

Review

Food insecurity conundrum: A case study of Amathole district in the Eastern Cape province of South Africa

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Received 22 March, 2019; Accepted 28 March, 2019

Over half of the population in the Amathole district in South Africa experiences food insecurity, despite on-going government initiatives to combat the problem. The study reported here investigated factors that inhibit the achievement of food security by households in the district and government responses, to better understand the factors that might account for the persistence of this challenge. Using a literature review as methodology, the study identified poverty, high unemployment and low income as causes of chronic food insecurity in the area. The government solution of providing social grants has also increased food insecurity as people generally depend on cash, which is insufficient in comparison to what could be gained from small-scale farming and subject people to rising prices of staple foods such as maize and wheat. Another factor is inadequate infrastructure and service provision to households in rural areas. Lastly, in terms of education status, a limited percentage of the population has obtained a matric (school leaving) certificate or higher education qualification, which makes skilled jobs unavailable to most people. Government initiatives often fail to be implemented adequately: services do not always reach intended beneficiaries and fall short in quality and quantity, with budgets not spent or misappropriated. The government has identified catalytic projects that include small, medium and micro enterprises (SMMEs), development and the solutions suggested in this paper involve adding job-creation initiatives, particularly in small-scale farming. Opportunities for developing the Amathole district's economy are identified in the ocean economy, the heritage and tourism sector, and natural forests and reserves.

Key words: Food security, poverty, food.

INTRODUCTION

Food insecurity is a problem that concerns policy makers in the Amathole region of the Eastern Cape Province of South Africa, where over half of the population lives in poverty and is vulnerable to food insecurity (ADM Vision

2030, 2015). This food insecurity persists despite the many programmes and projects that have been initiated by the government, with efforts inhibited by the fact that gaining access to food security is influenced by multiple

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factors and are dynamic in nature. Altman et al. (2009) argue that these multiple factors are not easily understood and may have a negative impact on the ability to identify relevant policies and programmes that would assist in making food accessible to individuals and households. This suggests that providing solutions to the food insecurity problem is not a straight forward process. The difficulty in understanding food insecurity may also be attributed to the fact that there is confusion about its trends at the household level (the actual experience of households that should be obtaining food) (Altman et al., 2009). Against this background, this paper looks at the factors that inhibit the achievement of food security in households in the Amathole district and current responses by the government at local level. In this way it intends to provide a better understanding of the factors that might account for the persistence of food insecurity in the area. On the basis of the identified factors and current responses, effective interventions to solve this problem are suggested.

LITERATURE REVIEW

The study employed both quantitative and qualitative as methodology to establish factors that might lead to food insecurity in the area and government responses to the problem. From the literature, specific solutions appropriate to the Amathole district were identified. The literature studied included studies that provide a theoretical basis for understanding food insecurity and that offer an international perspective on the issue. Studies related to South Africa and the Amathole district in particular were also consulted as were government policy documents and legislation, and reports on projects and programmes specifically aimed at the District.

Definitions of food security and food insecurity

To gain an understanding of food insecurity, it is necessary to understand what food security is. The concept "food security" refers to regular and adequate access by all people to safe and nutritious food for a healthy and productive life. A household can be said to be food secure when there is enough food in the household for all of the people that live in that household. Everyone in the household is taken care of and does not go hungry.

The phenomenon of food insecurity is the opposite of food security. Food insecurity occurs when an individual or community lacks physical or economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (World Food Programme Manual, 2006).

Tweeten (1997) identifies three dimensions of food security: food availability, food access and food

utilisation. Food insecurity is best captured by the Food and Agriculture Organization (FAO) of the United Nations, as quoted by Simon (2012), as a situation where some people do not have access to sufficient quantities of safe and nutritious food and hence do not consume the food that they need for growing normally and conducting an active and healthy life. Defined this way, food insecurity is mainly caused by:

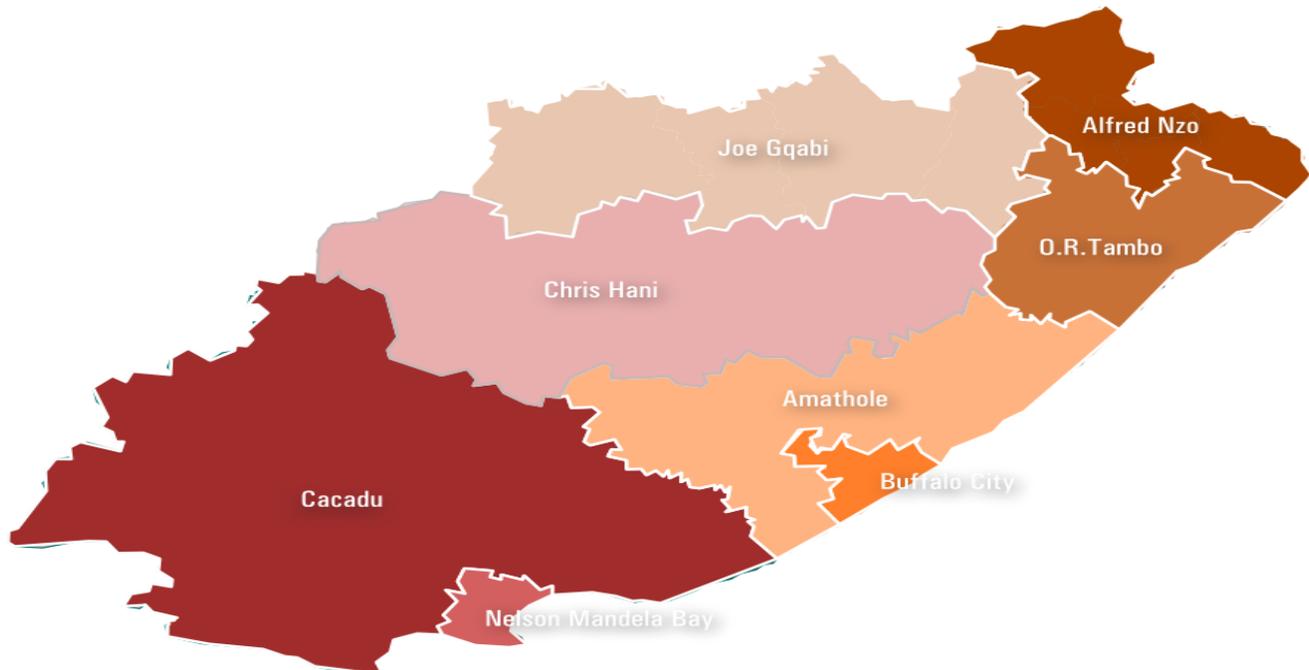
- (i) Lack of food: no availability
- (ii) Lack of resources: no access
- (iii) Improper use: no proper utilisation
- (iv) Change in time: no stability

Modirwa and Oladele (2012: 29) argue that food insecurity is not caused by food shortage; it is rather the insufficient "access to food by certain categories of individuals and households in the population". This appears to be true of South Africa. Assessing the food status of South Africa reveals that the country is self-sufficient in terms of having enough food; however, the country has approximately 1.5 million children who suffer from chronic malnutrition, while 14 million people are vulnerable to the challenge of food insecurity. Poverty and unemployment in South Africa (and in the Eastern Cape Province in particular) force poor people to prioritise having food in their stomach regardless of whether they are receiving a balanced diet or not. This paper examines the lack of availability of and access to food in the Amathole district.

Demographic profile of the Amathole district

The Amathole district municipality (ADM) was officially demarcated after the local government elections of December 2000 during the phase when South African municipalities were established. The district is situated on the eastern seaboard of the Eastern Cape Province and stretches from the Indian Ocean coastline in the south to the Amathole Mountains in the north, and from Mbolompo point (just south of the Hole-in-the-Wall along the Transkei Wild Coast) in the east to the Great Fish River in the west. It is one of six districts within the Eastern Cape and is the third largest in terms of population. The district covers a land area of roughly 21 229 km² (Figure 1).

The ADM consists of four sub-districts and six local municipalities (Eastern Cape Department of Health, 2009). The district is primarily rural with small towns scattered in all of its six municipalities. The population estimates for 2013 indicate that the Amathole district has 898 000 people, which is 0.9% increase from 2011, but 0.6% decrease from 2007 and 4.4% decrease from 2000. The municipality has large disparities in population density, with high density in settlements along major transportation routes. The average population density is 43.1 people per square kilometre.



O.R. Tambo	1 456 927
Nelson Mandela Bay	1 263 051
Amathole	914 820
Alfred Nzo	867 893
Chris Hani	830 494
Buffalo City	810 528
Sarah Baartman	479 923
Joe Gqabi	373 340

Figure 1. Map showing the province's population 2016 – STATSA 2016 Community Survey.

Causes of food insecurity in the Amathole district municipality

The demographic profile of the ADM (Figure 2) is accompanied by its own challenges. These according to STATSA (2016 Community Survey) include, first, poverty, where 59% of the population in the district earns an income of less than R1600 per month. Accompanying this problem are high unemployment and low income where employment does exist. Secondly, inadequate infrastructure and an economy that is focused on community services rather than agriculture have led the majority of the population to rely on income from government social grants. Lastly, in terms of education status, only 19% of the population has obtained a matric (school leaving) certificate or higher education qualification. Overall, these challenges increase the issue of food insecurity in poor households in the Amathole district and are discussed subsequently.

Unemployment, low income and poverty

Like the other district municipalities in the Eastern Cape Province, the ADM faces the challenge of a high rate of unemployment. The ADM Vision 2030 (2015) reveals that the municipality has 42.9% unemployment rate, which is a high level of unemployment for a district municipality. Unemployment is particularly high in the Ngqushwa Local Municipality at 52.8%. This is followed by Nkokobe, with a 48.1% rate of unemployment. Where people are employed, they generally earn a low income. Statistics indicate that approximately 2.1% of the ADM population earns an income that is less than R500 per month, while about 50.3% of the population earns an income that ranges between R500 and R3500 per month. In terms of the poverty line of R174 per month, which is equivalent to US\$2 a day, this benchmark classifies people with this level of income as "Ultra Poor" (ADM Vision 2030, 2015). Food insecurity is inherently associated with poverty and

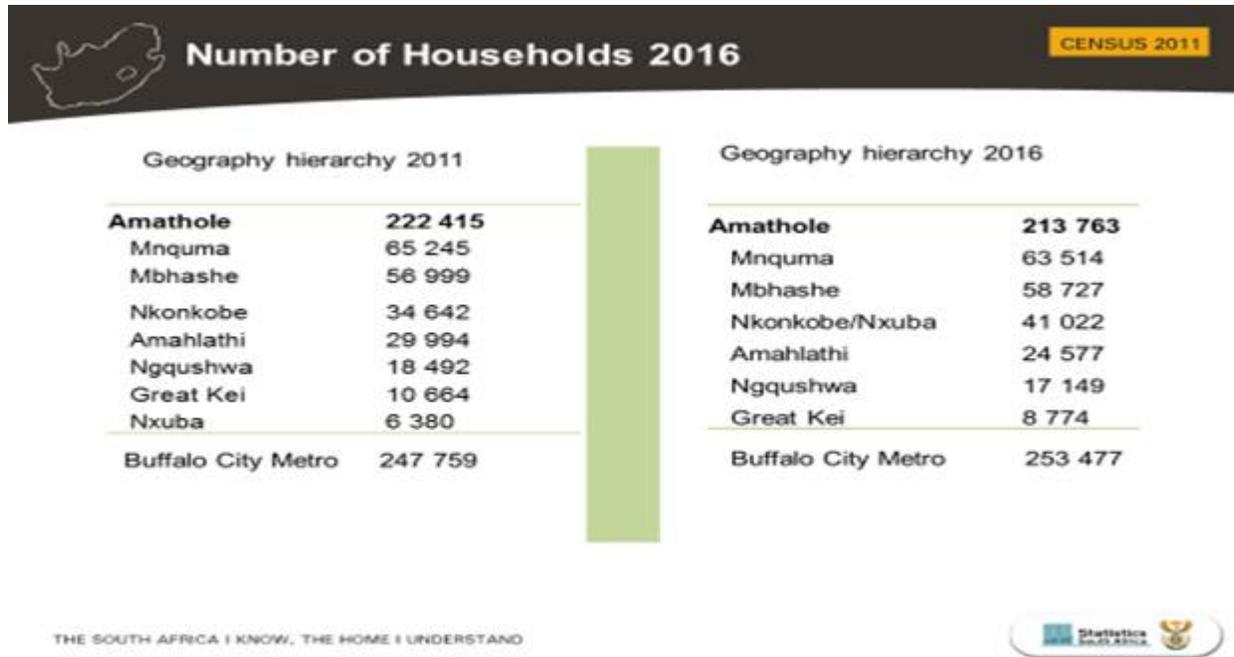


Figure 2. Amathole's number of households – STATSA 2016 Community Survey.

vulnerable groups in communities, and poverty is used as an indicator of food insecurity. The high unemployment and low income that characterise households in the ADM ensure that poverty continues in these households despite the provincial government initiating many policies aimed at providing solutions to these challenges.

Economic sector dominance: Cash economy vs agricultural economy

The type of economic sector that dominates in a particular district municipality determines whether it has high or low levels of socioeconomic development. The Amathole region tends to be dominated by community services, a sector of the economy that has been growing since 1996 (ADM Vision 2030, 2015) and is accompanied by low levels of socioeconomic development. The community service dominance reflects the presence of government services and that government plays a vital role in creating economic activity in the Amathole region and providing jobs (ADM IDP, 2012: 42).

This bias is understandable because of the dominance of the former Bantustan areas (a legacy of the apartheid era) in the region. Given the centrality of the government services in the former Bantustan areas, it is not surprising that this trend has continued with their integration into the ADM. This situation is perpetuated by the fact that not enough investment is made in economic infrastructure in the Amathole region for economic growth and development to take place. The situation has also been

made worse by the de-industrialisation that took place in the mid-1990s in areas that include the towns of Dimbaza and Butterworth, with a consequent reduction of the manufacturing base in these areas.

The second-biggest contributors to regional economic activity from a sectoral perspective are finance and trade. The financial sector reflects the presence of the banking industry, which provides services to government employees that benefit from the community services. Trade dominance is also linked to the massive presence of the government services in the form of government social grants and the salaries of government employees (ADM Vision 2030, 2015).

The South African government has used social grants as a tool for alleviating low levels of socioeconomic development. The Eastern Cape Planning Commission (2014: 28) points out that social grants have become the most important component of government strategy for fighting poverty. They are used as a means of providing a safety net, with the intended beneficiaries including disabled people, elderly people and children. For example, in 2012 a total of 2 655 831 social grants were provided to beneficiaries in the Eastern Cape Province. Of this number, 1 837 801 beneficiaries received a child support grant and 492 248 an old age grant (Eastern Cape Provincial Government (2014a).

The initiation of social grants by the government has brought with it problems of its own. One of the negative effects of this approach is the decrease in small-scale farming in rural and semi-urban areas as most people become beneficiaries of social grants. Modirwa and

Oladele (2012: 29) argue that there is a tendency for the majority of ordinary South Africans to purchase their staple foods from commercial suppliers, instead of growing it themselves. The situation creates a dependency on cash in the form of social grants. However, the social grant is insufficient in comparison to what could be gained from small-scale farming. In addition, the rising prices of food have a negative effect on food security. Staple foods such as maize and wheat are vital to the poor people in South Africa (HSRC, 2007) and the rise in their prices makes such foods inaccessible to these people. It appears that, as much as social grants are intended to eliminate food insecurity in households, they also perpetuate the very same challenge of food insecurity that they are trying to eliminate, with the practice ultimately creating food insecurity because of the shortage of income in households.

Poor infrastructure and service delivery

Through the eyes of the Eastern Cape Provincial Government (2014a), poverty in the province may be attributed to structural factors, which result in the confinement of poor citizens to a life of perpetual deprivation. A major problem in the province is underdeveloped infrastructure, mostly from being poorly maintained. The consequence is the reduction of the value of infrastructure assets (Eastern Cape Provincial Government, 2014b). National and provincial government plans for developing infrastructure are often not implemented as a consequence of the challenges that arise in rural areas. For example, the rural villages in the Amathole region are located in areas that have complicated topography, which results in high costs of delivering bulk infrastructure such as water and electricity. Consequently, such areas are characterized by infrastructure backlogs (Eastern Cape Provincial Government, 2014b).

The challenge of delivering infrastructure to the rural parts of the region is further compounded by the absence of reliable sources of finance. The dominance of high unemployment levels, low income and poverty in the majority of the population in the Amathole region has a negative effect on the municipality's ability to collect revenue from its citizens. These three challenges also make improved debt-collection procedures of little help. With the municipality unable to collect sufficient revenue from its citizens, it is not able to build up its own revenue and has to depend on the national government for grants.

The district currently depends on conditional grants made available by the national government. The fiscal formula for the allocation of funds to municipalities does not favour the ADM, which has to deal with the challenge of massive infrastructure backlogs inherited from the apartheid era. The current formula used by the National Treasury does not take into account the presence of

these backlogs in allocating resources. Backlogs in water, sanitation and transport, among others, constrain the capacity of the region to grow at levels that can deal decisively with under development and poverty. As shown in Figure 3, constrained resources affect the municipality's capacity to provide household services, with low percentages of households having access to piped water, refuse removal and sewerage.

Poor education levels

One of the challenges that face the Amathole region is inadequate education levels. The district's mediocre education status contributes to the perpetuation of food insecurity in households because, without education, opportunities for employment are low. The Statistics South Africa community survey of 2016 reveals that the majority of the people who reside in the Amathole region have only some secondary schooling as their highest level of education (Figure 4). This poor education rate exists despite the ADM playing host to four higher educational institutions (University of Fort Hare, Walter Sisulu University, and Fort Cox and Lovedale Further Education and Training colleges), according to Statistics South Africa (2000). In the absence of post-matric qualifications, chances of people becoming competitive in the job market deteriorate. This situation also contributes in the limitation of opportunities for self-employment.

Current responses to food insecurity

Since 1994, the South African government has put in place policies, programmes and projects intended to provide solutions to food insecurity-related challenges (Modirwa and Oladele, 2012). These are examined below as they relate to the ADM.

Government policies and programmes

The intention of these programmes has been to achieve access by all South Africans to safe and nutritious food for an active and healthy lifestyle at all times. The achievement of food security in South Africa is supported by the Bill of Rights in the South African Constitution, Act 108 of 1996. The Constitution asserts that every citizen of the country has the right to access adequate food and water. The state has the responsibility for the achievement of this right, as part of eradicating hunger, food insecurity and malnutrition (Modirwa and Oladele, 2012: 30). According to Hendriks (2013: 2), among the means of making food security a priority in South Africa is public spending that targets historically disadvantaged people. This involves the government focussing on social programmes in numerous spheres of government.

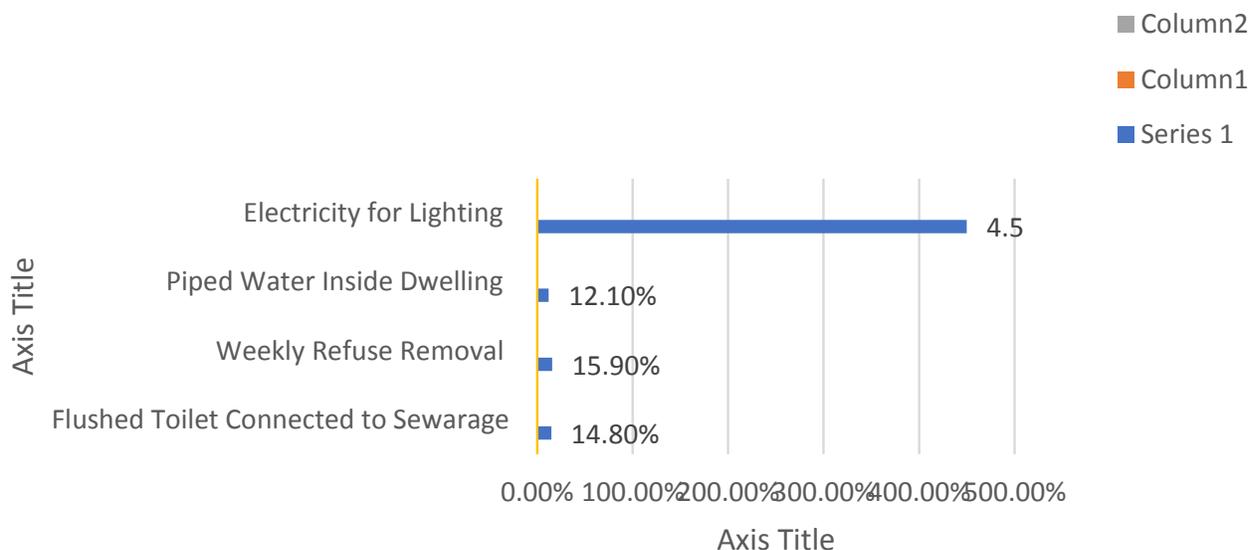


Figure 3. Household basic services (2016 figure).
Source: Statistics South Africa Community Survey (2016).

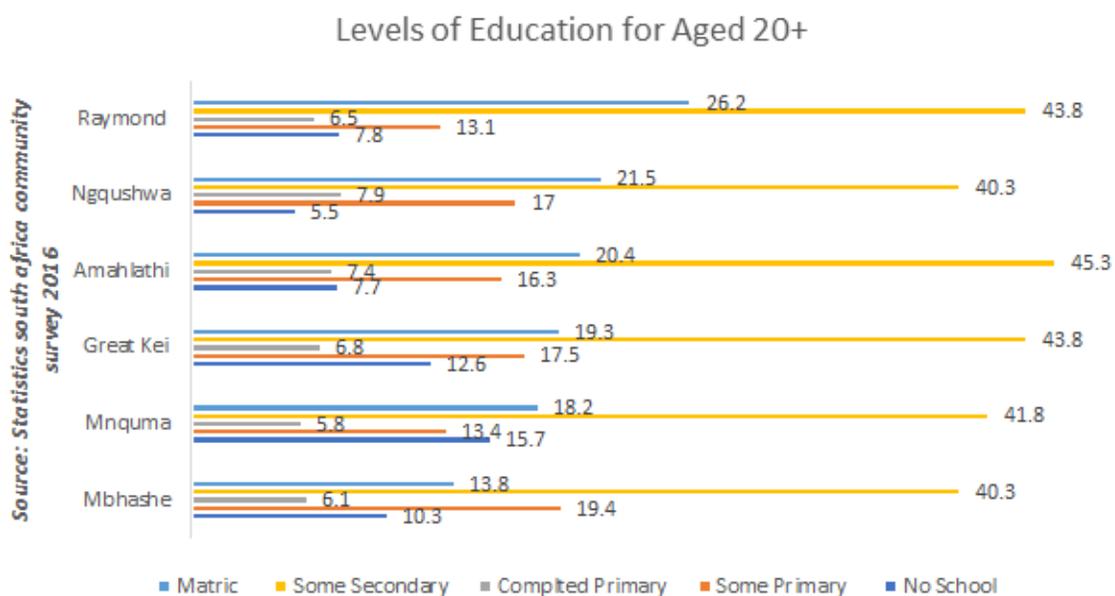


Figure 4. Education levels in Amathole District (2016 figure).
Source: Statistics South Africa Community Survey (2016).

Examples of the programmes that have been initiated as a means of alleviating the food insecurity challenge in the country are:

- (i) Social grants
- (ii) School feeding schemes
- (iii) Public works programmes
- (iv) Agricultural programmes (community-based food garden initiatives)

(v) Land reform and farmer settlement programmes

The Eastern Cape Province, including the AMD, has benefited from these initiatives. However, the implementation of such programmes has its own challenges. Policy implementation often looks different from what was intended (Ayee, 1994: 1) and challenges that were intended to be overcome by the policies go on dominating people's lives. This is attributed to the fact

that policy implementation does not always go as planned and that the services do not reach their intended beneficiaries with the expected quality or quantity. Cloete and de Coning (2012: 178) point to the signs of policy implementation failures as including the misappropriation or non-spending of approved capital budgets, unsatisfactory service delivery and dissatisfied citizen groups in South Africa. Symptoms of failure to conduct adequate policy implementation are community protests against poor public service delivery, which are sometimes violent (Vernekohl, 2009: 12).

Catalytic projects

The ADM has also identified catalytic projects whose implementation has the potential to benefit the inhabitants of the district. These projects include developing small, medium and micro enterprises (SMMEs), cooperatives and incubation centres.

Small, medium and micro enterprise development:

One of the means of eliminating food insecurity in households in the Amathole region is to embrace enterprise development, through SMME development, as a priority area. An indicator of progress on this matter was the development and the adoption of the SMMEs strategic plan by the AMD during the 2009/2010 financial year, which involved numerous programmes and activities intended to guide the implementation of the plan. Such an intervention should assist in developing local economic development in the Amathole region (ADM IDP, 2012: 42).

However, the idea of embracing SMMEs has its own challenges. Three of these are: poor infrastructure (in both urban and rural areas), underdevelopment and poor product quality. The ADM office has set up a database of SMMEs in response to the problem of underdevelopment and has implemented interventions for improving the quality of products. These interventions have included organizing training sessions for product development. For example, a session aimed at benefiting SMMEs and cooperatives was facilitated by the Small Business Enterprise Development Agency (ADM IDP, 2012: 42).

Development of cooperatives: One of the means of improving the socioeconomic development in the Amathole region has been to adopt the concept of cooperative development. According to the ADM IDP (2012: 42), enterprise development through cooperative projects has been identified by the ADM office as a priority area with the potential to make a positive contribution to economic development in the region. As a consequence, the ADM office has provided financial and other support over the past years to cooperative projects. Financial support assists cooperatives with the means to gain start-up capital for cooperative projects. Other

support benefits cooperative project members through initiatives such as training sessions and workshops, for example on marketing, improving product quality and business financial management.

Among the efforts to improve cooperative projects by the ADM office is the conducting of a baseline study on cooperatives. The findings of this study have revealed that these cooperatives operate mostly in the agricultural sector, followed by manufacturing and then by beadwork. These initiatives for the development of cooperative projects operate under the guidance of the “national and provincial legal instruments for cooperatives development” (ADM IDP, 2012: 42). The development of cooperative projects by the ADM office also includes the establishment of local and district cooperative forums.

The goals of the forum include creating a space for sharing information, networking among cooperatives and other stakeholders, and providing better chances of effective and efficient development of cooperative projects in the district. In terms of controlling the forums, the cooperative projects are responsible for facilitating their activities. The intention is that they must be able to take responsibility for and control of the development of individual cooperative projects (ADM IDP, 2012: 42).

Incubation centres: Among the efforts to provide development initiatives has been the development of incubation centres. The goal of embracing the concept of incubation centres is to monitor progress towards the development of SMMEs. The two types of incubation centre that have been developed in the Amathole region so far are epitomized by the Eastern Cape Information and Technology Centre in East London and the Skills Development Centre in Butterworth.

Solutions for producing food security

While the policies of government and the initiatives of the ADM in particular have benefited the inhabitants of the Amathole region, much more needs to be undertaken to reduce food insecurity in the region. Some suggested solutions are outlined below.

Government initiatives

Reducing the poverty that perpetuates food insecurity can be addressed by job creation. Agricultural productivity should be the focus of any job-creation projects. The advantage of embracing small-scale farming is that it generates food and income at the same time. That is, the food that comes from the garden is used to feed household members while some products can be sold in the market. Embracing such an approach results in the creation of food security in many households and the spirit of self-reliance in both

households and communities. Makgetla and Makgetla (2002: 3) write that farming “for own consumption” should be embraced by underprivileged rural households as a strategy for saving income. Other strategies include helping poor households cope with food price increases. Possible solutions to the challenge of infrastructure backlogs include providing social assistance to vulnerable groups and an effective provision of basic services as a means of improving safety nets and the quality of life, job creation and self-employment initiatives. Existing public works programmes can be used and expanded for rural infrastructure development.

Innovative ways of reaching more beneficiaries with a limited budget should be considered. It is proposed that an expanded food security programme be developed, building on implementation in some anti-poverty sites across the province over a three-year programme. The programme should set clear targets for reduction in food insecurity. While the focus here should be on rural development, this programme should be implemented in every township or residential area and in every small town, metro or rural area of the Eastern Cape Province. As part of this programme, vulnerable groups, particularly the elderly and chronically ill, should be given access to nutritional services through the health system and social relief of distress programmes.

The objectives of the national Zero-Hunger programme could be adopted where it is clearly wished that no individual goes to bed hungry. These are to: ensure access to food by poor and vulnerable members of society; improve the food production capacity of households and small farmers; improve the nutritional security of citizens; develop market channels through bulk government procurement of food from the small farming sector; and foster partnerships with relevant stakeholders within the food supply chain.

The expanded provincial food security programme should set clear targets for: household food production; improved access to affordable food; the government food procurement programme; smallholder agricultural production and agro processing; and food security research, monitoring and evaluation.

Potential areas for developing the economy

The economy of the Amathole region needs to be diversified and initiatives that are designed to attract investments in the Amathole region prioritised. The Amathole region has some points of strength that could make a vital contribution to developing the regional economic status. These include natural forests and game reserves, the ocean economy, heritage and tourism potential, and favourable climatic conditions for agricultural potential.

Natural forests and game reserves: The ADM is endowed with many game reserves and natural forests. If

these game reserves and natural forests could be used effectively, they could make a positive contribution to the economy of the region. The outcomes could be the creation of financial incentives and job opportunities (ADM Vision 2030, 2015).

The ocean economy: The ocean economy has been identified by the national government as one of the key drivers of economic growth in the country. It is one of the spheres with the most potential for increasing the declining economy of South Africa (Kim and Maubargne, 2005). The ADM needs to take the responsibility of organizing resources to exploit the ocean economy; this implies placing the ocean economy at the centre of economic growth drivers. In the Amathole region it is necessary for the authorities to pay particular attention to the Wild Coast and the coastal area near Ngqushwa, by investing in infrastructure as a means of gaining access to the coast and mobilizing the private sector to participate in the ocean economy of the region (ADM Vision 2030, 2015).

Heritage and tourism potential: One of the approaches to developing the economy of the region is to make use of the district’s history and its heritage sites. Among the heritage sites are historical sites such as Fort Fordyce, Fort Malan, Fort Beaufort and Fort Hare. The University of Fort Hare, for example, is an educational institution from which the leaders of the country graduated and that produced popular leaders such as Mangosuthu Buthelezi, Oliver Tambo, Robert Mugabe and Nelson Mandela. These sites could be marketed in a manner that goes beyond viewing history to promoting a tourism package that includes hospitality.

Favourable climatic conditions and agricultural potential

While the ADM is blessed with favourable climatic conditions in certain areas, which include areas with a high prevalence of rainfall, the district still needs to invest in irrigation schemes that can ensure that communities eventually move away from subsistence towards commercial agriculture (ADM Vision 2030, 2015).

There are three main rivers in the Mzimvubu to Keiskammahoek Water Management Area (WMA), which supplies the ADM, and the area is largely used for livestock farming and subsistence agriculture, with commercial timber grown in the higher rainfall zones. Climate change caused by emissions of greenhouse gases into the atmosphere is a global concern. Some portions of the ADM have been declared drought-stricken areas since July 2009. The change in weather patterns and regular appearances of the El Nino phenomenon have meant that certain areas in the district experience regular periods of below-normal rainfall conditions and even serious drought conditions. In this regard, special

planning initiatives are required, and alternative water resources need to be explored. In the towns of Bedford and Adelaide, the ADM has begun a groundwater exploration study via funding obtained from the Department of Water Affairs.

As it is likely that in the future there will be more frequent periods of drought caused by climate change, it is deemed wise for the ADM to invest in more sustainable and permanent drought-intervention measures. In this regard the ADM has set aside an amount of R78.55 million from its own funding obtained from its reserves to source alternative water resources in its endeavor to improve water supply security during drought conditions that would also help to mitigate the risk of droughts in the future. Drought intervention measures such as desalination and the establishment of waste water treatment works are planned for implementation as and when required.

Conclusion

With over half of the population of the ADM living in poverty and suffering from food insecurity despite the many programmes and projects that have been initiated by the government, it is important for government authorities in the Amathole district to exploit the opportunities suggested in this paper as a means of countering poverty and developing the economic status of the region. Embracing an approach that focused on economic development should result in the creation of job opportunities and self-employment, with the ultimate aim of alleviating poverty and consequently reducing food insecurity.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

ACKNOWLEDGEMENTS

The authors of this article would like to thank the University of KwaZulu-Natal for the student financial support during their Doctor of Administration degree studies at the university.

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