TOWARDS UNDERSTANDING THE MEANINGFUL PARTICIPATION OF DISADVANTAGED COMMUNITIES IN THE MSUNDUZI CATCHMENT MANAGEMENT FORUM

by

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Abstract

The participation of the public has become widely accepted through legislation as a critical component of managing water resources in South Africa. However, achieving meaningful participation continues to be a challenge especially for the previously disadvantaged communities. Participants from these communities, through legislative requirements have the opportunity to participate and make contribution in water management arena with little emphasis of their level of knowledge in understanding the information presented in the participation processes. The level of knowledge and understanding of participants has been found by Anderson (2005) and Faysse (2005) to affect meaningful participation in the water management arena. There have been, however, few empirical studies (Anderson, 2005; Faysse, 2005) to find out whether the disadvantaged community participants feel their participation in water management institutions such as the catchment management forum (CMF) is meaningful.

Meaningful public participation has increasingly been used in public participation literature to describe the quality of participation process Solitare, (2005), Canadian Association of Petroleum Produces (CAPP) (2004) and Videira *et al.* (2003). Authors have generally avoided strictly defining the adjective 'meaningful' in relation to public participation. Authors have however, concentrated on attributes of the concept which includes: the ability of the participation process to meet the expectation of the participants, inclusiveness of stakeholder, trust among participants in a participation process, participation process contribution to learning of participants and opportunity for participants to improve quality of decision.

The purpose of this research was to find out whether the disadvantaged community participants find their participation in the Msunduzi Catchment Management Forum (MCMF) to be meaningful. To achieve this aim, the specific objectives of the study were:

- firstly, to determine whether the participation processes meet the expectations of the participants;

- secondly, to determine whether the MCMF is inclusive of those having an interest in catchment management issues;

- thirdly, to determine whether there is trust among participants in the participation processes;

- fourthly, to determine whether participants have access to and understand appropriate and relevant information given at the forum; and

- lastly, to determine whether participants are notified about the forum early and adequate time given for sharing of information in the process.

A review of relevant literature on this research issues was conducted. A qualitative research approach was used to address the goals of the research, including a semi-structured interview of stakeholders of the MCMF. The semi-structured interviews were conducted with participants from the disadvantaged community, industry, municipality, DWAF and members of other non-governmental organizations that are not from the disadvantaged community. The other stakeholders who are not from the disadvantaged communities were included in the studies to find out whether they are aware of the perspectives of the disadvantaged community participants on the meaningfulness of the MCMF. Another objective for including these stakeholder groups was to find out whether they share the same views as those from the disadvantaged community on the meaningfulness of the MCMF. The results from the interviews were used to determine whether participants from the disadvantaged communities find their participation in the MCMF to be meaningful.

The results established five key finding from the research. Firstly, the disadvantaged community participants do not see their involvement in the MCMF to be meaningful. Secondly, the disadvantage community participants have expectations that have not yet been met. Thirdly, there is a degree of differences in relationship among stakeholders based on educational background which is affecting networking and trust building. Fourthly, the lack of understanding of the information presented at the forum by the disadvantaged community participants, and lastly improper medium and timing of

notification by DWAF. These were found to be the major factors affecting disadvantaged community participants' meaningful participation in the MCMF.

This research has recommended five key means through which the MCMF public participation process can be improved which are based on the conclusions of this research.

It is recommended that:

1. Expectations of participants especially those from the disadvantaged community on the functions of a catchment management forum should be addressed urgently.

2. Degree of differences that exist among some participants especially those from the disadvantaged community that educational background influence views presented by a participant should be dealt with through measures such as field trips.

3. Technical information is presented in a medium that disadvantaged community participants can understand.

4. The medium of notification used to ensure effective public participation at the MCMF be addressed.

5. DWAF evaluates the MCMF participations process to find out the level of satisfaction among participants.

Declaration

The research described in this mini-dissertation was carried out at the Centre for Environment, Agriculture and Development, University of KwaZulu-Natal, Pietermaritzburg, under the supervision of Dr. Mark Dent.

This mini-dissertation represents the original work of the author and has not otherwise been submitted in any form for any degree or diploma at any university. Where use has been made of the work of others it is duly acknowledged in the text.

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Acknowledgement

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Chapter 1 Introduction

Public participation in water management institutions according to Anderson (2005), Faysse (2005), James (2003) and Karar (2003) is critical for the management of water resources because it provides the opportunity for water management institutions to share ideas with the local community. Water management institutions in South Africa according to James (2003) and Karar (2003) have been re-structured in a manner that will ensure the participation of the public in water resource management and one of such institution is the catchment management forum (CMF). The CMF according to the National Water Act (NWA) of 1998 is a non-statutory water management institution which is to assist in the setting up of statutory water management institution. The CMF is in the view of James (2003) and Karar (2003) is the institutional level in water resource management which provides the opportunity for citizens to express their views on water resources management.

The participation of the public in South African in general in the opinion of Racheln (2006) and Roefs & Liebenberg (2005) is critical to the political transformation process which is about redressing the inequalities of the past by including those who were marginalized and excluded from benefits and rights as citizens of the nation. The participation of the marginalized and the previously disadvantaged[1] is seen as deepening of democracy (Racheln, 2006) and also as a mechanism for increasing their involvement in the decision-making process that affects their daily lives (Mishay, 2006). Public participation has been acknowledged therefore in South Africa as a means of involving the vast majority of South Africans in the decision-making process, especially at the grassroots level (Khan, 2007).

The general lack of public involvement in decision-making at the grassroots level in South Africa, in the opinion of Khan (2007), affected broad based decision-making on environmental issues. However, public participation was used in environmental decision making in other countries which in the opinion of Videira *et al.* (2003) were due to the

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[1] Previously disadvantaged in this thesis refers to Africans (black-South Africans).

recognition of the connections between nature and society. Public participation in environmental decision-making in South Africa, according to Sowman (2005), was given much attention in environmental decision-making during the Consultative National Environmental Policy Process (CONNEPP) in 1995. The objective of CONNEPP was to solicit stakeholder inputs for the development of a new environmental policy which led to the adoption of the National Environmental Management Act (NEMA) in 1998.

The NEMA of 1998 established the idea of broad-based public participation in environmental decision-making. The specific principles to public participation in NEMA include section 2 (4) (f) of the Act which states that: "the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured" (NEMA, 1998:12). 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). The mandatory participation of the previously disadvantaged through legislation has however received criticism due to lack of or insufficient knowledge from this population group to understand the information presented at a forum (Faysse, 2005; Anderson, 2005). This has affected their meaningful participation (Racheln, 2006; Roefs & Liebenberg, 2005) and level of commitment to a participation process (Lerotholi & Wilson, 2003).

Water resources management institutions such as the CMF were required by legislation to include disadvantaged community groups in order to address social injustice. The National Water Act (NWA) of 1998 was developed with the objective of addressing inequalities in water management through the promotion of public participation irrespective of race or gender (Anderson, 2005; Faysse, 2005; Karar, 2003). The NWA of 1998 mandates the participation of the general public, especially those from the previously disadvantaged group, as critical in achieving its goals in the areas of water conservation, management and monitoring which are the objectives of water management institutions.

1.1 The Problem Statement

Meaningful public participation has increasingly been used in public participation literature to describe the quality of participation process Solitare, (2005), Canadian Association of Petroleum Produces (CAPP), (2004) and Videira *et al*. (2003). Authors have generally avoided strictly defining the adjective 'meaningful' in relation to public participation. Authors have however, concentrated on attributes of the concept which includes: the ability of the participation process to meet the expectation of the participants, inclusiveness of stakeholder, trust among participants in a participation process, participation process contribution to learning of participants and opportunity for participants to improve quality of decision.

The participation of the public in water management institutions in South Africa is seen as a means of democratization. Legislation has therefore been put in place that is intended to ensure that the general public have the opportunity to take part in a participation process in all institutions. According to du Toit (2005), policies and legislation on public participation processes in South Africa are silent on how best public involvement can be achieved. Faysse (2005) found that little emphasis has been placed on the capacity of participants especially those from the disadvantaged communities in terms of their level of knowledge and understanding of the information that is presented at the participation processes in South Africa. Anderson (2005) found that most participants from the disadvantaged community at Inkomati Catchment Management Agency did not understand the information presented during meetings due to lack of knowledge in water resource management.

The resultant effect of lack of or insufficient knowledge is the creation of unrealistic expectation since participants are unable to understand the purpose of a participation process (du Toit, 2005). Illegitimate representation is also a resultant effect of lack of or insufficient knowledge since those who will participate might not be representatives from the community. Community representatives or leaders on the other hand might not attend due to their lack of knowledge. Distrust among participants in a participation process can also result from participants' lack of knowledge which can results in the creation of a

degree of difference among participants based on knowledge. Lack of or insufficient knowledge also affects participants in a participation process since participants are unable to make any connection with the information presented and therefore make contribution that will improve the quality of decision (du Toit, 2005).

1.2 Aim

The aim of this research is to investigate whether participants from the disadvantaged communities consider their involvement in the Msunduzi Catchment Management Forum (MCMF) participation processes to be meaningful.

1.3 Research objectives

In order to achieve the aim stated above, the objectives of this study will be:

- to determine whether the participation processes meet the expectation of participants;

- to determine whether the MCMF is inclusive of those having an interest in catchment management issues;

- to determine whether there is trust among participants in the participation processes;

- to determine whether participants have access to and understand appropriate and relevant information given at the forum; and

- to determine whether participants are notified about the forum early and adequate time given for sharing of information during the participation process.

1.4 Study area

The study was conducted in the Msunduzi Municipality in the KwaZulu-Natal Province of South Africa (Figure 1). The Msunduzi river catchment covers an area of 540 square kilometers (Figure 2) with about four hundred thousand people living in urban and peri-urban reaches of the catchment (Rivers-Moore & Hay, 2002). Most of the people living in the catchment come from disadvantaged communities and lack understanding of environmental and development issues (Rivers-Moore & Hay, 2002). Due to the large number of people living in the catchment coming from the disadvantaged community there is need for their inclusion in solving issues in the catchment. Members of organized groups in disadvantaged communities have therefore been asked to participate in the participation process that aimed to address the issues in the catchment.

According to the River Health Program (2006), the main land use of the peri-urban area by the disadvantaged communities is informal settlement (Figure 2) with Edendale and Imbali being the prominent peri-urban areas with a population of 280 000 people. The main environmental threats to the river according to River Health Program (2006) is built up areas (Figure 2) which have led to an increased run off therefore increasing sediment load which decrease depth of rivers and contributes to flooding. Inadequate waste services in the informal settlements lead to faecal pollution and illegal discharge of industrial effluents which increase the nutrient load of river which influences the algal growth of the river (River Health Program, 2006).

Figure 1 Map of the Msunduzi Municipality
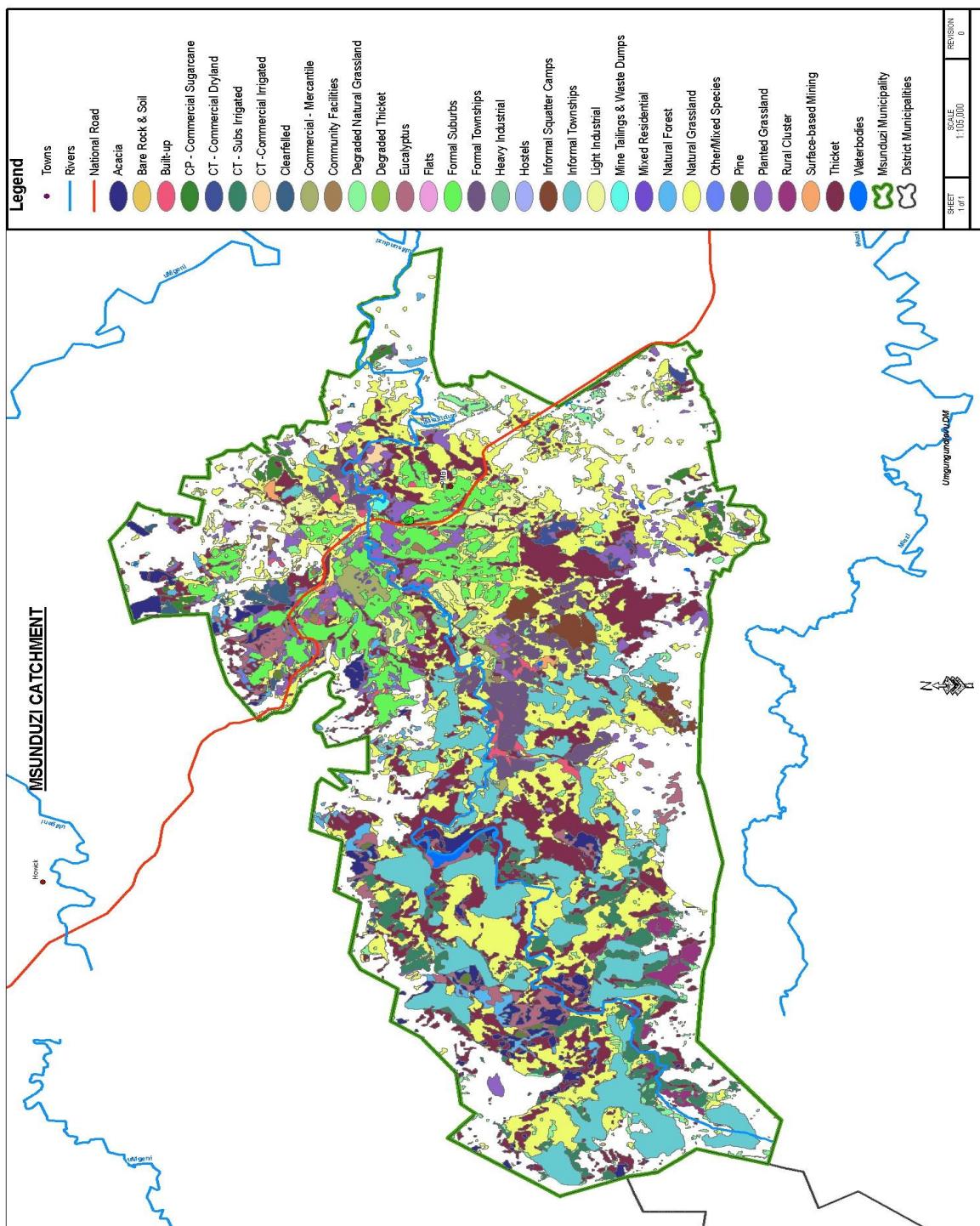
Figure 2 Land use within the Msunduzi catchment (Ntusi, 2007)

The MCMF has been formed as a legal requirement of the 1998 NWA to assist in addressing the threats to river health which directly impact on human health and the economic situation of the area. The organizer of MCMF has been the KwaZulu-Natal regional office of DWAF and meetings have been chaired by an Assistant Director of DWAF. The MCMF meets four times in a year that is every three months. In order to have the opportunity to make a contribution on the management of the catchment the 1998 NWA has made it mandatory for DWAF to seek the involvement by all stakeholders in the MCMF. The MCMF was chosen for this study because it is relatively new compared to the Inkomati Catchment Management Agency and it is anticipated that the findings from this research will help in improving the participation process.

1.5 Dissertation Structure

This dissertation is made up of six chapters. The first chapter serves as an overview, outlining the introduction; the research aim; objectives of the dissertation; and a description of the study area. The second chapter reviews the relevant literature on public participation. Chapter three outlines the methodology and specific research techniques used to achieve the objectives of this research. Chapter four is the presentation of results obtained from respondents during the interview process. Chapter five presents the discussion of views that were analyzed in chapter four. Chapter six is the conclusions drawn from the study and recommendations.

Chapter 2 Literature review

The literature review covers studies that are directly or indirectly related to the research objectives. This chapter begins by exploring the concept of public participation. The benefits and pitfalls of public participation processes and the typology of participation processes are also reviewed. This chapter also examines the factors that contribute to meaningful public participation processes.

2.1 Defining public participation

There are numerous definitions for public participation in the literature but the key factor in all the definitions is the degree by which the public is able to influence, involve themselves or control decision making (International Association of Public Participation (IAPP), 2006; World Bank Group, 1996; Vandervelde, 1983). There are different definitions for public participation but they all involve factors which lead to facilitation of communication and engagement of citizens in problem solving. The World Bank Group (1996:11) for example, defines public participation as "a process through which stakeholders influence and share control over development initiatives and decisions and resources which affect them". The IAPP (2006:1) also defines public participation as a "process that involves the public in problem-solving or decision-making and uses public input to make decisions."

According to Vandervelde (1983) definitions of public participation have become far from clear as a result of the different interpretations that are given to words such as 'influence', 'involvement' and 'control' or 'power' over decision-making. Individuals' interpretation of these three factors in the opinion of (Vandervelde, 1983) invariably impact on how one conducts a participation process.

Involvement according to Vandervelde (1983) deals with the how, when, where for the people who will actually take part in a participation process and is seen by Vandervelde (1983) as the actual procedure of participation. Involvement allows the participation process to be open and allows grassroots contribution to be part of decision making since

it strives to make everyone aware of issues to be discussed and play an active role in discussions. Influence in the opinion of (Vandervelde, 1983) can be considered as competition due to some degree of control that different groups of participants have in the participation processes. The degree of control often results in participants refusing to accept other participants' perspective objectively. In a study on employers perception and attitude towards influence by Hrebiniak (1974) cited by Vandervelde (1983), it was found that, most employees see influence in decision making as "fixed" power since views can be taken and then ignored. Power or control in a participation process is used to refer to the relative amount of influence that is exerted by an individual or a group (Vandervelde, 1983). According to Vandervelde (1983) power is exercised often in a participation process where a section of participants have more information than the others which leads to a hierarchical relationship.

The use of participation according to Vandervelde (1983) should be clear about the factor being used since it determines what one wants to achieve in a particular participation process. In this study, participation will mean the degree of involvement of individuals in a participation process and will be concerned with aspects such as when, where, and how participants can take part in a participation process.

2.2 Benefits of public participation

Some of the benefits associated with public participation have been extensively discussed in public participation literatures (Alder & Kranowitz, 2005; Solitare, 2005; Soneryd, 2004; Leatherman & Howell, 2001; Gracia-Zamor, 1985; Sewell & Coppock, 1977). A key argument for public participation according to Leatherman & Howell (2001) is that, it upholds democratic principles in societies by ensuring that the interests of the majority of citizens are at the forefront of decision-making and each citizen has an opportunity to express his/her view. Participation also helps in improving deliberate democracy whereby decisions are preceded by discussions among those who are affected by the decision (Soneryd, 2004; NEMA, 1998; NWA, 1998).

In the opinion of Leatherman & Howell (2001), Gracia-Zamor (1985) and Sewell & Coppock (1977) public participation helps in effective decision-making by providing

suggestions that will lead to the improvement in the quality of decision to be made. Although not all suggestions may be beneficial, there will be some that will lead to a genuine improvement in the decision-making process (Leatherman & Howell, 2001; Gracia-Zamor, 1985; Sewell & Coppock, 1977).

Gracia-Zamor (1985) found that, public participation helps in prevention and reduction of conflict by providing opportunity for minor irritations to be addressed by allowing individuals to air and discuss their grievances openly. Another objective of participation is to seek public opinion (Lankford *et al.*, 2005; NEMA, 1998; NWA, 1998) with the resultant advantage of increased legitimacy and democracy in the acceptance or rejection of a process (Lankford *et al.*, 2005). Alder & Kranowitz (2005), Solitare (2005) and Burke (1983) states that, if people are involved in the decision making process, they are likely to support and defend that decision even if some groups are not included or chose not to include themselves; the fact that it was open and fair makes the decision legitimate.

Public participation helps to increase the amount of information on the physical and biological characteristics of an area for proponents of a project in terms of design of the project that the impact assessment process may not be able to provide (Hampton, 1977; Internet 1, 2006). For instance, people who have lived in an area for a period of time may be able to provide information that will be vital in reducing the effect of hazards that an impact assessment may not detect. This inevitably helps proponents of a project make use of local knowledge and also gets the local community involved.

Public participation also serves as a learning process for communities through the information they acquire about environmental risk that they and their families are exposed to which helps them to change their life styles (Internet 2, 2006). Public participation according to Solitare (2005) and Leatherman & Howell (2001) also helps to educate the public by reaching out to the public which helps individuals to become aware that they are part of a society.

2.3 Pitfalls of public participation

There are also potential downsides of public participation according to Charnley & Engelbert (2005), Scottish Parliament Participation Handbook (2004) and Solitare (2005). A key pitfall of public participation process is the rise in expectation of participants that cannot be met (Scottish Parliament Participation Handbook, 2004). Even when the objective of participation has been clearly stated most participants expect their views to be turned into policy overnight according to the Scottish Parliament Participation Handbook (2004).

Public participation has also been found by Solitare (2005) and Charnley & Engelbert (2005) to be time consuming and a lengthy process which often discourage investment of capital. It therefore increases the cost of making decision rather than decreasing the cost of decision-making.

Public participation can also not guarantee representation according to Charnley & Engelbert (2005) and Solitare (2005) which is a key requirement for social justice. In most instances those who already have power participate more often using the participations to enhance their position in their communities (Charnley & Engelbert, 2005).

According to Charnley & Engelbert (2005) and Scottish Parliament Participation Handbook (2004) some issues are too complex and technical and should be left to experts to make a decision rather than involving unqualified public to be emotionally involved in finding solutions to such technical issues.

2.4 Typology of participation

Typology of participation is used to refer to the different types of participation that Arnstein (1969) used to describe a public participation process. From Arnstein (1969) ladder of participation (Figure 3), there are different levels of public participation which are:

- non-participation;
- tokenism; and
- citizen power.

The levels of public participation from Arnstein's ladder show the difference between actual optimal participation and participation that might appear to be public participation but is no more than a masquerade. The levels of public participation are subdivided into different types by the rungs on the ladder. The types of participation from Arnstein (1969) ladder are the representation of the extent of influence citizens have in determining the end product of a participation process at each level of Arnstein (1969) ladder which are:

- manipulation;
- therapy;
- informing;
- consultation;
- placation, partnership;
- delegated power; and
- citizen control.

The types of public participation range from being manipulated in the first two steps to receiving information and being consulted in the middle steps to controlling decisions in the final steps (Lithgow, 2004; Soneryd, 2004). At the bottom of the ladder there is no participation due to lack of interaction between stakeholders. According to Lithgow (2004) the main objective of organizers of a participation process at the bottom of the ladder is to "educate" or "cure" participants without having interest in involving them in the planning and implementation of deliberations.
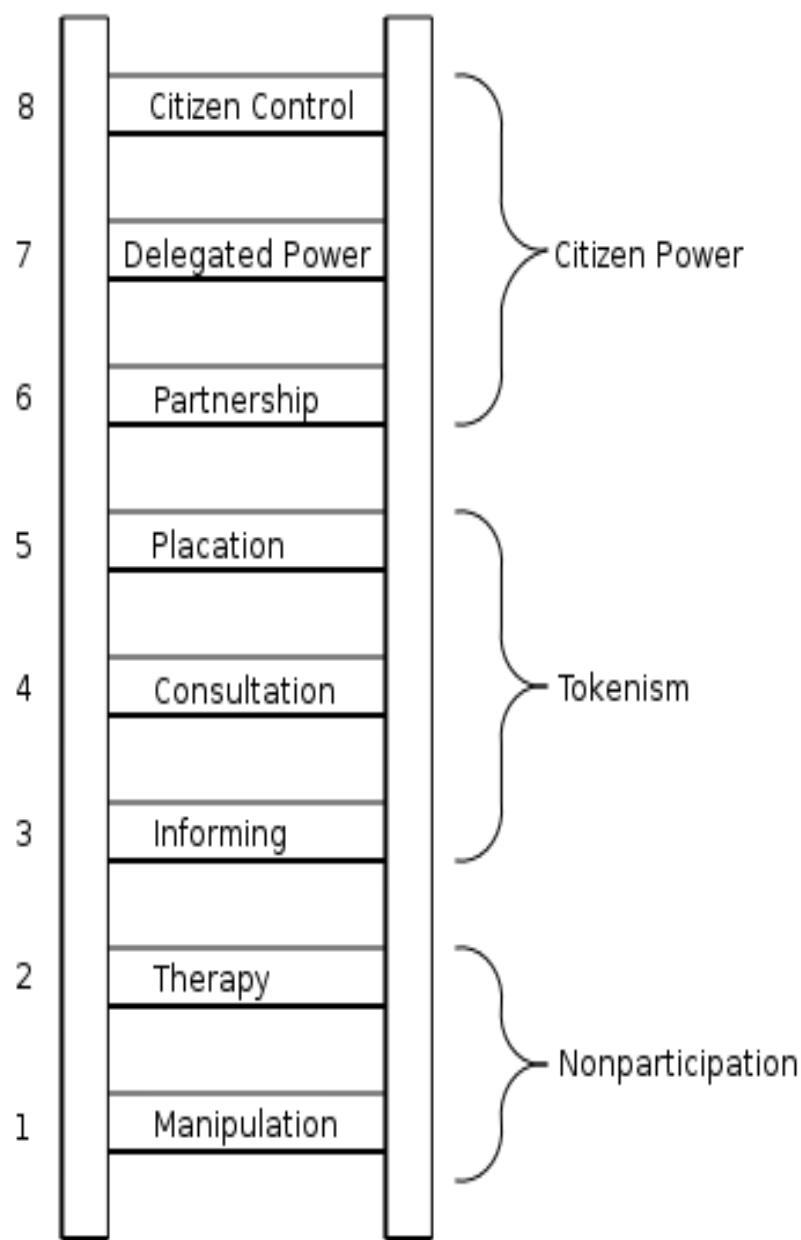
Figure 3 Arnstein's ladder of public participation (Lithgow, 2004)

The second level of the ladder is tokenism where the views of the public are solicited without any obligation by the authority to act on those views. Participants at the second level of the ladder in the opinion of Lithgow (2004) have no means to ensure that their views will be taken by the organizers of a participation process thus no assurance of

changing the situation. From the third level of the ladder, participation is considered to be interactive because decisions are made with inputs both from concerned or affected citizens and the lead authority with the affected parties often initiating the participation process (Lithgow, 2004; Soneryd, 2004).

The essence of meaningful public participation according to Lithgow (2004) and Giovanni (2002) is not moving from one rung (type) of the ladder to another but ensuring that the type chosen is feasible and ensures that the public gets involved in deliberations. Competing interest, divergent view points and sub-groups among participants in the opinion of Lithgow (2004) should be taken into consideration by the organizers of a participation process since the typology of the participation process does not consider these as roadblocks. Other factors that should be considered in the choice of typology is the knowledge base of participants and the difficulties in organizing participants that are accountable to their communities in order to avoid further alienation of citizens (Lithgow, 2004). For instance, a participation process with participants that lack knowledge on issues should not be at the level of citizen power since the participants does not know the consequence of their decisions. Similarly, a participation process that is not representative of the community cannot be at the level of citizen power in Arnstein's typology due to the alienation of certain citizens which can result in resistance by citizens on decisions made.

2.5 Components of meaningful public participation

Public participation is increasingly becoming accepted as the means by which the public can be involved in decisions affecting them. Early criticism of participation centered on achieving citizen power in the Arnstein's ladder of public participation whereas there is a new trend towards questioning the quality of the participation process (Solitare, 2005; Canadian Association of Petroleum Produces (CAPP), 2004; Videira *et al.*, 2003; Hampton, 1977). The quality of participation processes according to Warburton *et al.* (2001) is the manner in which a task is performed and the judgment of it by specific individuals with unique characteristics, needs and aspirations.

Public participation literatures is increasingly using the adjective 'meaningful' to describe the quality of participation processes (Solitare, 2005; CAPP, 2004; Videira *et al*., 2003). The adjective meaningful does not require one to be at an eighth rung or level of the ladder of participation in order to make it meaningful but rather concentrates on factors that will improve the involvement of participants at each level of the participation process. Arnstein's ladder inevitably implies a hierarchical relationship between its rungs, but public participation can contain elements from various parts of Arnstein's typology. According to Hampton (1977) different actors in the participation process may be standing on different rungs but still achieve meaningful involvement in public deliberations.

Authors have generally avoided strictly defining the term "meaningful" in reference to public participation but have instead focused on describing the components of the concept. These factors vary depending on the author. Solitare (2005), for example, sees meaning public participation as a process that is inclusive of all stakeholders, having commitment, trust, time, common vision and opportunities for all participants. Videira *et al*. (2003) also views meaningful public participation as a process that contributes to learning, is inclusive, reduces conflict and builds trust and improves quality of decision. There are lot of factors that can also be found in participation guidebooks and manuals on public participation with some of the above mentioned factors found in the form of principles and recommendations.

For the purpose of this research, meaningful public participation components comprise of the common factors found in textbooks and public participation manuals and guidebooks. These are:

- advance planning;
- inclusiveness and representation;
- trust;
- accessibility and understanding of the required information; and
- medium of awareness creation and timing of notification.

2.5.1 Advance planning and design

Planning is an integral part of a public participation process because it gives information about a proposal to the participants that will be involved. If the public is involved in the planning process they are no longer asked to judge a near finished product but rather help in the improvement of the planning process. According to Solitare (2005) and Sewell & Coppock (1977), a meaningful public participation will consider uniqueness of the issue at hand in the design of the participation process since different issues requires different degrees of public attention. Charnley & Engelbert (2005) found that, local communities take part in a participation process when issues discussed at the participation process directly affects their daily lives which requires the design of a participation process to be specific about the target group. The pruning of trees along a public road, for instance, may require little or no direct input from the public in decision-making. On the other hand matters that involve conflict of interest such as the exploitation of natural resource or relocation of a community will require an extensive promotion of interactions between planners and the affected parties. There are factors that contribute to the success of participation process planning in involving the general public in participation process which are:

- techniques used;
- clear objective;
- capacity building;
- linking of the participation process to decision making; and
- evaluation of the participation processes.

Each of these factors is outlined below.

2.5.1.1 Techniques

Public participation planning may use different techniques to achieve its purpose. These techniques are usually grouped into dispersal of information, gathering of information and the promotion of interaction (Table 1) between the planners and the public (Giovanni, 2002; Hampton, 1977).

Table 1 Public participation techniques (Adapted from Hampton, 1977)

Technique	Subsidiary objective
Dispersal of information	What information? • Information about decision already taken • Information about discussions taking place Who is informed? • Major elites e.g. public bodies • Minor elites e.g. local interest groups • The general public or individuals who are not affiliated to major or minor elites
Information gathering	What information? • Information about physical facts • Information about decision taken by public or private bodies • Information about public attitude and opinions Who is listened to? • Major elites e.g. public bodies or major commercial concern bodies • Minor elites e.g. local interest groups • The general public or individuals
Interaction with the public	What kind of interaction? • Through widening of debate by dispersing more information • Through the involvement of elites such as public bodies and interest groups • Through encouragement of individual citizens Who are the public? • Major elites e.g. public bodies or major commercial concern bodies • Minor elites e.g. local interest groups • The general public or individuals

The dispersal of information is usually associated with decisions already taken whiles information gathering is related to public attitude and interaction deals with the encouragement of the public in debate. According to Hampton (1977) dispersal and gathering of information are important in a participation planning process because interaction cannot take place in a participation process between ignorant authority and general public. The technique chosen should however be useful in achieving the objective of the participation process and planners must choose the technique that is most appropriate to their specific purpose. Giving information for instance in the opinion of Hampton (1977) will prompt a demand for more information while interaction will also lead to calls from other groups to be part of the participation process and plans must be made for these situations.

2.5.1.2 Clear purpose

In every participation process the proponents should be clear about what participants can contribute to the process, what they will gain from taking part in the process and the extent to which their input can influence decision-making (CAPP, 2004; Internet 3, 2002). Clarity about the purpose of the participation processes will help in improving relations between the public and the proponents.

According to Kweit & Kweit (1987) two participatory techniques have helped in the setting of a common vision by using stakeholders to define the problem and identifying stakeholders that have the same interest as the proponents of a participation process. The first is the Delbecq's Nominal Group Technique and involves the bringing together of individual participants and placing them into groups and unlike regular group decision-making based on interaction, participants initially work independently (Delbecq *et al.,* 1975 cited by Kweit & Kweit, 1987). Individuals working in groups can be asked to list problems. These problems can then be aggregated and organized and used to establish priorities and can be accomplished at one meeting or over a period of time. The Delbecq's Nominal Group Technique according to Kweit & Kweit (1987) produces higher quantity, quality and variety of information than the traditional brainstorming techniques and helps in giving a clear picture about what participants expect from proponents of a participation process.

The other technique for ensuring that there is alignment in the purpose of stakeholders and the lead organization is the use of the Delphi Technique. According to Strauss & Zeigler (1982) cited by Kweit & Kweit (1987), this technique is useful for long term goal setting and uses questionnaires to ascertain the views of various participants. In the opinion of Siegel *et al.* (1987) questionnaires in a Delphi Technique should be distributed to stakeholders whose opinions on issues are highly valued in their communities. The response from such stakeholders should be used to derive the needs of their communities (Siegel *et al.*, 1987). The Delphi Technique according to Siegel *et al.* (1987) is much useful in instances where minimum amount of time is available for obtaining individual opinions.

2.5.1.3 Capacity building

The staff of an organization conducting a public participation process requires some skills in order to make the participation process meaningful. These skills include negotiation and conflict management, relationship management, information management, problem solving and process design (EPA, 2001). If an organization lacks these skills, they would need to provide this training for their staff or hire outside expertise in performing such functions. If those facilitating the participation process for an organization are bitter, uncaring, distrustful, contradictory or apathetic, this will reflect badly on the organization. According to CAPP (2004) if representatives of an organization lack technical information or have little or no authority or skill to negotiate decisions or commitments, a notion is created that the organization does not take public concerns seriously and is only going through the process for appearance sake.

In the opinion of Drysdale (2007), capacity building should not only focus on the lead agency personnel but also on participants because even when they are given the opportunity to participate, most of them may lack the capacity to participate as they desire. A meaningful public participation process should therefore ensure that, there is support for participants in terms of financial and technical assistance if the need arises. Effort should be made to ensure that participants lacking organizational and leadership skills and are assisted in developing these skills to enable them to better process

information and provide inputs during decision-making. CAPP (2004) found that, technical, scientific and economic issues may require some assistance from a professional before participants may fully understand. Time should therefore be allotted according to CAPP (2004) for those who require this assistance so that they can participate fully.

2.5.1.4 Linking participation processes to decision-making

The participation of the general public in decision-making has two facets; one being procedural and the other being substantive (Ingram & Ullery, 1977). The procedural form of participation according to Ingram & Ullery (1977) involves giving interested public participants an opportunity to air their views and possibly creating the illusion that their advice has been accepted even if their advice is rejected. Substantive form of participation on the other hand measures the extent to which the public actually affects the policy (Ingram & Ullery, 1977).

According to Sewell & Coppock (1977) it is important for proponents of a public participation process to recognize in a participation process that, participants give their valuable time, skills and resources to participate and this should be recognized and respected at all times. There is therefore a need for the integration of public views in decision-making in the opinion of Sewell & Coppock (1977) since participants continuous involvement in a participation process depends on the indications that their views are being taken in the decision-making and their presence serves a purpose. If the individuals participating feel that their views are not considered in the decision-making process thus their participation being for what Olivo (1998) describe as "normative" democracy, their confidence and motivation for involvement will certainly decline (Sewell & Coppock, 1977).

2.5.1.5 Evaluation and follow-up

The design of a participation process should not be for the purpose of planning and implementation only, but should also involve monitoring and evaluation of the participation process itself. According to Warburton *et al.* (2001) the evaluation of a participation process helps in the consolidation of achievements through the identification of success which provides the opportunity for the strengthening of achievements and

avoidance of pitfalls in future. Three general types of evaluation of public participation programs have been suggested by Beierle & Cayford (2002) cited by Charnley & Engelbert (2005) these are:

- those that evaluate the participation program itself;
- those that evaluate whether it is improving democracy; and
- those that evaluate whether it is achieving the goals of the participants.

In the opinion of Beierle & Cayford (2002) cited by Charnley & Engelbert (2005) if such an evaluation is carried out by proponents of a participation program it will help in strengthening their relationship with participants and this will eventually help in consolidating achievements and avoidance of pitfalls.

Evaluation provides an opportunity for the proponents of a participation process to begin to become an adaptive management process which in the opinion of Rogers *et al.* (2000) is the recognition of continual fluctuation and acknowledgement of uncertainties in management programs such as a participation process. The intent of adaptive management in the view of Walters & Holling (1990) cited by Rogers *et al.* (2000) is to provide an inductive process which can be achieved through evaluation of previous intervention strategies. The evaluation of previous process will allow for problem classification which will enhance communication among stakeholders and proponents of a public participation process. Adaptive management is hampered by gaps in information available to different stakeholders (Doremus, 2007). In the opinion of Doremus (2007), gaps in information will affect stakeholders view on what is categorized as a problem since individuals have different sources of information and even in instances where information source is the same, different interpretations arise.

2.5.2 Inclusiveness of participants

Giovanni (2002), Internet 3 (2002) and Sewell & Coppock (1977) found that, a variety of factors such as available resources, time, and the nature of the policy issue will influence decisions around which sections of the public are involved. However public participation in the opinion of Internet 3 (2002) and Sewell & Coppock (1977) should strive to include

the views of all the people that have a legitimate interest in the issue in order to promote participatory democracy. The public according to Internet 4 (2001) is not any one body, but rather a collection of individuals and groups (different publics) that can be characterized as organized or unorganized, professional or amateur, grassroots or institutional and attentive or inattentive to the issues at hand. In the view of Internet 4 (2001) most public participation processes have however not differentiated among these members of the public. Community on the other hand, is described as groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people (Internet 4, 2001).

The identification of participants with legitimate interest is not easy to resolve in the opinion of Mondras & Wilson (1993) since people with interest in a participation process may not be at the closest vicinity, the most accessible or the most obvious ones. This indicates that multiple methods are required to identify them. According to Khan (2007), participatory democracy which strives for the involvement of all citizens is seen as the means of giving people especially those at the grassroots level a voice in decision-making in South Africa. Participation however can not include all citizens which in the view of Sewell & Coppock (1977) is neither useful nor possible and can lead to alienation. The large number of people that participation processes is anticipated to attract in participatory democracy will be unable to provide opportunities for all citizens to express their views due to time constraints.

Reliance has been placed on representatives in modern democracies in expressing the views of citizens, under the assumption that those channels of communication are easily accessible to citizens (Sewell & Coppock, 1977) and representatives consult citizens in what they present in the decision-making process. These groups are referred to as stakeholders and are often but not always represented by a member of one of the organized attentive publics. Such representatives are also part of the communities in the sense that, they have a special interest or stake in the issue at hand and are more inclusive because they tend to represent the full range of interests in the issues at stake (Solitare, 2005; Internet 4, 2001). Stakeholders often include people who are directly affected,

those with economic interest and those with a more indirect interest such as community organizations, environmental groups, NGOs and CBOs.

Solitare (2005) and Lane (1995) suggested several reasons why stakeholder groups might be better placed to put public participation into practice, these include their innovation and flexibility, their ability to rely on voluntary and committed staff, and their closeness to the grassroots level. Such organizations according to Olsen (1982) serve as intermediaries between individual citizens and governing institution by bringing together people with similar concern and goals. These organizations also provide a channel through which locals can be heard in participation process and also inform the grassroots about deliberations with the governing institutions.

Accountability of stakeholders with reference to NGOs and CBOs has however become an issue in recent years. According to Naidoo (2003) and Nelson & Wright (1995) the issue of accountability can be attributed to the continued increase in numbers of these stakeholder groups and the assertions that these groups do not represent anybody but themselves and lack mandate from the people since they are not elected by a constituency. The accountability of these organization or stakeholder groups is however complicated due to the number of actors these organizations engage creating the issue of whom they are accountable to.

Although several reasons suggest the importance of representatives in expressing the views of community members Solitare (2005) and Lane (1995), the complications associated with the accountability of representatives Naidoo (2003) and Nelson & Wright (1995) has led to the use of participants in this research. Even if organizations are referred to in this research it will be limited to participant's concerns in the participation process hence participants or an individual member of an organization are used in the evaluation of this research.

2.5.3 Trust
The establishment of trust according to Petts (2001) is the cornerstone of every participation process and is achieved through being honest and open especially in the

communication process between proponents and the participants. In the opinion of Alder & Kranowitz (2005) and CAPP (2004) a good working relationship between participants can be enhanced if participants' endeavour to know each other as individuals and their history which will help solve fear based interaction. Solitare (2005) found that, the less trust a participant has in the other stakeholder the more likely the participant will protect his or her self-interest in the participation process which will limit the opportunity to exchange information. It is therefore important for proponents of a participation process to build trust and credibility before and after a public participation process and also put emphasis on cooperation and positive attitude, minimization of differences, and reduction in stereotyping and negative perceptions (CAPP, 2004).

In the opinion of Petts (2001), if trust is established in a public participation process, it will help in the creation of opportunities for developing interpersonal relationships and mutual understanding among participants in a participation process. Improved relationship among participants in a participation process will help in the building of networks among participants which can facilitate learning. Networking according to Hastings (1993) is a social process that links and connects individuals in a manner that facilitates the sharing of information and joint working in order to pursue a common objective more effectively. Due to the lack of precedent in integrated catctment management (ICM) in South Africa (Rogers *et al.,* 2000) the use of networking is very vital among participants since it will help participants to improve their understanding of ICM of which CMF forms part. In order to realize the full potential of networking in improving participants understanding, three barriers needs to be overcome (Hastings, 1993) which are:

- the need for autonomy;
- need for recognition; and
- individualism.

According to Hastings (1993) there is often a desire by individuals to have autonomy which inhibits such individuals from crossing traditional boundaries of function, level or location in order to interact with others to get more information and improve their

knowledge. Apart from the desire for autonomy, Hastings (1993) found professionals such as medical doctors and engineers to be strongly driven by their need for recognition and have felt little or no obligation in the past to explain to their clients what they are doing and how they arrive at their conclusions. A final barrier to effective networking according to Hasting (1993) is individualism where asking for help is seen as a failure and a person achieving the impossible is seen as a hero. Individualism therefore affects trust building since such individual tends to dissociate themselves from the group.

In the opinion of Hastings (1993) there are three stages that individuals go through in developing a network for themselves are:

- knowing the network;
- developing the network; and
- mobilizing the network.

Knowing the network according to Hastings (1993), is about individuals becoming aware of the structure, business and activities of an organization and external linkages that the organization has. It also requires from the individual some level of open-mindedness, interest and curiosity to find out who is who and identify some of the key people who are the access route to the relevant information. The lead organization in a participation process is therefore required to ensure that the necessary information is made accessible to participants.

The second involves developing the network which is about extending a network through the networks that other people such as co-workers provide or an organization has provided (Hastings, 1993). The development of a network is dependent on the individual initiating contacts which could be useful to them based on their circumstances.

The third stage involves mobilizing a network using the benefits of the first two stages during which you have identified the people who have got what you want and those who need what you have (Hastings, 1993). Stage three involves persuading people to take a

particular course and negotiating different kinds of resources or securing their support for a particular project.

2.5.4 Understanding of information

According to Giovanni (2002) the language, style and format in which information is disseminated is important in a participation process since it affects participants understanding of the information. Repackaging of the technical information so that participants understand and engage in deliberations in a participation process will help in their meaningful contribution to the process. Effort should be made in the opinion of the EPA (2001) to ensure that most participants understand the language that is used in the participation process through the avoidance or explanation of unfamiliar terms and jargon. Giovanni (2002) found that, participants in a participation process are able to discuss technical issues if ordinary language and concepts are used. A public participation process should therefore strive for ways of making scientific knowledge useful to non-scientist, so that participants will be able to understand the information presented in a participation process. The use of local knowledge should also be considered in a participation process since in most instances locals in an area might have more information about an area than an average scientific data collection.

The understanding of information by participants in a participation process has been found by Kilpio *et al.* (2005), Lankford *et al.* (2005) and Johnson (2000) cited by Pahl-Wostl & Hare (2004) to improve through a social learning process. Social learning according to Johnson (2000) cited by Pahl-Wostl & Hare (2004), is able to combine the 'hard' systems analysis which involves data collection and quantitative analysis and 'soft' systems analysis which involves knowledge elicitation in arriving at environmental decisions. Social learning techniques elicit a joint sphere of knowledge creation and sharing (Kilpio *et al.,* 2005). In the opinion of Kilpio *et al.* (2005) social learning simulations, if used for educational purpose in a participation process, enable the distribution of knowledge among participants and the transfer of skills and knowledge from simulation contexts to real life situations. In simulation the participants are active learners and not passive recipients of information and this stimulates flexible thinking with participants engaged in deliberations, and seeing the consequences their actions.

Kilpio *et al.* (2005) found simulation building as a tool in a participation process that helps in sharing experiences and ideas through the creation of an interactive atmosphere that provides the opportunity for participants to express their questions and problems to other participants. Smeds *et al.* (2001) cited by Kilpio *et al.* (2005) found social simulation is a tool that enables participants to share their tacit knowledge and experience and express it in an explicit form making it available for others to use in new ways. The result of social learning is an increase in individuals' knowledge and understanding since individuals become familiar with different viewpoints through sharing of competence.

The acceptance of information according to EPA (2001) is critical in a participation process and is dependent on the source of information and the level to which the receiver understands the information. EPA (2001) found that, participants often accept information that can be produced or confirmed by outside sources. Efforts should be made in a participation process to ensure that, trustworthy information is provided at all times and that information can be verified.

2.5.5 Awareness creation and notification

According to Anderson (2005), good public awareness creation provides opportunity for all participants that are interested in a participation process to be included in the participation processes. Awareness creation techniques in the opinion of Miskowiak (2003) and Mondras & Wilson (1993) are very important in a participation process since the participation of citizens is dependent on it. Good public awareness processes take into consideration the differences in interest and concerns among participants (Lithgow, 2004; Giovanni, 2002). According to Mondras & Wilson (1993) inviting a business minded person to a participation process may require the need for emphasizing the commercial advantages that will be obtained for attending while that of low income people may require stress on service delivery.

A good awareness program in the opinion of Mondras & Wilson (1993) will also take into consideration hierarchies in societies where status in terms of age, position and qualification are important and may require face-to-face invitation. Religious people

according to Mondras & Wilson (1993) often take advice from their leaders which suggest that, having a face-to-face interaction with the pastor can help in getting announcement through these leaders. Traditional authorities can also help in the awareness creation especially in developing communities for a participation process since they are seen as figure heads in their communities. Mass media such as radio, television and newspapers can also be used as awareness creations tools since they can reach a number of people who are not even targeted for a particular participation process (Miskowiak, 2003).

The medium of notification is as important as awareness creation due to its influence on participants in a participation process. According to Drysdale (2007) and Mondras & Wilson (1993), notices should be able to communicate to the fullest extent the concepts and ideas of a participation process. The mode of notification should not only state where and when a forum is taking place (Thomas, 2007; Miskowiak, 2003) but also stimulate interest through visual enhancements such as the use of attractive color and advanced cartographic techniques to better display information. Notification for public participation can be posted at various locations around communities such as community town halls, public buildings such as schools and libraries. Care should however be taken in the opinion of Roefs & Liebenberg (2005) to ensure that communication of concept does not lead to information overload and reader aversion when a public notice is used. Miller (2003) and Miskowiak (2003) also found that, apart from public notice, direct post mailing can also be used to increase awareness but it is best used when there is a target group. Electronic mailing has also been suggested by Miller (2003) as a means for notifying participants about a participation process but the limitations are that, individuals contact details must be known and is limited to targeted individuals. Most disadvantaged communities in South Africa for instance, do not have immediate access to the internet.

A meaningful public participation should ensure that the public is notified early about the participation processes. According to Alder & Kranowitz (2005) and EPA (2001) the timing of notification helps in improving the relationship between participants and organizers of a participation process. Appropriate notification helps to minimise

differences in expectation among participants. Information also needs to be disseminated in good time for interested parties to prepare their inputs in timely fashion, including consulting with constituencies if they are present as representatives (CAPP, 2004; Giovanni, 2002). This is based on the assumption that participants understand the information given to them and will help participants to offer better suggestions if they have time to think about the issues, consider implication and formulate their views to contribute meaningfully.

2.6 Catchment Management in South Africa

In order to manage water resources sustainably, South Africa adopted the integrated catchment management (ICM) approach which was to redress the past fragmented management of water resources (Pollard & du Toit, 2005). ICM in the view of Ashton (2002) is the recognition of the interdependency of environment, economic and social issues in order to derive the greatest results in the sustainable management of water resources. Water resource management was previously based on sectoral and geographical considerations and lacked communication between administrative and natural boundaries (Pollard & du Toit, 2005). The sectoral interest such as irrigation, mining, forestry and domestic use, and geographical and administrative boundaries made the management difficult due to lack of integration between all the stakeholders in management.

According to Ashton (2002) and du Toit (2005) ICM can be considered as people oriented management of resources due to individual roles such as the environmental and economic choices they make in ensuring the sustainable use of water resources. The involvement of individuals in a participatory process on issues concerning water resource management is therefore critical to the success of ICM. In the opinion of Jaspers (2003), the institutional arrangement required to implement integrated catchment management must be able to identify stakeholder participation as a critical aspect without which water resources planning will be highly ineffective. This places a lot of responsibilities on institutions that are involved in water resource management since the success or failure of policies depends on them. Information on catchment for policy formulation in Jaspers

(2003) view should therefore start from the lowest appropriate level since more relevant information can be observed at a lowest level closer to the end-user where decisions are usually applied.

From the legal status relationship between various water sectors and institutions described by Karar (2003), in Figure 4; three broad categories:

- the national government;
- water service institutions; and
- water resources management institutions can be identified as institutions responsible for ICM.

The national government according to Karar (2003) has a watchdog role to play in ensuring the equitable distribution of water resources, promotion of environmental values, facilitation and monitoring of devolution of responsibilities in water resource management. Water services institutions on the other hand, have the primary responsibility of ensuring access to water services (James, 2003; Karar, 2003). These institutions include the bulk water producers whose responsibility is to provide water to users other than individuals and water service providers with the responsibility of supplying water directly to consumers.
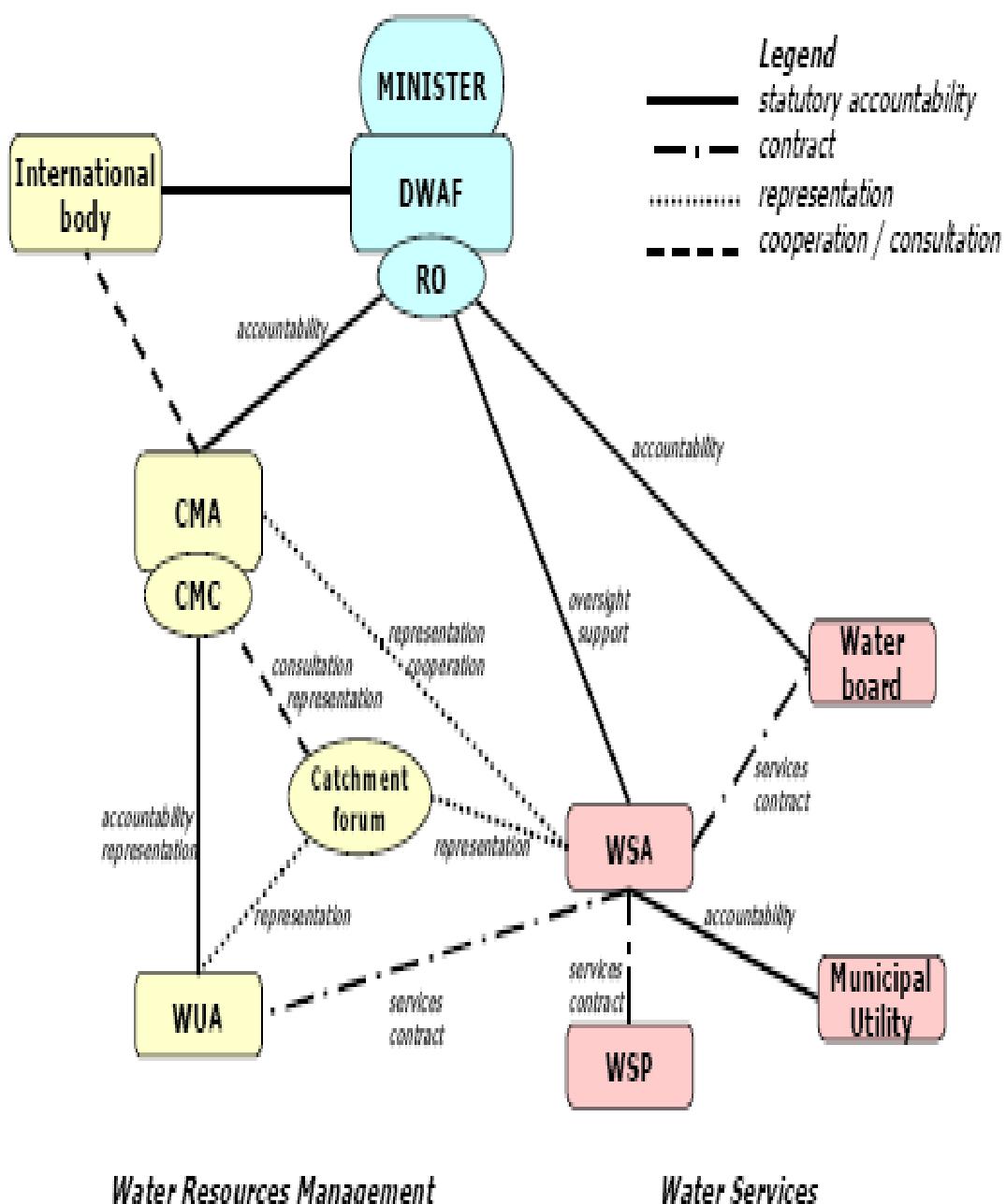
Figure 4 Legal status relationships between water institutions (Karar, 2003)

RO=DWAF Regional Office; CMA=Catchment Management Agency; CMC=Catchment Management Committee; WUA=Water User Association; WSA=Water Services Authority; WSP=Water Services Provider.

Water resource management institutions are responsible for the management of water resources at the hydrological basin level, and their boundaries cut across administrative boundaries (James, 2003; Karar, 2003). The functions of the Catchment Management Agency (CMA) include water resource planning, collection of user charges and issuing of license at the catchment level with the participation of the public in achieving this goal. However, in the absence of a functioning CMA, DWAF performs the functions of the CMA.

Water management institutions have been divided into statutory and non-statutory institutions depending on whether they have the legislative support to make decision on water resource management (James, 2003). Statutory institutions include the CMA's Catchment Management Committees (CMC) and Water User Associations (WUAs), both of which are specified in the NWA as a means of involving communities of users in the process of allocating scarce water resources among competing needs (James, 2003). Deliberation made by these statutory institutions are binding making it substantive in terms of the decision making process. Non-statutory institutions include Catchment Management Forums, Catchment Steering Committees and Advisory Committees, which are transitional institutions, set up to assist in the setting up of the statutory institutions, and to develop into statutory institutions over time (James, 2003).

Catctment management fora (CMF), though non-statutory institutions for water management, are seen as the institutional level where the views of the public can best be solicited on issues relating to water resources management with equal opportunity for all stakeholders (James, 2003, Karar, 2003). Due to the CMF being non-statutory the DWAF is under no obligation to implement the views of the public making it procedural in terms of decision-making. The CMF is therefore not a medium for pressure groups or activist bodies who are interested in the immediate implementation of decisions since it is not a decision making body (Leeu Taaiboschspruit Forum Newsletter, 2007). The CMF only serves as a medium for stakeholders to become aware of each others perspective on issues along the catchment making the CMF an important institution in the promotion of stakeholder participation in water resource management. CMF therefore serves as a

communication channel and a watch dog for identifying problems and communicating the problems to the responsible department or authority. In the opinion of Smit (2003), CMF creates the institutional environment at the local level to facilitate stakeholder consultation around the establishment and functioning of the CMA.

The institutional arrangement for ICM is supported by legislations which seek to promote the sustainable management of water resources in South Africa. The National Water Act (NWA) of 1998 was introduced as the main legislative instrument for the management of water resources without contradicting the objectives of NEMA. The aim of the NWA of 1998 is to ensure that the nation's water resources are protected, conserved, managed and controlled in a manner that promotes ecological sustainability, economic efficiency and equitable distribution (Karar, 2003). The NWA of 1998 also calls for the participation of the general public which is legal requirement in water resource management (Anderson, 2005).

2.7 Conclusion

The review of the literature has presented many of the benefits of public participation and also highlighted the importance of public participation to democratic decision-making. The review also highlights an increased concern on the quality of participation process which has become the focus of much public participation literature. The factors that determine the quality or meaningfulness of participation process were also looked at in this chapter.

The importance of public participation in water management arena has also been mandated by legislation in South Africa. Unfortunately, there is a gap between what the literature wants to achieve in terms of how best to conduct a public participation process and the mandatory inclusion of stakeholders especially those from the previously disadvantaged community by legislation in South Africa.

In the next chapter, the method of data collection and analysis as well as the rational for the chosen method is explained.

Chapter 3 Methodology

This study was qualitative and various qualitative methods were used in this study. The qualitative methods that were employed in this research include a review of the relevant literature, interviews with participants from the disadvantaged community and other participants who have interest in the MCMF. The purpose of the literature review was to provide a background about meaningful public participation. The results from these publications were used to establish the components of meaningful public participation. Factors that formed the basis of the meaningful participation process that the interview focused were:

- expectations of participants for joining the process;
- inclusiveness of participants;
- trust among participants in the participation processes;
- accessibility and understanding of appropriate and relevant information by participants; and
- participants' level of satisfaction about timing and medium of notification about the participation processes.

The interview for the participants was developed based on the key or common components of meaningful public participation established from a review of the literature. The purpose of the interviews was to gather information to answer the research aim and objectives of this research.

3.1 Sampling design

3.1.1 Sampling method

A variety of sampling strategies were used to identify respondents for this study due to the diverse nature of respondents in terms of working and residential places. The sampling methods used for the study were purposive sampling, snowball sampling and convenience sampling. According to Patton (1990), the use purposive sampling requires the selection of participants that are rich in information on the research topic or subject.

The sampling design was therefore not based on randomness. The respondents for the study were limited to participants who attend the MCMF due to their experience about the activities of the MCMF. The lists of all the participants who attend the MCMF were obtained from Department of Water Affairs and Forestry (DWAF) and used to represent the population of respondents for this study. These participants include members of both advantaged and disadvantaged organizations, representatives from government and private agencies.

The list of participants at the MCMF provided by DWAF did not however have the current details of some participants who attend the MCMF especially those from the disadvantaged community. Respondents were therefore used to locate other participants that were on the attendance list provided by DWAF but who have changed their contact details. The participants that other respondents assisted in locating were approached and those that were willing to take part in the research were interviewed. Participants that were approached for this research took into consideration participants who attend MCMF regularly and participants who have been absent on a regular basis as identified from the attendance list provided by DWAF. Convenience sampling which involves choosing respondents who are easier to approach (Welman *et al*., 2005; Stahler & Cohen, 2000) was also used in this research due to unwillingness of some participants at the MCMF to take part in the research. Some participants whose details were on the attendance list provided by DWAF and those whose details were provided by other participants were not willing to take part in the research so those who were interested in the research were interviewed.

The participants that were identified through purposive sampling were grouped according their geographical locations in the Msunduzi Municipality. The selection of participants in research that takes into consideration the wide geographical distribution of respondents in a given geographical area is described by Sarantakos (1998) as area sampling. Area sampling in the opinion of Sarantakos (1998) guarantees the equal representation of participants from different geographical areas in a research. Respondents for this research were therefore classified based on their current geographical area using suburbs within

the Msunduzi Municipality for the grouping of participants at the MCMF. The respondents were chosen from these areas: Willowfontein (six members of an organization at the same venue), Imbali (one respondent), Edendale (one respondent), Sobantu (three respondents), Northdale (one respondent) and one disadvantaged respondent domicile in town (Figure 1). The respondents that were chosen were also based on a stratified sampling method. The stratum used in this research was based on disproportionate units such as economic status of the participants creating disadvantaged and advantaged participants. The interviews took into account the participants that attended the MCMF forum at the inception and participants that are currently attending to account for any variations in views over time.

3.1.2 Sample size

According to Patton (1990:184) "there are no rules for sample size in qualitative enquiry". Patton's view is supported by Welman *et al*. (2005). According to Welman *et al*. (2005:71), the size of sample is not dependent on a single factor and includes "the size of the total population from which our sample is being drawn". The attendance of MCMF is very poor with only 15 people attending 15 August 2006 meeting and this affected the total population from which the sample was drawn. Table 2 (Chapter 4, Section 2) provides analysis of the attendance at MCMF and provides information of the numbers of participants at the forum. 19 participants were interviewed in total and these participants included members of organizations from the disadvantaged communities, advantaged NGOs, company, municipality and DWAF. Out of the 19 participants interviewed, 13 were members of disadvantaged community organizations, 2 members of advantaged organizations, 1 from a company, 1 from a municipality and 2 from DWAF. Of the 13 participants interviewed from the disadvantaged community population group, 6 were members of the same community organization and were interviewed together at the same venue and time thus a focus group interview was conducted with members of that organization.

3.2 Questionnaire development

The questionnaire structure advocated by Videira *et al*. (2003) was chosen for the development of the questionnaire for this study due to the relative ease of identifying the

possible questions that were asked in each section of that study. The subdivision of Videira *et al*. (2003) questionnaire structure provided the opportunity to know the questions that were asked under each sub-section. The structure was however tailored to suit the aim and objectives of this study which was based on the components of meaningful participation identified in the literature.

The questionnaire for the stakeholders was grouped into three major sub-sections. The first section was made up of background questions which were to get general information about why stakeholders had offered themselves to participate in the MCMF. The second section consisted of questions on components of meaningful public participation that were aimed addressing the objectives of the research and was formulated from a review of literature including: Anderson (2005), Faysse (2005), Soneryd (2004), Videira *et al*. (2003), Petts (2001), Hampton (1977), Sewell & Coppock (1977). The objective of this section was to use the components of meaningful participation identified from the literature to check whether those situations exist in the MCMF. Another objective of this section was to find out from respondents whether the components of meaningful participation in this section influence each other in the MCMF. The third section consisted of wrap up question and was designed to find out what stakeholders thought will make the public participation process more meaningful.

Questions for other stakeholders such as those from municipality, company and advantaged community participants varied from that of disadvantaged community participants in the manner that it was posed. The disadvantaged community participants were the first to be interviewed so questions for these stakeholder groups were asked to find out whether they are aware of the issues raised by the disadvantaged community and whether it influence their meaningful participation in the MCMF.

A different set of questions was developed for DWAF representatives who serve as organizers of the MCMF based on the views obtained from both advantaged and disadvantaged participants of the MCMF. The new set of questions was meant to find out

whether the organizers of the MCMF are aware of the issues and concerns obtained especially from disadvantaged community respondents.

3.3 Participants interview

Potential interviewees from the disadvantaged communities, advantaged NGOs, company, municipality and DWAF were contacted through phone and E-mail and the purpose of the study was made known to them. A follow up visit was also made to interviewees who did not reply to e-mails and did not respond to phone calls using their residential or work place address. Some potential interviewees however declined to take part in this research for the reason that they are new in the forum and do not clearly understand the activities of the MCMF. A look at the minutes of the MCMF obtained from DWAF rather suggests these participants were not new in the MCMF. There was no pilot study for this research because prior to the onset of this research, the researcher had numerous informal discussions with people with interest in CMFs and public participation to establish the kind of issues to be covered in this research.

A semi-structured interview was conducted with 19 participants who represent the concerns of disadvantaged communities, other NGOs (advantaged organizations), and participants from other sectors such as industry and municipality with interest in the MCMF. The participants from other non-governmental organizations are members of organizations that have interest in the MCMF but are not strictly representing the interests of only the disadvantaged communities but the general public as a whole. These stakeholders were included in the studies to find out whether they are aware of the perspectives of the disadvantaged community participants on the meaningfulness of the MCMF. Another objective for including these stakeholder groups was to find out whether they share the same views as those from the disadvantaged community on the meaningfulness of the MCMF.

According to Blake (2005), semi-structured interviews are flexible and explorative and allow for an unexpected change in conversation and are usually focused on collecting and capturing information about experiences and feelings. Semi-structured interviews gave

the opportunity for a conversational two-way communication between the researcher and respondents and allowed for questions that were not anticipated during the creation of the interview structure to be added. A set of questions was however prepared to ensure that unexpected change in conversation during the interview did not divert the conversation away from the issues of interest in this research. The interviews were tape recorded with permission from the participant and were transcribed verbatim. The responses of participants who declined the recording were hand-written. The recording however provided the opportunity for attentive listening of the interviewee and also provided the opportunity for further verification of statements from respondents when necessary during data analysis.

The interviews were conducted in 2007 with 14 participants within the months of March and April. The venue of the interview was determined by the interviewee with most interviews taking place in the interviewees' homes and offices. The lengths of interviews varied from one hour to one hour fifteen minutes.

The interview process varied for different organizations. In some instances all members of organization were interviewed together as a focus group. In other instances, members of the same organization were interviewed at different times and venue in order to find out whether they share the same opinion. The immediate interpretation of respondents meanings were asked during the interview to ensure a connection between respondent and researcher meanings to comments.

3.4 Data analysis

The identification and interpretation of themes after participants interview according to Patton (1990) is an important element in qualitative data analysis especially when data collected are not subjected to quantitative analysis. The information collected in this research from the interviews of respondents was not subjected to any statistical analysis. Significant themes from the participants' statements were however identified and presented in illustrative quotes and used for discussion as suggested by Soneryd (2004). According to Stahler & Cohen (2000), extracts from themes not only help substantiate

statements made by participants but also bring the reader closer to the direct understanding of the participants' viewpoint. The objective of the analysis was to seek patterns that emerged from respondents' statements. The themes from respondents' statements were categorized based on the questions which were designed to answer the objectives of the study. The themes from respondents were analyzed by subjectively examining the underlying trends in the themes.

3.5 Constraints and limitations of the research

The interview process encountered some difficulties which included difficulty in getting stakeholders to take part in this research, high level of suspicion especially from the disadvantaged community stakeholders. Most of the disadvantaged community stakeholders were suspicious about the intention of the study and 3 participants from the disadvantaged community even declined to be interviewed after the objectives were clearly made known to them. These stakeholders were of the view that South African citizens have not been able to assist them and making their views known to a foreigner will definitely not bring any change. Those interviewed were also concerned about having a lot of researchers asking similar questions but not seeing any change and therefore refused to be interviewed because they had the feeling that they are being used. The attitude of stakeholders especially those from the disadvantaged community affected relationship building between stakeholders and researcher.

Two respondents, one advantaged participant and one disadvantaged community participant refused the interview recording. The respondent from the advantaged participants group did not give any reason while that of the disadvantaged community group was of the view that information provided can be used for witch-hunt purposes without divulging further. The witch-hunt perception in my view can be attributed to individual respondent's dissatisfaction about the participation process which respondents felt might be unique to him/her only and not prepared to point it out to the organizers of the MCMF.

Language barrier was however not a problem since all those who took part in this research were able to communicate in English which was understood by both the researcher and the stakeholders. Accent was however a problem but that could not be dealt with within the short period of the research since the researcher is used to pronouncing words in such a manner that is acceptable in his home country but strange to respondents.

The time and venue of interviews were also determined by respondents and created a tight interview schedule and often required the researcher to travel in different suburbs within a day in the Municipality. Most respondents did not also honor their appointments and did not notify the researcher prior to the meeting which required another appointment which increased cost at the expense of the researcher.

3.6 Conclusion

This chapter presented a detailed description of the research process that was followed in this study. The research instruments that were used to gather data from the field were discussed. The discussion in focused on data collection techniques used, analysis of data collected and the constraints and limitations of this research.

The next chapter focuses on the presentation and analysis of views obtained from respondents.

Chapter 4 Presentation and Analysis of Results

The purpose of this chapter is to present the results of the interviews for analysis. The analysis is comprised of five categories and uses excerpts from the interviews to answer the objectives of this research. The analysis of each category is accompanied by applicable question from the questionnaire and quotation from the interview transcripts of respondents.

4.1 Determination of whether the MCMF is meeting the expectations of participants

The first objective of this study was to determine whether the participation processes meets the expectations of participants. Historically, DWAF has had minimal relationships with the general public and its support for public participation emerged as a result of the new democratic principle in South Africa which seeks to address the past alienation of citizens in decision-making and give equal rights to citizens as enshrined in the Constitution of South Africa (Act 108 of 1996). DWAF as a public institution is legally obliged to involve the public in deliberations but the involvement of the public is voluntary without any obligation to participate on the part of the general public. Respondents were therefore asked what prompted them to take part in the MCMF.

Question: What are your main reasons for getting involved in MCMF?

Answers:

> *"I have realized that there is poor management of water and just wanted to take an active role because I always see big amount of water being wasted through pipe burst and nobody doing anything about it so my organization is educating the people about water management"* (Respondent # 3-Disadvantaged)

> *"The fact is that during our days in politics we did not tell each other to clean the environment because we were causing troubles to) the previous regime. We use to put the bins in the streets and that stuff that is not good for the environment. So later we realized that we need a change and clean our townships so that people will realize that this is the way to do it because we are affected by the diseases. Some people still resort to dumping in order to receive the attention of the councilor so that is why we are engaging people and our members in cleaning the*

environment. So our involvement is about environmental education" (Respondent # 4-Disadvantaged)

"My interest is about water delivery and pollution because the water is dirty and our children play there" (Respondent # 8-Disadvantaged)

"Our main reason for joining the process is related to the issues of water supply and management because in our townships along the route we always see water are being wasted (through pipe burst) for no reasons" (Respondent # 1-Disadvantaged)

"Our participation initially was to deal with access to water for communities as well as transfer of skills in environmental management specifically to disadvantaged communities" (Respondent # 2-Disadvantaged)

Analysis:

A forum is a place where people come together to exchange ideas and make each other aware of their perspectives on issues that are addressed. The above statements indicate that most participants have an interest in water and environmental management issues. The interest of participants in a participation process is very important since it determines the relevance of that participation process to participants. The interest of participants mostly from the disadvantaged community is in water supply and access rather than in water resource management. However, according to the institutional management of water in South Africa described by Karar (2003) Chapter 2 (Section 2.6), representation is allowed in a CMF for stakeholders with interest in supply and access of water. Secondly, supply and access to water is directly dependent on the water resources that are available and therefore participants' interest in water and environmental management issues can be considered as a motivation factor in their participation at the MCMF. The interest of participants in water and environmental management issues will therefore motivate participants in ensuring that the MCMF succeed since the purpose of the MCMF is of relevance to their interest. The relevance of issues that are addressed in a participation process to the lives and objectives of participants has significant effect on participants' motivation.

The use of public participation as a means of knowing each other's perspectives on issues of interest to stakeholders is however limited by the techniques used in that particular participation process. These techniques are grouped into three and are:

- information dispersal;
- information gathering; and
- promotion of interaction.

The choice of techniques determines the level of interaction of participants in sharing ideas. Respondents were introduced to the three different types of technique and asked which of the three techniques is used in the MCMF.

Question: What technique is usually used in the MCMF?

Answers:

> *"Each meeting has an agenda and you are able to submit items to the agenda before the meeting but a lot of the agenda items are reoccurring so it is a kind of interactive process and you are free to communicate with the chairperson" (Respondent # 10-Advantaged)*

> *"The process (MCMF) I will say is interactive because the essence of being in a forum is to interact and get access to information" (Respondent # 2-Disadvantaged)*

> *"I think the procedure used at the meetings is interaction and they (DWAF representatives) do interact with us (participants)" (Respondent # 3-Disadvantaged)*

Analysis:

The above comments suggest that, participants are satisfied with the public participation technique used at the moment by DWAF representatives who are the organizers of the MCMF since it promotes interaction between participants and organizers of the MCMF. Personal interaction in a participation process helps in improving social networks of individuals and also provides opportunity for learning for participants because it serves as an informal source of knowledge transfer for participants who did not understand some information presented at a participation process. Although participants admitted the

techniques used do promote interaction, this has not helped in building trust among participants as can be seen in Chapter 4 (Section 4.3).

Clarity on the purpose of a participation process is important because it helps in dealing with the gap between the expectation of participants and the actual opportunities that a participation process can provide. Clarifying the purpose also helps organizers of a participation process to attract participants that have the same interest. This helps in reducing the gap between expectation and what the participation processes can deliver since participants become aware of both. Respondents were asked whether the purpose of the MCMF was made known to them and whether their purpose for joining has been met.

Question: Was the purpose of the MCMF made known to you and has your purpose for joining the MCMF been met?

Answers:

> *"Our objective as an organization (for participating) has yet not been met" (Respondent # 2-Disadvantaged) with the organizations objective relating to access to water in communities.*

> *"I must say that my expectations for joining have not been met yet because sometimes they do what I say and sometimes not" (Respondent # 3-Disadvantaged) with the organizations objective relating to wastage in water supply*

> *"So far they are not solving our problems" (Respondent # 6-Disadvantaged) with the organizations objective relating to flooding*

Analysis:

All the 13 respondents from the disadvantaged community could not give an indication of how the overall purpose of the MCMF was made known to them but are most often made aware of the purpose of each meeting. Respondents however had expectations that have not yet been met and are more concerned with these expectations which can be seen from their responses above. The disparity between expectation and opportunities for participating by stakeholders can be attributed to the lack of knowledge by participants about the purpose and functions of a CMF. A DWAF official was asked whether the functions and purpose of the MCMF are made available to participants. This was to

clarify whether stakeholders were made aware of the functions and purpose of the MCMF and the linkages between CMF and CMA due to the high disparity between stakeholder expectations and functions of MCMF.

Question: How is/was the purpose of the MCMF made known to them?

Answer:

> *"We do have terms of reference which is what we follow and is available to anyone who attends the forum but I don't know who has it or who doesn't have it"* (DWAF representative # 2)

Analysis:

The extract "I don't know who has it or who doesn't have it" by the DWAF representative is an indication that the organizers (DWAF) of the MCMF are not reviewing the participation process since they are not aware of participants who have the terms of reference and whether participants who have even understand the terms of reference. This led to a follow-up question of why DWAF has not found out whether the stakeholders are aware of the purpose of MCMF. The answer from the DWAF representative revealed that the current DWAF representative in-charge of MCMF is new and is not the one who invited them and will not be able to determine whether it was made known to them or not. The inability of DWAF representative to determine participants who know and do not know the purpose of the MCMF is an indication of poor documentation and improper handover procedure on the part of DWAF representatives. The lack of documentation on the part of DWAF in order to identify stakeholder who are aware of the purpose of MCMF calls for a re-clarification of the purpose and functions of the MCMF which will help DWAF in identifying stakeholders that have interest in the MCMF

The lack of clarity on the part of the disadvantaged community participants about the functions and purpose of a CMF is also reflected in the views of disadvantaged community participants that, they are unable to influence decision-making at the MCMF. The respondents who felt they were not influencing decisions perceived the process as ineffective and see their inability to influence decisions as a major weakness of the

MCMF as a water management institution. Consequently, these respondents are not taking their attendance to the MCMF seriously resulting in their numerous absences to meetings. When respondents were asked whether their contribution is valued in the MCMF most of them were of the opinion that their views are not valued.

Question: Do you feel that your contributions have impact on the decisions made?

Answers:

"When we go to meetings what ever we say we don't see any changes and they (DWAF) don't come to check whether what you (we) said is true or false" (Respondent # 6-Disadvanatged)

"What I can say is that my views are not taken in the decision making process because things always remain the same" (Respondent # 1-Disadvantaged)

"I must say my contribution does not affect the decision making because you (I) don't see any change" (Respondent # 3-Disadvantaged)

Analysis:

The above statements indicate a clear misunderstanding of the functions of a CMF among disadvantaged community participants. Participants are not aware that the MCMF as water management institutions is non-statutory and therefore has no legal mandate to implement the views of participants. The participation of participants in MCMF is for normative purpose thus without any obligation on the part of DWAF to implement their views. However, one of the functions of a forum is to facilitate in finding solutions to issues that are raised during meetings. A representative of DWAF which serves as the organizers of the MCMF was asked whether they facilitate in finding solutions to issues that are raised during the forum.

Question: Do you assist in facilitating on issues raised by participants?

Answer:

"Yes we do the facilitation and also we say to them that it isn't strictly water issue (supply) also if the have land issues we try to tell them the people to contact so we try to facilitate that" (DWAF representative # 2)

Analysis:

The response from respondents and that of DWAF representative indicates that there is a gap between the assistance that DWAF provides to make things easy for participants in addressing issues of concern to them. The disparity can be attributed partly to disadvantaged community participants' lack of knowledge about the relevant agencies that can assist in addressing disadvantaged community participants' problems. The lack of attendance of the MCMF by public agencies is also contributing to this gap since DWAF and participants have to contact these public agencies while if they had attended issues relating to their agencies could have been addressed. Another reason for the lack of appreciation of assistance provided by DWAF is that DWAF is not indicating to participants how their inputs were used or considered on issues that are the responsibility of DWAF which would have helped in showing the utility of the participants. There is a need for the organizers of MCMF to take steps to show to participants that they as participants are responsible for making follow-ups to the relevant agencies that might present at the forum, so that their issues are addressed.

The lack of awareness about the functions and purpose of the MCMF could easily be identified if there was a proper evaluation mechanism. The extract "I don't know who has it or who doesn't have it" by the DWAF representative is an indication that the organizers are not evaluating the MCMF participation process to find out how stakeholders feel about the process. Without evaluation, organizers of a participation process will not know how well it is achieving its goals and make improvements that will be satisfactory to members and also attract new members. A DWAF representative was asked whether as organizers of the MCMF, they evaluate the participation process in terms of participants' satisfaction.

Question: Do you evaluate the MCMF participation process in terms of participants' satisfaction?

Answer: "*No*"

Analysis:

The evaluation of participation process in terms of participants' satisfaction is important because evaluation can help in identifying the needs of stakeholders in order to provide assistance when needed. The lack of evaluation of participants' satisfaction and needs by the organizers of the MCMF has led to a lack of assistance. Based on the profile of the Msunduzi Municipality prepared by the Built Environment Support Group (2003), 75% of the municipality dwellers who reside in the townships or come from the disadvantaged communities are unemployed and have no source of income. The average income per month of those working is R 1 500 which is less than 10 US$ a day. In the opinion of Mondras & Wilson (1993), most disadvantaged communities are more concerned with making daily bread and will hardly take part in a public participation process if there is no immediate benefit and they will not risk losing a daily income to attend meetings. In a community like Msunduzi Municipality which has 75% of its disadvantaged community dwellers being unemployed financial assistance in the form of transportation allowance will help to attract disadvantaged community participants to the MCMF. Assistance in this form will ensure that even if participants' losses a days work, participants will not have to incur additional debt for attending forum. Respondents were asked whether they get assistance in terms of finance from the organizers of the MCMF.

Question: Do you have the financial resource to participate fully?

Answers:

> *"I use to finance myself with transport …there is no financial assistance… I must say that there is no effort in terms of putting us (disadvantage community organizations) at the same level (in terms of knowledge) as others (advantaged organizations)" (Respondent # 3-Disadvantaged)*

> *"There is not support in terms of finance for transport and they do not teach us anything about water (water management)" (Respondent # 1-Disadvantaged)*

> *"There is no financial assistance so I use to finance myself to the forum" (Respondent # 5-Disadvantaged)*

Analysis:

There is a need for the identification of participants who need assistance in terms of finance in order for them to participate meaningfully. Deliberate assistance especially to participants from the disadvantaged communities is needed in terms of finance if their attendance is to be sustained. The organizers of the MCMF should look for innovative mechanisms in sponsoring participants from the disadvantaged communities in terms of financial assistance for transport.

4.2 Determination of inclusiveness of disadvantaged community participants at MCMF

The second objective of this study was to determine whether the MCMF is inclusive of those having interest in catchment management issues. It is important in a participation process to ensure that the process is inclusive all stakeholders that might be affected or having interest. The manner in which participants are invited into a participation process is very important since this affects the inclusion of communities since these participants are members of organizations that represent the interest of these communities. A DWAF representative was asked how members of these organizations are invited to the forum.

Question: How were members of disadvantaged community organizations informed about the MCMF for the first time?

Answer:

> *"I send invitation to as many people that I get from the database…when I joined the database was already established"* (DWAF representative # 2)

Analysis:

The database according to the DWAF representative was built from the interaction of the department with organizations and individuals that have been involved with the activities of DWAF. The use of information from a database as source of invitation is however likely to miss individuals and organizations that have never had any involvement with DWAF. The invitation of participants will eventually fail to lure new participants into public participation programs by DWAF such as the MCMF since the invitation process fails to reach out to people who are not aware of the activities of DWAF. The use of

database can also eliminate other already existing leadership structure such as councilors and religious leaders who have influence in most communities but are not necessarily organizations and do not have their information on a database. A follow up question was asked to find out whether other leadership structures in communities are targeted for the forum. The quote below indicates the response of DWAF representative:

> *"It is very difficult to get the councilors but we can investigate with the municipality because they might have the list of NGOs in the area and go on from there because not all of them will be relevant to us" (DWAF representative # 2)*

Although CMFs are open to the public in South Africa, awareness creation and notification are important in attracting the general public to a forum. The above statement is indicative that not all NGOs which might have interest in MCMF are known to DWAF. Other leadership structures in communities such as councilors should be used by DWAF to make contacts to organizations and individuals who have interest in catchment management issues if councilors have other commitments that makes it difficult to attend. Other leadership structures are necessary in a participation process because NGOs and CBOs may not be carrying the mandate of the communities they purport to represent. According to Naidoo (2003) and Nelson & Wright (1995), there is assertion that NGOs and CBOs do not represented anybody but themselves and lack a mandate from the people since they are not elected by a constituency. Based on this assertion, the DWAF representative was asked whether they investigate the organization that attend the MCMF to find out about their achievements in their community and whether the truly have the mandate of the community.

Question: Did you make any enquiries about the organizations representing the interest of disadvantaged communities?

    a. How they are funded
    b. Their objectives
    c. Number of years of existence
    d. Their achievements in their own communities

Answer:

"We don't investigate the organizational structure of NGOs and CBOs and their objectives… we don't investigate their number or years of existence, their success in the community but they introduce themselves at the forum as to who they are but we don't investigate them" (DWAF representative # 2)

Analysis:

The above statement which indicates that these organizations are not investigated can create the illusion that; these organizations are interacting with the community or serving as intermediaries which in reality the organizations may exist for themselves. Respondents were asked whether they interact with members of their community after meetings.

Question: Do you interact with members of your community after the forum?

Answer:

"After the meeting we share it (information) in our organization but not to the whole community but I often call meeting with members of my organization and we are only eight (members of that organization)" (Respondent # 1-Disadvantaged)

"After meeting (the MCMF) I call a meeting with members of my organization to inform them what we discussed (at the MCMF) but I have to give them transport which I don't have so it doesn't happen always but if I have the money I call them to tell them" (Respondent # 8-Disadvantaged)

"No I used to tell (what was discussed at the MCMF) members of my organization but not the whole community" (Respondent # 3-Disadvantaged)

"I am the secretary so I am the one who often attends the meeting (MCMF) and when I come back (from the MCMF) I call a meeting to tell members of my organization what was discussed…we are eight in the organization" (Respondent # 6-Disadvantaged)

Analysis:

The above statements indicate that, NGOs and CBOs that are attending the MCMF are not serving any purpose to the communities since these organizations do not serve as intermediaries between the community and the organizers of MCMF due to their lack of interaction with members of their communities. The lack of interaction between MCMF

participants and the general community makes community organizations less favorable at the moment for DWAF to depend on as intermediaries between the community and the forum. An investigation into the background of these organizations about their objectives and achievements in their communities will ensure that organizations with interest that is aligned with that of DWAF are attracted the MCMF. A look at the attendance register for 2006 meetings of the MCMF indicates that, the forum is poorly attended with only five organizations attending the 25 August 2006 meetings. Out of the five organizations, only one organization was from the disadvantaged community stakeholder groups. The DWAF representative was therefore asked why very few participants especially those from disadvantaged community stakeholder group organizations are attending the MCMF.

Question: Have you taken notice of the dwindling number of disadvantaged community participants? If yes what do you think are the cause and what can be done about it?

Stakeholders from advantaged organizations were also asked if they have any idea about why the attendance for the disadvantaged community stakeholders is so poor.

Question: What do you think affects the attendance of stakeholders?

Answers:

> *"What I have noticed is that to get the community involved is a hard process and we think transport is an issue so we go to their community such as Sobantu so that the local community can be part of the participation process" (DWAF representative # 1)*

> *"…most of the people (disadvantaged community stakeholders) need rather bus fare and that is stopping them from coming (attending the forum) especially those from the townships… (Respondent # 7-Advantaged)*

> *"I think the problem is they don't have the money to attend all the time" (Respondent # 10-Advantaged)*

> *I think the problem has to do with poverty so we have tried having meetings in the community (Sobantu) but their attendance is still low and I don't know why" (Respondent # 13-Advantaged)*

Analysis:

The attendance of 2006 meetings (Table 2) for instance shows a very poor attendance by the disadvantaged organizations even when the meeting was held in the Sobantu township.

Table 2 Analysis of attendance at MCMF meetings in 2006

	Umgeni Water (Town)/16/05/06	Umgeni Water (Town)/15/08/06	Sobantu Community Hall/21/11/06
Number of participants	29	15	23
Number of participants from disadvantaged organizations	7	1	3
Percentage (%) of disadvantaged community participants	24.14	6.66	13.04

The attendance at meetings by members of the disadvantaged community organizations can not be attributed only to finance in terms of transportation for attendance since the attendance of the meetings even in the townships where these organizations are located was low. Disadvantaged community participants were not asked why this is the case since other factors such as lack understanding of information presented at the forum and degree of differences in relationship among participants were also found to affect their participation.

4.3 Determination of degree of trust among participants at MCMF

The level of trust among participants in a participation process is very important since it affects the level of interaction between participants. As mentioned by Solitare (2005) the less trust participants have in each other, the less their level of interaction in a participation process. The level of trust in a participation process is very important especially in South Africa due to historical racial segregation. The high disparity in economic and educational status in South Africa is also likely to affect the level of trust

in a participation process since the "have-nots" often believe that their concerns are not being attended to by those who are perceived as the "haves". Respondents were asked whether educational or racial background is a factor that affects their level of trust which directly affects the level of interaction among participants in a participation process.

Questions: How has heterogeneity in terms of racial background affected cooperation and innovation of the MCMF?

Answers:
> *"…if you are not coming from the department or any bigger organization it means you are not recognized or you are no welcome but they don't tell you (Respondent # 1-Disadvantaged)*

> *"I have not noticed anything that is related to race but what I can say is that those from DWAF and DEAT and other big companies such as Umgeni, their views are given more value than us but they don't ask us our educational background also" (Respondent # 3-Disadvantaged)*

> *"I have not realized anything that if a white or an Indian talk is taken more than me but when they are from companies they listen to them more. Those educated people up there sometimes don't look at you they look down upon you sometimes but not always" (Respondent # 6-Disadvantaged)*

Analysis:

The above statements are indications of dissatisfaction among some disadvantaged community participants that, those with better educational background are given value more than racial background. This can however be attributed to the level of knowledge of stakeholders. Those that complained about high level of interaction between those with educational background and those from companies are those who responded that they do not understand the information presented at the forum (Section 4.4 of Chapter 4). There is a need for more positive interaction among more knowledgeable participants in assisting less knowledgeable participants which can help in addressing the knowledge gap between participants. Improved interaction among participants will help in the formation of networks (Chapter 2 Section 2.5.3) among participants which will help to improve their level of knowledge and increase their level of trust. Networking has been used by some participants from the advantaged organizations to improve their level of knowledge in

catchment management issues. This was evident when respondents were asked whether they make use of networking in improving the level of knowledge.

Question: Do you communicate with other participants on catchment management issues after meetings?

Answers:

> *"…the CMF (MCMF) has been an important sources of information for me because before I joined I didn't have any knowledge about water but through my interaction with others I am now able to talk (catchment management issues)…."* *(Respondent # 10-Advantaged)*

> *"An active effort is made to ensure that contact details are supplied of every member of the forum. Every effort is made to ensure that there is networking and peoples details are made accessible"* *(Respondent # 9-Municipality)*

Analysis:

From the statements above, networking has been a great source of information for participants from the advantaged community and these participants are willing to make use of networking to improve their knowledge. Networking according to Hastings (1993) is a social process that links and connects individuals in a manner that facilitates the sharing of information and joint working in order to pursue a common objective more effectively. In the opinion of Hastings (1993) there are three stages that an individual goes through in developing his/her networks which are: knowing the network, developing the network and mobilizing the network (Chapter 2 Section 2.5.3). Knowing the network according to Hastings (1993), are about individuals becoming aware of the structure, business and activities of an organization and external linkages that the organization has. The lead organization in a participation process is therefore required to make the necessary information accessible to people. Developing networks is about extending a network through the networks that other people such as co-workers provide or an organization has provided (Hastings, 1993). The development of network is dependent on the individual initiating contacts with that could be useful to them based on their circumstances. Mobilizing a network involves using the benefits of the first two stages during which you identify the people who have got what you want and those who need what you have (Hastings, 1993). This may involve persuading people to take a particular

course and negotiating different kinds of resources or securing their support for a particular project.

The organizers of MCMF have provided the list of participants which is available to participants which is seen by Hasting (1993) as the first stage in development of network by an individual (Chapter 2 Section 2.5.3). The following were the response of some disadvantaged community participants when they were asked about use of networking in improving their knowledge.

Answers:

> *"After meeting we don't talk again (to other organizations) but during tea time we talk to each other because after meeting the air time is expensive so we don't phone anyone" (Respondent # 6-Disadvantaged)*

> *"I don't like to take issues from some places and involve myself. I only communicate with other organizations before or after (at the venue of the meeting) the meeting but not when we have left the meeting place" (Respondent # 8-Disadvantaged)*

> *….usually we communicate with each other when you have a chance during the meeting but after the meeting it is hard (no communication)" (Respondent # 3-Disadvantaged)*

Analysis:

The lack of networking among participants from disadvantaged community can be attributed to lack of resources in terms of money to purchase air time to ask another participant for clarity on issue. Other stakeholders from their response do not understand networking therefore did not know the importance of networking and can be said to be in a state of individualism. Such participants see seeking information from other participants as involvement in other people's issues. There is a need for importance of networking to be made known to participants from the disadvantaged community by DWAF since this will not only help participants to improve on their level of knowledge but also but also help them to know the issues at different locations in their suburbs and assist in addressing those issues. The lack of network among participants was evident in this study during the interview when members of two organizations from Sobantu townships were

not aware that each is attending the MCMF but they were often present in the 2006 meetings. Participants from both organizations complained about smell from Darvil sewage works but did not have a unified voice in presenting their views during the forum.

4.4 Determination of understanding of information by participants at MCMF

Critical to a meaningful public participation process is access to good quality information by participants. Participants' need to acquire a solid understanding of issues that are discussed in the participation process in order to participate meaningfully which requires access to relevant information on what will be discussed. Respondents were asked whether they get access to relevant information in order to participate meaningfully.

Question: Do you have access to information required for you to participate fully?

Answers:

> *"Information relating to the catchment are (is) often given during the meeting but the time give (given) to read the information (understand the information) depends on the type of information and your knowledge background" (Respondent # 2-Disadvantaged)*

> *"They (DWAF) sometimes give us agenda but sometimes they don't especially when they phone" (Respondent # 6-Disadvantaged)*

> *"The information (information on what will be discussed at the forum) is given during the presentation and there is not much adequate time to read and understand those (that) information" (Respondent # 3-Disadvantaged)*

Analysis:

The above comments indicate that, relevant information on what will be discussed is not given to participants before meetings. The lack of information on what will be discussed at the forum as results of the medium of notification such as phone and the short time at which the agenda is given affect the meaningful participation of participants since participants will be unable to seek assistance on issues that they do not understand. The lack of relevant information on what will be discussed also affects consensus building among all members of organization and even the community the organization represent if the organization have the mandate of the community. The views presented during the

forum can therefore be classified as an individual's perspective and not that of the organization or the community as a whole and affects communities views in the participation process.

In my view, for information to be useful in a participation process, it must be presented at a level that all participants will be able to understand. It is therefore important for organizers of a participation process to assist participants in understanding the information that it provides. Respondents were asked whether they understand the information that is presented at the MCMF.

Question: Did you understand the information presented?

Answers:

> *"The information they present is always calculation but sometimes it depends and you can ask anything but sometimes you can't ask anything" (Respondent # 3-Disadvantaged)*

> *"Sometimes they talk about things you don't even understand" (Respondent # 6-Disadvantaged)*

> *"They just give us statistics that two months ago the water was like this and this time the water is like this sometimes for the whole year. They say we tested this time and the water was so much dirty or clean but we are getting improved but I am not clear because we don't know how the technicians do (arrive at their answers)" (Respondent # 8-Disadvantaged)*

Analysis:

The responses above from these disadvantaged community participants indicate that, the information presented at the MCMF is often technical. Participants are therefore required to comprehend technical and scientific information that they do not understand from their responses above. In the opinion Scottish Parliament Participation Handbook (2004) a participation process with a technical information whereby participants do not understand amounts to tokenism of participation described by Arnstein since participants are unable to absorb the technical information and contribute. There is a need for the content of technical information to be presented in a plain language that will ensure that participants

understand what is presented at the forum. A DWAF representative was asked to find out whether the information presented at the forum is technical in order to confirm what the disadvantaged community participants said.

Question: Do you think most of these participants from the disadvantaged community have sufficient knowledge to understand the technical information presented to participate in the MCMF?

Answer:

> *"The technical issues is the heart of the forum I guess in this particular instance (MCMF) because the water quality is a huge issue so the technical issues and its language will be difficult for them (disadvantaged community stakeholders)" (DWAF representative # 2)*

Analysis:

The lack of understanding of technical information in a participation process affects the meaningful participation of participants. When participants are unable to understand information presented in participation process they are unable to contribute to the process making them virtual members of the participation processes. A follow-up question was therefore asked to find out from DWAF representatives and advantaged organization stakeholders were asked whether the stakeholders from the disadvantaged community group make contribution during the MCMF participation process due to their complains about the technical nature of information that is presented at the MCMF.

Question: Do the disadvantaged community participants contribute during meetings?

Answers:

> *"They (disadvantaged community representatives) don't talk and I don't know if they lack confidence or they are not sure   what is being discussed or they might have something to say but they are   intimidated   because   unfortunately   the MCMF is white attended" (DWAF representative # 2)*

> *"I have noticed that most (disadvantaged community participants) don't communicate at all but the presentation is to educate the people" (DWAF representative # 1)*
> *"They (disadvantaged community participants) actually do not speak so I think (DWAF) will have to empower them to speak, you (DWAF) have to make them to speak   otherwise they will not say anything so you   have   to   address   questions   to*

them   otherwise on their own they will not speak even if given opportunity to them" (Respondent # 7-Advantaged)

"I think there are areas where communities come to the process and they (disadvantaged community participants) don't understand the terminologies and what the forum is responsible for and its duties ..."(Respondent # 9-Advantaged)

Analysis:

The lack of contribution from the disadvantaged community participants can be attributed to their lack of understanding of the technical information presented at the MCMF which in the opinion of Scottish Parliament Participation Handbook (2004) increases privileged access to such a participation process. There is a need for new ways to be explored in the presentation of technical information so that all participants will be able to understand and contribute. The manner in which information is presented affects the information comprehension by participants in a participation process. The relevance of information to participants in a participation process is affected by the manner in which information is presented which eventually affects learning and educational aspect of a participation process. The presentation of information in a participation process should therefore be in a manner that will be relevant to everyone in a participation process. Respondents were asked how information is presented during meetings. All the respondents answered that, information is always presented by power point which was confirmed by DWAF representative. The problem with power point presentation in a participation process according to Scottish Parliament Participation Handbook (2004) is that it creates a distance between the speaker and the audience. The audience therefore becomes passive and achieving active participation after presentation becomes a difficult task and is recommend that the presentation be turned off in between slides so that the audience can be engaged (Scottish Parliament Participation Handbook, 2004).

Individuals learn differently which requires a variation in the manner in which information is presented to them. If individuals are able to make connection between information that is presented to them, they will be able to determine the credibility of the information that is presented to them in a participation process. The ability to determine

the credibility of information in a participation process is very important since it affects the quality of a participation process. The lack of understanding of the technical nature of information at the MCMF has however led to the inability of participants from the disadvantaged community to determine the credibility of information presented at the MCMF. The advantaged community participants however rely on the honesty of Umgeni Water for the reliability of information that is presented at the MCMF. Respondents were asked whether they believe in the credibility of information presented at the MCMF.

Question: Do you think the information presented was credible?

      a. How do you judge what is credible?

Answers:

"Umgeni Water has a good scientific data reputation and it's a statutory require for them to give water quality data to DWAF so they are not going to make up E coli counts and the people who do it are professionals and if they have a problem with the sampling they tell you so they don't just make up results" (Respondent # 10-Advantaged)

"They (Umgeni Water) are professional organization and we must accept it as credible because we certainly don't have time as a local authority to verify or analyze or confirm the data so we must accept it unless it pointed to us by someone else so we generally accept that it is credible information" (Respondent # 9-Advantaged)

Analysis:

The above statements are indication that, stakeholders do not verify the information presented at the MCMF due to the advantaged organizations relying on their trust in Umgeni Water. The disadvantaged community organizations on the other hand, do not understand the technical nature of information and therefore can not determine the credibility of information presented at MCMF by Umgeni Water. Respondents were however not asked about alternative methods of verifying the information presented at the meeting such as water-born related diseases in the communities. Water-born diseases such as cholera in most developing countries or poor communities are underreported since most people resort to self treatment or consult traditional healers. It was therefore deemed a non reliable source since there is the likelihood of underestimating such

information. A DWAF representative was asked whether they as the organizers of MCMF verify the information presented by Umgeni Water.

Question: How credible is the information presented at the forum?

Answer:

> *"We rely heavily on their (Umgeni Water) information for this particular forum but we do have a DWAF personal who collaborate with them (Umgeni Water). We believe they (Umgeni Water) are very honest. May be the information is fifty fifty (half-truths) we give you this but we will not tell you that but I don't know but they (Umgeni Water) are very honest but if there is a problem they will be honest to tell you" (DWAF representative # 2)*

Analysis:

The above statement by DWAF representative is an indication that, there is no secondary source for the verification of scientific information provided by Umgeni Water on water quality presented at the MCMF. Although participants may not have problem at the moment about the credibility of information at the MCMF, there is a need for an independent verification of information provided by Umgeni Water by DWAF. An error in information that is presented by Umgeni Water can erode the confidence that stakeholders have in the MCMF which will affect the confidence that stakeholders have in DWAF. DWAF should therefore institute a monitoring team that will periodically provide scientific test on water quality. Health authorities can also be contacted by DWAF to find about the consequence of bad water quality such as water-borne diseases although it might not be able to provide accurate for reasons explained above. However, the prevalence of water-borne disease can be used by DWAF at a first step in conducting an independent investigation into water quality.

4.5 Determination of level of satisfaction among participants at the MCMF in relation to medium and timing of notification

The medium through which participants are notified about a participation process has significant effect on the number and group of stakeholders that attends a forum. The notification of stakeholders in a participation process should therefore ensure the

encouragement of interested and impacted stakeholders to participate. A representative of DWAF was asked about how they notify stakeholders.

Question: How do you notify them about the next meeting?

Answer:

> *"We try all avenues through posting. Posting is the main one so we rely on the information they provide at the meetings but we found that sometimes being illiterate they just copy some ones box rather than their box. We also rely on e mailing and in some instances we do fax but other forums we use to phone and in other instances we advertise the forum in the Newspaper (Natal witness) and the Echo" (DWAF representative # 2)*

Analysis:

The inability of some participant to properly complete attendance forms is an indication that, participants might not even be able to read and understand the invitation of meeting. Respondents were asked whether the medium and timing of notification affects their meaningful participation at the MCMF.

Question: Were you notified early about the MCMF? Are you satisfied with the medium of notification?

Answers:

> *"When we are at meetings they (DWAF) give us the date for the next meeting. The notification is affecting those in the townships because if you don't come to meetings you will not know when the next meeting will come on because they (DWAF) don't announce it on the radio and it doesn't come to the news papers" (Respondent # 1-Disadvantaged)*

> *"They (DWAF) use to inform me through the phone. They (DWAF) do tell us the objective of the meeting but the problem is the time because sometime the just phone you today (Monday) and the meeting is on Wednesday so there is no time to prepare" (Respondent # 3-Disadvantaged)*

> *"Sometimes a week to the meeting and sometimes they (DWAF) phone me maybe on Monday and say there is a meeting and I just go. Sometimes if I meet somebody I know the person will tell me there is a meeting they did not tell you and the person will say we must go" (Respondent # 5-Disadvantaged)*

"They (DWAF) write to me to attend meetings and also got a call from Cape Town that there will be a workshop so I must be there. They (DWAF) sometimes give us agenda but sometimes they don't especially when they phone" (Respondent # 6-Disadvantaged)

"The agenda is sent(by DWAF) to me through the post and I think it is about twice that I missed that meeting because it did not arrive on time because I don't have a box so somebody always brings it to so if I don't see that person I cant go there…..and I don't know whether they (DWAF) will allow me to come with others because they invited me only but I need more support from other people so I don't think its useful to call me only because I can raise but if we are two or three of us we can share the information" (Respondent # 8-Disadvantaged)

Analysis:

The above statements indicate that, stakeholders from the disadvantaged community are not satisfied with the medium in which they are notified. The medium of notification from the statements above affects their meaningful participation and it's of major concern to the disadvantaged community participants. This was evident when they were asked what will make the process more meaningful; all of them were concern about the medium of notification.

Question: In your view what makes a public participation meaningful? Do you think your expectation have been met from your factors of meaningful public participation?

Answers:

"I think we (if respondents organization was organizing the MCMF) have approach them about the importance of forums (a how question) by improving the notification". (Respondent # 4-Disadvantaged)

"I think the notification must be done on the radio because many people don't know (about the MCMF)" (Respondent # 1-Disadvantaged)

"They (DWAF) must find the best means to notifying us (disadvantaged community organizations). The news paper is fine (for advertisement of MCMF) but it must be in a local language too and on posters and the radio" (Respondent # 3-Disadvantaged)

"I think if they (DWAF) announce it on the radio most people will listen and come (attend the MCMF) especially on a radio station that uses local language for its broadcast such as (Kakasi)" (Respondent # 6-Disadvantaged)

Analysis:

The comments above are an indication that, participants from the disadvantaged community are dissatisfied with current medium of notification and have got alternatives in improving the notification process. A representative of DWAF was asked whether they have checked their means of notification is affecting the meaningful participation of stakeholders. Due to the lack of evaluation of the MCMF by DWAF about the level of satisfaction among participants, the level of dissatisfaction among disadvantaged community participants is not known to DWAF. There is a need for DWAF to evaluate its participation programs to know the level of satisfaction and concerns of participants.

4.6 Conclusion

This chapter focused on the presentation and analysis of the views obtained from respondents as well as a detail discussion of the themes that emerged from respondents' statements. The next chapter discusses the results obtained from respondents with relevant public participation literature.

Chapter 5 Discussion of Results

The aim of this chapter is to use the results from the interview and relevant literature on public participation to determine whether participants from the disadvantaged community find their participation in the Msunduzi Catchment Management Forum (MCMF) to be meaningful. The discussion is based on the components of meaningful participation that were identified in the literature on which the objectives of this study was based and used for the development of the questionnaire.

5.1 Expectations of participants

According to the (EPA, 2000), there is often a considerable gap between the expectations and opportunities that a participation process can provide which calls for greater care in the design of a participation process which will help in clarifying goals to stakeholders. For a public participation process to be meaningful, the organizers of the participation program must be open and sincere about what participants can achieve from the participation process. This is especially so in the South African context where government promises such as free housing for all after as series of community forums has not materialized. This will avoid misunderstanding and conflicting expectations about the participation process since participants will become aware of the purpose, intentions and scope of the participation process.

The participants from the disadvantaged community stakeholders at the MCMF are not aware of the purpose of the forum which has created a gap between stakeholder expectations and what the forum can deliver. According to du Toit (2005) there are generally unrealistic expectations among stakeholders in a public participation process in South Africa. This he says is due to poor public awareness campaigns in the current democratic dispensation which has shifted all responsibilities to the government. This has therefore created the impression among citizens that their views as expressed in a public participation process should be implemented.

Based on the legal status of water management institutions described by Karar (2003) (Chapter 2, Section 2.6), the CMF can be classified as tokenism under Arnstein's ladder of public participation. The organizers of a forum are not obliged to implement the views of participants in a participation process solicited at this level of the ladder. Participants at the MCMF, feel that their views are not being taken into consideration by the organizers of the MCMF. Participants concerns that their views are not taken into consideration can be attributed to their lack of awareness that the CMF is a non-statutory or decision making institution. Participants also feel that educational background influences the value given to statements at the forum.

The gap between expectations and what the forum can deliver can however be attributed to the lack of evaluation by DWAF on the level of satisfaction of participants in the MCMF about the participation process. According to Charnley and Engelbert (2005) organizers of a participation process should have methods and tools for evaluating public participation programs. Without evaluation, organizers of a participation process will not know how to improve their public participation programs to effectively involve citizens in a participation process. There is an urgent need for DWAF to evaluate whether participants at the MCMF are satisfied with the forum in order to keep them motivated. The evaluation of the participants' level of satisfaction will help DWAF to address the expectations of participants at the MCMF. The non-attendance of the MCMF by public agencies is also contributing to this gap since DWAF and participants have to make contact with these public agencies while if they had attended the meeting then issues relating to their agencies could have been addressed.

5.2 Inclusiveness of participants

Community organizations according to Solitare (2005) and Lane (1995) are better placed to put public participation into practice, the lack of interaction between participants who are members of community organizations and their communities' calls for a review of DWAF's reliance on these organizations as intermediaries in their public participation programs. Most of the participants interviewed are members of organizations in their communities but have had little or no interaction with community members on

deliberations at the MCMF. There is a need for investigation of the background of participants who represent organizations in order to know whether they have the mandate of their community and whether the organization interacts with the general community. A self-regulatory method of accountability which according to Naidoo (2003) is the development of code of conduct through a participatory process to determine the standards expected of NGOs and CBOs in terms of their performance in their communities should therefore be discussed with organizations by DWAF. The self-regulatory mechanism will ensure that community organizations voluntarily give themselves the responsibility of reaching out to people in their locality.

The lack of interaction between participants from the disadvantaged community and the general public in their community makes these participants less favorable as intermediaries between the community and the organizers of the MCMF. Other existing leadership structures in the community such as resident associations; ward councils and committees should therefore be engaged by the organizers of the MCMF to ensure a broader participation of the public. Currently the lack of participation of other existing leadership structures can be attributed to their lack of awareness about the MCMF. Smit (2003) found councilors to function as a key communication channel between administrators and residents in catchment management forums. According to Smit (2003) councilors should be engaged by organizers of the participation process such as CMFs since they can provide valuable information and contacts at the grassroots level about people who have an interest in water resources management. People with an interest in community welfare such as the parish priest should also be contacted since they are involved most often resolving community issues and will be able to identify community members that have an interest in water resource management.

5.3 Trust among participants

Raising trust between participants through the deliberative process is important, as the aim is to achieve outcomes upon which people can agree, based on respect for different values within the group (Petts, 2001). Respondents in this study admitted that, the technique used in the MCMF is interactive (Chapter 4, Section 4.3), this interaction has

however not changed the degree of differences among participants. The degree of difference among some participants who see educational background as having influence in the MCMF has not helped in promoting the exchange of ideas in water resources that would have improved participants knowledge. In the view of Giddens (1984) cited by Nelson & Wright (1995), positive or cooperative interaction among stakeholders should lead to a change of attitudes and behavior among the different stakeholder groups by altering the gap in relationship among stakeholders but this is not happening at the MCMF. The altering of degree of differences among stakeholders according to Rowlands (1992) cited by Nelson & Wright (1995), has three levels. The first involves the development of personal confidence and abilities of undoing the effects of internalized oppression. The second involves ability to negotiate and influence close relationships whiles the third involves working collectively to have greater impact than each could have done alone.

The existence of a high degree of differences among participants at the MCMF can be attributed to internalized oppression among participants who view educational background as influencing the MCMF. Their lack of knowledge in contributing in the forum has made these participants feel that, they are been ignored in the forum. There is a need for stakeholders to form networks that will help them improve their knowledge which will eventually help them to form close relationships with participants that have knowledge in water resource in order to also improve their knowledge in water resource management.

5.4 Understanding of information by participants

The technical nature of information affects the meaningful participation of disadvantaged community participants at the MCMF since most of the participants are less knowledgeable in water resource management. According to Giovanni (2002) participants in a participation process are able to discuss technical issues unless ordinary language and concepts are used. The organizers of MCMF should strive for ways such as social learning processes that will make scientific or technical knowledge useful to non-scientist and non-technicians. Social learning techniques have been proved as a method

that elicit individuals potential in understanding issues irrespective of level of knowledge (Kilpio *et al.,* 2005; Lankford *et al.*, 2005). The organizers of the MCMF should therefore strive to use social learning techniques to elicit learning among the disadvantaged community participants who are less knowledgeable in water resource management. The social learning process should however not be restricted to meeting times only but rather be a continuous process that will ensure that enough time has been given to the disadvantaged community participants to learn.

Lankford *et al.* (2005) used a simulated social learning model to explain the effects of upstream abstraction of a river on the downstream users. Such a process is normally seen as technical in terms of water allocation that would have required mathematical calculation that the local population would not have been able to understand. This example has shown that technical information can be understood by a layperson if the problem is introduced to them is a way that will bring out their creative thinking. Lankford's model used a wooden platform with different paths to represent channels of a river and metal wire to pick metallic balls that were released to represent the river flow. At the end of the game playing exercise the participants became aware that if those upstream take too many balls it affects those downstream and if balls are taken at the same time by all participants if affected the number of balls available to participants. This gave the participants an indication about cooperation in the sharing of the river without going through any mathematical calculations.

DWAF should therefore endeavor to use social learning techniques at MCMF to improve the understanding of technical information for both disadvantaged and advantaged participants. Beierle (1999) found many professionals who couldl not explain the concept "environment" but were part of an environmental decision-making body. According to Beierle (1999) formal knowledge cannot be used always as a basis for understanding of information at a public participation process. Roefs & Liebenberg (2005) also found in their study in South Africa that most people with formal education at the local government did not understand the functions and linkages between various government structures. In the opinion of Roefs & Liebenberg (2005), knowledge and understanding in

a participation process are related but does not always happen together. The use of social learning techniques will help in addressing these assumption because social learning according to Smeds *et al.* (2001) cited by Kilpio *et al.* (2005) enables participants to share their tacit knowledge and experience and express it in an explicit form which will help in identifying individuals shortfalls in a subject area or issues.

The lack of multiple methods in presentation of information at the MCMF by DWAF is also affecting learning and understanding of information by stakeholders. The MCMF does not use methods such as site visits in their presentation of information. The use of site visits has been found to be useful in a participation process by improving learning and interaction among participants (CAPP, 2004; Petts, 2001). According to CAPP (2004) and Petts (2001), the use of site visits greatly improves the knowledge of participants since they get the opportunity to see the issues that are discussed, which may not be at their locality. Site visits also improve participants interaction due to their informal nature therefore bringing participants closer in expressing their grievances to each other.

5.5 Awareness creation and notification of participants

Houston *et al*. (1999) cited in Anderson (2005) describe radio as the best means to overcome the difficulty in awareness creation since most people from the disadvantaged communities have access to radio as their means of communication. Roefs & Liebenberg, (2005) in their research on how most citizens of South Africa obtain their information found radio to be preferred by most South Africans as a means of receiving their information. The use of radio as a means of notification was evident in disadvantaged community participants' views on how to make the MCMF more meaningful. According to Singh (2003), broadcast-oriented channels of communication do not require high levels of literacy in understanding information and makes it an effective tool in raising awareness. The participation of the disadvantaged community in MCMF can be accelerated through broadcast-oriented channels such as the radio because it does not require high literacy level for understanding. Apart from radio, school children and

church announcement together with presentations should be promoted as a source of awareness creation in disadvantage communities by DWAF.

5.6 Conclusion

This chapter focused on the results obtained from respondents and used relevant literature on public participation to determine whether participants from the disadvantaged community find their participation in the (MCMF) to be meaningful based on the factors of meaningful participation identified from literature.

The next chapter provides the conclusions drawn from this research and provides recommendations that are deemed to improve the MCMF participation process.

Chapter 6 Conclusions and Recommendations

6.1 Conclusions

The overall aim of this study was to investigate whether the disadvantaged communities view their involvement at the MCMF to be meaningful. In order to achieve this purpose, the specific objectives of the study were:

1. to determine whether the participation processes meet the expectations of the participants,
2. to determine whether the MCMF is inclusive of those having an interest in catchment management issues,
3. to determine whether there is trust among participants in the participation processes,
4. to determine whether participants have access to and understand appropriate and relevant information given at the forum,
5. to determine whether participants are notified about the forum early and adequate time given for sharing of information in the process.

These objectives were addressed by reviewing relevant literature and conducting a semi-structured interview on stakeholders of the MCMF. This chapter highlights the key conclusions of this study and provides recommendations for improving the MCMF participation process to make it more meaningful to stakeholders.

The findings of this research were that the MCMF had shortcomings in meeting the expectations of disadvantaged community stakeholders. Stakeholders participating at the MCMF especially those from the disadvantaged community have some expectations for participating at the MCMF which have not been met. The expectations of stakeholders from the disadvantaged community are not realistic considering the non-statutory status of a catchment management forum. Stakeholders are not clear about what the forum expects from them and how their inputs are used by the organizers of the MCMF. There

was also a limitation with respect to the inclusion of participants due to the use of a list of members of organizations that are found on a database that has been build over the years through DWAF's interaction with stakeholders in the activities.

Disadvantaged participants trust in relation to information presented at the MCMF could not be quantified in this study due to lack of knowledge and understanding of information presented at the MCMF. Participants from other stakeholder groups such as members of advantaged NGOs, the municipality and even DWAF do not verify the information presented at the forum due to their trust in Umgeni Water which often provides the information used at the forum. There is therefore a need for the independent verification of information that is presented by DWAF.

There was also a large difference among stakeholders based on educational background which is affecting relationship building. Participants from the disadvantaged community feel that, the MCMF participation process is influenced by educational background. The perception by the disadvantaged community participants that, the MCMF is influenced by educational background can be attributed to their lack of knowledge in water resource management which has affected their interaction with knowledgeable participants.

Another key finding of this research is the high level of dissatisfaction among participants from disadvantaged communities with the manner in which technical information is presented at the MCMF. It was found that most of the disadvantaged community participants are not familiar with how conclusions are drawn from the information presented at the forum. It was clear that a limited number of involvement learning techniques are used and the techniques used at the moment are passive in nature by presenting only the presenters information. Participatory involvement techniques that lead to collaboration, generation of ideas, problem solving that really engage the stakeholders are not in use. Participatory techniques such as role playing that will allow for a more meaningful involvement of participants in discussions and contribution during meetings should be explored by the organizers of the MCMF participation process.

Participants from the disadvantaged community were also dissatisfied with the medium and timing of notification because of its effect on their preparation for the forum. Most often, participants were phoned to attend meetings and they have very limited information about the agenda of the meeting.

6.1.1 Concluding remarks

The importance of public participation and the need to improve the quality of current participation processes has been established in literature and legislation. The focus now is not on whether the public should be involved but rather on how best to involve the public in participation processes. The incorporation of components of meaningful public participation will help in the improvement of the quality of participation processes. The MCMF is in a unique position to shape and enhance its procedures and mechanisms for the public participation process because it is relatively new compared to others such as Inkomati Catchment Management Agency. The MCMF organizers should therefore not see the physical presence of disadvantaged community stakeholders as a sign of meaningful public participation. Emphasis needs to be placed on the development of skills and capacity of participants to understand and make meaningful contributions, especially participants from the disadvantaged communities. 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.

6.2 Recommendations

This research has suggested five key means through which the MCMF public participation can be improved which are based on the conclusions of this research which are:
- expectations of participants;
- relationship differentials among participants;
- presentation and understanding of information;
- medium of notification; and
- evaluation of participation processes by DWAF.

It is recommended that:

1. Expectations of participants, especially those from the disadvantaged communities, on the functions of a forum should be addressed urgently.

   Participants should be made aware that the mandate of CMF is that of a deliberate democratic process only and therefore the organizers of the forum have no authority to implement the views of the participants'.

2. The large differences in educational background that exist among some participants especially those from the disadvantaged community make field trips an important element of presentations.

   Field trips will create an informal atmosphere for interaction among participants by affording them the opportunity to make contributions on issues that are not of a technical nature and this will bring them closer to the knowledgeable participants. Disadvantaged community participants should also be made aware, by DWAF, of the powers of networking in improving their knowledge and understanding and association with other participants.

3. Technical information is presented in a medium that disadvantaged community participants can understand.

   The understanding of technical information can be improved through participatory   problem solving techniques. Techniques such as simulation, games and role playing which primarily focus on a risk free environment with various alternatives to determine their impact on the simulated environment should be considered.

4. The medium of notification used to ensure effective public participation at the MCMF must be addressed.

Notifying stakeholders through mediums such as phone and post is likely to exclude participants who often change their contact numbers and even move out of their residence without taking the responsibility to inform DWAF about their change of address. Broadcast oriented medium should be explored since this will not only inform the already existing participants about an impending meeting but also lure the general public to participate in the MCMF.

5. DWAF evaluates the MCMF participations process to find out the level of satisfaction among participants.

This can be achieved through the development of standard evaluation criteria which will answer questions such as the perception of participants regarding their ability to participate and the degree to which their expectations are being met. The significance of participants in terms of their community outreach should also be investigated by DWAF.

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Appendix 1 Questionnaire for Stakeholders

Questionnaire for Stakeholders

Section 1 Background question

I.   What are your main reasons for getting involved in MCMF?

II. Are you involved in another public participation process?

III. Did you get involved as a representative of a group?

    a. Did they elect you?

    b. How long has this group been together?

IV. In there anything special that you/group want to achieve from this forum?

Section 2 Components of meaningful public participation

2.1.1 Technique

I.   What technique is usually used in the MCMF?

II. Is that technique best for the MCMF?

2.1.2 Clear purpose

I.   Was the purpose of the MCMF made known to you?

II. How was this done?

2.1.3 Participants support

I.   Do you have the financial resource to participate fully?

II. Do you get the support from experienced members in order to improve your knowledge and participate fully?

III. If assistance is needed in terms of knowledge; how is it addressed?

2.1.4 Linking process to decision making

I.   How often do you contribute during meetings?

II. Do you feel that your contribution have impact on the decisions made?

2.1.5 Evaluation and follow up

    I. Are there any rewards for being a participants (in terms of regular attendance or initiating of new ideas)?

   II. Do you know of any indicator(s) for measuring the success of MCMF?

2.2 Inclusiveness and representation

    I. Do you think most affected parties are included or represented in the MCMF?

   II. Do you interact with members of your community after the forum?

  III. What do you think affects the attendance of stakeholders?

  IV. Is there room for accommodating stakeholder groups at different stages of the MCMF?

2.3 Trust

    I. Do you feel that your interest is valued in the MCMF?

        a. How did you know this?

   II. How has heterogeneity in terms of racial background affected cooperation and innovation of the MCMF?

  III. How has heterogeneity in terms of educational background affected cooperation and innovation of the MCMF?

  IV. Do you feel the MCMF promotes open dialogue or two way communication?

   V. Do you communicate with other participants on catchment management issues after meetings?

  VI. Do you have a means to express your grievances and make suggestions after meetings?

 VII. How easy or difficult is this means?

2.4 Access to quality information

   II. Do you have access to information required for you to participate fully?

  III. Was some of the information requested classified as confidential?

  IV. Did you understand the information presented?

   V. How was information presented during meetings?

VI. Could there be a better means for presentation of information during meetings?

VII. Do you think the information presented was credible?

     a. How do you judge what is credible?

2.5 Notification

I. Were you notified early about the MCMF?

II. Are you satisfied with the medium of notification?

III. What in your view are barriers to notification and timing of the MCMF?

IV. Do you have adequate time to read and digest information given at meetings?

V. When issues are brought forward do you have adequate time to address them?

VI. Do you have enough time to share information with those you represent?

Section 3 Wrap up question

I. In your view what makes a public participation meaningful?

II. Do you think your expectation have been met from your factors of meaningful public participation?

Appendix 2 Questionnaire for DWAF Representatives

Questionnaire for DWAF Participants (Led organization)

Section 1. Background

II. What do you think are the reasons for people (organizations) joining the Catchment Management Forum?

III. Are groups able to join the process without being invited or do you control who attends by controlling the invitations?

IV. How were the disadvantaged organizations informed about the MCMF for the first time?

V. Do you know why their attendance is so poor?

VI. Did you make any enquiries about the organizations representing the interest of disadvantaged communities?

    a. How they are funded

    b. Their objectives

    c. Number of years of existence

    d. Their achievements in their own communities

Section 2 Components of meaningful participation

I. Have you ever enquired from them whether the procedure used during meetings is best for them?

II. How are the purpose of the MCMF made known to them?

III. Have the objectives of the MCMF changed over time if yes has it made it more meaningful to stakeholders?

IV. Do you think most of these participants from the disadvantaged community have sufficient knowledge to understand the technical information presented to participate in the MCMF?

V. If not, how is this knowledge gap being addressed?

VI. Do the disadvantaged community participants contribute during meetings?

VII. Do you have any indicator for measuring the success of the MCMF?

VIII. Do you facilitate on issues raised by participants?

IX. Have you taken notice of the dwindling number of disadvantaged community participants? If yes what do you think are the cause and what can be done about it?

X. Have you taken any notice of how heterogeneity in terms racial background has or is influencing the MCMF?

XI. Have you taken any notice of how heterogeneity educational background has or is influencing the MCMF?

XII. How is information made known to the participants on issues in the catchment?
   a. Is it by pictures?
   b. Through field trips?
   c. Participants serving as informants or watchdog?
   d. Newsletters?
   e. Community networks?

XIII. How credible is the information presented at the forum?

XIV. Do you have any clue about stakeholders communicating with each other about catchment matters, outside of the meeting times?

XV. Do they have means for stakeholders to express their grievances and make suggestions in after meetings?

XVI. How do you notify them about the next meeting?

XVII. How you checked how your notification is affecting stakeholder participation?

XVIII. Do you give stakeholders information and materials about what will be discussed during meetings at MCMF to read and before attending meetings?

XIX. If the above is not done (XVI), do you give time to participants to read and share information at meetings during the MCMF process
   a. How is the sharing of information done at meetings (by grouping them or they forming alliance themselves)

Section 3 Wrap up question

I. In your view what (is/are) the shortfall of the MCMF apart from those we have discussed and what can be done to make the process more meaningful?