross tabulation was further performed to generate a Chi-square to establish an association between variables. A paired samples T-test was performed to compare business performance between Mbarang'andu and Tunduru WMA. The paired samples T-test was performed using the financial data using required funds for business start-ups and funds available to fill the equity gap in the WMAs under investigation and then comparing planned and implemented activities to reveal the intention-action gap. A comparison of the number and qualifications of human resources between conservation business plans and the available number and qualification in both WMAs was carried out to establish the socio-capital gap. Analysis of semi-structured questionnaires supplemented comparison analysis for the socio-capital gap. To establish entrepreneurial gaps interlinking and bridging framework, interpretivism philosophy was adopted in which interpretation, reasoning, and arguments based on findings were made, and the framework was established.



## FINDINGS AND DISCUSSION

### Demography and Education of WMA leaders

The findings express that many Tunduru and Mbarang’andu WMA leaders were male, 70% and 80%, respectively (Table 1). The gender composition in leadership between the two WMA was statistically significant (Pearson Chi-square = 22.012, d.f = 4, p = 0.021). Generally, the mean age of Mbarang’andu and Tunduru WMA leaders was 44.38 years, suggesting that most were above 44 years old (Table 1). The results indicate that most WMAs leaders in Mbarang’andu and Tunduru WMAs had primary education, 50% and 80%, respectively, whereas only 40% and 20% had secondary education, respectively (Table 1). The level of education between the two WMAs was statistically insignificant (Pearson Chi-square = 6.175, d.f = 8, p = 0.628).

Table 1: Demographic Characteristics

Demographic parameter		Mbarang’andu WMA	Tunduru WMA
Sex	Male	70%	80%
	Female	30%	20%
Age	Mean	44.38	44.38
Dispersion	Std Dev.	10.55	10.55
	Min.	24	24
	Max.	68	68
Education level	None	10%	0%
	Primary	50%	80%
	Secondary	40%	20%
	Tertiary	0%	0%
	Entrepreneurial training	0%	0%

### Equity Gap

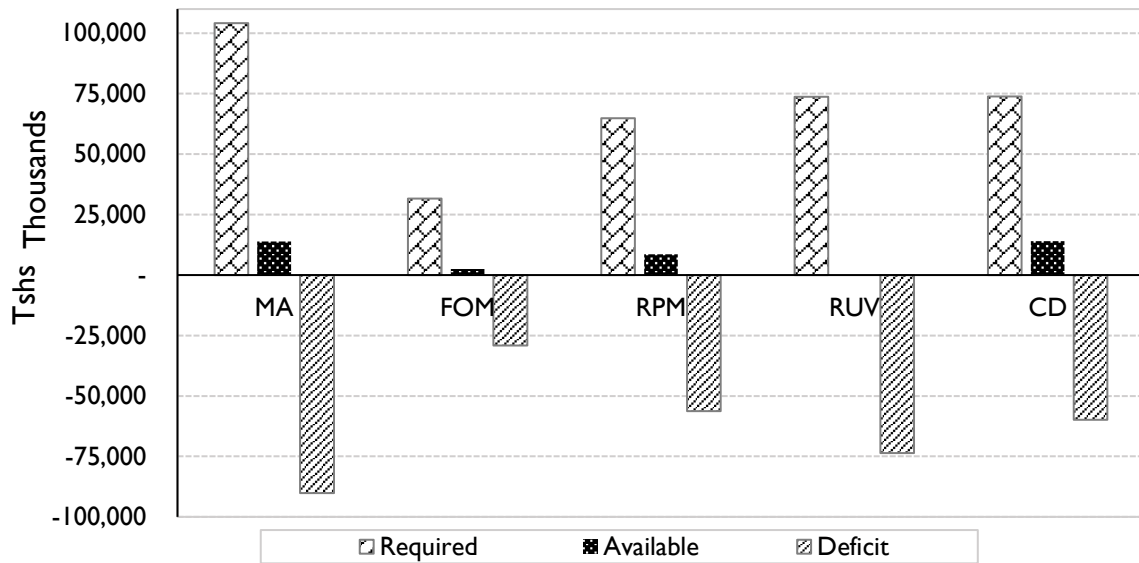
It was found that the businesses for Tunduru and Mbarang’andu WMAs were established with a deficit in funds for all five defined functional areas, totalling Tshs. 327,906,400 and Tshs. 309,207,000 respectively (Figures 1 and 2). The computed equity gap defined as the required fund minus the available funds statistically was determined significant for Tunduru WMA (t=4.1393, p=0.0144) and Mbarang’andu WMA (t=6.116, p=0.0036). Anticipation to bridge the equity gap for respective WMAs was largely donor contributions by 82% for Tunduru WMA and 84% for Mbarang’andu WMA, which in reality was never achieved. Further, bridging the equity gap was anticipated through income generated in wildlife tourism activities; to a large extent, only trophy hunting activity generated little or no substantial income. Through FGDs discussions, the equity gap was recognised as the foremost limiting factor in realising the WMA business growth, consequentially resulting in the dormancy situation in the implementation of the hopeful conservation business plans as per narration from one of the leaders in Mbarang’andu WMA.

*“... It is a daylight dream to think of doing business with no financial capital and/or with no funding strategies; no matter how good you plan, the business plan is just like hanging a*

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*picture of a strong combatant on the wall expecting to win a war ... ” [Interview with a WMA leader on 16th November 2018].*

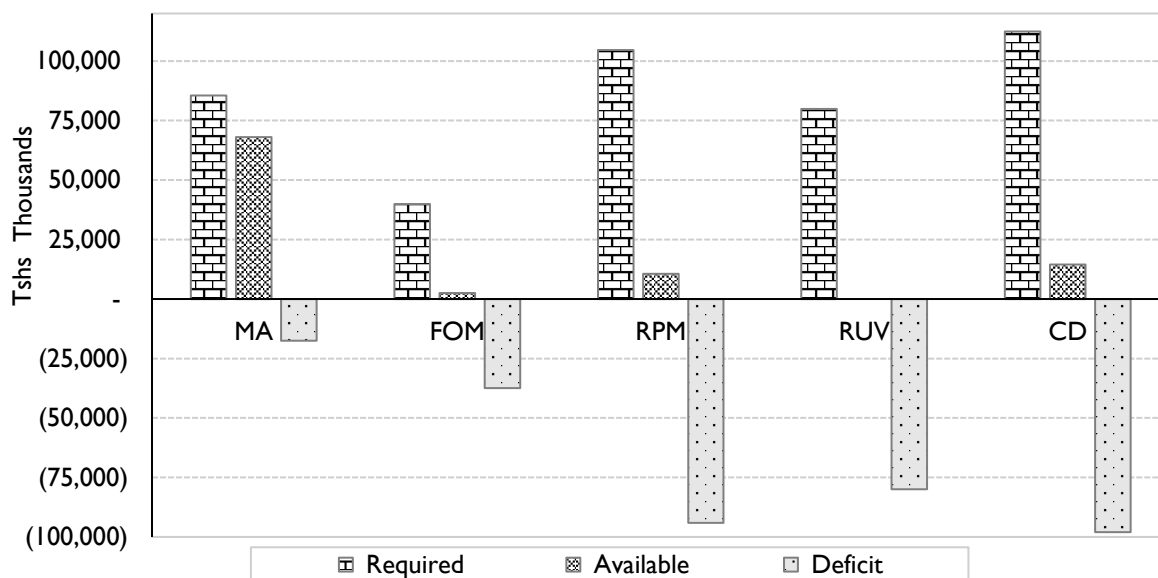


MA: Management and Administration  
FOM: Facilities, Operation and  
Maintenance

RPM: Resources Protection and  
Management  
RUV: Resources Utilisation and Visitation  
CD: Community Development

*Figure 1: Operational Expenditure in Mbarang'andu WMA in the 1<sup>st</sup> Year of Business Operation-2011*





MA: Management and Administration  
 FOM: Facilities, Operation and Maintenance

RPM: Resources Protection and Management  
 RUV: Resources Utilization and Visitation  
 CD: Community Development

*Figure 2: Operational Expenditure in Tunduru WMA in the 1<sup>st</sup> Year of the Business Operation-2011*

### Socio-capital Gap

The overall governance of business units for the Tunduru and Mbarang'andu WMAs is wholly under the management of leaders elected from the corresponding Community-Based Organisations (CBO). The WMAs' Conservation Business Plans (CBPs) guidelines pinpointed recruiting staff qualified to run the WMAs as business units. However, compliance with the requirements was spelt out as a problem, whereas nobody was employed. Following the WMAs' CBPs, five departments were outlined to be founded explicitly: resource utilisation and visitation, operation and maintenance, resource protection, business administration and management and community development. As per the CBPs' guidelines, respective departments required heads with qualifications as outlined in the CBPs, the condition which was not honoured. It was further found that handling all WMAs' administrative operations was mandated by the Chairperson, an Accountant, and a Treasurer under the Finance and Planning Committee (PFC) of the corresponding CBOs. As a matter of the current practice, no technical business expertise is required for office bearers; the only prerequisite is the aptitude for reading and writing. It was further clarified that basics in arithmetic as educational competence, whether in primary or secondary school, was an additional condition for the CBOs' treasurer. Through collective agreement, the FGDs with leaders of the WMAs and DNRBs also amplified the socio-capability gap, stating that failure to hire staff with technical skills was the root cause of the observed poor business performance. Moreover, it was noted that several series of development partners' funded programmes for capacity building in the form of tailor-made courses have been provided to WMAs' leaders in areas covering the basics

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of administration and management, accounting and record keeping, which are the only focal areas in operations of WMAs' business units. It was also noted that such capacity-building programmes have not been considered to ensure manuals for finance and record keeping as working tools are prepared.

### **Intention-Action Gap**

The activities, including income generation listed in the Tunduru and Mbarang'andu WMAs' years Resource Zone Management Plans (RZMP) of 2009-2013, which was reviewed in 2017, infer WMAs' intention to participate in the business. It was recognised that trophy hunting, fish farming and beekeeping are the ongoing activities in the Mbarang'andu WMA business; in the Tunduru WMA business, the other case, the ongoing activities are campsites and trophy hunting. Only  $\leq 20\%$  of the planned activities are implemented in Mbarang'andu and Tunduru WMAs (Table 2). Further, in these WMAs, the intention-action gap was also established in the execution levels of the ongoing activities, where there was no deliberate effort by the WMAs to take specific actions to ensure the ongoing activities were sustainably implemented. According to RZMP and the business plan, two (2) blocks were designated for hunting investors in Mbarang'andu WMA. However, in the implementation, only one (1) investor had invested in one (1) hunting block, leaving the other block uninvested. For the Tunduru WMA in particular, there was a plan to launch two campsites, but in practice, only one campsite was launched in partnership with another organisation that pays the WMA land rent (Table 2). The implementation of planned activities was significantly lower in both Mbarang'andu ( $t=3.052$ ,  $p=0.019$ ) and Tunduru WMA ( $t=2.931$ ,  $p=0.026$ ) implying the existence of an Intention-Action gap, which has genesis and linked to equity gap. The FGDs further expressed the intention-action gap emanating from insufficient funding (equity gap) and the unavailability of the right staff to formulate resource mobilisation, including fundraising alternatives (socio-capital gap). The leaders of the Tunduru and Mbarang'andu WMAs in FGDs collectively presented that:

*“WMAs started their businesses with fund deficit and given the human resources in the WMAs have inadequate capacity to mobilise financial resources; full exploitation of business opportunities in the WMAs have been difficult to realise”.*

*Table 2: Planned and operating income-generating activities in WMAs*

Activities	Mbarang'andu WMA		Tunduru WMA	
	Planned	Operating	Planned	Operating
Tourist hunting blocks	2	1	1	1
Resident hunting blocks	1	-	1	-
Campsites	1	-	2	1
Photographic safaris/annum	3	-	5	-
Beekeeping project	1	1	1	-
Fish farming project	1	1	-	-
Walking safaris/annum	3	-	3	-
Bush crafting safaris/annum	4	-	2	-
<b>Total</b>	<b>15</b>	<b>3</b>	<b>15</b>	<b>2</b>



### Business Performance

Both Mbarang'andu and Tunduru WMAs have shown a negative trend in business performance for the entire period of operation. During this period, the revenue collected from business activities was less than the projected income in the respective business plans (Figure 3). Furthermore, revenue continued to show a negative trend after the period of business plan operations (Figure 4).

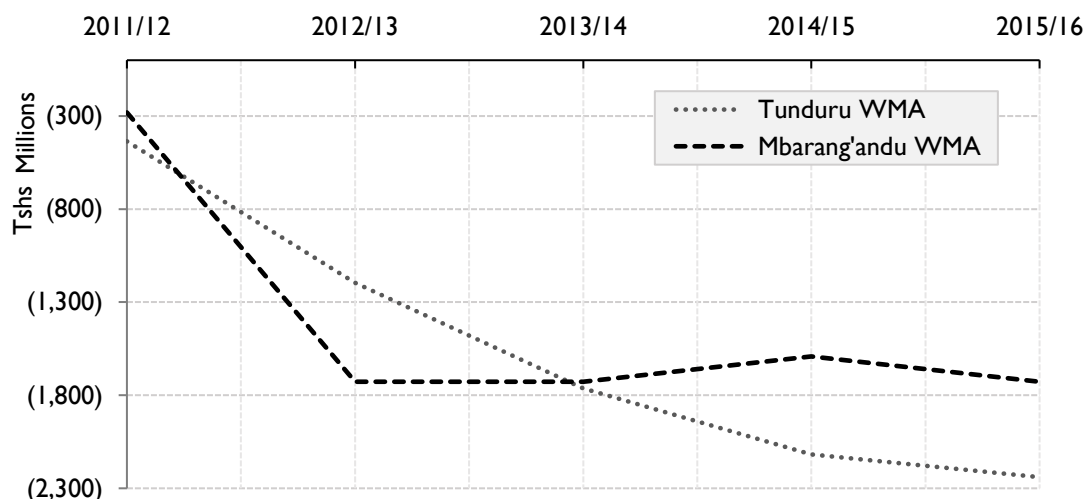


Figure 3: Deviation of Revenue Collection from Expected Income Projections in the Business Plans from 2011 to 2016 in Tunduru and Mbarang'andu WMAs

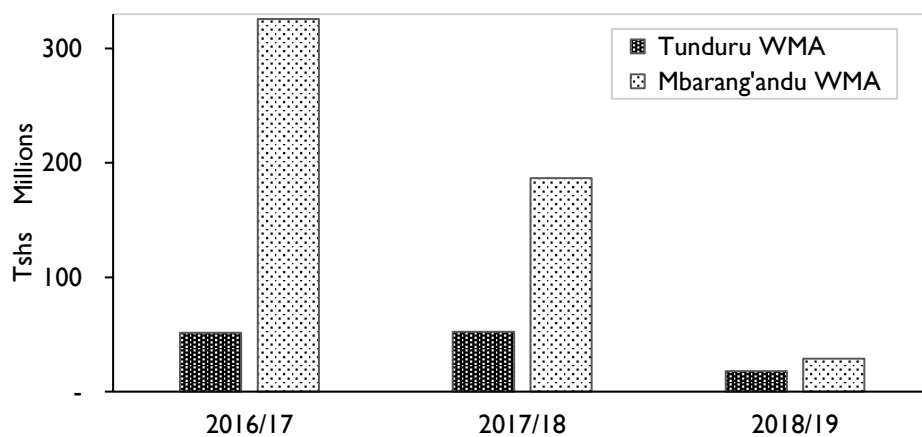


Figure 4: Mbarang'andu and Tunduru WMAs Income after Business Plan Operations

### Interlinking and Bridging of the Entrepreneurial Gaps

Mbarang'andu and Tunduru WMAs are challenged with equity, social-capital, and intention-action gaps, which collectively impacted six key business success areas, namely socio-capital development, recruitment, income generation, fundraising and equity aversion, business implementation capacity, and business/project selection. This has rendered entrepreneurial



success in the WMAs and undermined other various supports provided to the WMAs by the government and other stakeholders. The pronounced entrepreneurial gaps in Tunduru and Mbarang'andu WMAs are interlinked, as conceptualised in Figure 5, with each entrepreneurial gap influencing the other. Establishing and implementing viable business activities to generate sustainable income is inevitable to bridge the equity gap in the WMAs. Availability and appropriate mobilisation of financial resources will then ensure thematic business management and entrepreneurial training to bridge the socio-capita gap and eventually empower the WMAs in taking deliberate business actions and hence bridging the intention-action gaps.

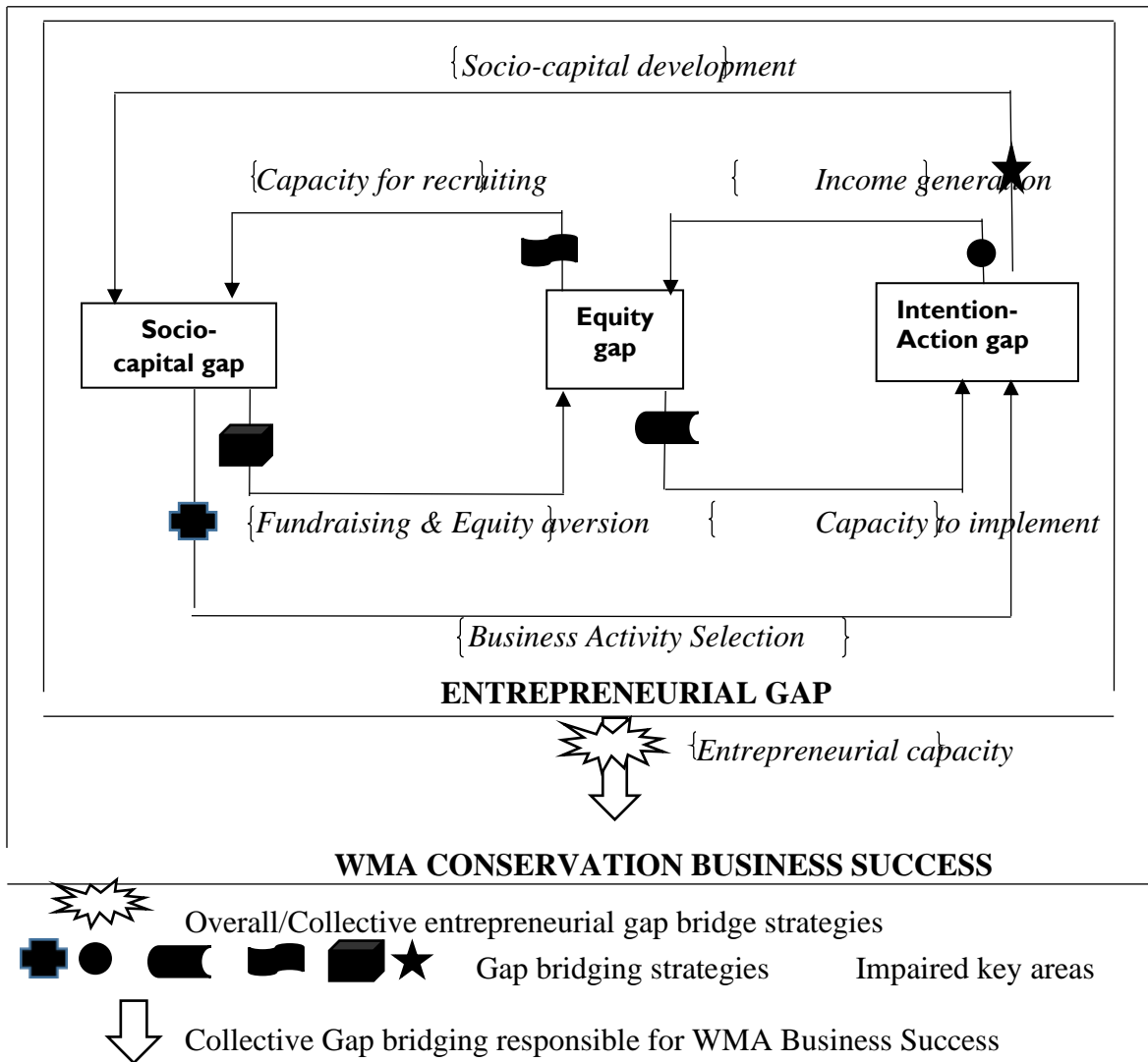


Figure 5: Framework for Interlinking of Entrepreneurial Gaps in Mbarang'andu and Tunduru WMAs



## **Discussion**

The study indicates entrepreneurial decisions in the two WMAs resulting in entrepreneurial gaps in particularly Action-Intention gaps are inclined to men contrary to evidence elsewhere, which suggests female-influenced businesses trail male-influenced businesses (Kiefer, Heileman, & Pett, 2022) and in some cases, gender diversity does not contribute to entrepreneurial performance (Almarayeh, 2023). So, for the WMAs, gender is not an aspect to stress over but other factors. Concerning age, studies have indicated age has a positive but weak linear relationship with general entrepreneurial achievement, but it displays indicators of a negative relationship among youth but positive among older groups (Zhao, O'Connor, Wu, & Lumpkin, 2021). Robust Evidence suggests that the 50-year-old and above age group has a higher tendency to take risks than younger to introduce innovative products that are defined as new to the market and hence contribute to the entity's success (Murmman, Salmivaara, & Kibler, 2023). The WMA leaders, predominately youth, bring low accumulated business wisdom to the WMAs and, hence, poor business performance. WMAs experiencing a low level of education coupled with no entrepreneurial training imply putting the daily running of the WMA's business in jeopardy as it is suggested there is a relationship between training and the performance of business (Bhat & Rainayee, 2019). As a result, the socio-capital gap prevails in both WMAs. Consequently, this becomes the precursor of equity and action-intention gaps from unqualified human resources to run such businesses and make sound financial decisions. Evidence shows that education and entrepreneurship skills positively relate to the internal locus of control, risk-taking propensity, entrepreneurial goal intentions and need for achievement (Ndofirepi, 2020). Low levels of education and entrepreneurial capabilities have also been reported as accelerators of the economic underperformance of WMAs (Mawi & Mashenene, 2020).

The dependence of the WMAs on the start-up capital left the WMAs an inclement equity gap, and the expected revenue from hunting was insufficient to realise business performance. Unlike traditional business set-ups, WMAs face statutory revenue sharing at the onset of their operations. About 35% of WMA's revenue is retained as a contribution to the Government, and after that, 50% of the WMA's revenue should be contributed to fuel community development; by WMAs' regulations, this contribution is mandatory to be implemented right from the first year of business commencement. For business startups, such contribution is a strain for an entrepreneurial entity still at the infant stage of establishing a financial base. Consequently, WMAs' equity gap is prolonged, so the WMAs cannot flourish. Revenue-sharing plans need to be revisited to financially empower the WMAs from the onset as entrepreneurial entities to offset the equity gaps. Emphasising education and entrepreneurship skills requirements for WMA leaders' positions has left the WMAs drowning in entrepreneurial failure, as Bhat and Rainayee (2019) revealed underperformance associated with inadequate training. Relying on the elected WMA leaders to institute business operations creates an institutional loophole that propagates the socio-capital gap in the WMAs.

The fact that WMA leaders may be re-elected or lose during the election after 5 years, the accrued work experience, knowledge and exposure spell out a gap in leadership for the corresponding WMA in the next phase of leadership, bringing the WMA back to the initial stage about socio-capital due to lack of institutional knowledge succession. Hiring specific



technical personnel for management and administrative roles of the WMA's businesses will help to evade the option of recurring the socio-capital gap after every WMA election. Inadequate decisions to implement viable business ideas into practice culminate in an intention-action gap, which indicates low risk-taking and is also attributed to a lack of entrepreneurial skills. Furthermore, there was no deliberate effort by the WMAs to take specific actions to ensure the ongoing activities are sustainably implemented. The existence of the entrepreneurial gaps in Tunduru and Mbarang'andu WMAs and, subsequently, the downward trend of business performance aligns with Baumol's theory, which emphasises that economic performance results from the proper allocation of resources.

## **CONCLUSION**

The results specify that equity, intention-action and socio-capital gaps in Tunduru and Mbarang'andu WMAs jointly have undesirably impacted the WMA business model. From the onset, the capital investments in the two WMAs were infinitesimal for anticipated business performance, rendering the business model mythical. The interlinkage spelt out three gaps, where equity is the pivot of other gaps and influences intention-action and socio-capital gaps. Further, the socio-capital gap predicts the intention-action gap where unskilled human resources take no risk in making sound business decisions. Subsequently, the socio-capital gap is the precursor of limited novelty and risk-taking propensity while struggling to bridge equity and intention-action gaps, consequently leaving the WMAs' businesses in a growth dilemma.

## **Recommendations**

Several initiatives are deliberately required to bridge the gaps by adopting unique resource mobilisation strategies, including fundraising for specific business activity capital and diversification of the scope of tourism through appropriate marketing of activities geared toward generating income via nature-based tourism products. In this light, diversification of activities geared to generate income will correspondingly require the identification of suitable personnel for initiating operations of the businesses, carrying out marketing activities and embracing appropriate managerial decisions for the established business ventures. This infers the requirement to hire and/ or train personnel for business management to bridge the socio-capital gap. Consequently, such personnel needed for business management will similarly make deliberate efforts to implement planned business activities, breaking the Intention-Action gap.

There is a need for special attention to the equity gap, which is at the centre of the WMA business model. Carbon finance initiatives have shown promising business performance in WMA as a social enterprise in Northern Tanzania. The forest endowment in the WMAs in Southern has great unexploited potential with immense prospects for carbon finance initiatives and is likely to curb the equity gap in the WMAs. This calls for private partnerships for carbon trade in these WMAs following the Nation Carbon Trade Regulations, which will bring a new revenue stream to support the WMAs. Carbon trade private partners will enter into a legal contract with the WMAs as owners of the forest resources and linking revenue sharing arrangements where the investor will seek to pay for the service of protecting nature by the Nation Carbon Trade Regulations. The ultimate goal should be empowering the WMAs



through respective village governments to become key business partners in carbon projects for optimal realisation of direct benefit to local communities.

Special attention has also to be directed to Business Planning. The Conservation Business Plans (CBPs), 2010-2015 for WMAs were developed too ambitiously, with the killer assumption of accessing donor support for the business startup. The outdated plans imply that Tunduru and Mbarang'andu WMAs run business ventures without obviously formulated objectives and strategies for their businesses after the end of business plan operations. As a result, the entrepreneurial gaps observed are perpetuated by WMAs being out of proper directions for their businesses. Following the fact that CBPs are crucial documents as a roadmap for business undertaking in optimal exploitation of entrepreneurial opportunities available in the WMAs, it is imperative to carry out the development of new CBPs for the said WMAs by considering the inclusion of the proposed business objectives, activities and strategies. It is consequently suggested to the Community Wildlife Management Areas Consortium (CWMAC), an apex organisation for WMAs in Tanzania and development partners to collectively support the WMAs in the review process of the CBPs to reflect the reality of the nature of the conservation business in southern Tanzania. The focus should be directed to activities moderately implemented in both WMAs to enhance their implementation. Avoiding overambitious business planning will facilitate and support bridging the observed entrepreneurial gaps in the WMAs.

### **Areas for future research**

The study recommends further research using econometric models to establish the effect of the identified entrepreneurial gaps on the performance of Mbarang'andu and Tunduru WMAs. Also, a comparative study involving different WMAs from other zones, such as northern and western zones, is needed to explore entrepreneurial gaps in such WMAs and apply the framework to bridge the gaps.

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