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Pig farming and the quest for decent work and economic growth: Evidences from Buffalo city

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Copyright © 2024 by author(s). Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license. https://creativecommons.org/licenses/by/4.0/ Abstract: This study delves into the role of pig farming in advancing Sustainable Development Goal (SDG) 8—Decent work and economic growth in Buffalo City, Eastern Cape. The absence of meaningful employment opportunities and genuine economic progress has remained a significant economic obstacle in South Africa for an extended period. Through a mixed-method approach, the study examines the transformative impact of pig farming as an economic avenue in achieving SDG 8. Through interviews and questionnaires with employed individuals engaged in pig farming in Buffalo City, the study further examines pig farming's vital role as a source of decent work and economic growth. The study reveals inadequate government support and empowerment for pig farming in Buffalo City despite pig farming's resilience and potential in mitigating socio-economic vulnerabilities and supporting community's livelihoods. To enhance pig farming initiatives, this study recommends government's prioritization of an enabling environment and empowerment measures for the thriving of pig farming in Buffalo City. By facilitating supportive policies and infrastructures, the government can empower locals in Buffalo City to leverage pig farming's potential in achieving SDG 8.

Keywords: pig farming; unemployment; rural communities; sustainable development goal 8; economic growth; South Africa

1. Introduction

The lack of inadequate decent work and real economic growth has persisted as a formidable economic challenge in South Africa for years, with the second quarter of 2022 reporting a staggering rate of 33.9%, as documented by Stats SA (2022). This rate has shown continuous fluctuations over time, underscoring the persistent nature of the issue. Steenkamp (2015) affirms the enduringly high levels of unemployment, noting that many individuals still struggle to meet basic necessities like food and shelter. Ferreira and Rossouw (2016) provide insights into the complex factors contributing to South Africa's high lack of decent work and economic growth rates, which stem from a multitude of reasons. In regions such as the Eastern Cape (EC), vast expanses of underutilized land present opportunities for agricultural activities like crop or animal farming, including pig farming. However, despite these prospects, the EC grapples with extreme poverty and lack of decent work and economic growth rates. In the second quarter of 2022, the EC recorded the highest lack of decent work and economic growth rate at 42.8%, further exacerbating socio-economic challenges in the region (Stats SA, 2022).

The ramifications of high lack of inadequate decent work and economic growth rates are far-reaching, affecting individuals' ability to contribute productively to

society and the economy while struggling to meet their basic needs. Moreover, the prevalence of extreme lack of decent work and economic growth and poverty poses significant challenges to revenue collection, with fewer individuals paying personal income tax and an increasing dependency on social grants. South African National Treasury (2018) reports a shortfall of R48.2 billion in revenue collection in 2017/18, prompting measures such as the increase in value-added tax (VAT) from 14% to 15% in April 2018 to address fiscal pressures (National Treasury South Africa, 2018). Recognizing that job creation is essential for enhancing self-sufficiency and economic prosperity, the imperative for collaborative efforts between the government and society to address lack of inadequate decent work and economic growth becomes evident. As emphasized by the World Bank (2012), jobs serve as the cornerstone of economic and social development, necessitating concerted action to tackle lack of decent work and economic growth rates effectively.

Against the backdrop of recently released crime statistics, the correlation between lack of decent work and economic growth and social challenges becomes apparent. Stats SA (2019) highlights increases in various crime categories, underscoring the multifaceted impact of lack of decent work and economic growth on societal well-being. Despite government interventions and social security programs, South Africa continues to grapple with poverty, inequality, and food insecurity, as noted by Ebenezer and Abbyssinia (2018).

Empirical evidence confirms the intricate relationship between lack of inadequate decent work and economic growth and poverty, with elevated lack of inadequate decent work and economic growth levels exacerbating poverty rates, as highlighted by Ramphoma (2014). The inhibition of economic growth due to lack of inadequate decent work and economic growth perpetuates the cycle of poverty, hindering efforts to alleviate poverty without sustainable economic expansion (Grosso and Smith, 2012). Addressing the multifaceted challenge of lack of decent work and economic growth requires a comprehensive approach encompassing diverse interventions, support mechanisms, and economic reforms. Against this backdrop, this study seeks to understand how pig farming contributes to achieving Sustainable Development Goal 8 (SDG 8)—Decent work and economic growth in Buffalo City, Eastern Cape.

2. Literature review

We begin this section by first examining concepts such as poverty, pig farming, decent work, economic growth and the concept of poverty alleviation within the context of BC in South Africa. Afterwards, we map out the historical trajectories of pig farming as a means towards achieving decent work and sustainable livelihood cum economic growth among the local populations in BC, thereby contributing to the attainment of SDG 8. Lastly in this section, we review existing literature with a view to locating this study within an existing gap in the literature.

2.1. Poverty in the Buffalo city

Poverty is a complex phenomenon characterized by the lack of essential resources and opportunities required for individuals and communities to lead dignified lives. It encompasses economic, social, and political dimensions that hinder people from meeting their basic needs and realizing their full potential (Sen, 1999). At its core, poverty involves inadequate access to necessities such as food, shelter, clean water, healthcare, education, and decent work and economic growth opportunities (World Bank, 2018). It manifests in various forms, including limited income and assets, insufficient nutrition, inadequate housing conditions, restricted access to education and healthcare services, and exclusion from social and political participation (UNDP, 2020). Key indicators of poverty include low-income levels, lack of decent work and economic growth opportunities, inadequate housing, food insecurity, and social exclusion (UNESCO, 2021). Moreover, factors like gender inequality, discrimination, and environmental degradation exacerbate poverty and deepen its impact on vulnerable populations (UNICEF, 2020).

Recent data from the World Bank (2018) highlights that in 2015, 10% of the global population lived on less than US \$1.90 a day. Although there has been a 1% decline compared to 2013, 1.1 billion people worldwide still live in extreme poverty. However, there has been progress since 1990, with estimates indicating a decline from 1.85 billion people in poverty to 736 million in 2015. This suggests significant development in combating the increasing poverty rate. In South Africa, Stats SA reports a significant rise in poverty levels. The "Poverty Trends in South Africa" report noted a decline in poverty levels between 2006 and 2015, but there was a significant increase in 2015, with continuous fluctuations since then due to the government's lack of investment and development (Stats SA, 2017). Social grants, as highlighted by Gcumisa et al. (2016), are a crucial social safety net provided by the South African government to alleviate poverty. Social grants constitute a significant portion of income for many South African households, with salaries or wages being the second largest income source at 30%, followed by crop production at 12.7%, and livestock production contributing 10% to household income.

Buffalo City, situated in the Eastern Cape province of South Africa, faces considerable challenges related to poverty and inequality. Recent data from Statistics South Africa indicates that the poverty rate in the Eastern Cape province stands at around 59%, making it one of the poorest regions in the country (Eastern Cape Socio-Economic Consultative Council, 2020). Within Buffalo City, poverty is particularly prevalent in informal settlements and rural areas, where access to basic services and economic opportunities, including decent work and economic growth, is limited (Eastern Cape Socio-Economic Consultative Council, 2020).

2.2. Pig farming in Buffalo city

Pig farming is not a new industry, Patra et al. (2014) contend that the emergence of pig farming is mainly because of the high demand for pig meat and other benefits. Pig farming involves developing livestock pigs; they are bred and grown till they reached the required weight for slaughtering. A significant advancement can be observed in this sector, reflecting how important and efficient pig farming became, with an increasing pig product demand. Insignificant development in this sector is presented in small districts; however, the emergence of pig farming programmers is essential in providing employment opportunities for locals (Patra et al., 2014).

Most pig farms are familiar with the conventional methods of feeding, growing,

and caring for the livestock, presenting employment opportunities. The sector is experiencing further advancements. This implies that even though the sector within the district is being neglected and providing inadequate growth opportunities, pig farming remains a significant source of employment for the people in this area of the country.

The pig farming growth is justifiable for several reasons. The sector received considerable attention in recent years while presenting employment opportunities for the locals. Most countries' regulatory authorities, such as health and safety and the livestock sector emphasized the improved standards (Thomson et al., 2013). This forced farms to take significant measures to further advancements within the sector, with a significant employment generation opportunity for the locals, allowing them to institute farming. The government sector focused on assisting local farmers in awareness and training while funding further growth of the sector (Farmer's Weekly, 2016).

According to Aarestrup (2012), sustainable farming refers to successful farming. It has become essential for farmers to pursue sustainable practices, enabling long-term benefits and sustainability. The pig farmers need to meet the supply and demand with economical and efficient resources. Manure and emission management has been a significant challenge for pig farmers. Efficient and sustainable manure management can enable farmers to recycle the manure for fertilizers, useful in producing crops; these crops can be used to feed the pigs.

The pork industry of South Africa is small, with the registration of only 243 commercial farmers. An estimation of small-scale farmers farming in small districts and others is 1500 to 3000. The South African pork industry produces only 0.5% of pork globally. This is despite the favorable geographical location and atmosphere for the growth of pigs. This signifies that the sector needs proper attention and pig farming programmers (Farmer's Weekly, 2016). The EC is renowned for its pig farms because of its suitability of the landscape, comprising mountainous regions and forests support a pig farming environment.

2.3. Decent work and economic growth

In the Sustainable Development Goals, this is dubbed SDG 8. What this implies is that every individual is entitled to a decent work and livelihood that can sustain the household and contribute to economic growth. By conceptualization, decent work and economic growth are interrelated concepts crucial for achieving sustainable development and improving people's livelihoods. Decent work refers to employment that is productive, secure, fairly remunerated, and conducted in conditions of freedom, equality, safety, and dignity. Economic growth, on the other hand, pertains to the sustained increase in a country's output of goods and services over time, leading to higher incomes, employment opportunities, and living standards (World Bank, 2018). Decent work entails not only the availability of employment but also the quality and conditions of work. It encompasses opportunities for fair wages, social protection, job security, workplace safety, and equal opportunities for all, irrespective of gender, age, or other characteristics. Economic growth involves fostering an environment conducive to entrepreneurship, innovation, investment, and trade, which create

employment opportunities, generate income, and alleviate poverty (World Bank, 2018).

Key indicators of decent work include employment rates, labor force participation, wage levels, working conditions, social protection coverage, and gender equality in the workplace. Economic growth is thus typically measured by the gross domestic product (GDP) growth rate, per capita income, investment levels, industrial production, and trade volumes (World Bank, 2018). In Buffalo City, Eastern Cape, South Africa, the level of decent work and economic growth faces significant challenges. While the region has made strides in economic development, high levels of unemployment, particularly among youth and marginalized communities, persist (Stats SA, 2021). Additionally, informal employment is prevalent, with many workers lacking access to social protection and decent working conditions (Stats SA, 2021).

2.4. Mapping the historical trajectory of the role of pig farming in the attainment of decent work and economic growth in Buffalo city

Pig farming has played a significant role in the economic and social fabric of Buffalo City, Eastern Cape, South Africa, over centuries. In the pre-colonial era, indigenous communities in the Eastern Cape region practiced traditional pig farming as part of their subsistence agriculture systems. Pigs were valued for their versatility, providing not only meat but also leather, fat, and other by-products essential for daily life (Cock, 2012). Pig farming was integrated into the socio-cultural fabric, with communal ownership and shared labor practices contributing to social cohesion and resilience (Kepe, 2014). With the arrival of European colonizers in the 17th century, pig farming underwent significant changes. Colonists introduced commercial farming practices, including the establishment of large-scale pig farms to supply meat to growing urban centers and European settlers (Moll, 2000). This led to the displacement of indigenous farming practices and the concentration of land and resources in the hands of colonial elites, exacerbating inequalities within the region (van Sittert and Hallett, 2007).

Following the end of apartheid in 1994, pig farming in Buffalo City experienced a revival driven by small-scale farmers and community cooperatives. Government initiatives aimed at land redistribution and rural development supported the emergence of black-owned pig farms, promoting inclusive economic growth and empowerment (Hassan, 2018). Pig farming became a source of employment and income for previously marginalized communities, contributing to poverty alleviation and social inclusion (Ntombela, 2016). Despite its historical significance, pig farming in Buffalo City faces challenges in the contemporary era. Issues such as disease outbreaks, market fluctuations, land tenure insecurity, and environmental sustainability pose threats to the viability of pig farming enterprises (Shabalala, 2020). Additionally, the legacy of colonialism and apartheid continues to shape access to resources and opportunities, perpetuating inequalities within the sector (Mafongoya, 2019). However, pig farming also presents opportunities for decent work and sustainable economic development growth in Buffalo City. The rise of niche markets for organic and free-range pork products, coupled with increasing consumer demand for ethically sourced food, provides avenues for small-scale farmers to differentiate their products

and access higher-value markets (Mhlongo, 2021). Moreover, initiatives focused on skills development, technology adoption, and value chain integration have also enhanced the competitiveness and resilience of pig farming enterprises in the BC (Nkosi, 2018).

2.5. Empirical review

Several studies have highlighted the role of pig farming in generating employment opportunities, especially in rural communities. For example, a study by Ntombela (2016) in South Africa found that smallholder pig production contributed to rural livelihoods by providing employment for family members and hired laborers. Similarly, research by Hassan (2018) emphasized the potential of pig farming to create jobs along the value chain, including feed production, transportation, and marketing. These findings underscore the importance of pig farming in promoting full and productive employment, a key aspect of SDG 8.

Pig farming has been shown to contribute to income generation and poverty reduction among smallholder farmers. Mhlongo (2021) reported that pig farming activities generated significant income for farmers, enabling them to improve their living standards and invest in education and healthcare. Furthermore, a study by Shabalala (2020) in Eswatini revealed that income from pig farming helped households diversify their sources of livelihood and reduce reliance on subsistence agriculture. These findings align with SDG 8's objective of promoting sustainable economic growth and reducing poverty. Despite its potential benefits, pig farming also faces various challenges that can hinder its contribution to decent work and economic growth. Moll (2000) highlighted the impact of disease outbreaks on pig farming enterprises, leading to significant economic losses and reduced productivity. Additionally, van Sittert and Hallett (2007) pointed out the historical legacies of colonialism and apartheid, which continue to shape access to resources and opportunities within the sector. Addressing these challenges is crucial for realizing the full potential of pig farming in advancing SDG 8 objectives.

Another important aspect of pig farming is its environmental sustainability, which is essential for achieving long-term economic growth. Research by Cock (2012) emphasized the need for sustainable farming practices to mitigate the environmental impact of pig farming, such as soil erosion and water pollution. Integrating environmental considerations into pig farming strategies is vital for promoting sustainable economic growth and ensuring the well-being of future generations, as outlined in SDG 8. Empirical studies have demonstrated the significant contribution of pig farming to decent work and economic growth, aligning with the objectives of SDG 8. While existing studies provide valuable insights into the relationship between pig farming and SDG 8, there is a notable gap in research focusing specifically on the context of Buffalo City, Eastern Cape, South Africa. Despite its historical significance in pig farming, Buffalo City has received limited attention in empirical studies examining the contributions of pig farming to decent work and economic growth. This study, therefore, investigates the role of pig farming in advancing SDG 8 objectives in Buffalo City, particularly from 2015 to 2023.

3. Methodology

In this study, we used a mixed-method research approach to explore the rural communities of Buffalo City (BC) in the Eastern Cape (EC) region (see **Figure 1**). Based on data from the 2016 community survey, Buffalo City Municipality (BCM) spans an area of 2750 km² and is home to a total of 834,997 people. The climate in this region is quite mild, with plenty of sunshine throughout the year and an average annual rainfall of 850 mm. We chose BCM for our study because of its suitability with pig farming. The geographical representation of the study area is depicted in the figure below:



Figure 1. Rural communities in BCM.

Source: Municipalities SA (2020).

According to the 2016 community survey, Buffalo City (BC) is home to about 835,000 people (Stats SA, 2017). For our study, we focused on individuals aged 15 to 64 living in BC, estimated at around 510,000 in late 2017. To understand better how lack of decent work and economic growth affects South Africa and its impact on pig farming, we randomly selected unemployed individuals and existing farmers to participate in our research. We also interviewed officials from the Department of Rural Development and Agrarian Reform to ensure we included policymakers' perspectives.

We chose participants using a simple random sampling method. Our data collection involved a mix of interviews and questionnaires. We conducted telephonic interviews with open-ended questions and recorded them with participants' permission. We also gave participants questionnaires, including both open and closed-ended questions. In this study, a total of 164 individuals participated, generously sharing their perspectives through the research instrument. Among them, 141 respondents, accounting for 86% of the total, indicated that their religious beliefs don't hinder their interactions with pigs. Approximately 11% of respondents opted not to respond to this specific question, while the remaining 3% acknowledged that their faith does influence how they interact with pigs. This diverse range of responses

underscores the diversity within our sample population and confirms its validity for our study. To make sure our data collection tools were reliable and valid, we conducted a pilot study in Langa Township near Cape Town. Residents there received questionnaires to test the clarity and relevance of our questions. For data analysis, we used Excel and other software tools. To analyze the questionnaire data quantitatively, we relied on software packages like XLSTAT and SPSS 28, while NVivo helped us with the qualitative aspect. We analyzed qualitative data using a thematic approach with NVivo software from QSR International. This software helped us organize and explore emerging themes and patterns in the data.

4. Presentation of findings

Our primary aim in this study was to understand how pig farming contributes to achieving Sustainable Development Goal 8 (SDG 8)—decent work and economic growth in Buffalo City, Eastern Cape. However, gathering demographic information from our participants was crucial as it offers valuable insights into their backgrounds. This demographic data not only ensures the credibility of the responses but also allows for a more nuanced analysis and interpretation of the findings. **Table 1** below presents the breakdown of respondents based on demographic characteristics, providing a comprehensive overview of the individuals who shared their perspectives in our study.

Table 1. Respondents' demographic descriptive analysis.

Variables	Categories	Frequency	(%)	Total Frequency	Total Percentage		
Gender	Male	86	52	164	100		
	Female	78	48	104	100		
Village	Tolofiyeni	44	27				
	Mdingi	62	38	164	100		
	Masingatha	58	35				
Location	King Williams Town	157	96	164	100		
	Not indicated	7	4	104	100		
Age	15–25	12	7				
	26–30	16	10				
	31–35	17	10	164	100		
	36–40	26	16				
	Above 40	93	57				
Family size	0–4	76	46				
	5–9	83	51	164	100		
	10 and above	5	3				
Family head	Male	93	57				
	Female	64	39	164	100		
	Youth headed	7	4				

Table 1. (Continued).

Variables	Categories	Frequency	(%)	Total Frequency	Total Percentage		
Education level	Informal	7	4				
	Primary	20	12	164	100		
	Secondary	93	57	164			
	Tertiary	44	27				
Religion	Catholic	111	68				
	Christian	17	10	164	100		
	Others	13	8	164	100		
	Traditional	23	14				
Employment status	Yes	43	26	164	100		
	No	121	74				

Source: Authors' computation.

Figure 2 offers a glimpse into the composition of respondents based on gender. Recognizing the physical demands and strength required for pig farming, it is essential to factor in the gender of participants. In our study, we found that 52% of respondents were male, while 48% were female, highlighting the diverse representation within our research sample.

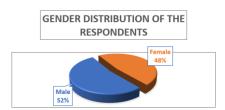


Figure 2. Gender distribution of respondents.

Source: Authors' computation.

Similarly, pig farming calls for committed workers, as shown in **Figure 3**, 57% of respondents were over 40 years old. Interestingly, only 7% were in the age group of 15 to 20, while 10% fell between 26 and 30, and another 10% between 31 and 35. Additionally, 16% were aged between 36 and 40 years. Taken together, it is noteworthy that more than 80% of respondents were 30 years old or above, underlining the maturity and experience prevalent among those involved in pig farming.

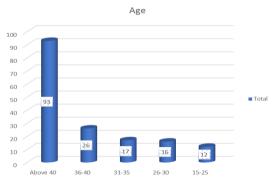


Figure 3. Age distribution of respondents.

Source: Authors' computation.

Once more, the success of pig farming hinges significantly on environmental factors, particularly location, which greatly influences productivity. Notably, 96% of respondents hailed from King Williams Town, as shown in **Figure 4** with the remaining 4% either not specifying their town or indicating the same region.



Figure 4. Location of respondents within the Buffalo city, Eastern Cape, South Africa.

Source: Authors' computation.

The participants also include residents from three villages within King Williams Town: Mdingi, Masingatha, and Tolofiyeni. Among them, 44 (27%) respondents were from Tolofiyeni village, while 62 (38%) originated from Mdingi village. The remaining 58 (35%) were affiliated with Masingatha village (as illustrated in **Figure 5** below). Consequently, it can be deduced that the largest portion of respondents came from Mdingi village.



Figure 5. Respondents' distribution based on villages in Buffalo city, Eastern Cape. Source: Authors' computation.

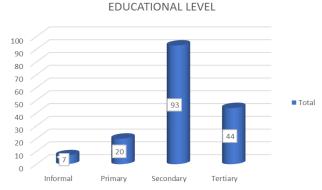


Figure 6. Educational levels of respondents.

Source: Authors' computation.

On a different note, **Figure 6** sheds light on the educational background of the participants. It shows that 57% of them had completed secondary school, while 20 (12%) had only completed primary school. Furthermore, 4% had received informal training, while the remaining 27% held certificates from higher education institutions.

When it comes to the employment status of the respondents beyond pig farming, it is crucial to emphasize its significance. We need to pay close attention to this aspect, as it helps us understand their availability by pinpointing positions where they earn wages or salaries. Our findings show that 26% of the respondents were in jobs where they received salaries, while the remaining 74% were not employed in paid roles as evidenced in **Figure 7**. This highlights the stark reality of unemployment in the region, pointing towards a potential interest in pig farming as a way to tackle this issue and possibly reduce unemployment levels in the area.



Figure 7. Employment status (other than Pig farming) of the respondents. Source: Authors' computation.

Furthermore, when we looked at the 26% of respondents who held other jobs besides pig farming and received wages or salary, we noticed something interesting about their incomes. Only a small fraction, specifically 4.3%, earned R10,000 or less each month. If we dig a bit deeper into the numbers, we see that 16.5% fell into the income range of R1100 to R3000 monthly, while 2.4% earned between R3100 and R5000. Additionally, 1.8% fell into the income brackets of R5100 to R7000, and similarly between R7100 and R10,000 monthly. Furthermore, 2.4% reported earning more than R10,000 monthly.

4.1. The effects of pig farming on decent work and economic growth in BC, EC

Findings reveal that a significant majority of respondents, comprising 80 percent, held secondary school certificates, indicating a commendable literacy level within the community. However, against the backdrop of persistent lack of decent work and economic growth in South Africa, the likelihood of enduring moderate poverty levels looms large. Recent assessments underscore this harsh reality, ranking South Africa as the most unequal nation globally, with a Gini coefficient of 0.6 (Stats SA, 2019), as highlighted by De Vos et al. (2020) Faced with this pervasive poverty, many respondents have turned to pig farming as a means of finding stability. When asked about the benefits of pig farming, as illustrated in **Table 2** below, 70.1% indicated that pig farming allows them to feed their family, 18.1% believe it is their only income, 3.7% adds that it adds to their other incomes, 11.6% implied that pigs were either

provided to them, or they had pigs, while 25% believe that funding was provided for them to farm with pigs.

Table 2. The impact of pig farming on decent work and economic growth in BC.

Purpose of farming	%
To feed your family with the pigs you raise	70.1%
It is your only income	18.1%
To add to your other incomes	31.7%
The pigs were provided to you, or you already had pigs	11.6%
Funding was provided to farm with pigs	25%

Source: Authors' computation.

During the interviews, a notable insight surfaced: the community is still struggling with a significant lack of decent work and economic growth. Many interviewees expressed worries about the widespread absence of job opportunities, portraying a grim scenario of impoverishment within the community. One person vividly described the harsh reality of poverty, linking it directly to the soaring lack of decent work and economic growth rates. Given these daunting challenges, pig farming emerged as a hopeful solution to address this urgent issue, resonating with the sentiments of numerous interviewees. According to some responses, pig farming is viable because:

"The community has nothing to do, and many are unemployed. It will enable them to provide food for their families. Pig farming will also be a tool to fight poverty".

"It is possible because it is difficult for us as youth to get employment, especially for those of us who are over 35 years old".

"Yes, most of the youth are unemployed, so it is an opportunity for them to create jobs".

"Yes, we are not employed, and we also have ample land space. We need financial support".

Based on their feedback, it appears that securing employment becomes increasingly challenging as individuals age. One respondent noted the dismal job prospects for those over 35 years old. In their efforts to overcome this distressing state of impoverishment, many community members explored various avenues and resources. They observed that despite the abundance of available space, numerous individuals in the community remained unemployed, prompting them to consider utilizing local resources for their sustenance. Reflecting on these insights, it becomes evident that multiple factors drive community members to engage in pig farming.

4.2. Accessibility of land and additional pig farming assets

Numerous participants underscored the abundant land resources within the community, signaling the viability of pig farming in the region. As one respondent articulated, "We possess ample land for agricultural endeavors, coupled with accessible water sources. The primary deficiency lies in municipal support." The availability of extensive land and water reservoirs establishes a strong groundwork for regarding pig farming as a potential remedy for lack of decent work and economic

opportunities in the community. Multiple individuals stressed that given the ample space and water resources for agricultural pursuits, pig farming stands as a feasible option. Asserting further:

"We are unemployed; we have land for pig farming. It will assist us with generating an income because there are no jobs".

"Community members such as pork meat and there is land to do that. There is water and electricity for efficient piggery".

"Because there is water and electricity and enough space to build pig housing".

According to the respondents, besides the extensive land facilitating pig farming in the community, there is also an abundance of water and consistent access to electricity. This suggests that factors such as water and electricity are crucial considerations in pig rearing and farming. "There is plenty of land, and the community is also enthusiastic because pig farming proves to be profitable."

Another highlighted factor that ensures the feasibility of pig farming in this area is the community's keen interest in pig farming. People enthusiastically engage in pig farming possibly due to the availability of land space and other essential resources, but also because it serves as a safety net for families during times of need. In the words of the respondents:

"We have large land, it is enough for pig farming. It will also help to support the family".

"We have enough space to farm pigs. People from my community enjoy farming pigs, it's such as chicken, almost every household has it".

The abundance of land and water resources has motivated many locals to pursue pig farming. "We have plenty of unused space in our yards that could be used for raising pigs. Moreover, there's enough land available for large-scale farming." This indicates that the community's involvement in pig farming is viable, including the potential for large-scale operations.

4.3. The cost-effectiveness of pig farming

The cost-effectiveness of pig farming has become a crucial factor that motivates people into pig farming. Its affordability of pig farming and the ease of caring and sustaining the pigs makes pig farming a cost-effective farming that positively contributes to the actualization of decent work. As some respondents mentioned, "Looking after them is simple; we just need to make sure they are fed and have sufficient water." Even those with limited space can raise pigs in their gardens. Many find it financially viable because they grow maize on their farms to feed the animals, reducing the need for additional expenses to maintain their farms. A respondent remarked:

"We have gardens which we plough so it is very easy to feed the pigs".

"One would build a pigsty in his own yard and feed them daily in the morning".

"We plough mielies which assist us in feeding pigs, and we are not far from a river".

Some respondents stated that pig farming does not demand specialized expertise,

enabling them to rear pigs comfortably. Moreover, many recognized the feasibility of pig farming because the area is devoid of epidemics like swine flu and environmental hazards such as drought. They believe that:

"Pig farming is viable in my community because we are hardly affected by drought and even by animal diseases such as swine flu. We have been only hit once or twice". "It is easy to farm pigs even though droughts don't affect them much".

Participants assert that pigs are easy to breed and have a fast growth rate, which is why they opt to rear them. Additionally, one respondent highlighted the high demand for pork meat as a motivating factor for considering pig farming. Furthermore, they noted that pigs can be raised in a confined space, which enhances the attractiveness of pig farming, as mentioned by one respondent:

"It is because pigs reproduce at six months, and it takes only about 6 months for pigs to be ready to be slaughtered".

"It is easy to farm pigs because they can almost eat anything even when you don't have feed you can go to your neighbors and ask for leftover food and even supermarkets to ask for expired food".

Participants stressed that pig farming demands little attention, as pigs seldom get sick; once they are fed, they flourish. It was revealed that administering vaccinations to the animals is unnecessary; ensuring they have adequate food and water is all that is needed for their welfare.

4.4. Pig farming as a community enterprise

Respondents confirmed that pig farming thrives in their area as a collective effort passed down through generations, resulting in a rich legacy of expertise in pig rearing. The longstanding tradition of pig farming in their community sparks a keen interest among the younger members. One respondent remarked, "Pig farming is invaluable because it's deeply ingrained in our community; I have witnessed people raising pigs all my life." This underscores the integral role of pig farming in their economic activities. "It is woven into the fabric of our community, and occasionally, people give pigs or piglets instead of money, motivating recipients to engage in trade." A young person familiar with the advantages of pig farming would value such a gift, either selling it for income or using it for sustenance, thereby bolstering the local economy. "We raise pigs to provide for our families, often receiving them from relatives and family friends."

Many families rely on pig farming for their sustenance and income, with some respondents emphasizing its significant contribution to their households. "Most of us grew up in families that raised pigs for extra income or to meet our daily needs, so we possess the necessary skills." "I sell pork meat, which I slaughter myself, and it helps support my family; thus, I believe pig farming is viable in our community." Numerous families in this community see pig farming as both straightforward and essential for survival. Furthermore, the community's culture is intertwined with pork, utilized in traditional ceremonies and social gatherings. For another respondent:

"People enjoy farming pigs for traditional ceremonies, for example when a boy goes to initiation school".

"Because the most people from my community enjoy pork meat. I don't see anything that can stop us from farming pigs as we are not from the Muslim community whereby, we might have been not allowed to farm them".

Pig farming is highly viable and feasible within the community because there are no religious constraints. Given that the community does not follow Islamic practices, there are no religious obstacles to pig rearing. The community's involvement in pig farming is believed to have contributed significantly to reducing poverty levels. Therefore, pig farming shows a statistically significant and positive influence on poverty reduction in BC, EC.

4.5. The viability of pig farm programmers in Buffalo city in the Eastern Cape

In **Table 3** below, it is clear that 47.5% of respondents disagreed with the idea that BC in the EC supports and implements programs for traditional pig farming methods. Additionally, seventy-eight respondents disagreed with the notion that BC in the EC has implemented programs for industrialized (commercial) pig farming. Moreover, over 46% of respondents opposed the suggestion that BC in the EC has accommodated or implemented programs on integrated systems of pig production, along with other initiatives like fish farming.

Table 3. Viability of pig farm programmers in Buffalo city.

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Buffalo City Municipality in the Eastern Cape has accommodated/implemented programmers for the traditional methods of pig farming	24	54	74	11	1
	14.6%	32.9	45.1	6.7%	0.6%
Buffalo City Municipality in the Eastern Cape has accommodated/implemented programmers on industrialized (commercial) pig farming	23	55	71	14	1
	14%	33.5%	43.3%	8.5%	0.6%
Buffalo City Municipality in the Eastern Cape has accommodated/ implemented programmers on integrated systems, of pig production alongside other initiatives such as farming fish	24 14.6%	52 31.7%	71 43.3%	16 9.8%	1 0.6%

Source: Authors' computation.

4.6. The influence of government programmers on pig farming in the community

Table 4 "The Influence of Government Programmers on Pig Farming" presents responses to four different statements regarding the impact of Buffalo City Municipality's initiatives on pig farming. The responses are categorized into five levels of agreement: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Most respondents (58.5%) either strongly disagreed or disagreed that education extension/advisory services have increased access to knowledge in pig farming technologies, suggesting that this initiative may not be perceived as effective.

A significant portion of respondents (68.9%) disagreed with the effectiveness of disease control programmers for pigs, indicating skepticism about this policy's impact. Again, 67.7% of respondents disagreed or strongly disagreed that there was adequate access to financial services for commercial pig farming, highlighting a perceived lack of financial support. Most respondents (66.5%) remained neutral regarding the revival of cooperatives and marketing boards, suggesting either uncertainty or indifference

about this initiative's impact. In general, the data indicates a general lack of satisfaction with the government programs aimed at supporting pig farming in Buffalo City, with many respondents expressing disagreement or neutrality about the effectiveness of these initiatives.

Table 4. The influence of government programmers on pig farming.

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Buffalo City Municipality in the Eastern Cape established education extension/advisory services to increase access to knowledge in areas of pig farming technologies	35	61	42	24	2
	21.3%	37.2%	25.6%	14.6%	1.2%
Buffalo City Municipality developed policies on disease control programmers for pigs	34	79	30	20	1
	20.7%	48.2%	18.3%	12.2%	0.6%
Buffalo City Municipality provided and encouraged access to financial services for commercial pig farming	53	58	35	15	3
	32.3%	35.4%	21.3%	9.1%	1.8%

Source: Authors' computation.

4.7. Programmers aimed at encouraging pig farming and other livestock farming

Table 5. Programmers aimed at encouraging pig farming.

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The BCM of the Eastern Cape is developing and upgrading Infrastructure such as roads, lines of communication and facilities for farming.	78	16	29	39	2
	47.6%	9.8%	17.7%	23.8%	1.2%
The BCM of the Eastern Cape has developed free education/ enlightenment/ training programmers on pig farming and developing digital information centers in all its rural communities.	45 27.4%	65 39.6%	29 17.7%	18 11%	7 4.3
The BCM of the Eastern Cape has developed a health management system and programmers for pig farming, including offering free traditional or pharmaceutical medicines.	46	67	24	24	3
	28.0%	40.9%	14.6%	14.6%	1.8%
The BCM of the Eastern Cape is gradually introducing interest-free agricultural loans to pig farmers requiring no collateral.	21	26	71	42	4
	12.8%	15.9%	43.3%	25.6%	2.4%

Source: Authors' computation.

As depicted in **Table 5**, a majority of the respondents, over 57%, expressed skepticism about BC in the EC's efforts to develop and improve infrastructure such as roads, communication networks, and farming facilities. Moreover, 67% of the participants disagreed with the claim that BC in the EC has implemented free education and training programs on pig farming, along with digital information centers in all rural communities. Additionally, 69% of respondents disputed the notion that BC in the EC has established a health management system and initiatives for pig farming, including the provision of free traditional or pharmaceutical medicines. Furthermore, nearly 28.7% of the respondents disagreed with the statement that BC in the EC is gradually introducing interest-free agricultural loans for pig farmers without requiring collateral.

4.8. How the government is supporting pig farming towards SDG 8 (decent work and economic growth)

The South African Government operates as a structured entity within a

democratic framework, featuring various levels of government and an independent legal system. Officials from the Department of Agriculture, Land Reform, and Rural Development (DALRRD) play a crucial role in providing farmers with advice and expertise on pig farming and production methods. However, there are currently no specific financial aid programs tailored specifically for pig farming. This suggests that the department's support focuses more on helping the public develop business plans using the available resources and expertise within the department and its partners. Apart from the East London branch, there are also 17 service centers and satellite offices located in Buffalo City (BC) and the Amathole district. The Amathole district, situated along the southern coastline of the Eastern Cape (EC) province, is home to these service centers. They are staffed by service officers and veterinary personnel known as animal health technicians, whose responsibilities include visiting farmers, conducting awareness campaigns, and organizing workshops to educate them about departmental programs. These service centers operate under an open-door policy, welcoming farmers to seek assistance and information.

Table 6. How the government is supporting pig farming towards SDG 8 (decent work and economic growth).

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Buffalo City Municipality in the Eastern Cape must reinstate marketing boards for pig farming to encourage price negotiation	2	1	13	104	44
	1.2%	0.6%	7.9%	63.4%	26.8%
Buffalo City Municipality in the Eastern Cape must offer export and interest rate subsidies for products from pig farming	1	2	8	99	54
	0.6%	1.2%	4.9%	60.4%	32.9%
Buffalo City Municipality in the Eastern Cape must establish free veterinary services for pig farmers	3	1	5	95	60
	1.8%	0.6%	3.0%	57.9%	36.6%
Buffalo City Municipality in the Eastern Cape should lease out government land to prospective pig farmers	1	1	7	94	61
	0.6%	0.6%	4.3%	57.3%	37.2%
Pig farmers and the administration of Buffalo City in the Eastern Cape must enter partnerships on the discovery of market and product value addition	0	0	2	97	65
	0%	0%	1.2%	59.1%	39.6%
Government should formulate a proper policy on pig production, religious, behavioral, and cultural change of people and include it in the national livestock development programmer	0	0	3	95	66
	0%	0%	1.8%	57.9%	40.2%

Source: Authors' computation.

While there are no specific programs exclusively dedicated to pig farming, the department provides general support for agriculture. Those interested in pig farming can receive guidance and assistance, including on-site inspections and advice on structural requirements from extension officers. Additionally, engineering services are available to help design pig pens, and funding may be accessible for specific items such as boreholes, with assistance offered throughout the application process. However, it's important to note that these assistance programs are available to all farmers, not just those involved in pig farming. The Comprehensive Agricultural Support Programmer (CASP) primarily focuses on addressing broader infrastructural needs in agriculture, rather than exclusively targeting pig farming. A specific directorate assists pig farmers in registering their cooperatives, although financial support is not provided for this. The state also takes on certain responsibilities regarding animal health, offering free veterinary services through government offices, although some services may incur minimal fees. Despite efforts to promote participation through workshops and roadshows, challenges such as limited resources

and a lack of interest continue to persist. Although the region's environment is conducive to pig farming, adequate support is essential for success in the industry. Many residents express interest in pig farming, but breaking into the industry proves to be a challenge. Profitability depends on securing sufficient funding and operating at a large scale, as small-scale farming may not be financially viable. Notably, respondents in **Table 6** overwhelmingly support various initiatives to boost the pig farming sector, including reinstating marketing boards, offering subsidies, establishing free veterinary services, and forming partnerships between pig farmers and the government. Additionally, there is a call for comprehensive policies addressing various aspects of pig production, as well as religious, behavioral, and cultural considerations, within the national livestock development program.

4.9. Challenges and obstacles to pig farming engagement as a viable mechanism for decent work

Table 7. Obstacles that hinder pig farming.

Items	Disagree	Neutral	Agree
Inadequate access to knowledge in areas of new pig farming technologies in Buffalo City	17	42	105
	10.4%	25.6%	64%
Buffalo City Municipality lacks disease control programmers for pigs	13	13	138
	8.0%	7.9%	84.1%
Many farmers in Buffalo City lack access to financial services to engage in commercial pig farming	11	15	138
	6.7%	9.1%	84.2%
Many pig farmers encounter marketing barriers, such as insufficient market amenities, loading ramps and scale pens, scarce market data, low prices, and the high costs of transactions	37	20	107
	22.6%	12.2%	65.2%
There are hardly any export and interest rate subsidies in Buffalo City owing to the privatization of pig farming cooperatives and the marketing control boards	25	67	72
	15.2%	40.9%	43.9%
There are several religious, behavioral, and cultural taboos on pork consumption in Buffalo City leading to fear of deprived domestic marketing probability in producers	112	21	31
	68.3%	12.8%	18.9%
The government lacks a proper policy on pig production in the national livestock development programmer	18	33	113
	11%	20.1%	68.9%

Source: Authors' computation.

The data from **Table 7** highlights several key findings. Firstly, 64% of respondents noted a lack of access to information about new pig farming technologies in Buffalo City (BC), posing a significant challenge for farmers aiming to raise pigs for both subsistence and commercial purposes. Additionally, 84.1% of respondents expressed concern over the absence of disease control programs for pigs in BC, citing the potential for substantial losses during disease outbreaks, fuelled by the perception that the municipality is seldom affected by epidemics. Moreover, 84.2% of respondents believe that many BC farmers encounter difficulties accessing financial services for commercial pig farming, hampering their ability to contribute to the municipality's economic development. A notable proportion of respondents (65.2%) observed various marketing barriers faced by pig farmers, including inadequate market infrastructure, limited market information, and high transaction costs, posing significant obstacles to effective product marketing.

Furthermore, 43.9% of respondents noted the scarcity of export and interest rate subsidies in BC, attributing this to the privatization of pig farming cooperatives and

marketing control boards. Interestingly, while 68.3% of respondents disagreed with the idea of religious, behavioral, and cultural restrictions on pork consumption in BC, concerns were raised about potential repercussions on domestic marketing prospects for producers. It is worth mentioning that religion and cultural practices are not seen as barriers to pig rearing in the district. Additionally, 68.9% of respondents highlighted the government's lack of a comprehensive policy on pig production within the national livestock development program. Despite the community's eagerness to engage in pig farming, a significant challenge is the insufficient support provided by the municipality. Many aspiring youth face obstacles due to limited capital and government assistance. Respondents stressed the importance of government support in fostering their enthusiasm for pig farming. Moreover, the high costs associated with implements and medication present financial barriers for impoverished farmers. Government intervention is crucial in addressing these challenges and facilitating community involvement in pig farming.

"Majority of community members are unemployed. Hence, I'm also looking for support in the form of feed, materials to build the pig housing and other form of assistance I can get from the municipality."

Numerous farmers face financial constraints when initiating farming endeavors. Some were gifted pigs but struggled to maintain them, highlighting the urgent need for support from external sources, particularly the government. One respondent emphasized this as a conditional requirement, stating that pig farming can only thrive with government assistance within the community. Asserting further:

"Youths in our community are interested in pig farming but they don't have any money to startup".

"Yes, it is but if only we can be given proper resources such as shelter and feed for the pigs it can work".

This demonstrates the community's willingness to engage in productive work; they should not be labeled as lazy. They are eager to work but are hindered by the lack of initial capital. If the municipality could offer assistance, they are prepared to contribute, ultimately bolstering the nation's economy. The local government can derive its Internal Growth Rate from these farms, creating job opportunities and alleviating pressure on governmental resources. Supporting these farmers indirectly broadens the government's revenue prospects.

5. Discussion of findings

In South Africa, the current lack of inadequate decent work and economic growth is one of the highest globally, accompanied by pronounced income inequality. Small and medium enterprises (SMEs) face a daunting failure rate of 75% within their initial five years of operation. Nearly 40% of the population relies on government welfare grants for sustenance. While pig farming holds promise for community sustainability, many pig farmers encounter challenges due to insufficient government support and seed funding.

The study has emphasized the pivotal role of farming activities as a primary income source for numerous households, aligning with prior research by Matabane et al. (2015), which emphasized the significant contribution of pig production to

enhancing food security and reducing poverty in rural areas. Many individuals engage in pig farming out of necessity, reflecting a form of entrepreneurship driven by survival imperatives. A notable finding reveals that 70% of respondents depend exclusively on pig farming as their primary income source, underscoring the sector's crucial role in livelihoods. The government bears dual responsibilities in ensuring the sustainability of pig farming: fostering an enabling business environment and formulating supportive agricultural policies tailored to pig farmers' needs. While specific aspects of animal health receive government support, there is widespread advocacy for free veterinary services in underserved areas, with 94.5% of respondents endorsing their establishment. Municipalities could contribute by providing seed funding or developmental funds to pig farmers and bolstering the sustainability of their value chain. Despite the favorable environmental conditions for pig farming, the study believes that there is the indispensable need for adequate support for pig farming in BC in order to ensure its success.

6. Conclusion and recommendations

Pig farming continues to play a significant role in advancing Sustainable Development Goal 8—decent work and economic growth in Buffalo City, Eastern Cape, as highlighted by this study's findings. By creating employment opportunities, particularly for young people, pig farming becomes a key driver of economic empowerment and poverty reduction within the community. Its inclusivity in the job market, accommodating individuals with varying skill levels, fosters a diverse workforce engaged in meaningful economic activities. Furthermore, pig farming's potential as a viable means of livelihood is underscored by its contribution to addressing unemployment, especially in rural areas where job opportunities are limited.

The combination of ample available land and the community's strong interest in pig farming further solidifies its position as a sustainable economic pursuit. Moreover, the absence of religious constraints removes barriers to residents' engagement in pig farming, promoting participation without hindrance. However, despite these positive aspects, it is evident that pig farmers heavily depend on government assistance to sustain their operations. Despite this dependence, there seems to be a gap between farmers' perceptions of government support and the actual assistance provided. To fully harness the economic potential of pig farming, collaboration between government officials and farmers is crucial. This collaboration should involve consultations to inform targeted support measures and policies tailored to the needs of pig farmers. Additionally, inadequate infrastructure development, including roads, communication networks, and farming facilities, poses a significant challenge to the growth of pig farming and other agricultural activities in rural areas. Effective government intervention in infrastructure development is therefore vital to facilitate the expansion of pig farming and enhance its contribution to economic growth and job creation. In sum, pig farming has therefore emerged and continue to serve as a promising avenue for promoting decent work and economic growth in Buffalo City, Eastern Cape. However, unlocking its full potential requires collaborative efforts from government authorities and stakeholders to address existing challenges and implement targeted interventions that bolster the growth and sustainability of pig farming as a

crucial element of the local economy.

6.1. Suggestions for future research

The study's sample size of 164 individuals, drawn from a population of 510,000, may limit representativeness, affecting the generalizability of findings. The geographical focus on Buffalo City might not capture region-specific nuances applicable elsewhere. Data collection methods relied on self-reported information through interviews and questionnaires, introducing potential response bias and limiting reproducibility due to insufficient detail on questionnaire items and interview questions. The study primarily assessed short-term impacts, necessitating longitudinal research to evaluate long-term sustainability and economic effects. Future research should expand the geographical scope to include diverse regions, utilize larger and more representative sample sizes, and provide detailed methodological descriptions for enhanced reproducibility. Longitudinal studies are essential to assess the enduring impacts of pig farming initiatives. Comparative analyses with other economic activities can offer insights into the relative effectiveness of various strategies for job creation and economic development.

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