



**UNIVERSITY OF  
KWAZULU-NATAL**

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**INYUVESI  
YAKWAZULU-NATALI**

**EVALUATION OF COMMUNITY PARTICIPATION IN SIHLANZIMVELO STREAM  
CLEANING PROJECT: CASE STUDY OF PINK SIHLANZIMVELO PROJECT**

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**A dissertation is submitted in partial fulfilment of the requirements for the degree of  
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## **Declaration**

I, **Wendy Nompumelelo Gumede**, hereby declare that the work submitted for the degree in Master of Town and Regional Planning in the College of Humanities, School of Built Environment and Development Studies, Howard College Campus, University of KwaZulu-Natal is my own unless stipulated otherwise in the text with necessary citations where indicated. This work has not been submitted to any other university or institution of higher learning for examination.

## Acknowledgments

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- Last but not least my employer eThekweni Municipality department of Coastal Stormwater and Catchment Management. I thank them for their financial support and motivation to undertake this degree.

## **Dedication**

This Town and Regional Planning Masters dissertation is dedicated to my parents, Mrs Ntombi Gumede, the late Mr Themba Gumede and my wonderful sisters Thuli, Nelly, Zodwa and Zanele. Thank you for believing in me and for the infinite love and support.

## **Abstract**

The concept of Community Participation (CP) has become widely adopted internationally, nationally and locally through policy framework as a critical component of managing, protecting and conserving water resources in South Africa. However, achieving effective participation of communities in water resource projects continues to be a challenge especially for the previously marginalised communities.

The study aims to evaluate community participation in Sihlanzimvelo Stream Cleaning Project (SCP) at Inanda, Ntuzuma, and KwaMashu (INK). To understand the nature and extent of how, why, when community participated and who participated in SCP. To understand the significance and the value of community participation, factors that encourage and hinder CP as well as identifying strategies to enhance CP.

A qualitative and quantitative research method was adopted for collection of primary and secondary data sources which was used to achieve the objectives of this study. The results reveal that SCP has to promote participation of youth and women. There is a very low percentage of PINK community members that are participating in SCP and some members are not aware of the project. There is a need to improve the level of participation and communication channels to reach out to all members of the community. The significance of community participation into SCP is to improve their socio-economic wellbeing of the community. provide empowerment of knowledge and skills. Develop trust and partnership with community.

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## **ACRONYMS**

<b>ANC</b>	<b>African National Congress</b>
<b>CBO</b>	<b>Community Based Organisation</b>
<b>CSCM</b>	<b>Coastal Storm water and Catchment Management</b>
<b>CP</b>	<b>Community Participation</b>
<b>CSW</b>	<b>Cleansing and Solid Waste</b>
<b>EM</b>	<b>eThekwini Municipality</b>
<b>EMCPP</b>	<b>eThekwini Municipality Participation Policy</b>
<b>FCG</b>	<b>Focus Group</b>
<b>GIS</b>	<b>Geographic Information System</b>
<b>HIV-AIDS</b>	<b>Human Immunodeficiency Virus Acquired Immunodeficiency Syndrome</b>
<b>IDP</b>	<b>Integrated Development Plan</b>
<b>IWRM</b>	<b>Integrated Water Resource Management</b>
<b>MSA</b>	<b>Municipal System Act</b>
<b>NEMA</b>	<b>National Environmental Management Act</b>
<b>NGO</b>	<b>Non-Governmental Organisation</b>
<b>NSDF</b>	<b>National Sustainable Development Plan</b>
<b>PINK</b>	<b>Phoenix Ntuzuma Inanda KwaMashu</b>
<b>SCP</b>	<b>Sihlanzimvelo Stream Cleaning Project</b>
<b>SDF</b>	<b>Spatial Development Framework</b>
<b>RDP</b>	<b>Reconstruction Development Programme</b>
<b>RSWM</b>	<b>Roads and Stormwater Maintenance</b>
<b>WPLG</b>	<b>White Paper on Local Government</b>

# CHAPTER 1

## INTRODUCTION

### 1.1. Introduction

In South Africa the concept of community participation in water resources management was adopted to minimise human impact in water resources and to promote the idea of protection and conservation of water resource by all people. The approach has focused on the importance of interaction between communities with natural resources, establishing knowledge, information sharing and raising awareness to foster the culture of conservation, protection and management of water resources in S.A. Effective participation of communities in planning and taking decisions will ensure empowerment and development of communities and their environment. According to South African Constitution (1996) people's needs must be responded to, and the public must be encouraged to participate in policy-making. High emphasis is on participation of previously disadvantaged communities such as women and the poor (Chifamba, 2013). Community participation in water resource management has been highly recognised as the strategic tool for conservation, protection and management of water resource at a local level.

According to Boakye and Akpor (2012) Community participation, internationally and nationally has been accepted through legislation as an important element of water resources management. The concept is promoted by the South African Constitution which indicates that the key function of local government is delivering a healthy and safe environment and to ensure the engagement of communities. The constitution further stipulates that municipalities should involve community based organisation in programmes and projects of municipalities, while effective community participation has become a critical challenge for marginalised community. According to Municipal Systems Act (2000) municipalities should encourage the involvement of local communities. In the light of water resource management in South Africa, department of Roads and Stormwater Maintenance of eThekweni Municipality initiated Sihlanzimvelo stream cleaning Project (SCP) as a tool in order to resolve the issues of stream pollution and the effect it has on the health hazard to the surrounding

communities located closer to the streams and minimise challenges associated with stream pollution such as storm water infrastructure damages. The challenges of stream pollution at Phoenix, Inanda Ntuzuma and KwaMashu (PINK) area includes blockages on storm water infrastructure and flooding damages, stream river bank erosion, illegal dumping, debris and building rubble, sewer contamination, water quality deterioration, biodiversity loss, Alien plants and environmental degradation.

## **1.2. Problem Statement**

Thwala (2012) debated that reversing economic marginalisation and social exclusion in South Africa's informal settlements and townships is a powerful process. There are a high number of communities living below minimum subsistence levels that are unemployed. This is based on the analysis that the income levels are low and unemployment levels high. These conditions are associated with poor level of education and shortage of skills as well as spatial segregation from the resources of cities. It is in this regard that the SA Constitution (1996) preamble states that we should heal the division of the past and establish a society based on democratic values, social justice and fundamental human rights.

Therefore, the socio-economic challenges faced by these townships and informal settlements community has pose threats into the state of the environment within this areas, due to shortage of land for housing development, community develop informal settlements within environmental sensitive areas such as wetlands and flood plains. Illegal dumping of waste and litter is one of the major problems in these areas, thus contributing to streams pollution. Improper disposal of waste from informal settlements and stream illegal dumping from townships has affected the water quality of streams, leading to problems of flooding and erosion of river banks during the time of storm. Due to clogging and pollution of streams, surrounding communities' experience health hazards such as water borne disease and damages of infrastructure. The South African Constitution (1996) state that the objective of local government to promote a safe and healthy environment in order to minimise vulnerability of communities. The National Environmental Management Act (NEMA) (1998) indicates that municipal

intervention programmes should promote participation of local communities to minimise environmental degradation.

eThekwini Municipality department of Road and Storm water Maintenance in partnership with other internal departments such as Coastal Storm water and Catchment Management, Environmental Health, Cleansing and Solid Waste, Parks and Recreation, Environmental Planning and Climate Protection Department and Natural Resources initiated Sihlanzimvelo Stream Cleaning Project (SCP) with an objective of improving qualities of water resource, in streams and improve health conditions of the local residents and also minimise challenges associated with stream pollution. This study will evaluate the nature and the extent of PINK community participation into SCP, the significance of community participation and what strategies can be adopted to improve the level of community participation in stream cleaning projects.

### **1.3. Research Objectives and Questions**

#### **1.3.1. Main Research Objective**

The objective of this study is evaluation of community participation in Sihlanzimvelo stream cleaning project (SCP).

#### **1.3.2. Sub-Objectives**

- To evaluate the nature and extent of community participation in SCP.
- To assess how the significance of community participation in SCP.
- To examine the factors shaping community participation in SCP.
- To identifying the strategies to enhance community participation in PINK.

### **1.4. Research Questions**

#### **1.4.1. Main Research Question**

To what extent does the PINK community participate in Sihlanzimvelo Stream Cleaning Project?

#### **1.4.2. Sub-Questions**

- To what extent does PINK community is participating in SCP?
- What is the significance of community participation in SCP?
- What are the factors shaping community participation in SCP?
- Which strategies can be used to enhance community participation in SCP?

### **1.5. Hypothesis**

Community Participation during the planning and decision making of Sihlanzimvelo Stream Cleaning Project can assist in achieving sustainability and community ownership of the project.

### **1.6. Location of the Study**

Sihlanzimvelo Stream cleaning project (SCP) is a pilot project for stream cleaning at PINK area. PINK is located 25 kilometres away North of Durban city centre. The size of the area is 9 340ha, and is housing more than 580 000 eThekwini residents (eThekwini IDP, 2017). PINK is the largest township at North of Durban with low percentage of monthly income per household. PINK is occupied by black and Indian communities. PINK communities are previously marginalised communities with challenges of high unemployment rate, crime, high birth and mortality rate and inadequate service delivery issues.

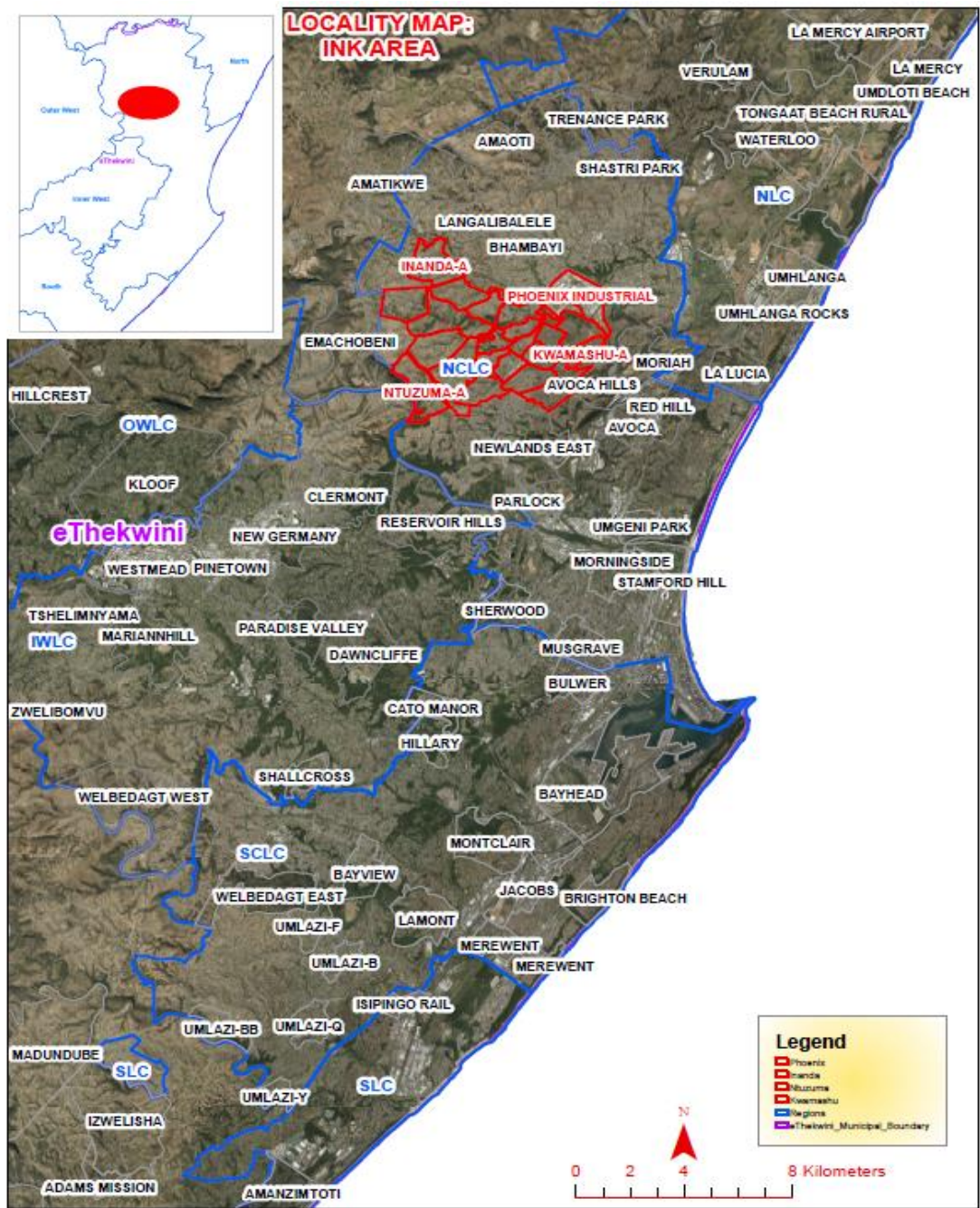


Figure 1: INK Area Locality Map (Source: Author (2017))

### 1.7 Literature Review

Participation of communities in environmental decision-making has obtained support on policy framework during the Consultative National Environmental Policy Process (CONNEPP) in 1995 which was followed by adoption of National Environmental Management Act of 1998. The purpose of the policy is addressing the previous



isolation of communities in making decisions and provides equal opportunities to all community indicated by the Constitution of South Africa (Act 108 of 1996) (Boakye, 2012). The Municipal Systems Act (MSA) of 2000 clearly indicates that municipalities should establish a clear relationship, and facilitate co-operation and communication, between it and the local community.

Community Participation is emphasized by the South African White Paper on Local Government (WPLG) of (1998), it states that all citizens of the community have a right to participate in the affairs of local government in four ways: as citizens, voters or as stakeholder organisations, presenting their opinions in the legislation processes. Therefore, the importance of community participation in water resource management and in decision-making has been highly recommended by both National and local governance (Boakye and Akpor, 2012).

The importance of legislation for community participation and community empowerment is endorsed by the constitution of South Africa which authorise municipalities to ensure “democratic and accountable government for local communities” as well as “encouraging the involvement of communities and community organisations in the matters of local government” (Lane, 2005). Therefore, eThekweni Municipality Community Participation Policy (EMCPP) of (1996) state that EM is aiming to empower members of community, ward structures, ward councillor, municipal officials and community organisations to effectively participate in community upliftment hence community awareness is the key strategic tool of ensuring that communities are being capacitated with knowledge and understanding of the project that is aimed to develop their environment.

Sultana (2009) debated that members of the community are encouraged to take advantage of participating in water resource programmes to enhance the level of fairness, equity, transparency and efficiency, it is in this regard that communities should take ownership of water resource programmes that are aimed at improving the quality of water resources and environmental sustainability.

National Environmental Management Act (1998) promotes that interested and affected parties should participate in environmental protection and that all citizens must have equal opportunities to development of understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and

disadvantaged persons must be encouraged. NEMA also stipulates the importance of participation of local communities as key stakeholders on water resource projects that affect their lives.

## **1.9 Theories**

### **1.8.1. Communicative Planning**

Communicative Planning has gain its recognition as the fundamental principle in the planning process, the approach has move from the concept of a planner as a technical expert toward a facilitator (Peterman, 2004). It is in this regard that in place making process participation of communities is recognised and included in the policymaking decisions. Therefore, to achieve effective participation of communities' local municipalities must capacitate residents to make informed decisions (Chaskin and Garg, 1997).

The main themes that are elaborated within this approach include “inclusiveness, reciprocity, good communication, empowerment and mutual learning” (MacCallum, 2008). It includes the introduction of participatory models, and methods that include the community in decision making (MacCallum, 2008). The communicative turn to advocates for the knowledge of all actions in planning by the community (Healey, 2003). This approach also highlights the influence of politics and power distribution (Forester, 1982). The approach is derived from the notion of involvement of affected parties, planning projects cannot proceed successfully (Healey, 2003). Indeed, the distribution of knowledge and power in the community opens opportunities to address inequalities and oppression (Forester, 1982).

According to Fainstein (2000) view communicative planning as a reaction towards the top down approach in planning. The theory promotes community members as stakeholders in a place of making and as the appropriate unit of planning for achieving a profound sustainable future.

### **1.8.2. Advocacy Planning**

Advocacy planning theory is adopted from the legal practice which advocates interactive discussion between two opposition parties it presented a revolution in planning that brought previously excluded stakeholders into play and also bring a new role in planning for planner to undertake in their profession (Peattie, 2007). Lane (2005) mentioned three main themes that advocacy planning is focusing upon:

Firstly, the existing disparity of negotiating power between groups and stakeholders. As stated by Williams (2006) that winning a specific battle and identifying with the plight of a group that is in a position of power or resource disadvantage. Secondly the uneven access of all parties to the political structure, manipulating the environment to gain a desired interest on behalf of marginalised community (Williams, 2006). Thirdly the fact that the majority of communities and specifically the previously disadvantage do not have a representative structure therefore their interest is not represented in planning

### **1.8.3. Community Participation**

The concept of community participation (CP) promotes participation of communities in planning process, implementation and decision making in water resource management projects. Ragini (2015) debated that community participation recognise that all role players are equal; they share knowledge, resources and skills in managing their natural resources.

According to Kamuiru and Mbwisa (2014) realization of community participation in planning has led to the adoption of the 'bottom-up' approach to development. This implies for the active engagement of local communities into development projects. Therefore, CP implies open discussions and working with and not for people. Also to involve all stakeholders in the design and implementation of projects, in order to ensure beneficiary ownership and also to instil virtues of accountability, transparency and sustainability. Active participation of beneficiaries in project design and implementation will also enable donors/sponsors to identify and

address the factors leading to poor CP in development projects (Burns and Taylor, 2000).

## **1.9 Data Collection**

A mixed research method that uses both qualitative and quantitative research methods was adopted. Data collection will be collected from primary and secondary source in order to obtain adequate and relevant information. The primary data will be collected through the use of interviews, questionnaires, focus group discussion and by observation. The secondary data will be gathered from books, journal articles, policies, online reviews and encyclopaedias.

## **1.10 Limitations of the Study**

The most important factor of this research paper is time management. The researcher has to able to manage time during all stages of the research as time that is available is limited for the completion of the study and also ensuring accuracy of all information gathered, and also the unavailability of respondents during data collection from the sample of households. It is in this regard that the researcher has to work long hours and over the weekend and using public holidays to cover the targeted dates stipulated on the work plan schedule also, financial cost would be the limitations that could be encountered by the researcher. The researcher will seek financial and resource support from the employer to ensure the best quality standard of the study.

## **1.11 Structure of Dissertation**

This research paper will be structured into seven chapters:

**Chapter one:** this chapter presents the introduction of the study. The chapter will discuss the research problem, literature, concept and theories of community

participation in water resource project. It includes the motivation of the study, the location of PINK areas, the statement of the problem, objectives and questions of the study, brief explanation of research methodology, and limitations of the study. The chapter will conclude by presenting the structure of this dissertation.

**Chapter two:** this will review literature of CP water resource and from legislative framework of CP from national level to municipality level. The literature will be reviewed focusing on the research objectives of the study. This chapter will also discuss the theoretical framework of community participation in water resource management, which will include communicative and advocacy planning. These are main influential theories that promote a community participatory approach to development.

**Chapter three:** outlines the methodology of data collection used in in this study. This chapter includes sampling procedure and sampling method of key informants of the study. It will indicate sources of data collection were from primary and secondary source in order to obtain adequate and relevant information. The chapter will also present how validity and reliability in the study will be maintained.

**Chapter four:** the chapter presents the historical background and location of Phoenix, Inanda, Ntuzuma and KwaMashu (PINK). This chapter further presents the socio demographic and socio-economic conditions and service delivery status of PINK.

**Chapter five:** This chapter provides an analysis of the data collected through focus group discussion, interviews, observations and secondary data. This chapter presents the findings and the relevance of the literature review and the theories of the study

**Chapter six:** in this chapter the researcher will present the summery of research findings, project recommendation, research recommendations and recommendations for future research studies on how community participation can be implemented effectively to ensure a sustainable stream projects.

## **CHAPTER 2**

### **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

#### **2.1. Introduction**

This chapter aims to discuss the context of participation of communities in water resource management projects within South African local governance and it will also present key participatory planning theories, Communicative planning theory and Collaborative planning theory, as the area of focus for this study hence the study is evaluating community participation in Sihlanzimvelo Stream Cleaning Project (SCP). The nature of community participation, significance of community participation, factors shaping community participation and strategies to enhance community participation. The literature of community participation will be analysed in relation to the legislative framework that governs participation of communities in water resource projects at a national and local government level in South Africa.

#### **2.2. The Nature of Community Participation in Water Resource Management.**

Community participation is one of the concept that is adopted for Integrated Water Resource Management (IWRM). Boakye and Akpor (2012) stated that at international level, the United Nations Conference on Environment and Development in Rio in 1992 (UNCED or the 'Earth Summit') emphasized the need for public involvement in the design and implementation of all sorts of environmental policy. Principle 10 of the Rio Declaration on Environment upholds the idea of broad based public participation in environmental decision-making. They further stated that in South Africa The legislation is aimed at addressing the past alienation of citizens in decision-making and gives

equal rights to citizens as enshrined in the Constitution of South Africa (Act 108 of 1996)

Community participation has remained broad concept (Chifamba, 2013). The concept of community participation in water resource management projects is defined by Abrahamson (2011) as a strategic tool by which communities can able to influence the decision and implementation of a water resource project in order to develop themselves, their income, self- resilience and personal growth. The National Water Act (NWA) of 1998 therefore mandates the participation of the general public, especially those from the previously disadvantaged and marginalized groups, as critical in achieving its goals in the areas of water conservation, management and monitoring (Boakye and Akpor, 2012). According to Sultana (2009) community participation is often portrayed as increasing the ‘empowerment’ of community, but recent evidence suggests that many communities are disempowered and marginalised in the process. Geiring (2011) stresses out that an effective participation process should have a two-way exchange of information between the local government and the community. Because this information should normally be linked to goals and objectives of the water resource project, it is vital for local government to clarify to the community what to understand, information that is needed and how they can participate.

Swanepoel (2011) debated the term of Community Participation has been used for different meanings and methods of implementation in the past few years and has questions which are not answered about why they participate, who participates, when they participate and how they participate in water projects. Swanepoel (2011) added that the nature on which communities participate in water resource projects depends on the level of community engagement in a project. Lane (2005) identified levels of community participation in water resource projects

### **2.2.1. Typology/levels and different modes of community participation**

Table 1: Typology/levels and different modes of community participation

<p><b>1. Manipulative Participation</b></p>	<p>Participation of communities is represented in discussion meetings with no power to influence decisions.</p>
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<b>2.Passive Participation</b>	Communities participate by being informed about the project plan and what decisions have been made. Their views are not considered all the plans are made without community consultation.
<b>3.Participation by Consultation</b>	Participation of communities is through consultation or answering questions. Project planners identify problems and gather information and analyse. Communities do not participate in decision-making.
<b>4.Participation for Material Incentives</b>	Communities participate by providing resources, such as labour traditional authority may provide land and labour, but are not involved in planning or implementation of the project. This is the most common form of participation, yet communities have no input or engagement in decisions.
<b>5.Functional Participation</b>	Participation is viewed by government agencies as a tool to achieve project objectives, to minimise costs. Communities participate by developing groups to achieve project objectives. Such participation may encourage interaction and participation in decision making, the community may be used to serve the interest of the external agencies.
<b>6.Interactive Participation</b>	Community participate in partnership, designing action plans or building local government institutions. Participation is a means of social justice and equity, not to meet project goals. Community have stake over decision making and manage available resources.
<b>7.Self-Mobilization</b>	Community take initiatives to make change without any external agencies. They engage external agencies for support and technical and for resources they need, they have control over the project resources.

Source: Arnstein (1969).

### **2.2.2. The Significance of Community Participation in Water Resource Management**

According to NEMA (1998) participation of all stakeholders the interested role players in environmental programmes should be promoted. The act promotes recognition of participation by local communities as key stakeholders into water resource



management projects. Twala (2009) argued effective community stakeholder engagement is important for project planning and implementation of water resource projects, assist in understanding how to work with the community particularly the affected group in the project.

Ragini (2015) highlighted five main factors that promote community participation and engagement in water resource projects:

- **To understand the perception of community**

For effective community engagement one has to understand the social dynamics of the community. This will assist in identifying needs and choices of the community based on their environment. Understanding the unique lifestyle of the people and individuals at a local level, through their socio-economic and environmental issues. This also assists in developing partnership and trust for water resource management projects at nationally and local levels.

- **Involvement in decision making**

When dealing with community it is important to ensure administration of decision-making since local government takes decisions at community level. Participation includes establishing forums where issues will be discussed and implemented.

- **Commitment from localities**

Community participation is one of the strategic tools to have commitment and involvement of community in order to achieve target goals and partnership for water resource management project. Municipalities should mobilise community in one platform to participate in water resources protection at a local level.

- **Optimum utilization of Resources**

Participation of community in a project contributes towards availability of multi skills, diverse resource and contributes by creating ownership and sustainability and pride of project.

- **Monitoring & Evaluation**

Community participation will enhance the level of monitoring and evaluation conducting corrective action can be done by and for community. Community can take responsibility of participation and controlling their intervention. Community's suggestions on environmental programmes and partnership would develop a culture of monitoring the environmental programmes

Understanding the importance of community participation in water resource projects one has to understand the unique social context of those communities in order to able to develop proper community participation mechanisms that ensure that communities are able to participate. These issues indicate that effective participation of community into water resource project would not only yield positive benefits to the community in terms of knowledge and partnership will also encourage community to take ownership and sustainability of project.

The importance of community participation in water resource projects is promoted by S.A constitution which calls for local government to ensure community participation at a local level. The objectives of municipalities are to create conducive environment for community to participate in development programmes. According to the White Paper on Local Government (1998) creating a conducive environment means that the municipalities must adopt inclusive approaches to fostering community participation, including strategies aimed at removing obstacles too, and actively encouraging, the participation of marginalised groups in the local community.

Kamiuru and Mbwisa (2014) agreed by explaining that when community is not engaged in water resource initiatives that affect community socially, economically and environmentally and that can have long-term impact. Developing a strong relationship and strategy with community and other role players is highly important for water resource projects.

### **2.3. Factors Shaping Community Participation in Water Resource Management**

Community participation in water resource management project is influenced by factors that shape participation of communities in WRM. There are factors that

encourage or attract community as a pull factor to participate in WRM and those that are push factors which discourage community to participate in WRMP, these factors hinder participation of community.

## **2.4. Factors Encouraging Community Participation in Water Resource Management**

Kamuiiri and Akpor (2014) debated that community will participate freely in water resource management interventions they own. This gives community a responsibility of taking a lead and identifying solutions. According to Twala (2009) people at the local grassroots level know their needs better than development agencies. Whilst the Municipal Systems Act (MSA) of (2000) stipulates that providing openness, address and give information to community must be timely and accurate ensure effective involvement.

## **2.5. Benefits of Community Participation in Water Resource Management**

Boakye and Akpor (2012) argue that the benefits of community participation in water resource projects are also deriving from identification of clear project objectives. Community. "Ownership" of the facilities by the community and thus ensures more extensive and efficient use project resources.

The importance of recognizing the role of community participation in water resource projects for public, private sector and community based organisation and involvement of affected and interested stakeholders in all stages of the project will increase the level of transparency, partnership, sustainability, accountability and ownership (Kamuiuru and Mbwisa, 2014). Therefore, Thwala (2009) emphasise that the main aim of municipalities is to empowering communities, capacitate them with information, ensure project effectiveness and sharing project resources and costs.

## **2.6. Factors that hinder Community Participation**

Rahman (1993) debated that people's participation in water resource projects is utilised to full fill the interest of external agencies with less interest on community well-being. Communities are faced with variety of challenges in the process of participation. These challenges are identified below by (Kakumba and Nsingo, 2008).

- **Inadequate financial capacity:** inadequate resources have adverse impact on the success of the project and participation by the community to be able to influence decisions and policies that affect them.
- **Lack of general information:** communities lack information about local government plans and programmes. Information on policies is accessible but difficult to be obtained.
- **Absence of community representation in the decision-making process:** lack of effective representation of communities in the affairs of the municipality can affect the level of community participation.
- **Socio-economic structure:** Kakumba and Nsingo (2008) debated that poor community leadership structure of most communities such as community based organisations; governance and lack of community involvement affect effective participation.
- **Political patronage:** Poor political by-in from the municipal governance affect powers of the community to influence decisions. (Kakumba and Nsingo, 2008).

## **2.7. Strategies to Enhance Community Participation in Water Resource Management.**

Rahman (1993) mention that members of the community will actively participate in programmes they have ownership of. Community should be given an opportunity to identify problems and solutions. Nekwaya (2007) added citizens understand their environment and know what causes are and what needs to be done better than anyone

### **2.7.1. Processes of Community Participation**

EMCPP (1996) indicated processes that guide community participation into the affairs of the municipality.

### **2.7.2. Community Information**

eThekwini Municipality shall provide communities with information and keep communities informed. This will include the use of a website, meetings, audio-visuals, informative meetings and public notices.

### **2.7.3. Consultation of Community**

EThekwini Municipality indicates that it will use the process community consultation with an aim of listening to the views of the public and suggestions. The tools of facilitating consultation include public meetings, focus groups, izimbizo, workshops and questionnaires.

### **2.7.4. Involvement of Community**

The process of working with communities assists in addressing issues faced by the municipality and making decisions. eThekwini Municipality will ensure that citizens are participating in all processes. The tools for involvement are planning focus meeting, facilitation, project steering committee and precinct committee.

### **2.7.5. Community Participation**

eThekwini Municipality is committed to encourage communities to participate in programmes and the affairs of the municipality. The municipality involve citizens to planning discussions and decisions making. The promise to members of the public is that citizens must be part in identifying best solutions. The process includes round table, advisory committee and conferences.

### **2.7.6. Community Empowerment**

Local government has to support communities to take responsibility and ownership of programmes. EThekwini Municipality Community Participation Policy (1996) indicates that the city has adopted Community Based Planning for empowering communities with programmes that the municipality has. The approach will incorporate conferences,

working groups, forums, feedback meetings for communities and mapping as community empowerment strategy.

## **2.8. Community participation critics**

Like any other concept, the concept of community participation has been highly criticized by other philosophers that are not practical as communities are not homogeneous and the process is delaying the project. And it is time consuming. Lane (2005) debated that the challenge with participation of communities is poor leadership structures, lack of information and poverty which affect the level of participation.

## **2.9. Communicative Planning and Advocacy Planning Theories**

Participatory planning models in water resource management emerge as the criticism to unitary planning system which was exclusive not considering the importance of all role players in the planning process. This participatory planning theory has shaped and contributed to a shift from old school of thought (top-down approach) in planning to a new school of thought (bottom-up approach) in planning. Participatory planning promotes the importance of integrating all aspects and all role players, the theories put more emphasis on the inclusion of local communities in the process of place making.

These theories have been identified for this study as the main theories that emphasise the importance of local community as key role players to participate into development initiatives that affect their lives. This part will firstly examine the origin and the main arguments from each theory. Secondly will analyse the key principles from the theories and indicate how each principle relates to the research objectives and the research problem. And it will conclude by indicating the influence of these planning theories on water resource projects.

## 2.10. Communicative Planning Theory

Communicative planning theory was developed by Jurgen Habermas the German sociologist- philosopher in 1981 and was referred to the theory of Communicative. Heberman entry into the phase of postmodernism in 1980's representing defence of modernism and its criticisms as Hebermas view it against modernism by Lyotard Foucalt (Tewdwr-Jones and Allimendinger, 1998).

The work of Habermas was analysed and presented by different philosophers. Healey (2003) explore that the main debate of communicative planning is based on the converging of ideas that planning as a communicative approach require the involvement of all key players. Gunder (2010) argues that communicative planning is perceived as an ideal of all types of planning processes because it promotes discussions and debates among stakeholders in the process of place making.

The theory intends to achieve undistorted, open, community-based consultation which culminates in unforced consensual agreement of all roll players prior to the beginning of an agreed social or spatial plan (Healey, 2003). In the light of Fainstein (2000) view communicative planning as a reaction towards the top down approach in planning. The key emphasise of this theory is on the community as role players in process of a place making and as the appropriate unit of planning for achieving a profound sustainable future. According to Habermas debate of communicative action, suggests a new approach to planning, the bottom-up planning approach in which discourse functions as the main regulator in planning (Portugali and Alfasi, 2008).

The bottom-up approach acknowledges other approaches like advocacy planning that emphasise the role of a planner as an advocacy to local communities. It encourages communication between citizens and planning agencies. The communicative planning approach also emphasised the distribution of power and influence of politics (Forester, 1982). Giddens (1994) states that the approach is based on the principle that without the participation of the relevant stakeholders, the planning projects cannot be achieved successfully.

Forester (1982) also added that the communicative planning emphasises distribution of power and knowledge in the community which opens opportunities to address inequalities and oppression among stakeholders. Communicative planning theory also promotes the need to shift from the individualised conception of reasoning to a joint decision making by all those who are at stake, in this approach all parties involved can then start to understand each other and be able to reach a consensus in decision making (Heredia-Martínez, 2010).

### **2.10.1. Key Principles of Communicative Planning Theory**

MacCallum (2008) has identified the main principles that are emphasised by communicative planning. These include:

1. Inlusiveness: promote Participation, integration, collaboration, advocacy and involvement of all people into the planning process as the theory emphasise that planning is action.
2. Reciprocity: promote Respect, trust, acknowledging others views and mutual understating between all role players of development.
3. Good Communication: promote Dialogue, discussion, communicative, speech situation, right to speak of all citizens in the process of place making.
4. Empowerment: promote Conflict resolution, power shift, power distribution, social justice, inequalities, and democracy to community
5. Learning: promote Knowledge, new ideas, learning, listening and sharing by all stakeholders in the planning process

### **2.10.2. Relevance of Communicative Planning into Water Resource Management**

Communicative planning theory is one of the key strategic planning methods that have been adopted by many planning practitioners in the place making process. The key emphasise of communicative planning begins with the recognition of a system that is inclusive, a shift from a sectorial planning to a more inclusive planning approach. Communicative planning promotes policy formulation that incorporates all aspects of



planning into the spatial planning policy of place making. The incorporation of all aspects will ensure the qualities of places, their uniqueness and identity that promotes the life style of the local people, environmental sustainability, economic and social growth. Communicative planning promotes an integrated approach into water resource management the incorporation of the socio-economic conditions and participation of local communities in the planning and decision making to ensure sustainability of water resource management.

Communicative planning encourages the recognition of various stakeholders and equity among the stakeholders in sharing knowledge and empowering stakeholders to be able to have meaningful and effective decision making process. In the light of this argument communicative planning promote social justice and equity among all role players. Effective management of water resource projects recognise the importance of multi stakeholder engagement a by sharing resources and knowledge and equity amongst all role players. It also recognised the importance of communicative planners to be mediators in order to manage conflict. Communicative planning promotes a democratic planning system in the place making process.

Communicative planning in South Africa is highly adopted and implemented as the strategic planning system in the process of water resource management as an approach that requires that municipalities work with the local people to plan and manage development. It also promotes sustainable development that in order to create places of good qualities environmental sustainability, social development and economic development should be highly recognised. Communicative approach promotes bottom-up approach in order to listen to the voices of the people. A community-based planning approach which is referred to as a placed based approach. Communicative planning emphasises bottom-up approach in water resource management local communities to identify the problem, take decisions and be part of the solutions in changing their behaviour and protection of water resource. Communicative planning in South Africa promotes recognition of indigenous knowledge and its inclusion into the process of place making.

Communicative planning was formulated as the planning approach against past planning system in which communities were not involved in the process, an authoritative planning to a democratic planning. The theory transforms planning into

an inclusive and consultative process in which all parties are equal and share ideas and knowledge.

## 2.11. Advocacy Planning Theory

The theory of advocacy planning is a planning practise formulated by Paul Davidoff the American Planner in 1965. Advocacy planning focuses upon the principles of social inclusion, political equity, pluralism and empowerment in policy development. Advocacy is the planning process that emphasise conveying a message more broadly to a mass audience on behalf of others. Advocacy planning is known for “architectural design and planning for powerless, inarticulate inner-city groups, notably when resisting destructive schemes by planning authorities, government agencies, or similar bodies”. Davidoff (1965) argue that the theory of advocacy planning was borrowed from the legal practice that indicates differences between two viewpoints in an unfavourable proceeding. Advocacy planning presents a transformation in planning that encourage participation of previously excluded stakeholders into place making and also foster a new role in planning for planners to undertake as mediators in their profession (Peattie, 2007).

Lane (2005) mentioned three main themes that advocacy planning is focusing upon:

- The existing disparity of negotiating power between groups and stakeholders. As stated by Williams (2006) that winning a specific battle and identifying with the plight of a group that is in a position of power or resource disadvantage.
- The uneven access of all parties to the political structure, for example manipulating the environment to gain a desired interest on behalf of marginalised community (Williams, 2006).
- The fact that the majority of communities and specifically the previously disadvantage do not have a representative structure therefore their interest is not represented in planning.

The above key objectives of advocacy planning are to promote and enforce a planning practice that ensures equal opportunities for participation of all people in planning processes (Davidoff 1965). Advocacy planning was developed as a criticism against the traditional radical approaches in the process of place making by focusing on the

recognition and inclusion of interests for powerless, underprivileged and previously disadvantaged groups into planning

### 2.11.1. Key Principles of Advocacy Planning Theory

Table 2: Advocacy Planning Theory

PRINCIPLES	CONCEPT
1. Social Inclusion	<ul style="list-style-type: none"> <li>• Integration</li> <li>• Power Distribution</li> <li>• Respect and Acknowledgement</li> </ul>
2. Multi-Stakeholder	<ul style="list-style-type: none"> <li>• Participation</li> <li>• Collaborative</li> <li>• Sustainability</li> </ul>
3. Equity	<ul style="list-style-type: none"> <li>• Democracy</li> <li>• Social Justice</li> <li>• Political Equity</li> </ul>
4. Pluralism	<ul style="list-style-type: none"> <li>• Bottom-up Approach</li> <li>• Stakeholder Engagement</li> <li>• Conflict Resolution</li> </ul>
5. Empowerment	<ul style="list-style-type: none"> <li>• Learning</li> <li>• Knowledge sharing</li> <li>• Information sharing</li> </ul>

Source: Author, 2018

### 2.11.2. Relevance of Advocacy Planning in Water Resource Management.

Firstly, Davidoff advocacy planning argues on advocacy for affected and interested parties in planning process. Advocacy planning emphasise the communication or

dialogue in the policy making as the critique of unitary planning system. Advocacy planning promotes the inclusion of the views of other role players. It recognises the importance of stakeholder integration in planning. He debated that planning should be a participatory process, engagement of all parties and all plans to be recognised against unitary plans. Advocacy planning recognised in a society plans should not be developed by one party, multi plans should be considered as he refers to pluralism planning.

Secondly Advocacy planning emphasise social inclusion and social justice that planning should include all citizens concerned for participation and promote inclusiveness of all role players in place making and community development. Advocacy promotes representation of all stakeholders in the planning process of water resource management. Thirdly advocacy planning promoted empowerment of clients by giving information and clarification of client's ideas. The idea of advocacy planning is to provide necessary information to clients in order to be able to make informed decision, this concept promotes that in order for local communities to make decisions on water resource projects they should be capacitated and be informed. Davidoff debated that the duties of the advocacy planner would be informing other groups in that he emphasise the idea of education and awareness in order to able to make effective decisions.

Advocacy planning also promoted community based planning as he argues pluralism in planning, he indicated that effective planning should start at the neighbourhood level. Advocacy planning also emphasise holistic approach or integrated the recognition of all aspects into the planning process. He argues that the social, economic and cultural institutions and other things should be included in planning. He also emphasise effective democratic planning practice for the establishment of public policies and democratic decision making.

Advocacy planning and community participation presents a breakthrough from traditional ways of practicing participation. Participation, in particular the participation of the majority and the underprivileged becomes the central focal point, rather than marginal planning technique (Lane, 2005). Advocacy planning promotes participation of all role players including the minority. Advocacy approach was formulated as the framework of community participation it ensures the powerless, unheard and invisible

interests are considered and brought to surface in decision making processes (Lane, 2005). Rejection of the notion of unitary public interest also form part of advocacy planning areas of interest (Ibid). This means advocacy planners, community developers and political plurality becomes not only facilitators of public participation but also advocators of the marginalised interest directly, represent members of the public in planning discussions (Ibid).

## **2.12. Chapter Summary**

The literature indicates the need and the importance of community participation in stream cleaning project, in that communities are the key role player in the protection and conservation of water resources at a catchment level. For effective community participation communities should be empowered with knowledge that will enable them to be able to make meaningful decision and to participate with an understanding. The literature also indicates that if proper community participation principles are applied that will increase the level of participation by the communities. Communicative and Advocacy theory are participatory planning theories that promote the principles of inclusiveness and equity into the process of place making. The principles of communicative and advocacy planning recognise that places are different. It is the role of a planner as a mediator to manage conflicts in order to ensure participation of communities into planning are being recognised and the views of the people are included. The next chapter will be presenting the methodology which was adopted for data collection in this study.

# **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.1. Introduction**

The main focus for this chapter is to elaborate what type of research methodology to be used for the study. The methodology that was adopted is a mixed research method which includes quantitative and qualitative method. The research design includes sampling procedure of key informants of the study. The data collection will be collected from primary and secondary source. Different data analysis techniques of qualitative and quantitative methods are to be applied.

### **3.2. Research Design**

The method was adopted to evaluate community participation in Sihlanzimvelo Stream Cleaning Project (SCP) study. According to Kumar (2011) stated that mixed method research design is a procedure for collecting, analysing, and mixing both quantitative and qualitative research methods in a single study. A mixed research method is relevant to the study as it has different data samples; each sample requires a specific data collection technique.

Qualitative research method has been defined by Tewksbury (2009) as the concepts, meanings, definitions, symbols, metaphors, descriptions and characteristics of variables. Quantitative research is defined as focusing on measurements to compare and analyse different variables by (Anderson, 1987).

### **3.3. Sampling Procedure**

A sample of thirty community respondents was adopted from PINK area. The study focused on collecting data from Inanda Ntuzuma and KwaMashu within PINK, hence Phoenix was not included in Sihlanzimvelo Project. The target number of the sample

size of the study was confined by financial resources and the availability of respondents during the week days, the researcher was forced to conduct the survey on Sunday's in order to be able to get adequate number of respondent's those who are working and not working for comparison of the study. Time constrains were a restricting factor to minimize the number of the sample size, the timeframe of the academic study is six months also restricted study to sample a manageable sample size of key informants in order to complete on time.

**3.3.1. Sample 1: Community Respondents-** Ten community participants were sampled from Inanda, Ntuzuma and KwaMashu. The community respondents were sampled from the households allocated along the stream. Households were mapped using GIS mapping from the radius of 100 meters from the stream in each INK area. The study sampled thirty community respondents residing along the stream that are interested and affected by SCP at INK area.

**3.3.2. Sample 2: Government Officials-** The sample of three eThekweni municipal officials was sampled from the key departments who are facilitating the SCP. One official who was the Project Manager from the department of Roads and Stormwater Maintenance (RSWM) and two officials from the department of Coastal Stormwater and Catchment Management (CSCM) who are Catchment Coordinators. The study identified departments who are having knowledge, experience, expertise and officials who participated in the planning, implementation and management of SCP.

**3.3.3. Sample 3: Civil Society Organisations-** The study identified three cooperatives who are participating in the SCP from INK area for the Focus Group Discussion (FCG). The FCG was represented by three members of each cooperative that were invited. A convenient venue for all cooperative was arranged as each INK area was represented by one cooperative. The cooperative invited for FCG are those cooperatives that are participating as field workers, with an understanding, knowledge of SCP.

## 3.4. Sampling Method

**3.4.1. Sample 1: Community Respondents-** Probability Random Sampling method was used for community sampling. According Mohsin (2016) Random Sampling method is defined as the type of sampling each and every element of the community has equal chances of being sampled in the sample. This sample method was used to sample community respondent residing along the stream as all community members are affected the same.

**3.4.2. Sample 2: Government Officials-** Purposive Sampling Method. Plowright (2011) argue that purposive sampling allows the investigator to identify who are key informants in the study and sample them as their source of data. The government officials were sampled using the purposive sampling method. This method allows the study to identify and sample the relevant informants of the study as known by the researcher. Only the officials involved in the projected were invited to participate.

**3.4.3. Sample 3: Civil Society Organizations-** the Focus Group included the cooperatives who are participating in SCP. These cooperatives were identified as key informant and also as members of the community who are participating in SCP. The type of method used by the study is simple Random Sampling and is defined by (Ibid) as the type of sampling that each and every element of the population have same probabilities of being sampled in the sampling size. In this sampling method every element contains same kind of characteristics that meets the described criteria of target population. This method was used as it allows the researcher to sample those who are participating in SCP and will able to give relevant information on the SCP.



## 3.5. Data Collection

The primary data and secondary data sources were collected in this study. These data sources are briefly described below.

### 3.5.1. Primary Source

The research method adopted was the mixed method that include both quantitative and qualitative research methods was adopted to evaluate the significance of community participation in stream cleaning projects and making it more sustainable. The data was collected through interviews, focus group discussions and a questionnaire. There are three key informants were sampled for data collection as they have different information and experience regarding SCP at INK area.

- **Sample 1: Community survey-** The community survey was done using a designed questionnaire. A questionnaire has been defined by Fox and Bayat (2007) is an instrument that is widely used to collect data for social research studies, in which a set of questions for a specific title are compiled to collect information and answers. A questionnaire was formulated specifically to study main questions. The respondents were assisted by the researcher to fill in the questionnaire. This survey tool enables the researcher to collect information from the community and understand their interest and concerns on the project. The survey was guided by a questionnaire which is attached as appendix 2.
- **Sample 2: Semi-structured Interviews-** a semi-structured research interview was adopted in the study for the interview for municipal officials. This research tool allowed for the careful probing of views and opinions so as to facilitate the expansion of answers by respondents (Gray, 2017) this tool was used with a purpose of obtaining ideas and opinions from the interviewee on the strategies used for participation of the community in the SCP and how the SCP was managing to ensure effective participation of communities. The interviews were guided by the interview guide attached as appendix 3.

- **Sample 3: Focus Group Discussion (FCG)** - SCP INK cooperatives focus group discussion was conducted by semi-structured questionnaire used for official's interviews. The FCG are intense information sharing in which informants participating discuss about the research study focusing on a specific research question Nachmias and Nachmias (1981). The discussions were conducted for organisations who are participating to gather information on their role and the level of participation in the SCP. The FCG was guided by interview guide attached as appendix 4.

### **3.5.2. Secondary Source**

Secondary data sources of the study present second hand information that has been collected according to research objectives and in order to answer research questions. The information gathered include; books, journal articles, policies, online reviews and encyclopedias. The researcher has used the secondary data obtained from 2011 census data, and information collected from eThekweni Municipality Community Participation Policy. Another data was collected through the use of Community participation journals, articles and books. These research data sources were analysed to gather information with regarding to SCP and the INK community.

## **3.6. Data Analysis**

According to Biggan (2008) research data analysis is the systematic analysis of information that ensures logical presentation and provides meaning and structure to the quantity of collected information in a study. The data collected was analysed by adopting Biggan qualitative analysis process (Figure 4.1 below).

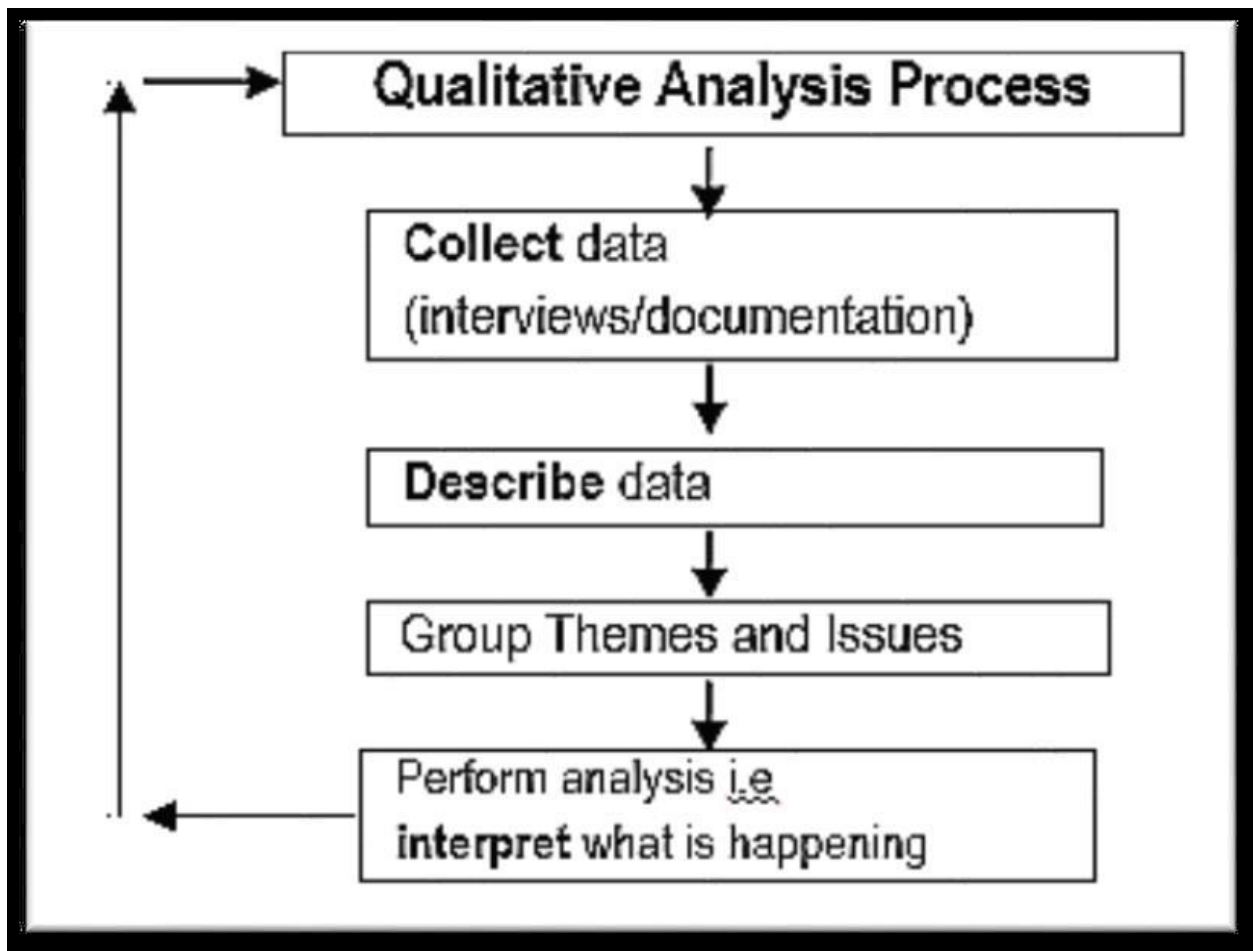


Figure 2: The interpretation of qualitative data (Source: Biggan, 2008: 118)

The data that was collected was grouped into themes that are guided by the research questions,

- a) Theme 1: Nature of community participation
- b) Theme 2: The significance of community participation
- c) Theme 3: Factors shaping community participation
- d) Theme 4: Strategies to enhance community participation

The importance of categorizing collected data into themes is used in social science studies. It assists the researcher to be able to analyse data in a systematic and scientific manner. This process was used in order to follow an appropriate method of data analysis for better understanding, interpretation and presentation of data findings.

### 3.7 Validity and Reliability

Jackson (2006) defines research validity as a focus on scientific results, data truthfulness and accuracy of findings. A valid study should demonstrate existing conditions through the use of appropriate instrument or method should accordantly measure what it is intendant to measure. (Ibid) stated that reliability is based with the repeatability, stability and consistency of the respondent's accounts and researcher's ability to gather information and record data accurately.

Table 3: Appropriate methods and tools of data processing

Primary Source-(Key Informants )	Research Method	Research Tools	Data Analysis method	Research Objectives	Validity and Reliability
INK Community Members	Random Sampling	Community Survey - Questionnaire	Qualitative Data Analysis Process	Research objectives themes	Community members affected and interested in the project. Located near the streams
Government Officials	Purposive Sampling	Semi structured Interview questions	Qualitative Data Analysis Process	Research objectives themes	Municipal Officials facilitating the SCP
Civil Society Organisations	Probability Sampling	Focus Group Discussion	Qualitative Data Analysis Process	Research objectives themes	Cooperatives who are working in the SCP
Secondary Source	Research Method	Research Tools	Data Analysis method	Research Objectives themes	Validity and Reliability
Literature Review, Conceptual &Theoretical Framework	Mixed Research Method	Books, journals articles, Policies, GIS data	Qualitative Data Analysis Process	Research objectives themes	Current information less than 10 years old

Source: Author, 2018

The researcher has carefully applied the qualitative data collection and analysis methods, procedure and tools of a social research study as illustrated in table 1 for primary and secondary data sample to ensure that the data collected was accurately

collected in order to ensure that the information obtained in the study is valid and reliable.

### **3.8. Ethical Considerations**

The ethical considerations were applied in order for the community respondents to participate in the study, consent letters were issued to receive permission for participating (attached appendix 1), the consent letters were translated in Zulu as most of INK community members are Zulu speaking. The ward councilors for the three selected wards were requested to conduct community survey within their wards and permission was granted to the researcher. The community respondents that participated in the study were informed that their participation is voluntarily and information received will be treated highly confidentially. The municipal departments were requested by the gatekeeper's letter (attached appendix 5) for permission to interview officials for the purpose to gain information for the study. Thirdly the cooperatives were telephonically invited through their chairperson to participate in the focus group discussion. The purpose of the study was explained to all key informants prior to responding to questions. The introductory section was containing information about the name of the researcher, institution of study and reasons for the research. The participants were requested to include their names and contact addresses for reference purposes only.

### **3.9. Research Constrains**

The researcher has identified few constraints that were encountered during the time of data collection. A primary Constraint was finding the respondents during the weekdays; few community members were available during the day at home on week days. The researcher had to change the time of collection to be on a weekends on Sunday's when most of the community members are available. The secondary constraint identified by the researcher was community members that were reluctant to participate, the researcher had to find the community members who are willing to participate and that was time consuming for the study.

### **3.10 Chapter Summary**

In this chapter the researcher has reviewed the methods and instruments that were applied to collect data. Qualitative and quantitative methods were adopted as the relevant methods for evaluation of PINK community in SCP. Through these methods key informants and community respondents were carefully selected. The researcher also presented how data was collected to ensure that all data is valid and reliable. The ethical considerations and constraints that were experienced during the investigation were also discussed. The next chapter will deal with study analysis.

# **CHAPTER FOUR**

## **RESEARCH STUDY**

### **4.1 Introduction**

This chapter presents the case study analysis; the geographical location of the case study is Phoenix, Inanda, Ntuzuma, Kwa-Mashu (PINK), and the historical background of PINK area. This chapter will also present PINK socio-demographic profile which includes population size, gender and age, it will reveal the socio-economic conditions focusing on education, employment and income levels underlying factors that influence community participation at PINK. The case study analysis will be linked to Sihlanzimvelo Stream Cleaning Project (SCP) to show how the PINK conditions impact on community participation in SCP.

Analyses the historical background, socio-demographic, socio-economic, built environment, service delivery and ecological infrastructure of PINK area will ensure understanding of PINK unique social context that shape the nature and the extent community participation in SCP.

### **4.2. Geographic Context of PINK Area**

PINK is located in the northern region of eThekweni Municipality (EM). PINK was established as one of the semi-urban townships for Blacks and Indians in eThekweni Municipality (EM). Ngceshu and Ncwane (2002) debated that PINK community tribal diversity and culture is representation of S.A urban community. PINK has become a multicultural urban settlement, housing local community and foreign citizens from neighbouring countries. About twenty-five per cent households at PINK accommodate 1 to 3 people, 65 % of household accommodate four to seven members. Therefore, PINK area is a reflection of apartheid planning, previously disadvantage communities with no input into the government planning system.

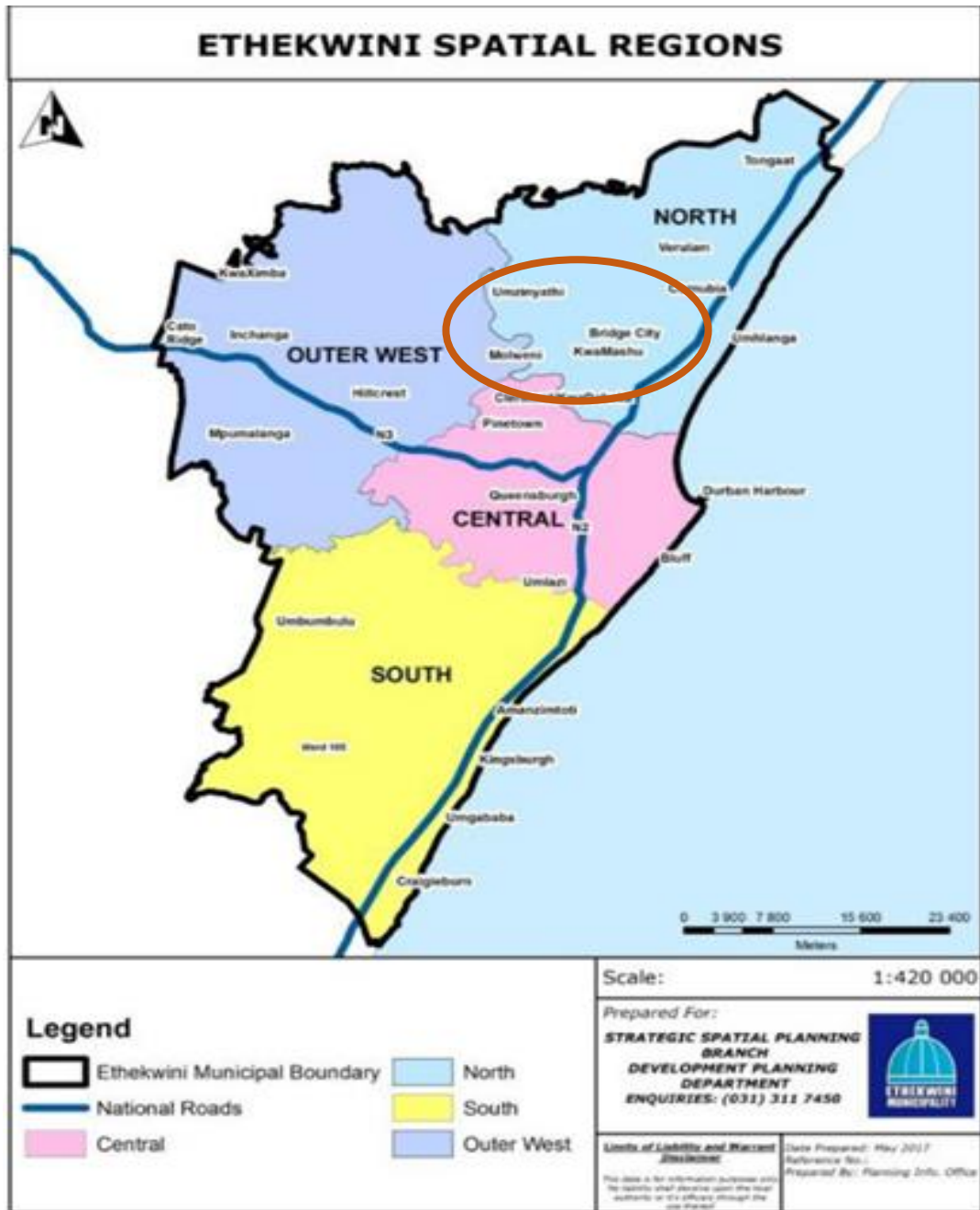


Figure 3: INK Area (Source, eThekweni Spatial Development Framework 2017/2018)

- Kusel (2009) stated that Inanda was first African Township established in the 19th century as a result of apartheid planning which was referred to as ‘reserve’ for Africans and Indians. In the early 19<sup>th</sup> century towards early 80’s. The area was then allocated only to Africans, before it was also occupied by Indian community until 1936.



- KwaMashu second African township built as R293 settlement of previously KwaZulu Bantustan. It was developed in 1955–1966 to accommodate Africans forcibly relocated from Cato Manor (Umkhumbane). Thirty-two percent of the eThekweni Municipality population lives in KwaMashu (Department of Provincial and Local Government, 2006)
- Kusel (2009) Ntuzuma is the youngest of the three townships. eThekweni Municipality built Ntuzuma in the 1970s as a formal African township. The total population of Ntuzuma accounts for 18 per cent of INK’s population (INK Township Renewal 2008).

### 4.3. Socio-Demographics Profile

#### 4.3.1. Population Density in INK

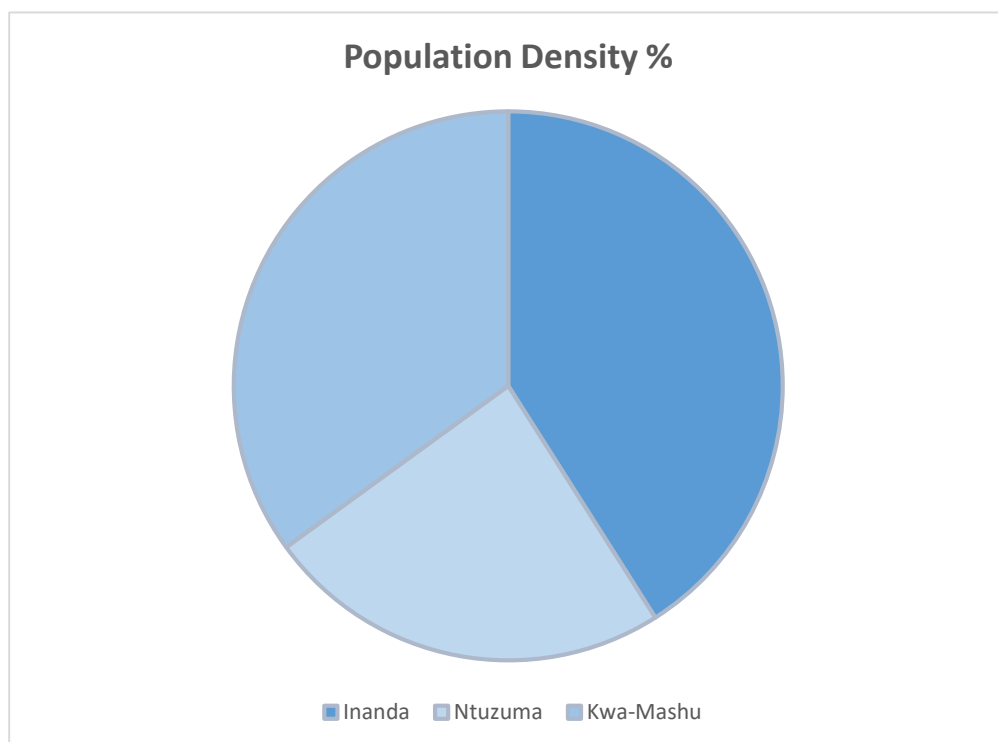


Figure 4: INK Population Density (Source, Statistics SA 2011)

PINK is a home of about 58000 people with 115 136 households (Dlamini and Mbonambi (2009). Inanda is the oldest with the highest population of 41% followed by KwaMashu with 35% and Ntuzuma has the lowest population of 24% (Statistics S.A,

2011). Population distribution at PINK is not the same because of the socio-economic background of each area. According to EM IDP (2017) the highest number of people in eThekweni is living at PINK.

**4.3.2. Gender**

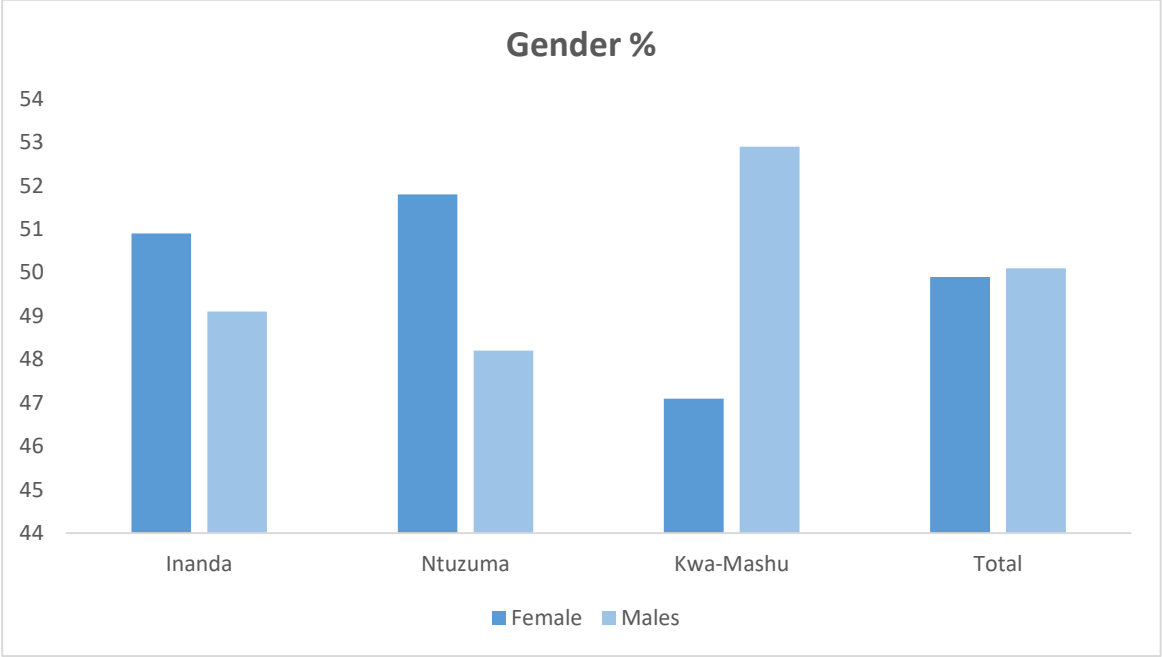


Figure 5: Bar Graph showing Gender at INK (Source, Statistics SA 2011)

According to the data obtained from Statistics South Africa (2011) the graph indicates that Inanda and Ntuzuma has a high number of females in relation to male percentage. What was observed is that most of the households in these areas are female and child headed households. KwaMashu has low percentage of females than the percentage of males, this is the evidence of the presence of a male hostel in Ward 39 that increases the number of males in the area. According to National Environmental Management Act (NEMA) of (1998) the vital role of women and youth in environmental management projects and development must be recognized and their full participation therein must be promoted.

### 4.3.3. Age

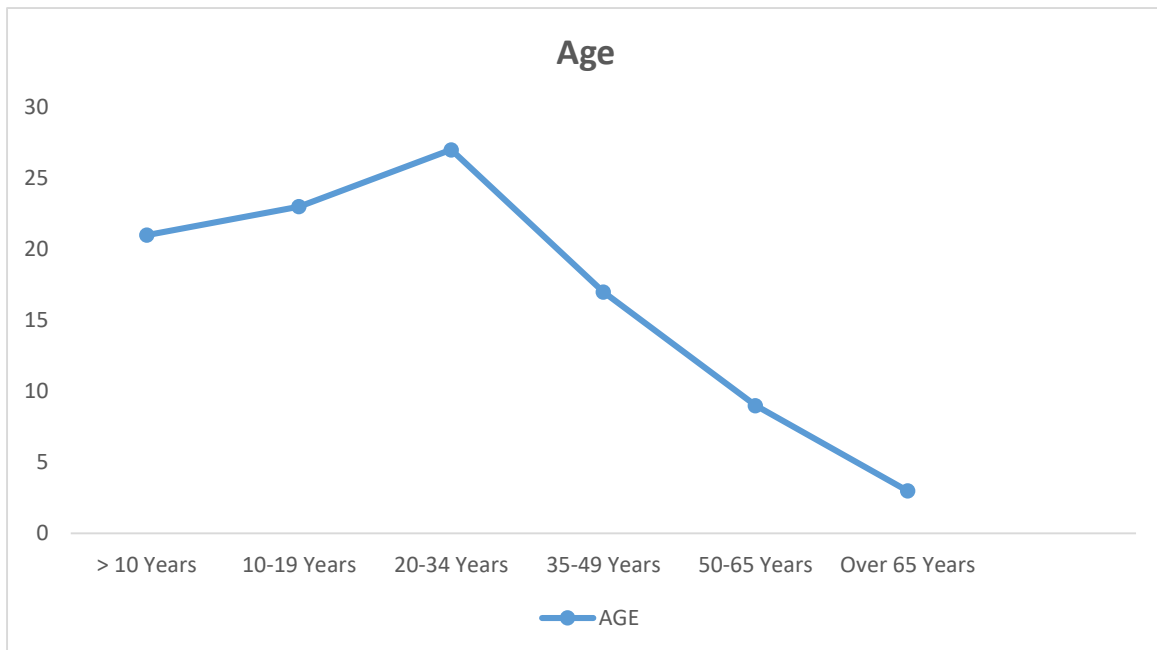


Figure 6: Line graph showing Age Percentage (Source, Statistics SA 2011)

The graph shows that there is a high birth rate at INK as 21% of the population is less than ten years of age. This is supported by EM Integrated Development Plan (2017) which states that EM has a young population. There is an increase in population growth from the age of less than 10 years to 34 years and a decrease in population growth from the age of 34 – over 65 years. INK has a challenge of high teenage pregnancy which increases fertility rate in the area. The majority of INK community is young people between the ages of 10 -35 years as indicated by the graph (Statistics S.A, 2011). SCP has to promote youth participation in the projects to ensure sustainability of the project. Youth participation is highly promoted by NEMA as youth will be empowered with knowledge and skills.

## 4.4 Socio-Economic Profile of INK

### 4.4.1. Education Levels

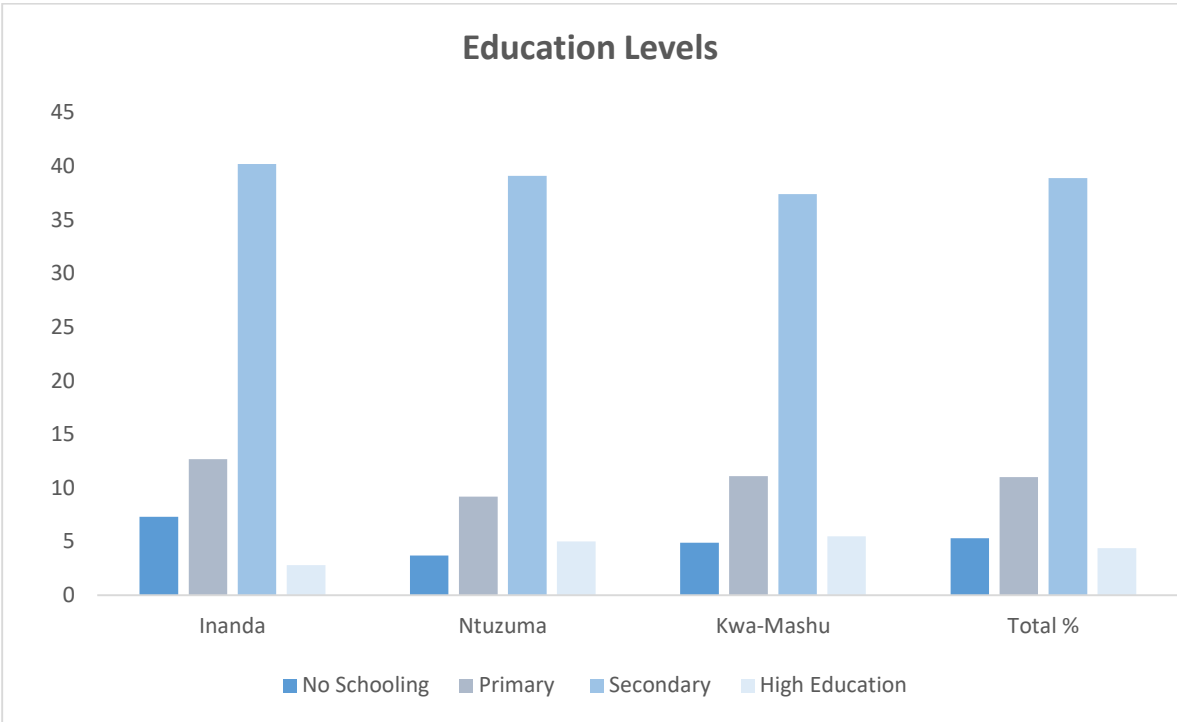


Figure 7: Bar graph showing Education Levels (Source, Statistics SA 2011)

The education levels at INK are very low; the graph represents poor level of education. Few people are able to enroll for tertiary education only 4.4 % have tertiary education from the total population. Inanda has the highest population with 7.3 % that has never attended school, 12.7 % has attended primary education. The highest percentage of 40.2 % has attended secondary education and only 2.8 % manage to enrol at tertiary education. Ntuzuma consist of 3.7 % of people who has no schooling and 9.2 % of the population has attended primary education. Ntuzuma is having the highest percentage of 39.9 % of people who attended secondary education and 5 % has attended tertiary education. KwaMashu has less numbers of people who has no schooling than Inanda, 4.9 % of the population that hasn't attended school, 11.1 % that attended primary education and 37.4 % has secondary education. KwaMashu has 5.5 % of the total

population that attended higher education as per statistics results (Statistics S.A, 2011).

The level of education at INK is very poor this indicates that there is a need for community awareness, in order for the community to be able to make informed decisions. Thus it affects the nature and level of community participation into SCP leading to the community being engaged as beneficiaries of the project rather than key role players in the planning and decision-making process. Public education is the first step in involving citizens in the life of their community and in creating a participative culture (Kamuiru and Mbwisa, 2014).

**4.4.2. Employment levels**

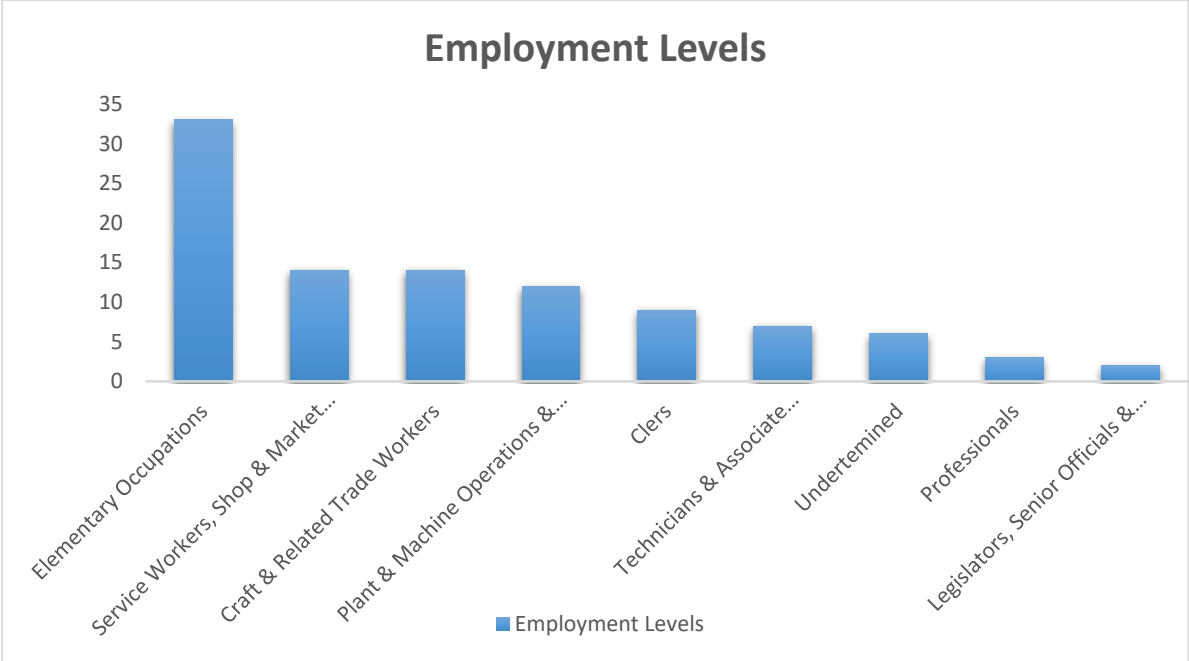


Figure 8: Bar graph showing INK Employment Rates (Source, Statistics SA 2011)

With reference to 2011 Statistics S.A report indicates that INK has 33 % of active working population in elementary occupation. This is evidence to educational graph that has clearly indicated that some community members have not attended school and some only have primary education that contribute to high percentage of the work force that are general workers because of poor level of education. A high level of population that has attended secondary education which is indicated by the percentage

of people employed as service workers, trade workers, plant and machine operators and clerks contribute to 14 % of the total population. There are few people who are in senior management positions at INK as the majority don't reach tertiary education. A high level of unemployment rate at INK was observed from the number of people who are available during the day from youth to old people. The levels of education in INK area highly impacts on the type of job opportunities that can be developed for the community. The levels of unskilled & semi-skilled jobs indicate that there are many people who can participate in labour intensive projects such as SCP. In order to ensure that the community benefits from opportunities from projects, which are presented by the municipality in the area, further education and training opportunities are needed, in order to capacitate them and in order for them to benefit from those opportunities. This clearly indicates that there is a need for skills development and socio-economic development long side with environmental development of INK.

**4.4.3. Income Levels**

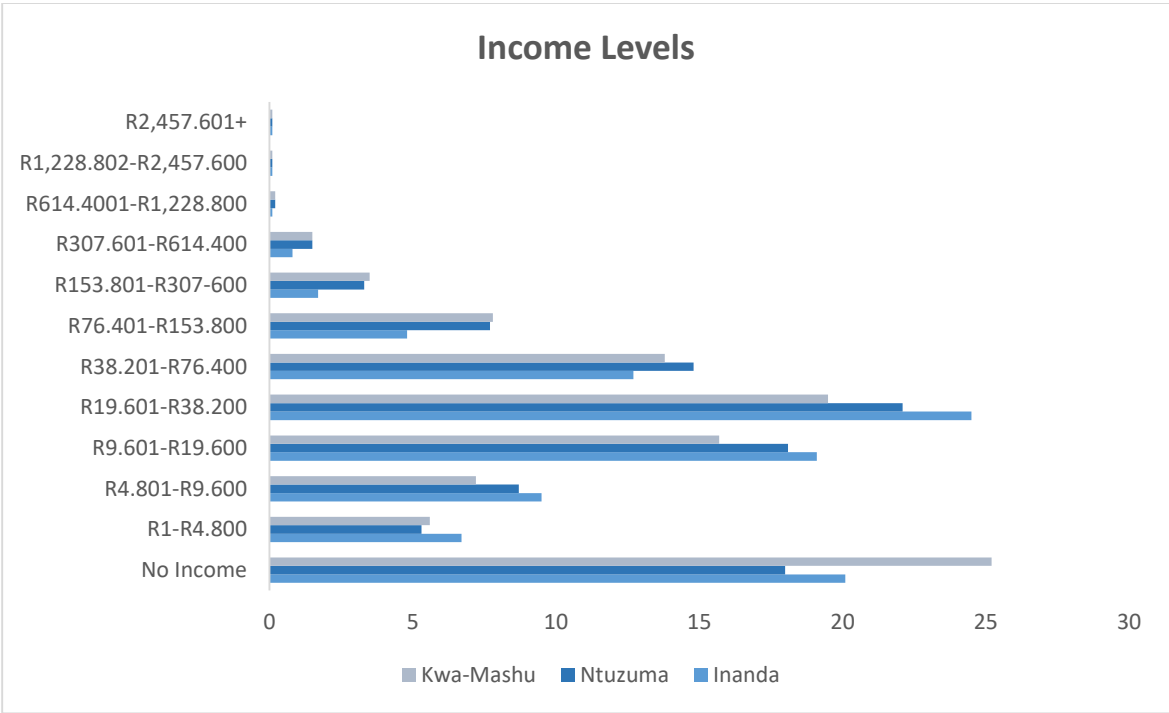


Figure 9: Bar graph showing INK Income Levels (Source, Statistics SA 2011)

The income levels indicate that there is a high percentage of people who do not have monthly income than the percentage of people who obtain monthly income. The

majority of the working force earn below R19.601- R38.200 per income. This means that there is a high dependency ratio on household heads with low income levels. The socio-demographic and socio economic conditions at INK are very poor; this indicates that INK communities are living below average standard of living in SA.

Twala (2009) debated that high percentage of community members living in formal and informal settlements live below average subsistence levels. Unemployment rates are very high with low income levels. These conditions are associated with low level of education, skills shortage, poor level of formal employment and spatial distance from the nodes. The challenge of high unemployment and low income levels at INK indicate that there are many community members who are available to participate into SCP in order to benefit from the project opportunities.

#### **4.5. INK Built environment**

INK Urban Renewal (2006) stated that INK has three housing typology. The formal settlements are 52%, informal settlements are 43% and semi-rural settlements are 5% in the area. The formal settlement is characterized by free standing households with unified housing typology of almost equal sizes per site; the housing density is relatively medium with high population density. The informal urban settlement is characterized by highly congested houses with high population density. The houses are built from different materials with different structures and sizes. Informal settlements are located in areas that are hilly and environmental sensitive, not suitable for housing settlements. Formal and informal urban settlements are faced with challenges of poor level of infrastructure service delivery, the existing infrastructure require being maintained and improved.

The semi-rural settlements are characterized by scattered low housing density with inadequate infrastructure e.g. main roads are tarred and most of other roads are gravel roads and service delivery is in-adequate. The semi-rural settlements are located at the outskirts of the urban periphery. The challenge of shortage of land at INK for housing and the overgrowing population has led to the change of built environment over years. The formal housing settlements are characterized by backyard rooms; others have extended their properties thus changing the INK urban fabric from four room houses. The informal settlements at PINK are a mixture of low cost houses and

informal houses. The built environment analyses reveal that PINK areas have a high percentage of low income houses with low percentage of middle income houses, this indicate that PINK is a previously disadvantage community with poor living conditions.



*Figure 10: Pictures showing INK Housing Typology (Source, Author 2018)*

## **4.6. INK Service Delivery**

### **4.6.1. Solid Waste Management**

Waste disposal and removal at INK remains the challenge as domestic waste from households requires to be managed in order to avoid pollution and environmental degradation due to improper waste management. According to National Environmental Management Act (1998) waste should be minimised or be avoided, reduced, recycled and re-used by all means to avoid pollution and environmental degradation, to be disposed properly.

There are two types of solid waste removal services at INK. In formal settlements the residents dispose their waste in black refuse bags which are collected on the day allocated for waste collection by the department of Cleansing and Solid Waste (CSW). CSW has contractors that are appointed to collect waste and dispose of it at the nearby (Springfield) landfill site. Each household is provided with three months 'refuse plastics bags for waste disposal. In informal settlements the communities dispose their



waste at the collection points as there is no proper assess and some household are too far from the main road. The waste is collected by community cooperatives appointed by CSW that collect waste from the collection points to minimize development of illegal dump sites. Some informal settlements are provided with skips for waste disposal, CSW empty the skips once a week. One plastic bag is provided to each household per week. Kamuiru (2014) argue that through community education process one can determine community awareness about their problems, educate community about nature of the problems in which they can change or change their practices and participate in issues that affect them. SCP has provided community awareness interventions for PINK community to ensure active participation of the community and to instil the culture of living in a clean, safe and healthy environment.

#### **4.6.2. Sewer Infrastructure**

Ntuzuma and Kwa-Mashu have adequate sewer system. The sewer infrastructure was designed to follow gravity in order to minimize over flowing problems, the sewer system is flowing along the streams when the system overflow it leaks into the streams, the stream became contaminated. Inanda has no existing planned sewer system, the community is using soak pits for sewer detention. In areas where it is highly congested there is no soak pits the community use pit latrine toilets and some members discharge directly into the streams thus causing sewer contamination. The National Environmental Management Waste Act (2008) state that waste management in South Africa is not in a good condition to a healthy and safe environment and the practices of proper management of waste are poor. Therefore, engaging PINK communities in discussion and information sharing and also on legislation framework will ensure that the communities take informed decision and be responsible on their environment.

#### **4.6.3. Stormwater Infrastructure**

According to eThekweni Stormwater Design Manual (2008) the Stormwater system designs specifications in residential areas is 1 in 3-year storm recurrence and for critical points is 1 in 10 years. INK Stormwater system is designed to protect properties between 1 in 3 to 1 in 10 years. A new development has to ensure proper connection to the existing infrastructure. The challenge is illegal connections into Stormwater system, littering and dumping that clog the Stormwater system. In informal settlements

and semi-rural areas there is minimum Stormwater infrastructure the challenge is unplanned developments into environmental sensitive areas such as wetlands and flood lines leading to properties became flooded. Proper communication channels and communication platform by municipality and PINK community has to be established to ensure that the communities understand the importance of Stormwater infrastructure and their role to own the infrastructure. Community participation in SCP will eliminate some of this issues they will get an understanding of the importance of the project and the role they have to play in the SCP.

**4.6.4. INK Ecological Infrastructure**



Figure 11: Picture showing river encroachment (Source, Author 2018)

INK high population density increase causes high pressure on availability of land for housing purpose as a result of shortage of land, the community has built informal settlements in open spaces. Some of these open spaces are environmental sensitive areas such as wetlands, flood lines and river banks and grasslands causing damages to ecological infrastructure services and leads to storm disaster problems and environmental degradation. According to eThekweni Municipality Resilience Strategy (2017) Informal settlements are experiencing challenges with service delivery, shortage of infrastructure, high rate of vulnerability and unhealthy living conditions. They also contribute to, and are impacted by a range of environmental and health challenges, usually related to: their location in environmentally sensitive areas; their lack of services; and the impacts of wastewater and pollution runoff into adjacent rivers. Therefore, it is highly important to engage PINK community into SCP planning decision making that affect their lives.

## **4.7. Chapter Summary**

The socio-economic and environmental context of the area indicate that PINK community is a previously disadvantage community. The area is faced with challenges of high unemployment rate, low income levels; level of education is low, poor infrastructure and low level of service delivery. The historical background on the establishment of PINK is the underlying factor into the challenges faced by the community. Participation of PINK community into SCP will not only improve their environmental conditions but also ensure community development of PINK. The next chapter will present data analyses and research finds of the study.

# CHAPTER FIVE

## RESEARCH FINDINGS

### 5.1. Introduction

The purpose of this chapter is to present the analysis of research the focus group included the Inanda Balindi Cooperatives (IBC), Ntuzuma Civil Organisation (NCO) and the Kwa-Mashu Siyaphambili Cooperative (KSP) while the municipal officials included the INK Area Project Manager (APM), Kwa-Mashu Ward 40 councillors (Cllr) and Catchment Coordinators (CC). Thirty households in the INK area were sampled.

### 5.2. Socio-Demographic Profile of Respondents

#### 5.2.1. Age of the Respondents

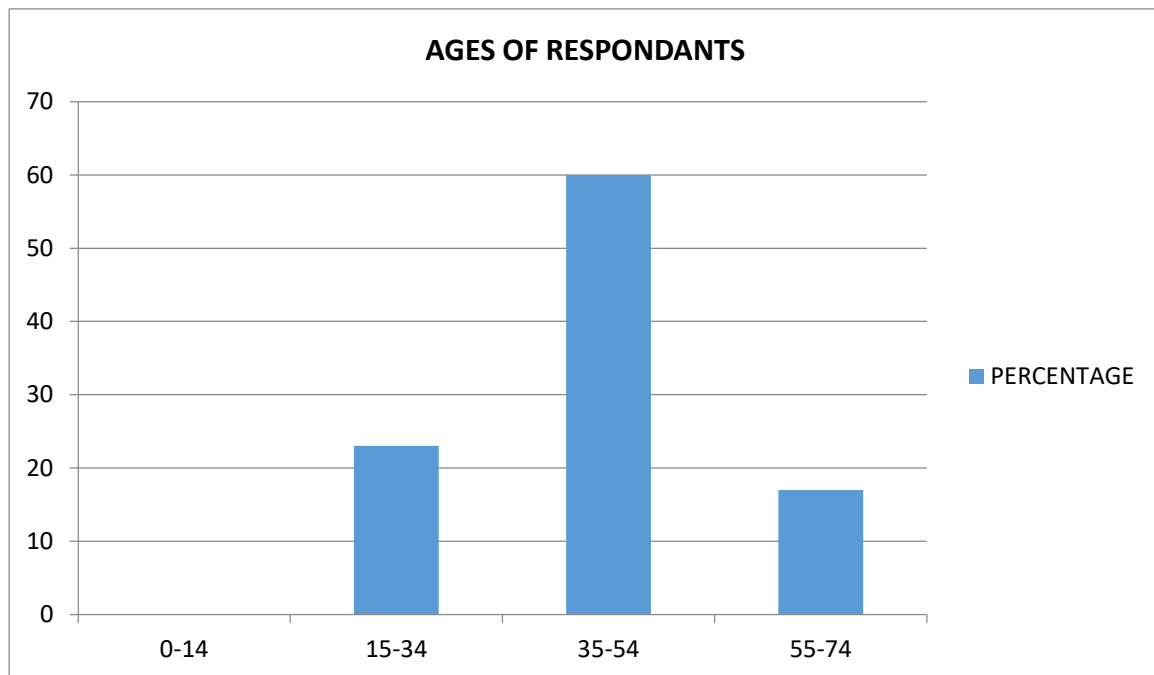


Figure 12: Ages of respondents (Source, Author 2018)

The data indicate that 59.9 % of the respondents who are between the ages of 35-54 years that are participating in the SCP project. While there were 23.2 % respondents between the ages of 15-34 years who participating in the project. Only 16.5 % elderly

people between the ages of 55-74 years are not participating due to physical fitness and health reasons presented by old people who are unable to participate. The results clearly indicate poor level of youth participation in SCP due to lack of information about the project and tangible benefits. eThekweni Municipality (EM) Integrated Development Plan (2018) indicates that a number of the population is young people, this indicate that there is a large percentage of INK youth that is unemployed. Participation of young people in SCP has to be encouraged to ensure sustainability and ownership of the project for a longer period through capacity development programmes aimed to young people.

### 5.2.2. Gender of Respondents

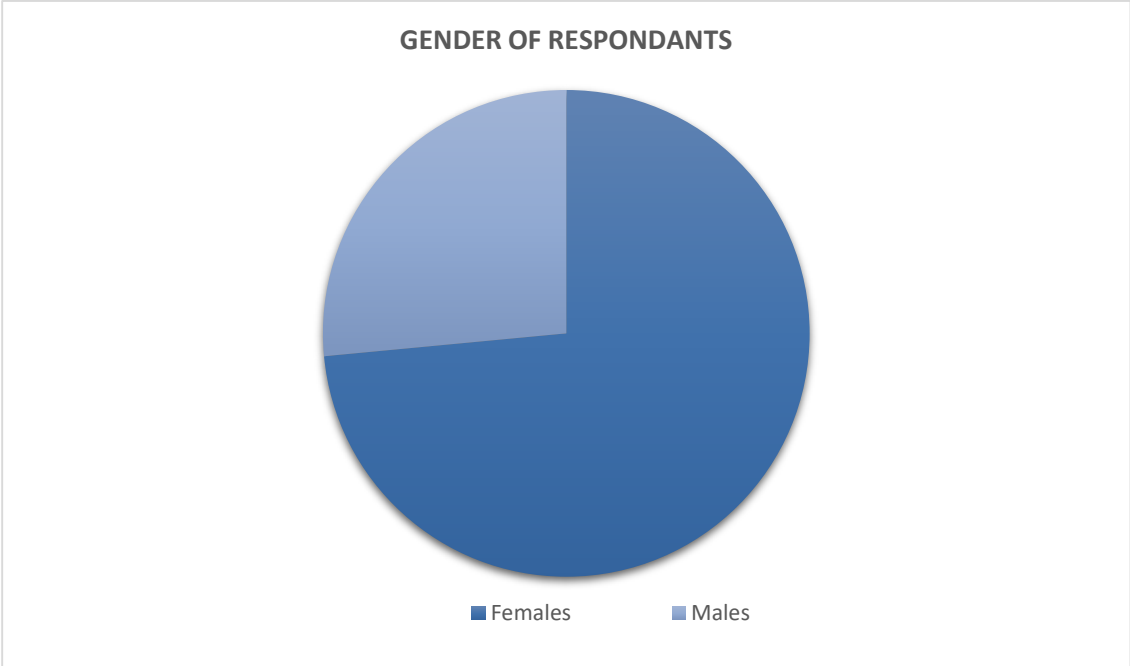


Figure 13: Gender of respondents (Source, Author 2018)

The graph above indicates that majority of the respondents are females. Female participants made a total of 73.5 % while the male participants made a total of 26.5 %. Female participation at the age of 38 years is high because of the keen interest in SCP projects because high percentage of job opportunities from the project is allocated to women and youth. The researcher noted from community respondents that due to a stigma that environmental activities are associated with domestic work, the

participation of males is very low as they prefer to participate in infrastructure development projects.

### 5.3 Socio-Economic Profile of Respondents

#### 5.3.1. Education Levels

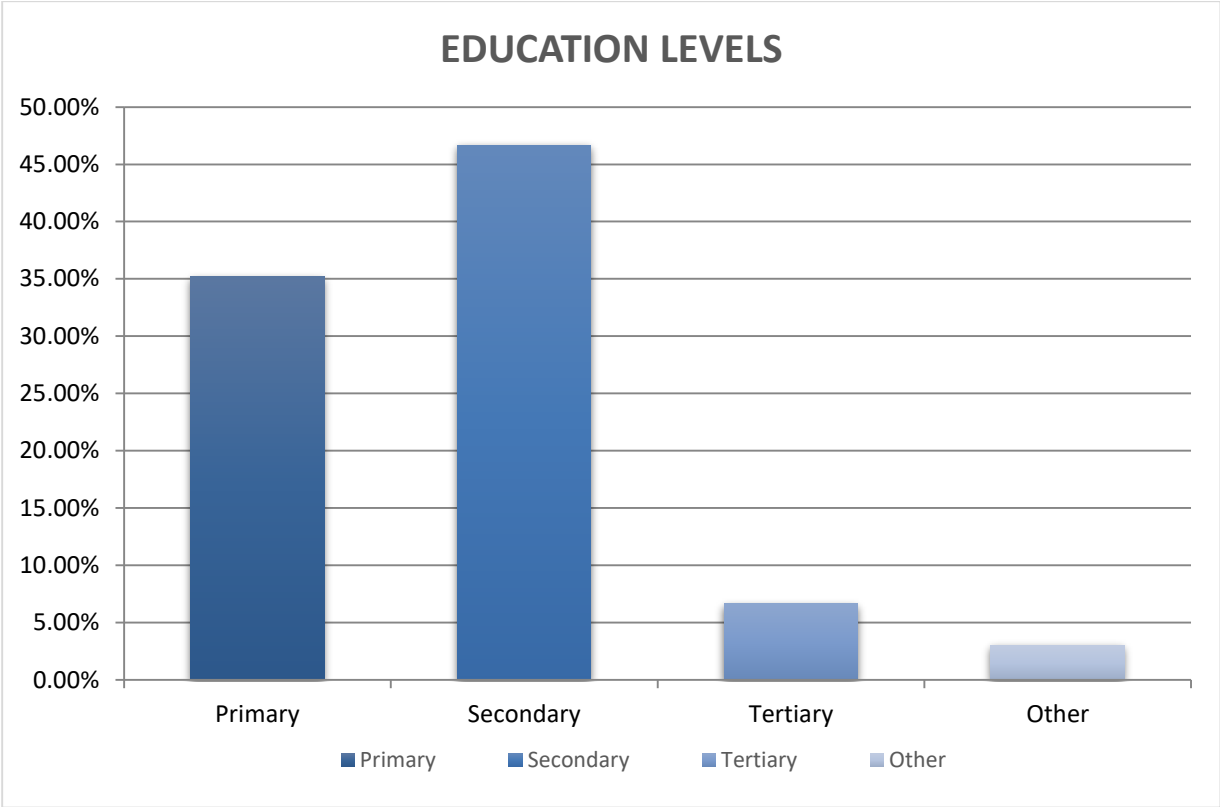


Figure 14: Education Levels (Source, Author 2018)

The data analysis revealed that 51 % of the respondents have received secondary education. It is at this level of education that a high number of community members drop out from school before completing. This was indicated by a low percentage of 7 % respondents who are having tertiary education. Only 38 % of respondents have primary education. A total percentage of 3% couldn't review their educational levels. The levels of education at INK are relatively low. These results indicate that there is a need for education and awareness interventions for INK communities about SCP to be able to make informed decisions into project.

### 5.3.2. Employment Rates

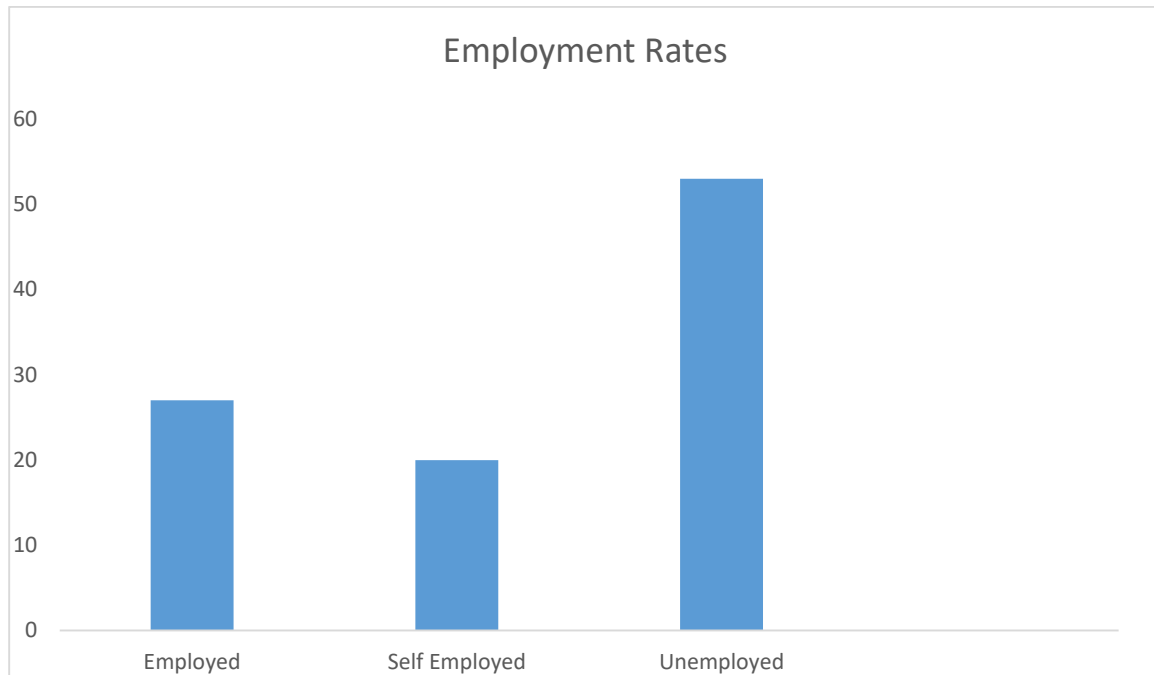


Figure 15: Employment Rates (Source, Author 2018)

INK communities have high rate of unemployment, the data indicate that 45 % of respondents is unemployed, the reason indicated by respondents was that there is scarcity of job opportunities and some jobs require Senior Certificate and the majority did not complete secondary education. 27% of respondents stated that they are employed and they are available on weekends. Some 20% of the respondents stated that they are self-employed as means of earning a living and helping by creating job opportunities for other community members. There is 5 % of the respondents that were not willing to disclose their employment status and later it came to my attention that they were not physical fit due to illness conditions and some respondents receive social grant. The high percentage of unemployment at INK indicates that if the project was properly communicated there are many community members who should have benefited in the project, contributing to employment levels and socio-economic well-being of INK community.

## 5.4 The Nature of Community Participation

### 5.4.1. Level of Community Participation

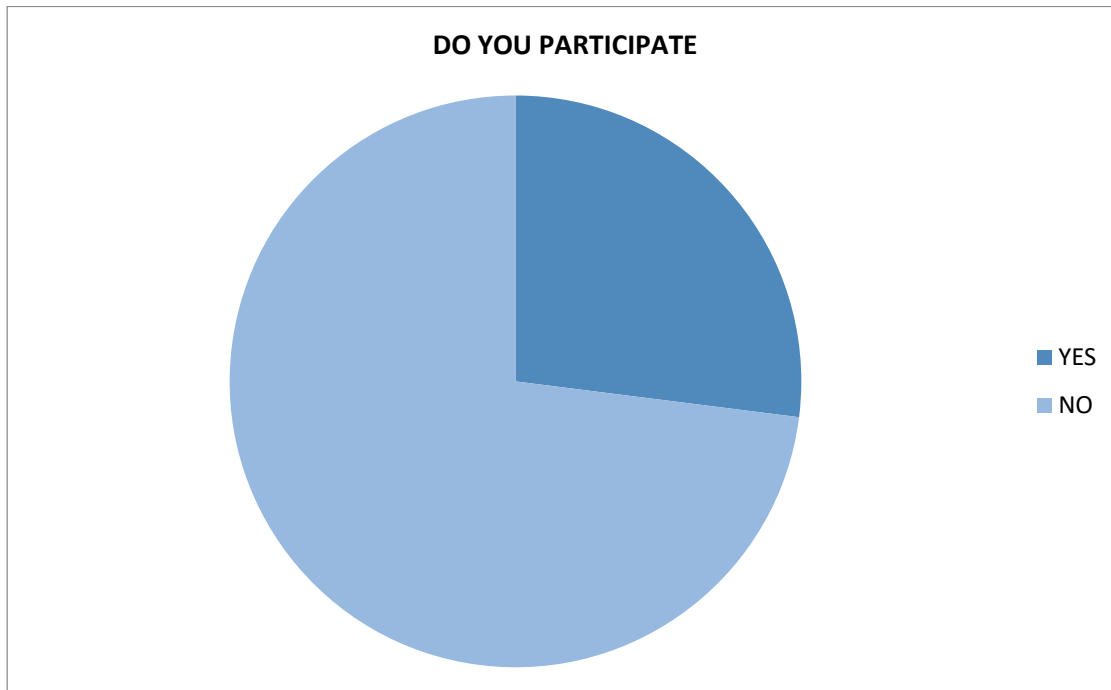


Figure 16: Level of Community Participation (Source, Author 2018)

The study has revealed that there is poor level of community participation in the SCP project a large number of 73 % of respondents stated that they do not know about the project. Only 27% said they do participate as members of cooperatives who are working by cleaning the streams. The Republic of South Africa Constitution (1996) indicates that the main objective of municipalities is to encourage the participation of communities and community based organisations in the affairs of Municipalities. However, the results reveal that the municipality failed to comply with the constitution as there was limited community participation in SCP.

*“Little has been done to encourage community participation among community leaders especially government officials as it is indicated by the law, many local governments implement the policy at a nominal, compliance manner” (Carrim, 2011)*



#### 5.4.2. Nature of Community Participation

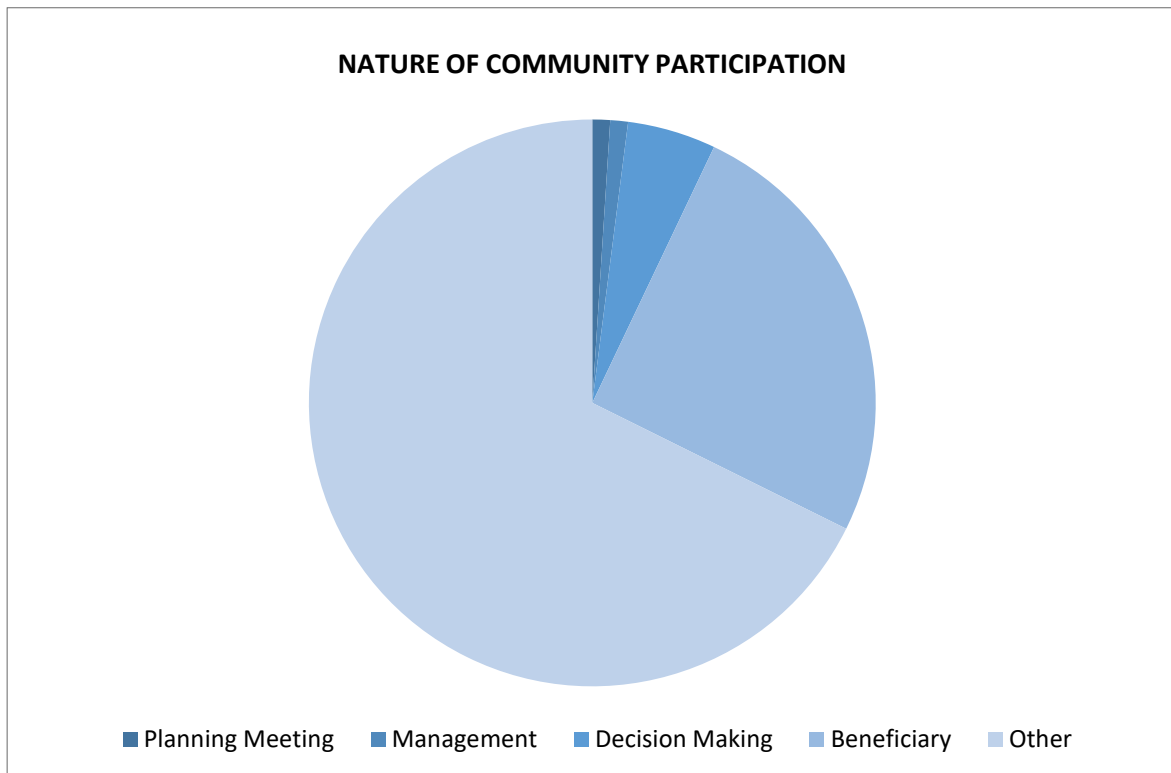


Figure 17: Nature of community participation (Source, Author 2018)

When community respondents were interviewed to indicate how they are participating in the SCP. It was clear that there was no effective engagement of community to actively participate in the planning and decision making of SCP. None of the respondents indicated that they were invited into planning meetings however the member of NCO stated that *“ward councillors were not part of the planning because there was no invitation from municipal officials for them to participate in the planning of the project”*.

The project plan was presented by officials to INK councillors; it was at that stage of the project where they raised their concerns about the SCP plan. This view was supported by Kamuiru and Mbwisa (2014) debated that community beneficiaries are

involved all plans have been prepared through meeting and their views will not be considered.

In response to that CC stated that within EM (eThekweni Municipality) there is no department responsible for cleaning the streams, the city took the initiative from the community complains it is for that reason there was limited engagement of the community in the initial stage as the project initiation was part of responding to community complains. A member of KSP stated that they are participating by cleaning the stream as members of cooperatives who have benefited from job opportunities developed by the project; they are not involved in the management and decision making of the project.

**5.4.3. Reasons for non-participation**

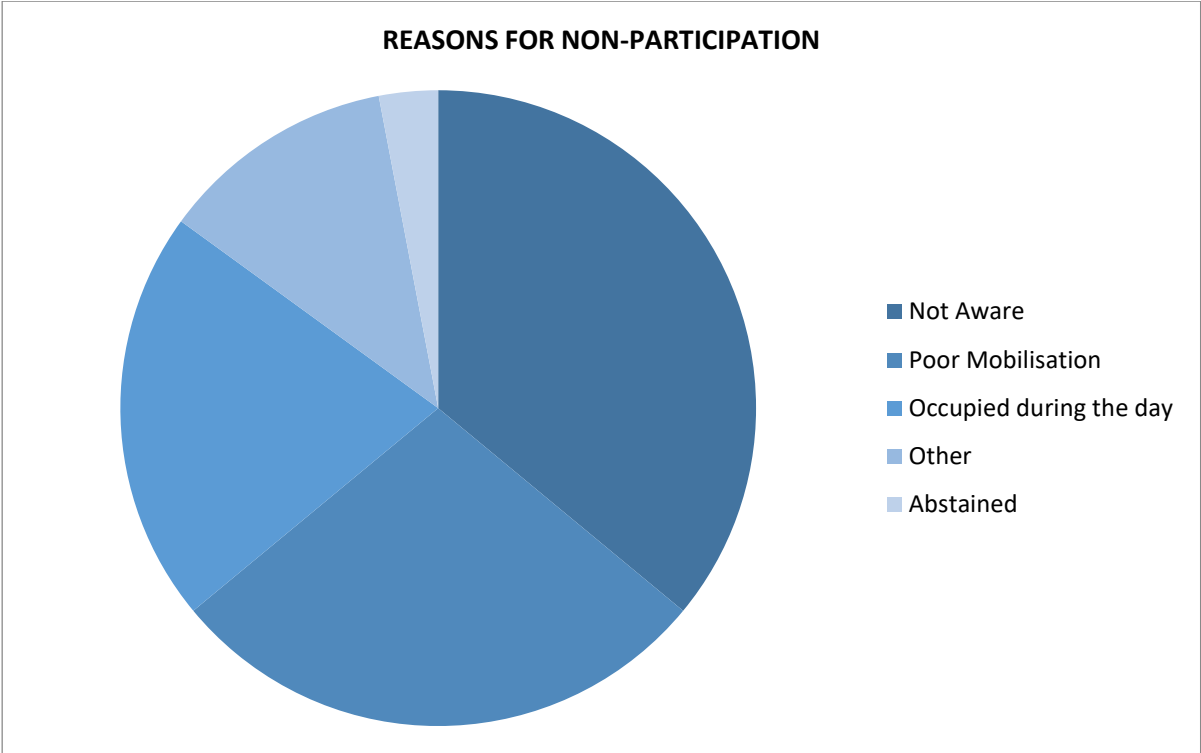


Figure 18: Reasons for Non-participation (Source, Author 2018)

A high number of 36 % respondents said they were not aware of the projects existence. However, 28 % argued that there was poor mobilisation in the process of informing community members about the SCP project. Twenty-one per cent respondents were unable to participate in the project due to their commitments during the day such as

job opportunities and other activities. 12 % indicated other reasons had barred them from being part of the project such as hospitalisation and other health conditions. 3 % abstained from responding because they were illiterate and could not read or write. Poor participation of community from planning to management may result in limited chances of project sustainability (Kamuiru and Mbwisa 2014).

## **5.5 Factors Shaping Community Participation**

There are two factors which were identified from data collection that are shaping INK community participation in SCP. The first factors are tangible benefits that encourage community to participate and the second factors are intangible benefits those shaping the community from participating in SCP.

### **5.5.1 Tangible Benefits.**

**Employment:** The APM said some community members do not understand the importance and the value of participation in projects unless there are tangible benefits that they can derive from the project such as job opportunities and incentives. Cllr Mabizela state that “due to high unemployment rate at INK people hardly participate into projects that they are not going to gain financial support or incentives and it became difficult to invite the community for volunteering as most of the people are not working, it also raises high expectations that when job opportunities arise they will get first preference”. NCO responded by stating that it’s not easy to participate into projects that were not going to gain any incentives whereas other community based projects in the municipality do offer a stipend e.g. Extended Public Work Programme (EPWP) from the government. CC explained that due to financial constrains they have limited number of cooperatives that are appointed for the project they cannot be able to accommodate everyone in the community.

**Trainings:** The APM stated that SCP is one of the strategic tool of the municipality to empower the community with skills development as the projects has offered training courses for the cooperatives such as Alien Plant identification and removal, safety

management which can be used when searching for job opportunities. A member of NCO said that they have not only gained job opportunities from the project, they have also gained skills which will assist them in other projects similar to SCP in future.

**Availability of Resources:** Availability of resources encourages the community to participate in stream cleaning projects. IBC stated that there are so many community members who are not working and available during the day; they are willing to participate into SCP. The problem is shortage of resource like safety wear, slashes, and gloves in order to participate as it's not safe to work in the streams as there is overgrown vegetation and hazardous materials. The APM did admit that as the municipality the challenge they have is budget for SCP, she said that the project was a pilot project for INK and Umlazi some of the resources that are needed were discovered during the implementation when we assess the scope of work and the challenges they overcome.



Figure 19: community members' volunteers in a stream cleaning initiative (Source, Author 2018)

### 5.5.2 Intangible Benefits

The other benefits identified by the respondents are those which are not for monetary gain and incentives as token of appreciation, other benefits of community participation in SCP are those that empower the community and improve their social well-being are referred as intangible benefits.

**Information Sharing:** Cllr Mabizela said that the community members are very eager to participate into projects. When they are invited into planning meetings where they would be able to identify their challenges with an aim of seeking support and assistance from the government, in some cases they even take initiatives of inviting the departments for support. According to chapter 1, section 4 (g) of National Environmental Management Act (1998) state that decisions must take into account the interests, the needs and values of all interested and affected parties, and this includes recognizing all forms of knowledge including indigenous knowledge. KSP stated that the community like to attend meetings in order to participate from the initial phase of the projects so that they can be able to share their knowledge and experiences and identify solutions that are suitable for their environment.

The APM said that they do provide community education workshops on their departmental services and capacity development on environmental issues so that the community would be able to make informed decision. He further indicated that they do take into consideration the concerns of the community into planning process. The CC also argue that during the workshops they acknowledge the indigenous knowledge from the community and advise the community of municipal by-laws related to protection of natural resources in order for the community to understand what is acceptable and not acceptable on the environment. Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means (National Environmental Management Act, 1998).

Information sharing of stakeholders in a project is important for the success and sustainability of the project with regard to SCP there was limited information sharing.

**Other benefits:** The NCO also added that the SCP has not only to improve their knowledge and skills it also has contributed to community by development of new business from recycling materials found in the streams such as water bottles and

development of food garden projects from clearing overgrown vegetation as well as opening of open spaces.

## **5.6. Factors hindering Community Participation**

### **5.6.1. Poor Communication**

Lack of proper communication leads to project challenges, good communication of project can be accomplished conducting door to door and mobilisation (Cleland and Ireland, 2007). The author noted that proper communication process was the major constraint for the community to participate in SCP. The IBC also argue that there was no mobilisation of the community about SCP to participate in the planning phase.

National Environmental Management Act (1998) promote that decision making must be an open and transparent process, and accessibility of community to information about policies must be provided. Cllr mentioned that when there is a community meeting planned they request the office of Community Participation and Action Support (CPAS) to assist by conducting mobilisation to the community through loud hailing and they also report in community structures of the proposed projects. The challenge is when they are not informed properly or being informed on a short notice to mobilise the community. The CC stated that the community was informed through local radio stations. The project was presented to ward councillors; however, it was not sufficient enough to ensure effective participation. NCO mention that the community was not all reached during the time of mobilisation as a large percentage of the respondents indicated that they were not aware of the SCP.

The CC also raised the concern that the community don't attend meetings and they don't come on time on the meetings that delay project implementation at is time consuming and it delay the SCP process as meetings have to be cancelled and be rescheduled or sometimes they are forced to work with those few community members available with an understanding that they will convey the message to the community at large.

It was clear that community mobilisation is a challenge within INK. According to members of KSP, eThekweni Municipality has been very hesitant to change their ways of mobilising people into projects. He further said:

*“The municipality only inform ward councillor and the mobiliser has only been loud hailing around the main roads and has never come to the parts near the streams”*

The members of the IBC and KSP indicated this issue as a big challenge for them as well. To the defence of the municipality the APM said “it is not true that mobilisation is poor” she added that they do encourage the participation of communities to ensure effective communication however poor participation of communities into meetings affects communication that will require for them to change the approach working with those who are interested into SCP.

### **5.6.2 Lack of Compensation**

The community respondents indicated that for them to participate they wish to be informed prior what they are going to benefit from participation not to be used by the municipality. NCO member argued that municipality must employ people to clean the streams in order to create job opportunities for the people. However, the Cllr said the community is willing to volunteer the challenge is transport cost and refreshments because the majority of volunteers are not working. As Cllrs we are forced to find support from other organisations and businesses to give support to the volunteers as token of appreciation and means to compensate the community and motivating them to continue participating in projects. Lack of incentives to compensate community members affect the moral of the community to participate in SCP.

### **5.6.3 Lack of Political Buy-in**

Respondent's mention that they rely on the information they receive from the ward structures like ward committee and ward councillor. If they do not have a clear understanding about the project or no information received from councillors they become reluctant to participate because it would appear that it is political affiliated or sabotage of the current community leadership. The APM stated that they work in partnership with councillors and the office of Community Participation & Action Support (CPAS) as well as the Community Development Workers (CDW) from the office of

Cooperative Governance and Traditional Affairs (CG&TA). These departments are responsible to ensure that communities are being engaged by government departments. Through community ward structures and community based organisations which are affected and the interested are being consulted, to participate in projects in order to avoid political biasness. She further added that they rely on these departments to advise them on the best approach to work with the community as they understand the social dynamics within the wards which may hinder the projects. Lack of partnership with community leaders at INK was a major challenge in communicating the project to the community.

#### **5.6.4 Lack of Resources**

There's an indication that the community projects including the SCP faces significant challenges in terms of a number of resources such as financial and human resources. This became vivid as all the participants of the study indicated poor budgets were allocated towards the mobilisation of the projects. The CC further said:

*“The SCP operate on a limited budget and mobilisation, education and awareness was never budgeted for the project”*

Subsequent to this, a members of the IBC stated “I was tasked as the member of the ward committee to mobilise members of my area, however because the information came to me too late I could not make the necessary call to alarm people, as a result that meeting was poorly attended”.

The SCP is also constrained in terms of human resources because only two municipal officials manage the implementation of the project. However, the CC indicated the municipality is aware of the challenges and especially the human resource constraints but it is also looking into increasing project funding so as to employ more individuals to be allocated full time. The municipality has further considered the deployment of interns as a cheaper option for the project implementation.



### 5.6.5 Transparency

Boakye and Akpor (2012) debated the section 51 of Constitution section stipulate that all spheres of government and all organs of state must implement these principles: “communities must be encouraged to participate in the formulation of legislative policies, respond to the needs of the people, accurate information and accessibility must be provided.” Community respondents stated that they do not have an understanding of what the SCP is all about, how long is it going to take and what is expected from them. In response to that the APM said that *“we do address the community and respond to their queries about SCP”*

## 5.7 Significance of Community Participation

Community participation is a broad concept which has been applied through different methods with an aim to empower those who are affected and interested in a project. Effective community participation may yield positive benefits to the community and to project success because lack of community participation may affect the sustainability of the SCP project.

**Socio-Environmental benefits:** KSP member stated that SCP has improve their environmental conditions, stream were very polluted no one was using the water from the streams, now people are using water for many purposes. NCO added by saying that the community needs to be educated more on environmental management as we still have some challenges of people who are dumping into the streams. The CC further eluded that as a city we had so many challenges attached to pollution of streams since we have started this project there is a huge difference streams are clean; people have started to use the stream water for domestic purposes but we still have challenges of people who continue to dump into streams. *Figure 2: illustrating children playing at the stream by fishing at Isolezwe kwa-Mahu ward 40.*



*Figure 20: Showing KwaMashu cleaned stream (Source: Author (2018))*

**Sustainability:** The community respondents stated that effective engagement of community members in SCP would provide sustainability of the project even if the project is closed, as the residents they will continue to clean and protect the streams and minimise continuous challenges of community members that supporting the project. Limited community participation in SCP poses a threat to the sustainability of SCP.

**Ownership:** The IBC indicating that community participation is important as the community takes ownership of the project and be responsible for continuous monitoring of the project after completion. APM stated that the community has to understand that streams are natural resources which need to be protected from any form of pollution that is the role of everyone the government and the local people. The community has to be responsible for adopting the portion of streams that is closer to their properties as they are the ones who are affected and are benefiting from stream cleaning, municipality is responsible for providing the services to citizens for them to own SCP. Due to poor engagement of communities into SCP which will limit the level of ownership from the community, as communities take ownership of projects that they have been involved in taking decisions and solutions. It was noted from the community respondents that the project has been viewed as one of the service delivery functions

of municipality. *Figure 3: illustrates KwaMashu Gcinani Cooperative cleaning the stream.*



*Figure 20: KwaMashu Gcinani Cooperative cleaning the stream (Source: Author, 2018)*

**Job Opportunities:** SCP has added value to INK community in creation of job opportunities. CC indicated that SCP has benefited community members that were unemployed and now they have jobs they able to support their families. As in some families it contributed to the source of income. NCO stated that the level of unemployment is very high at INK. When we have ward community meeting the issue of job opportunities is always part of the agenda. If the municipality propose a project to be implemented in the ward, we became excited with little or no emphases on what will be the role of community in the project as long as job opportunities are created. APM indicated that there is 95 kilometres of streams identified for SCP at INK. Each cooperative has a minimum of eight (8) members that is assigned for cleaning and maintaining 5kms of a stream. This indicates that there are approximately 19 cooperatives which were appointed and about 152 people have benefited in jobs in SCP.

**Skills development:** SCP had added value to community empowerment with skills that are needed when cleaning the streams. Cllr indicated that SCP provided a number



of skills to the cooperatives that are needed when cleaning the stream such Alien plants removal, health and safety to name the few. The cooperatives have obtained the training certificates of this courses which they are going to use when they are searching for jobs and when similar projects arise at INK. The member of NCO pointed out that they are very thankful of the project because it has developed their skills in stream cleaning, which they had no money to enrol for this causes on their own.

## 5.8 Strategies to Enhance Community Participation

**Community Meetings:** APM stated that when we invite communities to attend meetings the challenge is that they don't have transport to come to meetings causing the meetings not to start on time, starting late the meeting because they don't come on time, in some cases we have to postpone the meetings and its time consuming for the project it delays the process. It has become difficult to keep those who came early, as the municipality is having a policy that if you are going to keep the community members in a meeting for more than three hours you have to provide them with refreshments (fruits and water) Even when they have attended became vocal and contributing into discussions. The community respondents stated that they do attend meetings however the meetings are being held in the venues which are not closer to the people and they are expected to attend e.g. at Ntuzuma they have one community hall located at Ntuzuma F then the community members from Ntuzuma C, E and G will struggle to get into the venue. In the meetings some community members they don't participate or put suggestions they become passive participants only few members will participate actively.

**Community Awareness:** Kamuiru and Mbwisa (2014) stated in community awareness process one can determine community understanding project, informed community positive change to their behaviour and participate in development projects. When the respondents were asked whether they did attend any SCP community awareness programme, many respondents stated that they have never attended any community awareness intervention on SCP except few responded mention that there was an official from municipality who raised awareness on SCP during the Water week community workshop. The APM response said "there are a lot of platforms we are

using such as door-to-door, pamphlets, loud hailing as well as radio announcements on SCP, that we utilised to communicate and raise awareness and addressing the issues of the community on SCP. In support of this statement Anderson (2005) argues that community outreach programmes for participation in areas with poor network. Effective awareness develops confidence to communities to voice out their ideas and trust.

**EM Newspaper:** the CC indicated that all the communications about SCP are being communicated through municipal newspaper Metro Ezasegagasini, this paper is made available to all municipal buildings. The municipality has extended the distribution of the paper to councillors offices and major shopping malls for the community to easily access the paper but it is noted that people they do not read the paper, the frequently users are the job seekers and those who take it for their personal use who are using the paper. The NCO said that the municipal newspaper is not easily accessible; the paper has to be placed in the local spaza shops for everyone or to be distributed in each household.

In life there are four sides of a man, the one that you know, the one that you don't know, the one that he/she know and the one that she doesn't know

## **5.9 Recommended Strategies to enhance Community Participation**

**Multi-Stakeholder Approach:** Participation of all stakeholders in environmental projects should be promoted. For effective participation of all groups capacity development is important (National Environmental Management Act 1998). The NCO indicated that for the success of SCP all stakeholders should be involved which is Councillors, Community Based Organisations (CBO), Non-Governmental Organisation (NGO), Private Sector and all affected and interested community members for resource sharing and knowledge as well as for the sustainability of the project.

Kamuiriri and Mbwisa (2014) argues project funders and sponsors to involve all role players from the designing phase to ensure community ownership, sustainability, accountability and transparency. The IBC added that the community should be recognised as equal stakeholders in SCP as they come with knowledge and resources

to the project not only as the beneficiaries because as members of cooperatives there is information about the project that they don't know and they are not able to answer to other community members when they ask about the project for instance on how long the project is going to take.

During the focus group discussion, the KSP pointed that there is a need for multi stakeholder participation in SCP in order to share common goal of community development and resources because the involvement of other stakeholder will accelerate the level of service delivery, strengthen partnership and the level of impact of stretching the project to other areas of the city where it is needed. The FCG also added that for engagement of different stakeholders will assist in the monitoring and evaluation and continues sustainability of the project after completion.

**Resource Availability and Funding:** EM have to secure enough funding for larger scale of impact of SCP to other areas within the city as it is noted from the responded that financial constrains have impact on limiting the level of community participation and the scope of work. MSA (2000) state that council representatives and municipal officials should enhance the level of participation through allocation of funding and resources for community participation policy implementation. The community respondents stated that for success of SCP the municipal must be transparent in terms of budget and resource availability.

**Community Mobilisation:** Thwala (2009) argued that all stakeholders interested within the community must be invited and engaged. The use of communication channels such as advertising, radio announcements, and educational materials could assist in mobilising members of the community. It was clear that there was poor communication of SCP to the community and the communication strategy has to be improved. NCO suggested that for effective communication to ensure that all members of the community receive information, EM should place notice boards for community meeting in strategic points where people converge such as taxi ranks, bus stops, Taverns, churches and in tuck-shops where the community can able to read the notice. Another strategy is to make use of media as the platform to inform the community such as radio announcement in local radio station and local newspapers. The FCG also mention that the municipality should use social networks as the tool to communicate with the community. The other strategy that was raised by the community was of ward

structures and community leaders to mobilise because some community members rely on the information received from the community leaders. They also added that in order to improve participation mobilisation should start two days before the date of the event because poor participation in SCP is caused by informing the community about the event on a short notice sometimes during the day of the event.

The FCG mention that for effective community participation in SCP the municipality must improve the communication strategy to communities through informing all relevant community structures. Other organisations such as farmer's association were not properly informed of the project. The community also added that communication should be a two-way communication the municipality should listen to the opinions and the needs of the people and take it into consideration.

**Operation Sukuma Sakhe (OSS) and Masakhane Outreach (MO):** The Cllr stated that there are many platforms available to communicate to the community about SCP. We have ward war room meetings under the programme of OSS. Each ward has to meet with government departments to discuss issues in the wards and intervention programmes in place for the ward every month. Secondly we have Masakhane community meetings where all municipal departments are invited to address the community on services and programmes available and attend to community complain in order to bring the departments closer to the community. SCP could use this platform available to communicate the project at a ward level.

**Women and Youth:** According to NEMA (1998) the vital role of women and youth in environmental management and development that it must be recognised and their full participation therein must be promoted. The NCO mention that we need to promote and encourage youth and women participation in SCP so that we reduce the number of unemployed of youth, by engaging youth that will contribute with new and innovative ideas and that will ensure the sustainability of the project. The WPLG (1998) emphasise that youth development should be promoted as future resource, though investing and building on their innovation, motivation and participation in government affairs. In the light of the above statement the CC mention that the project has encouraged more of women and youth participation because there are a high number of households at INK which are headed by women and children's.

**Political By-In:** The members of the community that participated responded to projects like SCP and other require intensive community participation the political by in is very important in order to influence the community members to actively participate on the project. Participation of community in local government affairs should be facilitated by political structures according to the Municipal Structures Act (MSA, 2000).

IAC added that when there is no political support the project can be unsuccessful because the community won't participate as results of political biasness. To strength partnership with political leaders for SCP it is very important to the sustainability of the project. The WPLG (1998) indicate that councillors and ward committees as community leaders need to be capacitated as they play critical role in mobilising resources and community development. This indicates that there is a need for officials and councillors to work together for the benefit of the community and the success of SCP.

**Community Participatory Approach:** The FCG insisted that in order to improve community participation the municipal officials have to improve their method of working with communities. The acknowledgement of community views is important. Communities are discouraged to attend meeting because their views are not take into consideration. The community members said that the government officials should listen to us and allow us to take responsibility and make decisions of our projects because we know our environment and understand our communities better. The skill and capacity of the organizers of MCMF also needs to be developed in order to allow them to know how to relate to participants in order to know their level of satisfaction in the participation processes.



## **5.10 Chapter Summary**

The purpose of this chapter was to present the analysis of qualitative and quantitative data collected from the INK community members, government officials and from the civil society groups actively involved SCP. Findings show that participation in catchment stream cleaning projects remains a challenge that requires attention. This is visible even at INK Sihlanzimvelo project. The next chapter will deal with summary of key findings, project recommendations, future research recommendations and conclusion of the study.

# **CHAPTER SIX**

## **SUMMARY OF KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION**

### **6.1. Introduction**

The purpose of this chapter was to present the summary of key research findings from the study; the findings will be drawn from what was obtained from qualitative and quantitative data in order to answer the research questions. The findings focused on the nature of community participation in Sihlanzimvelo Stream Cleaning Project (SCP), the importance of community participation in SCP, factors shaping community participation in SCP and strategies to enhance community participation in SCP. The chapter also presented the SCP project recommendations and conclude by research recommendations and recommendation for future research as well as the study conclusion.

### **6.2. Summary of Key Research Findings**

The aim of this research paper was to evaluate the role of Inanda, Ntuzuma and Kwa-Mashu (INK) community participation into Sihlanzimvelo stream cleaning project. The research objectives of the study were analysed through qualitative and quantitative data. The data was collected from INK community member's residents residing closer to 3 identified streams at INK, municipal officials managing the project, ward councillor, INK civil organisations involved in the cleaning of the stream and observations by the researcher. Thematic data analysis method was applied in the study. The research objectives were used as research themes:

- To evaluate the nature and extent of community participation in SCP.
- To assess the importance of community participation in SCP.
- To examine the factors shaping community participation in SCP.
- To identifying the strategies to enhance community participation at INK.

The research questions were formulated from these key research objectives which inform these objectives. The first question was to examine what was the nature of community participation in SCP? The second question was what was to evaluate the importance of community participation in SCP? The third question was to investigate the factors that shaped community participation in SCP? And the last question was examined what strategies were used and can be used to enhance community participation in SCP at INK. The research objectives inform the goal of study to understand INK community who participated, how they participated, why they participated, when do they participated.

The results revealed that young people are not participating into SCP most of the people are older community members. There are few males participating into SCP compare to the number of women this is due to a high number of women at INK. The study also analysed the socio-economic profile which include educational levels, employment rate and income levels of INK community. Results indicated that there is low educational level at INK. High number of community members did not complete secondary education and some primary level. Few community members have tertiary education at INK.

This indicates that the educational levels in the area are very poor. The findings reveal that there is high unemployment rate at INK. The majority of INK community is not working only few community members are employed and some are self-employed. This is also indicated by the results of income levels at INK. Income levels are very low because most of the employed community members are engaged in semi-skilled labour.

### **6.3. Nature of Community Participation**

The research findings of the study indicate that municipal officials and have not effectively engage the community into SCP. There are many community members who are not aware of the project. The community was not involved in the planning and decision making of the SCP. According to the preamble of the Municipal Systems Act of (2000) is to ensure that local government system consult communities for decision and participation in the affairs of local government making. Communities should be an integral part of service delivery and planning. The findings reveal that the project was planned by municipality with no engagement of INK community this also reveal that a top-down approach was applied in the planning decision making process. In the light of the above EM has not comply with current legislation (section 152 of the Constitution and Municipal System Act) which stipulate the inclusion of local community into programmes and projects that affects their lives in the affairs of the local government.

However, members of the INK cooperatives who are working in the SCP did indicate that they are participating in the SCP. Their participation is cleaning the stream they have no influence on the decision making of SCP. This indicates that communities were not involved as key role stakeholders in SCP; their participation was being beneficiaries in the SCP. This nature of participation discourage community from participation as it increases dominance rather partnership between the government and community. it also affects the meaning of community participation as communities and trust on government officials.

### **6.4. Factors Shaping Community Participation**

The socio-economic and political background of the INK area shapes the level of community participation in SCP. The data revealed that what encourage community to participate are tangible and intangible benefits that are derived from the project. The availability of job opportunities encouraged the community to participate. In SCP there was limited job opportunities only appointed cooperatives benefited from the project. The data also reveal that availability of resource encourages community to participate.

The challenge with SCP was financial constraints. The data revealed that municipality has to improve its budget allocation for SCP in order to enhance the level of community participation and sustainability of SCP. Empowerment of community with training skills, education and awareness has benefited the community, information sharing between municipality and community promote trust that their views are taken into consideration.

The data also reveal that apart from above benefits there are factors that were identified by the community that hinder them to participate in SCP. Poor communication was one of the challenges in SCP. The data reveal that the communication tools were not sufficient enough to reach the community. Community respondents indicated that there were not aware of the project. Improper communication channels have been one of the participation barriers for INK community. Lack of compensation discourage community to participate since there is high unemployment rate at INK people get discourage to attend projects that there are not going to benefit anything. Community also depend on the information received from ward structure. This indicated that lack of political buy-in has hindered community participation. Strengthen partnership between political leadership and officials can improve community participation in SCP.

The data also revealed that nepotism and corruption is a challenge for INK community as some community members are side-lined from the benefits of the projects. An open and transparency planning process is required to build trust and access to opportunities. Limited numbers of community members benefited from SCP was also the results of lack of adequate resource.

## **6.5. Significance of Community Participation**

Community participation has multiple meaning that has been used in different methods of planning. The concept is broad has been adapted to suite the extent and nature at which participation of communities is facilitated. The question of who participated in SCP, when they participated in SCP, how they participated in SCP and what were the reasons they participated.

The study found that for INK community to effectively participate the community has to be empowered with knowledge. It has been noted that the community is having inadequate understanding of importance of community participation. Such projects are meant to empower the community socially by improving their well-being, economically by creating job opportunities and alleviate poverty as well as environmentally by ensuring that they live in a clean, safe and healthy environment. It is the role of the community to take advantage of this SCP benefits. The challenge was the limited involvement of the community that also affected the impact of the SCP in changing the behaviour and mind-set of the local community.

The findings reveal that there was an improvement in stream conditions however education and awareness is needed for INK community. The study has also reveal that lack of community mobilisation in SCP has affected the sustainability of the project because there is continuous misbehaviour of the people. Since the community revealed that they were not aware of the project, that affected the level of community ownership of the SCP. Literature review indicated that for the community to take ownership and responsibility they have to be part of the planning and decision making. The findings of the empirical data indicate that community views, feelings and opinions should be included and be implemented by municipality in ensuring effective community participation in SCP.

## **6.6. Strategies to Enhance Community Participation**

The primary and secondary data indicates that in order to achieve effective participation understanding the existing socio-economic condition of PINK is important. The community has to be aware of their situation, problems and causes and able to identify solutions to improve their livelihood. Mobilising and recognising all stakeholders and the community can contribute to effective achievement of community participation. The strategies that were identified for effective participation of community in SCP:

- Forums and community meetings can enhance partnership and information sharing between the municipality and INK community

- Community Awareness: aimed at educating the community for the importance and understanding the need for participation and taking decisions.
- Municipal Newspaper: publish municipal projects and programmes to communities and ensure accessibility.
- Utilise Sukuma Sakhe, Masakhane and Imbizo as strategic tools to communicate with community.
- Community leaders and Community development workers are being mandated by Municipal Systems Act to address citizens with council projects.

## **6.7. Project Recommendations**

Even when a concept of community participation is highly emphasized by the constitution into projects, the results indicated that there was limited community participation in the planning, implementation and management of SCP. This means that there are few chances of ownership and sustainability of SCP. The community was largely involved as local labour in the SCP not in project decision-making. That data has also revealed that councillors were only informed after the plan has been made by municipal officials and there was limited modification of the plan.

Despite the challenges of lack of resources, compensation the study has revealed that the participation of communities in planning and implementation SCP does not only ensure democracy, but also ensures acceptability, transparency, ownership, trust, support, sustainability and partnership of stakeholder in a project.

## **6.8. Recommendations and Future Research**

The concept of bottom-up planning necessitates participatory approaches and involvement of local communities and other stakeholders from the grassroots level. This approach is the best option to Integrated Water Resource Management because it ensures public trust, awareness and interest (Boakye and Akpor 2012). This means empowering local communities with the necessary tools to take care of their own welfare by ensuring that their voices are heard, and their interests are adhered to.

Recommendations to improve participation of community include:

- To strengthen political structures partnership will accelerate partnership between the municipality and community hence the findings reveal that Community leaders and Community development workers are being mandated by Municipal Systems Act to address citizens with council projects.
- To promote participation in decision making process for communities in order to ensure that local government system consult communities for decision and participation.
- Create a favourable platform for the community to freely express their opinions by utilising Sukuma Sakhe, Masakhane and Imbizo as strategic tools to communicate with community.
- Involve all role players interested and affected in all project phases through mobilising and recognising all stakeholders and the community can contribute to effective achievement of community participation.
- Develop effective information sharing platform and all citizens, establishing communication forums and community meetings can enhance partnership and information sharing between the municipality and INK community.
- Develop education and awareness initiatives and capacity development programmes for implementing legislative framework for communities and government officials through community awareness programmes that are aimed at educating the community for the importance and understanding the need for participation and taking decisions.

The finding of this study indicates that there is a lot of untapped information related to community participation in INK. There is a need for more research on the challenges that affect community participation in projects at INK. Further research studies can be done to analyse the status quo on why the concept of community participation has not been practiced to its capacity of ensuring sustainable community projects. Other recommended research studies at INK will be to investigate the influences of community participation in local development projects. The study has focused on nature and the extent of community participation in planning and decision making of SCP. Other researcher can assess other stages of a project like project monitoring and evaluation can be a relevant and interesting area for future research study at INK.



## **6.9. Conclusion**

The chapter began with a summary of findings in relation to objectives of the study. The chapter also noted that the research could have benefited from both qualitative and quantitative methods in order to arrive at both exploratory and statistical assessments of the participation of the community. Various gaps have been identified in the study; these relate to the implementation of policy on community participation, and various recommendations have been raised in this regard. This chapter concluded by recommending other areas for further research that could build on the existing body of knowledge on the participation of communities in planning and the implementation of CSP.

## CHAPTER SEVEN

### REFERENCE LIST

#### 7.1 References

Abrahamson, M. M. ed. 2011. *Contextual influences on Project Planning*. KTH ROYAL.

Anderson, J. A. 1987. *Communication Research: Issues and Methods*, McGraw Hill, New York.

Anderson, A. J. 2005. Engaging Disadvantaged Communities: Lessons from the Inkomati CMA establishment process. 'African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa'. Johannesburg, South Africa, January 2005.

Arnstein, S. R. (1969) "A ladder of Citizen Participation". JAIP, Vol. 35 (4).

Boakye, M. K., and Akpor, O. B. 2012. Community Participation in Water Resources Management in South Africa. *International Journal of Environmental Science and Development*, 3(6): 511-515.

Biggan, J. 2008. *Succeeding with Your Master's Dissertation: A step by step handbook*. New York, Open University Press.

Burns, D. L., & Taylor, M. 2000. *Auditing Community Participation*. Policy Press.

Cleland, D.I. and Ireland, L.R. 2007. *Project Management: Strategic Design and Implementation*. Singapore: Mc Graw Hill.

Carrim, Y. 2011. *Strengthening Community Participation in local Government: challenges and Opportunities*. South Africa

Chaskin, R. J. and Garg, S. 1997. The issue of governance in neighbourhood-based initiatives. *Urban Affairs Review*, 32 (5): 631-662.

Chifamba, E. 2013. Community participation in integrated water resources management in the Save catchment, Zimbabwe. *Journal of Environmental Science and Water Resources*, 2 (10): 360-374.

Cooperative Governance: Township Renewal. 2008. Inanda, Ntuzuma, Kwa-Mashu (INK) Case Study.

Davidoff, P. 1965. Advocacy and Pluralism in Planning. *Journal of American Institute of Planning*: 331-339.

Dlamini S and Mbonambi L. 2009. Township Renewal Ink: case study: eThekwini Municipality.

Dukeshire, S. & Thurlow, J. 2002. *Rural Communities Impacting Policy challenges and Barriers to Community Participation in Policy Development.*, Dalhousie University. Available: <http://www.ruralnovascotia> (Accessed 23 September 2018)

eThekwini Municipality. Community Participation Policy. 1996. eThekwini Municipality.

eThekwini Municipality. Integrated Development Plan. 2018. Integrated Development Plan of 2018. eThekwini Municipality.

eThekwini Municipality. Environmental Planning and Climate Protection Department. 2017. *Durban Urban Resilience Strategy*. eThekwini Municipality.

Fainstein, S.S. 2000. New Directions in Planning Theory: *Urban Affairs Review*, 35 (4): 451-478.

Forester, J. 1982. *Bounded Rationality and the Politics of Muddling Through*. Public administration: Cornell University.

Fox, W. & Bayat, M.S. 2007. *A Guide to Managing Research*. Cape Town: Juta & Co Ltd.

Giddens, A. 1994. *Conversations with Anthony Giddens: Making Sense of Modernity*. Stanford, CA: Stanford University.

Gerring, J. 2011. *Social Science Methodology: A Unified Framework*. Cambridge University Press.

Gray D. E. 2017. *Doing research in the Real World*. SAGE publications: UK.

Gunder, M. 2010. Planning as the ideology of (neoliberal) space. *Planning Theory*, 9. 298-314

Healy, P., 2003, Collaborative Planning in Perspective. *Planning Theory*, 2. 101-111

Heredia-Martínez, H. L., Artmann, E., Porto, S. M. 2010. Communicative approach of Situational Strategic Planning at the local level: *health and equity in Venezuela*, 26 (6): 194-206.

Jackson, M.R. Kabwasa-Green, F. and Harranz, J. 2006. Cultural Vitality in Communities: Interpresentation and Indicators the urban institute.

Kamuiru, J., Mbwisa, H. 2014. Factors Influencing Community Participation in Project Planning in Kenya. A Case Study of Mbucana Water Dam Project. *Strategic Journal of Business and Change Management*, 2 (29): 560-580.

Kakumba, U. and Nsingo, S. A. M. 2008. Citizen participation in local government and the process of rural development: the rhetoric and reality in Uganda.

Kiyaga-Nsubuga, J. 2004. Decentralisation, Local Government and Poverty Reduction: A Theoretical Exploration. Basic Principles of Decentralisation. Kampala: Uganda Management Institute.

Kumar, R. 2011. Research Methodology a step by step guide for beginners. California: SAGE Publications.

Kusel, A. 2009. The South African Urban Renewal Programme (URP), Development of rural/urban nodes in the context of migration.

Lane, M.B. 2005. Public Participation in Planning: an intellectual history. *Australian Geographer*, 36 (3): 283-299.

MacCallum, D. 2008. Participatory planning and means-ends rationality: A translation problem. *Planning Theory and Practice*, 9 (3): 325-343.

Mohsin, H.A. 2016. A Manual for Selecting Sampling Techniques in Research. University of Karachi.

Nachmias, D. & Nachmias, C. 1981. *Research Methods in the Social Sciences*. 2nd. ed. New York: St. Martin's Press.

Nekwaya, J. H. 2007. Assessing Community Participation in Development Planning and Service Delivery. A case study of the Omusati Regional Council. Master of Sustainable Development and management: University of Stellenbosch.

Ngceshu, S. and Nwane, T. 2002. *Social Justice and Poverty in Inanda, Discussion Paper*, Accessed 11/05/2018, Available: <http://scnc.ukzn.ac.za/>

Peattie. L.R 2012. "Reflections on Advocacy Planning", *Journal of the American Institute of Planners*, 34(2): 80-88.

Peterman, W. 2004. Advocacy vs. collaboration: comparing inclusionary community planning models. *Community Development Journal*, 39(3): 266-276.

Plowright, D. 2011. *Using mixed methods: Frameworks for an integrated methodology*. SAGE Publications.

Portugali, J. and Alfasi, N. 2008. An Approach to Planning Discourse Analysis, *Urban Studies Journal*, 45: 251–272

Ragini, S. 2015. Community Participation in Environmental Management: Role of Women, *International Conference on recent Research Development in Environment, Social Science and Humanities*, University of Delhi, Delhi, September 2015. Delhi.

Rahman, M.A. 1993. *People's self-development: perspective on participatory action research a journal through experience*. London: Zed Books.

Salsich, P. W. 2012. "Does America need public housing?".

South Africa. Government Communication and Information System. (1996) Constitution of the Republic of South Africa 1996: Government: Pretoria Printer.

South Africa. Government Communication and Information System. 1998. National Environmental Management Act 107 of 1998. Government Gazette 19519: 27 November. Pretoria: Government Printer.

South Africa. Government Communication and Information System. 2008. National Environmental Management: Waste Act 59 Of 2008. Government Gazette 32000 March. Pretoria: Government Printer.

South Africa: Department of Cooperative Governance and Traditional Affairs. 2000. Municipal System Act 32 of 2000: Pretoria: Government Printer.

South Africa. Department of Cooperative Governance and Tradition Affairs. 1998. White Paper on Local Government of 1998. Pretoria: Department of Cooperative Governance and Traditional.

South Africa. Department of Water and Sanitation. 1998. National Water Act 36 of 1998. Pretoria: Government Printer.

South African. Government Environmental Affairs. 1989. Environmental Conservation Act 73 of 1989. Government Gazette 11927: 9 June. Pretoria: Government Printer.

Statistics South Africa. 2011. Census Municipal Report: KwaZulu-Natal. Pretoria.

Sultana, F. 2009, Community and participation in water resource management: gendering and naturing development debates from Bangladesh: *Journal of Transactions of the Institute British Geographers*, 7: 348-349

Swanepoel. H. and De Beer. F. 2011, Community Development Breaking the Cycle of Poverty. (5<sup>th</sup> ed.) Juta, Landsdown.

Thwala, W.D. 2009, Experiences and Challenges of Community Participation in Urban Renewal Projects. The Case of Johannesburg, South Africa. *Journal of Construction in Developing Countries*, 14 (2): 37-54.

Tewdwr-Jones M, Allmendinger P. 1998. Deconstructing communicative rationality: a critique of Habermasian collaborative planning. *Journal for Environment and Planning*, 30: 11- 15.

Tewksbury, R. 2009. Qualitative versus Quantitative Methods: Understanding Why Qualitative Methods Are Superior for Criminology and Criminal Justice. *Journal of Theoretical and Philosophical Criminology*, 1 (1): 137-143.

Williams, J. 2006. Community Development Workers as advocacy planners in South Africa"? A Bourdieuan approach" Project: Policy Management, Governance and Poverty Alleviation in the Western Cape.

# APPENDICES

## Appendix: 1 Consent Form

### UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

#### Information Sheet and Consent to Participate in Research

Date: 17 September 2015

Greeting: Dear Community members.

My name is Wendy Gumede from University of KwaZulu Natal doing a Master of Town and Regional Planning my contact is 071 862 4415 and my email address is Mpume.Gumede@durban.gov.za.

You are being invited to consider participating in a study that involves research on community participation in Sihlanzimvelo stream cleaning Project. The aim and purpose of this research is to evaluate community participation into stream cleaning projects. The study is expected to enroll 30 participants, 10 participants from Inanda, Ntuzuma and Kwa-Mashu. It will involve consultation with respective ward councilors in order to be permitted to proceed with data collection from community members. The duration of your participation if you choose to enroll and remain in the study is expected to be 30 minutes' time frame. The study is funded by eThekweni Municipality department of Coastal Stormwater and Catchment Management.

We hope that the study will create the following benefits to improve municipal approach on engaging communities to participate in stream projects, it will also benefit the community on understanding the importance and their participation level into stream projects.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (031 2604557).

In the event of any problems or concerns/questions you may contact the researcher at [Mpume.Gumede@durban.gov.za](mailto:Mpume.Gumede@durban.gov.za)/ 071 8624415 or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557- Fax: 27 31 2604609  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

Participation in this research is voluntary by participants, may withdraw from participating at any point, in the event of refusal/withdrawal of participation the participants will not incur penalty or loss of treatment or other benefit to which they are normally entitled. The participant may be able to withdraw from participation at any time. The researcher will seek another participant that is willing to participate. In this research withdrawal of participants will not affect the research data as the data will be collected from participants that are willing and are available during the time of data collection. The Researcher may terminate the participant if the information given is not correct and may impose risk of data analysis.

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**CONSENT**

I \_\_\_\_\_ have been informed about the study entitled Evaluation of community participation in Sihlanzimvelo Stream Project: Case study Sihlanzimvelo Stream Cleaning Project. by Wendy Gumede.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at 071 862 4415/ 031 311 7727.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557 - Fax: 27 31 2604609  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)



I hereby provide consent to:

Audio-record my interview / focus group discussion	YES
Video-record my interview / focus group discussion	YES
Use of my photographs for research purposes	YES

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

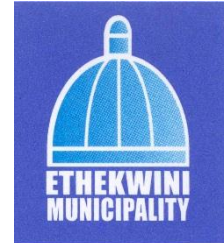
\_\_\_\_\_  
Signature of Witness  
(Where applicable)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Translator  
(Where applicable)

\_\_\_\_\_  
Date

## Appendix 2: Research Questionnaires



### EVALUATION OF COMMUNITY PARTICIPATION IN SIHLANZIMVELO STREAM CLEANING PROJECT: CASE STUDY OF PINK SIHLANZIMVELO STREAM CLEANING PROJECT.

#### COMMUNITY QUESTIONNAIRE

QUESTIONNAIRE NUMBER

##### A. PERSONAL PARTICULARS

Name and Surname			
Contact Number			
Gender	Female	Male	
Area	Inanda	Ntuzuma	KwaMashu
Ward Number			
Educational Level	Primary	Secondary	Tertiary
Employment	Not Employed	Employed	Self Employed

##### B. COMMUNITY PARTICIPATION IN THE PROJECT

2. Do you participate in projects or development programmes which are taking place in your area?  
YES/ NO

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2.1. If not, why?

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**3. At what level does involvement of the community in stream cleaning projects take place?**

- i. Planning process
- ii. Decision making process
- iii. Operation (Implementation) process
- iv. Not at all

**4. Who participate the most in projects?**

- (a) Women
- (b) Men
- (c) Youth
- (d) Elderly People

**5. What was the community contribution in the stream cleaning projects?**

- (a) Information and Knowledge
- (b) Decision making
- (c) Labour
- (d) All of the above

**6. Do you think community participation in planning, implementation and management of stream project leads to the effective and sustainable stream cleaning projects?**

- (a) Yes
- (b) No

**7. In your opinion, does community benefit from participating in the stream cleaning projects, justify?**

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**8. Do you think community participation in stream cleaning projects is important, please give reason(s) for your answer?**

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**9. What are the main problems that prevent involvement of community members into Stream cleaning projects?**

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**0. What challenges does the community face when participating in stream projects process?**

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**11. Do you think effective community participation can improve stream cleaning projects in the area, please justify your answer?**

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**12. In your view, which strategy or strategies government can use to ensure meaningful participation in projects?**

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**C. Community Attitude to Participatory Approach**

<b>Agreement or Disagreement statement</b>	<b>Strong Agree</b>	<b>Agree</b>	<b>Uncertain</b>	<b>Disagree</b>	<b>Strong Disagree</b>
<b>1-</b> The extent level of community participation in projects planning was a community initiative					
<b>2-</b> Community stream cleaning projects became sustainable when community participate and take decision					
<b>3-</b> The reason made community to participate in stream projects was to benefit from the project					
<b>4-</b> Women and Youth are actively involved in projects					
<b>5-</b> The community was educated and well informed about the project in order to participate					
<b>6-</b> Community leaders have been rarely involved in stream cleaning projects					

**Thank you for your participation.**



**EVALUATION OF COMMUNITY PARTICIPATION IN SIHLANZIMVELO  
STREAM CLEANING PROJECT: CASE SYUDY OF PINK SIHLANZIMVELO  
STREAM CLEANING PROJECT.**

**GOVERNMENT OFFICIALS QUESTIONNAIRE**

**QUESTIONNAIRE NUMBER**

**Date:**

Name and Surname	
Gender	
Contact Number	
Designation	
Department	

1. Do you know anything about Sihlanzimvelo Stream Cleaning Project for INK area that was initiated in 2012? If you know about this stream cleaning initiative, could you unpack whether the community played any role in the planning, decision making and implementation thereof?

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2. What is the importance of community participation in stream cleaning initiatives from the point of view of project or programmes?

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3. What is your assessment of these community participation interventions in terms of their effectiveness in achieving of the purpose for which they have been designed for?

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4. If you regard them as effective or ineffective, can you provide the reasons for your response?

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5. What role should the community leaders should play from your point of view?

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6. What are the challenges or problems that contribute to poor community participation?

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7. In your opinion how community should participate in stream cleaning projects in order to ensure sustainability of the projects?

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8. In your view, which strategy or strategies government can use to ensure meaningful participation in projects?

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9. The community was educated and well informed about the project in order to participate?

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10. Do you think education can play an important role to ensure that communities are able to make informed decisions?

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Thank for your Participation





## EVALUATION OF COMMUNITY PARTICIPATION IN SIHLANZIMVELO STREAM CLEANING PROJECT: CASE SYUDY OF SIHLANZIMVELO STREAM CLEANING PROJECT.

### FOCUS GROUP INTERVIEW QUESTIONS

1. What is the importance of community participation?
2. Does community participate in stream projects within INK areas?
3. When do they participate in stream projects (attending meetings, planning, Implementation, decision making or beneficiaries)?
4. What are the contribution of community in a stream project?
5. What are the factors affecting or hinder community to participation in stream projects?
6. What are the benefits of community participation in stream projects?
7. Do you think education can play an important role to ensure that communities are able to make informed decisions?
8. In what way does community participation empower communities?
9. How can community participation be improved in stream projects?
10. Do you have any comment or opinion on how community can be mobilized for participation to the stream projects?

Thank for your Participation

