

Sustainable ocean economy of coastal settlements in South Africa.



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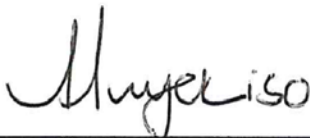
A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Masters of Business Administration.

**Johannesburg, 2018**

**Supervisor: Mr Moroka Mokgoko**

## DECLARATION

I Avela Zukiswa Mayekiso, declare that the research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.



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Signed at Morningside, Johannesburg

On the 16<sup>th</sup> day of October 2017

## **ABSTRACT**

The aim of the study was to assess the feasibility of utilising marine resources in the economic development of coastal communities in the Wild Coast located in the Eastern Cape, South Africa. The study identified marine resources that could be developed to sustain livelihoods through small-scale fishing and ecotourism within the rural coastal settlements. The study assessed diversified approaches to the utilisation of coastal resources and associated benefits in terms of employment creation, income-generation, food security, poverty reduction and health promotion. The Sustainable Livelihood Model was used to assess the feasibility of utilising marine resources in improving household income and reducing poverty. There were 50 participants who participated in the study. Of these, 26 were males (52 percent) and 24 females (48 percent). An interview schedule developed for this study was used to collect information from participants. Participants voluntarily participated in the study. Thematic content analysis was used to analyse data. Descriptive statistics was used to analyse demographic information provided by participants. The results showed that participants were interested and prepared to embark on income-generating projects that they considered feasible in the area. The business ideas that emerged from data analysis are cultural and heritage business, agro-tourism, small-scale farming, establishment of a conservancy, development of horticulture, legalising small-scale fishing and ecotourism, financial resource needs, fish farming, establishment of a fish market, developing accommodation facilities for tourists, infrastructural development, and acquisition of capital equipment for business development. A major recommendation of the study is the need to diversify livelihoods within coastal communities as a modality to build continuous economic activity due to the seasonality of fishing and tourism industries. Future studies could focus on the development of coastal resources for local communities in South Africa.

Keywords: sustainability, income-generation, small-scale fishing, ecotourism

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# CHAPTER 1

## INTRODUCTION

### 1.1. Purpose of the study

The aim of the study is to assess the feasibility of utilizing marine resources in the economic development of coastal communities in the Eastern Cape. The Sustainable Livelihood Model by United Kingdom's Department for International Development (DFID) will be used to assess the feasibility of utilizing marine resources profitably and to reduce poverty. The study will identify marine resources that would be used in developing a sustainable and diversified economic model with emphasis on small scale fishing and tourism within the rural coastal settlements in the Wild Coast, Eastern Cape, South Africa. The purpose of the model is to establish employment opportunities, income generation, and food and health security with a view to alleviating poverty within the area.

Recommendations based on this model on industry participation will look at local available marine resources and human skill sets. It will address core elements of the South African National Development Plan's 2030 vision by eliminating poverty through economic growth and development.

It will contribute knowledge on the assessment of community resources in establishing and sustaining new industries (ocean economy).

On completion of the study an article will be written for the Journal of Ocean and Coastal Management.

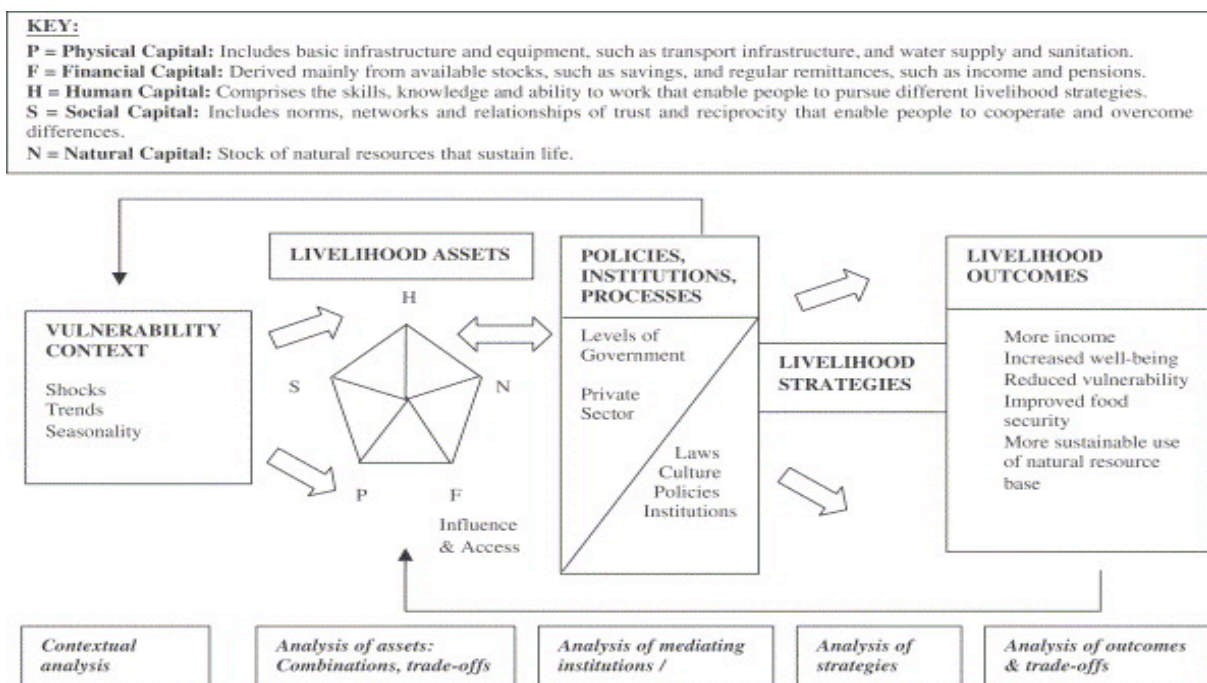
## 1.2. Context of the study

The Eastern Cape Province has a population of 7 million that accounts for 13 percent of South Africa's population in 2016 (Stats SA, 2016). Stats SA (2016) reported that only 17 percent of the working age population is employed in the rural areas. This is below the national average of 40 percent, as most of the economic activities in the province are based on the automotive industry located in the larger (East London and Port Elizabeth) cities (Tips.org, 2016).

Scarcity of employment in the province has led to the migration of employable individuals from the rural areas to the metropolitan areas and other provinces to seek work. Despite the migration trend, national and provincial employment figures are low because of major retrenchments in the mining sector following the Global financial crisis of 2008 and a drop-in commodity prices (Eastern Cape government, 2016).

To address the increasing levels of unemployment, the National Development Plan 2030 vision is set to promote economic growth and development to eliminate poverty and social inequality (NDP, 2011). Special focus in the plan has been put on the development of rural economies. In view of this vision, the Office of the Presidency embarked on a strategy (Operation Phakisa) as it realized that to stimulate economic growth and job creation, they had to think beyond the ecological limitations of land resources. The realization was that economic growth was to be achieved through the establishment of new industries. The value of the ocean as an economic resource has become prominent within the global economy (Zhao, Hynes, & He, 2014). Various coastal countries have embarked on legislation to develop and protect their marine resources (Colgan, 2003). Operation Phakisa operates within the custody of the Department of Environmental Affairs (DEA) and is designed to implement new growth areas and expand the potential of existing industries within the ocean economy.

The African Union (AU) through its Agenda 2063, has also added its support to the economic development plans of the ocean economy by the adoption of the African Integrated Maritime Strategy for its coastal located countries (Spamer, 2015). The African Union reckons that Africa’s development of marine infrastructure would be followed by economic growth for the continent and this would alleviate poverty and dependence on donor aid to sustain the lives of most households. The framework has set engagements to strengthen cooperation within the continent in the efficient usage and self-governance of marine resource (Spamer, 2015). It is in this global economy of marine resources that rural coastal communities could be empowered to create sustainable development (UN Brundtland Commission, 1987).



**Figure1. Sustainable livelihood framework. (Glavovic & Boonzaier, 2007)**

The sustainable livelihood framework described by Allison et al (2001) can be broken down into six categories: assets (natural, human, physical, financial and social capital), the activities and access to these (mediated through institutions and social relations) that then determine the actual living gained by an individual or household.

The entry point of this framework is through the assets at the disposal of the individual where physical capital refers to produced or economic capital, human capital entailing people, health and education, financial capital looks at available savings and credit for supporting the sustainability of the livelihood, natural capital evaluates the resources that can be used for economic development such as land, ocean and fish stocks etc. and social capital that looks at an individual's social network that can be called upon to assist in their development plans. Access to assets and activities are enabled or hindered through internal factors stipulated in organizational (government and local authority) policies and external factors that are referred to as vulnerability factors as they are out of control of households (trends: global economy, macroeconomic policies and shocks: natural and unnatural disasters).

Assets are seen to allow livelihood strategies to be constructed through activities that can be based on natural (fishing, livestock and, cultivation of food) and non – natural resources (rural manufacturing and services). The outcomes of this framework are the attainment of livelihood (income level and stability) and environmental sustainability (water, land and soil quality, fish stocks and biodiversity).

The business gap that this study seeks to bridge is that fishing and ecotourism are not considered as sustainable business ventures by communities along the Wild Coast. Fishing activities are done for subsistence purposes and this study intends to develop a sustainable business model to improve household income and food resources of local communities. Tourism on the other hand is not something that the rural communities have been readily exposed to. The economic potential of the coastline provides a case for the development of eco-tourism business in the area.

### **1.3 Problem statement**

Rural coastal communities along the Wild Coast are experiencing high levels of poverty and unemployment. These levels of poverty can be attributed to the absence of industries, jobs, high illiteracy rates and lack of access to infrastructure. As a result, these communities depend on social grants for their livelihoods and do not rely on the available natural resources. The reliance on social grants creates a dependency on the government and deprives the members of the community of the opportunity to be self-sustainable. It is, therefore, critical that these communities identify and utilise their natural resources and other assets to create jobs, alleviate poverty and promote local economic development which eventually may lead to sustainable development and community empowerment. The ocean or the coast line provides great opportunities for the economic development of the rural coastal communities. They need knowledge and skills to benefit from the community assets. Due to high levels of illiteracy these communities have not benefited optimally from their natural resources.

The Wild Coast is well known for the beauty of the coastline that is natural and pristine. The study aims to explore avenues of community development through tourism and subsistence fishing.

The geographic terrain of the wild coast stretches from the Great Kei River in the south (Figure 2) and the Umtamvuma River in the north. It has a warm, humid climate with an average rainfall of 1100mm per annum. Subtropical and evergreen forests with endemic plant species make up the coastal vegetation. Apart from the observable beauty of the flora they are also used in pharmaceutical (traditional/homeopathic medicine) and craft manufacturing industries (Kepe, 2014). It is this unique mixture of coastal flora that is only located in 235 other places in the world and the local culture that sets this region apart from other destinations.



**Figure 2. Wild Coast, Eastern Cape, South Africa**

#### **1.4 Research questions**

The study sought to provide answers to the following questions:

1. What is the feasibility of tourism and the marine industry as sources of local economic development in coastal rural communities?
2. Which local resources and assets can be leveraged towards local economic development?
3. What strategies can be implemented for community development?

#### **1.5 Main aims of the study**

The main aims of the study were:

1. To improve household incomes through the development of fishing and ecotourism activities in the Wild Coast of the Eastern Cape Province.
2. To assess the feasibility of the business model in a community whose livelihood depends on the ocean along the Wild Coast.

## **1.6 Significance of the study**

Implementation of Operation Phakisa within the South African context can be used to develop the economy within rural coastal areas. The Sustainable Livelihood Model would be applied in the context of Operation Phakisa, a management model which is particularly used to speed up project delivery in South Africa. The study looks at the availability of natural resources to address poverty and benefit the rural population. Tourism and fishing industries will be analyzed as to how they can best fit the local development plans. The study provides guidance on the uplifting of the livelihoods of communities that currently depend on traditional subsistence fishing and government grants along the Wild Coast.

## **1.7 Delimitations of the study**

The study focused on the Wild Coast population and not the entire fishing and tourism business in the Eastern Cape. The results obtained from this population sample were generalised to the coastal regions and not to the general fishing industry of South Africa. The data collected from the study were analysed qualitatively - although descriptive statistics was employed to analyse frequency data.

## **1.8 Definition of terms**

The terms that are central to the study are sustainable development, ecotourism and subsistence fishing.

Sustainable development refers to the long- term stability of the economy and environment which is only achievable through the integration and acknowledgement of economic, environmental and social concerns throughout the decision-making process. This ensures that the development meets the needs of today's society without compromising the needs of future generations (Redclift, 2005).

Ecotourism destinations have to fulfill three criteria: predominantly have nature-based attractions, tourist interaction with the attractions are based on learning or education and that the experience and management of the product offering should follow the principles of cultural, ecological and economic sustainability (Weaver & Lawton, 2007).

Subsistence fishing refers to `fishing other than sport fishing that is carried out primarily to feed the family and relatives of the person doing the fishing. Generally, it also implies the use of low technology artisanal fishing techniques and is carried out by people who are very poor. The fishing is often part of a life that also relies on small-scale agriculture and other sources of income, and may include some selling of the fish (World Fisheries Trust, 2008).

## **1.9 Assumptions of the study**

It is assumed that previous studies looked at subsistence fishing without looking at business models for sustainable development of the small-scale business enterprises to provide food security and reduce poverty. The majority of studies have focused on the managerial aspect of ecological/conservation system (Béné et al., 2016) of subsistence fishing.

## **1.10 Layout of the report**

Chapter 2 will present the literature review.

Chapter 3 presents research methodology applied for data collection and analysis.

Chapter 4 presents the results obtained from the study.

In Chapter 5, the results obtained in the study are discussed.

The final chapter focuses on the summary of the findings, conclusions, limitations and recommendations.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This literature review was informed by the Sustainable Livelihood that was presented in Figure 1 in Chapter 1. This chapter will provide a critical review of the ocean economy, subsistence fishing, ecotourism in the alleviation of poverty. The literature review is underpinned by Operation Phakisa which is one of the South African governments interventions towards economic development.

#### 2.2 Role of the Ocean Economy in Poverty Alleviation

Poverty is one of the main obstacles that is faced by the world's population predisposing them to a variety of social and health related hazards. Absolute or extreme poverty describes households who lack basic needs for survival such as shelter, food, health care clean water and sanitation (World Bank, 2015). Those in modest poverty have their basic needs met. Relative poverty on the other hand requires that the household income is just below the average national income. It is estimated that half of South Africa's population lives below relative poverty (World Bank, 2015). Poverty and inequality in South Africa still have deep-rooted racial, gender and spatial dimensions. It is predominately in Black Africans, greater in women than men and concentrated in rural areas. Poverty in South Africa is often paired with inequality, unemployment and poor economic growth. It is these levels of inequality that place poverty levels in this country above other middle-income countries with comparable per capita GDP.

(Inchauste, Maboshe, & Purfield, 2015) in the World Bank report on the Fiscal distribution in South Africa make an example using the international poverty line of US \$2.50 per day, feature South Africa's poverty rate at 36% compared to Costa Rica's 4% and Brazil at 11 % (World Bank, 2015).

Exploration of the ocean economy can provide an opportunity to use natural resources to improve the socioeconomic well-being of South Africa's poor. According to the National Environmental Management of the Ocean, White Paper (2013) the ocean borders The Republic of South Africa on the west, east and south covering a coastline of 3924 km. The extent of its EEZ (Exclusive Economic Zone) is 1553 000 square kilometers which is larger than its inland parameters. South Africa displays high levels of biodiversity with over 10 000 species of marine plants and animals which covers approximately 15 percent of global marine species biodiversity. The marine environment along the West Coast is cold and has low species diversity but large populations of some species. As a result of its high productivity of fish, the West Coast allows for large volumes of offshore commercial fishing and inshore subsistence and recreational fishing.

The East Coast is moist becoming more humid northwards has large biodiversity of species but lacks the volume of the West Coast and is suitable for subsistence and recreational fishing. It is only suitable for offshore commercial prawn fishing.

The Ocean Economy also known as the blue or maritime economy is about inclusive sustainable development practices that utilize natural ocean resources for socioeconomic growth (Colgan, 2003). Sustainability is defined as ecosystem usage that preserves the natural habit, whilst growing economies (measured by industry, sector and national GDP figures) and improving social conditions through job creation, income generation, food security and health (Meyer, 2015). Within the African continent the SIDS (African Small Island Developing States) have been at the forefront of the development agenda of the maritime strategy (Spamer, 2015), South Africa has embarked on its own development plans through its Operation Phakisa project.

The ocean economy industry is a key new growth for the country. Operation Phakisa is a Big Fast Result methodology borrowed from the observation of countries Malaysia and China. It involves the bringing together of key stakeholders in planning and implementing development goals (Operation Phakisa, 2015). Department of

Environmental Affairs has identified that South Africa's ocean economic potential can contribute 4 percent to GDP and create 1 million jobs by 2033 (Department of Environmental Affairs, 2015). Ocean economy industries are those that use marine resources as a major part of their product (Parker & Khare, 2005). The South African government has subdivided these industries into 9 categories in line with other coastal countries like the USA and Canada; marine transport and manufacturing, tourism, offshore oil and gas, construction, renewable energy, fisheries and aquaculture, communication, desalination and marine protection services.

South Africa's coastal provinces (Eastern Cape, Western Cape and Kwazulu Natal) are selected to drive the sector (Department of Environmental Affairs, 2014). The primary industry targets have been subdivided into four start-ups 'laboratory' initiatives estimated to generate R129-177 billion by 2033 (Maritimesummit, 2015).

The first of the four-identified industries are Marine Transport and Manufacturing which is expected to create 30 -60 hundred thousand jobs and contribute R14-23 billion to GDP (Operation Phakisa, 2015). Aquaculture is said to have potential value of R1.5 billion and create 5,500 direct jobs (Operation Phakisa, 2015). Oil and gas offshore exploration have been identified to increase GDP significantly after the exploration costs have been deducted. Marine Protection services and Ocean governance has been designed to protect South Africa's marine resources (Department of Environmental Affairs, 2015).

The Eastern Cape Ocean economy agenda has been set within the maritime, aquaculture and tourism industries. A provincial maritime summit held in 2015 was used to explain the geographic locations of each of these projects and they were: The Marine Transport and Manufacturing sectors are to be in Port Elizabeth port, Ngqura, Coega and East London. The Port Elizabeth port is set aside as an engineering hub to produce boats and yachts and for the movement of clean products like fruit, vegetables. A waterfront tourist attraction zone with yachts shops, hotels and restaurants is also on the development path. Ngqura port is specializing in ship repair. Coega port is to be the only port where manganese is to be moved through South Africa. Port of East London has been directed towards refurbishment of tug boats.

The Oil and Gas industry is also centered within these ports. Port of Ngqura's oil refinery capacity to be expanded, fuel storage facilities at Coega and liquefied natural gas terminal developed. The first phase of coastal gas exploration has already been awarded and much anticipated value to be realized for the Eastern Cape Province. The Eastern Cape aquaculture industry is already on the way with four development zones approved (Port Elizabeth, East London Industrial development zone, Coega and Hamburg and Qolorha). A national development fund has also been established to fund new and old ventures. The last major industry is Marine Protection Services and Ocean Governance run through the national Department of Environmental Affairs to monitor and enforce the conservation of the coastal biodiversity and the sustainable usage of marine resources.

The Eastern Cape will benefit from the employment of locals in the protection of their communal coastal areas. The initial focus of Operation Phakisa appears to be within the metropolitan areas that already display the highest levels of employment in the Eastern Cape. Marine conservation services are the most rurally located and this is where the disadvantaged communities are to benefit in the first phase.

Tourism and recreation have been for the smaller coastal areas (Port St Johns – Wild Coast, Port Alfred, and Cape St Francis) where small harbours are to be developed for cruise ship attraction. Plans to market the Wild Coast waters for the annual sardine migration festival is believed to be well positioned for ecotourism (Maritimesummit, 2015).

This paper will predominately focus on the rural development of tourism and subsistence fishing as a means of utilizing available marine resources for economic development.

## 2.3 Subsistence Fishing

Ocean economy industries can thus be evaluated according to their revenue streams and employment creation. Marine industries make up a large portion of the ocean economy and their impact on GDP can be measured through direct participation in fisheries and other value-add industries like net manufacturing, fish companies and agriculture (Operation Phakisa, 2015). Marine fisheries contribute direct (primary) and indirect (secondary and ancillary sectors) fisheries jobs. The primary sector is concerned with commercial (primary goal for fishing is to sell fish at high capacities), artisanal (primary aim of catching fish is to make an income from the fish and left-over fish used for food) and subsistence fishing (primary aim for catching fish is food and the excess sold). The secondary sector changes primary goods into finished products by processing, packaging and distribution and the ancillary sector provides public services like equipment repair, wholesale and trade (Teh & Sumaila, 2013).

Economic multiplier effect has been calculated for fishing as 1.82 meaning that for every dollar generated directly in the marine industry there is 82 cents generated through associated industries. Offshore energy industry had the largest multiplier (Jacobsen, Lester, & Halpern, 2014). Changes in commercial fishing influence the manufacturing industry through reduced demand for equipment, boats. Further economic effects are felt through the change in the spending habits of the employees because of retrenchment.

Over 120 million people worldwide are involved in activities that relate to fishing (capture, processing and sale of fish) and of these 95 percent are found in developing countries (FAO, 2000 cited by (Allison & Ellis, 2001). In 2000, it was estimated that 28,000 households depended on near shore food supply and that there were 30,000 subsistence fishers in South African (Clark, Hauck, Harris, Salo, & Russell, 2002), with greater of resources for income in the west and south coasts in comparison with the main aim being for food in the east coast.

The various functions of coastal areas have focused on ecological preservation rather than their effect on the socioeconomic status of surrounding communities such as revenue creation by various industries, income and employment (Béné et al., 2016; Ellis & Freeman, 2004). A wealth-based approach to fishing has been promoted within the African continent by the African Union and NEPAD (New Partnerships for Africa's Development) aiming to create wealth through fisheries by turning the multiplier effect of other industry participation into an economic surplus that drives economic growth and alleviating poverty by securing job creation. (Merle Sowman, Sunde, Raemaekers, & Schultz, 2014). This approach encourages the development of small and medium businesses that can play a role in the economic development in rural areas.

Marine quota planning has emerged because of the increased competition to use the ocean resources (Jacobsen et al., 2014). This was developed to prevent unnecessary pressure on fish reserves to ensure their survival for future generations. Rights and access to marine resources still favor commercial fishing interests (Sowman et al. 2014) even though small scale fisheries contribute to poverty alleviation and economic development.

Education of rural communities on regional quotas can allow them to reap benefits either as individuals or grouped co-operations that can supply local markets and larger traders (Visbeck et al., 2014). Reports from 136 maritime countries have demonstrated that the small – scale fishers represent a significant contribution to employment within rural coastal communities (Teh & Sumaila, 2013). The ocean provides an alleviating mechanism from poverty through fishing as a source of food, nutrition and income. In the world food regimen, fish products from captured fish and aquaculture represent 10 percent of global agricultural exports, exceeding any other animal source food (Béné et al., 2016). The nutritional value of food is very important among the poor and food sources that contain a wide range of nutrients are most beneficial.

It was reported in 2010 that 22 of the 30 countries where fish contribute greater than a third of animal protein consumption originated from food scarce and low income countries (Béné et al., 2016). The authors explain that fish have high bioavailability of essential nutrients in poly unsaturated fats and micronutrients (vitamin D, vitamin E, iron, zinc, selenium, calcium and iodine) which are essential for human cognitive function.

Increasing rural fishing quotas will increase marine employment in more than one industry. Changes within the fishing industry has a multiplier effect through its cascading effect on the economy. It is essential to open employment opportunities for the youth through income generating projects that contribute to the development of the gross domestic product of South Africa. Industry choice determinants can be chosen through identification of skill- sets availability and location dynamics. It is with this view that the sustainable livelihood model (Glavovic & Boonzaier, 2007) would be fitting for the South African fishing industry. The model looks at the capabilities of the local community which are classified as the resources (ocean), claims and access (fishing rights) which they require to sustain themselves. The capabilities are often threatened by controllable and uncontrollable circumstances (government policies, economic recessions, ecological damage to fishing sites).

Livelihoods are sustainable if forces are directed at preserving the capabilities for the present and future generations (Figure 1). South Africa's Operation Phakisa through the support of the government departments and local communities can drive the development of entrepreneurial hubs among the Wild Coast, where small scale businesses can be derived from subsistence fishing.

## **2.4 Ecotourism**

Ecotourism is a value based orientated tourism field that encompasses conservation, education and local community benefits. It has three core criteria: attractions should be nature based, tourists interact with attractions in a manner that supports learning and education and lastly the experiences should adhere to socio-cultural, ecological

and economic sustainability (Weaver & Lawton, 2007). The environmentally orientated tourism segments have been growing at a high rate according to the World Tourism Organization (Hassan, 2000) with ecotourism growing between 25 – 35 percent per annum and cultural tourism by 10 - 15 percent as compared to a tourism average of 4 – 5 percent. These figures show that the development of rural areas through tourism can create a sustainable economic environment.

The aim of sustainable tourism development is to leverage on the unique offering of a region and develop the local economy in conjunction with the community. Sustainability addresses the need for stable and consistent income generation viewed through the interdependence of economic, sociocultural and environmental wellbeing (Crouch & Ritchie, 1999).

Market competitiveness and sustainable development are linked by the uniqueness of a destination (Hassan, 2000) When the environment is the main attraction to an area it suffices that it must be protected to generate continuous revenue.

## **2.5 Destination competition**

The topic of destination competitiveness has been explored by various authors (Crouch & Ritchie, 1999; (Dwyer, Mellor, Livaic, Edwards, & Kim, 2004; Enright & Newton, 2004; Hassan, 2000), where visitors are said to purchase an experience which comprises the climate, scenery and culture. The advantages of destinations are divided into comparative and competitive natures. The accurate mix and emphasis of these can result in the special offering of a destination. Destinations that have multiple offerings such as wildlife, leisure activities, cultural excursion, fishing expeditions can retrieve greater tourist expenditure. It is this model of maximum economic involvement that is required to boost economic growth in the wild coast region.

## 2.6 Comparative Resources

Comparative features relate to available naturally occurring and created resources. Natural resources can be renewable and non-renewable. Non-renewable resources in the wild coast describe the unique flora found in ecological protected areas that can be used to market the region. Figure 3 below presents ecologically protected areas in the Wild Coast.



**Figure 3. Ecologically protected areas on the Wild Coast**

Care should be taken when creating resource infrastructure to preserve non-renewable resources. Operation Phakisa and projects by the Departments of Rural Development and Land Reform, Trade and Industry, Tourism and Environmental Affairs have identified infrastructure developments (water supply, sanitation, transportation) that will improve the access and living conditions within the rural areas. These projects will not only improve the tourism industry but also create employment in the construction and maintenance of the infrastructure by the local population.

## **2.7 Destination advantage**

Competitive advantage looks at the efficient and effective use of the comparative resources. Motivators for visitation to an area have been linked to the geographic nature which relates to the aesthetic appeal of the destination (landscape, climate), the culture of the local people (customs, attire, food, special events and festivals), and leisure activities (water and land) available.

To create value these activities would have to incorporate the physiography and culture (Crouch & Ritchie, 1999). Marketing of these offerings will create a competitive advantage for the wild coast. The advantage of using these unique features is that a comparative advantage can be created ensuring therefore a long-term appeal to target travel customers and securing thereby a sustainable business.

## **2.8 Conclusion**

The introduction of these two industries within the Willowvale, Wild Coast will be able to foster public and private partnership that can foster entrepreneurship ventures. Entrepreneurship is said to provide a new approach to fighting poverty and stimulating economic growth among the poor (Hassan, 2000). Business ventures do not only provide income empowerment for the business owner but also for the employees and suppliers thus creating a multiplier effect in the economy.

## **CHAPTER 3**

### **RESEARH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the methodology employed in the present study. It includes a description of the study area, the research design, the procedure followed as well as aspects of validity and reliability and concludes with a discussion on issues of ethical consideration.

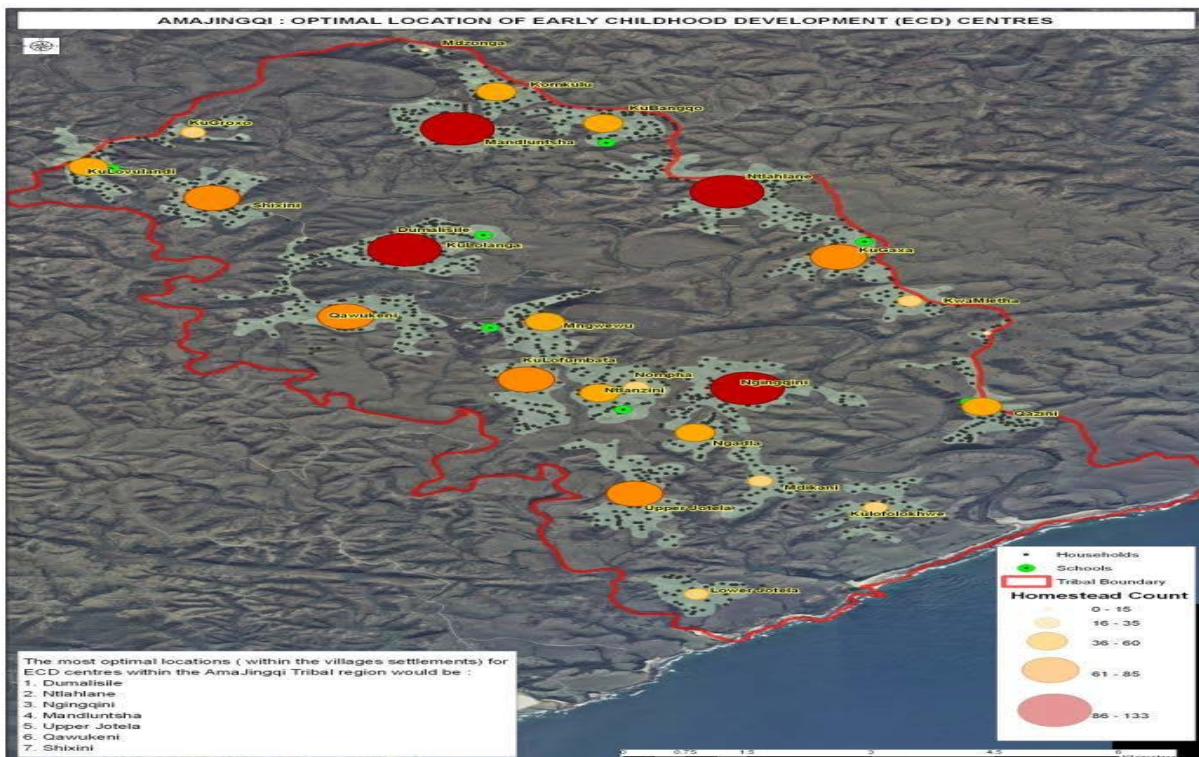
#### **3.2 Research design**

The study adopted both a qualitative and quantitative research design. The approach was informed by the aims of the study. The qualitative design allowed for the assessment of the themes that emanated from the study. The research design was suitable to the Sustainable Livelihood model as participants' views on the feasibility of the business model were recorded verbatim. The quantitative design enabled the application of descriptive statistical analysis of data in order to determine the feasibility of utilising marine resources in the economic development of rural coastal communities in the Eastern Cape.

#### **3.3 Study area**

Amajingqi traditional council is made up of 22 villages within the Mbashe Local Municipality of the Amatole district in the Eastern Cape. It spans over an area of 161.57km<sup>2</sup>. It borders the eastern part as the R345 road, in the west, the Jujura River, northwards, the fusion of the Shixini and Jujura river valleys and the ocean in the southern region.

A Stats SA (2011) community survey revealed a total population of 11,441 thousand. It has an estimated number of 3500 households. Of this figure, 45 percent of the population is under the age of 15, 48 percent between the ages of 16 and 65 years and 6 percent over the age of 65 years. The survey revealed low levels of education among those aged 20 years and older. Only 7.61 percent of the total population had completed Matric (Grade 12) and of those only 1.1 percent had a postgraduate qualification. The level of employment was low as only 8 percent of the people were economically active and 89 percent of the households were living on an income of less than R1600.00 per month. The area is covered by biodiverse vegetation ranging from forestry to savannah forming part of one of the critical areas of the Eastern Cape Biodiversity Conservation Plan. The climate is hot to sub-arid inland and humid to subtropical at the coast with maximum temperatures between 25 and 27 degrees in summer.



**Figure 4. Villages making up the Amajingqi Traditional Council (*Amajingqi Development Master Plan 2012*)**

According to figure 4, the Amajingqi Traditional Council from the sample of the present study was drawn is made up of 22 villages. The range in size from 16 households to 133 households. There are five primary schools and one high school.



**Figure 5. Shixini River Mouth (Source: Amajingqi Development Master Plan 2012)**

The Shixini River Mouth as depicted in figure 5 shows the proximity of this area to the ocean. Thereby highlighting the importance of the ocean in the economic development of the area.

One of the factors impacting negatively on the development of this area is the poor road infrastructure comprising of gravel roads that are not maintained. As a result access to the area is limited. Villagers have to walk long distances to the main road to attain public means of transport to the neighboring town, Willowvale. Figure 6 depicts the road from the Shixini Tribal Authority towards the ocean.



**Figure 6. Gravel road with bridge (Source: Amajingqi Development Master Plan 2012)**

### **3.4 Sample and sampling method**

According to the 2011 Census the area from which the sample of the present study was going to be drawn constituted an area of 12.3 square kilometres and occupied by a population of 2522 (205.02 per square kilometre). This area consisted of 802 (65.20 per square kilometre) households (Stats SA, 2011). As a result a sample size of 50 participants was considered adequate for the purpose of the study.

A modified probability (nonprobability) design was used for the sampling which was characterized by a stratified method in the first stage (stratified by village) and a volunteer method in the second stage.

A modified probability sample is based on two distinguishing features: the inability to specify the probability of selection of each element to be included in the study sample and the possibility of guaranteeing that every element in the population has a non-

zero probability of inclusion (Cooper & Greenaway, 2015; Levy & Lemeshow, 2013). Participants were selected using a purposeful random approach from villagers residing in the Amajingqi tribal authority, which is located along the Eastern Cape Wild Coast. Purposeful sampling involves the use of participants based on their anticipated relevance and richness of the information they will provide in relation to the research questions in the study (Gentles, Charles, Ploeg, & McKibbon, 2015). Eligibility for participating in the study included being a permanent resident of the area, an adult and ability to understand the purpose of the study, the instructions and questions asked.

The chief of the tribal authority invited 10 village elders who were the first to be briefed on the purpose of the study and be able to gather participants from the different villages. This was followed by interviews with each of the village elders. All the village elders from the participating area were invited to attend making this a probability design in that everyone could get involved.

The interviews were conducted over a period of two days. The first session of interviews had 10 participants.

On completion of the first set of interviews, due to the poor road infrastructure, lack of transport and the long distance of some villages from the chief's residence, a message was sent by the elders to the different villages for people to convene at specific locations to meet for the second stage interviews. In the second phase, a 100% sampling rate of the villages corresponding to the number of volunteers that the village elders reached was attained and were willing to participate. The people who were invited and were available at the time for the interviews arrived at the meeting points. There were 40 people interviewed in the second phase, bringing the total number of participants to 50.

### **3.5 Data collection**

Data for the present study was collected using an interview schedule. This method of data collection was deemed appropriate for the purposes of the study as it allowed the researcher the opportunity to clarify questions and to probe for additional information. The researcher was able to translate the questions into isiXhosa which is her mother tongue as well as that of the participants. The interview schedule consisted of both closed and open ended questions. It consisted of 25 questions and it took between 30-45 minutes per participant to administer.

The interview schedule consisted of five sections. Section A dealt with the demographical details pertaining to age, gender, level of education, marital status, employment status, number of members employed in household, industry employed in, monthly household income and disability; Section B explored information pertaining to subsistence fishing; Section C focused on information on ecotourism; Section D sought information on challenges that would require to be addressed to support marine resource activity (ecotourism, subsistence fishing) and; Section E focused on recommendations (See Appendix 1 for the Research Instrument).

### **3.6 Data analysis**

Data were reported using random number identification of participants in all cases. SAS Student software was used for a visual quantitative analysis of the survey responses describing percentages of occurrence. Pie and doughnut charts were generated using the PROC GCHART procedure. Qualitative analysis was performed using thematic content analysis following (Vaismoradi, Turunen, & Bondas, 2013) and (Braun & Clarke, 2006) which included familiarization with the data, generating codes, searching for themes, defining and naming themes, reviewing themes and producing the report along those themes. Generalization of results was based on reliability and knowledge displayed by the respondents on the issues raised.

For example, in terms of income, the respondents identified that many people derive their income from the government grant initiative which is available in all provinces of South Africa. Reliability of information provided by participants was compared to data provided by StatsSA, Community Survey (2016). The probabilistic data on the population provides a means of verifying the reliability and accuracy of information obtained in this study.

This essentially means that the bias that would have been introduced by obtaining the general view of everyone in the population is reduced when other sources are used to verify the data.

Some of the missing information or inadequate information in classified data is provided or made clearer by participants because their responses accurately highlighted a substantial coverage of the information on community income and income generating activities. The combination of StatsSA community data and data from other surveys on household income strengthened the generalization of results obtained in this study. The information obtained from respondents guided the decisions of the analysis and it was weighted appropriately in the recommendations of the study. The weighting of responses or information from respondents was done qualitatively through the triangulation procedure instead of using the Bayesian approach that is used in quantitative analysis (Wang, Rothschild, Goel, & Gelman, 2015).

### **3.7 Validity and Reliability**

The content validity of the interview schedule was established through the selection of questions that pertained to the aims of the study. The researcher developed the interview schedule after a thorough literature review. Validity of the interview schedule was established by asking 3 experts on qualitative data analysis techniques to look at the content of the interview schedule and assess the relevance of the items for the purpose of the study. Reliability in a qualitative research design was established through trustworthiness of the data obtained.

Trustworthiness in this proposed study was established through the assessment of the data obtained for credibility, transferability, dependability and confirmability.

### **3.8 Ethical considerations**

Ethical clearance to conduct the study was obtained from the University of the Witwatersrand. Permission to recruit participants was obtained from the chief of the tribal authority. The participants were invited by the researcher to participate in the study. They were informed that participation was voluntary and that they could withdraw from the study at any without any negative consequences. They were assured of privacy and anonymity. Permission to use the tape recorder was also obtained from the participants. They were informed that the use of the tape recorder would assist the researcher to focus on the interview. The participants were further informed that the results of the study would be made available to the tribal authority.

All the participants signed informed consent for the interview and the recording (See Appendices 2 and 3).

### **3.9 Conclusion**

In this chapter, the research methodology adopted was discussed and reference was made to the interview schedule as the tool that was applied to collect the data. Ethical considerations relevant for this type of research were discussed.

## CHAPTER 4

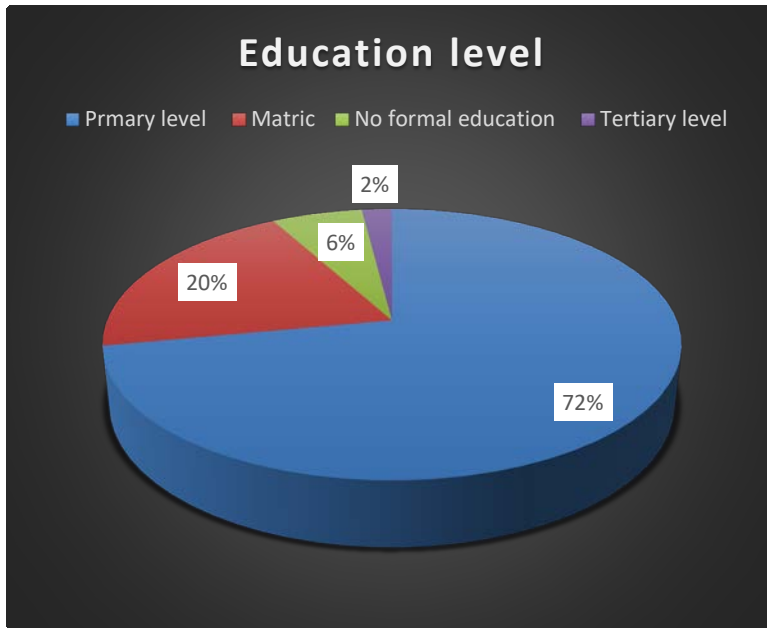
### RESULTS

#### 4.1. Introduction

The results are presented in this chapter in the following order: firstly, the demographics of the study population, followed by the involvement and challenges experienced in fishing industry, participation and challenges encountered in the tourism sector, business strategy recommendations and lastly the themes generated through the interviews.

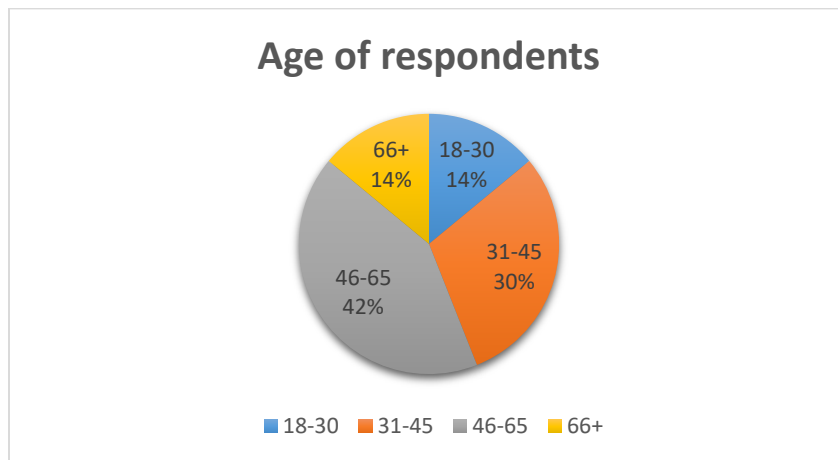
#### 4.2. Demographics of the participants

The sample of the present study consisted of 50 participants. There were 26 males and 24 females. They were drawn from the following villages: Kwitshi (22.92 percent), Lower Jotela (16.67 percent), Folokwe (16.67 percent), Upper Jotela (12.50 percent), Vulanda (8.33 percent), Ngandla (6.25 percent) and the remaining villages Fumbata, Mtshyelweni, Ndlelibanzi, Ngqungqumbe, Mdlakane, Mandlutsha, Gawela and Nompha (16.67 percent).



**Figure 7. Education level**

According to Figure 7, most of the participants had received some form of schooling, with 72 percent reaching primary level, 20 percent achieving a grade 12 pass. It is interesting to note that 2 percent attained tertiary education. Six percent of the sample had no formal education.

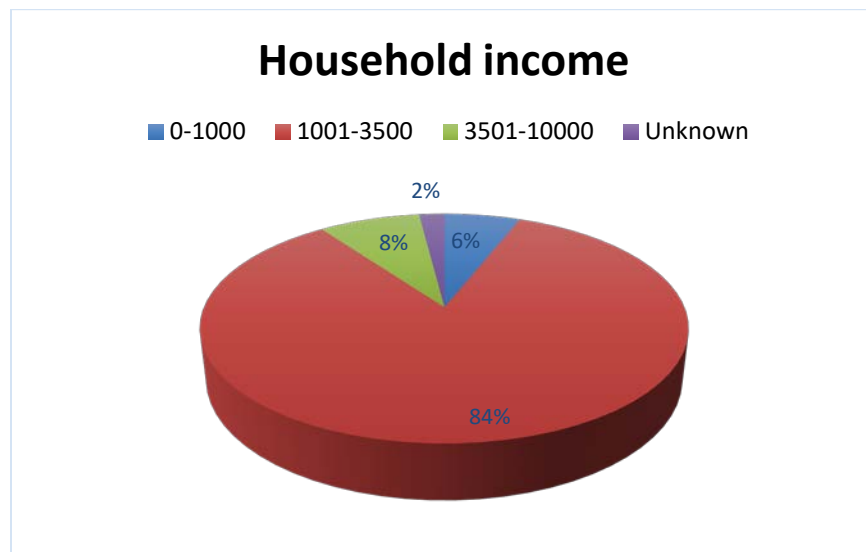


**Figure 8. Age of respondents**

According to Figure 8 the majority of the sample (42%) were between 46 and 65 years. It is interesting to note that the same percent (14%) of the sample was made up of individuals between 18 and 30 years and over 66 years.

86 percent of the participants were eligible for employment as they were between the ages of 18 and 65. Of these only half were employed, reporting a high level of unemployment of 36 percent, which is above the national unemployment rate of 27.7 percent (Stats SA, June 2017).

Three participants (6 percent) reported disabilities pertaining to visual loss, finger amputation and back injury. The most common employment industry was farming (55.56 percent) followed by law enforcement (14.81 percent). Household income was at a maximum between R3501-R10 000.00 accounting for 8 percent of those interviewed with the majority (84 percent) receiving a monthly income between R1000-R3500.00 (illustration figure 9).



**Figure 9. Household income**

### 4.3 Fishing section

Fifty percent of the respondents reported to be involved in some form of fishing. Those who were not involved in fishing, only 14 knew of other people that were involved in fishing. The majority (38 percent) earned between R2501 –R6000.00 per month, thirty six percent receiving up to R2500 and only two percent earning a leaving above R6000 from fishing.

Fishing is an activity that is carried out throughout the year but the variety of fish caught vary per season. There were 32 respondents who regarded fishing as a business.

Fishing was identified as a primary income for 33 percent of those involved, with 54 percent using it to supplement other income and 11 percent reported that they only participated in fishing activity for subsistence.

The most common fish caught by the respondents were Cobb and Crab both at 24 percent respectively, followed by Hake at 16 percent and mussels, 14 percent. These findings were similar to fishing patterns within small fishing communities in the west coast where the traditional mixed resource harvest showed the presence of mussels, rock lobster, line-fish, crab and oysters available to local communities (M Sowman et al., 2013).

There was a perception that the Department of Environmental Affairs could increase their efforts in educating the people along the coast on the benefits of developing industries along the coast and giving skills on how to pursue such endeavors. This was reflected in that 78 percent had never participated nor were aware of educational drives by the department and only 22 percent had seen department representatives in the past two years discussing the requirements of fishing licensing to be able to catch fish legally. The respondents acknowledged that the skills and knowledge that they possessed regarding fishing was indigenous as they had been taught by their parents who were taught by the past generations how to watch the moon for weather patterns, swim and size the fish that could be taken out of the water.

#### **4.3.1 Challenges noted by participants in the fishing industry**

Fishing challenges by percentage of respondents revealed the lack of training and skills development by 46.38 percent, followed by 18.84 percent who felt that equipment was not of the standard used for large-scale fishing projects (rods, nets, boats).

Lack of knowledge of the exact procedure to obtain and qualify for a fishing license also appeared to be a problem faced by the community and was mentioned by 14.48 percent of the participants during the interviews.

There was also a proposal of developing a fishing market (7.25 percent) along the coast together with having modalities to sell the produce at distant markets. Infrastructural development of road network to make it easier for the transportation of goods to the cities 5.80 percent of the participants and this infrastructure development also included the creation of a small harbour to hold fishing boats.

These developments were required to improve the local fishing industry. The remainder of the challenges raised (7.25 percent) related to funding to start large-scale fishing projects, cold storage facilities, development of a local fish factory to allow for processing and packaging of fish for sale.

#### **4.4 Tourism section**

Out of the two industries in the study, tourism received the least involvement. Forty-six (92 percent) of the participants were not involved in the tourism industry, with 4(8 percent) reporting involvement. Of these, 13 people (16 percent) knew other villagers involved in tourism. Ecotourism involvement had 17 percent of the participants who assisted tourists by showing them the best spots to catch fish or catching fish for them.

The remainder of the activities scored two percent (horse riding, cultural dancing shows, hiking and campsite cleaning. The respondents reported that the tourists that passed through the villages resided at Dwesa, and a village with a developed beachfront (Cora), established a hotel and camping facilities, nearby. It was shown that 76 percent of participants did not generate money from ecotourism and also did not know anyone else who did. Of the remaining 24 percent that did generate an income from tourism it was lower than that received from fishing.

The most common income generated was between R1-2000.00 per month corresponding to 7 (14 percent) of the participants, the remainder was as follows; 2 participants (4 percent) were not sure, 1 (2 percent) between R2001 – R4000 and the remainder 2 participants (4 percent) between R4001 – R6000.

Responding to whether the income obtained served as primary or supplementary income, 40 (80 percent) felt that tourism did neither of the two but 2 percent felt that it could be a primary income for those who utilized it alongside fishing (fishing for tourists) and 18 percent viewed it as supplementary income. In terms of the value that ecotourism currently generated with respect to employment or business activity, the majority of participants reported a 44 percent absence of value creation, 32 percent thought it brought low level of revenue as exemplified by the low monthly income received and only 6 percent thought it contributed to medium and high value. Of these respondents, 6 percent were not sure of the value ecotourism brought to the tribal authority.

#### **4.4.1 Challenges noted by participants in the ecotourism industry**

The overwhelming challenge was the lack of knowledge of businesses and activities that could be pursued in this industry. This was raised as a training need (55.71 percent) by the respondents. This was followed by the need to develop the infrastructure (21 percent) in the area to attract tourists to visit the villages. It involved upgrading of roads to the villages, upgrade of the beach area to allow for the laying of a camp site and building of hotels. Funding (17.4 percent) was also seen as a challenge. The villagers felt that even if they came up with novel ideas to improve ecotourism in the area they would need funding to initiate the ideas. Other challenges (5.71 percent) mentioned related to hierarchical procedures that involved traditional and municipal authorities. Income-generating projects needed to be approved by the tribal authorities before commencement which participants felt could sometimes delay operations. The municipality would be involved to regulate operations and to ensure that by-laws are followed.

Having to comply with the requirements of various government departments such as the department of health, environmental affairs and the requirements of local and traditional authorities was

perceived to be a mammoth task that participants found difficult to meet. The lack of higher education facilities such as vocational training centres to impart skills to the youth on how to embark on tourism was also one of the issues raised.

#### **4.5 Business strategy recommendations by participants**

The building of a hotel in the area received 13.53 percent consideration, followed by training on fishing skills and water safety (10.53 percent). The improvement of the youth`s level of education in the area could give rise to greater employability and business development (10.53 percent).

The creation of a fish market along the coast to attract buyers was raised by (8.27 percent) the participants and the need for infrastructural upgrade that entailed road networks, beach facilities and water and sanitation facilities was advocated by 7.52 percent the participants. Seed funding for the initiated projects (5.51 percent), fishing licenses to increase the scale of fishing (4.51 percent), fishing equipment to increase efficiency (4.51 percent) and other income-generating projects which included the creation of a zoo to attract tourists, horticulture farm to produce local medicinal plants for sale, fruits and vegetables and farming projects involving the raising of chickens, pigs and horses were supported by 36.09 of the participants. Horse racing entertainment and horse riding lessons could generate an income for communities.

## 4.6 Themes

### 4.6.1 Cultural activities

Participants in this study identified cultural tourism as having a business potential. Tourists interested in experiencing cultural resources are attracted by the unique qualities in offering in an area.

Participant 21 said *“We could use culture to draw people to our area as we do things here still in the traditional way unlike those who stay in the towns.”*

Heritage business initiatives like teaching tourists on Amajingqi culture were suggested as possible ventures.

Participant 1 said *“We sometimes educate people on how amasikho (rituals) are done and the traditional clothing of the Amajingqi culture.”*

Culturally related activities can be marketed as commodities attaining value from a heritage perspective. Participants expressed several ideas on how they could use their culture in participating in tourism where people could produce traditional artefacts. Beads and mats were suggested by several participants as a form of cultural art produce: participant 29 said *“If we could, we would sell beaded products.”* And participants 33 added that: *“I sometimes make straw mats and sell those to tourists at R100 each.”* Participant 43 said *“Women in the villages can make beaded things and mats from grass which can be sold.”*

This could be extended to offering accommodation within rondavel and cooking of traditional food to create an experience of folk living.

This was raised by the following participants: *“I think that people can come and see how we live by staying with us and eat what we eat to experience our culture”* (Participant 2). *“We could also have places built where we can cook for the tourists as some people really can cook well”* (Participant 45). *“We can have people that wish to stay in our village or sample our culture by sleeping in rondavels and eating maize”* (Participant 21).

Entertainment activities that were suggested included horse riding and racing competitions using wild and domestic horses and traditional dancing.

It was stated that *“I do observe tourists looking and admiring our area and especially the horses. There are people who do horse riding events but these are seasonal. I see them riding with tourists along the river”* (Participant 3).

*“I see many people involved in traditional dancing. It is something that they get paid for when they travel to other areas, like when they went to Dubai but they don’t really get paid when they do it here at the chief’s place”* (Participant 4).

Locals can also work as tour guides by showing tourist areas of interest within the coast as illustrated by participants:

*“We sometimes see the younger fishermen showing the tourists around the beach and nearby river hotspots where they can catch the fish they are looking for”* (Participant 17).

*“We assist by giving directions and showing tourist places to visit”* (Participant 28).

*“We can have guides that show tourist around”* (Participant 18).

*“The quality of fishing is good here that is why tourist come every year to fish form here”* (Participant 45).

#### **4.6.2 Agro-tourism business**

It was raised by participants that agro-tourism business could be promoted through show-casing successful agricultural projects to attract tourists. Locals wanted to educate tourists on indigenous ways of growing and harvesting crops, fruits and medicinal plants. They would involve tourists by working together with the locals in fields so that they get to understand hands-on through participation. This inclusive packaged experience would allow picking of fruits or vegetables to be taken home by the tourists. For example Participant 1 said *“We could also attract people to see the macadamian nut project which is unique in the entire Willowvale and Eastern Cape region”*.

### 4.6.3 Farming

Participants viewed farming along the coastal area as a possible business venture. Farming projects could increase employment opportunities through various farming activities. First, building of a fish farm as an aquaculture project to increase the scale of fish farming in the area and to conserve the fish in the nearby river and ocean

were considered to be viable projects by the local community. The following viewpoints illustrate this point:

*“We would really want to develop a fishing project with a dam for fish farming. This would help educate and give the people here employment”* (Participant 5).

*“We can have a hotel and fish farm started in the area to employ our youth”* (participant 26).

*“A water stream development for fish farming in this area would help create jobs”* (Participant 38).

*“I am not very close to the ocean and I have often told people there who want to start a fishing business to form a group and start a project in order to get government support”* (Participant 36).

Secondly, increasing the scale of Macadamia nut farming on the coast to include processing and packaging of the nuts. This was stated by participants as a modality to increase the level of employment in the area. This was suggested by participant 25 who stated *“We need to look at other farming projects that can benefit the community at large similar to the macadamian project that can include packaging of the produce.”*

Thirdly, projects that will include the development of a market to sell chicken, egg and other agricultural produce.

*“We would need funding to develop farming initiatives like chicken and egg farming and other animals. We would need a market to sell all of these things”* (participant 6).

*“We want an agricultural market to sell chickens and other farming products, we can earn more money if we do not only sell in rural areas”* (Participant 13).

*“There is a lot of space here and it can be used for farming. We want other projects besides the macadamian nuts like the Maringa fruit so that the youth can be able involved and employed and also those who are old but strong to work”* (Participant 20).

*“We need more projects similar to the macadamian nuts to increase farming in the area, maybe chicken and pig farming”* (Participant 24).

Lastly the rearing and selling of indigenous horses along the coast. This was mentioned by participant 20 who said *“Horses are reared in Idutywa and this could be brought to this area”*.

Instituting of the various farming projects would increase employment and secure sustainable income for the community.

#### **4.6.4 Game farming**

Participants were of the view that adding places of interest besides the ocean would make their area stand out more in comparison to other coastal areas, bringing more tourists. Developing an enclosure along the coastal strip for rare animals (zoo) to be an attraction for tourists in the area. This was demonstrated by the following statements:

*“We could also establish a zoo for people to come and see wild animals by the sea”* (Participant 15).

*“We could have animals that are enclosed like a zoo for the tourists to look at”* (participant 48).

#### **4.6.5 Horticulture**

Planting of a botanical garden of indigenous plants especially the variety that can be used for medicinal purposes. The various uses of the medicinal plants could be explained to the tourists as a form of an educational programme, the same plants could be sold too. Community members would benefit from employment created either as an educator or retailer or both. This was stated by the following:

*“There are plants around the sea that are used by traditional healers for medicinal purposes”*(Participant 35).

*“We also have plants that can be for medicine purposes by those who know them”* (participant 34).

Plants or seedlings could be packaged and sold. A plant market would increase the diversity of activities that could draw visitors to the area. This was expressed in the following statements:

*“There are also plants that can be sold to generate an income”* (participant 26).

*“There is a nursery in the area and if marketed properly it would be an attraction for those who want to buy plants”* (Participant 40).

Participants were of the view that the vegetation in the area could be of interest in the tourism industry bringing tourists to vacation in the Amajingqi area. Tourism was seen as a possible business model that could give rise to multiple businesses which included horticulture as a means to increase employment in the area to secure sustainable livelihoods.

#### **4.6.6 Legalizing the fishing and ecotourism business**

Presence of a site office for application and issuing of fishing licenses is necessary for legalizing the informal trade to encourage the development of fishing projects, where people can form cooperations to increase capacity to become more competitive. Project development was seen as a modality that could be used to increase community participation in the economy.

It was illustrated by a statement from participant 36 that said *“I think that people should be more business minded as they can make a lot of money from projects selling perlemoen and crabs”* (Participant 36).

Having licenses will reduce the number of community members that are arrested and encourage the youth to develop the skill and interest in fishing. This can facilitate the development of a fishing industry in the area. This was illustrate by the following:

*“People are fishing without licenses and if they had licenses maybe they could be doing this as a business officially to be able to have a proper income from this. They need fishing rights as they get arrested whilst fishing”* (Participant 1).

*“Fishing permits would allow us to be able to fish properly without fear”* (participant 8).

*“We need permits to be able to fish freely and not fear the police. We need skills development and education to be able to benefit from the sea”* (Participant 46).

*“Organizing of permits for people to fish, would encourage more people to fish”* (Participant 44).

#### **4.6.7 Socio-economic status**

Lack of knowledge of the possible employment opportunities within the ocean economy could be improved by education on the offerings within the economy.

The view was that it was lack of knowledge of the opportunities that could be realized from the ocean that fueled the low levels of entrepreneurship and employment in the area. This was communicated in these statements:

*“I think that if the education can start early with the children so that they can grow up knowing what income they can get from the sea, so that they can study along those lines”* (participant 2).

*“I would like to stress that a school would be beneficial in the area to teach according to the ocean economy and what we can do, instead of having to send people far away to places like Cape Town to study”* (Participant 3).

There is also a need to educate on the conservation of the environment to ensure the sustainability of resources. This was raised by Participant 2 who said *“I do think it is important to have conservation education so that people know the size of fish to get and when to fish what.”* Conservation of the environment is critical in maintaining sustainable businesses in the coastal areas. It is the nature that attracts tourists and needs to be maintained for future livelihoods. A substantial number of villagers expressed that education was required to develop competitive and good standard tourism developments within the coastal setting. This was illustrated by the following:

*“Education is required about what can be done in tourism”* (Participant 6).

*“Education on what employment opportunities can be developed within the coastal area, would help employ people in the community”* (Participant 7).

*“We don’t have the knowledge of what can be done, if we knew how to go about this tourism we could do something”* (Participant 11).

The inclusion of fishing as a trade within basic and higher education can assist the youth in the area to think of careers that can be of value closer to the coast.

Training programmes that educate on fishing as skills, swimming and water safety can improve the level of activity in the fishing industry within the community. This would mean that the youth can work locally and not need to go to Cape Town to study about fishing and look for employment. This was evident in these statements: *“I think we need training and education to develop the fishing industry here”*(participant 25).

*“We need education on fishing to do it properly”* (Participant 28).

*“There should be education early on regarding fishing and tourism so that there are ideas on how to do these to make money from them”* (Participant 34).

Establishing and encouraging educational drives that are specifically designed for women in fishing and agriculture will improve their economic involvement in the area. Currently it is men who do most of the fishing while women collect crabs on the beach to earn a living.

This was raised by Participant 6 that said *“I think there is still some stereotype regarding fishing as it is seen as something that men do even though there are a number of women who do fish. I think that if women were educated more about fishing they would do it more.”* This was echoed by similar sentiments from participant 16 stating *“Women here mainly collect crabs and if we were educated and taught how to fish, we would do it more.”*

Exchange of indigenous knowledge on fishing and conservation (wave patterns, size and position of the moon and the movement of the clouds) and how these determine the optimum timing for fishing as a form of cultural tourism.

*“People have indigenous knowledge, cultural knowledge especially the elderly on fishing. The knowledge has been carried through generations”* (Participant 3).

Participant 18 added to this that *“We can have guides that show the tourists around and education sessions where we can teach people how to fish and about the fish in our area and our culture.”*

Agricultural training in rearing chickens, pigs and cows as well as planting of crops can be a primary business and used for tourism purposes. Tourists could be allowed to participate in these projects for a fee. This was expressed in the following statement:

*“We need proper education to expand our career choices. In engineering to build roads and farming to rear and sell chickens and cows on a larger scale”* (Participant 23).

#### **4.6.8 Financing of development and educational drives**

Communities would need start-up finance to leverage the new businesses that they embark on. Owing to high level of lack of employment and poverty in the area, external funding and business management is needed to realize development goals.

This was evident in the comments made by participants:

*“So we need education of how we can start this project and also funding once that is complete, as education without the later funding would be useless” (Participant 1).*

*“Funding is required to improve tourism and fishing industries and this could assist people to get involved” (Participant 20).*

Assistance could be derived from venture capital financing/funding/grants /loans and NGO assisted government initiatives. Facilitation of this support can be done through local municipality departments as the high illiterate rate in the area makes it difficult for community members to assess funding and permits to run projects and businesses.

#### **4.6.9 Fish factory**

A fish factory with cold storage facilities would be beneficial in storing the fish that is caught and would allow for the packaging and exporting of the fish to urban areas. This was illustrated by the following:

*“Fish farming assistance by developing a factory here with all the cooling requirements” (Participant 2).*

*“If we had proper industries developed like a fish factory we would be able to fish and package the fish to sell in faraway places where there are restaurants to buy the fish” (participant 27).*

*“I would like to see a fish factory in the area that can create employment opportunities for us” (Participant 40).*

The presence of a factory would ensure that the fish is sold at the best commercial prices as in urban to avoid exploitation of the fisherman. This remarked was raised by participant 35 who expressed the following:

*“If the ocean was regulated the people who come to fish would have to pay properly to take the fish from here and those who work would be able to make a living.”*

#### **4.6.10 Fish market**

The establishment of a fish market with stalls along the coastal area for local vendors to sell to the community, tourists and hotels. This was informed by these statements:

*“I think that for us fishing people it would be a good idea to develop a market for us to be able to sell the fish we catch”* (Participant 9).

*“I really want a market to sell fish here as we are very good at getting perlemoen and crabs from the sea”* (Participant 10).

*“Building of markets for fish would overcome the lack of employment in this area”* (participant 11).

*“I just think that we could have more done to develop the fishing industry in the area, with the creation of a market to sell”* (Participant 16).

A marketing drive would be needed to inform people from the nearby towns and distant areas like East London of the market. Regional markets-exports of fish would be developed in conjunction with the development of the market. This understanding of the benefits of increasing one’s market was shown by the following comment:

*“We need a market for the fish so that it can be sold easier and a firm to help in the packaging and sale to faraway places”* (Participant 13).

*“We could have a railway line built to take the things we make to bigger markets”* (Participant 48).

#### **4.6.11 Accommodation for tourists**

There would be greater tourist inflow in the area which would improve business opportunities and development if there were places of shelter available for tourists. An understanding that an industry creation can improve the way of living was voiced by participant 4 that stated *“the development of hotels to create employment for the youth, would enable us to support ourselves than always requiring government assistance.”*

The presence of a hotel, B&BS, guest houses and campsites on the beach would make the place more accessible for tourists. The welcoming of developments for accommodation for tourists was illustrated by the following statements:

*“It is my wish that we could establish a hotel here”* (Participant 3).

*“Building of hotels and B&B’s by the coast would give us a chance of being involved in tourism”* (Participant 18).

*“We would appreciate a hotel to bring tourists to us, so that we can be able to sell goods to them and get employment at the hotels”* (Participant 31).

*“We want a hotel here so that tourists can come and we can get employment for our children”* (participant 32).

*“We need to develop tourist attractions, build chalets that can be used by tourist. The hotels would then bring more employment for the people who stay here”* (Participant 35).

The upgrading of the accommodation available was seen as a necessity in the view of creating a pleasurable experience for the tourists. This was expressed by:

*“We would appreciate the development of chalets but we are not well vested as to how this can be done”* (Participant 1).

*“There is no funding for building an acceptable standard of proper accommodation”* (Participant 5).

#### **4.6.12 General infrastructure**

Infrastructure needs to be improved in the area and will benefit the tourists through receiving better value for money and the community through employment in the upgrade projects and greater tourist visits. Gravel roads to be tarred to provide a smoother connection of the coastal area with urban areas. This was expressed by a number of participant’s e.g.

*“The infrastructure needs to be developed especially the road as it is still gravel. Even when people are sick we struggle to get them help because of the bad roads”* (Participant 21).

*“We have a beautiful beach here and I think that if we developed the road and built a hotel, many tourists would come and we would be able to have more employment”* (Participant 25).

*“We need the roads developed for us to be able to attract tourists to visit our beaches”* (Participant 38).

*“I think they can first develop the roads to and along the coast that would attract more tourists and this will give us work opportunities”* (Participant 41).

*“We need also better roads”* (Participant 47).

The presence of a harbour for boats and small ships for receiving and dispatching of goods would also increase industry development and employment opportunities. This was communicated in these comments:

*“We need the infrastructure to be developed in order for fishing to happen easier, like the building of a harbor”* (Participants 14).

*“We need a place to put boats at the beach”* (Participant 40).

Water and sanitation pipe installations to improve the rating of the quality of the accommodation for tourists. Participant 5 had stated that *“there is also a problem of infrastructure here as there are no proper sanitation development and water pipes.”*

Upgrade of the beach with sitting and braai areas would make it more attractive to visit. This was raised in these views:

*“We could upgrade the beach to attract people”* (Participant 15).

*“It would be good to have employment brought closer to us by developing a site at the beach for tourists to use and put up their caravans and tents”* (Participant 39).

Building schools and preschools in the area would improve the level of education and assist locals not to spend money on schools outside the area. This would keep the money in the area and enable faster growth. Participant 21 stated that *“we also need to have crèches as the children go to school late and that is why they don’t do well.”* A better educated community will be able to possess greater capabilities allowing them greater chances of developing employment opportunities.

#### **4.6.13 Marketing**

Marketing of tourist's attractions in the area seen as a modality to increase the awareness of the unique beauty of the surroundings. With greater awareness, the number of tourist visits are expected to increase e.g. Shixini River Mouth. Participant 1 noted that marketing of an area increases the number of visitors and this has a positive spin-off in the development of an area. Participant 1 said *"There is a project that has been running since 2011 at Shixini River Mouth that I have been involved in and it has received a lot of promotion and has seen an increased number of tourists since then."*

#### **4.6.14 Equipment**

Absence of proper equipment for fishing (boats, nets and rods) makes fishing difficult and that with the availability of the correct tools would improve the scale of fishing. It was felt by the community that the lack of adequate equipment limited their capabilities to upgrade into the fishing industry. Development of fishing projects, fish factories and markets would increase employment and secure income as there would be greater productivity. This would result in sustainable livelihood being achieved by a large number of the population. These sentiments were discussed by the following:

*"They lack boats, rods and nets to make them fish better"* (Participant 2).

*"I would say the lack of equipment like boats and proper fishing nets and rods make it difficult to for a living as they currently lack capacity"* (Participant 5).

*"We require access to equipment like boats to go deeper into the sea to get more fish"* (Participant 8).

*"If we had the right equipment such as boats, throw nets, fishing rods, water pumps we would work better increasing our produce"* (Participant 9).

*"We need to get permits and equipment like boats in order to fish well"* (Participant 31).

*"We have a capacity issue as we don't have the right equipment to get hold of the proper fish from the sea"* (Participant 38).

#### 4.6.15 Income

Income generated in the area was thought of as arising primarily from fishing by several community members. The following statements by community members demonstrate this:

*“They fish the entire year and it is their primary income”* (Participant 7).

*“You can say my primary income comes from fishing”* (Participant 9).

*“Fishing is primary income as the fish are always there but construction work is not always available”* (Participant 12).

*“Most of the people live on the money they make from fishing”* (Participant 17).

*“Their main income is from the fishing as they don’t have another source of income”* (Participant 20).

This was followed by those that saw fishing as supplementary income and was expressed in the following:

*“The elderly use fishing to supplement the grants”* (Participant 11).

*“I would believe that they are supplementing as they do not fish the whole year round”* (participant 23).

*“I use fishing to supplement the grant I receive”* (Participant 28).

*“For the younger people who don’t have grants and are not employed it is primary income but for others it is a way of supplementing what they already get”* (Participant 30).

*“I think that they use fishing to feed or supplement other incomes as the prices of the fish are very low for me to say they can make a living from it and also the tourist who mainly buy the fish are not always here”* (Participant 35).

There were views too that saw fishing as a means of subsistence rather than a modality for income generation. This was shown by these comments:

*“They fish for food and don’t make money from it”* (Participant 6).

*“I fish to get food, so it is not income for me”* (Participant 25).

One community member viewed tourism as a form of primary income but a few saw it as supplementary income. This was illustrated by the following:

*“I would not be able to say how much, but when the tourists are here they can make more money than they usually make from fishing alone but I am not sure of the figures”* (Participant 46).

*“I would imagine that they are supplementing their steady income”* (Participant 3).

*“They would use the money as a supplement to the fishing that they do”* (Participant 17).

This was a result of the impression that the current standard of infrastructure and development in the area did not promote the viability of a tourism business. There were no community members involved in both fishing and tourism industries to generate income.

#### **4.7 Conclusion**

The findings of the study identified local resources that could be developed into business ventures in the fishing and tourism industries. These local resources can be leveraged towards the economic development of the coastal region. Their potential also extends to the improvement of surrounding infrastructure. Strategies for community development derived from the interviews were discussed.

## CHAPTER 5

### DISCUSSION

#### 5.1 Introduction

The economic opportunities that were identified through the themes related to both ecotourism and fishing. Business development was aimed at sustainable income and employment generation through: cultural, heritage, fish and agro-tourism, small-scale farming, horticulture, fish farming (aquaculture) and the establishment of a game reserve and accommodation facilities for tourists. These would then be supported by infrastructure development, legalising of small scale fishing through the acquisition of licenses and fishing rights, fish market, educational drives, promoting business orientation, acquisition of capital equipment to improve fishing capacity, active marketing of the area to attract tourists and sourcing of financial resources to embark on these projects.

According to the sustainable development model the livelihoods, health and the human development index of countries improve when low-income groups are afforded the opportunity to earn extra income apart from social welfare grants.

Some of the interrelated have been grouped under one theme for the purposes of this discussion to ensure coherence.

#### 5.2 Socio-economic status

It was evident from the results of the study that there are low levels of employment within the area and that the majority of economically active individuals were involved in the fishing and farming industries.

There was a high dependence on government grants in particular child and pension grants. Despite the involvement in fishing and farming the yielded income was too low to be considered sustainable or sufficient for funding of other entrepreneurial initiatives. The current status of fishing in rural areas is not viewed as presenting a significant contributor to the overall macro- economy but plays a significant role in poverty alleviation through food security and livelihood (Sowman et al, 2014). Participants who were involved in fishing did so for subsistence and supplementation of primary income. This was also supported by research evaluating the role of subsistence fishing in Africa, Asia and South-East Asia (Teh & Sumaila, 2013) which showed that subsistence fishing as a provider of cash income for day-to-day expenses and nutrition for poor fishing communities.

### **5.3 Small-scale fishing**

The reason small-scale fishing was adopted by locals as confirmed by (Béné et al., 2003) was that it had low entry cost, making it a provider of the last resort of food for the poor. Fish as an important food source needs to be conserved for future generations (S. Garcia, Staples, & Chesson, 2000; S. M. Garcia & Cochrane, 2005). In trying to preserve fish levels an alternative livelihoods model have been sought to shift the focus of coastal communities from exclusive fishing. A study conducted on the Kenyan coast showed tourism as an alternative livelihood that reduced pressure on fishing stores (Carter, 2013). In this study participants supported keenly the idea of embarking on tourism ventures but felt that the lack of knowledge on what to embark on restrained the development of tourism. This was also reflected in study by (Carter & Garaway, 2014) that poorest of the poor used subsistence fishing as a livelihood as they lacked knowledge of the tourism sector. Low levels of education and lack of exposure to tourism business limited participants` entrepreneurship knowledge.

Lack of business knowledge and skills disadvantaged the local community in understanding tourism and its potential economic benefits. A study conducted on the West Coast of South Africa by Sowman et al (2014) on small fishing communities found similar results showing low levels of education and high levels of unemployment. Low education resulted in low employment opportunities and communities relied on subsistence fishing and government grants (pension and disability) as the primary household income. Fishing and tourism using the sustainable livelihood model can be viewed as complementary industries. Diversification of livelihoods gives individuals different options to make ends meet (Allison & Ellis, 2001). The greater the diversity the less vulnerable rural communities are to food insecurity and loss of income.

Fishing in a community setting has been shown to bring about several advantages from the ownership of ecological resources that could be exploited by locals to improve their welfare. The economic benefits include employment, income generation, and returns on investment in fishing processes. Social benefits are associated with the empowerment of women through development programmes and opportunities for people to improve their literacy and numeracy skills by attending courses on fishing business. There are health benefits from access to the protein from fish. The ecological benefits realised would depend on the exploitation rate, abundance of species, fishing pressure and the availability of fishing equipment. Communities would be required to comply with the local government by-laws and law on property rights (S. Garcia et al., 2000).

Taking into consideration the availability of resources that can be used in the development of the rural economy, participants in the Amajingqi tribal authority were interviewed using the sustainable livelihood framework for fishing and tourism. The key assets established through the interviews for small - scale fishing revealed that human capital was represented by 86 percent of participants being within the employment age which ranges from 18 years to 60 years. According to StatsSA (2011) the community was made of 3500 household and 11.441 thousand people.

The biodiversity of the vegetation which was rich in forestry and savannah forming one of the environmental protected areas in the Eastern Cape Province and the ocean represented the natural capital. The environmental quality of protected coastal and marine areas provide a huge competitive advantage within the tourism space (Hall, 2001). A noted disadvantage of the location of the villages within the east coast of South Africa was the lack of fish species volume as compared to the west coast. The east coast is most suitable for subsistence and recreation fishing although there are adequate prawn reserves for commercial fishing (DEA, 2013). Economic capital at present is insufficient as there is no formal industrialisation within the villages. The level of unemployment is about 36 percent and those who are employed are mainly in the farming industry (55.56 percent) with 84 percent earning below R3500. These two findings were supported by the results of a community survey done by Stats SA in 2011 showing that within the Amajingqi tribal authority there were high unemployment levels with only 8 percent of individuals economically active and majority earnings of R1600 with high government grant dependence. Social capital has been formalised through the interaction of the tribal authority with the elders and members of the community.

Fishing was the most common mentioned modality by the participants as a sustainable livelihood initiative to improve their living standards. The interviews revealed that 50 percent of the participants were involved in subsistence fishing, showing the presence of knowledge and skill pertaining to fishing that can be capitalised on, to embark on commercial fishing. Commercial fishing would increase job opportunities and income generation by the villagers. Participants felt that the absence of adequate fishing equipment limited the ability to embark on commercial projects. Funding for the acquisition of proper equipment (boats, nets, rods and fridges) and gear would be required for increasing to commercial levels.

The acquisition of fishing rights and licenses was another idea that was perceived to be a constraining factor in fulfilling plans of increasing the scale of fishing in the area.

Fishing rights in South Africa have traditionally favoured large-commercial fisheries and it is in the recent fishing quota system that small fishing communities have been empowered to apply for community fishing permits (Merle Sowman et al., 2014). Participants requested the presence of a nearby center for the application and issuing of fishing licenses. The current process was complicated as they had to travel far to apply for licenses. The constant arrest of community members fishing for food discouraged many from becoming involved in the fishing industry. Integrated assistance from different government departments was regarded by the participants as a solution for sourcing funding, educational and training support that would assist them in the implementation and management of the projects. Participants wanted the development of a fish market to sell their produce and assistance to assess markets in urban areas. Fish markets are crucial in developing small-scale fishing (Verma, Pal, Kumar, & Verma, 2015). A fish factory was needed to package and process fish for distant markets.

Through the different tiers (commercial fishers, fish market and factory) sustainable employment would be created. A major constraint to this business initiative is the limited east coast fishing stores documented by the Department of Environmental affairs (DEA, 2013). Stores of the common captured and collected fish described by the participants (cobb, mussel, crab, hake and perlemoen) are insufficient to support sustainable commercial fishing. Fishing stores can only support commercial prawn fisheries and recreational fishing of other species taking cognisance of their conservation (DEA, 2013). Indigenous knowledge on fish conservation has been found to be important in small fishing communities as it helps preserve stores for future generations. Educational drives on conservation by the DEA would assist in building knowledge on the conservation of the ecosystem. Participants were of the view that educational drives should be increased as only 22 percent had participated in conservation education drives in the area. A Brazilian study has also shown the importance of community education in ensuring ecosystem maintenance (Lopes, Rosa, Salyvonchyk, Nora, & Begossi, 2013).

## 5.4 Aquaculture

A possible solution to actualising the development of a fishing industry in the area whilst preserving the low levels of stores within the east coast is embarking on aquaculture. According to the Department of Environmental Affairs (2013) the east coast is most suitable for subsistence and recreation fishing with the only prawn stores adequate for commercial fishing (DEA, 2013). Aquaculture has been shown to play an important role in developing countries in poverty reduction by providing jobs, employment and income (Béné et al., 2016; Dey, Paraguas, Kambewa, & Pemsil, 2010).

During the Amajingqi interviews, the community was of the view that fish farming projects would increase employment through different activities. The building of a fish farm in the area as an aquaculture project would increase the availability of jobs, the capacity of fish production for commercial purposes. The added advantage of the project is that it would assist in the conservation of the fish stores in the nearby river and ocean as the majority of the fishers would be absorbed into the project for their indigenous knowledge on fish. The value of aquaculture for employment has also been noted by FAO (2009). Fishing employment has steadily increased worldwide as a result of the expansion of the aquaculture sector.

Aquaculture is also increasingly accounting for a larger proportion of fish supply and has an important role to play in future fish demand. This is a trend that the local community can copy to enter the commercial fishing industry. Hall (2001) found that within aquaculture income generation increase for both the farmer and the employees. It was thought by the participants that creation of this business venture would be a good fit for their villages as they could use their indigenous knowledge in the project. They argued that funding would be their biggest hurdle, as aquaculture farms require huge capital to start unlike subsistence fishing which has low entry costs (Béné et al., 2003). It was proposed that through the Operation Phakisa umbrella they could form a community trust to access credit through government agencies such as the National Development Agency,

National Research Foundation and the Land Bank. Literacy and skills development projects would be implemented through Sector Education and Training Authority (SETA).

Participants felt that more women could be empowered through aquaculture. The study revealed that the majority of fishers were men and that women occasionally collected mussels along the safer shore line and avoided deeper waters. The participants were of the opinion that greater educational drives in the coastal regions would improve women`s participation in the fishing industry. A similar concern was raised by (Béné et al., 2016) in relation to gender, health and safety in the fisheries sector. This equity and social issue has a critical role in food security and poverty reduction implications within households. Aquaculture projects can be instituted through equal opportunity practices allowing equitable inclusion of women. The success of this fishing project would require supporting strategies that give access to urban markets for the sale of the fish. Aquaculture and farming business opportunities can form an added link to the local tourism industry.

Utilisation of locally produced products from farmers at the hotels can secure a sustainable market. This will not only improve employment opportunities in the tourism industry but will secure jobs in the farming and fishing industries too. This was seen as a potential benefit in a study that looked at the under-utilisation of local small farmer produce in the coastal areas of the Kwazulu Natal province of South Africa. Linkage of tourism and agriculture created opportunities for pro-poor development through the supply of food to the hotels and guest lodges (Pillay & Rogerson, 2013).

## **5.5 Farming produce**

Farming projects that could be paired with aquaculture as possible business ventures were pig, chicken and vegetable farming.

They wanted to increase the current scale of macadamian nut farming with the introduction of a factory for packaging of the nuts. The Amajingqi community based fishing and farming projects will benefit from having a constant market demand for their products by local hotels and guest lodges. Formation of partnerships in communities helps in creating successful sustainable poverty alleviation projects. Working with the local food chains could guarantee the demand and revenue generation from fishing and farming industries. Another relevance of farming was the proposal of creating agro-tourism through the projects.

A packaged experience would include education on indigenous farming practices and local medicinal plants, planting and picking of produce from the fields. The tourists would be given a chance to participate in agricultural activities so that they learn where the food comes from, how the crop is harvested and processed. The tourist could possibly take the vegetables home for an additional fee. Farming projects within the area would be sustained through the commercial selling of produce and agro-tourism. This unique combination reinforces sustainability of employment, earnings and improved living standards.

## **5.6 Ecotourism**

Participants in the study considered tourism as the key alternative livelihood that could be developed using available resources besides fishing and farming. Ecotourism could be a primary or a complimentary source of income for the people of Amajingqi tribal council. Key contributors to the sustainability of tourism livelihoods in the area were identified as follows: biodiversity of the natural capital including the warm, temperate weather all year round and the absence of natural disasters like storms, hurricanes and tsunamis that pose risks to tourists. The absence of natural disasters has been identified as an important factor in the long term economic viability of areas basing their development on tourism. The study does show that the population of Amajingqi are keen on the development of a tourism industry in their area as they see it creating permanent jobs that would be sustainable for future generations.

Ecotourism as a segment of nature tourism is certified in areas that are relatively undisturbed and makes up 15 percent of world tourism (Gössling, 1999 ) and together with ocean and coastal tourism have been regarded as one of the fastest growing areas of tourism (Hall, 2001).

The Amajingqi tribal authority is situated in a conservation protected area, qualifying it as a place suitable for ecotourism. This is further supported by the geographic species diversity that increases with decreasing latitude resulting in the majority of the world's species located in the developing countries (Gössling, 1999).

This biogeographical dimension of nature could be utilised as a competitive advantage by the Amajingqi tribal authority to alleviate poverty through the development of the ecotourism industry. The need for the growth of rural tourism has been fueled by the declining economic activity, reduced rural industrialisation and out-migration of higher educated youth. This has required the development of strategies to retain the youth with tourism being adopted as a modality of an alternative livelihood for the economic regeneration of rural areas (Briedenhann & Wickens, 2004). This sentiment was raised by the participants in the study acknowledging that the youth migrated to bigger cities to look for work and education. The conviction was that if industries were developed in the rural areas there would be no need for people to migrate to urban areas in search of employment.

The community is expecting tourism to generate new jobs, improve community infrastructure and revitalization the economy in the villages. One of the challenges in relation to tourism that the community had identified was that the poor infrastructure in the area which they felt contributed to the lack of tourism development in their villages. Tarring of the coastal road to the other urban areas and the installation of water and sanitation pipe would improve the quality and possible rating of the area. Participants were of the opinion that if a hotel and B&B's were established the area would attract more tourists.

Upgrade of the infrastructure would not only provide improved services for tourist stimulating a sustainable volumes of tourist visits which would maintain higher bed occupancy allowing for constant revenue generation in village hotel industry. Full occupancy would secured income for the owners, employees and service providers.

Evolving tourist trends have over the years introduced a more individualistic offering. There is greater flexibility in creating a unique experience. The Amajingqi can take advantage of these trends through offering special experiences. Activities would display the ecological uniqueness, cultural experiences, outdoor and water based adventure opportunities or just the peace and quiet of remote areas.

### **5.7 Heritage and Cultural tourism**

In this study participants supported the development of cultural heritage business ventures. Tourist would experience culture first hand through folk living in rondavel accommodation, traditional custom education, teaching of the local language isiXhosa and cooking classes preparing traditional food. The participants felt that sharing their cultural heritage in all its richness would create unique experiences that could not be replicated anywhere else in the world. They would capitalise on the uniqueness of culture as a niche for business development. Culture would form the key element in marketing the area as people from diverse world backgrounds would be keen to understand the local culture and traditions (Weaver, 2007). Exposure to culture within an educational setting would be supplemented by selling traditional artefacts like beaded products, grass mats and traditional clothing that could be taken by tourists as souvenirs. The advantage of artefact creation is that it can be done by talented but uneducated community members who would take advantage of the economic opportunity created through small-enterprises based on the ocean economy. Participants' envisaged entertainment activities that could earn an income for local communities included guided fishing tours, traditional dancing, riding of domestic and wild horses and watching horse racing competitions.

Cultural heritage businesses would create jobs through teaching, artefact production and selling and outdoor scenic activities. Increasing the income earned by households improves the standard of rural livelihoods.

The soft sand, surrounded by rich biodiverse vegetation of Shixini River mouth was seen as another tourist attraction by the participants. The participants wanted the beach area to be upgraded to offer camping and braai sites to make it more enjoyable. Water safety and swimming skills are to be taught at local schools which would enable confidence in the instituting of water sporting activities for example, snorkeling, scuba diving, wind surfing and speed boat racing. The participants requested skills development to be able to offer these recreational beach activities. The development of new skills could lead to embarking on adventure orientated businesses that not only create earnings for the business owner but offer employment to other community members.

This type of business could offer the youth a modality to earn income as volunteers during term breaks. With the current skills set, beach activities would include e.g. guided nature trails along the sea shore and canopy tours run by villagers to expose the tourists to the rich biodiverse vegetation. The plants with medicinal properties would serve a triple purpose as a form of ecotourism, agro-tourism and horticulture initiatives. The plants will add to employment opportunities in the area through sightseeing, farming, packaging and selling. Tourists can participate in planting and harvesting of the plants whilst learning of their various homeopathic qualities.

## **5.8 Game farming**

Further diversification of the local attractions was suggested in the form of a game reserve. The use of animals as a draw to the area would include viewing of wild animals and selling of indigenous horses. A similar strategy has been used by ocean facing countries like Tanzania, Kenya, Mauritius and Seychelles in advertising additional features to beach tourism in order to attract tourists (Picard,2015).

Tanzania and Kenya in particular have a diversified tourist offering that includes wildlife safaris and ocean attractions.

## **5.9 Marketing**

For these initiatives to be successful, the participants were of the view that the area would require strategic marketing with local and international travel agents. A local initiative taken in 2011 to market Shixini River Mouth had increased the number of visitors to the area but without significant impact on livelihoods. Participants expected to receive a large number of tourists and they anticipated large-scale tourism that would generate greater business and employment opportunities which could dramatically improve their living standards. National agencies that act as brand ambassadors for South Africa for example Brand SA, SA Tourism, DIRCO (Department of International Relations and Cooperation and DTI (Department of Trade and Industry) could be approached to facilitate local and international marketing. In addition to marketing, participants viewed delays in community development to be due to the lack of clarity of the jurisdiction of the multiple authority figures (government, tribal authorities and councilors).

## **5.10 Public Private Partnerships**

A three tier cooperation model was demonstrated in another South African study looking at rural development. Briedenhann & Wickens (2004) showed that projects that worked well had cooperation between three main factors: community stakeholders, the tourism industry and government departments. The participant's views were that if stakeholders worked together towards a common goal the ideas raised by the community could be quickly implemented. Integration of efforts by the different tiers could produce a unique offering that results in a sustainable tourism industry in the Amajingqi tribal area attaining the goals of the sustainable livelihood framework. The third challenge arising from the interviews touched on the low levels of education in the area. Participants were of the view that their limited knowledge

of the ocean economy and its opportunities impacted negatively in the development initiatives for the area. With knowledge comes entrepreneurial ideation of business opportunities. (Briedenhann & Wickens, 2004) also showed that the lack of education, and problems with access to training resulted in inappropriate activities offered to tourists due to failure of quality appreciation. Helping to build community capacity through education and training can alleviate this problem.

### **5.11 Conclusion**

These unique experience present a chance for the development of rural service providers that can maximize opportunities by the offering of a diverse range of activities that can attract a wider market. The various ideas raised by the participants have the potential of stimulating entrepreneurial opportunities that can culminate in maximizing individual spend by tourists by providing services and activities that incentivise spending and repeat visits. The Amajingqi are in a unique position as their proximity to the ocean and forest offers diverse tourist attractions. These offerings could be marketed to different tourist segments in developing the poorer coastal regions of the country (Picard, 2015).

## **CHAPTER 6**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 Introduction**

This chapter presents the main findings of the study. Conclusions will be drawn from the findings and limitations of the study will be identified. The chapter will also present recommendations in relation to the improvement of the sustainable livelihoods of the area under study as well as recommendations relating to future research.

#### **6.2 Summary of findings**

The interviewed population of the Amajingqi tribal authority showed comparable representation of men and women. The majority of the participants were of employment age with a disadvantage of low education levels, attaining only a primary school level. Unemployment was high and was attributed to the paucity of industrial development, having only one large scale farming project of Macadamian nuts and which was the largest employer. There was a high dependency of households on government grants for income. These were insufficient to meet monthly expenses and were supplemented by part-time employment in the farming, fishing and construction industries. Most of the young, economically active individuals were involved in small - scale fishing. Earnings for fishers showed a seasonal pattern where they reached their peak during holiday season due to an availability of tourist buyers. Participants acknowledged that being situated next to the coast was an advantage economically but their lack of knowledge, skills and funding limited their ability to realise this wealth.

Challenges experienced by fishers were related to the lack of appropriate gear and equipment to increase the scale of fishing to a commercial level. There was also the issue of fishing licenses and rights that were not easily attained resulting in a frequent community arrest for fishing without a license. A proposal of funding sourced from the government and private sector to form a commercially viable community fishing project with access to local and distant markets was seen as a modality of creating sustainable business venture. Employment opportunities in the fishing industries were to be created through commercial fishing, aquaculture and recreational fishing. There was currently no large scale tourism in the Shixini area. The residents had minimal exposure and knowledge of this industry but were keen to learn and to get involved. They identified culture, agrotourism, horticulture, biodiversity of the local vegetation and the beach as possible marketing strategies to attract tourist. The current level of infrastructure (gravel roads, lack of water and sanitation pipes) was seen as a deterrent to the development of hotels and B&B's.

The utilisation of the land for vegetable and animal farming were another method that was seen to be able to create employment, guarantee income and improve their living standards.

The people of the Amajingqi tribal authority saw the creation of a sustainable livelihood through the development of the fishing, tourism and farming industries.

### **6.3 Conclusions**

The following conclusions are drawn from the findings of the study:

- a) There is a need to improve the level of education in the area in order to increase the opportunities for employment and the ability to start successful business ventures.
- b) It is imperative that entrepreneurial skills be developed and enhanced aimed at business development and management.

- c) The fishing industry can be developed focusing primarily on aquaculture and community based commercial fishing, can be used as a vehicle towards sustainable livelihoods.
- d) The establishment of a tourism industry that capitalises on the uniqueness of the culture, biodiversity and unspoilt beach of the Shixini Tribal area.
- e) The improvement of the infrastructure in the area that will not only benefit the tourism industry but will contribute to the economy of the area.
- f) Community, government and private sector partnerships are necessary to ensure the availability of the required funding and sustainability of business ventures.

#### **6.4. Limitations**

The interviews were conducted during the week hence participants were largely people who were available and willing to participate in the study. These were mainly people who were unemployed living in the villages and those who worked in locally based industries.

#### **6.5. Recommendations**

Alternative livelihoods are to be explored and developed in areas that are under stress or have limited production capacity. Diversification of livelihood within coastal communities can be used as a modality to build continuous economic activity due to the seasonality of fishing and tourism industries. This would allow the community sustainable economic and ecological benefits. The development of tourism sites should be based on creating an offering that can result in a sustainable customer base to ensure sustainable economic benefits for the community.

It is further recommended that a future study be conducted to monitor and evaluate the impact of the tourism and fishing business ventures on the living standards of the community

#### **6.4. Implications**

The key for rural coastal communities in the creation of employment and business opportunities requires cooperation between tribal and local government departments in improving the existing infrastructure and capabilities (education, skills and funding) within those areas. Without these improvements, the poverty alleviation goals that can be effected through economic development will not be met.

#### **6.5. Conclusion**

The high unemployment and scarcity of jobs in the urban areas has put focus on the development of employment opportunities in rural areas. Participants in the Amajingqi tribal authority are ready to embark on income-generating projects. This coastal population relies on seasonal fishing and farming for income. The development of projects around these industries would be beneficial as indigenous knowledge can be used involving even the uneducated. Communities would need to be helped to utilise the periods when they are not busy to engage in coastal businesses relating to fishing, farming and agro-tourism in order to earn an income. The advantage of developing coastal businesses is to make people less dependent on social grants, freeing up much of government revenue to improve the needed infrastructure in rural areas. The economic potential of the area could be achieved with community involvement, improved infrastructure, marketing and public-private partnerships. Most of the projects that succeed in improving the livelihoods of low-income households have community stakeholders working harmoniously with organisations in the private and public sectors (Mtapuri & Giampiccoli, 2016)

When strategic plans are turned into goals and operational strategies are supported by communities, government and the private sector, chances of sustainability of the business ventures initiated by local communities is high. Local business initiatives implemented by communities and their leadership have a greater potential for success in alleviating poverty in rural coastal areas.

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## APPENDIX 1

### INTERVIEW SCHEDULE

#### SECTION A: DEMOGRAPHICS

1. Age
2. Sex M      F
3. Marital status Single  
Married  
Divorced  
Widow/er
4. Level of Education No formal education  
Primary level  
Matriculated  
Tertiary level
5. Disability Yes    No
  - 5.1 Describe type of disability
6. House hold income
7. Employment Yes    No
  - 7.1 Industry employed in

#### SECTION B: FISHING

8. Are you involved in subsistence fishing? Yes    No
9. Do you know people in your village that are involved in subsistence fishing? Yes    No
10. How much income do you or the people you know make from fishing per month?
11. Is fishing seasonal or the whole year round?
12. Is it the primary form of income or does it supplement another modality of income for yourself or the people you know that fish?
13. What fish species are predominantly caught and sold?
14. Do conservation specialist educate the community on the quantities of fish to utilise in order to sustain fishing?

### **SECTION C: TOURISM**

15. Are you involved in ecotourism? Yes No
16. Do you know people in your village that are involved in ecotourism? Yes No
17. What activity or activities are you or those that you know participating in regarding ecotourism?
18. How much income do you or the people you know make from ecotourism per month?
19. Is this the primary form of income or does it supplement another modality of income for yourself or the people you know that participate in ecotourism?
20. Are you or people you know involved both in the tourism and fishing industry?
21. What proportion of income comes from tourism and fishing?

### **SECTION D: CHALLENGES**

22. What challenges does your age/gender group face within the fishing industry?
23. What challenges does your age/gender group face within the tourism industry?

### **SECTION E: RECOMMENDATIONS**

24. What are your suggestion about what can be done to overcome those challenges?
25. Is there anything you would like to add?

## **APPENDIX 2**

### **SUBJECT INFORMATION SHEET FOR PARTICIPANTS**

Dear Participant

I am Avela Mayekiso, an MBA student at the University of the Witwatersrand, Johannesburg. I am conducting research on “Developing a sustainable ocean economy of coastal settlements in the Wild Coast, South Africa”. The main aim of the study is to assess the use of marine resources specifically subsistence farming and ecotourism to build the local economy.

I wish to invite you to participate in the study. Please note that participation is voluntary and you can withdraw from the study at any time without any negative consequences.

I further request your permission to use a tape recorder during the interview to allow me to collect all the relevant information. The interview will take between 30 – 45 minutes.

Kindly note that the information obtained during the interview will be treated with confidentiality and anonymity. Only myself as the researcher and my research supervisor will have access to the information.

Feedback on the research findings will be provided to the community members.

Your participation in the study will be greatly appreciated.

Dr Avela Mayekiso  
Researcher  
0824424759

Mr Moroka Mokgoko  
Research Supervisor

## **APPENDIX 3**

### **INFORMED CONSENT FORM**

I hereby give consent to participate in the study “Developing a sustainable ocean economy of coastal settlements in the Wild Coast, South Africa”. I understand that my participation is voluntary. I have been assured of confidentiality and anonymity.

Name:

Signature:

Date:

Location:

## **APPENDIX 4**

### **CONSENT TO USE A TAPE RECORDER**

I hereby give consent for the interview to be recorded using a tape recorder.

Name:

Signature:

Date:

Location: