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# Stakeholder perceptions of public participation in development projects: a case study of the social impacts of the Mooi Mgeni Transfer Scheme Phase II

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# Stakeholder Perceptions of Public Participation in Development Projects: A Case Study of the Social Impacts of the Mooi Mgeni Transfer Scheme Phase II

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**ABSTRACT**

Public participation has become an integral component of development projects, and is encouraged in the South African constitution as well as national laws governing the development and management of the environment. Especially in large infrastructure projects such as dams and water transfer systems, community participation is essential, as these projects leave great social and environmental footprints, with the benefits often accruing far beyond the immediately affected areas. Yet, there is little consensus on how this participation should manifest or what it should hope to achieve.

This study sought to examine public participation processes through a case study of a dam and pipeline project, the Mooi Mgeni Transfer Scheme Phase II, particularly in terms of its social impacts. The study draws from the perspectives of all stakeholders involved, namely the various project authorities (government architects, implementing company, engineers, construction contractors), the interested and affected community members, and the independent authorities hired to monitor different aspects of the project.

This study found that differing views of participation among these different actors greatly affected the participation that manifested in the project. While project authorities' primary focus for participation was as a means to achieve project goals, community members expected that participation directly benefit them, whether through mitigating impacts or maximising benefits. These differences are complicated by conflicting conceptions of participation in South African legislation, and scant conflict management mechanisms. These conflicting views of participation led to conflict in participatory spaces, and resistance against the project. This study examines five participatory spaces, namely Environmental Impact Assessment public participation meetings, Environmental Monitoring Committee meetings, the engagement with marginalised communities, the engagement with expropriated landowners, and the engagement with relocated informal farm workers. The analysis illuminates the way that power manifests in participatory spaces and can work for or against community goals, and also the effectiveness of different community strategies to leverage their interests. It finds that trust between project authorities and community members is often lacking, but can significantly reduce conflict when it is present. When conflict does arise, if community members are able to upset the project from proceeding, they can make significant inroads in achieving their interests. However, marginalised contingents of the community are faced with ingrained disempowerment in participatory spaces which is difficult to overcome.

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**DECLARATION**

I, Chelsea R. Markowitz, hereby declare that this research report is my own original work and that where I have made use of others ideas I have referenced accordingly.

_____

Chelsea R. Markowitz Wits University, Johannesburg, South Africa, 14 March 2016

## LIST OF ABBREVIATIONS

| | |
|---|---|
| CES | Coastal Environmental Services |
| CV | Curriculum Vitae |
| DEA(T) | Department of Environmental Affairs (and Tourism) |
| DWA(F) | Department of Water Affairs (and Forestry) |
| ECA | Environmental Conservation Act |
| EIA | Environmental Impact Assessment |
| EMC | Environmental Monitoring Committee |
| EMP | Environmental Management Plan |
| IEM | Integrated Environmental Management |
| KZN | KwaZulu-Natal |
| LHWP | Lesotho Highlands Water Project |
| MMTS-I | Mooi Mgeni Transfer Scheme Phase I |
| MMTS-2 | Mooi Mgeni Transfer Scheme Phase II |
| MRFA | Mooi River Farmers Association |
| NEMA | National Environmental Management Act |
| PAR | Participatory Action Research |
| PPP | Public Participation Process |
| RDP | Rural Development Programme |
| ROD | Record of Decision |
| SIA | Social Impact Assessment |
| TCTA | Trans Caledon Tunnel Authority |
| WBHO | Wilson, Bailey & Holmes |
| WCD | World Commission on Dams |

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# Chapter I: Introduction

## Participation in Development Projects

This study analyses the public participation process in the Mooi Mgeni Transfer Scheme Phase II, particularly in terms of the social impacts on the communities living nearby the project. When analysing modern development discourse, one is almost certain to find "participation" mentioned as a buzzword indicating best practice for development projects in less economically developed countries (Cornwall & Eade, 2010). Ever since its adoption and promotion by the World Bank, participation has played a big role in mainstream development theory (Cornwall & Eade, 2010, Williams, 2004). Yet it is surprising that this term has achieved such widespread global relevance when there is little consensus on its definition and meaning in different contexts. Most development literature and government documents preface their discussion of participation by stating that there is no established norm for what exactly constitutes participation in development (Khwaja, 2004, Cornwall, 2008, Murombo, 2008, Greyling, 1999, Botes & Van Rensburg, 2010). Communities, governments, private companies, consultants, etc., all bring different interests and desires to the table in development projects, thus it is highly likely that their perceptions of participation will vary (Estrella & Gaventa, 1998). Thus it is relevant to question how differing stakeholder perspectives of participation affect the manifestation of participation in development projects. And how do various stakeholders mobilise when formal participation processes do not fit their needs? With little case study research available from the perspectives of multiple stakeholders, further investigation is necessary.

## Public Participation in Dam Development

Dam development represents an ideal context in which stakeholder perceptions of participation can be explored. The inherent scope and scale of such projects necessitates that a large and diverse group of stakeholders are involved. Within communities, there are multiple diverse interests based on location, demographics and organisational affiliation (WCD, 2000). Governments at the national, regional and local level are also often involved, with private companies carrying out some or all of the implementation, and a diverse range of external consultants are also working on the project. With dams often resulting in both significant benefits and costs to society, various stakeholders will value various outcomes differently. This reality exemplifies why public participation has become such a prominent

component of dam development: there is a need for increased engagement from those at the top who implement dam projects with those at the bottom living in affected communities (WCD, 2000). However, the current process is far from perfect, as there exists bountiful evidence of the devastating effects of dams on local communities and of the shortcomings of public participation (WCD, 2000, Égré & Senécal, 2003). A question arises as to whether the standard participation processes that feature so prominently in project proposals are even feasible, given that dam development is traditionally a top-down, highly technical process. In the context of mitigating the impact of dams, is it possible to additionally improve the lives of community members? How much agency do community members have to affect a pre-structured participation process? (Tilt, Braun & He, 2009, Gagnon, Hirsch & Howitt, 1993). This study addressed the need for further investigation of public participation in dam development from all angles and perspectives, helping to unpack the scepticism surrounding public participation in dam projects.

**Aim and Research Question**

The primary aim of this study was to examine the public participation in a qualitative case study: Phase II of the Mooi Mgeni Transfer Scheme in KwaZulu-Natal, which consists of the construction of the Spring Grove Dam and pipeline. This refers not only to the official public participation process mandated by the Environmental Impact Assessment, but rather to any participation from the stage of project conceptualisation to the stage of monitoring and maintenance. This participation process was analysed through the lens of various stakeholders in the project, such as community members and groups, private companies, consultants and various levels of government.

The primary research question of this study is: What are the stakeholder perceptions of public participation in social impact mitigation in the Mooi Mgeni Transfer Scheme Phase II?

Subsidiary Empirical Research Questions include:

-How do stakeholders' purposes and desires for participation differ?

-What forms of participation are most effective in achieving stakeholder goals?

-How do negotiations between stakeholders take place and do they succeed?

-How do perceptions of public participation differ in each component of the dam development process?

-How do power relations among stakeholders influence participation?

-What is the perception of the justness of the participation process?

Asking these empirical questions led this study to more theoretical questions, such as how project authorities' and communities' different underlying perceptions and beliefs shape participation processes in large infrastructure projects, and how the exercise of power by both project authorities and community members can shape the participation that takes place.

**Outline of Study**

This study explores the topic of participation in dam development through the lens of different stakeholders in the project, examining their interests and definitions of participation. Chapter II unpacks the concept of participation in development, examining the development of modernisation, neoliberal and Marxist theories of participation. It then situates participation in the debate between its utilisation as a means to facilitate development projects and as a means to improve or maintain the lives of community members. Participation models have been developed to help conceptualise these different forms of participation, identifying participation that is manipulative and complacent all the way to participation that is empowering and community controlled. However, aspects unique to different projects, such as the level of technical expertise and varying dynamics of local communities, often make achieving intensive participation difficult.

The study then delves into a discussion of power, which is inextricably linked to all forms of participation. Three forms of power interact within development projects and are utilised by both project authorities and community members to shape the participation process. Visible power is the most formally recognised form of power and shapes the participation process through rules and norms such as public meetings and public participation consultants; however, invisible power more subtly can control who gains access to these forums of participation. Hidden power is the most difficult to detect or change, as it deals with ingrained notions of one's level of agency, which have been instilled over a lifetime or generations. Power manifests in both invited spaces of participation, which are legitimised by project authorities, or invented spaces, created by community members to exercise power

not formally awarded to them. Various factors determine whether participation and power that are used to change the terms of development projects are effective. Literature on community mobilisation indicates that a community's resources, level of conviction and opportune circumstances are important factors. My project additionally demonstrates that the ability to actually prevent a project from proceeding (whether through impeding authorisation or stopping physical construction) also demands attention and concessions from project authorities, potentially representing a new form of power.

The next section situates these theories of participation and power in the context of the Mooi Mgeni Transfer Scheme Phase II, both as a water transfer project and as a project implemented in South Africa. The construction of dams is commonly paraded as a nationalistic project by developing nations to further their growth and economic prowess. Thus the social and environmental impacts are viewed as a necessary sacrifice for a greater national good. However, in recent years, social impact assessments have become standard international practice to help mitigate the burdens on individuals living in the affected project area. Yet they are often only used as window dressing and do not succeed in significantly changing the terms of projects.

Post-apartheid South Africa has implemented its own extensive environmental legislation that derives from the democratic, people-centred Constitution. The National Environmental Management Act enshrines the concept of "Integrated Environmental Management," which encourages participation not only before project commencement when identifying impacts, but throughout implementation and maintenance. South Africa has passed various legislation supporting these aims, such as mandatory Environmental Impact Assessments, Environmental Monitoring Committees and Environmental Management Plans for large scale projects. Dam projects also often involve expropriated land, which is governed by both the Constitution and the Expropriation Act. Public participation requirements are weaved throughout these various legislations; however, notably absent is an extensive conflict management regime, even though infrastructure projects often breed resistance from affected communities.

Chapter III outlines the methodology of the project, which is a qualitative case study consisting of interviews of various actors involved in the project, both project authorities and community members. Chapter IV then gives the context of the project, setting the stage for the proceeding empirical chapters. The project was conceptualised by the Department of

Water Affairs because of a severe need for water in South Africa's arid climate, in order to further support the development of urban areas. It was implemented by a State Owned Enterprise and various consultants and contractors, such as engineers, construction contractors, participation consultants and environmental monitors. The communities living near the affected area represented an excellent vantage point from which to analyse participation, because they were heterogeneous in socioeconomic status, occupation and in the manner in which they were affected. This allowed the research to compare how communities with different characteristics engage with participatory processes.

Chapters V and VI analyse the empirical data from interviews. Chapter V looks at stakeholder perspectives of participation from the angle of the project authorities and community members. Key differences are noted which give insights into how the participation process manifested. Project authorities' goal for participation was informed by their end goal of efficiently completing the project. Thus they believed that participation should support this goal by involving community members in order to quell any potential resistance. Ensuring proper mitigation of physical impacts also garners community buy-in and is essential for approval from the Department of Environmental Affairs. Community members; however, desired minimal harm and in some cases maximum benefit from the project, and these desires went beyond the standard impact mitigation and consultation. They desired that their lives be in no way altered negatively (even indirectly) by the project, and also that project authorities were trustworthy. Additionally, marginalised community members expected that the project would benefit their communities.

These differing views led to conflicts discussed in Chapter VI, demonstrating the ways in which communities use power in participation. The Chapter outlines how participation manifested in five spaces of participation. These first two spaces are the Environmental Impact Assessment public participation meetings and Environmental Monitoring Committee meetings, the most formalised spaces created by the project to share information and raise concerns throughout the project. The next space of public participation looks at the engagement of marginalised communities on the project, mainly through employment, skills development and legacy projects. The last two spaces of participation are the individual negotiations/mitigation for those who lived directly in the area of the proposed project, and either had land expropriated or were relocated. This section examines how project authorities and community members interacted in these spaces based upon their different goals for

participation and how effectively they leveraged power to successfully or unsuccessfully achieve their goals of participation. It demonstrates both how community members can utilise South Africa's robust legal framework to push their interests and also how the most marginalised sectors of society have internalised their powerlessness and are the least successful in achieving their goals. It also draws the conclusion that community members who can leverage their interests to impede the project's implementation are most successful in having their concerns addressed.

## Chapter II: Literature Review

### Theories of Participation in Development

Although most accounts of participation in development only begin with its emergence as a buzzword in the 1980s, variations of this practice date back to the mid-20th century. In the 1940s and 1950s, British colonial officials throughout the world used participation as a tool to cement their indirect rule with decentralised governing. Couched in euphemisms of "community development" by colonial officials, participation was viewed as an obligation of communities, promoted alongside values of cost sharing and self-reliance. During this time participation in "community development" projects was used to quell protests and discontent, keeping rural communities from urbanising and adopting leftist motivations for social change (Hickey & Mohan, 2005).

In the 1960s as the colonial period waned, modernisation theory became the mainstream approach to development, led by the state rather than colonial officials. This theory maintained that a "take-off" in development, either spurred by general institutional changes or a discreet economic or political event, would cause an active increase in investment by the government in infrastructure (such as dams) and technology, leading to industrialisation and belonging to the "modern", economically developed world (Rostow, 1956). This paradigm of development perceived "modern" to be large scale, industrialised societies striving towards efficiency and wealth. Small farmers living off of the land were viewed as backward and inefficient. The discourse surrounding development theory shifted toward the hegemony of the state as the central actor in development, and a society that works toward the greater good of a stronger and more powerful nation, even if at the expense of individuals or communities who are disrupted by modern development. Participation was therefore linked to sacrifice and assistance in state-building. In order to increase the perceived legitimacy of the state, participation was also exercised as a political right in the form of political parties and voting (Hickey & Mohan, 2005, De Wet, 2000). In the process of state building in developing countries, this approach to development is still prominent today. Particularly in my project, the dam and pipeline are necessary to continue South Africa's infrastructure development in order to provide the growing, modernising population with water, and participation must serve this broader goal.

In the 1960s and 1970s, a new and different participatory practice emerged. Participatory Action Research (PAR) was led by radical Southern theorists such as Freire and Rahman, and promoted participation which aimed to confront structures of economic, political and social oppression. Rooted in Marxism, the goal of this form of participation was focused on marginalised sections of society who did not benefit individually from serving the interests of the state and development. Rather, those affected by poverty would actively transform the structures of power that sustained inequality, and then poverty would be alleviated as a consequence of this movement (Cornwall & Eade, 2010).

Starting in the 1980s, participation was adopted by the mainstream development movement and Western aid organisations (Cornwall & Eade, 2010). Neoliberalism emerged as the dominant development theory, advocating that underdeveloped countries in Africa adopt the principles of individualism, free trade, and decentralisation, as this was now the dominant economic paradigm of the West (Oya & Pons-Vignon, 2010). Participation fit perfectly into this discourse, as it was viewed as a way for individuals to engage in the economy, "build their capacity" and individualistically influence development outside of the state. Technocratic in nature, neoliberal development focused on specific technical and methodical approaches to discern community needs and improve project outcomes (Cornwall & Eade, 2010). However, this approach to development stopped short of any mention of politics or the need for structural and social change advocated by past participatory methods such as Participatory Action Research. Thus participation could still fit nicely within the inherent goal of the neoliberal strategy to maintain the economic, political and social status quo, while still championing "development" (Hickey & Mohan, 2005). Although participation was promoted as a right and an individual choice in the neoliberal framework, only participation which supported the neoliberal free market policy framework was formally encouraged (rather than more radical socially transformative variants) (Summerville, Adkins & Kendall, 2008, Cornwall & Eade, 2010).

Today, neoliberal theory persists in Western development assistance to the poor nations, while emerging economies, for example the BRICS (Brazil, Russia, India China and South Africa) generally display a mix of participation to support modernisation state-building and neoliberal free market participation. However, community driven pockets of collective mobilisation against societal structures, policies or projects still do emerge (Cornwall & Eade, 2010).

**Project and Community Centred Approaches to Participation**

Understanding the underlying goals of different actors for implementing or engaging in participation is essential to analysing participatory processes. Participation can either be perceived as a vehicle to facilitate the implementation of a project, as a vehicle to benefit the community, or some combination of the two. Most often, project authorities tend toward participation as a means to help actualise their projects, while community members believe participation to be a vehicle to meet their needs.

When participation is project-implementation driven, participation is viewed as an important human resource addition, providing valuable skills, labour power and local knowledge. These assets are a means to achieving efficiency and effectiveness of projects, as well as sustainability because community members will be knowledgeable about the inner workings of the development project and better able to maintain it. Important to this approach is that participation must not end after the Environmental Impact Assessment, but instead continue during implementation and monitoring. This is solely for the purpose of increasing the sustainability of the project, as community members living nearby will be able to constantly monitor the project (Morumbo, 2008). Participants will also gain skills, work experience and self-reliance from such participation as a secondary spinoff (Oakley, 1995). This was one of the fundamental views of project authorities in the Mooi Mgeni Transfer Scheme Phase II – that participation would both help to erect and maintain the dam, and additionally that it would help to keep community members informed so that they would support and not resist the project.

Often, when participation is only a means to achieve project goals, project objectives are completely pre-determined before negotiations, and the project takes on a defensive stance rather than an open one, with no real space for changes based upon participation (Greyling, 1999, Morumbo, 2008). This stance can de-motivate community members from engaging with public participation opportunities (Khwaja, 2004). This was evident in the Mooi Mgeni Transfer Scheme, where the technical plans were conceived in advance of the public participation process. Authorities pointed out that this pre-participation planning is mandatory for highly technical projects, but it ultimately caused project setbacks due to community unrest later in the project.

Participation that is centred around the lives of community members is often used as a vehicle for community members to confront the structural reasons behind their poverty and marginalisation, through practitioners giving them the training and resources to help achieve basic needs and improve their life conditions (Choguill, 1996). The poorer communities in the Mooi Mgeni Transfer Scheme Phase II saw participation in this light – that a government project must ensure that the underprivileged living in the area are empowered to change their marginalised position, beyond merely participating in meetings and menial project work. With this approach, participation is viewed as an inherent political and human right that must be protected and promoted, aside from project goals. Participation also requires recognising the often marginalised position of a community in relation to greater society, and empowering community members to confront broader social impediments such as unequal institutional structures (Miraftab, 2004). There should be a focus on enhancing participants' abilities to engage politically with all levels of power structures (local, regional, national) to provide them with the skills to impact their livelihoods long after project completion (Williams, 2004). In order to drive this empowerment, development practitioners must value and utilise the inputs from local participants and prioritise egalitarian negotiations between local participants and development practitioners (Reed, 2008, Botes & Van Rensburg, 2000). Involving community members in implementation and maintenance is also beneficial from this approach; however, not in terms of increasing the sustainability of the project but rather in driving their own ownership of the project. More power and control is shifted to community members when they are empowered to serve as watchdogs to ensure that project officials are accountable and that proposed mitigation efforts are in place (Estrella and Gaventa, 1998).

With this community centred approach it is important not only to regard the marginalised position of a community as a whole, but the social, political, or economic structures that create marginalisation within a community and disparity between its members. According to Cornwall and Jewkes (1995), communities are complex and composed of diverse groupings related by networks of power. Wealth and gender are common examples of power differentials within communities. When communities are viewed as homogenous, these differences in needs and values are ignored. Sometimes communities are dominated by minority interests, and projects that do not engage in extensive analyses of community relations could end up favouring elite interests, amplifying conflict among different groups or further subjugating marginalised groups (Botes & Van Rensburg, 2000, Brett, 2003,

(Cornwall & Jewkes, 1995). In the Mooi Mgeni Transfer Scheme, the affected community was extremely diverse, with variations in wealth, race, political affiliation and gender, which all affected how community members experienced and utilised the public participation process. Thus it is important for practitioners to take the time to understand and represent different dynamics in a community.

Prominent development scholar Amartya Sen fits into this community-centred approach with his Human Development Theory. He views development as "a process of expanding real freedoms that people enjoy" including political freedoms, economic facilities, social opportunities, transparency guarantees and protective security (Sen, 1999, p.3 & 10). His concern is that in modern development practice, economic development is often incorrectly viewed as the ends for development, rather than the means to achieve the aforementioned freedoms (Sen, 1990). Sen's focus is on the expansion of capabilities to improve quality of life, "and the valuable capabilities vary from such elementary freedoms as being free from hunger and undernourishment to such complex abilities as achieving self-respect and social participation." Thus participation in itself is seen to have social value as an end outside of the economic impacts that it can have on a development project. Participation, if included in a way that is intensive and empowering, can help to change internalised views of worthlessness in marginalised communities. It is rare that participation processes are built with this level of engagement due to the effort and specialised training involved in changing socialised norms, and thus in the Mooi Mgeni Transfer Scheme Phase II this level of participation was not reached.

While most participation literature views this debate in the context of developing countries with poor populations, the Mooi Mgeni Transfer Scheme Phase II brought a new element to this debate. The project affected community was socioeconomically diverse and not every contingent of the community was marginalised and looking to participation to improve their lives. The higher income community contingents merely hoped that participation would ensure that their lives were not unduly negatively affected. Thus this community centred approach does not only encompass participation as a means to empower but also as a means to maintain one's previous quality of life.

Other labels for this contrast between project driven and community driven participation are technical versus political participation and efficiency versus empowerment (Cleaver, 1999). The project driven approach is generally characterised by top-down decision-making, while

the community focused approach allows more of the decision-making to be centred at the community level and focused on community needs (Botes & Van Rensburg, 2000).

**Participation Models**

Situated within these debates of community and project driven participation, participation theorists have populated the field with many models of participation in order to assess the type or degree of participation present in projects. The foundational model for participation is Arnstein's (1969) "ladder of participation." The ladder ranges from "non-participation" at the bottom rung, "tokenism" at the middle rung (which constitutes symbolic participation that does not give participants actual control in decision-making) to "citizen control" at the top.

However, other models have been developed that are both more detailed and centred on participation from the participant perspective rather than only that of the practitioner (Cornwall, 2008). An example is Pretty's typology of participation identified in Table 1 below. In the Mooi Mgeni Transfer Scheme Phase II and many similar national development projects, participation generally manifests as a combination of the middle rungs of Pretty's participation ladder. Given the technical nature of such projects, participation is often "passive," which only serves the purpose of informing community members about the impending project (this generally occurs through public notices about project developments). However, public meetings generally fall under "participation by consultation," as they contain a question and answer section where community concerns are noted. "Participation for material incentives" was utilised in this project when the poorer contingents of the population were offered jobs on the dam and pipeline; however, they were not equipped with significant skills that would empower them beyond project completion. "Functional participation" was especially evident when discussing mitigation. For example, project authorities eventually utilised the knowledge of community members when having to re-plan the pipeline route, so that the pipeline would require the least social and environmental mitigation and be most cost-effective. This was closest that participation came to community decision-making, and was even viewed by some project authorities as unnecessarily intensive participation. Formal participation never reached the last two rungs of the ladder, as project authorities' purpose for participation was strongly tied to the project and not to community empowerment on its own. However, certain marginalised sections of the community expected participation to reach these levels of community involvement and power, which resulted in conflict in the participation process.

Table 1: Typologies of Participation

| Typology | Characteristics of each type |
|---|---|
| Manipulative participation | Participation is simply a pretence, with "people's" representatives on official boards but who are unelected and have no power. |
| Passive participation | People participate by being told what has been decided or has already happened. It allows unilateral announcements by an administration or project management without any listening to people's responses. The information being shared belongs only to external professionals. |
| Participation by consultation | People participate by being consulted or by answering questions. External agents define problems and information gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views. |
| Participation for material incentives | People participate by contributing resources, for example, labour, in return for food or other material incentives. Farmers may provide the food and labour, but are involved in neither experimentation or the process of learning. It is very common to see this called participation, yet people have no stake in prolonging technologies or practices when the incentives end. |

| | |
|---|---|
| Functional participation | Participation seen by external agencies as a means to achieve project goals, especially reduced costs. People participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision-making, but tends to arise only after major decisions have already been made by external agents. At worst, local people may still only be co-opted to serve external goals. |
| Interactive Participation | People participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is seen as a right, not just a means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structured learning processes. As groups take control over local decisions and determine how available resources are used, so they have a stake in maintaining the structures of practices. |
| Self-mobilisation | People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how the resources are used. Self-mobilisation can spread if governments and NGOs provide an enabling framework |

| | |
|---|---|
| | of support. Such self-initiated mobilisation may or may not challenge existing distributions of wealth and power. |

*Source: Pretty (1995) P.1252*

**Difficulties of Participation**

Although listing the ideal practices for effective participation on paper is relatively uncomplicated, it is often exceedingly difficult to execute them in practice. Large transfers of power to local community members, especially in large infrastructure projects such as dams, are very challenging. Often decisions are complex and require highly specific professionals, and the idealised participation level of complete control by participants is nearly impossible (Brett, 2003). Khwaja (2004) asserts that certain aspects of a project, such as choosing which project to implement based on needs, and maintenance of the project, benefit from high levels of community participation. However, decisions that require specific technical knowledge, such as site selection and project design, will ultimately provide a greater benefit to communities if left for specialist practitioners to decide. Khwaja supports this claim by providing data that an increase in community participation in nontechnical decisions leads to the betterment of project maintenance, but the same increase in participation in technical decisions leads to a decline in maintenance (Khwaja, 2004). If a project fails due to inappropriate participation, it will also likely lead to less beneficial by-products in quality of life for community members (such as ongoing employment or infrastructure management skills). This raises the point that empowerment and improved livelihoods might not always be complementary. Although these assertions are often true, the notion of limiting participation in overly technical projects can also be taken too far. In the case of the Mooi Mgeni Transfer Scheme Phase II, the dam and pipeline planning were viewed as best left to technical experts, but this led to the neglect and undervaluing of certain social concerns, such as the pipelines' path through residential properties and the damaging effects of the dam on local irrigation. These then caused conflicts later in the project that still had to be dealt with.

Additionally, constraints of time and finances, which are out of the control of on-site practitioners, often hinder the possibility of in-depth participation (Hughes, 1998). Although the knowledge derived from participation can cut costs in certain situations, in others the intensive effort can be very costly (Brett, 2003). A higher cost and difficulty of participation

generally correlates with more underdeveloped countries and communities (which are unfortunately also the situations where participation is most needed). Communities with low levels of technical skills as well as political and social institutions traditionally unsupportive of public participation pose significant challenges for the incorporation of high levels of public participation (Choguill, 1996). In the Mooi Mgeni Transfer Scheme Phase II, the empowerment of marginalised communities was not in the budget of project authorities, who emphasised that the end water users in urban areas would end up paying for any additional costs.

Participatory processes can also put a strain on the participants themselves. Involvement at the most intensive levels of participation can take immense amounts of meeting time, taking time away from the jobs of community members who may be struggling to make ends meet. Participants also might excuse themselves from participation to avoid the conflict that often ensues with other community members or practitioners (Brett, 2003). Past failed experiences with participation due to the abovementioned hindrances for practitioners (technological deficits, unsupportive institutions, time and money constraints) may also discourage community members from being motivated to participate (Botes & Van Rensburg, 2000). These deterrents may make community members more than willing to defer their participation rights to professionals to handle projects (Botes & Van Rensburg, 2000, Brett, 2003). In the Mooi Mgeni Transfer Scheme Phase II, some community members expressed fatigue with the community participation process which ran for over ten years, and became less proactive towards the end of the project as a result.

**Participation and Power**

***Forms of Power***

Thus far, this literature review has largely focused on the design of participation processes in development and the implications thereafter. However, mainstream participation literature often lacks an analysis of the power which is inherent in any participatory space, and furthermore the active use participation by community members to exert power and resist participation that they perceive to be unjust. It is thus crucial to understand the concept of power and its manifestation in participation. Although power is an underlying force which often shapes participatory spaces, it is often not explicitly stated by those who implement participatory processes or even recognised by some stakeholders involved. Power is

traditionally viewed as possessed almost entirely by one actor or group of actors, at the expense of other actors who do not have agency to also exert influence (Campbell, 2013, Gaventa, 1980). This is because those who have power often have some combination of control of resources, information, or power bestowed by institutions, which allows them to steer the outcome of participatory engagements in the direction of their interests (Speer & Hughey, 1995).

John Gaventa (2006) identifies three forms of power: visible power, invisible power and hidden power. Visible power is the most explicitly recognised form of power in participation, described as "the formal rules, structures, authorities, institutions and procedures of decision making." For example, this form of power could refer to a national law which states that there should be two EIA public participation meetings for projects of a certain size, chaired by an independent consultant. Given that visible power is most accepted and easily recognised, it also the easiest to target for change. For example, in response to community members feeling they have little opportunity to exercise their voice in public participation meetings, project authorities could increase the number of meetings or the time allocated to comments and concerns.

Hidden power is often not formally recognised, but understood by many stakeholders nonetheless. It refers to the political agenda setting, where institutions or individuals with more power control who has access to the spaces where visible power is exercised. For example, in the Mooi Mgeni Transfer Scheme Phase II, community members from a politically divided township asserted that project authorities chose a representative from a certain political party which aligned with their agenda to represent a community at a public participation meeting, to ensure that the outcomes were in their favour.

The last form of power, invisible power, is the least tangible but can also be the most disempowering for community members. Invisible power shapes individuals' beliefs and norms, and consequently their perception of their role in participation. Invisible power can be built and strengthened over generations, and can begin to ingrain a subconscious identity of inferiority and marginalisation, which encourages passive acceptance of the ideas and directions of project authorities (Gaventa, 2006). For example, generations of lack of education in the most marginalised communities in the MMTS II ingrained a belief that community members had nothing to contribute and project authorities know what is best, and thus made community members hesitant to express their views in participation forums. Often

a sense of fatalism arises resulting in a lack of motivation and faith one has in affecting their own condition (Campbell, 2013). Rarely do projects have the time, finances or intrinsic motivation to tackle this form of "invisible power," which often requires extended efforts in relationship and capacity building. Furthermore, project authorities may not even recognise systemised disempowerment, and rather view it as laziness or lack of interest in participation.

In projects which prioritise empowerment in their participation agenda, it is much more likely that project authorities will be willing to relinquish aspects of visible and hidden power, in order to increase the balance of power and decision-making towards community members (Choguill, 1996). Such projects might even try to target invisible power by seeking to understand marginalisation and encourage proactive behaviour. However, effective dismantling of invisible power is difficult and rare, and would likely only be attempted in a project that is centred around community development (for example, a school built and maintained by and for a community), rather than a project that includes community participation as a necessary exercise of social responsibility because the project incurs social impacts (Choguill, 1996). In projects such as dams, it is more likely that project authorities will exercise formal and hidden power in order to ensure that participation is utilised in a way that is most beneficial to project goals.

***Resistant Participation***

Scholars of power such as Michel Foucault, argue that power is not necessarily static and always maintained wholly and immovably by those with greater resources and authority. This view of power posits that power is complex and can also be uncovered and utilised by other actors in society (Campbell, 2013, Foucault, 1982). Applied to development projects, this view on power would maintain that community members can find opportunities to exert power through their participation and resist the power of traditional authority.

When unpacking the capacity to resist formal power through participation, it is necessary to differentiate between invited and invented spaces of participation. According to Faranak Miraftab, invited spaces of participation are those spaces carved out by traditional figures of power, where community members are encouraged to participate. Any formal participation processes held throughout development projects would be an example of an invited space (Miraftab, 2004). Given that project authorities control the agenda in these spaces, exercising community power and objectives through participation in these spaces may be difficult.

However, given the democratic nature of South Africa's constitution, there exists a robust legal framework that community members can utilise in invited spaces in order to push for their objectives of participation to be achieved. For example, in an Environmental Impact Assessment process, community members can appeal a decision for a project that they believe will cause them significant detriment. Through using legal means, this gives them the power to have a project amended or outright rejected. However, in order for such citizen power to be realised, there must be an established independence between project authorities and the independent authority who presides over legal objections. It is also important to note that these measures are only available to limited subsets of society that have both the education and resources to take advantage of legal rights.

If community members are not "invited" to spaces of participation, they also have the possibility to exercise power through "invented" spaces (also designated claimed or created spaces) (Miraftab, 2004). It is more likely that those who create a space are able to exercise the most power within it, as invented spaces are created without the objectives of an authority figure, and have autonomy in creating their own direction (Cornwall, 2002, Gaventa, 2006). Invented spaces often come in the form of various social movements, such as protests, strikes, mass assemblies and meetings. Invented spaces are often looked down upon by formal institutions as improper and counterproductive; however, they have nonetheless in various cases succeeded in pushing change when power is limited in invited spaces. Prominent examples of invented spaces in history abound, such as the civil rights movement in the United States and the recent Arab Spring. Much conflicting research exists on the determinants of the success of these movements, with different explanations highlighting a common grievance, the ability to mobilise resources, and empowerment/recognition of agency (Campbell, 2013, McCarthy and Zald, 1977). This section demonstrates that when analysing participation, it is imperative to not only examine the various ladders of participation and lists of best practice, but to identify power in participatory processes and how community actors can mobilise for or against such power. The next sections will further situate the preceding discussion of participation in the context of dam development and South African legislation.

**Dam Development**

Evidence of the existence of dams utilised for water storage dates as far back as 3000 B.C., and by 2000 B.C. dams for irrigation and water supply became commonplace. However, it was not until the 20th century that the explosion in growth of dam production really took hold, and was championed along with modernisation theory as a source of growth and development (WCD, 2000). Dams are utilised for industrial purposes, such as the management of water resources related to food, energy, flood control and household uses. They additionally foster job creation both in construction and through the creation of electricity-based export industries (WCD, 2000). While in 1945 approximately 5,000 dams existed worldwide, at the turn of the century that number increased to 45,000. Especially throughout the Cold War, dams were promoted as a symbol of dominance for the world's competing superpowers (Nixon, 2011). The Western world is now currently reaching its capacity in dam production, yet dam development is increasing rapidly in the rest of the world (WCD, 2000).

Both internationally and now specifically in the African context, dam development has become increasingly linked to nationalism. Dams are framed as an integral component of development, not only for the purpose of economic viability, but also as a symbol of a "modernised" state that is catching up to the developed world. Dams are paraded as highly visible and tangible evidence of thriving independence for formerly colonised states in Africa (De Wet, 2000, Nixon, 2011). It is thus the responsibility of the nation to unify around the cause of dam development, and those disadvantaged by dam development should view it as a sacrifice for a greater good, the betterment of the nation (De Wet, 2000, Nixon, 2011). In South Africa, President Hendrick Verwoerd framed a campaign for the development of the Orange River Dam in the 1960s as a means to ensure that the precious and scarce resource of water was utilised in the best manner possible. The Orange River dam was a necessary sacrifice in order to prolong and further develop the civilisation of South Africa for future generations (Marx, 2015). This sentiment continues today, compounded by a growing crisis of water scarcity in South Africa. The Minister of Water Affairs spoke of the national development drive for Mooi Mgeni Transfer Scheme before its commencement: "This is a multi-year project which will have a long term impact on South Africa's economic development and it will contribute a great deal to our new economic growth path imperatives" (BuaNews, 2011). Despite the national benefits of dams, their environmental and social impacts have rendered them highly controversial. Significant ecological impacts

include “the physical, chemical, and geomorphological consequences of blocking a river,” which negatively alters the functioning of ecosystems. However, due to the limited scope of this research, the focus will be placed on the social impacts of dam development. Dams can alter the primary economic means for communities, affect their health, and destroy sites of cultural heritage (Égré &Senécal, 2003). However, the largest impact of dams by far is the mass displacement and resettlement of nearby communities, which frequently occurs. At the time of the World Commission on Dams (WCD) report in 2000, between 40 and 80 million individuals had been displaced by dams since their inception (WCD, 2000). With displacement, often communities who have been dependent on their relationship with the land for generations are abruptly removed from this context of familiarity and survival. In a World Bank study evaluating 192 of its own rehabilitation and resettlement projects, only one was deemed adequate (Nixon, 2011). One of the most devastating realities of dam development is that dam construction, often in rural areas, tends to harm poor and marginalised communities most. Their lack of social, political and economic power (invisible power) and often technically informal claims to the land do not afford these communities a voice in the process; they are considered to be virtually invisible. Paradoxically, they are “developmental refugees”: impoverished and threatened by what is championed as unequivocally positive developmental growth. Furthermore, the water and electricity services of the dam almost never accrue to these communities, but rather to urban centres (WCD, 2000, Tilt et al., 2009, Nixon, 2011).

A recent prominent example of the vast social impacts of dams is the Lesotho Highlands Water Project (LHWP) (Tilt et al., 2009). Rural community members experienced a disproportionate amount of costs from the project, including lost access to land and resources, affecting both their living situations and employment. Very few local community members were employed on the project, with most labour comprised of migrant workers. The Rural Development Program (RDP), intended to bring growth to the community, was slow to take effect, as neither Lesotho, nor South Africa (who commissioned the dam), wanted to shoulder the costs. Even after it was finally implemented, the effort put into the RDP was debatable, as was its effectiveness. As indicated in the literature, marginalised groups suffered greater disadvantage in this project, as women reported increased workloads and less access to resources and compensation. Most formal project positions were only available to men, so women’s work ended up mainly in domestic services for project authorities living in the area, which was unregulated and thus poorly paid. This effect was enhanced by competition from

the inflow of women moving into the project area from outside to find work. Additionally, the dairy and poultry training programmes designated for women required capital investments, in contrast to the wage labour for men. However, the project did not tackle the traditional cultural norms which required women to get permission from husbands or fathers to access credit, thus both reinforcing gender inequality and leaving few opportunities for women (Tilt et al., 2009). These findings only skim the surface of the immense social impacts of the LHWP, demonstrating the need for a more proactive approach to help communities benefit from dam development.

Due to the widespread concern over the failure to adequately measure and prevent the impact of dam development on communities, Social Impact Assessments (SIA) have become widely utilised. SIA can be broadly defined as "the process of assessing or estimating, in advance, the social consequences that are likely to follow from specific policy actions or project development, particularly in the context of appropriate national, state, or provincial environmental policy legislation" (Burdge & Vanclay, 1996). The SIA is either conducted on its own or as a component of a larger Environmental Impact Assessment (EIA). Its objective is to both allow for better decision making as to whether a development project should proceed and to minimise harm and maximise benefits for nearby communities affected by projects that do proceed (Vanclay, 2003).

A prominent component of SIA is eliciting the participation of those affected to assist in minimising harm and maximising benefits to them. Public participation processes are often included in the SIA component (Tilt et al., 2009). Participatory SIA is stated to be both instrumental as a means to achieving community buy-in and increasing dam effectiveness and sustainability, and as a means to promoting empowerment and betterment of the lives of communities (Tilt et al., 2009, Gagnon et al., 1993). However well-meaning SIA practitioners may be, the practice is nonetheless often couched in the neoliberal means to an end framework of dam development. Stated in the WCD Report as a "rights and risks" approach, participants' "rights" extend to consultation and representation, with the report even going as far as stating that consent is a "right," exemplifying that there is actually little agency in community rights (WCD, 2000). This implies that any major contestations that upset the proposed agenda are usually not welcomed, given that these stated rights do not extend beyond being informed.

Gagnon et al. (1993) have conducted multiple cases studies of dams to determine whether participation that actually empowers and improves the livelihoods of community members is possible within Social Impact Assessments. They found that if practitioners were willing to adapt and modify formal Social Impact Assessment procedures to fit better with community priorities, and if communities were allowed to have more control over technical inputs in Social Impact Assessments, community participation would be able to have more substantial impacts for community members beyond technocratic assistance to the project. There is usually little that Social Impact Assessments can achieve in the realm of actually preventing dam development, and the focus generally rests on the ability and willingness of practitioners to utilise participation to implement extensive mitigation and compensation efforts (Cashmore, Gwilliam, Morgan, Cobb & Bond, 2004). This section demonstrates that the scale of dam construction makes social impacts inevitable, yet they are nonetheless advocated by governments throughout the world as a necessary pillar of national development. Although international best practice has made strides in tackling the mitigation of social impacts, there is still an overarching lack of agency in participation spaces for affected communities. The next section will delve further into South Africa's specific legislative framework for the various forms of participation in dam projects.

## South African Legislative Framework for Participation in Dam Development

### *History of Participation in Environmental Management*

In South Africa, participation in dam development is preceded by a history of legal developments. Prior to the abolishment of apartheid, the opportunities for public participation in development projects in South Africa were extremely limited. Following the trend of Western countries, The Environmental Conservation Act (ECA) of 1989 institutionalised the need to protect the environment from human activity, and also made provision for environmental impact reporting (DEAT, 2004). However, only with the new Constitution in 1996 did the government highlight the connection between development and the protection of South Africa's citizens, implying the need for citizen participation in development projects. Section 24 of the Constitution states that "everyone has the right… to an environment that is not harmful to their health or wellbeing" (Republic of South Africa, 1996). Requirements for participation in large environmental projects such as dams were then mandated in 1997, when the first Environmental Impact Assessment (EIA) regulations were promulgated in terms of the ECA (Republic of South Africa, 1997).

1998 marked a turning point in environmental legislation, when the National Environmental Management Act (NEMA) was passed to replace the Environmental Conservation Act (Republic of South Africa, 1998). NEMA institutionalised the term Integrated Environmental Management (IEM), which outlines a cooperative environmental governance framework, and stresses the importance of environmental and social considerations not only in pre-project impact studies, but throughout the lifespan of a project. This Act aligns much more closely with the Constitution's focus on democratic participation in development and the environment. NEMA emphasises the importance of public participation in order to ensure that environmental laws are enforced, and that development is not only economically sustainable, but also environmentally and socially sustainable. In accordance with the Constitution, transparency and public access to information is emphasised. NEMA also posits that participation can be a vehicle of empowerment, to ensure that previously disadvantaged persons are not only included, but that their traditional forms of knowledge are recognised and that environmental education and awareness is promoted (Republic of South Africa, 1998).

***Operationalising Participation***

The Department of Environmental Affairs and Tourism (DEAT) in 2002 released a 20-part Integrated Environmental Management information series to help guide the application of IEM. Information Series 4 on Stakeholder Engagement speaks directly to public participation (DEAT, 2002). The term engagement replaces participation to indicate a more interactive, empowering process for community members. In the series, different levels of public participation are identified in a table, and they are similar to much of the general literature on public participation. From lowest to highest level of involvement, the levels are: inform, consult, involve, collaborate, empower. As participation moves from informing, to consulting, to involving, community members have increased voice; however, they only acquire some decision-making power at the collaborating stage. The authors indicate that different levels of participation may be most appropriate for different activities throughout the lifespan of a project.

It is important to note that "protest," which is rooted in South Africa's current democratic culture from the anti-apartheid struggle, is also identified, but not included in the participation table, as it is viewed as a breakdown in stakeholder engagement. In the words of the authors, "Protest is adversarial and will not be dealt with further in this document"

(DEAT, 2002). However, conflict management, which is the first step in dealing with differences between project authorities and community members before conflict such as protest erupts, is only vaguely mentioned in the series. Mechanisms for conflict management are very briefly defined in a table located only in the series' appendix. Thus the way the series is structured does not indicate much room for community members to disagree in the stakeholder engagement process. The document does highlight that conflict management is an area that needs improvement based upon past reflections on past projects (DEAT, 2002). The Mooi Mgeni Transfer Scheme Phase II led to protests, appeals, and project delays due to conflicts in the participation forums, and thus signals a need for the Department of Environmental Affairs and Tourism to revise and deepen their conflict management procedures.

***Current Applicable Environmental and Social Legislation***

Multiple environmental impact and management laws and guidelines as well as the Constitution all contribute to the methods through which affected communities are incorporated into Integrated Environmental Management. This section will detail these legislative frameworks, and in particular those that are relevant to dam development and the Mooi Mgeni Transfer Scheme Phase II. It first covers the Environmental Impact Assessment (EIA) which governs participation before the implementation of the project, and the Environmental Management Plans (EMPs) and Environmental Monitoring Committees (EMCs) which govern participation during and after implementation. It then delves into expropriation and relocation legislation, which applies to those directly affected by a dam.

*EIA Regulations*

As indicated in preceding sections, EIA regulations were first mandated in 1997. According to the government-gazetted Regulation 1182, "dams, levees and weirs affecting the flow of a river" and "schemes for the abstraction or utilisation of ground or surface water for bulk supply purposes", inter alia, are Schedule 1 activities which must undergo pre-impact studies conducted by independent consultants (Republic of South Africa, 1997). Regulation 1183 lays out the requirements for these projects, which all must undergo a scoping process to identify the possible environmental issues. Within the scoping process, project authorities must conduct a Public Participation Process (PPP), in which all interested and/or affected parties can comment. If the relevant overseeing authority (in this case the Department of

Environmental Affairs) predicts that a project will have significant scope and/or impact, the project will then additionally undergo an Environmental Impact Assessment (EIA), which requires further, more concrete research on possible impacts and their alternatives, as well as a new Public Participation Process. After the EIA report is released, interested and affected parties have the opportunity to appeal the project if they believe that it does not adequately consider their social and environmental concerns (Republic of South Africa, 1997).

In accordance with the more participatory nature of the National Environmental Management Act, the government released new impact assessment regulations in 2006. These guidelines go into much more detail on the public participation process, rather than merely mandating its existence (Republic of South Africa, 2006). Public participation regulations and guidelines have since continued to be updated in order to further expand and amend what is expected of public participation (with the 2012 regulations most recent). The Department of Environmental Affairs and Tourism also released detailed guidelines to accompany each updated regulation. The guidelines specify the ways in which interested and affected parties must be notified of the PPP (newspaper, radio, written notices etc.) as well as the different participation methods (public meetings, focus groups, individual meetings, on-site information desk, etc). Most importantly, the guidelines identify the roles that community members are encouraged to take on in the participation process. These include the identification and prioritisation of issues, suggestion of alternatives, clarification of their needs and expectations, and contribution of their knowledge (DEAT, 2005). However, the participation indicated in these guidelines and regulations is still a relatively one-way process, with interested and affected parties expressing their concerns to project authorities, who then ultimately decide what to take into account when mitigating impacts. A couple participants that were interviewed raised the concern that that EIA's end up only being a "tick-box" process, where the mandatory requirements for participation are fulfilled to a minimal degree, only to ensure that projects are compliant on paper. This is an example of the project centred approach to participation, in contrast to a participation process that places the importance of ensuring that community needs are met above merely following minimal legal requirements.

*Post-EIA Environmental Management*

The greatest focus of global environmental sustainability frameworks has been on the EIA stage, before projects are actually implemented. However, South Africa's Integrated Environmental Management series stresses the importance of ensuring that Environmental Impact Assessments are actually followed through in the implementation phase, and that new issues that arise are dealt with. This section will focus on two post-EIA environmental management mechanisms, Environmental Management Plans (EMPs) and Environmental Monitoring Committees (EMCs), as they were both utilised in the Mooi Mgeni Transfer Scheme Phase II. An EMP is a document that provides a "description of the methods and procedures for mitigating and monitoring impacts." (DEAT, 2004). It is essentially a continuation and practical implementation of the EIA, which sets out a detailed plan for the measures and costs of impact mitigation throughout construction, operation and decommissioning. Unlike the Environmental Impact Assessment, it can be updated and altered throughout the different stages of the project.

Environmental Monitoring Committees are committees that meet regularly once implementation begins, and are comprised of various stakeholders involved in and affected by the project, including government officials, engineers, construction contractors, NGOs, and interested and affected community members. According to the Environmental Monitoring Committee series, EMCs are formed to ensure that the EMPs are actually being implemented, and also as a tool for continued communication between project authorities and community members (DEAT, 2005). Thus EMCs provide both the opportunity for project authorities to explain decisions and inform community members of upcoming project activities, and the opportunity for community members to discuss their concerns and make recommendations. The series; however, maintains that Environmental Monitoring Committees have a "watch-dog" role: while the Committee can make comments and suggestions, formal decision-making powers still rest with the overseeing environmental authorities (DEAT, 2005). This bred conflict in the Mooi Mgeni Transfer Scheme Phase II, as community members felt that they should be able to utilise the EMC to rectify new issues that arose during implementation; however, any major changes could not be made without a long process of application to and approval by the Department of Environmental Affairs.

Overall, South Africa has one of the most conducive legal and institutional frameworks for participation in Africa, with environmental laws that are comprehensive and outline many

participation requirements. Framed by the explicit focus on democracy and participation in the Constitution due to South Africa's history, the National Environmental Management Act places the concerns of people at the centre of environmental management, as well as empowerment of historically disadvantaged persons (Republic of South Africa, 1998). However, documents on the Environmental Impact Assessments, Environmental Monitoring Committees and Environmental Management Plans take the tone that participation should be geared toward the exchange of information and concerns rather than collaborative and empowering decision-making. This is both due to the technical nature of infrastructure projects such as dams, and the time-consuming nature of more intensive participation. Thus, there is a bit of a disconnect between the broader legislation governing participation in development and the guidelines and regulations which operationalise it, and even perhaps a disconnect between all of the above documents and the on-the-ground manifestation of the projects themselves.

Additionally, the vast residual economic inequality that exists in post-apartheid South Africa today is understood to pose challenges for adapting public participation and negotiation processes from paper to reality. The Mooi Mgeni Transfer Scheme Phase II demonstrated that the needs and concerns of someone who cannot afford basic services will likely be vastly different from the needs of a wealthy landowner who is concerned about daily construction impacts and compensation. For example, the former might be more concerned about gaining employment from a public participation process and the latter most concerned about a construction site running through their plot of land. Balancing these disparate concerns is difficult, especially when, as indicated in the preceding power analysis, historically disadvantaged individuals are in a less empowered position to vocalise their concerns (Murombo, 2008).

*Expropriation Legislation*

Dam projects often require large areas of land to be cleared, and thus legislation pertaining to expropriation of land and displacement of persons by the government is additionally relevant to discuss. Expropriation of land in South Africa is principally governed by the Expropriation Act of 1975 and the Constitution. According to the Constitution, land may be expropriated "for a public purpose or in the public interest" (Republic of South Africa, 1998). The Expropriation Act validates this claim with the statement that the Minister has the right to expropriate land "for public and certain other purposes." (Republic of South Africa, 1975).

Although those whose land is expropriated may not be particularly happy with the decision, the public generally recognises the right to expropriate in the public interest.

However, compensation for expropriated land is much more contentious, despite the clarity of the Constitution and the Act. The Expropriation Act bases compensation on the current market value of land, as well as any actual financial loss caused by the expropriation. The Constitution adds more considerations, such as the current use of the property, "the extent of direct state investment and subsidy in the acquisition and beneficial capital improvement of the property," the history of the acquisition (particularly to recognise the unlawful acquisition of land during apartheid), and the purpose of the expropriation. Despite the other considerations, market value is the most standard measure used to expropriate. However, the other considerations leave significant room for debate, both in terms of the government's ability to use its discretion to consider public interest factors which might lower compensation, and also the difficulty of measuring the loss from the current use of the property (such as current and future lost farming business profits). Additionally, the common law principle of "restitutio in integrum," or, the restoration of an injured party to their previous position, is often commonly referenced by both project authorities and community members in expropriation processes such as the Mooi Mgeni Transfer Scheme Phase II, despite its lack of recognition in South Africa's expropriation law. This principle essentially states that community members should not be in a worse off position after expropriation, and is much vaguer and more favourable to the expropriated individual than market value compensation.

Additionally, it is important to elaborate on the expropriation of "rights" in addition to land, as dams can affect citizens' right to utilise water for activities such as irrigation and cattle feeding. The Expropriation Act states that compensation must be an "amount to make good any actual financial loss caused by the expropriation or the taking of the right." However, the Constitution also states that "everyone has the right to…secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development" (Republic of South Africa, 1996, Republic of South Africa, 1975). Thus this creates room for conflict in the case of an expropriated right which is justly compensated, but still impedes future economic or social development. An example in the Mooi Mgeni Transfer Scheme Phase II is when a water right can no longer be utilised for irrigation or cattle feeding to sustain farmers' future livelihoods.

*Informal Land Ownership Legislation*

Although expropriation legislation governs the displacement of those who have formal ownership of land, in many cases, especially in developing countries, land which is expropriated is inhabited by people living informally on land. Often, such communities have been living on the land for decades, and also may be working informally for a landowner, but do not have legal land ownership. When this category of people is displaced, there is no national legislation which specifically protects them or governs how they will be relocated (Relocation Action Plan for People Living in the Dam Basin, 2012, Project Authority 1, Project Authority 7). If they are living on tribal land, the onus technically rests on the state, and if they are living on private land, the onus rests on the landowner on who's property they are living. Due to the lack of protective legislation and in most cases existing poverty and marginalisation of informal residents, they are often left in a much worse off position when they are displaced by infrastructure projects such as dams and mines. Often, those who may have lived off of the land in order to fulfil their basic needs can no longer live sustainably if they lose their land. Given that their livelihoods are not under their own jurisdiction; their participation is also less empowering than other landowning affected individuals (Picciotto and Edward, 2000).

Even in cases such as the Mooi Mgeni Transfer Scheme Phase II, where informal landowners lived on private land and the private landowners are responsible for their relocation, their relocation is still generally recognised in the EIA, and project authorities have a role in ensuring that private landowners act responsibly. Although South Africa does not have pertinent legislation governing this matter, the World Bank offers guidelines for the proper management of involuntary resettlement, which covers both formal and informal land claims (World Bank, 2001). Project authorities generally take these guidelines into account in order to comply with international best practice and avoid controversy. In South Africa, this is especially the case due to the past injustices afflicted upon informal landowners during the apartheid era. For example, with the construction of the Orange River Dam in the 1960's, while white landowners were compensated, black and coloured workers living on their properties were essentially left behind, having lost their homes, jobs and receiving no compensation (WCD, 2000). Given the negative public backlash from project authority inaction in the Orange River Dam and other controversial projects, project authorities took responsibility for the relocation of workers in the Mooi Mgeni Transfer Scheme Phase II.

However, their actions were delayed due to an ongoing dispute of responsibility with landowners, at the expense of the powerless workers. The issues surrounding relocation will be elaborated upon in the empirical chapters. The World Bank guidelines address these issues, stressing an adequate participation process, financially supported resettlement, and assistance with finding new opportunities for employment. They also state that efforts should be made to resettle rural communities in rural areas where possible, to lessen the disruption to livelihoods. Most importantly, the guidelines state that the standard of living of displaced communities should be restored to the previous level, if not better, referencing the concept of "restitutio in integrum" as indicated in the preceding section.

Given the controversy surrounding dam projects throughout the world due to the social impacts of expropriation and displacement, South Africa has developed a particularly strong legislative foundation to govern such processes. However, the ambiguity in some aspects of the compensation regulations and the governance of informal landowners leaves much room for conflict, especially given the highly emotional and impactful nature of being physically uprooted from one's land.

## Chapter III: Methodology

### Qualitative Study

This research study utilised a qualitative case study design. Qualitative methodology examines how people attribute meaning to their social experiences and situations. This study utilised qualitative case methodology because perceptions of public participation processes are subjective and based upon stakeholders' experiences and roles in the process (Hesse-Biber & Leavey, 2011). A case study allows for stakeholders to tell their stories in greater depth, from which perceived realities can be constructed. The selection of one case study is based upon the level of depth that is desired given time constraints (Punch, 2000, De Vaus, 2001). Although it is a single case study, the case study contained embedded subunits, given that different demographics within the affected community were analysed and compared. A case study also delves into sufficient depth so that the context of stakeholders (such as their socioeconomic status or their relation to the project) can be analysed. Context is of great importance for my particular study, as the contexts of different community demographics affected the way in which they experienced the effects of the Mooi Mgeni Transfer Scheme Phase II (Baxter & Jack, 2008). This research takes an interpretive approach, arguing that meaning is constructed via interactions with humans and objects, and cannot be deconstructed independently of such. Therefore, it is impossible for an objective process for public participation to exist independent of the various stakeholders' experiences with the process, and stakeholders continually mould their perceptions and actions based on their experiences. This interpretation of reality aligns with an inductive approach to the research study. I avoided explicitly presupposing any theories regarding the participants' responses in advance, striving to form theories and judgments from the data that was collected (Hesse-Biber & Leavey, 2011, De Vaus, 2001). However, I acknowledge that my own inherent subjectivity can affect the interpretations and theories derived from data (Creswell, 2009). This study is primarily descriptive and exploratory, rather than explanatory, seeking to describe the perspectives on public participation in detail and then explore the actual processes which occur. (Punch, 2000, De Vaus, 2001).

**Research Process**

The research site for this study was in the Mpofana and Umngeni municipal areas, in the midlands of KwaZulu-Natal (KZN), South Africa, where the Mooi Mgeni Transfer Scheme Phase II is occurring. In order to choose this site, I first began by consulting a 2014 press release which detailed the progress South Africa's 2012 National Infrastructure Plan. This article contained details of all of the recent infrastructure development projects in the country and the stage which they are in. After researching many of the projects, the Mooi Mgeni Transfer Scheme was purposefully selected for several reasons. Firstly, the dam and pipeline construction was large enough to require an extensive environmental assessment and management procedure which includes public participation throughout. Also, through my background research I identified a diverse range of community stakeholders who were affected and involved, which represents a rich scenario for analysing public participation (Creswell, 2009). Throughout my research I began to identify key stakeholders involved, and grouped them into categories. On the project authority end, there were government officials who envisioned and controlled the overarching project, the client which implemented the project, consultants who managed public participation, and contracted engineers and construction companies. On the community end, there were affected landowners, their informal workers and tenants, underserved communities seeking to benefit from employment and community groups representing various interests (construction impacts, irrigation rights, ratepayers organisations etc.).

**Research Methods**

***Interviews***

The interview is perceived as the best way to uncover the perspectives of various stakeholders, in their own words. Observatory techniques (Case Study, Participatory Action Research and Ethnography) demonstrate process but not the opinions and perspectives that underpin the reason that a process occurs in a certain way (Hesse-Biber & Leavey, 2011). Thus interviews were the most crucial research method for this case study, due to the ability to utilise data from interviews to analyse how perceptions of participation can shape the public participation process. Analysing interview data did not only help to understand generalised perceptions of participation, but also to understand opinions on the actual process that did occur which were unique to the perspectives of different stakeholders.

The interviews conducted were semi-structured, because the focus of the study is on the participation process, and does not seek to explore other topics based upon interviewee responses (which is possible with unstructured interviews). However, the interviews were not completely structured as I acknowledged that respondents had information and knowledge relevant to the topic that I did not consider in advance (Hesse-Biber & Leavey, 2011, Punch, 2000). Interview schedules were divided into two sub-topics; firstly, descriptive questions about the public participation process that occurred, and secondly opinion-based questions on, inter alia: its efficacy, justice, and the general importance of public participation. However, the interviews allowed for some flexibility to explore new questions, as long as they were related to the topic of 'perceptions of public participation' (Hesse-Biber & Leavey, 2011). The interview guides were also not uniform for each interview, as this study gathered information from stakeholders involved in the participation process in very different ways, and thus question guidelines were tailored to their various roles. Two general interview guides were crafted: a community member guide, and a project authority guide. However, throughout the interview process these guides became less rigid, as the importance and role of different stakeholders was revealed, which altered the use of these guides. Questions from multiple interview guides were used for one interview, new categories of stakeholders arose, and new questions were formed as well. The original interview guides; however, are detailed in Appendix A.

This study utilised non-probability sampling for interviews, as a random sample is not able to target all of the desired views within specific chosen stakeholder populations (Creswell, 2009). Quota sampling was initially employed, as the emphasis of this study is on comparing the differing perspectives of public participation based on the stakeholder category to which individuals belong (Luborsky & Rubenstein, 1995). Thus certain populations, such as the government architects, Trans-Caledon Tunnel Authority (the State Owned Enterprise that is carrying out the Mooi Mgeni Transfer Scheme), various social consultants hired to monitor community involvement, and community members and local officials living in the project area, were targeted for initial interviews.

Within the quota sampling categories, purposive, convenience and snowball sampling were used. For example, purposive sampling, which chooses respondents based upon the particular research question and the information that specific respondents can provide, was used when the study attempted to secure interviews with specific members of the Department

of Water Affairs who were involved with the Mooi Mgeni Transfer Scheme. Even within the local communities, purposive sampling was utilised to attempt to represent the perspectives of specific groups (affected landowners, local community leaders, displaced workers andinterest-based community associations). However, when individuals in certain categories were difficult to access, convenience sampling, which is sampling based on ease of access, was utilised. For example, in certain categories of project authorities, the most involved individual could not be reached, and thus a colleague who was also relatively involved was interviewed. Snowball sampling - sampling based upon referrals – was also utilised, especially among community members, as less specific information regarding their roles and contacts was available in advance (Hesse-Biber & Leavey, 2011).

The size of the sample was 49 interviews, which were on average 20-30 minutes long. Interviews were mainly conducted on-site, in stakeholders' homes, or in public places such as coffee shops. Three interviews were also conducted in Gauteng province as key stakeholders were no longer on site. One interview was conducted over Skype and two by email when travel to the interviewees' location was unfeasible, and one follow-up interview was conducted by phone after the site visits.

***Document Analysis***

Document analysis relies on the observation that "we can learn about our society by investigating the material items produced within it" (Hesse-Biber & Leavey, 2011). The documents utilised in this study added diversity to the data, as opinions were often expressed much more fervently with more detail in public meetings held during the heart of an issue than in a one-on-one interview after the fact. For this study, primarily Environmental Impact Assessment and Environmental Monitoring Committee meeting minutes were utilised in order to obtain the perspectives of both those designing the participation processes, and the comments of community members involved in the process. These documents were all publicly available, although some were difficult to find online and thus were provided by various interviewees. These documents also helped to fill in important gaps where certain stakeholders could not be reached, given the range of sub-categories of stakeholders that needed to be consulted in order to form a robust analysis. For example, only one community member could be reached from the Mooi River Farmers Association, which represented an important stakeholder group. Thus the minutes from the Association's public participation

meeting helped to triangulate the interviewee's claims (triangulation refers to increasing validity of data by using multiple research methods) (Creswell, 2009).

**Data Analysis**

In order to make sense of the data and begin to draw conclusions, I used the common qualitative analysis tool of assigning categories from the data (specifically guided by the work of Ian Dey) (Dey, 2005). Given that the purpose of my study is to examine stakeholders and their differing perspectives, I first looked to categorise stakeholders. Immediate and obvious categories such as "project authorities" and "community members" were recognised first. However, within these categories, different similarities and dissimilarities emerged, which allowed me to further divide the stakeholders into subcategories based upon the uniqueness of the data. For example, among project authorities, most were proponents of the project and strictly tied to guaranteeing its success, while others were hired to be independent and allowed more room to dissent. Among the community, certain groups differed based upon their socioeconomic status as well as how the project affected them (for example, expropriating homes vs. offering opportunities for employment). From this exercise, distinct groups of stakeholders emerged built upon similarities, and thus their views of participation also contained similarities.

I next looked to create themes from the data, unpacking conceptual ideas that arose among different categories of stakeholders and were recurrent throughout (Miles and Huberman, 1985). For example, power was exercised differently by different stakeholder categories, and different categories also had different motivations for participation. Through uncovering these themes, I then began to link, or "splice" the data. This entailed connecting the different categories of stakeholders based on the themes. For example, how did one category of stakeholders exercise power over another? How did the motivation for participation differ from one stakeholder to another? From these connections I began to tell a story of how participation manifested among stakeholders.

**Ethics**

Ethical considerations were taken into account to avoid harm to participants involved and to avoid damaging the integrity of the research. The purpose of the research was made clear to all interviewees without deception, through detailed participant information sheets written in both English and Zulu (Marshall & Rossman, 2011, Creswell, 2009). Informed consent was obtained in writing or recorded for all interviewees, and confidentiality of respondents was respected through anonymity in reporting (Punch, 2000). When names had to be used in direct quotes, pseudonyms were utilised to protect confidentiality. Additionally, I researched this project extensively in advance to ensure that no harm could befall interviewees as a result of their participation in this study (Marshall & Rossman, 2011). In certain cases, community members asked if I would be able to help them with grievances suffered from the project, and my response was that my only assistance can be the publication of research to elucidate various issues surrounding participation in dam development. This was done to ensure that I did not make any promises of assistance to interviewees that I could not keep. Additionally, extensive scrutiny has been exercised in the final research report to ensure that it is an accurate account of the information that has been obtained, and information has been stored on a password protected computer (Creswell, 2009).

**Limitations**

The objective and uniqueness of this study is founded on its analysis of multiple stakeholder perspectives; however, this also represents a limitation in the study's validity given the diverse categories of stakeholders interviewed. It was impossible to ensure that an equal number of stakeholders were interviewed from each category indicated in the analysis, as some categories were broader than others and had more key stakeholders, while other stakeholders were more difficult to contact. However, in most cases where certain categories of stakeholders contained fewer actual interviews, they were in part compensated by the account of a key stakeholder who was very involved in public participation.

Given that some participants only spoke Zulu, a translator was required to obtain certain perspectives. Some depth of understanding and meaning was lost because of the need for translation, particularly the loss of opportunity for certain follow-up questions, as full translations were only obtained after the research visit. However, I conducted extensive

debriefings with my translator to ensure that the sentiments of the non-English speaking participants were captured as adequately as possible.

Given the time limitations and qualitative depth of this study, only one case study site could be selected. Time and knowledge limitations also did not allow the study to cover the environmental impacts in addition to the social impacts. The results can; however, contribute as a specific case to the body of research on public participation processes and the social impacts of dam development. The next chapters will begin to unpack the empirical results from the case study of the Mooi Mgeni Transfer Scheme Phase II, beginning with the context of the case study and ending with the analysis.

## Chapter IV: Context and History of the Mooi Mgeni Transfer Scheme Phase II

### Project History and Background

This chapter details the background surrounding the Mooi Mgeni Transfer Scheme Phase II, giving a brief summary of the context surrounding the project, the order of events and the actors involved, in order to help contextualise the participation process. As a country that is naturally water-scarce compared to many of its neighbours, South Africa now is facing a water crisis. In 2010, 8% of households in South Africa did not have access to water. The demand for water is growing, and exceeds the natural supply in the majority of the country, leading to predictions that the percentage of households without water will increase drastically in the coming years (AFD, 2012). Given the Constitution's guarantee that water is a basic human right, augmenting water supply has been a primary focus of the South African government. The National Development Plan aims to ensure that all South Africans have access to clean water by 2030, and in the 2012 National Infrastructure Plan, constructing new water infrastructure and improving existing infrastructure is a central concern, with many projects in addition to the Mooi Mgeni Transfer Scheme Phase II (MMTS-II) in the works, such as the De Hoop Dam and the Mokolo and Crocodile River (West) Water Augmentation Project. KwaZulu-Natal is one of the South African provinces experiencing water shortages, particularly in the rapidly expanding metropolitan areas of Durban and Pietermaritzburg, in which water shortages are hampering the growth of development and tourism (Coastal and Environmental Services, 2013). These motivations reveal two conflicting narratives behind the need for the Mooi Mgeni Transfer Scheme; a human rights based approach to the need to provide water to every citizen, and the modernisation theory view of the need for national growth and development at the expense of individual citizens (it could be argued that the Mooi Mgeni Transfer Scheme Phase II seeks to serve the development of urban populations at the expense of affected rural populations). However, in this case both narratives seem to be true at least in part, as the drought has seriously compromised access to water, while at the same time the country is continually pushing economic development and modern infrastructure.

The Mgeni River Catchment, which services the KZN metropolitan areas, is severely stressed from previous dam construction, which indicated that if a dam was to be built, there was need to transfer water to the area from another catchment. In 1983, the first water transfer from the Mooi River to the Mgeni catchment was initiated. The Mearns Emergency Transfer

Scheme was constructed in response to severe drought. Then in 2003, the Mooi Mgeni Transfer Scheme Phase I (MMTS-1) was initiated, allowing a more sustainable water transfer from the Mooi to the Mgeni River by enlarging Mearns Weir on the Mooi River. Thus the municipalities of the project region, Mpofana and Umngeni, had past experiences with development projects in their area.

Government officials knew decades prior to the Mooi Mgeni Transfer Scheme Phase II that another transfer scheme would be needed, and many community members had also been alerted to the possibility of a new dam and transfer infrastructure (Project Authority 5, Community Member 32, Community Member 26, Community Member 24). However, the community officially became involved in participation in the Mooi Mgeni Transfer Scheme Phase II with the first Environmental Impact Assessment, conducted in 2000. Initially it was recommended that the Scheme be split into two phases, 2a and 2b, with 2a consisting of a dam on the Mooi River and 2b consisting of the transfer infrastructure. This EIA was conducted under the 1997 EIA Regulations (derived from the Environmental Conservation Act of 1989) with more detailed guidance from the 1998 Department of Environmental Affairs and Tourism EIA Guidelines. This EIA included a separate Social Impact Assessment as one of its ten components. The EIA also included a Record of Public Involvement, which consisted of general public meetings, specific public meetings for different affected interest groups, and personal interviews with landowners who would possibly have land expropriated (WRP Consulting Engineers, 2002).

An EIA for the transfer infrastructure was completed in 2004, which assessed five different options and also had its own public participation included. The EIA received a positive Record of Decision from the environmental authority, in this case the Department of Environmental Affairs and Tourism (DEAT), meaning that the project could go ahead.

Due to various delays (approximately ten years of additional EIAs and specialist studies), the Record of Decision eventually expired (Project Authority 5). New Environmental Impact Assessments were conducted again in 2007. For the new 2007 Environmental Impact Assessment, an important part of the participation process, the scoping report, was not conducted. This is because the project authorities and the Department of Environmental Affairs and Tourism considered the studies done throughout the previous EIA to be sufficient to substitute a Scoping Report. Within this Environmental Impact Assessment, Social Impact Assessments were completed for the dam and pipeline, as well as a Socioeconomic Baseline

Study assessing the community demographics of the two potentially affected municipalities, Umngeni and Mpofana municipality. In regards to public participation, public meetings were again conducted, and the project was publicised throughout the community, with information provided by paper and a project website.

A positive Record of Decision was again issued by the Department of Environmental Affairs in June 2009. The final approval was for the construction of the 37M high Spring Grove Dam in the Mooi River, from which water would flow to the Mearns weir and Midmar Dam in the Mgeni catchment. The transfer infrastructure would consist of 5.8 megawatt pumping station and pipeline capable of pumping 4.5 m3/s that would run alongside the existing Mearns Pipeline, a rising main to a new break pressure tank in Gowrie Village (with the old one being demolished), and a new gravity main discharging to an expanded outfall on the Mpofana river. The pipeline would follow the same route as the existing servitude from the Mooi Mgeni Transfer Scheme Phase I, apart from the first small portion extending from the dam (Coastal and Environmental Services, 2012). The completed dam/pipeline combination would augment the water in the Mgeni System by 60 million m3/year, from 334mm to 394mm (Project Fact Sheet SGD website). Additionally, the local water department, Umgeni Water, planned a separate pipeline to initially run along the servitude of the Mooi Mgeni Transfer Scheme Phase II but then diverge to provide water to the local surrounding areas, given that the MMTS II would only supply Durban and Pietermaritzburg with water.

Two appeals were lodged against the Record of Decision, one from the Mooi River Farmers Association against the dam, which was eventually withdrawn, and another from the Mziki Homeowners Association against the pipeline, which was upheld by the Minister of Justice and Constitutional Development. While the implementation of the dam was allowed to proceed, the Minister mandated that a new Environmental Impact Assessment with public participation be conducted for the pipeline, as the appeal stipulated that not enough options were considered for the pipeline placement. Impoundment of the dam began in March and it was completed in October 2013, while at the time of writing the pipeline is still being constructed.

Figure 1 shows a diagram of the current water transfer schemes on the Mgeni and Mooi River, including the Mearns Energy Transfer Scheme/ Mooi Mgeni Transfer Scheme Phase I and the addition of the proposed Mooi Mgeni Transfer Scheme Phase II on the Mooi River. The diagram helps to show the current stress of the Mgeni river from existing dams and why

the Spring Grove Dam was instead built on the Mooi River with a transfer pipeline to the Mgeni River. Figure 2 shows a close up of the MMTS II route (in yellow) next to the Mearns/MMTS I route (in blue). It is important to note the small portion extending from the Spring Grove Dam where the two routes diverge, as this portion of the route was most disputed by landowners who had not become accustomed to a previous servitude on their property.

Figure 1 Dams on the Mgeni and Mooi Rivers

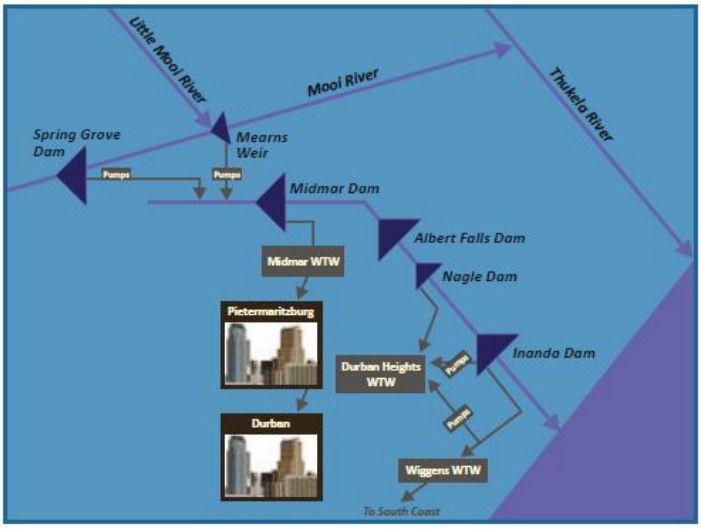


Figure 2 Map of the previous Mearns Energy Transfer Scheme and the new Mooi Mgeni Transfer Scheme Phase II




This section gave a brief background of the project specifics, while the next section will situate the project planning and implementation in the context of the social actors involved. Understanding the social dynamics will then lead to the crux of this study in the empirical chapters, which examine the participation process.

**Project Actors**

The project actors include all those involved in the planning implementation and monitoring of the Mooi Mgeni Transfer Scheme Phase II. In 2007, the Department of Water Affairs and Forestry issued a directive stating that the Trans-Caledon Tunnel Authority (TCTA), a statutory body established by the government under the National Water Act, would implement the Mooi Mgeni Transfer Scheme Phase II through the private sector. The Department of Environmental Affairs and Tourism served as the authorising body to approve

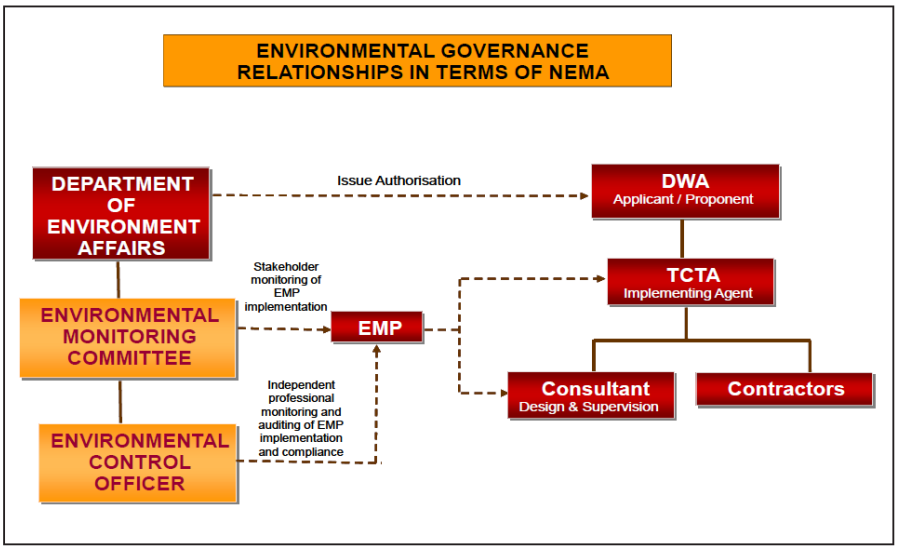
the project. TCTA (interchangeably referred to as the client) brought on various contractors and consultants to complete the project, as indicated by the National Environmental Management Act. The first Environmental Impact Assessment was conducted by WRP Consulting Engineers. For the Second Environmental Impact Assessment, BKS Group (now AECOM) was hired to conduct the EIA, with the Social Impact Assessment conducted separately by an individual consultant and Public Participation Process conducted by Cymbian Enviro-Social Consulting Services. For the third EIA (this time only for the pipeline) Coastal and Environmental Services (CES) conducted the Environmental Impact Assessment and NMA Effective Social Strategists conducted the Public Participation Process. BkS Group was also hired as the engineer for both the dam and pipeline project, while Group 5 was hired as the construction contractor for the dam and Wilson Bailey & Holmes (WBHO) for the pipeline.

During project implementation, an independent Environmental Control Officer monitored the implementation of the Environmental Management Plans as well as environmental and social compliance. An Environmental Monitoring Committee with representatives from both the project authorities and the affected communities was also established to assist in monitoring compliance. Both the Environmental Control Officer and the Environmental Monitoring Committee reported to the Department of Environmental Affairs and Tourism, and the DEAT was the only body with decision-making powers regarding changes in the project during implementation. This environmental governance structure is outlined in a diagram in Figure 4, in order to show the hierarchy and distribution of power. The client, the engineering consultant, and the contractor also commission on-the-ground consultants monitoring day to day social and environmental issues throughout implementation of the project.

For the purposes of the forthcoming empirical chapters, “Project Authority” is used to refer to any of the above actors under the jurisdiction of the government project architects and specifically instructed to serve their interests. In addition to the Department of Water Affairs (DWA) authorities this includes the client, engineers, and construction company. Figure 3 shows this chain of command under DWA. “Independent Authority” is used to refer to anyone hired by the national government authorities for the specific purpose of providing an independent perspective and a check on project authority power. These include the chain of Command under the Department of Environmental Affairs: The Environmental Control Officer and the chair of the Environmental Monitoring Committee. Additionally, public

participation consultants were hired as independent authorities. The third designation utilised in the empirical chapters is "Community Member," and refers to anyone who lived in the affected area or represented the interests of local community members, including local government representatives. The various community contingents will be detailed in the next section. I only identify the specific role of a participant beyond these general designations in my empirical chapters when absolutely crucial to the analysis, in order to protect the confidentiality of participants.

Figure 3 Diagram of project authorities

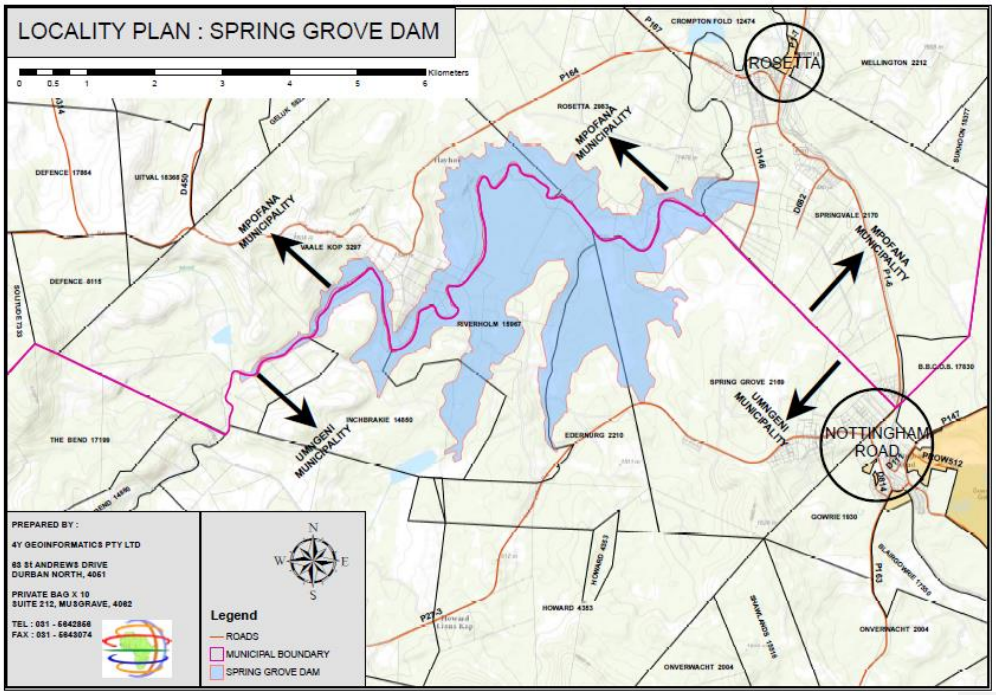



**Community Description and Actors**

The community actors consist of any interested and/or affected parties in the surrounding communities where the project was built. It is useful to situate them within their geographic location, as this elucidates how they were affected by the project. The MMTS-II spans the Umngeni (in the North) and Mpofana (in the South) municipalities which are a part of the uMgungundlovu district. Figure 4 (below) shows that the dam is split between Umngeni and Mpofana municipalities. The line traversing the length of the dam and arrows denote the municipal boundary, with Mpofana Municipality above the line and Umngeni Municipality

below the line. Other than a small uppermost portion of the pipeline, the majority of the pipeline rests in Umngeni municipality. This distinction is important to note in order to understand the disputes between the municipalities expounded upon in the empirical chapters.

Figure 4 Division of Mpofana and Umngeni municipalities across the Spring Grove Dam

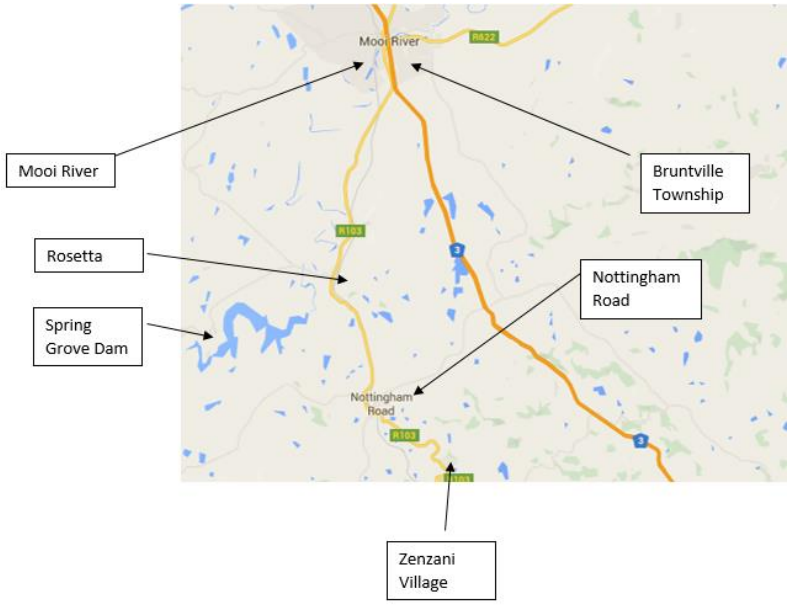



The communities which populate the surrounding areas of the Spring Grove Dam and pipeline are diverse. The communities in Mpofana and Umngeni are primarily rural and agricultural, although the community boasts several small towns, as well as a township and a village. The area is home to the Midlands Meander, a high-end tourist destination known for craft shops, outdoor activities, accommodation and restaurants set amidst the quiet, natural beauty of the area. Thus many hotels, lodges, and bed and breakfasts are situated in the area. The dam is situated among private land, affecting approximately 40 landowners. On the Northern end it cuts through many smallholdings, including residential homes and tourist accommodations. The Southern end of the dam mainly runs through large commercial farms. Land on these properties was partially expropriated by the state to form the dam. Many

employees and tenants of the large farmers were also living within the area of the dam (approximately 35 families), and had to be relocated and have graves exhumed.

About two kilometres northwest of the dam is closest residential small town of Rosetta (shown in figure 7). The most populated community near the dam is a township called Bruntville, which had a population of 8,102 in 2011 and is approximately ten kilometres North of the dam. The adjacent residential farming community of Mooi River is the second most populated area with approximately 2,890 residents in 2011 (StatsSA, 2011). The pipeline traverses several populated areas. It first runs through a small number of individual properties, and then runs through the small town of Nottingham Road. The break pressure tank is located in the residential development of Gowrie Village. Then the pipeline continues through the local village of Zenzani; however mainly through community sports fields rather than residences. Zenzani is considered to be a village because its population is much smaller than that of a township, such as Bruntville. The pipeline then continues from there to the outfall on the Mpofana River. Below in Figure 5 is a map of all of the towns and populated areas in the project vicinity.

Figure 5 Map of Affected Community Members



It is important to note particular stakeholders that were important to the participation process. For the dam it is important to note the representatives of the Nottingham Road Landowners Association and Rosetta Ratepayers Association, representing communities close by to the dam construction that could suffer various construction-related impacts. Additionally, there are representatives for the affected farmers owning land in the dam basin and the community of tenants and workers who live in the dam basin. There are also representatives from the Mooi River Irrigation Board, who manage irrigation out of the former Mooi River (now the dam basin). Additionally, there are municipal representatives, who's main purposes is to serve as a voice for those in underserved communities. With the pipeline stakeholders list, it is important to note the addition of a representative of the potentially affected landowners in each section of the pipeline (the pipeline is divided into 5 sections). Also representatives from the affected communities of Gowrie Village residential estate and Zenzani Village, and Mziki Homeowners Association (initially affected by the pipeline before route changes were made).

Although the project area is partly characterised by wealthy landowners and residential areas, there is great socioeconomic inequality in these two municipalities and the majority of the population resides in the township and village (8611 residents in Bruntville and Zenzani compared to 4708 residents in Rosetta, Mooi River and Nottingham Road). In 2011, only 6% and 3% of the populations of Mooi River and Zenzani, respectively, had completed higher education. This is despite the fact that the one of the country's most prestigious private schools, Michaelhouse, is located in the area. Additionally, the infrastructure in these municipalities is severely lacking. In 2007 in Umngeni, 8% of the population had no access to water, 21% had no access to sanitation, 26% had no access to electricity, and 20% had no access to housing. In Mpofana, 24% of the population had no access to water, 44% had no access to sanitation, 47% had no access to electricity, and 20% had no access to housing. The next chapters will begin to unpack and analyse the perspectives of the community participation process, as well as the process that occurred and resistance which followed.

## Chapter V: Perceptions of Participation

This chapter argues that dissecting the varying perceptions of participation held by actors in the Mooi Mgeni Transfer Scheme provides an essential grounding to understand the ways in which community participation manifested, as well as the tensions that arose between project authorities and community members (which will be the focus of Chapter VI). Expectations from participation are rooted in each actor's relation to a project. With any large government project, the most important goal for project authorities is to complete the project so that its benefits can be realised. And generally in project-affected communities, the most important goal is some combination of impact minimisation and benefit maximisation, influenced both by how directly they are impacted by the project and whether their basic needs (employment, basic services etc.) are being met in their daily lives. In the Mooi Mgeni Transfer Scheme Phase II, these underlying goals were central to shaping the varying perspectives on participation. Project authorities and community members expressed fundamental differences in their beliefs about why participation is necessary and how it should be conducted, and even within the community, different perceptions of participation were held by different geographic and socioeconomic contingents.

This chapter will attempt to flesh out these goals and perspectives of participation. It will first compare the overall project authority and community goals for participation. It will then delve into how these goals inform these actors' expectations and views on three aspects of participation: consultation, impact mitigation, and benefit maximisation.

### Goals for Participation

#### *Project Authorities*

In order to understand project authority perspectives on participation, it is necessary to turn back briefly to the context of the MMTS-II. Many news articles and statements from government officials over the past five years have solidified the concern that Durban and surrounding areas continue to face major water shortages that are likely to lead to a major water crisis within the next ten years (Pillay, 2014, "Anonymous", 2012, Anonymous" 2015). Given the project authority professions (government officials, engineers, and construction companies), they were focused on these large scale concerns. Project authorities' primary concern was building a successful transfer scheme in a cost-effective and timely manner, so that households lacking water could be serviced in the most economical way possible. This is

rooted in the modernisation theory of participation that is discussed in Chapter II, where economic development and service provision for the country is of utmost importance, and individual sacrifices in affected communities cannot be completely avoided in achieving this goal. Therefore, from the project authority perspective, the most important purpose of community participation is to assist in the goal of implementing an effective, timely and cost efficient project. In order to do this, community participation must ensure that the community buys into the project and does not engage in resistance which could result in costly project delays. Both consultation and mitigation of direct impacts were perceived to help achieve this compliance, and thus emphasised by project authorities, as will be unpacked in the next section. Consultation and mitigation are also required in the environmental laws indicated in Chapter II, to ensure authorisation from the Department of Environmental Affairs and Tourism.

***Community Members***

Community concerns regarding the Mooi Mgeni Transfer Scheme Phase II, although occasionally converging with those of project authorities, were generally quite different. This stems from the fundamental difference in perception of the MMTS-II. While project authorities' greatest focus was on the end goal of supplying water to Durban and surrounding areas, this concern was far from central for local community members. A few community members did express the knowledge and acceptance that the Mooi Mgeni Transfer Scheme Phase II was for the betterment of the country, and that their sacrifice would benefit a larger population (Community member 26, Community Member 32). However, this knowledge did not negate their understandable prioritisation of the direct costs and benefits affecting them ahead of the overall vision of the project, i.e. community centred participation. In their perspectives on participation, community members similarly highlighted the importance of consultation and impact mitigation, but their interpretation of these terms differed from project authorities, believing that more intensive processes were necessary so that they were not in a worse off position than before Additionally, a large marginalised section of the community placed benefitting from the project as their top priority, which conflicts with the priorities of project authorities.

## Participation to Inform and Consult

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### *Project Authorities*

Consultation falls among the lower levels of Pretty's typologies of participation (refer to the Figure 1 in Chapter II), at level three. Consultation does represent an interactive participation process, where community members engage in conversation and question and answer with authorities. However, an important distinction between consultation and higher levels of participation is that community members do not engage in any project decision-making. Consultation was conducted in a number of ways in the Mooi Mgeni Transfer Scheme Phase II. In the EIA process, two mandatory public meetings were held, where project authorities explained the proposed plans for the project and community members could express their concerns and suggestions relating to the project. Also, once the implementation phase began, representatives from various contingents of the community met in monthly or bi-monthly meetings with project authorities to gain feedback on the implementation of the dam and pipeline and raise issues of compliance. Also, landowners who were individually affected as well as labourers and tenants living on their land were consulted in group meetings and on an individual basis regarding expropriation of land (for the landowners) and relocation of homes (for the labourers and tenants).

When speaking about these forums, project authorities repeatedly emphasised the importance of ensuring that community members "feel" as though they are involved and informed, so that they do not attempt to disrupt the project (Project Authority 1, Project Authority 4). One authority directly expressed that community participation serves to "get people more involved, before people run to court," indicating the legal road blocks that could occur if people do not feel like they are properly informed (Project authority 2). Authorities closely involved in the construction aspects of the project especially emphasised the importance of consultation so that they can continue their construction without affected landowners resisting because they were not properly informed about the procedure that was going to take place (Project Authority 3, Project Authority 7). One project authority went further to emphasise that when people feel as though they are informed, they not only allow the project to proceed, but buy into the success of the project and will work to ensure that it is maintained. In his own words:

> "If people look after that infrastructure, it also helps the department. We allow people to say what they have to say and see if we can accommodate them, in the hope that they will take responsibility for that infrastructure. Because they influence the quality of that water. Farmers, irrigation, fertilisers…The government can manage dams, but it's always better if the local people take responsibility for infrastructure like a dam. You have dams that are in very bad shape, because people would do whatever they want. They would go fish and they would damage that infrastructure and they would pollute it. But if you can have buy in from the local community…they will sort out their own neighbour." (Project Authority 2).

This sentiment speaks directly to the project driven approach to participation and the overriding project authority goal of implementing a successful project. According to this authority, the most important purpose of participation is to elicit the help of community members in ensuring that the MMTS2 is well-maintained, and the community can provide lasting benefit to the project if they are on board.

Project authorities however, emphasised that participation should not go further than allowing the community to be consulted and feel involved, and does not entail giving community members power to make decisions regarding the design and implementation of the project. This sentiment was frequently expressed in terms of the Environmental Monitoring Committee, a so-called "toothless" organisation (Project Authority 2). Project authorities pointed out that community members often desired to make logistical implementation decisions, when such decisions were not actually under their jurisdiction. The high levels of technical expertise required for this project served as a significant boundary against more active participation. These statements are supported by the Department of Environmental Affairs' Environmental Monitoring Committee Guidelines, which specify that it is not a decision-making body (Project Authority 6, 2 and 1). Summarised by a project authority:

> "People got very confused, it's not an environmental 'management' committee, it's 'monitoring,' and it's completely voluntary. It's really for people to be the eyes and ears, to say, look something is going wrong, and it was used extensively…they're the eyes and ears on the ground to see if you are being a responsible developer. And that's their role. Beyond that, they really can't tell you how to do things, they can merely make suggestions." (Project Authority 6).

Project authorities emphasised that participation that is used to influence projects usually proves detrimental by making projects more time consuming and expensive, which conflicts with project authorities' goals of efficient implementation (Project Authority 2, Project Authority 5, Project Authority 1). Essentially they believed that participation utilised as a means to improve the lives of individuals is unrealistic in a technical project such as a dam. One project authority highlighted that the community must look at the bigger picture, which extends beyond the affected-community impacts all the way to the taxpayer. When public participation becomes more expensive, more taxes must be paid by the end water users benefitting from the transfer scheme (Project Authority 2). This presents an example of the concept of modernisation theory, or the "greater good" inherent in dam projects, such as the Orange River Project discussed in Chapter II. This principle maintains that one small community should be willing to sacrifice for the benefit of a much larger population, the greater good of the country. If participation moves beyond the base level of consultation, although communities might benefit, the greater number of water users in Durban will suffer from higher taxes. This authority noted that it is incredibly difficult to find the balance between the satisfaction of affected community members and end water users. Overall, project authority views on consultation show that a limited level of community participation is most desired. Project authorities believe that many aspects limit the feasibility of a more in-depth community role in consultations, such as time, money and the boundaries of technical expertise. It is important that consultation mechanisms do exist to ensure community buy-in and prevent conflict, but that they are limited in their influence. Thus project authorities express the need for limited, project driven participation towards a national priority.

***Community Members***

Community members expressed a differing view of consultation, which was more intensive. Only one community member noted that consultation was merely meant to keep them informed on what was happening with the project and take note of their concerns, and this individual was not directly impacted by the project but a representative on the Environmental Monitoring Committee (Community Member 1). However, in interviews community members made no mention of consultation so that they could "feel" a part of the project and contribute to its success. Authorities' hope that community members would share a common vision for a successful project, work toward its actualisation and not attempt to impede it was

not what manifested in reality. Although community members understood the national need for water, their individual daily needs were much more tangible and immediate than this overarching goal, and thus more important. Participation was viewed as a means to improve or at least to avoid being detrimental to their lives. Therefore, for community members, being informed and a part of a greater national project was not enough to achieve their full support. Community members only would buy into the project if it met their requirements for minimising harm and/or maximising benefit, and would not hesitate to resist if they were unsatisfied.

Regarding consultation, what communities did highlight as most important is that the client is credible and transparent. Community members desired follow-through of promises made during the EIA public meetings during project implementation. Some examples given were if project authorities promised to provide a certain service to give back to the community, or promised not to route the pipeline through a certain landowner's plot, they must keep these promises (Community Member 2, Community Member 18). Transparency also refers to offering clear facts and figures regarding the project to community members. An example given was clear information on how compensation figures were calculated, beyond the explanation of market value. They also desired the articulation of accurate construction schedules so that they could anticipate the impacts that they would face (EMC minutes, 5 June, 2013, Community member 26, Community Member 32). Trust was an important factor for community members, and if project authorities broke this trust in any way, it affected community members' willingness to cooperate for the rest of the project. If project authorities made a promise to mitigate and impact or provide a service which was not kept, community members felt that this signified that project authorities did not value the community and the social aspects of the project, and were only concerned about finishing the project. This issue of distrust and scepticism of project authority intentions was raised significantly by many of the different community demographics, both because of their past experiences with irresponsible consultation with dam projects in the area and their knowledge that project authorities urgently needed to complete the project at any cost. Thus the onus rested on project authorities to earn community trust in consultation. It is interesting to note the lack of focus on trust and transparency in participation literature, as it is a nuance that is underemphasised when abstracting to a theoretical level. As evidenced by the participation ladders and community and project driven models of participation, the main dynamics analysed in participation literature are the levels of intensity. However, this research

demonstrates that trust was equally important and could significantly impact community perceptions, and demonstrates the importance of relationship-building in participation.

In contrast to the views of community members, project authorities stressed the difficulties of providing transparent and exact information, due to two different reasons. Firstly, the EIA phase mainly consists of desktop studies, and it is impossible to be able to know all of the specific technicalities that might arise once planning begins and relay exact information to the communities in advance. Even if such detail was possible, there is a limit to the amount of money project authorities can spend during planning the EIA, as there is still a chance that the project may not be approved (Project Authority 2, Project Authority 5). Secondly, with a large project such as this where over 20 years has passed since initial contact was made with the community, it is inevitable that project authorities will change over time. And with these changes in personnel come losses of information that was transferred between project authorities and communities. As one project authority put it, even when meeting minutes are transcribed, "there's so much behind that short paragraph that we have reached a common decision that you don't write in the minutes, and that's what you lose when people change" (Project Authority 5). Meeting minutes only paraphrase and can leave important detail out, and also do not capture the relationship building that is essential to effective community participation, which is lost when personnel changes. Thus, according to project authorities, the level of transparency that community members desired from project authorities was generally unfeasible. However, one project authority recalled that there was a disconnect between project authorities involved in the pre-project process (such as the EIA and feasibility studies), and project authorities which were employed to implement the project on the ground. Better communication between these two groups, and the guarantee of more key personnel present throughout multiple project stages, could have lessened unrealistic expectations and led to greater trust with community members (Project Authority 2).

## Minimising Harm: Impact Mitigation

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### *Project Authorities*

Project authorities believed that mitigation of project impacts is the most important practical aspect of consultation. Effective impact mitigation causes less disruption to the daily lives of community members, thus harbouring less community resistance, and even the possibility of support for the project, thus aligning with their project driven approach to participation.

Additionally, project authorities genuinely sympathised with those affected community members who had little choice but to accept the disruption of the project, and felt they should be inconvenienced as little as was feasible. Project authorities are also bound by numerous references to mitigation in the National Environmental Management Act, framed by the overarching clause in the Constitution that "every citizen has a right to an environment that is not harmful to their health and well-being." (Republic of South Africa, 1998, The Republic of South Africa, 1996). Mitigating impacts is the most direct way in which environmental harm can be prevented in such projects. Project authorities interviewed stressed the importance of participation to ensure that impacts are mitigated effectively. One project authority's interpretation of NEMA is "to ensure that affected stakeholders have the opportunity to influence an optimum outcome," by recognising and articulating their own impacts (Project Authority 5). Project authorities indicated that participation to bring to light potential impacts is especially important in the early stages of the project (such as the EIA) when the project construction has not yet begun and changes are most likely to be able to be made (Project Authority 2, Project Authority 3).

However, more salient than the rather expected project authority emphasis on participation to mitigate impacts given its legal importance, is the interpretation of what constitutes "impact mitigation". Of particular relevance are issues of first and second order impacts. According to Edwards, Jones, Davies, and Hussain (2009), a first order impact is an impact that is directly caused by the project. For example, expropriation of land, or noise from construction. A second order impact is an impact that is caused by a first order impact, and only indirectly caused by the project. An example would be crime that results from significant human migration to an area where a project is built. In the public meeting on 25 June 2007, the coordinating project authority explained that while most operational and construction impacts will be mitigated, and certain important second order impacts (such as relocation of farm workers, for example, who are technically under the jurisdiction of landowners) will be prioritised, not all second order impacts will be able to be addressed. According to a project authority, "it is difficult to manage community member perceptions of how deeply they are being impacted" and they even sometimes seek to have issues redressed that have no relation to the project (the authority gives the example of complaints about dust from a windy day that actually can't be attributed to the project) (Project Authority 1). The authority stressed that it is important to manage participation so that community members don't have unrealistic expectations as to what actually can be dealt with and what rights they

have in the process. This ties back to Project Authority 2's criticism of the lack of communication between project authorities involved in different project stages. Yet this ambiguity regarding what actually constitutes a first or second order impact also leaves room for potential contestation between project authorities and community members in terms of which indirect impacts can/will be mitigated, and presents a difficult balancing act of encouraging participation but limiting its extent.

Expropriation and displacement are some of the greatest social impacts of large scale development, as they directly and permanently change the living space of community members. The scale and sensitivity of these impacts often leads to much contention between authorities and community members regarding their mitigation. Thus it is important to determine project authorities' perspectives on how to manage such impacts and how to conduct participation with individually affected community members. In this project, land was expropriated either from approximately 40 plots either partially within the dam basin or along the transfer pipeline route. They consisted of mainly smallholdings with less than 10 large farms. Approximately 35 families living and/or working on farms within the dam were relocated.

According to project authorities, with expropriation, it is most important that community members are compensated in line with the Expropriation Act (Project Authority, Project Authority 6, Project Authority 2). Outlined in detail in Chapter II, the most important clause of the Expropriation Act states that community members are compensated using market related value for any land that is expropriated, or resource rights that are redacted. This is affirmed in the Constitution (although the Constitution even gives the government more power to alter valuations for public purposes). Government officials do not have to give detail on the valuations, but rather make an offer based upon their valuators' determination of market value (Project authority 6, Project authority 2, Project authority 5). Authorities recognised the emotional distress of losing land and potential business impacts, but stated that this process allows for an objective measure and prevents the government from freely giving away money with no guidelines when a landowner is aggrieved and unsatisfied (Project Authority 2, Project Authority 5). However, as an aside, project authorities mentioned that landowners should be in at least the same position or better after expropriation (Project authority 2, project authority 5). This notion derives from the international common law principle of "restitutio in integrum," that one is "not worse off" from public expropriation

(expanded upon in Chapter II). Although project authorities were quite clear on their dependence on the Expropriation Act for this aspect of mitigation, the contradiction between the expectation to be "not worse off," which project authorities affirmed, and South African law, lays the foundation for inevitable conflict with how expropriation is handled.

With regards to the relocation of workers and tenants on the farms of expropriated lands, authorities explained that this was technically not a part of the participation process, and most authorities believed that this should not be their responsibility (Project Authority 1, Project Authority 6). They pointed to the Employment Act, which states that any issues with employees must be dealt with by the relevant landowner (Republic of South Africa, 1997). Tenants' claims to the land are informal and they have no legal property ownership, and thus the Constitution and Expropriation Act do not have legal provisions for their handling. It is thus the landowner's responsibility to retrench and find alternative accommodation for his employees and tenants, after which he can claim the necessary compensation from project authorities. Any actions taken on behalf of the authority to assist the workers and tenants (such as the establishment of alternative accommodation) is above and beyond their legal obligations (Project Authority 6). This reaffirms the project authority view of participation as a means to complete the project, as project authorities were not initially inclined to mitigate impacts on informal residents because this was not technically required of them. In summation, project authorities believe that impact mitigation is important, and did not want community members to be in a worse position after the project, especially given the benefits of the project are not accruing directly to their community. However, they also stressed that with mitigation, one can only do so much, and that authorities must exercise some objectivity in establishing boundaries for the extent of mitigation.

***Community Members***

Construction impact mitigation was most important to those directly affected by the project, namely landowners in Rosetta whose properties were within or near the dam basin, as well as the communities of Nottingham Road, Gowrie Village and Zenzani Village through which the pipeline traversed or who were affected by project related traffic and debris. It is important to delineate some of the specific issues of mitigation relating to project construction important to community members. Some of the biggest mitigation issues were traffic and roads. This specifically refers to the use of access roads by project authorities and the danger of large trucks speeding, especially given that community members had pre-

existing concerns about the quality and safety of the main road in the area (the R103). Additionally, usual construction issues such as dust, noise and monitoring the activity of workers on landowners' properties were concerns voiced by community members prior to and throughout construction. According to community members, community participation should ensure that the effects of the dam are controlled, and serve as a watchdog when authorities don't comply with regulations during construction (Community Member 2, Community Member 21). Thus they are focused on how participation can serve as a means to ensure that their lives are not disrupted from the inconvenience of the project.

Of particular importance to the community was the mitigation surrounding the obtainment of quarry material for the dam wall. Initially, the client proposed (and community favoured) that a quarry be built in Rosetta very close to the dam. The other option was that quarry material would be hauled in from an existing quarry outside of the area. With either option, significant mitigation would be required, either regarding the increased large vehicle traffic if material was hauled from outside, and blasting and debris impacts if the quarry was to be built near the dam. The result of this conflict will be further explored in the next chapter.

Communication regarding resource rights, expropriation, compensation and relocation were also primary concerns of directly affected community members. In conflict with project authorities' primary emphasis on the Expropriation Act, community members emphasised the Constitution as well as the tenet that they should not be worse off than they were before, as implied by "restitutio in integrum,". This was firstly emphasised in terms of losing various rights to natural resources. Community members cited the Constitution in protecting their water rights that they previously held for the Mooi River, and thus that their agricultural capabilities should not be negatively affected. If their rights were to be compromised, compensation is necessary (Community member 16, Community member 24). This was also emphasised in terms of the physical expropriation of land, and a primary concern for many was that project authorities provide a clear breakdown of the land valuations to ensure that these landowners are not worse off economically. Although technically only landowners are protected by law, tenants and workers also claimed that this right to "be in the same position or better" after they are moved was emphasised to them by the client. The primary concerns of those relocated were adequate compensation for job loss and suitable new houses (Community Member 11, Community Member 8, Community Member 12, Community Member 20). Generally speaking, affected community members expected that project

authorities would ensure that they as community members felt as though they were in the same position or better after the project, which did not always happen.

Regarding first order and second order impacts, from the perspectives of the community, mitigation refers not only to physical effects of the dam, but the socioeconomic changes to the community when such a large project comes in. Although project authorities cautioned that not all second order impacts should or could be managed, community members felt it was their right that project authorities manage any issues they experience relating to the project, and thus that participation should be community centred. This project was not their choice or desire, and thus it is project authorities' responsibility to ensure that their lives are not negatively impacted. Community members felt that participation was meant to deal with the negative impacts of workers relocating to the area such as crime and informal settlements, safety risks from increased traffic, as well as labour disputes that inevitably arise when a new large employer enters a community with high levels of unemployment and cannot employ everyone. This represents a point of contention with the views of the authorities, as the lines between first and second order impacts are not completely clear. The EIA mentions potential second order impacts, but the list can never be exhaustive as each project is unique. However, even if the second order impacts could all be clearly defined, community members still did not agree they should be ignored, because if the dam had not come, they would not be facing the increased crime and labour disputes that they now face (Community Member 3, Community Member 14). These concerns all reflect back to the community centred approach to participation, where community members were most concerned about the impact of participation on their own lives.

**Maximising Benefit: Contributions to the Community**

***Project Authorities***

Unlike community development projects such as a school or local health centre, this project was not initiated with the guise of being "for the affected community" in order to obtain buy-in. It is quite clear that the MMTS-II, as with most dam projects, was built with the primary purpose to serve a community outside of its physical location. However, given South Africa's post-apartheid human rights-focused legal framework, providing benefit to disadvantaged communities in government projects has both mandated and symbolic requirements. Quotas for local employment in projects (detailed in Chapter VI) as well as the

desire to maintain a socially responsible image, led project authorities to list social benefit for marginalised communities as a "secondary spinoff" of the participation process (Project Authority 7). Although participation is primarily implemented to inform and minimise impacts, project authorities expressed the desire to leave a positive footprint in the area in which they worked (Project Authority 6, Project Authority 3, Project Authority 5). The benefits that authorities wished to provide include local employment on the project, local training and skills development, and legacy projects (usually infrastructure projects). However, when discussing community participation project authorities spent much less time emphasising and explaining benefit maximisation than they did for consultation and impact mitigation. In summary, project authorities viewed the goal of benefitting the local community as subordinate to the goal of project implementation, but nonetheless, measures had to be taken in order to present a positive project legacy of social responsibility. Once again, the balance of encouraging participation but ensuring community members understand its limited extent is evident.

***Community Members***

Although for project authorities, providing additional benefits to marginalised communities in the area was a secondary concern, for community members living in Bruntville township, Zenzani village and the dam basin who struggle to have their daily needs met, participation as a means to derive life benefits was of primary importance (Independent Authority 3, Community Member 6, Community Member 7, Community Member 8). Although those in Bruntville township were not at all directly affected by the project construction, and those in Zenzani Village minimally affected (the pipeline ran through their sports fields but did not affect any houses), they still hope and expect to derive benefit when a big project such as this comes to their municipalities, as they have many unmet needs. These benefits primarily refer to employment on the project; all those who are unemployed are hoping and expecting to find work on the project. According to a local councillor from Mpofana Municipality.

> "Mpofana is a very dead town in terms of industrial employment coming in, investment, we only have got one factory, so there's a high rate of unemployment in the area. The construction projects are the only projects that are seen to be employing our people. Therefore, whenever an opportunity like that one come across, people they want to benefit" (Community Member 43).

Community members also expect training that would enable them to not only contribute to the project, but gain skills that will make them employable long after project completion. In this way, community members that are not able to be employed on the project due to limited opportunity can still benefit (Community Member 13, Community Member 9, Community Member 19, Community Member 10). This speaks to the empowering participation identified in the higher rungs of the participation ladders in Chapter II. The community also expected to benefit from additional infrastructure as a measure of goodwill (Community Member 15, Community member 9). The difference in expectation regarding community benefit between project authorities and community members creates tremendous potential for conflict, as the bulk of the population of the Mpofana and Umngeni municipalities are living in the township and village and share these desires to benefit. Given that project authorities are primarily concerned with completing the project and secondarily concerned with mitigating impacts, only limited attention is devoted toward the specifics of community benefit (i.e. how hiring is conducted, what training programs are offered, choosing what legacy projects are implemented and ensuring they are implemented in a timely manner). Yet community members' needs are dire and they expect a lot from project authorities. Given their communities are under resourced, when they see a government-sponsored project come into their community with extensive funds and resources, they feel that it is the government's job to also help them. However, this expectation also comes from the rhetoric that project authorities use to attain early buy-in and acceptance of the project. When initially explaining the project, authorities state that it will be good for the community, and thus community members remember these initial statements and expect to see improvements in their condition. Realistically, the needs of underprivileged community members are well beyond the scope of this project, and their desires are more reflective of the unsettling level of inequality in the area. However, from the interviews it seems that project authorities could have better managed the expectations of community members, and that their bottom line and desire for buy-in led to a possible exaggeration of project benefits, and foreshadowed a breakdown in trust.

Understanding project authority and community perceptions and expectations in the project is crucial to understanding the actual participation that manifested, most notably the conflict and resistance. Project authorities were concerned with implementing the project as quickly and efficiently as possible in order to alleviate the water shortages in Pietermaritzburg and Durban. Thus they felt that in order to do so they needed to comply with national laws and

ensure that physical impacts were controlled as much as possible, and also that community members should feel involved so they would not impede the project. Yet community members desired more. Especially among marginalised community members, there was a general belief that the project should bring benefit to their lives outside of its own goals Other community members felt that impact mitigation did not go far enough, especially in considering impacts that were indirect but nonetheless could be tied back to the project. The community also felt that building trust was crucial, and would not buy-in to the project if this trust was not built or was broken. These points of contention laid the groundwork for multiple instances of conflict, which will be detailed in the next chapter, both in terms of their outcomes and power dynamics present.

## Chapter VI: Participation, Power and Resistance

This chapter will analyses five general spaces through which communities participated in the MMTS-II. These spaces include the EIA public meetings, Environmental Monitoring Committee meetings, community benefit initiatives, the individual consultations regarding expropriation and the individual consultations regarding relocation. The participation that manifested in these spaces is grounded in the varying views of participation dissected in Chapter V. Chapter V illustrated that there is much conflict in perceptions of participation between project authorities and community members, and thus this chapter will demonstrate how such differences led to disagreement, and where power lies within these spaces. As indicated by Gaventa (2006), it is paramount to first consider who creates spaces for participation in order to analyse these manifestations of power. The five spaces of participation in the MMTS are "invited spaces," meaning that they are created and legitimised by authorities, who invite community members to engage in these spaces. Thus project authorities hold the default decision-making power, or "visible power" of how the space is designed and how issues are addressed (Gaventa, 2006 Miraftab, 2004).

However, according to Foucault, power is complex, and even those who do not possess formal authoritative power are able to exercise power in unique ways. A space may be created for a certain purpose but utilised in different ways than originally intended, or spark mobilisation outside of the space (Campbell, 2013, Foucault 1982, Cornwall, 2002). This chapter will illuminate the ways in which community members utilised resources available to them (such as wealth, knowledge and strength in numbers) to also exercise power and challenge the formal power of project authorities. Communities in the MMTS-II exercised power through using the legal rights and processes available to them in spaces of participation as well as creating their own "invented" spaces of protest outside of what is provided to them by project authorities (Miraftab, 2004). Yet also some of the most marginalised community members were effectively demobilised in asserting their voice and power to resist.

This chapter will also assess the effectiveness of the varying expressions of power of those who resisted, concluding that the most successful acts of resistance came from those who were able to impede project implementation, and interfere with project authorities' most pressing goal of completing the project in an effective, timely and cost-effective manner. This power to impede project objectives is not explored in literature on power and

participation, but was an important finding in this study. The first spaces analysed are the EIA public participation meetings and EMC meetings, the most formalised group spaces created by the project authority for community members to raise issues before and during the project. The next space refers to the engagement of marginalised communities on the project, mainly through employment, skills development and legacy projects. The last two spaces of participation are the individual negotiations/mitigation for those who had land expropriated by the dam or pipeline, and those who were relocated from the dam basin.

**Public Participation in the EIA**

This research includes both the EIA conducted in 2007 and in 2010. The first EIA conducted in 2000 is less relevant given that much of the details of the project were not yet conceptualised at that point in time. It was also more difficult to gather information on that stage as many stakeholders currently involved in the project were not involved in the earliest stages. As mentioned in Chapter V, the 2007 Environmental Impact Assessment followed the requirements indicated in the 1997 EIA regulations promulgated under the Environmental Conservation Act of 1989. Mandated by these regulations, two public meetings were held where anyone who registered as an Interested and Affected Party could attend. The project and its proposed impacts were explained in detail, and community members had opportunity to comment, and further communicate with project officials via email or phone. Additional specific public meetings were held for the Mooi River Farmers Association, landowners potentially affected by the proposed pipeline, and local authorities, to attempt to ensure that specific and particular interests were addressed. The general consensus from the community was that this process was thorough and sufficient given the stringent legal requirements that project authorities must follow and anticipating the many social issues that arise from large infrastructure projects (Community Member 3, Community member 21, unidentified community members-public participation meeting 1). However, among the directly affected community members, there were certain contingents that were not satisfied with the communication with project authorities and their proposed mitigations.

***Mooi River Farmers Association***

The Mooi River Farmers Association is an association comprised of farmers who irrigate out of the Mooi river. They appealed the Record of Decision approving the Spring Grove Dam because they believed that their ability to irrigate out of the new Spring Grove Dam would

not be guaranteed. Thus this would negatively affect their ability to irrigate locally, for the benefit of those 100-200 kilometres away in Pietermartitzburg and Durban (Community Member 21). This posed a threat to economic growth, as Mooi River is a prime agricultural area (Community Member MRFA Public Meeting, 17 June 2007). The Mooi River Farmers Association cited the Constitution in prohibiting the confiscation of a resource right which provides continuing development to the area. Section 24 of the Constitution states that:

> "Everyone has the right…to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that…secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

Project authorities agreed that they must not harm irrigation. According to a project authority at the Association's public meeting:

> "The catchment area will never suffer. It is not State policy to cause economic harm in donor catchment areas, but that would be relative to existing conditions and not possible future development" (Project Authority at MRFA Public Meeting, 17 June 2007).

However, a community member cited that the catchment where the dam would be built was already overextended and closed off to the further extraction of water, and the Department of Water Affair's initiative to build the Spring Grove dam and pump water out would further stress the water supply in the catchment. Thus it was unconvincing to the Association that their agricultural irrigation would not be affected given the existing overextension of the catchment. Additionally, they did not feel confident overall with the veracity of the Department of Water Affairs' claims because they felt they were not sufficiently considered when the location of the Spring Grove Dam was planned, and their emails were not responded to during the EIA stages. As indicated in Chapter V, a sense of trust and credibility among community members is imperative to secure support for a project, and members of the Mooi River Farmers Association did not feel confident that the Department of Water Affairs would hold to its promise that their agricultural operations would not be harmed because of the difficult communication between the two parties.

Additionally, the Association believed that they should have the right to not only maintain but expand their irrigation by building future dams in the catchment area in order to continue

future growth (Community Member at MRFA Public Meeting, 17 June 2007). While the Constitution seems to imply the protection of future growth through ensuring the right to "ecologically sustainable development and use of natural resources while promoting justifiable economic and social development," the Expropriation Act, which was highly regarded by project authorities as an elaboration on the constitution, does not stipulate for the protection of future growth. The Expropriation Act merely states that resource rights can be confiscated by the state as long as compensation covers the amount of the financial loss from the confiscated resource right.

Thus the Association was firstly not confident that their resources would not be harmed, and needed more substantial assurance than a verbal guarantee, especially given their lack of trust in project authorities. Additionally, they had differing views on what they should have a right to protect, namely their desire to protect future growth and project authorities guarantee that they could only project current agricultural production. This reflects back to modernisation theory and the project authority priorisation of national urban development over the growth of smaller rural communities.

Therefore, the Association filed an appeal. According to the 1997 EIA regulations, an appeal is a legally acceptable action for community members to take if they believe that a project is in conflict with the law. The Association was educated and informed enough to be aware of the option to take legal recourse and as a collective organisation could pool the funds to hire a lawyer to facilitate their process and put pressure on project authorities. The Association's appeal represented a threat to project authorities, as the guarantee to protect economic viability in an area is an important principle in both the Constitution and NEMA, and thus there existed a chance that the appeal would be upheld. If it was upheld, the potential of a court case would significantly delay project implementation, impeding project authorities goal of implementing the project as quickly as possible. Thus the Department of Water Affairs was compelled to negotiate with the Association. The two parties reached a compromise, and the authorities agreed to allow the Mooi River Farmers Association to build additional dams and thus protect their water right and future economic viability. The Association then withdrew their appeal. According to one community member, it is too soon to tell whether their water right will actually be upheld as they are still in the process of identifying sites for their dams and haven't yet gotten approval, but because of their appeal they will always be able to refer to the compromise made with the Department of Water

Affairs in which the department guaranteed that the Association could safeguard their own water supply (Community Member 16). Thus the Mooi River Farmers Association utilised a space of participation (the EIA appeal process) to challenge the visible power of authorities by ensuring that they better addressed the Association's issues. The Association had the baseline resources and knowledge to use the visible form of legal power to challenge the Record of Decision, and the potential power of their appeal represented a threat to the initiation of project construction (since the appeal was against the actual construction of the dam). Thus project authorities were compelled to seriously consider their complaints and compromise.

***Mziki Homeowners Association***

The Mziki Homeowners Association owns a plot of residential estates in Nottingham Road, and the initially proposed pipeline route for the transfer infrastructure was going to squeeze between two estates. This caused discontent among the Association, as they believed that this route would cause significant visual impacts on the Estate, decreasing the property values and economic viability. They also believed that fewer landowners would be impacted if the pipeline was positioned on one of the alternative proposed routes (Community Member 2).

However, to understand the difficulties surrounding the pipeline route, one must go back to the initial authorisation to conduct the EIA in 2009. The authorisation stated that the pipeline was to be defined by EIA authorities "as agreed by the affected landowners" (Record of Decision, 15 June, 2009). This differs from the standard authorisation for linear infrastructure, which proposes a predefined route generated by engineers who understand the technical issues, which can then be amended based upon the EIA (Project Authority 5, Project Authority 6). The uncertainty of the route in this particular EIA made the process of public participation for the pipeline much more difficult, as there was no tangible proposed pipeline for community members to comment on and amend, and it was impossible to get all landowners to agree on their own creation of a route as was directed. (Project Authority 2, Project Authority 5, Project Authority 6). This was evident in the Pipeline Focus Group held on 10 October 2007, where landowners stated that they found it difficult to discuss their concerns with the pipeline route when they did not know where exactly it would be going.

As indicated in Chapter IV, a scoping process was not done for the 2007 EIA, as the studies from the previous EIA in 2000 were said to be sufficient. The scoping process is normally

where alternatives are investigated in depth. However, during the 2000 EIA there was much less clarity in the actual conceptualisation of the project. Thus this contributed to one of the Mziki Homeowners Associations' main concerns, that sufficient alternatives were not considered in the draft EIA for the pipeline route, and were only proposed in the final EIA report when there was no chance for community members to comment. Members of the Association felt betrayed by project authorities who had assured them that they had thoroughly assessed alternatives when in fact, they had not (Community Member 2). Thus in this case, the project authority goal to streamline the environmental authorisation process as well as lack of clarity on behalf of the authorising agency in pre-defining a route led community members to distrust project authorities and feel as if mitigation was not properly conducted in the EIA. Therefore, the Mziki Homeowners Association also filed an appeal.

Similarly to the Mooi River Farmers Association, the Mziki Homeowners Association possessed the knowledge and resources (as a high-end residential development) to utilise the visible power afforded to them in the EIA and take legal recourse against the project. The Association filed an appeal against the pipeline route because of the abovementioned grievances. The appeal was upheld by the Minister of Justice and Constitutional Development, who stated that alternatives were not adequately assessed, and all community members' concerns not adequately taken into account. Based on this finding, the Minister mandated that a full new EIA be conducted to sufficiently consider alternative routes, but only for the pipeline portion of the project that was contested in the appeal.

The appeal from Mziki Estate presents another good example of how communities can use visible, formal power available to them to push their interest in spaces of participation, as after the appeal, the new Environmental Impact Assessment was much more thorough and considerate of community needs. Although this in-depth EIA cost the client more money, the strong voice of the community necessitated such measures in order to prevent project delays.

According to a project authority:

> "We've already been in the community, and we've worked with them for the dam, and we understand how communities can halt a process and can cause delays, and with our experience…and the huge cost that we spend and the delays, we felt it was better to iron out the issues during the EIA phase and go and do as detailed planning as possible. So that when construction starts then we're not faced with the same

> challenges that we'd been faced with on the dam. We didn't want to come up with a situation where we could not tell people where the route was. We were able to tell someone its going 5 meters behind your house and define exactly the route (rather than general corridor which is typical) …with that detailed interaction with people, with a cost up front, we were happy to spend, because we knew that it would save us in the long term in terms of delays." (Project Authority 6).

The client could not afford any more delays from another appeal as augmenting the water supply to Durban was a pressing issue, and so the new EIA and public participation was conducted by a much more expensive consultant known for conducting EIA's that are above and beyond minimum legal standards (Project Authority 6, Independent Authority 3). Thus the community pushed the client to become more lenient on their goal of cost-efficiency in order to ensure that the project did not experience more delays. This participation process allowed for much more in-depth engagement with community members, and surpassed project authorities' standard participation merely to consult (Independent Authority 4). In addition to three public meetings and multiple open houses, the new consultant divided the pipeline route into 5 different sections, and conducted individual focus group meetings for those affected by each section so that the meetings could be more specific to individual concerns. The meeting minutes were all recorded very thoroughly, which demonstrated transparency and was appreciated by community members. After meetings, community members could go back and think of alternative routes, and the consultant printed maps on which community members could mark up suggested alternatives. They also conducted many site visits to look at potential routes with landowners, and when people still weren't happy towards the end of the process, held one-on-one meetings to iron out issues. These efforts led to a build-up of trust from a very sceptical community. Trust ultimately led to a more successful second EIA for community members, as community members' expectations of transparency were met, as well as thorough impact mitigation. The sincerity of this participation process was substantiated by the fact that the pipeline route was changed in three of the five sections in response to community concerns. The portion of the route that originally went through Mziki Estate was moved, as another route was actually found to be more efficient and affect less individuals (Community Member 2, Project Authority 6). Additionally, the route was changed in another residential community, Gowrie Village. Initially, the proposed pipeline would run right next to many gardens which were built (sometimes unknowingly) on the rehabilitated land over the previous Mearns Energy

Transfer Scheme servitude. The client and the community reached a compromise, in that the client moved the route so that it did not disturb these residences, in exchange for the community foregoing a more expensive and aesthetically pleasing design for the new break pressure tank located in their vicinity (Project Authority 1, Project Authority 6, and Independent Authority 3).

However, there were also some additional external factors aside from community solidarity that allowed community interests to prevail. The fact that the pipeline spanned a relatively short distance (only approximately 20k), also enabled the participation to be more personalised than on other larger infrastructure projects (Independent Authority 3, Independent Authority 4, Project Authority 5). Also, since the Record of Decision had been approved and the dam was already beginning to be built at the time of the new EIA (meaning that the transfer infrastructure had to eventually go ahead as the whole purpose of the project was to transfer water to Durban) this assisted in the client's willingness to spend more money on detailed planning of the new EIA. They were sure that some of this money for detailed planning would need to be outlaid anyway once the new EIA was approved and more detailed planning begun. Thus the power of community members was also assisted by a favourable context, and not necessarily fully due to the agency they were given in the EIA participation process.

This new EIA was much better received, indicated both by overall community member satisfaction and the fact that no new appeals were filed (Zenzani Community Members, Community Member 2, Project Authority 6, Independent Authority 4). However, no one wants the pipeline in their backyard, and it is impossible to satisfy everyone, and thus not all community members ended up satisfied. Particularly those who were now going to be affected by the changed route were not happy, because not only were they not going to be initially affected, but this section of the pipeline was not along the route of the original Mearns Emergency Transfer Scheme, so they were not accustomed to having a pipeline under their property (Community member 23, Community member 31). Despite some remaining objections, the new EIA was much more thorough, and ended up affecting less individuals. Thus in this case, community member power and the upheld appeal threatened project authorities' need to build the pipeline portion of the Mooi Mgeni Transfer Scheme as quickly as possible, compelling them to compromise their initial prescriptions for participation where community members are not significantly involved in decision-making. This resulted in a

greater trust and transparency between community members and authorities, and ultimately a more thorough consideration of alternative routes that better mitigated impacts for community members.

**The Environmental Monitoring Committee**

In the Record of Decision for the Mooi Mgeni Transfer Scheme Phase II, the construction of the project was authorised on the condition that an Environmental Monitoring Committee be established before the initiation of construction. The Record of Decision established a number of different representatives that must be present in the Environmental Monitoring Committee, including project authorities, community representatives and local and national government representatives. It also outlined the purpose of this Environmental Monitoring Committee, based upon the Department of Environmental Affairs' EMC guidelines published in 2000.

According to Section 3.2.2.7 of the Record of Decision:

> The purpose of the EMC would be to execute the following:
>
> (a) To familiarise themselves with the pre-construction status of the affected environment
> (b) To monitor and audit project compliance to the specific conditions of this record of decision related to construction and rehabilitation activities, environmental legislation and specific mitigation measures as stipulated in the environmental impact report related to construction and rehabilitation and the site specific environmental management plans.
> (c) To make recommendations to the Director: Environmental Impact Evaluation on issues related to the compliance to the conditions of the ROD by the Applicant
> (d) To sign off on rehabilitation once satisfied that the environment is in the same or better than pre-construction.

The overall consensus from numerous community members, project authorities, and independent authorities was that the Environmental Monitoring Committee was exceptional. The client brought a panel of experts to the Environmental Monitoring Committee, whose representative stated it was the best Environmental Monitoring Committee he experienced in his 40 plus years of monitoring projects throughout Africa, and the first to satisfy all of the

National Environmental Management Act's (NEMA) requirements and philosophy (refer to Chapter 2 on Environmental Management for a description of NEMA) (Independent Authority 2, EMC Minutes 7 August and 5 September 2013).

***Trust in Authorities***

Authorities and community members attributed the success of the EMC to various reasons, but most explanations concerned its ability to foster a sense of trust and credibility among community members. The overwhelming consensus was that the greatest enabler of the Environmental Monitoring Committee's success was the excellent chair, who was appointed independently based upon a stakeholder vote. The delegation of visible power to the Environmental Monitoring Committee in allowing it to choose the Committee chair worked to the advantage of the project, as they chose a chair who was well-received by the community and this facilitated a cooperative environment. The chair had an initial advantage in winning the community's trust because he was from a nearby area and knew many of the affected community members personally, and also was familiar with the economic and environmental issues of the area. Thus both familiarity and knowledge built an initial credibility among community members. The chair understood that this community in particular placed a high value on trust, and spent time to listen closely to community grievances and assure them that their views were considered, and this led to a continued active dialogue. Community members did not feel that the chair was biased toward project authorities (which can be a common issue with "independent" authorities paid by the client). According to the chair, this sense of trust and value eventually even led to community members developing a sense of buy-in for the success of the project. As indicated in Chapter V, this is one of the aims of participation for project authorities. Thus when project authorities and community members' views were both aligned in desiring a successful project, this facilitated cooperative participation and discussion in the EMC (Community member 1, Community member 16, Community Member 2, Project Authority 5).

Additionally, the Department of Water Affairs and client's structure of multiple environmental consultants on the ground ensured that daily mitigation issues brought up in the Environmental Monitoring Committee were heard and dealt with. The majority of the community noted that the availability, impartiality and responsiveness of one particular on the ground consultant, the engineer's social monitor, was instrumental in making the daily mitigation process legitimate (the "daily mitigation process" refers to everyday impact issues

of dust, noise, leaving gates open etc.). This consultant was available well beyond office hours and, according to community members, had their genuine interests at heart and put in an exceptional effort to make sure that their concerns were actually addressed by the higher authorities. Once again, the trust and credibility of project authorities played a huge role in community buy-in, in this case in ensuring that issues raised in the Environmental Monitoring Committee were mitigated promptly. Additionally, the prioritisation of daily mitigation of impacts was also one of the few expectations of participation on which both project authorities and community members agreed. Both parties cited that this was an important part of the community participation process, and thus this area saw less conflict and effective implementation.

The balanced structure of the Environmental Monitoring Committee also contributed to community trust, which can be attributed to the client in scoping out interest groups with the assistance of the community. An extensive number of community groups were represented (see Chapter IV), and there was an even representation between those delivering impacts (project authorities) and those receiving impacts (Project Authority 6, Community Member 2, Independent Authority 1). According to the chair, this is very important, because if the presence of the authorities is too dominant, this can intimidate the voice and empowerment of the community to vocalise their concerns. The structure was also rounded out by independent authorities, specialists in different areas such as water resource management and land expropriation who attended as invited guests and made presentations. According to the chair, their neutral and technical expertise provided a check to the tendency of the authorities to use their position to roll over the community with technical jargon.

This trust in the general Environmental Monitoring Committee coupled with the informed and educated background of community representatives allowed for the Environmental Monitoring Committee to truly become active and act as a check on compliance. Community members attended all meetings and familiarised themselves with environmental law and project documents so that they could use the Environmental Monitoring Committee mechanism to its fullest and truly "monitor and audit compliance" as the purpose of the Environmental Monitoring Committee states (Community Member 24, Project Authority 6, Project Authority 3, Independent Authority 1). The high socioeconomic status and education of many community members in the Committee allowed them to use the power of information to leverage their interests. However, this sense of community ownership and

activism led to one of the biggest conflicts in the community participation process; the placement of the quarry for the dam.

***The Quarry Dispute***

Briefly mentioned in Chapter V, the location of the quarry was a hugely contentious issue between community members and project authorities, after project authorities decided to haul material in from outside of the area rather than build the quarry in Rosetta. Community members did not want aggregate quarry material to be hauled in to their community from far due to the dangers it would pose to their main road from the large speeding trucks. They preferred the quarry to be developed right near the dam site in Rosetta. Although the Record of Decision did not definitively state that the quarry would be located in Rosetta, community members felt that they were misled, and that their buy-in was predicated upon the assumption that the quarry would be located in Rosetta (this sentiment is validated by EIA Public Participation meetings which seemed to plan for the quarry in this location) (EIA PP Meeting 16 Apr 2009). They also believed that project authorities had not properly planned for the nine-month licensing process to create a new quarry in Rosetta, and now since they wanted to implement the process as quickly as possible, they changed their plans, to the detriment of community members. However, project authorities did not believe that they did anything wrong. According to a project authority:

> [the Rod states]: 'IF the quarry is to be developed, then you will write an EMP. IF…[is] not telling you to develop it. We assumed there was no problem to bring in the material from other sources because one: it is a public road and two: it falls under department of transport not DEA, and therefore legally there are no issues" (Project Authority 6).

Project authorities stated that quarry material was found to be no longer suitable in Rosetta due to the quality of the rock, and they were in line with the law in changing their decision.

Although this dispute seems like a classic case of "he said-she said," it actually relates back to the conflicting views of project authorities and community members' toward participation. In Chapter V, community members indicated that mitigation was of utmost importance, and the Constitution states that they have a "right to an environment that is not harmful to [their] health," thus they felt that hauling in quarry material from an outside location would represent a danger to the health of those living nearby because of large speeding trucks on an

unstable road. However, according to project authorities, this impact was not directly related to the project (a second order impact) and community members were rather using the project to push an agenda to limit trucks on the road that they had been trying to accomplish for years, before the project's existence. Additionally, the trust and credibility of project authorities was threatened by this decision, as community members saw this dispute as an example of project authority inconsistency, and not following through with promises from the planning stages. The ability of project authorities to change a major previous decision also is another example of their visible decision-making power in the participation process.

However, these disagreements did not go unchallenged and caused the community to take action. Their opposition first started through heatedly opposing the hauling of material from outside in Environmental Monitoring Committee meetings. However, merely talking did not provide leverage to compel project authorities to respond. Thus, community members began to seek legal advice, culminating with the Nottingham Road Landowners Association threatening to go to court to stop the quarry material from being hauled in from outside. Thus because of this community pushback, when the Environmental Management Plan was approved, the DEA stated that the dam could be built, but that no aggregate material could be hauled in from outside using the R103, and that a separate traffic Environmental Management Plan (EMp) must be developed before material can be hauled using the road. This delayed the project for four months and cost millions of rand. When the traffic EMp was eventually approved, it did allow quarry material to be hauled in using the main road, but with many restrictions and concessions to the community. The community then "begrudgingly accepted that there were no alternatives." The decision put restrictions on the number of aggregate trucks allowed on the road, the hours aggregate trucks could drive, and implemented a speed over distance camera and a loop road to increase safety. Authorities were also required to report to the EMC every month the number of aggregate deliveries and traffic violations to ensure that compliance was followed. Although the community would have preferred to not haul in material at all, their efforts did push the client to make concessions to partially appease their concerns (Community Member 24). The end result also averted potential disaster for the client, as the issue eventually got resolved and the project continued, despite increased costs to the taxpayer from the delay. According to the chair, the trust built in the EMC is the only thing that prevented the body from completely breaking down and ending communications due to this disagreement.

Analysing whether the client was lacking in transparency, the community was trying to push ulterior motives, or the Record of Decision was at fault (most likely some combination of all three factors is true), is not most important. What this misunderstanding highlights is the importance of clear communication and understandings of participation between all channels in participation processes, and the trouble that results when lines of communication are ambiguous. It also demonstrates the ability of the community to use a participation body that is intended for complacent participation (as the EMC is indicated to be in Chapter II) to achieve significant compromise and concessions. Community members banded together and were aggressive and vocal, using invited spaces of participation to stall elements of the project from continuing until their concerns were addressed. Like the two appeals, their complaints were lodged against a fundamental aspect of the project (quarry material is necessary to build the dam wall), and thus received attention and compromise.

***Lack of Representation from the Dam Basin***

While the resolution of the quarry issue demonstrates how the community can assert their desires in invited spaces of participation and achieve compromise, the lack of voice of the dam basin community in the Environmental Monitoring Committee shows how groups can also be demobilised in the same space. Although the dam basin community (tenants and/or workers living in the dam basin) was allocated a representative on the EMC, both project authorities and community members recognised that their representative was not vocal and their concerns were not heard in the Environmental Monitoring Committee. They surmised that dam basin residents either did not feel capacitated to voice their concerns or felt like the construction impacts-focus of the Environmental Monitoring Committee was not relevant to them. Many felt that these sentiments were valid, and that the Environmental Monitoring Committee was too technical and not the right space for dam basin resident concerns of relocation, retrenchment and removal of graves. They felt that these individualised issues should primarily be dealt with on an individual basis, in the separate meetings that were being held for dam basin residents (Community Member 21, Project Authority 6).

However, the lack of additional effort by the Environmental Monitoring Committee to cater to such concerns removes a powerful and unique forum for community members to express their voice, even if specific figures and details are worked out in individual consultation. The Environmental Monitoring Committee could serve as an empowering medium to air general issues throughout the process of retrenchment and relocation because it would allow the

issues of the dam basin to be heard by a plethora of other community contingents present in the forum, who could become aware of the issues and lend their support in numbers.

The lack of voice from the dam basin community in the EMC was largely due to its structure of representation. Although the EMC did have a representative who came to the first couple of meetings, he was not actually living in the dam basin, but rather lived in a nearby community, with family ties to the dam basin. The representative was chosen due to his education and fluency in English, which were thought to help his ability in voicing the concerns of the community in the EMC setting, but because he was not a resident, he was not intimately familiar with the concerns of the community. Thus, because of the lesser capacity of the dam basin community, they had less invisible power than other community contingents to have their concerns represented in the Environmental Monitoring Committee. According to an independent authority, their lack of strong representation significantly affected their ability to resolve their grievances. He compared their situation to the strong representation pushing the issues of the quarry:

> "They didn't have a representative on the EMC who was capable of really forcefully articulating the dire impact that this dam had had on their welfare… if you don't have somebody talking up, a [John] in their midst, and they didn't have a [Mark] to sort of shout the odds…and some of these guys were vociferous, they would be scathing about traffic and dust and things like that. Meanwhile, the people who lost their homes and lost their jobs and everything else…." (Independent authority 1).

Proper representation posed a problem for those in the dam basin for a number of reasons. As an extremely marginalised (poor, uneducated, mainly non-English speaking) and fractionalised (split between many different farms) group, the dam basin could not be expected to produce vociferous representation on its own. Generally, in cases like these, project affected communities are either represented by tribal chiefs or municipal government. However, in this case the dam basin residents were not living on tribal land but on the properties of large farmers, and their tribal chiefs were not located in close proximity. Additionally, multiple stakeholders referred to the dysfunctionality of local government in the region, that ward councillors were not engaged and rarely attended EMCs meetings, so needless to say they did not take up the cause of the dam basin community (Independent Authority 1, Project Authority 5). According to the officially chosen representative, when he came in there was no political representative willing to take on their cause; he thought that

this could be because they were worried about backlash if the result did not end favourably for them, or were only concerned about their own political interests (Community Member 43). Community members from the dam basin did not consider him as representative at all, as he did not visit often and know the dynamics and day to day needs of the community. However, the community's marginalised position served as a barrier to them to voice this dissatisfaction, ultimately causing their issues to be under-addressed in the EMC (and even overall, outside of this forum).

According to some authorities, this issue of representation could have been better dealt with if project authorities had made a proactive effort to examine the dynamics of the dam basin community in earlier stages of the project, and had chosen their own representative who would spend time to intimately get to know the issues of the community and take on their voice. According to the EMC chair:

> "You've got to choose a political representative if in fact the community cannot produce their own spokesperson, someone who's articulate, and who can understand the sides around environmental impacts and social impacts…Their political representatives failed them, and so to the Environmental Authorisation failed them by not making sure that they had a correct representative…I felt strongly that the EMC had failed in not ensuring that there was a representative here through an interpreter present in the EMC to put forward their circumstances in a more forthright fashion and I think towards the end of the EMC it was still an unclosed item."

However, failure to do so relates back to a number of underlying issues. As mentioned throughout this paper, project authorities' primary focus in the technical aspects of the dam contributed to this perceived neglect of the dam basin. A plan for the dam basin was not outlined at the time of the initial public participation meetings, when much of the technical aspects had already been planned. In order for the project authorities to choose a representative and actually ensure that they were acquainted with the issues of the community, exploration of the relocation issue should have started much earlier. It takes a concerted amount of effort to empower a marginalised community, and it is rare that any project which relegates social issues a side concern to the main goals of completing the project dedicates the resources to ensure that marginalised affected communities can participate on an equal plain (and likely that most authorities do not even comprehend the full

extent of their marginalisation). Thus, in this case, the community experiencing the most drastic changes to their daily lives had little agency to voice their concerns in a public space.

**Benefiting Marginalised Communities**

Chapter V revealed one of the biggest differences in perceptions of participation was the focus on benefit to marginalised communities. While materially benefitting was most important to the majority of Mpofana and Umngeni municipalities (as only a small percentage of these populations was actually directly affected by construction), for project authorities these gestures of corporate social responsibility were secondary to issues pertaining to the physical completion of the MMTS-II. This difference in priority is key to understanding the conflict that manifested in Zenzani village and Bruntville township.

Guided by the government's Transformation Agenda, the client set employment and skills development targets which involved local community members in the project. All unskilled labour and most semi-skilled labour were targeted to be drawn from the Umngeni and Mpofana municipalities, .25% of the budget was targeted for spending on skills development programs, and targets were also set for the employment of local and previously disadvantaged contractors. Over 300 people were hired from the township, village and dam basin. The contractor held trainings in disciplines such as shutter-building, machine operation and reinforcing, as well as HIV counselling. As communities suffering from dire unemployment, the community members were grateful for this opportunity, and the five community members interviewed who were actually employed on the project were satisfied with the work (Community Member 37, Community Member 38, Community Member 27, Community Member 40, Community Member 46). Given the size of the project, this project could only provide a limited number of jobs, much less than are needed by the communities with approximately 10,000 residents. In this sense, it is impossible for one short-term project to satisfy chronic, widespread unemployment. However, benefitting from the project was the primary concern for these communities, and given their lack of visible power in relation to project authorities, they did not have agency to control the scope of benefits provided. Ideally, if power was balanced in favour of community members, they would devote extensive technical trainings and capacity building to create more job opportunities in higher level positions. This manifested in disappointment surrounding the distribution of jobs within the municipalities. There was also concern regarding people from outside the municipality migrating to the area to find jobs while project requirements indicated that

100% of unskilled labour should be local. This heightened scrutiny of job distribution represented symptoms of the reality that employment availability was not able to satisfy needs.

***Client Policy on Employment***

According to the client, employment of local unskilled labour on the dam and pipeline was best dealt with within the local political and community structures. Communities were instructed to set up local recruitment offices and the community hired liaison officers to help manage employment. Community members would bring their Curriculum Vitaes (CVs) and proof of residence, signed by the Ward Councillor, to the community liaison officer. The contractor would then request the needed number of workers from the Community Liaison Officer. Project authorities stated that they chose this method to avoid any accusations of client or contractor bias and to stick to the norms to which the community is accustomed. Essentially they did not feel that it was their job to manage political issues in the community arising from employment opportunities, and they possessed the visible, agenda-setting power to choose the extent of their community involvement. To them, these issues represented a second order impact that resulted indirectly from the project. This stance would save them much time on conflict management of a community issue that was separate from their primary goal of project completion. If community structures were in charge of employment, then any inequities could not be directed back to project authorities. Project authorities stated that this method was beneficial for community members as well because they had the freedom to choose the system that's best for them (Project Authority 6, Project Authority 7, Project Authority 3).

***Community Concerns with Employment***

**Commented [A3]:** Watch your headings.

Community members however, felt that it was the responsibility of the client to manage the process and ensure that it was fair. Given that community members' concerns regarding the MMTS-II were centred around employment, they expected that project authorities also give this issue diligent attention. Also, they felt that the presence of the MMTS-II caused (or at least exacerbated) community divisions and thus those who brought the project must mitigate this social impact by intervening in the hiring processes (Community Member 37).

Community members disputed the employment process based upon three main inequities, namely politically biased employment within Zenzani village, unfair distribution of

employment between Zenzani village and Bruntville township and between wards within Bruntville township, and employment of migrants originating from outside Umngeni and Mpofana municipalities. These disputes exemplified that power inequalities are not only between project authorities and community members, but within the communities. In Zenzani village, there is a growing political opposition to the dominant political party. Community members felt that if you were not a part of the dominant party, you would not be considered by local leaders for employment on the project. Some community members claimed that the Ward Councillor only signed proof of residence forms for those within his own party. This politicisation was also verified by many project authorities (Independent Authority 2, Community Member 34, Community Member 37, Community Member 36, Project Authority 1). Additionally, there were disputes regarding the distribution of employment between the two Municipalities, Mpofana (under which the majority of the dam falls, and where Bruntville township is located) and Umngeni (where the majority of the pipeline runs through, and where Zenzani is located). According to residents from Umngeni, at the beginning of the pipeline phase, more people were being hired from Mpofana, even though Umngeni was affected by the construction while Mpofana was not (Community Member 33, Community Member 37). Bruntville Township is very big with four wards, so this created additional problems within this municipality as community members believed that certain wards were favoured for hiring (Community Member 35, Community Member 6). Additionally, a problem common to nearly all large construction projects is that migrants from outside the community will always try to find work on the project, and if political structures are corrupt, migrants will be hired. In this case, according to one community member from Zenzani village, in order to avoid having to be present to sign proof residence forms from the opposing political party, the Ward Councillor resorted to issuing blank, pre-signed proof of residence forms that anyone could fill in. This allowed for non-locals to easily obtain employment (Project Authority 1, Community Member 34). In summary, those within the communities who were involved in the process of sending CV's to the contractor (ward councillors, community liaison officers) were accused of being biased (either to their municipality, ward or political party). According to a skilled worker brought in from outside by the contractor to work on the project,

> "But the message between the people and [the contractor], wasn't translated very well, because there was a middle man between the community and [the contractor]. The middle man didn't play his role. Because the middle man was supposed to tell

> guys, guys if you want to be hired, bring your CVs to me, and when they maybe looking for 20 guys, they will come and lead the guys to the councillors. They will say, we don't have jobs, but then tomorrow, someone is hired." (Community Member 6).

When temporary projects that only have limited employment opportunities come to communities with dire unemployment, disputes often arise. It is not the purpose of this research to determine whether the client was "right" or "wrong" in their initial decision to deal with employment through local structures, but rather to analyse why disagreements arose and how resistance unfolded.

***Strikes***

Community grievances were mainly concerning the aforementioned employment opportunity inequities, compensation disputes, and inequity among conditions from certain subcontractors. The majority of these community members were not included in formal participation structures such as the EIA public participation meetings and Environmental Monitoring Committee Meetings, as they were not personally affected by construction. They also did not have very strong assistance from local representatives, as Ward Councillors rarely attended meetings. They also did not have the money nor legal motivation to take legal recourse (as nothing that the client did regarding employment was in conflict with the law). Therefore, in order to attempt to have their grievances heard, community members from Umngeni and Mpofana municipalities used their strength in numbers to invent their own spaces of participation through protest. They organised strikes (and less frequently, sit-downs) throughout the dam and pipeline projects. These strikes physically blocked the project so that employees could not get to work and thus all construction had to temporarily stop (Community Member 34, Community Member 33, Community Member 38, Project Authority 3, Community Member 30).

Like the two appeals, these methods proved a threat to the project, which resulted in a response from the client and contractors. According to community members and project authorities, in response to the strikes, project authorities became more involved in employment, engaging in multiple meetings within the community and initiating a hat system where the community drew names from a hat for employment to ensure that the process was fair. According to a project authority:

> "…still a continuous effort from our side to stop people from striking, and stop people from stopping the work. It does take compromise; we've compromised a lot on this site. Stuff that we haven't allowed on any other project, we've had to allow on this project in the best interests of the project" (Project Authority 7).

When reflecting on the successfulness of the strikes, not everyone ended up happy, and certain issues were said to be resolved better than others. For example, those fighting politicisation within their municipality felt they only began to see progress as the project was ending and employment was already being scaled down (Community Member 34). However, many interviewees conceded was that at least some progress was made in getting the client and contractor's attention to sit down with the aggrieved and attend to various issues, since they were pressed to ensure that work would continue on the project. Resistance from the community compelled project authorities change their stance and attend to indirect impacts that they did feel to be under their jurisdiction, thus demonstrating an important display of community power through inventing one's own participatory spaces (Community Member 27).

***Training***

Another area from which community members expected to benefit was training. Although employment provides immediate income, training is perhaps the most important overall benefit that community members could receive from the project because it has the ability to provide sustainable benefits in terms of marketable skills. The community overall was not satisfied with the levels of training, lamenting that project authorities did not put enough effort into training and it seemed to be only a side focus. According to community members, the client would hold one week trainings with a complicated machine like an excavator and then provide a certificate, which wouldn't allow community members to truly master a skill to benefit them in future employment. They also were disappointed with the lack of external training to help those who did not gain employment. They suspected that the money budgeted was not all being used towards training (Community Member 27, Community Member 37, Community Member 28, Community Member 4, Community Member 37).

However, according to project authorities, they were allocated a budget for training and they fulfilled this budget, and now people are definitely better off than before in their ability to find jobs (Project Authority 3, Project Authority 7). Much of the discrepancy here reflects

back to the difference in priorities, how community members expected community centred participation and to gain lasting empowerment from the project, while project authorities saw their benefits to the community as an ancillary favour, that community members should be grateful for whatever is given. As a secondary benefit external to the main project, authorities felt that they had done more than enough. Community members were less successful in leveraging their power to achieve this desire for more empowerment in training. This is partially because there was less focus on this issue by the majority of the community members who were most concerned about immediate benefit from employment. Inadequate training was mainly the focus of community leaders and local politicians looking at the future of the community, but didn't have the numbers to form a mass movement. Thus at the end of the project this still remained an outstanding issue with which many community leaders were dissatisfied.

***Legacy Projects***

Although the project did not affect any individual homes in the Bruntville township or Zenzani village, the pipeline did run through the community sports fields in the Village. In order to leave a positive legacy, the client went beyond fixing the affected area and built an entirely new sports field. They also consulted with community members during public meetings to find out what they would like to be improved in their community, and as a result will be building new change rooms and bleachers for the sports facilities. The engineers on the project will also lay a pipeline and build a treatment plant that will provide water to the township (paid for by the municipality), given that the water from the Spring Grove Dam will not be serving their community and they also are facing water shortages. This was one of the few issues with little contention between community members and authorities. Through just a small percentage of the total project expenditure and little time spent (thus not impeding their primary goal of efficient implementation), project authorities could make a lasting difference in the lives of community members through infrastructure. This speaks to this community's most important desire from this project, *lasting* benefit (what they believed was lacking from the training component). Almost all community members interviewed were very pleased with these amenities. From one community member's perspective:

> "The coming of the project is a blessing in disguise to a disadvantaged community like us…there are things that will come out of it that will last forever in terms of infrastructure." (Community Member 27).

**Expropriation**

Unique from many dams built on either public (government owned) or tribal land, the area to be expropriated to form the Spring Grove Dam was surrounded by private landowners. Land was also expropriated along the pipeline route, comprised of individual landowners and residential developments. Landowners had heard word that the dam was going to be built for decades, so they were prepared for this development and understood the concept of individual sacrifice for the country's need for water (Community Member 26, Community Member 24, and Community Member 27). Landowners on both the dam and potential pipeline route were formally (though not yet officially) notified around five years before dam construction commenced when consultants began doing impact studies, and the client met one-on-one with individual potentially affected landowners outside of public meetings. Subsequently, notices were issued with the intent to expropriate (Community Member 26). Most landowners interviewed believed that the expropriation process was properly managed in the early stages and communication was fluid and transparent.

However, regarding the subsequent compensation process, as is often the case, some landowners were happy and some were not. Although the client followed the Expropriation Act of market related compensation, some landowners felt that they were not "in the same position or better," as implied by "restitutio in integrum," and the words of project authorities (Project Authority 2). Those who were the most unsatisfied were the owners of large farms, as market compensation is less rand/acre for large amounts of land than for smaller lifestyle properties (Community Member 26, Community Member 32, Community Member 24). In addition to disputes over compensation amounts, landowners felt that they were not left in the same position or better because their whole farms were not expropriated (only a smaller affected portion was expropriated), but enough was expropriated to necessitate shutting down their businesses, some which had been running for generations in the family. Since they only received money for the partial expropriation, they couldn't afford to re-establish their farms and businesses in another location. Also some along the pipeline were unsatisfied. Project authorities admitted that the compensation for the pipeline was quite meagre, as land was only expropriated and compensated to cover the area of the exact width of the pipeline. However, the damage was much greater than this small compensation, as the pipeline cut right through properties causing a major disruption, and owners could no

longer farm or build over the servitude (Project Authority 1, Project Authority 2, Community Member 23, and Community Member 31).

According to project authorities, the formal process of expropriation consists of an offer of compensation from the client's valuer, after which the landowner can appoint a valuer to give a counteroffer if they do not agree with the initial offer. Then the valuers negotiate, and if an agreement cannot be reached then the community member can choose to escalate the situation legally (Project Authority 2, Project Authority 5, Project Authority 6, Project Authority 7). Those who were unsatisfied with initial valuations and thus decided to contest were very unhappy with the whole communication process going forward. By law, the client does not have to divulge the breakdowns for valuations unless the disagreements reach litigation phase, and thus the client felt no need to entertain demands for clear valuations (Project Authority 5, Project Authority 1). However, community members still felt that it was their right to have a clear breakdown of valuations in order to ensure that they were compensated fairly, in line with their strong desires for transparency in participation. Thus they felt that communication broke down when they began to dispute valuations. They felt that they were bullied into either accepting unfavourable terms or hiring lawyers, because the client refused to negotiate with them (Community Member 26, Community Member 32). According to one landowner:

> "The communication was always stressed. It was like, they held a gun to my head; I had no option. With a buyer, if you don't like the price, you don't have to sell. With them, they just tell you this is what we're gonna give you and that's it…I was told this is what we pay, and this is a fair amount. Never mind what I think or what the prices around here are. This is their opinion, and this is it, otherwise we'll see you in court." (Community Member 23).

In order to dispute what they believed was a violation of Section 25 of the Constitution, some landowners decided to take further action. As with the community associations which filed appeals, landowners were informed and resourced to allow them the option of utilising visible power and seeking legal assistance. This right is indicated under the Promotion of Administrative Justice Act

> In order to give effect to the right to procedurally fair administrative action, an administrator may, in his or her or its discretion, also give a person referred to in

subsection (1) [a person adversely affected by administrative action] an opportunity to (a) obtain assistance and, in serious or complex cases, legal representation;

However, in this case, taking legal recourse was a much greater struggle, and yielded less favourable outcomes than for those from the Mooi River Farmers Association and Mziki Homeowners Association who filed appeals. Although both landowners and members of the aforementioned Associations enjoyed the privilege to use the law to protect what they perceived to be violations of their rights, the fundamental difference lies in their power to frustrate project authority goals in order to leverage their desires. With the two Associations' appeals, their concerns were attended to quicker with more compromise, as their appeals pertained to the construction of the dam and the pipeline, which project authorities needed to sort out urgently so that they could implement the project as quickly as possible. The landowners' disputes; however, were not directly implicating the implementation of the project, but rather disputing their personal compensation figures for land (which was dealt with separately from the actual expropriation). Thus compensation arguments did not impede the impoundment of the dam. According to community members, because their concerns were not directly linked to implementation, authorities had no problem acting evasively in communication and strategically trying to drag out the legal process until community members gave in due to exorbitant lawyer fees. At the time of conducting interviews with the four landowners who were dissatisfied, some landowners were still involved in legal battles that had spanned over three years. Community members cited that this process caused significant social stress for little gain. However, they felt that if they didn't involve lawyers they would have been completely taken advantage of (Community 26, Community Member 32, Community Member 23).

At the time of interviews of the four landowners who were unsatisfied with compensation, one had given up his legal battle due to stress and costs, one was still fighting, and two were newly planning to take legal action. According to one community member, if one continues the fight until they are pushed to court, only then will the client be willing to compromise, as losing in court would negatively affect their reputation (Community Member 26). However, the overall consensus was that fighting compensation disputes was an uphill battle. The client was steadfast in adhering to the Expropriation Act and the landowners did not have legal power to stop the project from proceeding, and thus large farmers could not effectively achieve their desires from participation**.**

**Disempowerment in the Dam Basin**

Approximately 35 families lived on expropriated land in the dam basin. Many were also working for some of the large farmers in the basin, while others were just living as tenants in small cottages on the land. The dam basin residents represent the poorest, least educated, and overall least capacitated community members impacted and involved in the Mooi Mgeni Transfer Scheme Phase II. Of the nine residents interviewed from the dam basin, all were dissatisfied with the hand that they were dealt, and there was more unanimous disappointment than from any other community group. This dissatisfaction was both due to drastic changes that the dam inflicted upon their lives as well as their position as the least capacitated community group to raise their issues to project authorities.

***Relocation: Who shoulders the burden?***

The disempowerment of those in the dam basin begins at the basic legal level given their informal ties to the land, which by law prevent them from exercising decision-making regarding their relocation. This case of relocation presents a unique scenario, different from those that often occur with dams or mines that are located in large tribal areas. In this case, land in the basin was not owned by a tribal authority in which case it would officially be owned by the state. It was rather owned by the private citizens which the dam basin residents were either working for or residing as tenants. Thus, legally, the onus rests on the landowner to retrench and relocate those working and living in the dam basin (Project Authority 1, Project Authority 5, Project Authority 6). This legal framework is disempowering to those living in the dam basin, as it gives them no say in the process, despite the fact that some families have been living in the same location for generations, even longer than the landowners. It represents a case of hidden power, where certain groups are excluded from exercising visible power, because they do not have access to the agenda and decision-making of how their issues are dealt with (Gaventa, 2006). With this process of deciding the futures of those in the dam basin occurring largely outside the knowledge of the residents, it ended up extremely delayed. According to a project authority:

> "You see I don't think the environmental impact assessment public participation process even took the workers and tenants into account at all. It wasn't even in the frame. They were private land, farmers' problems, farmers look after that. In their terms of reference, they didn't have any public participation mandated other than the

> landowners...The only access that our project team had was to the landowner, not to anyone else that was working on the property. So for most of the duration of the planning and implementation and the design, we never got to speak to employees." (Project Authority 5).

Eventually, the client took on the responsibility of establishing a development to relocate the majority of these community members, establishing a residential development in Bruntville township (aside from a few who decided to relocate to tribal land). According to some community members and project authorities, their fate was not dealt with in the planning and early phases of the project, because the client assumed that landowners would take full responsibility for those living on their land (Project Authority 5, Community Member 24, Community Member 32). However, it was later realised that many landowners did not want to take on the responsibility of sorting out their tenants due to the effort, and for some, the emotional stress (Project Authority 1, Project Authority 6, Community Member 32). According to landowners, the client waited too long to address this issue, putting the technical aspects of the dam first, in line with their priority of completing the dam. However, according to the client, the landowners failed to inform their tenants of the project and that they would eventually be relocated (Community Member 24, Community member 32, Project Authority 5, Project Authority 6, Project Authority 1). Aside from the opinions of each side in this dispute, the result was that the issues of those in the dam basin were not dealt with early, and those living there were left to suffer from a process in which they had no say. According to a project authority, the last dam basin residents were only being moved as the water in the dam began to raise up to their houses (Project Authority 5).

### *Effects of Relocation*

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Given that the communities in the dam basin experienced drastic life changes, it is expected that they would have many grievances, as is often the case with relocation. From a Western, developed perspective, giving community members new houses with a title deed (so that they now have assets under their name) with functioning sewage, electricity etc., puts them in a position where they are much better off than before. Project authorities and some of the landowners generally subscribed to this view. Although they conceded that this is a drastic change in lifestyle, they still believed that these residents would be better off in the long run with formal housing. However, from community perspectives, the impacts of the whole relocation process were quite severe.

Due to the aforementioned disputes between project authorities and landowners regarding the responsibility of relocation as well as the fact that the land in the new housing development had to be rezoned from residential to agricultural, the building of and moving into the new development was greatly delayed, and those whose homes were inundated by the dam had been living in temporary housing for three years at the time of empirical work. During my research visit, I visited the two temporary housing sites. In one site the houses seemed quite suitable - well-built and sizeable homes with functioning amenities. However, the other site was quite abysmal, composed of run-down shacks. At the time of the visit there was no electricity, and the women interviewed were huddled around a fire for warmth and light. The four community members interviewed living in the latter conditions had many grievances with their current situation. They lamented the frequent shortages of amenities, that sometimes they would have to walk to Bruntville township (approximately 3 kilometres away) to beg for water and carry it back, putting a strain on their bodies. They also often lacked firewood and were unable to cook (Community Member 28, Community Member 40).

In addition to their current temporary housing situation, community members expressed many grievances with the overall impacts of the dam. One of the biggest issues was the loss of employment for those that were working for landowners. To ensure fairness and that landowners would not have to choose which staff they would retain for their smaller remaining businesses, all workers living in the area were retrenched and relocated. The landowners gave their workers standard retrenchment packages, an amount which the client matched, and the client also gave workers six months of additional salary while they were looking for new jobs. However, new jobs could not be guaranteed:

> "In terms of restoring livelihoods which is a World Bank requirement, we will not be able to achieve that. What we've done is we've given preference to those people evicted by the dam to work on the pipeline, but it is a short term project and it does come to an end next year. The onus was on the people to find alternative employment and we've tried to help with training programs; we've taught them how to lay bricks and that sort of thing. But they will have to go out and find jobs." (Project Authority 6).

This has put community members in a very difficult situation, as the unemployment levels in Bruntville, (where the community members were moved) are extremely high. According to a landowning farmer living near the township:

> "You've also just taken a whole lot of people and unemployed them. 70 or 80% of [Bruntville] are unemployed. If you're going to take another 10% or 1% or whatever [and move them to Bruntville], they're all going to be unemployed, because there is no job opportunities." (Community Member 16).

At the time of my research visit community members were greatly struggling with employment, at best finding meagre temporary work. Most were either running out or had completely exhausted their retrenchment fund, and wished that they had been given retrenchment money to last until they were moved and settled into their new houses (Community Member 28, Community Member 40). A few had found work on the pipeline, but their new stand-in representative cited political interference from Ward Councillors from the township, which led to them not always getting preference on the pipeline as promised (Community Member 5). The employment situation was direst for women who were formerly working in the dam basin, as the jobs on the pipeline as well as other jobs in the community were generally not available for women. According to one community member: "finding jobs here is hard, I might even have to end up going back to crime to feed my family." (Community Member 40).

Another big issue for community members was their new houses. Although community members appreciated the aesthetics of the houses and did agree that they were an upgrade in quality, having a nice new house did not necessarily fulfil their particular needs (Community Member 28, Community Member 29). The most pressing community concern with the houses was the size. According to the client, in order for the community members' legal status to remain as indigent so that they can receive subsidised electricity and water, they could not build houses with more than 5 bedrooms (Project Authority 6). However, many community members lamented that these sizes were much smaller than their previous homes and would not fit their families. They would now have to extend to build extra rooms, but did not have the money to do so (Community Member 40, Community Member 29, Community Member 8, Community Member 22).

Perhaps the harshest impact, but also most intangible, is the change of lifestyle that these community members had to undergo, from initially living off the land for generations in the same place, to now living in a township environment. Their sense of place was uprooted, not only through their homes but through the exhumation of over 130 graves (Community Member 30, Community Member 43). According to community members:

> "We haven't ever moved to another place…I'm 28 years old, had never lived in another place up until this project…it's difficult, but we are trying to cope, because there is nothing that we can do." (Community Member 22).

> "At the farm, my family has lived there for 3 generations. My mom lived there and worked there and so did my dad. And they both died there. I've been employed there as a kid until 2012. The employer/landlord had actually given me a large piece of land because my family has been working there for that long." (Community Member 29).

> "Because someone is going to touch the graves, you know for us, for black people the graves are very sensitive things, you can't just go to the grave, we respect the grave a lot. They don't know what is going to happen once they dig them, whether they are going to be angry, whether misfortune is going to follow them after digging them, those were just assumptions around the whole thing" (Community Member 43).

Community members always had food on the farms and never had to worry about going hungry, and also many owned livestock which there was now no space or purpose for in an urban environment (Community Member 40, Community Member 29, Community Member 5). They now had to cope with the drastic changes of urban living, such as increased crime in a township and the need to now pay for basic needs (such as medical assistance, which was often provided by the landowner) while newly unemployed. These lifestyle changes can easily be underestimated when imagining what is best for a community (i.e. title deeds), without considering the lived experiences of community members.

Some landowners and project authorities warned that the grievances of community members must be heeded with caution, citing that some were opportunists, always looking for more opportunities to gain financially from the project. Examples cited were families keeping the livestock that were given to them by the client to be sacrificed with the removal of their graves, or families dividing their households in two when it came time to be allocated to new houses so that they could have bigger spaces (Project Authority 6, Community Member 24, Community member 32, Project Authority 5). However, such actions should not necessarily be viewed as opportunistic and deceitful, but rather further evidence of the indigence of this particular community, and their desperation to fulfil their daily needs. Summed up by one community member:

> "The dam had a negative impact in our lives. We were previously employed, now we are not employed. We made a living on the farm, and had everything we needed right there. Now here we have nothing, and its hard making ends meet" (Community Member 28).

***How the Dam Basin Resisted: Demobilised***

It is salient to examine how those living in the dam basin reacted to perceived injustices, in comparison to other community groups affected by the project. As has been demonstrated by this chapter, communities used legal means, protests, as well as speaking out in formal participation forums to fight against impacts that they felt were unjust, and experienced varying levels of success. For dam basin residents, none of these options were available, and they were effectively resigned to be passive receivers of impacts. As indicated in Chapter V, those in the dam basin did not have representation in the Environmental Monitoring Committee, the one public mode of redress. They also were a fragmented community of families separated by large farms, working for different landowners without political, cultural or community unity. According to theories of social movements, one of the most important indicators of successful mobilisation is the collective experience of misery, that those who experience dissatisfaction band together and become more empowered in the ability to affect change (Eckstein, 2001). However, families were relatively separated, and also were small in number making it unlikely that the community could impact the project with protests and strikes. Needless to say, they also did not have the education or resources to take legal action. This left them disempowered, and left to attempt to bargain on an individual basis with project authorities. According to community members, when they were approached by project authorities, they were told only how good the project would be for them, and in meetings they could raise any of their concerns regarding grave removals, relocation etc. Thus they felt that since they were given the option to move and agreed, they must accept all consequences.

> "[They said] they will do everything…so we do agree to that, alright, it's fine. Then we agreed to come there…there was nothing that maybe we were forced to do, they were just asking are you happy with that, if there's something you are not happy with you must tell us." (Community Member 22).

According to some community members, project authorities initially approached the elders (as the younger generation are not around the house during the day), and the elders who were illiterate were presented with documents in English, as well as a plan of the house in square meters. However, especially given their history of oppression and minimal interactions with those outside of their small rural setting, their intimidation and confusion from these interactions likely prevented them from feeling comfortable voicing their lack of understanding. They therefore signed and agreed to the terms without true comprehension, removing the opportunity they should have had to push back and negotiate favourable terms in the initial stages of communication (Community Member 22, Community Member 28). One community member stated that project authorities always came to them with the attitude that authorities were doing community members a favour, as anything that project authorities were doing for them was the responsibility of the landowners. This further worked to internalise complacent acceptance among community members, and they believed that they were not entitled to ask for more (Community Member 28). Overall, community members felt that the way communication and impacts were delivered from project authorities was not conducive to allowing them to voice their concerns, and they felt resigned to passively accepting what was happening to them.

However, the lack of empowerment of those in the dam basin was not only derived from communications with project authorities. Perhaps the biggest part of this complacency comes from an internalisation of powerlessness as a result of generations of marginalisation. According to Gaventa (2006), the dam basin residents were subjects of hidden power, the most insidious and entrenching of the three forms of power. Given their knowledge of their lack of education, resources, and voice in society, the residents of the dam basin have come to accept a sense of inferiority and therefore a passive role in any sort of participation. They have come to believe that project authorities are superior and they as a community are incapable of pushing back, or it is not their place to resist such authority (Gaventa, 2006, Campbell, 2013). Thus, from their perspectives, "most of it was just accepted, because it seemed like there's nothing we can do." (Community Member 29). Their marginalisation from wider society internalised the belief that their views are invalid. The hidden power they are confronted with as a marginalised community is summed up by one community member:

> "It's just that, there's nothing we can do, because we've got no powers. To be quite honest, we are not happy. With so many things we are not happy. As I've said, we

> don't have powers, there's nothing we can do. If they came and said this and that to us, we can accept that even though we are not happy. Sometimes, it's hard to say we are not happy to them. Yeah, it's just like that." (Community Member 22).

It takes a significant amount of empowerment from external forces to assist communities such as this in realising their own agency (Campbell, 2013). As elaborated in the Environmental Monitoring Committee section, the initial assigned representative, who would ideally be able to help bridge these gaps of powerlessness, was not intimately familiar with the community as he resided in a different location. Therefore, for much of the early stages of planning and implementation, this community's concerns were not brought to the attention of project authorities (beyond scheduled community meetings). Community members relied on a project authority from the engineering team as the one person who had a direct line of communication with project authorities and would listen to and communicate their concerns. According to the community, he was very responsive and their issues were initially always addressed (Community Member 40, Community Member 25, Community Member 28). However, community members indicated that midway through the project, this representative resigned, and this eliminated their channel of redress. This meant that all of the initial promises made were no longer adhered to, and also that there was no longer a channel to report issues with the temporary accommodation. As indicated in Chapter V, trust and follow-through of promises was a primary concern for participation of community members, and led to conflict and resistance when trust and credibility was severed. Almost all community members were distraught from this lapse in communication and follow-through, and felt that the new person who occasionally came to visit them was not as accountable and could not empathise with their concerns as he had not been there with them throughout (Community Member 25). But unlike other communities, given their powerlessness, there was nothing that they could do to resist, and they now are living with many grievances that do not get addressed.

For example, according to community members there is no longer a way to have their issues with electricity and water in the temporary accommodation addressed efficiently, and promises made regarding reimbursement for transporting their kids to their old school as well as amenities for the removal and reburial of graves by the initial representative are no longer recognised (Community Member 25, Community Member 28). Additionally, a community member expressed that they requested to their liaison from engineering to have gardens so

that they could live more sustainably as they did on the farm (Community Member 25). However, project authorities indicated that community members do not take initiative and feel entitled because they are project-affected, specifically stating that they have not shown an interest in planting gardens (Project Authority 6). Thus the disconnect in communication is clearly evidenced, to the detriment of the dam basin community. According to one project authority, the client purposefully did not provide a solid, continuous representative in order to minimise their risk relating to the impacts on the dam basin community, which severely hindered participation and negatively impacted the community (Project Authority 5). However, this is only one subjective opinion, and what is more important to take away from these representation issues is the community's helplessness in shaping their participation in the project.

Only as land was beginning to be expropriated did the community's issues finally get taken up in full by a representative willing to devote to their cause, and who is also connected within local political structures. A primary school teacher from nearby Bruntville township, the representative came in specifically to address issues of the grave removals, as community members were dissatisfied with amenities that they were being provided for the ceremony, and the compensation for the deceased (because they said that the terms had changed from what they were initially promised) (Community Member 28, Community Member 22). This new representative did help in getting more compensation for the deceased. But at this point it was too late for many issues regarding housing and employment to be revisited. What can be seen from this case is that dam basin residents were severely disadvantaged in voicing their issues in comparison to other community groups. They did not have their own resident capable of forcefully addressing their issues and were left to deal with constantly changing, broken representation. The plight of this particular community truly represents a case of marginalised minority sacrifice for "the greater good."

Throughout this chapter I have argued that it is important to examine the power relations in participatory spaces. Although project authorities create spaces of participation and create the agenda in these spaces, there were some opportunities in the Mooi Mgeni Transfer Scheme Phase II for community members to mobilise their resources and put pressure on project authorities so that communities could achieve favourable outcomes, while for other community groups, power relations were not in their favour.

## Chapter VII: Conclusion

The new focus of "participation" in development projects is a positive step toward considering the people that infrastructure projects affect and should seek to benefit. However, the massive impacts of dam construction on communities that are usually not even primary beneficiaries of the project present a need to focus particular attention on improving the public participation processes in such projects. Through analysing the perceptions of various stakeholders in dam development, this study represented a start in this effort, by defining what participation means in the context of dam development, the depth and feasibility of participation sought to be achieved, and how communities both struggle and succeed in exercising their own agency in participation. A case study allowed the thoughts and experiences of project authorities and especially community members to be unpacked in much greater depth than in the official project public participation meetings. Analysis of these experiences can help to inform future policies for public participation in a way that better considers the interests of all parties involved, which are sometimes not overtly visible.

This research sought to delve beyond the rhetoric of polished participation documents and explore the underlying motives behind perceptions of participation and resultantly how participation manifests. Literature on participation identifies a divide between participation that is envisioned to empower community members (which generally manifests at the higher, more intensive rungs of the participation ladder) and participation that is used as a means to further development projects (which generally manifests on the low rungs of the ladder). This literature informed the analysis of the Mooi Mgeni Transfer Scheme Phase II, where participation was primarily conceived by project authorities as a mechanism to facilitate the efficient implementation of the project, while by community members it was viewed primarily as a mechanism to impact their own condition, whether by mitigating impacts or providing additional benefits, which would require a greater depth of participation than project authorities envisioned. This disconnect is common and expected in development projects, given the differing interests and objectives of project authorities and community members. Semi-structured interviews provided the depth so that some of these perspectives which were not effectively communicated between parties throughout the project could be explored. These ranged from project authority beliefs that community members were abusing the benefits of project compensation to community feelings of internalised inferiority and complacency. In the future, projects can look toward creating a dedicated forum for all

parties to honestly articulate and discuss their overarching interests and desires before and throughout project implementation, perhaps as a separate component of public participation meetings (which are generally more specific and issue-focused).

Additionally, the Constitution and National Environmental Management Act afford civil society a great degree of rights and empowerment which the educated demographic in the community understood and utilised throughout the process. However, the actual participation guidelines only mandate minimal consultation and engagement in order to achieve legal compliance. These incongruences also set the stage for conflict, and indicate the need for a reassessment and alignment of national legislation and participation guidelines. Trust was an important mediating factor which could either lessen or exacerbate conflict in participation. In instances like the Environmental Monitoring Committee, community members and project authorities achieved considerable compromise due to the trust built by the chair of the committee. However, in issues such as compensation, community members felt that they were misled and this caused a breakdown in trust and increased disagreement and dissatisfaction. All of these conflicts of interest plus the scant elaboration on conflict management techniques in national participation guidelines led to inevitable resistance from the community when they felt that their needs were not being met. More time dedicated to relationship building and discerning community needs before project implementation will likely be made up for by less project delays during implementation due to misunderstandings and lack of trust.

The resistance that manifested in the project has demonstrated that the ability to threaten project implementation combined with one's resources determined the outcomes of resistance. This research has shown that group efforts that threaten project authorities' most important goal of project completion require urgent attention, and thus yield greater success in having concerns met. This form of "project impeding" power does not appear to fit into Gaventa's formal, hidden and invisible forms of power, and is worth further exploration in future research. This exercise of power can be seen through both of the appeals from community associations, as their concerns were with fundamental technical aspects of the project and could cause extensive legal delays if not dealt with by the client. Thus these contingents gained a more favourable response from the client when utilising their legal right of appeal. The threat of legal action from unified group mobilisation regarding material for the quarry also lead to favourable gains. The strikes of those upset with the employment

process were arguably reacting to issues somewhat beyond the jurisdiction of the project (community politics and chronic local unemployment), but still received considerable attention due to the power of strikes to impede construction. This draws lessons for community mobilisation efforts, especially when invited spaces of participation fail to achieve results. This study provided evidence that stalling some element of project implementation carried the greatest likelihood of receiving attention for one's demands. However, the grievances of those individually affected made the least progress (both landowners and dam basin residents). These were both individual negotiations that had less bearing on project authorisation and construction. The aid of lawyers assisted in some concessions for landowners, but minimally so. And the dam basin, a severely marginalised community, did not have the physical resources nor ideological power to organise any form of collective resistance to the project, even though their lives were the most altered, and thus they were largely left to be the receivers of impacts. This indicates that there should be a reassessment of how project authorities work with those who are affected by large scale expropriation, with the particular aim of providing more transparency and engagement regarding compensation, so that there is less room for dispute and legal escalation. Most importantly, a more concerted and in-depth effort to engage marginalised communities needs to be considered. This study demonstrated that marginalised communities often have less opportunity to communicate their needs to project authorities than other community demographics, and even when they are afforded a channel of communication, both their material and internalised disempowerment weakens their voice. Although there is no easy fix to empower marginalised communities, it is definitely something that deserves more weight in participation strategies, especially given South Africa's history of structural inequality from apartheid.

It is the hope that some of the insights from these findings will provide additional knowledge and understanding of public participation and its dynamics. Although impacts of dams are unavoidable, effective public participation should be able to provide sufficient benefits to improve the lives of all affected community members, as well as offset impacts.

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**APPENDIX A: INTERVIEW SCHEDULES**

**Interview Schedule for Community Members**

Where do you live? In relation to the Mooi Mgeni Transfer Scheme construction?

How/when did you first hear about the Mooi Mgeni Transfer Scheme? How was the project publicised? (was it well publicised?)

How/when did you first hear about the public participation process?

Can you describe any public participation meetings you attended/you heard about?

-Who attended?

-What was discussed?

-How were community concerns addressed?

-What involvement opportunities were presented?

Can you describe any public participation that occurred outside of meetings?

-What happened? Who was involved?

Can you describe the process of job creation for local residents from the MMTS?

At what points in the process of the MMTS construction were you involved? (before, during, after construction?)

What did you think of public participation in the MMTS overall?

Do you feel that project officials were considerate of your concerns? Were you able to work together with project officials on equal terms?

How has the construction of the MMTS affected your life, if at all? How do you think it will in the future?

Do you any benefits coming to you directly or indirectly from the construction of MMTS? Any detriments?

Do you any benefits coming to you directly or indirectly from the Public Participation Process? Any detriments?

What were your expectations from the public participation process/were they met? Do you believe it was effective?

Is there anything that could have been done/considered to make the public participation process better for you?

Do you believe that all voices in the community that desired to participate were heard?

Do you believe that the process was fair?

Do you think that PPP are important for these types of projects? What do you think is the role?

What do you feel are the benefits of public participation? (for MMTS and in general). The challenges?

What would your ideal participation process consist of for the MMTS?

**Interview Schedule for Project Authorities/Independent Authorities**

What was the purpose of the MMTS?

What is the role of PPP (in general and for MMTS)

What do you feel are the benefits of public participation? (for MMTS and in general). The challenges?

Can you describe any public participation meetings you attended/you heard about?

-Who attended?

-What was discussed?

-How were community concerns addressed?

-What involvement opportunities were presented?

Can you describe any public participation that occurred outside of meetings?

-What happened? Who was involved?

Was the community provided with additional benefits that they would not receive otherwise from the PPP?

At what points in the process of the MMTS construction were you involved? (before, during, after construction)

Were you able to work together with community members on equal terms?

What were your expectations from the public participation process/were they met? Do you believe it was effective?

Do you believe that all voices in the community that desired to participate were heard?

Do you believe that the process was fair?

Do you think that PPP are important for these types of projects? What do you think is the role?

What do you feel are the benefits of public participation? (for MMTS and in general). The challenges?

How do PPP's factor into the National Infrastructure Plan/National Development Plan?

Do you feel that there is a trade-off between community member livelihoods and dam construction?

**APPENDIX B: INTERVIEW DATES**

Project Authority 1: 17/07/2015 and 16/09/2015
Project Authority 2: 27/07/2015
Project Authority 3: 05/08/2015
Project Authority 4: 17/07/2015
Project Authority 5: 15/08/2015
Project Authority 6: 31/07/2015
Project Authority 7: 17/07/2015
Community Member 1: 15/07/2015
Community Member 2: 25/08/2015
Community Member 3: 14/07/2015
Community Member 4: 08/08/2015
Community Member 5: 8/08/2015
Community Member 6: 05/08/2015
Community Member 7: 05/08/2015
Community Member 8: 04/08/2015
Community Member 9: 14/07/2015
Community Member 10: 17/07/2015
Community Member 11: 04/07/2015
Community Member 12: 04/07/2015
Community Member 13: 17/07/2015
Community Member 14: 16/07/2015
Community Member 15: 15/07/2015
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Community Member 18: 04/08/2015
Community Member 19: 17/08/2015
Community Member 20: 05/08/2015
Community Member 21: 14/07/2015
Community Member 22: 05/08/2015
Community Member 23: 06/08/2015

Community Member 24: 07/08/2015:
Community Member 25: 04/08/2015
Community Member 26: 06/08/2015
Community Member 27: 17/07/2015
Community Member 28: 05/08/2015
Community Member 29: 05/08/2015
Community Member 30: 16/07/2015
Community Member 31: 06/08/2015
Community Member 32: 05/08/2015
Community Member 33: 17/07/2015
Community Member 34: 17/07/2015
Community Member 35: 03/08/2015
Community Member 36: 16/07/2015
Community Member 37: 15/07/2015
Community Member 38: 17/07/2015
Independent Authority 1: 7/08/2015
Independent Authority 2: 27/07/2015
Independent Authority 3: 19/08/2015
Independent Authority 4: 19/08/2015