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*Understanding the Participatory Development approach to Solid
Waste Management -A case study of Mnyamatsini, Swaziland*

Maria A. Jäppinen

Department of Human Geography
SGED10

Supervisor: Spring term 2015
Yahia Mahmoud

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The MFS Scholarship Programme gives Swedish university students the opportunity to carry out fieldwork in low- and middle income countries, or more specifically in the countries included on the *DAC List of ODA Recipients*, in relation to their Bachelor's or Master's thesis.

Sida's main purpose with the Scholarships is to stimulate the students' interest in, as well as increasing their knowledge and understanding of development issues. The Minor Field Studies provide the students with practical experience of fieldwork in developing settings. A further aim of Sida is to strengthen the cooperation between Swedish university departments and institutes and organizations in these countries.

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To my Mum, for your endless support!
Посвещаю свой маме, благодаря которой я добилась всего, что у меня сейчас есть!

ABSTRACT

In the field of development studies, few concepts have gained as much prominence as the Participatory Development (PD) approach, which emphasizes on putting the poor and marginalized groups at the heart of development policy planning practices. Central to the PD approach is bottom-up management of development policymaking and practices, which considers learning, empowerment and local ownership as both a means to an end, and an end in itself. However, it has not gone without criticism, especially with regards to conceptual slips in visualizing community as a homogenous group, and underestimating the embedded power relations. This paper relies on the concept of PD and the related criticisms as a lens to understand the participation behavior in a bottom-up waste management project in Mnyamatsini, a semi-rural area of Swaziland. The project, 'Mbabane Dry Sanitation and Waste Management' (MDSWM) uses the PD approach as a core element to enable the project's efficiency, effectiveness and sustainability and ultimately to contribute to solving the poor waste management practices in the community. However, central to the project's success is the level of local participation of community members as both implementers and users. The findings of the paper demonstrate that the local community's participation or not in the project as users and implementers is determined by a complex interplay of factors, including social relations, ownership issues and environmental health aspects. This complexity requires in this context, a "middle-ground" approach between "top-down" and "bottom-up" approaches to this development project.

KEYWORDS: Participatory Development, Participation, Community Participation, Solid Waste Management, Semi-Rural, Swaziland

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ABBREVIATIONS

DOP	Drop-Off Point (for recyclable waste in Mnyamatsini)
FAO	Food and Agriculture Organization
GLM	Green Living Movement
ISWM	Integrated Solid Waste Management
MDG	Millennium Development Goals
MDSWM	Mbabane Dry Sanitation and Waste Management Project
SDG	Sustainable Development Goals
SWM	Solid Waste Management
TUAS	Turku's Applied Science University
UN	The United Nation
UNDP	United Nation Development Programme
UNEP	United Nation Environmental Programme
UNISWA	University of Swaziland
WB	the World Bank
WM	Waste Management
3R	Reduce, Reuse, Recycle

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1. INTRODUCTION

Ever since the end of 1960s, when Participatory Development (PD) was introduced into the development agenda, there have been arguments about whether this is truly a ‘bottom-up’ approach to people-centered development or a utopian concept which in reality continues to serve ‘top-down’ agendas (Cornwall, 2000). Despite discussion throughout decades, presence of PD approaches has been undeniable in nearly all development projects throughout the 21st century (Cornwall and Brock, 2005; Cooke and Kothari, 2001).

One such project, the ‘Mbabane Dry Sanitation and Waste Management’ (MDSWM) project uses the participatory development (PD) approach as the core element to enable the project’s efficiency, effectiveness and sustainability. The project, which is funded by the Finnish Foreign Ministry, aims to empower and mobilize community dwellers by including in the project work in semi-rural community in Swaziland (MDSWM Project Plan, 2013). While I was part of the project team in 2014, I noticed a lack of data on functionality of PD approaches in Swaziland. As a result, this sparked an interest to study this project further and critically reflect on whether the participatory development approach is a successful model for bottom/up waste management in the Swaziland context. Here success is defined not just in terms of active participation of community beneficiaries in project-led waste management practices but also in relation to how well the local implementers of the project are able to take over ownership and run the project sustainably.

The reason behind choosing waste management to exemplify participation is not only due to the fact that I had access to the project, but also because poorly managed solid waste has become one of the biggest environmental problems of this century (Marshall and Farahbakhsh, 2013). Currently, poorly managed solid waste management in semi-rural communities in Swaziland is causing large scale environmental degradation and affecting human health (GLM, 2014; Abul, 2010). As a result of poor waste management, various alternative methods, such as NGOs, have emerged to tackle these unmanaged waste issues (Marshall and Farahbakhsh, 2013). In Swaziland, the need for bottom-up approaches arises also because of the lack of resources, infrastructure and administration at national and local level (GLM, 2014). The main methods for waste management in semi-rural communities are burying and burning the waste. Meanwhile, burning waste in large quantities is associated with causing pollution and diseases (Laurent et al, 2013). Furthermore, countless dwellers throw solid waste into streams or roadside, as a result contaminating the water bodies and also hindering transportation services. These types of waste reduction methods can cause water table contamination (Dlamini, 2015; Marshall and Farahbakhsh, 2013:992).

Undoubtedly this goes to show that waste management is a cross cutting issue that is connected with the sustainable development of the country. The MDSWM project marks the beginning of using a bottom-up approach to tackling the issue of waste management. Central to success of the bottom-up project is the participation of the community itself in running the project as well as using the waste management services offered through the project (e.g., a Drop-Off Point). However, if people do not participate, this project itself becomes a ‘waste’ of opportunity and resources. Thus, an important question that prevails is what motivates or demotivates participation of the community members in such a project.

1.1 PURPOSE OF THE STUDY

The purpose of the study is to critically reflect in line with Participatory Development (PD), and thus to assist in developing this type of projects further, not only in Swaziland but elsewhere, if project design and location would have similarities with this case study. With this study I wanted to go beyond physical factors of participation. Through interviews I was able to identify three strong themes amongst interviewees about why dwellers did or did not participate in the solid waste management (SWM) options that were brought to Mnyamatsini through the project.

The setting of this project is intriguing because it is an international yet local project. Stakeholders come from Finland and Swaziland, from a bottom-up level and top-down institution.

Despite the fact that PD is commonly used in development discussions in the context of “North-South” relations, in my thesis I have zoomed in on the concept within a developing country where international and national stakeholders are tackling a local challenge. From that perspective, one of the purposes of the study is to fill a gap for future studies: how a participatory development approach is used in international-national settings with a local context.

1.2 RESEARCH QUESTIONS

Based on research purpose and need to problematize the concept, I am using two main research questions:

- *How does the design of the project affect community participation?*
- *What are the factors which influence dwellers to participate or not in community Solid Waste Management?*

2. CONTEXT AND CASE STUDY

This chapter gives detailed insight into the study context of Swaziland, introducing the country's current solid waste management practices and strategies. This chapter also describes the project, its emergence and approach to participatory development. Further, this chapter introduces the Mnyamatsini community, how dwellers participate in SWM and importance of the Mnyamatsini's location regarding research findings.



Map 1: Geographical location of Swaziland,

Map 2: Map of Swaziland

Sources: Both maps are illustrated Maria A. Jäppinen and information gathered from ESRI, 2015

2.1 SWAZILAND AND WASTE MANAGEMENT PRACTICES IN THE COUNTRY

The Kingdom of Swaziland is a landlocked country located in Southern Africa, bordering South Africa and Mozambique (See: map 1 and 2). It is an absolute monarchy, Ruled by King Mswati III, who holds supreme executive, legislative and judicial powers. As many developing countries, Swaziland faces a lot of challenges; nearly 40.6% of the Swazi population lives below the

international poverty line of US\$1.25 per day (in some documents the number reaches over 60% (CIA, 2015)) (UNICEF, 2007-2011). The total population of Swaziland is estimated to be over 1.4 million (September 2014 est.), of which nearly 60 000 live in the capital city, Mbabane (CIA, 2014). However, the majority live in rural and semi-rural communities where various development issues are exacerbated (Marshall and Farahbakhsh, 2013). Due to insufficient infrastructure, administration and resources, the main methods for waste management in semi-rural communities are burying waste in pit latrines and burning the waste; this method leads to potential land contamination (GLM, 2014).

‘At some landfills [in Swaziland] studies are done and there has been an incident that groundwater was polluted. At controlled dump sites such studies has not been done but there is 800 % chance that that it has polluted ground water.’ (Swaziland’s Environmental Authority officer: Mduzi Dlamini, interview, the 4th of February 2015).

The current solid waste management (SWM) situation in Swaziland is controlled by Swaziland’s Environmental Authority (SEA) who regulates and controls environmental issues for the country. However, waste management (WM) is overseen by only one employee for the whole of Swaziland. Potentially through the SEA it is possible to get transportation for waste in some rural areas and hence to be transported to landfills or controlled dumpsites (Dlamini, 2015). In urban areas waste is controlled by the Ministry of Housing and Municipalities, whereas in company towns (non-urban areas) where for example sugar cane, citrus and palms are produced, waste is controlled by local companies. SEA’s officers state that rural and semi-rural areas are so called “problem areas”, which are ruled by the Tikundla (local chiefdoms) who do not have the capacity to take care of waste because they lack funding and human resources. Tikundla rely on financial support from the Ministry of Health, under which is the Environmental Health Department. From that department, the environmental health officers, who are based in rural and semi-rural areas, work zone by zone from where they further report to regional offices in which they are working. From the regional offices the environmental health officers’ report back into the Environmental Health Department (ibid). The Ministry of Health is responsible for clinic waste, in terms of administration, education, public awareness and implementation. Despite regional officers in rural and semi-rural areas, waste management and education in general is limited. Additionally waste disposal is usually non-existent (ibid). In the whole country there are 3 landfills, around 10 licensed waste recyclers who only collect and sort waste, and some controlled dumpsites. There is a great

need for recycling activities because existing landfills are designed for 10 years, however they can be only in use for 5 years as the landfills fill up fast (Dlamini, 2015).

Additionally, Swaziland does not have hazardous waste facilities and relies on neighboring countries, especially on South Africa. Some hazardous waste is taken to the UK and pesticide waste to Germany. Transportation of hazardous waste to other countries is sponsored through the Ministry of Agriculture, which is funded by FAO (ibid).

Swaziland has been active in global discussions on human development and environmental degradation and the country has signed various global agreements, such as protecting Biodiversity, Climate Change-Kyoto Protocol, Hazardous Wastes, Ozone Layer Protection as mandates to be able to protect its' fragile environment (CIA, 2014). Governmental documentations make it clear that the government is aware of development hindrances which might be caused by, for example, mismanaged waste. Swaziland took the initiative to manage the waste challenge by implementing a 'National Solid Waste Management Strategy' between 2000-2002, where an emphasis was put on reducing, reusing and recycling waste (DANIDA, 2002). Despite the government's emphasis of SWM, it is failing to provide proper funding to implement more sufficient WM in the whole country (DANIDA, 2002), especially in rural and semi-rural areas where the majority of population resides.

As a result of failing 'top-down' management, different 'bottom-up' approaches have emerged, which was the case of the Mbabane Dry Sanitation and Waste Management' (MDAWM) project in Mnyamatsini, which will be further introduced in the following paragraph.

2.2 'MBABANE DRY SANITATION AND WASTE MANAGEMENT' -PROJECT

The Mbabane Dry Sanitation and Waste Management (MDSWM) project emerged out of a long collaboration with a couple of Swaziland areas and Finnish Turku's University of Applied Sciences to tackle development issues via a 'bottom-up' approach. This project is currently fully funded for 2014-2016 by the Finnish Foreign Ministry. During these three years, financial assistance is allocated to three different communities, one of which is Mnyamatsini (GLM, 2014). This project was established in Mnyamatsini on a local person's initiative, after this community member heard about the aims of this project (Heikkilä, 2015). The aim of this project is through community participation to improve not only unmanaged waste in the communities but also to improve sanitation and introduce permaculture gardening. Hence through positive action the core aim is to positively influence development in poverty stricken semi-rural communities. Facilitators from Finland, Swaziland and Zambia have been educating locals about environmental health, promoting WM management concept of 3Rs (reduce, reuse and recycle), composting, organic

gardening, grey water reuse, establishing a waste drop-off point (DOP), dry toilets, and developing the business aspect to potentially increase livelihood possibilities (GLM, 2014).

As expected, this project aims to be sustainable in the long term and the even higher goal is that after this project is completed, the activities will flourish in the communities. Therefore co-operation with Swazi stakeholders for both language and cultural understanding has been a vital element of this project. One result of the co-operation would be that when the project would be over, communities have access to local assistants, such as, Swazi NGO Green Living Movement (GLM). The GLM and University of Swaziland (UNISWA) are the local collaborators with Turku University of Applied Sciences (TUAS) and The Global Dry Toilet Association.

Currently through this project, solid waste managing is an integrated into a business model; the drop-off point's (DOP) management team run the collection point (*See*: picture 1) by buying waste from community dwellers (*See*: picture 2) to sell in domestic and regional markets. For example, there is already an existing waste trading link between Swaziland and South Africa via the recycling center 'AMZ Investments' in Mbabane (GLM, 2014). The current trade link with South Africa is a great advantage in terms of how much waste Swaziland can sell and could improve livelihoods and hence could positively affect a decline in poverty (Karani and Jewasikiewitz, 2007).

At the time of completing this thesis (December 2015), the Drop-Off Point was still functioning and project running.



Picture 1: Drop-Off Point in Mnyamatsini, March 2015



Picture 2: Dweller puts subgrade metal on scale, January 2015

Source for both pictures: Maria A. Jäppinen

2.3 CASE STUDY AREA –MNYAMATSINI

This case study is located in a semi-rural community which lies about 10 km South-East of Mbabane, the capital city, and neighboring with Ezulwini city. The Mnyamatsini community is located in a valley and on a mountain, so the elevation differs a lot within the community. This difference could influence the DOP accessibility. Population estimates range between 2000 – 10 000 in the different sources (Eriksson, 2015; Population data for selected areas, 2007). Based on a 2007 document from the Swaziland’s National Statistics Office, the Mnyamatsini community, which is sub-area of Mvutjini area, is 3,95 square kilometers, contains 94 homesteads and 180 households (Population data for selected areas, 2007). However ‘Mbabane Dry Sanitation and Waste Management’ (MDSWM) project is not working in the whole Mvutjini area, but in sub-areas called Mnyamatsini and Khula, and therefore the official project documents refer to Mnyamatsini. There are two reasons why the project is working particularly in these sub-areas (*See: in Map 3 Mnyamatsini is marked in blue and white borders are within Mvutjini*). The first reason is because the local person who introduced this project into her community happens to come from Mnyamatsini (Heikkilä, 2015). The second reason is that the Mvutjini area is ruled by two chiefdoms and hence is divided into two areas, which has some sub-areas like Mnyamatsini and Khula. Due to inner conflicts between chiefdoms the MDSWM project functions in Mnyamatsini whose, chiefdom has given permission. I use the Mnyamatsini name to refer to all of the sub-areas in which the project is active.

Map 3: Research area Source: Map is by the Swaziland’s National Statistics Office, 2007, however markings of the area is by author



The drop-off point (DOP) for recyclable waste is itself located in Khula. Since my study revolves around reducing, reusing and recycling waste, it was a natural choice to conduct interviews in the Mnyamatsini, Khula and Entsabeni areas. Because these areas are near the DOP, dwellers have possibilities to learn and to practice SWM more efficiently in their households. Through the interviews that I conducted, I learned that people who are aware of and use the DOPs also come from other neighboring communities and even from Ezulwini city. Despite the spatially wide range of DOP users, in my interviews I focus on people around the DOP, to stay in line with the project's community focus.

2.3.1 PARTICIPATION OF THE COMMUNITY IN SOLID WASTE MANAGEMENT

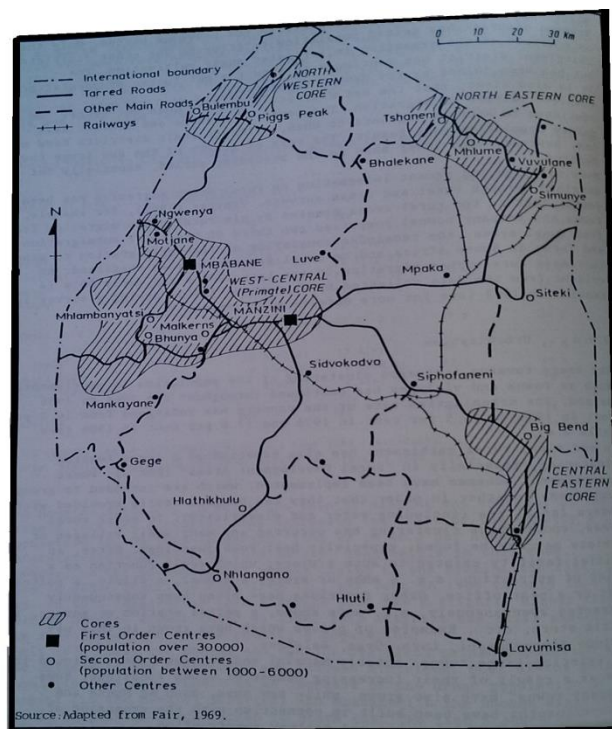
Current participation in Mnyamatsini is revolving around collecting, reducing, reusing, recycling, and selling waste via the drop-off point (DOP). The DOP is managed by the DOP management team which consists of 7 active members. They have participated in waste management workshops, visited other DOPs and been part of a group who would further educate community dwellers about waste management. The DOP is open three times per week, where anyone can sell their recyclable waste such as metal, scrap metal, paper, cardboard, glass bottles (white and color bottles) and copper. They co-work with 'AMZ Investments Recycling (Pty)' in Mbabane whose trucks come and pick up waste, when the DOP containers are full and DOP needs to have money to be able to buy from dwellers (Sihlongonyane, 2015).

Dwellers from Mnyamatsini have been advised to separate household waste already in their houses and reduce as much as possible the burning and burying of waste due to polluting and esthetic effects on environment. So far information about SWM in Mnyamatsini has been spread through educated dwellers who have participated in the workshops, they have been sharing information with others who live in and around Mnyamatsini in community meetings and in the church.

2.4 MNYAMATSINI'S SEMI-RURAL LOCATION

Mnyamatsini's semi-rural location is a vital element to include into this research, because it affects findings of participation and everyday connectivity to WM. Mnyamatsini area in the project documents is referred to as a rural area (MDSWM Project Plan, 2013). However based on my six months observation of Mnyamatsini and the definition by Davies (1967 and 1968), I refer this area as semi-rural (*See*: picture 1). Davies pointed out that the Swaziland's urbanization process in a rural area was transferred into semi-rural area when the dwellers of the area had access to water,

electricity and also is near road junctions (Davies in Post, 1988:51-54). To name a few traces of urbanization currently in Mnyamatsini, dwellers have large access to electricity and everyone has access to water pumps. There is also a school, shops, a church and a local bus travels to and from the capital city. Despite urban traces, Mnyamatsini is distant from what the UN authority would state to be an urban area. Mnyamatsini, for example, lacks paved streets, electric lighting and a sewerage system (UNICEF, 2012).



Picture 3: Picture of Swaziland’s urbanization map from Post’s study (1988:52)
 Source: picture taken by Maria A. Jäppinen

As previously mentioned in community description, Mnyamatsini is located between two cities, Mbabane, the capital city, and Ezulwini, where some of the Swazi royals resides. The municipalities of both cities have managed waste and placed large waste containers on the outskirts of the cities, relatively near Mnyamatsini. Because Mnyamatsini is close to these cities, it benefits in several ways and not only in the accessibility of some waste containers but also, for example, in terms of accessibility to urban labor and trade markets. This gives a better position to develop further the Mnyamatsini area rather than other rural or semi-rural areas.

I have so far described the Mnyamatsini area as “semi-rural”, although other authors may use of similar area “peri-urban” definition. Out of those two terms I chose to use “semi-rural” because Mnyamatsini is leaning more towards the rural rather than urban area settings, based on the political structure of the area and the UN definition that an area is categorized rural when the majority of the population is primarily engaged in agriculture sector (UNICEF, 2012) In the semi-rural

Mnyamatsini community over 50% of population is reliant on the land for agriculture through food and income generation (GLM, 2014).

3. METHODOLOGY

The method chosen to conduct this study is based on the aims and purposes of this study, which are encapsulated in two main research questions: 1. *How does the design of the project affect community participation?* 2. *What are the factors which influence dwellers to participate or not in community Solid Waste Management?*

Before describing in depth about my research methods, I would like to detail my *theory of knowledge* to clarify, how I as researcher construct reality and what could have affected my choice of theories, and how I have approach this study. From an ontological perspective I stand from a constructionist view, meaning that social phenomena and the meaning of it is continually being affected by social actors and is socially constructed. Simultaneously, social phenomena are in constant state of change (Bryman, 2012:33,35). While contextualizing ontological perspective in Mnyamatsini, I view that community and project is in constant change.

As from epistemological consideration I stand from an interpretivist view. That us to say I am seeking through my study to understand human action, and hence to explain it through a vivid understanding of social actions (Bryman, 2012:27-30). I am trying to see Mnyamatsini case from different angles and views, such as, from top-down and bottom-up.

My relationship between theory and research has from the beginning been a mixed, deductive and inductive approach. Both, theory and findings have affected changes and views in directions of my study (Bryman, 2012:24-26).

Clarifying my ontological and epistemological views helps to explain my methods which will be discussed next. I introduce my research approach, design, and data collection and analysis conduct. Further I reflect on positionality and reflexivity, concluding my reflection on ethical consideration, weakness and the validity of my study.

3.1 RESEARCH APPROACH

My research aims have been not only to look at how the participatory development (PD) approach of the project influences a community to participate in solid waste management (SWM), but also at dwellers' motivation/de-motivation and constrains to participate in SWM. Therefore, a *qualitative approach* structure has been the most suitable research strategy to use. This type of

method gave me the possibility to observe in my study even small nuances in participation, beyond just the large parts of people's opinions and responses to the arrival in the community of the SWM through MDSWM project. According to Keith Punch (2005) qualitative approaches allows to discuss further human constructions within society (Punch, 2005:135). From my case perspective, where external funding, power and authority are present, I was able through a qualitative approach to look participants' relationships with one other and with the project.

Qualitative approaches also have downsides: I am influenced by my own biases, perceptions and ideas (Punch, 2005:135). Bryman (2012) continues the critique by pointing out that because qualitative research is too subjective, '...findings rely too much on the researcher's often unsystematic views about what is significant and important, and also upon the close personal relationship that the researcher frequently strikes up the people studied' (Bryman, 2012:405). This critique is understandable because a researcher most likely cares about the researched topic and the people. Contextualizing this view to my study I can see a similar pattern, however I have been aware of that and trying to distinguish personal relationships apart from my study. Bryman (2012) points out another important critique in that qualitative approach can lack transparency (Bryman, 2012:406). He suggests that it is not always clear what sampling procedure was used, and on what terms, and on what ground analysis, hence it a conclusion of a study remain unclear and non-transparent (ibid.). In further paragraphs, I will give a detailed descriptions about my study to maximize transparency.

3.2 RESEARCH DESIGN

In the scope of my research question I opted for a *case study*. Because the PD theory is people centered and I wanted to see how the theory applies in a real world, real 'bottom-up' settings. This design, the case study, is a form where the core is in understanding the case in depth: going in-depth, intensive analysis to recognize the complexity of a case (Bryman, 2012:66; Punch, 2005:144). My case is about community participation yet it has an international-national involvement. Since a unique setting, case study approach gave me space to explore not only community motivation/de-motivation to participate in SWM, their constraints to participation but also the relationships between stakeholders, and which the project design and implementation.

To get more views and understanding for the structure of the project and SWM policies in Swaziland I accessed various documents, such as Statistical Data from the National Statistic Office, Waste Management regulations from Swaziland's Environmental Authority (SEA) and MDSWM - project documents. Case study has own limitations, for example, I will not able to generalize this research, due to a combination of the time, place and people which are not necessarily replicable in

another spaces (Punch, 2005:145-146). Something which may have been a motivating or demotivating factor to participate for Mnyamatsini dwellers may potentially be different when time has passed. In terms of space, Mnyamatsini is located geographically in a unique setting between two big cities, this could lead to several advantages/disadvantages for participation compared to other communities.

3.3 DATA COLLECTION: INTERVIEWS

The method I used to collect my data was *semi-structured interviews*. Interviews were structured with the formulation of open-ending questions. I used this method to get knowledge about people's attitudes and understandings towards the SWM (Punch, 2005:169). During the semi-structured interviews, I asked follow up questions for clarification or to get more in-depth answers from the informants (Willis, 2006:145). Follow up questions came usually on the spot and some of those questions I asked in forthcoming interviews because they led to more explanatory answers. To answer the research question, interviewing was the most suitable method. Because interviewing was not restricted to strictly structured question only, semi-structured interviewing allowed to have more in-depth questions, and yet at the same time interviews had structure because of my prepared interview questions. Because of prepared questions there was a little chance that interviews would wonder away from the subject. Also, because I had interpreters I was able to discuss my questions with them before interviews to assure full understanding of my questions and if my questions were culturally appropriate. During interviewing in Mnyamatsini I had two different interpreters, however one at the time of interviewing.

Using the above mentioned methods has been suitable regarding of this research aim. Semi-structured interviews give space to be flexible and have additional questions if needed, and it leaves room for discussion (to a certain extent). However, sometimes it has been challenging because an interviewee can reply very shortly (Bryman, 2012:177-178) and will just be waiting for next the question. As Bryman (2012) suggest to minimize misinterpretations error during interviews is by using audio-recorders, however is it possible to mishear which could have affected the meaning of people's replies.

Lucky Maseko (DOP Management Team chairperson) and people from GLM NGO have been my key informants and "gate keepers" as well as one of my translators. Another important figure who was giving a lot of information off the record about Swaziland, its political structure and land issues was my first translator, Mr. Abraham Dlamini. Through Mr. Maseko I was able to meet with the headman, councilor and chief executive, who gave me not only blessings to conduct a minor field study. Once I got blessing from chieftdom and I was able to conduct research without feeling

that someone is watching me and I would need to report all my moves. I think this is because this project has been for a year there and some people knew already me or they were trusting people who were one way or another involved positively with the project.

I had four *sampling groups* based on the participants' position and knowledge regarding SWM: the 1st Khula's/Mnyamatsini's Drop-Off Point's (DOP) management team, the 2nd the DOP's users, the 3rd DOP's non users, and the 4th group was experts regarding SWM. In total I had 38 interviews: As can be seen in the table 1. With the first group I had 7 interviews, with the second I had 10 interviews, with the third group I had 15 interviews and with fourth group I had 6 interviews.

Sampling techniques: For the Drop-Off point management team and Business/Authority/Experts group (the 1st and the 4th group) I used *purposive sampling* because 'the goal of purposive sampling is to sample cases/participants in a strategic way, so that those sampled are relevant to the research questions that are being posed.' (Bryman, 2012:418). To reduce as much as possible and to build data's reliability I used other participants in the interviews to verify information given by key informant and interviewed (Mikkelsen, 2005:177). In the case of groups 3 and 4, which include Drop-Off point users and non-users, I applied a mix of *convenience sampling* and *snowball sampling* (see Bryman, 2012:201,424). This choice was made due to it was challenging to reach non-users and some users of the Drop-Off point.

Table 1: Sampling groups and number of interviewees

GROUP:	NUMBER OF INTERVIEWEES:
1 st : Khula's/Mnyamatsini's DOP management team	7 interviews, out of which 6 females and 1 male
2 nd : the DOP's users	10 interviews, out of which 8 females and 2 males
3 rd : DOP's non users,	15 interviews, out of which 10 females and 5 males
4 th : group was experts regarding SWM	6 interviews, out of which 1 female and 5 males

The first sample group was from Khula's/Mnyamatsini's Drop-Off Point's (DOP) management team, whom I have met before and built rapport with in 2014. Despite that positive factor, I faced challenges with this group. Because they saw me as an NGO representative and

potentially thought they could benefit from me, I think responses may have been cajoling. To solve this challenge I tried to emphasize about my current study from university and that I was lucky to get a scholarship to do this research otherwise I would not been able to be back so soon. I emphasized that I am not intern of local NGO though I co-work with them. I had seven interviewed from that group and I kept almost the same questions, varied only in assisting questions.

The second sample group was people who used the Drop-Off Point to sell their recyclable waste material. At the entry stage I emphasized on building trust and a rapport by chatting and being transparent about my studies and aims (Mikkelsen, 2005:155). Usually I stayed at the DOP with my interpreter waiting for costumers to come to sell their waste material and then I asked if they would have time for an interview. Usually people had time and were able to sit down for an interview. But at some point there were no adult costumers, only children. In this case, I asked if their parents were home and had time for an interview. If the answer was positive, I followed the children and requested an interview with the parents (Mikkelsen, 2005:175) and sometimes I interviewed both the parents and their children at the same time in their homes. When there were no costumers at the DOP, I applied the same method for the third sampled group which is discussed next.

The third sampled group consisted of people who do not use the DOP and do not generally practice waste management. To access these people, I took my translator and a youth who was volunteering at the DOP and we went around the Khula and Mnyamatsini community door to door and asked if someone in the house had time for an interview. In a Swazi culture it is acceptable to approach at the gate (but not enter it if you do not know them) and request an interview. After a positive response for an interview, it is normal in Swaziland to walk into the private space and conduct the interview. To be able to cover as much area as possible in my researched community, I devoted entire interview days to the valley or mountain, depending on the weather (because of the slippery road conditions during rain).

For the DOP users and non-users, I kept interview questions the same to follow response patterns of interviewees and see if and when they had similar answers to be able to categorize clearly in the analysis phase. To minimize biases and to have coverage of different people, while we were walking around the community for the interviews, I pointed to the houses and asked my accompanying translator and the DOP volunteer if certain homesteads use DOP or not and if it was not rental house, we asked for interview permission. The reason why I did not interview rental houses because they do not have same obligation to participate at the community meetings where different activities in the community are introduced, such as arrival of the SWM and the DOP. I tried to cover in my interviews males, females, working/non-working, different age groups and households with different financial statuses to get diverse opinions (Bryman, 2012:188). In the

beginning of the interviews pointed out that interviews were anonymous and that there is no right or wrong answers to my questions. I encouraged them to speak as much as they could and/or wanted. As Mikkelsen (2005:174) suggests for a relaxing interview start, I began with less challenging questions and continued further to my point. Throughout my data collection I emphasized the importance of the informants' consent and assured the participants' of their confidentiality, which helped me to gain the trust of the dwellers and stakeholders and hence I could encourage them to participate and persist (Flick, 2009:41-42).

As my last sampled group, I chose people who are experts regarding SWM. This included people from the local NGO who are working on SWM in that community, a professor from the University of Swaziland, a project leader, a business person who has a big recycling center and to whom Khula's DOP management team is selling DOP's waste, an environmental engineer from Swaziland's Environmental Authority office and a councilor from Khula's/Mnyamatsini's community. I tailored questions to each of these experts depending on their area, and through their responses I sought to better understand how the SWM is functioning and needed in Swaziland. In all but one of these interviews I was able to conduct the interview without a translator.

To have Mr. Maseko and people from GLM helped me greatly in the field, however I had also some challenges with the DOP team. One such challenge was that they were naturally biased towards the project which is currently ongoing in Khula/Mnyamatsini. No matter how much I emphasized that I am not part of GLM anymore and that this study is from my university, people who I met last year and whom I interviewed, associated my study with the local NGO and project, and this without a doubt impacted my data. For example, they said a lot positive things about the project and the DOP and it was very challenging to "dig out" information about the challenges they are facing. They often just mentioned that 'yes, we have challenges' and then they moved on. In that case I approached my question from another angle to get a full understanding of their challenges regarding the SWM, including the DOP.

3.4 DATA ANALYSIS

After data collection by using a dictaphone, I transcribed all the 38 interviews to have a document to always go back when needed (*See*: Bryman, 2012:482-486). From these transcriptions I started coding data (*see*: Punch, 2005:199-201) based on factors which influence dwellers to participate. I found three key themes based on that they were repeated by interviewees. These themes I analyzed through the participatory development (PD) approach and integrated solid waste management (ISWM) concept to answer my research questions. I used quotes from the interviewees to give examples to my empirical analysis. Despite that I have been trying avoid misunderstanding

the meaning of Swazi words by asking my interpreters for clarification, I am in doubt that I have been able to completely avoid them and some errors might have occurred while I was analyzing my data (Bryman, 2012:522). Not only during data analysis but also while in the field. I also am aware that not only during the data collection but also during data analyses I am subjected being biased, and this potentially can influence empirical analysis. The next paragraph will further discussing reflexivity.

3.5 REFLEXIVITY, POSITIONALITY AND ETHICAL CONSIDERATION

Scholars have been emphasizing that it is important to critically reflect not only interviews but also yourself as a researcher (Bryman 2012:39). I am aware that there is no one truth to be discovered and there are many factors which influence my research process and decision making. The influence of the content and the context of the interview is shaping data collection and data analysis. I am biased to my own beliefs and views, no matter how neutral I try to be.

I had easy access to additional and vital data for this research, the official documents about Mnyamatsini from the National Statistic Office and the Waste Management Regulations in Swaziland and NGO's documents. This easy access was potentially due to my *positionality*, as I am in university (which is highly respected in Swaziland) and unfortunately to the unequal power relations between "black" and "white" people, from which I benefited as a white person. Simultaneously I have stayed in good terms with NGO Green Living Movement who had vital documents about the MDWM project and Mnyamatsini community. Despite being privileged to access official documents, I should never abuse my positionality. I would not take a bribe nor give bribe for getting information.

It is imperative to reflect on why I do this research on the PD and using example of SWM, if I seek that my research will benefit someone or if anyone at all. As Sultana (2007) further points out important remark that 'Conducting international fieldwork involves being attentive to histories of colonialism, development, globalization and local realities, to avoid exploitative research or perpetuation of relations of domination and control' (Sultana, 2007:375). I was aware constantly that I am an outsider in Swaziland and while conducting this study I tried to understand culture by talking with locals and reading books about Swazi culture, and simply by showing respect to it.

This study could have been conducted by a local student and it would be equally valid, perhaps even more because of language and cultural understanding. My findings and empirical analysis are my interpretation and I do not claim that this study is absolute truth.

I made sure that I informed consent by who I am, why I am there, who this might benefit if at all. I requested the same openness from my translators. Interviews with the 2nd and the 3rd group

(DOP users and non-users) were anonymous. Also, I always started my interviews by discussing the issue of confidentiality and anonymity with my informants.

4. THEORY AND CONCEPTUAL FRAMEWORK

This study gains perspectives from the implementers of the project and the targeted community beneficiaries to how the application of Participatory Development (PD) principles influenced the participation behavior of the community in SWM. This chapter introduces the concept of PD and *participation* as “means” and as an “end”. In addition, the concepts of *community development*, *integrated solid waste management* (ISWM) and livelihood diversification will also be defined and elaborated.

‘Even if participation cannot be seen as *the* new orthodoxy, it is clear that it has become one of the central influences in mainstream development thinking.’
(Parfitt, 2004:537).

4.1 PARTICIPATORY DEVELOPMENT

In this paper I use the arguments of participatory development put forward by Robert Chambers who sums up the process as “putting the last first” (Chambers, 1983). He states that a development shift should be more inclusive of everyone, particularly poor and marginalized people (Chambers, 1983). By including bottom-up approach into development implementation, dwellers have a better possibility to increase their socio-economic development and ability to reduce poverty (ibid). Thus, by definition PD aims to improve the condition of poor and marginalized people and is thought to be more sustainable than top-down approach to development (Fredholm, 2008:59-61). PD is perceived as a way to approach development from the ‘bottom-up’, by empowering people and encouraging self-reliance not only on the decision making level but also on the implementation level, which could in theory lead to a community which constructs itself (Oakley and Marsden, 1984:9-10).

For deeper understanding of the PD, it is crucial to look into definitions of *participation* itself. There is no universal definition of participation, however for clarity of working statement there is necessity of some sort of definition (Oakley and Marsden, 1984:18-20). Using summary by Ghai (1988), where he refers that the use of the term varies from seeing participation as part of “mobilizing” people toward the process of empowerment, and as a potential way of leading towards decentralization (Ghai, 1988:3). The term empowerment has also various interpretations, however in this text I use definition by the WB whereas “empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired

actions and outcomes". Even though authorities who drive for "good" participation and empowerment in development projects, authorities tend to want to participation in own terms based on their ideological view (Oakley and Marsden, 1984:29). Misuse of the participation might emerge, for example, by top-down authorities who can potentially leave issues, such as waste management, to be handled by dwellers or NGOs. While at the same time dwellers and NGOs use the PD approach to develop further as household/community/region. In case of Mnyamatsini, since the DOP arrival in community leadership has not addressed issue of unmanaged waste, instead the leadership let the community to handle it through donor funded project. In these situations where communities feel that they are left alone to battle with major issues, there is a high risk that could lead to negative input in communities, for example, creating conflicts amongst dwellers which will be elaborated in the analysis.

Furthermore, the typology of participation introduced by Jules Pretty gives some insight of different interpretations on what kind of participation can be found in the projects (Cornwall, 2008). She categorizes it into seven dimensions, of which, I find 'Functional participation' to be a useful concept in the context of this paper: 'Participation seen by external agencies as a means to achieve project goals, especially reduced costs. People may 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' (Pretty (1995) cited in Cornwall, 2008:272).

The philosophical foundation of PD emerged in light of critique of the mainstream 'top-down' development and the need for structural change towards more 'people-centered development' (Mohan, 2014:132-133). Nevertheless, neither has PD gone without criticism. In particular, Chambers's work has been criticized for having a tendency to romanticize poor people and to represent them as homogenous groups who all have the same agenda and goals (Brown 1994 in Mohan, 2001:159-160). Kapoor continues critique by pointing that Chambers an under-theorize account of power (Kapoor in Parfitt, 2004). Furthermore, marginalized people are represented as if they do not have rivalry or hierarchy within their communities, which in reality most likely exist and complicates communication and drive for "common good" (Mohan, 2001:160). Nici Nelson and Susan Wright (1995) point out that PD is about a power shift and in reality it is not as 'democratic' as PD has been commonly interpreted. Who decides who can participate, for example, in project planning, implementation and evaluation? How are these people chosen to participate? Are these people chosen to represent everyone or in reality certain a group? How is consensus of participation made? Kothari (2001) brings view by Foucault (1980) that the power must be viewed

that is circulating and it is never stagnant (Kothari, 2001:140-142). Simultaneously, it is not only in one place it is everywhere and is scrutinized through the creation of social norms that are practiced throughout society (ibid.). Mosse (2001) suggest that if local's knowledge is included that would possibly provide key to the reversal of hierarchies in planning and implementation phase (Mosse, 2001:17-18). As for contrast Chambers (1997) points out that in reality community is repeatedly is represented by few members who do not give clear view and therefore is commonly misinterprets the real situation of community (Chambers, 1997:185). Wright and Nelson (1995) emphasize that participation should be evaluated closely so it does not preserve top-down agendas, as it can easily do.

Despite these critiques, PD is a desired aspect when planning and implementing development goals. The contemporary relation between development and participation rotates around decentralization and participation which potentially could empower and promote democracy at the local level (Fredholm, 2008:60). Development does not only aim for progress towards democracy, it is about human rights to have basic needs, which is: shelter, food, access to health care and education. Equally influential to the PD is Amartya Sen's (1985) work, in which he emphasized that increased human capabilities could enable positive development and empowerment.

Therefore, nowadays most donor agencies and project stakeholders have participation approach as mandatory in development projects; however, due to different interpretations and backgrounds, usage of participation approaches differs from project to another (Ghai, 1988:1). The MDSWM project studied in this paper is an example of external-internal multi-stakeholder development project that integrates participatory approach into its design and implementation (MDSWM Project Plan, 2013). Hence, a key aspect of my analysis interrogates how the PD approach influences the actual participation of the project beneficiaries with regards to waste recycling, reducing and reusing.

4.2 A MEANS AND AS AN END OF PARTICIPATION

Peter Oakley and David Marsden (1984) as well as Nici Nelson and Susan Wright (1995) describe that PD is commonly defined and seen from two fundamentally different perspectives, as a *means* to and as an *end* of participation. These two differ in a nature of approach, in the efficiency, equity and empowerment. "Means" reflects more into a project's produced outputs where participation is used as a tool to achieve better project outcomes. Simultaneously, in this type of setting power relations remain between government and project stakeholders rather than between community and project stakeholders, hence losing ability to be a comprehensive bottom-up approach, which PD represents (Nelson and Wright, 1995:1). This type of approach has the

tendency to focus on short term projects where the project's outcomes could remain limited (ibid). Other critique points out that this type of approach has resulted lack of meaningful participation in development process (Oakley and Marsden, 1984:27-28).

Despite critiques, a participation as a means approach is sometimes necessary when, for example, in a project occur pressure of deadlines that need to be met and relatively fast results of development is needed to be able to receive funds for further work to proceed or receive funding for similar projects, and therefore there might not be space for other approaches to development.

Participation as “end” represents more inclusiveness of local people; as to themselves create possibilities to be part through the planning and implementation phases (Nelson and Wright, 1995:1). Hence, this atmosphere could over time empower dwellers and liberate them (Oakley and Marsden, 1984: 28). Therefore the “end” approach to the PD projects/cooperation is seen as sustainable and desirable. However, it is perceived as qualitative process which does not have clear structure, therefore becomes challenging to recognize development progress (ibid.). Also, due to limited human-, time- and financial resources this approach challenges to fulfill to its full capacity or even recognize progress.

Various researchers have been trying to detect if a means and an end to participation is not as black and white as usually is perpetuated, and if those approaches has unity between them. Oakley and Marsden (1984) discusses that ideally these both extreme sides should be incorporated. Parfitt (2004) points out that those approaches are corresponding with each other ‘Participation must function as a means because any development project must produce some outputs (therefore participation is seen as a means to achieve such outputs), but it must also function as an end inasmuch as empowerment is viewed as a necessary outcome.’ (Parfitt, 2004:537).

It must be noted that both angles have own way to approach participation, there is common outcome aim: successful project/cooperation. Even though in theory participatory development aims for a “down to earth” and sustainable approach to development and even though it is widely used, in actuality the PD approach commonly fails due to numerous reasons.

4.3 COMMUNITY PARTICIPATION

Inclusion of community dwellers into participation is one of the main aspects in the participatory development. Since this study is based in community settings, it is crucial to look closely meanings of community based and -driven development. Community is commonly perceived as homogeneous group based on natural, social and administrative boundaries, and echoes optimism (Nelson and Wright, 1995:14-15). However, the term is ambiguous one and it

needs to look close into social structures of communities, as it in reality can be completely non-homogenous (Cornwall, 2008:277).

Within one community could be various different people and social groups, with different aims and goals in every daily life and future goal. Under “community” lies different power structures which reflects on ability for community to develop further (Nelson and Wright, 1995). As was discussed previous section about power relations it is about who will be in deciding role and who is chosen to represent a community. Chambers (1997) points out that repeatedly community is represented by few members who do not give clear view and therefore is commonly misinterpreted (Chambers, 1997:185).

4.4 SOLID WASTE MANAGEMENT (SWM)

Solid waste management (SWM) consists of different parts: waste prevention, reuse, material recycle, compost, energy recovery and final disposal (WASTE, 2016). The primary purposes underlying the solid SWM strategies are to ‘address the health, environmental, aesthetic, land-use, resource, and economic concerns associated with the improper disposal of waste’ (Marshall and Farahbakhsh, 2013:988). Additionally, one of the aims through SWM is to ensure that the most economic resources out of waste is used (World Bank, 2015). In the context of developing countries, the current form of solid waste management (SWM) practices is contributing to large scale environmental degradation and affecting human health and overall development (GLM, 2014; Abul, 2010). Increased consumption patterns due to various factors, for example, growing economy, population growth, urbanization and as well as industrialization, continue to generate large amounts of waste that requires not only to reduce and but also prevent waste challenges (UNDP, 2014; European Environment Agency, 2014).

The MDSWM project’s design is influenced by this incentive model, and also considers a framework of Integrated Solid Waste Management (ISWM), which basically promotes the ‘recovery of useful materials / energy from waste streams is an effective approach to enhance Resource Efficiency while reducing the adverse environmental impacts caused by waste disposal.’ (UNEP, 2015). The ISWM has emerged through addressing issue of suitable SWM model in developing, transitional, and developed countries. It is designed to raise and address questions of policy, good and bad practice, sustainable financing, and the role of governance in making waste management fair and effective (WASTE, 2016). The ISWM includes not only, the 3Rs (reduce, reuse, recycle), and waste hierarchy, but also covering generation, segregation, transfer, sorting, treatment, recovery and disposal in an integrated manner (UNEP, 2015). Despite the importance of the whole process of SWM, my scope in this study covers the 3Rs (reduction, reuse, recycle) and

accessibility to the Drop-Off Point (DOP). In this regard, I study why the community members are participating in the reducing, reusing and recycling.

4.5 LIVELIHOOD DIVERSIFICATION

SWM also carries a lot of potentials to positively influence development of some above mentioned challenges. The waste has been recognized as valuable resource not only in developed countries, but also in developing regions where there has been progress turning waste into resource, hence into business model and further increasing livelihood possibilities (UNEP, 2015). The World Bank (WB) remarks that emphasis on micro-enterprises aspect could improve recycling and waste collection rates. The WB further points out, that there are numerous replicable initiatives whereas, for example, communities set up women-owned collection cooperatives, upgrade itinerant waste pickers to provide door-to-door collection using trolleys or small vehicles, could potentially be part of livelihood diversification. In this regard, this paper uses the concept of Livelihood diversification to study the participation motivation. Livelihood diversification entails different meanings, and in this paper the definition used is the following: ‘Livelihood diversification is defined as the process by which rural families construct a diverse portfolio of activities and social support capabilities in order to survive and to improve their standards of living.’ (Ellis, 1998:1). I look at how the members of the community are using the waste recycling at the Drop-Off point as a way to diversify their income and build self-reliance.

5. EMPIRICAL ANALYSIS

In the empirical analysis chapter I look into my findings based on two research questions: *How does the design of the project affect community participation? What are the factors which influence dwellers to participate or not in community Solid Waste Management?* Even though I have two research questions, I do not separate them in the analysis because nearly all findings are interlinked and influence one another. My empirical analysis is the outcome of merging findings and theory.

It is important to take into consideration with these findings and analysis that SWM had taken place in Mnyamatsini only for one year and the DOP had been in operation for half a year when I entered the field to conduct this study. Because a year is a relatively short amount of time, it is highly possible that the people are yet not familiar with SWM, and this affects my findings.

5.1 SOCIAL RELATIONS

Through the field interviews and observations, I noticed that within the Mnyamatsini community there are different social relations which potentially influence positively and negatively on participation in SWM. Under *social relations* I include findings related to community dynamics, specifically issues of distrust and hierarchies within the community that affects participation of members in the MDSWM project.

As stated in the theoretical framework, a community is rarely homogenous; instead, it has embedded within it power structures and different agendas (Cornwall, 2008:27). Although one can assume that a community like Mnyamatsini will have shared goals when it comes to development projects such as waste management within the community, I observed that in reality the perceptions varied between the individuals. Crucial to the success of the project was participation of the community members through continued delivery of solid waste from the households to the Drop-Off Point (DOP). While most of the interviewees demonstrated positive attitudes towards the importance of having good waste management in the area, many of them acknowledged that they did not take the waste to the drop-off points for various reasons; this included transportation of waste to be ‘too much work’ and ‘time consuming’. But, when asked then if a family would consider paying the project team a fee for a waste collection service, the majority expressed unwillingness to share the costs. The comment below from a non-user shows how the individualistic interest is prioritized.

‘I would not be happy if someone would come [to collect waste for a fee], I would not pay. As you can see I have a lot of scrap so I want to take and sell it myself.’ -Male, DOP non-user, 28.1.2015

Secondly, the interrogation into the social relations aspect also revealed how *power structures* among community members and also struggles between the local leadership (chiefs and elected councilors in the region) inhibited the project participation process from its inception to Drop-Off Point use. During the fieldwork I learned that the project took place in the context of an ongoing regional leadership conflict. As described in the context chapter, the Mvutjini area was divided into two areas with separate ruling chiefs and councilors –Mnyamatsini is one of the two areas. To go deeper into the analysis of this conflict is beyond the scope of this paper. Nevertheless, worth noting is that people living in the second area could also easily reach the drop-off point due to close proximity but this was never emphasized. This conflict blocked any opportunities that existed for the management team to promote the project in the other area and potentially get more users to

participate in recycling, reducing and reusing; also this conflict affects the sustainability of the project itself. The more waste collected at DOP means the more revenue the team can earn through re-sale of waste for investments to run the project and upgrade the DOP.

Thirdly, an important factor to mention is how only a certain group of people within the community have been able to be a part of the overall community management team from the beginning, and how the same members have emerged as the team running the DOP. Interviews with users and non-users revealed that they perceived the team running the DOP as an exclusive group, and accused them of being 'bossy' and 'discriminatory'. The comments below reflect these sentiments.

'When they [people] get there [at DOP] that they don't get money what they are supposed to get. I feel we get fooled.' -Male, DOP user, 7.2.2015

'It is how they [DOP management team], behave amongst each other someone acts like it is boss at this place [the DOP] that is very de-motivating...' -Female, DOP user, 19.2.2015

This observation requires a close look at what Nelson and Wright (1995) refer to about participatory development (PD) in reality, which is about a *power shift*. Meaning that in reality the PD approach could preserve top-down agendas and not be inclusive for all people. In Mnyamatsini, through contextualization, it is possible to see traces of shifting power from project stakeholders into a certain group (e.g.,: the DOP management team). The findings reveal that there is a distrust within the community towards the managing team of the DOP arising from perceived elite-bias and discrimination, which in turn demotivates participation.

Experiencing that the DOP is run by an *elite group* comes as an expected reaction because of the fact that the DOP is run by only 10 people who have attended actively in workshops throughout the existence of the project and have been elected by the community management team (CMT) to be part the DOP team (controversially the CMT chose the DOP team). Around 2000-10 000 people (depending on the documents) resides in Mnyamatsini, and it is impossible that whole community runs the DOP. From that perspective it is imperative that someone takes responsibility and runs the DOP.

During the fieldwork, I also learned that the project implementers failed to identify the DOP team responsibilities and give a clear picture regarding their roles (Mid-term Evaluation Report, 2015). Furthermore, there was confusion as to how the final DOP management team was selected from community members initially engaged in the project. The project implementers should have put more emphasis during the planning phase that certain group, comprised of people who have

been the most active, will be managing the DOP and to educate further the community about SWM practices. As a consequence not putting emphasis on “role” in the group, the DOP team experienced disunity and mistrust towards each other and discouragement to run the DOP. This information did not come only through interviews but also in the evaluation reports. The existence of the DOP is significant because it has been the main way to encourage and promote the community dwellers to participate in the SWM. So, for example, disunity among the team potentially has disastrous influence on whether or not the community will participate at all in SWM.

Despite challenges, the DOP team remains very hopeful and empowered. For some of the team members the DOP turned out to be a stress reliever and a place to talk about their problems.

‘We no longer stay at home. We are happy about DOP, even if we have problem at home once when we come here then problem is gone. We are happy about this place because it makes us to put effort in it’. -Female, DOP management team 22.1.2015

The DOP team’s feeling of empowerment leads to the question of who is successful. If only a certain local group benefits, would the project be considered unsuccessful? If this project’s work will not be sustained in terms of the DOP not functioning anymore, however the community got very clean, community dwellers learned to deal with waste in an environmentally sound way, and certain groups did get empowered, this project was to certain extent successful? This question was formulated to be provocative because in PD theory, a project is successful if everyone in the community is mobilized and empowered (Ghai, 1988:3). But not everyone can get motivated or encouraged to practice something which has hindrance of *social discrimination*, because waste management in general is stigmatized topic. If and when this project greatly benefited some dwellers, where is the border line whose empowerment counts more than others?

Stigmatization has resulted in that some of the interviewees felt that if they would participate in SWM, which in Mnyamatsini context means collecting, reusing, reducing and recycling waste, they would be labeled as poor.

‘They [DOP team] discriminate kids, ok they can see that they come from another family’ -Male and Female, DOP users, 28.1.2015

‘It is important to say from beginning that this is for everyone, not only for example poor people will practice.’ -Female, DOP user, 7.2.2015

Interviewees reflected that the feeling of social discrimination resulted in lower participation use of the DOP. This result contradicts with PD theory, because in theory the emphasis is on the

inclusiveness of all people (Chambers, 1983). Interviewees reflected that if inclusiveness would have been highlighted in the community when this project started, the participation rate might have been different. Though, this is speculation and not necessarily the key ingredient for successful development. However, discussion on inclusiveness has opened a platform from the community's side and from Green Living Movement (GLM) NGO's side to discuss the need for clearer communication between all the stakeholders, including the DOP management team.

'It has been great year but we need somebody from GLM who would be on the ground almost every time. Living them alone makes all hard, it is for them hard to reach us, like come in the office.' -GLM volunteer, expert, 26.1.2015

Communication and support was wanted also from the leadership of Mnyamatsini. In fact, the majority of interviewees, including the project manager, reflected that if the leadership would be more present and supportive, people would participate in SWM more eagerly. This finding contradicted with PD theory, because at the core of the theory is that top-down authorities, in this case leadership, should ideally not be involved with community development projects (Nelson and Wright, 1995:1). This would potentially perpetuate top-down power relations between community leaderships and dwellers (Mosse, 1995:155).

'...local's leaders support is really needed because people needs to be encouraged. Especially chief's support is really important' -Project manager, expert, 2015

Heavy involvement of authorities, not only differentiate from the core of PD theory but actually minimize possibilities that local dwellers could participate in running the DOP and education about SWM. This all leads to ownership, which is one of the main aspects in the PD approach. Ownership means to take over financial control and to have control over resources.

5.2 OWNERSHIP

In the practice of participatory development, an emphasis is put on the fact that the community group should take over control of resources and how they use them (Pretty, in Cornwall, 2008:271). This leads to an "end" approach to participation which is seen as a key to ultimately successful projects (Oakley and Marsden, 1984: 28). In reality that would mean community *ownership* of the project results, after the original project implementers (particularly the donors and external partners) have exited from the field. Hence, in the context of this study, the community

group should for example become the advocates for SWM education, implementing and developing the community SWM further, and run the DOP sustainably.

However, the issue of ownership is complex and primarily is intertwined with the power structures discussed under ‘social relations’ and other external factors. In the case of Mnyamatsini, I analyze the issue of ownership from the perspective of DOP users and the DOP team. Interviews with DOP users and non-users reveal how livelihood diversification and self-reliance were important aspects behind their participation, whereas the DOP team highlighted how resource constraints were inhibiting their participation and sustainability of the project itself.

Interviewees emphasized on the financial aspect while discussing what motivated/de-motivated them to practice in SWM. In the context of Mnyamatsini, dwellers saw the arrival of SWM as an opportunity for *livelihood diversification* after the project implementers emphasized on waste as a resource and used it as an economic incentive (Heikkilä, 2015).

*‘The waste was the problem and now I’ve started make a living out of it’. -
Female, DOP user, 19.2.2015*

The need for livelihood diversification does not come as a surprising factor to participate in SWM, because 40-60% of the whole population in Swaziland lives below 1.25 US\$ per day (NDS, 2013; UNICEF, 2007-2011). SWM experts point out that for the DOP’s management team and for dwellers that practice SWM, the project would potentially expand job market opportunities because the waste industry is blooming and there is a lot of possibilities (Heikkilä, 2015). According to my interviewees, crime seems to have decreased since people have access to earn money legally by selling waste at DOP.

‘It [Selling recyclable items] also helped to prevent not stealing because my friends have now money.’ -Male, DOP user, 7.2.2015

*‘A lot of our citizens could work with waste, there are a lot of opportunities’ -
GLM volunteer, expert, 26.1.2015*

‘...it [unmanaged waste] creates jobs.’ - AMZ founder, expert, 23.1.2015

Currently in Swaziland the job market is really poor, especially for those who do not have a chance to learn a profession (Eriksson, 2015). Participation in SWM is seen as an opportunity to gain livelihood and hence have a better chance to have positive development. The need for livelihood diversification is not only because of high unemployment or economic incentives, but also because land is scarce. At the same time as this paper is being written, Swaziland is

experiencing a worse drought than ever before that is affecting food and the income source of farmers (Khumalo, 2015). For areas such as Mnyamatsini, where half of the population rely on the agriculture sector (in rural Swaziland, people rely 100%), the need of livelihood diversification is urgent and absolutely imperative to have a safety-net against the risks of fluctuations in agriculture-based income.

Economic incentive was not only a factor among adults but also among children. Children have possibility to assist their families and assist themselves, for example, to get lunch at school. “Pocket money” as it is referred to, is seen as a motivator to participate in the school day. Some children will not even participate in school unless they receive pocket money (Dlamini, 2015).

‘As I told I was working with children teacher at Care Point [place where for unfortunate children is provided food] some parents cannot afford pocket money. If children go to neighbors they ask for bottles and they get pocket money, I can see children’s situation has changed. I can see the change.’ - Female, DOP non-user, 28.1.2015

‘... [WM] helps our kids, we don’t give them anymore pocket money, they go and collect and get themselves.’ -Male, DOP non-user, interview 28.1.2015

Furthermore, interviewees reflected that in general increased livelihood through SWM (by selling the recyclables) brought changes not only to children but also to adults in terms of poverty alleviation. The SWM has been seen as way to lessen poverty by receiving income through recyclables items to buy food or other urgent commodities. This to say, it enhances possibilities for self-reliance.

‘... Because now if you collect enough you can get bread or food for evening for family, especially some people who cannot provide, now they can through selling the waste.’ -Female, DOP user, 19.2.2015

‘We have no longer problem what we will eat in the morning, because whenever we are here we definitely know that we can get something for next breakfast. Even at home I say to my kids when they ask for pocket money that go collect and sell at DOP.’ -Female, DOP team, 22.1.2015

Yet, not everyone, including the poor households, were motivated to participate in SWM because they felt that only limited income was possible and there was dis-trust towards the DOP team (*See: social relations*). Interviewees reflected that they were paid inconsistently, meaning that they received different amount of money for the same waste each time.

'The issue is the money, we feel that we are sometimes cheated. We bring a lot but we get a little.' -Female, DOP user 7.2.2015

Ownership is a complex issue which entails multiple local meanings and interpretations (Chambers, 1997). Ownership is more than insurance through self-reliance or livelihood diversification; it also concerns the issue of control over decisions and resources. People do not necessarily want to depend on authorities for their basic needs, and so they look at participation within the project as a way of gaining extra earnings to manage their needs.

Furthermore, in the case of Mnyamatsini, especially for the DOP team, the issue of ownership came as an important factor with regards to sustainability of the project. The MDSWM project's implementers emphasized that once the project is over there, the DOP team will take over the project activities (Heikkilä, 2015). But this emphasis has not been clear enough because the DOP team felt that they were not supported nor was it clear for them who will take over the activities after the project ends (Mid-term Evaluation Report, 2015). Yet, the DOP team began to save money from the DOP earnings, for example, to improve the DOP's *infrastructure*. Currently, the DOP team work is voluntarily based, meaning that they do not get a salary. The team members do not have personal vehicles to collect and dispose waste, and hence they rely on AMZ recycle center's trucks, which frequently are not able to pick up the waste from the DOP.

Additionally, the team emphasized on improper fencing (*See*: picture 4) because recycled waste was often stolen and re-sold the next day at the DOP. In that way they were losing a lot of money. As a result, ill-functioning infrastructure turned out to be one of main discouraging factors to practice SWM amongst the DOP team, though they are the ones who should motivate and encourage the rest of the community.



Picture 4: The Drop-Off Point's ineffective fencing, January 2015,
Source: Maria A. Jäppinen

Ownership is an essential part of the PD process, but the resource constraints threaten the success of the project after the external partners leave. Oakley and Marsden (1984) pointed out that in order to empower marginalized dwellers there is a need in the beginning for assistance from the outside, in the form of partnership and finances. In Swaziland, because poor dwellers do not have financial resources and limited options to take loans from banks, they have to rely on external sources. Since community dwellers are depending on either external or private funding, one can ask if true ownership is realized without financial independence.

'...But here government will not fund, it will be private funding in private meeting with MPs' [member of parliament]. They could provide through own money...' –Councilor of Mnyamatsini, 28.1.2015

Chambers (1997) points out that people's interpretations about of "good" development for communities go beyond economics, and hence ownership; it is a more complex and dynamic issue (Chambers, 1997:176-179). In this regard, I found out that people's perception of why they prefer to practice SWM also stands from their value of owning clean land and reducing health risks. The dimension of environmental cleanliness and land use will be discussed further in the following section.

5.3 ENVIRONMENT AND LAND USE

Even if PD theory does not emphasize on the importance of a clean environment, it is an essential part of wellbeing. For people who rely on their land and local wells for water, a clean environment is crucial, because dwellers would not afford loss of land or/and polluted water (Boyd, 2014:342). Therefore it was not surprising that nearly all interviewees attributed their motivation to participate to their goals to have a clean environment in order to protect themselves, their children and their livestock. Because cleanliness can mean different things to different people, I wanted to understand deeper what environmental cleanliness meant to my interviewees.

Fifteen out of 21 interviewees associated an environment clean from waste as a way to reduce illness, specifically malaria and cholera. According to the interviewees, since the arrival of the DOP, no cholera break outs have been recorded. Residents pointed out that people throw less waste into river in Mnyamatsini because dwellers have begun to understand that they can turn (recyclable) waste into money. Interviewees mentioned that there are barely mosquitos left because bottles and cans where mosquitos were breeding before are collected.

'Some diseases get decreases because no more mosquitos. Fewer injuries caused by broken bottles, because they are stored in good place; kids will not have any more fear to play.' -Female, DOP user, 19.2.2015

One of the goals of the integrated solid waste management (ISWM) system is to create a clean environment and the MDSWM project has been aiming the same. As a result, on the arrival of the DOP and promotion about SWM, community dwellers not only became more aware of the harm of waste but also the community became clean from recyclable items (*See: picture 5*). Speculatively, through the locals' empowerment to become entrepreneurial, dwellers saw their land as an asset. Some of the interviewees reflected that the clean environment attracts tourists and, according to them tourism, would potentially increase livelihood possibilities.



Picture 5: Community management team collecting recyclable material from roadside, August 2014, Source: Maria A. Jäppinen

After one year of the arrival of this project, dwellers faced the challenge that the community became so clean that there were barely recyclable materials left. As a result of cleanliness, subgrade-metal has been dug out from fields. This phenomenon led for more space for agriculture activities.

'...a lot space has been occupied by waste but anymore now it is used for agriculture. It can be seen now that those where was waste underground are now planted.' -Female DOP team, 22.1.2015

Also, one aspect of ISWM is the importance of *accessibility* to the services such as DOP. Active usage of the DOP and learning more about SWM resulted to look closely from what area participants were coming and if there were any hindrances to access the DOP.

As a matter of fact, location of the DOP was decided not based on accessibility of the place, but where the local chieftdom decided to donate the land. Locals did not have any influence on deciding where it would be situated.



Picture 6: Mnyamatsini's the highest residential area, February, 2015 Source: Maria A. Jäppinen



Picture 7: Household's waste is ditched into downhill, February, 2015 Source: Maria A. Jäppinen

I asked interviewees about accessibility to the DOP. The response was slightly surprising. Even though the area is mountainous and roads leading to the DOP are in relatively poor condition (mostly muddy roads), people did not highlight those as demotivating factors. Accessibility to the DOP was not a problem at all. In fact, 24 people out of 28 interviews replied that for them and their homesteads it is easy to access the DOP, even though some lived on steep mountain slopes away from the DOP (See: pictures 6 and 7). On the other hand, the issue raised was regarding the opening times of the DOP. The center is only open 3 times per week or even less. Interviewees elaborated that sometimes it is a long way to walk and then DOP happens to be closed and they have to return back home with waste. Therefore, some interviewees felt that the whole SWM process was a 'waste of time', if the DOP team will not work harder.

'To me it is waste of time [to take recyclables to the DOP], if they would take it seriously then I could practice it.' -Female, DOP non-user, 28.1.2015

However, as was discussed in previous section, the whole situation that the DOP is closed is not a "black and white" because the DOP team encourages people, but the team itself needs to be empowered and is in need of constant support by the project's partners (Mid-term Evaluation Report, 2015). Neither the DOP team, the Mnyamatsini dwellers nor the local NGO is currently self-reliant and they depend on good social relations and still face various challenges; however, they have felt that this project became a source of inspiration and empowerment in Mnyamatsini and they are determined to succeed with this project work.

'We have never had projects in this community. We want to show that we are strong and we can do it.' -Female, DOP team, 22.1.2015

5.4 FURTHER DISCUSSION

The discussion about participatory development in the context of a national project which is funded by and in partnership with a foreign country is a complex one. Stakeholders not only come from such different spatial and cultural backgrounds but also from different educational backgrounds. However, the aim remains the same among all stakeholders: that this project will empower community members by transferring the partner's knowledge and financial resources. Through this project's findings and field observation I can see that this is neither a "means" nor an "end" participatory approach project. It is mix of both because in the context of Mnyamatsini an "end" would not be realistic, even though theory suggests that this is the most suitable approach.

Many aspects of the participatory development approach are in place in the 'Mbabane Dry Sanitation and Waste Management' project, yet currently there are several hindrances which affect the sustainability of the project. It is also hard to determine measurements of success, because the definition of "success" is relative. There is no right or wrong answer on how to minimize the hindrances of participation. However, from the findings it is important to look closely into the planning and implementation phases to alleviate hindrances to participate, such as: the social structure of the community, 'power shift', 'elite group', ownership, communication, stigmatization, infrastructure, accessibility, to name few.

Even if these findings would be considered, it is impossible to predict exactly what will happen to a project, no matter how much time, planning and money is put into community project. Especially when a stakeholders from the outside intervenes into community dynamics, there are high possibilities of unwanted results even if the intentions of outsiders have been good (Cleaver, 2001:38). Yet, while contextualizing, I understood that a joint effort with top-down and bottom-up stakeholders are required. In the case of Swaziland's social hierarchy and legal system, where the King rules all, there is without a doubt a rooted system where authorities are required so that project would run as smoothly as possible.

However, there is a dilemma. The hierarchical social order that demands support from leadership is not only contradicting with PD theory but also the practice in reality because it creates fear that local people would lose ownership. How is it possible to go around the issue when top-down and bottom-up approaches are needed and even interviewees emphasized on leadership presence in the project? The suggestion is that there needs to be closer co-operation between stakeholders on different levels – international, national and the local community level. A top-down management can emerge easily within even a PD inspired project. Thus is it is absolutely imperative the roles of the stakeholders from different levels are clearly defined and elaborated. For example, during planning and implementation phases, in the context of Mnyamatsini, there is a

need to actively involve authorities and explain why the PD approach is important and what is needed from the leadership to ensure empowerment of locals and sustainable operation of the project by the community for the community. Within the existing theories of PD, I find there is an ambiguity on how “middle-ways” between top-down and bottom-up can be interpreted and operationalized.

6. CONCLUSION

The aim of this study has been to understand community participation in SWM and to analyze how the project’s design and other external factors influenced the participation process both for implementers and users. I utilized the participatory development approach as a lens through which I looked at participation synergies. I opted for a case study where I had the possibility to use an in-depth methodology. The purpose of this was to gain a better understanding of reasons and processes enabling or hindering people's actual participation in the project. After a total of six months in Swaziland, I was able not only to collect data through interviews but also through field observations. I interviewed users and non-users of a waste recycling DOP point, and further interviewed other informants, such as SWM experts in the country and the management team running the DOP.

Based on the responses, I was able to elucidate why people participated or not in SWM in the Mnyamatsini area. For example, two common factors on why people participated in SWM were: possibilities to earn financial resources and environmental cleanliness, which is perceived to not only contribute to better health but also to possibilities for using clean land as an asset. Responses for why people did not want to participate indicated that limited financial benefits, social hierarchies and lack of common community spirit discouraged participation.

In my discussion I emphasized on three themes based on responses; I discussed social relations, and the issue of hierarchy, emerging dis-trust and a power shift from project implementers to the DOP team. Under findings about ownership, I discussed issues such as self-reliance and livelihood diversification, to name a few. For the third large theme, environment and land use, I discussed issues such as the importance of environmental cleanliness and accessibility.

To conclude, it must be noted that participation is a complex subject that cannot be understood or treated as “black and white”. There is a need to achieve a common ground among different stakeholders in practice. In the context of Swaziland, the PD in reality cannot sustain itself due to the degree to which political and social hierarchies shape the setting in which a project takes

place. Thus indicating a great need to look for a “middle-way”, not only in practice but in the theoretical discussions. In this regard, I find that there is a greater need for further studies about if there can be possibilities to pursue “middle-ways” that harmonizes the top-down and bottom-up approaches without compromising the ultimate goals such as putting the poor first and ensuring local ownership and empowerment.

BIBLIOGRAPHY

- Abul, S. 2010, "Environmental and health impact of solid waste disposal at Mangwaneni dumpsite in Manzini: Swaziland", *Journal of Sustainable development in Africa*, vol. 12, no. 7, pp. 64-78.
- Bryman, A. 2012, *Social research methods*, Oxford: Oxford University Press, 2012; 4. ed.
- Central Intelligence Agency (CIA) [webpage] <https://www.cia.gov/index.html>
- Chambers, R. 1997, *Whose reality counts?: putting the first last*, London : ITDG Publishing, 1997.
- Chambers, R. 1983, *Rural development: putting the last first*, London : Longman, 1983.
- Cooke, B. & Kothari, U. 2001, *Participation: the new tyranny?* London : Zed, 2001.
- Cornwall, A. 2008, "Unpacking 'Participation': models, meanings and practices", *Community Development Journal*, vol. 43, no. 3, pp. 269-283.
- Cornwall, A. 2000, *Beneficiary, consumer, citizen: perspectives on participation for poverty reduction*, Stockholm: Sida, 2000.
- Cornwall, A. & Brock, K. 2005, *What Do Buzzwords Do for Development Policy? A Critical Look at 'Participation', 'Empowerment' and 'Poverty Reduction'*, Routledge Publishing.
- DANIDA (Danish International Development Agency), 2002 [webpage] Available: <http://www.environment.gov.sz>
- Desai, V. & Potter, R.B. 2014, *The companion to development studies*. Abingdon, Oxon ; New York : Routledge, 2014; 3rd edition.
- Dlamini, M. 2015, *Interview with the Swaziland's Environmental Authority officer*, February edn.
- Dlamini, W. 2015, *Interview with GLM's volunteer*, January edn.
- Ellis, F. 1998, "Household strategies and rural livelihood diversification", *The journal of development studies*, vol. 35, no. 1, pp. 1-38.
- Emily Boyd, 2014:342 in Desai, V. & Potter, R.B. 2014, *The companion to development studies*. Abingdon, Oxon; New York: Routledge, 2014; 3rd edition.
- European Environment Agency [webpage] <http://www.eea.europa.eu/themes/waste>
- Eriksson, L. 2015, "Creating livelihood through dry sanitation value chain in Mnyamatsini, Swaziland", thesis.
- Flick, U. 2009, *An introduction to qualitative research*, London : SAGE, 2009; 4., rev.] ed.

- Fredholm, A. 2008, *Beyond the catchwords: adjustment and community response to participatory development in post-Suharto Indonesia*, Lund: Department of Sociology, Lund University, 2008.
- Ghai, D. 1988, *Participatory development: some perspectives from grass-roots experiences*, Geneva] : UNRISD, 1988.
- Green Living Movement [webpage] <http://www.glmglobal.org/our-work/swaziland/> (unpublished internal memos. August 2014)
- Heikkilä Jonna 2015, *Interview with the project's manager*, March edn.
- Karani, P. & Jewasikewitz, S.M. 2007, "Waste management and sustainable development in South Africa", *Environment, Development and Sustainability*, vol. 9, no. 2, pp. 163-185.
- Khumalo, S. 2015, "*CATTLE DEATH TOLL EXCEEDS 12 400*", the 9th of November edn, Times of Swaziland. <http://www.times.co.sz/news/105481-cattle-death-toll-exceeds-12-400.html>
- Kirstinä, Leppänen, Ngambi, Ngobese, Mlungisi, Salla & Shabangu. 2013. Baseline study on project areas. GLM unpublished internal memos. August 2014)
- Laurent, A., Bakas, I., Clavreul, J., Bernstad, A., Niero, M., Gentil, E., Hauschild, M.Z. & Christensen, T.H. 2014, "Review of LCA studies of solid waste management systems–Part I: Lessons learned and perspectives", *Waste Management*, vol. 34, no. 3, pp. 573-588.
- Mid-Term Evaluation of the "Mbabane Dry Sanitation and Waste Management" project 2015, consultancy company unknown, unpublished internal memos September 2015, Swaziland.
- MDSWM, Mbabane Dry Sanitation and Waste Management Project plan 2014-2016 (2013) unpublished internal memos. June 2014)
- Mikkelsen, B., 2005, *Methods for development work and research: a new guide for practitioners*, New Delhi: Sage, 2005; 2. ed.
- Mohan, G., 2001, in *Participation: The New Tyranny*, Bill Cooke and Uma Kothari (editors), Zed Books, London and New York
- Mosse, D. 2001, "People's knowledge', participation and patronage: Operations and representations in rural development", *Participation: The new tyranny*, , pp. 16-35.
- Nelson, N. & Wright, S. 1995, *Power and participatory development: theory and practice*, London: Intermediate Technology, 1995.
- Oakley, P. & Marsden, D. 1984, *Approaches to participation in rural development*, Published on behalf of the ACC Task Force on Rural Development [by the] International Labour Office, Geneva.
- Parfitt, T. 2004, "The ambiguity of participation: a qualified defence of participatory development", *Third World Quarterly*, vol. 25, no. 3, pp. 537-555.

Post, C.H.M.v.d. 1988, *Migrants and migrant-labour absorption in large and small centres in Swaziland : a comparative study of the towns Manzini and Nhlangano*, Amsterdam, 1988.

Punch, K.F. 2005, *Introduction to social research: quantitative and qualitative approaches*, London: SAGE, 2005; 2. ed.

Sen, A. 1985, *Commodities and capabilities*, Amsterdam: North-Holland, 1985.

Swaziland's National Statistics Office 2007, Population data for selected areas by sex age groups, 2007 (unpublished internal memos. February 2015)

Swaziland's the Environment Management Act (2002a) document:

<http://www.google.se/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjsj5vH9KDKAhWFhHIKHV9IAnwQFggeMAA&url=http%3A%2F%2Fwww.sntc.org.sz%2Fdocuments%2FTheEnvironmentManagementAct.doc&usg=AFQjCNHvUxYF5JbTvb4izWII6UEkEBh27Q&sig2=iZyaljqKPaAPXulxaFe02Q&bvm=bv.111396085,d.bGQ>

The World Bank [webpage] <http://www.worldbank.org/depweb/english/sd.html>

The World Bank, Solid Waste Management

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTURBANDEVELOPMENT/EXTUSWM/0,,menuPK:463847~pagePK:149018~piPK:149093~theSitePK:463841,00.html>

The UNDP, [webpage]

<http://www.undp.org/content/undp/en/home/ourwork/environmentandenergy/overview.html>

The UNDP 2016, [2015, 11].

<http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=52&ArticleID=69>

UNICEF, 2012

http://www.google.se/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&sqi=2&ved=0ahUKEwjakra5_aDKAhXB8HIKHAVjBiQQFggqMAI&url=http%3A%2F%2Fwww.unicef.org%2Fsocial%2F2012%2Fpdfs%2F%2FSOWC-2012-DEFINITIONS.pdf&usg=AFQjCNF1irjTBxIx7MDb9NOi1fBTXWbTww&sig2=LEvw4Y6iihafd9HkL7Liig&bvm=bv.111396085,d.bGQ

UNEP 2016, [2015, 11].

<http://www.unep.org/ietc/OurWork/WasteManagement/tabid/56239/Default.aspx>

WASTE 2016, <http://www.waste.nl> [2015, 12].

APPENDIX 1

Interview questions for the drop-off point management team:

1. How you have been feeling about WM?
2. What are your general thoughts about it?
3. Has it brought any change in community?
4. if, yes what kind?
5. Have you motivated community members to participate in WM?
6. If yes, how?
7. Any challenges? Something on the way?
8. How SWM promotion is done?
9. How can be improved?
10. What kind of plans (short or long term) is made regarding drop-off point?
11. Has they been implemented?
12. If yes, how? With what kind of success?
13. If no, what are reasons behind? possible to change?
14. Do you think that in Mnyamatsini is increased income generation activity by doing WM?
15. What level of waste management activities carried out by rest community members?
16. What kind of community level planning and networking and activities related to sustainable waste management is done?
17. What you like to be done more?

APPENDIX 2

Interview with Drop-off point users:

1. How often you come to drop-off point?
2. How you heard about it?
3. What other way you do SWM? (I would tell what is SWM)

4. What do you bring usually to drop-off point?
5. You collect from home or from street?
6. After this drop-off point has arrived, has your life changed?
7. How?
8. What challenges you get while collecting/bringing waste?
9. Any challenges to reach drop-off point?
10. What motivates you to come here?
11. Is this the best way to collect waste in your area?
12. Do you think if this type of WM will sustain in long term in your community?
13. Why yes, Why not?
14. What could be done more that this drop-off point will remain?
15. Any other suggestions how WM can be done in your community?

APPENDIX 3

Interview with dwellers who **do not** use Drop-off point:

1. Have you heard about WM process? (I explain what it is)
2. What area reasons behind that you don't use it?
3. Do you think you could reuse, reduce or/and recycle waste?
4. Have you heard of drop-off point? (I explain what it is)
5. Would you use it?
6. Why you think it is challenging to use?
7. Is it challenging to access?
8. Where you would like to hear about it?
9. What would motivate to practice SWM?

APPENDIX 4

Interview with Mr. Dlamini from SEA:

1. What is to you proper WM?
2. What is situation in Swaziland in terms of WM?
3. Who is funding WM services?
4. Is it part of 2022 goal?
5. Who is taking care of WM if it is under chief dom? In the area where gov. is failing to provide? Whose responsibility?
6. What is needed to improve in Swaziland in terms WM?
7. What challenges occur?
8. Who people can reach in chieftom if failing to provide proper WM or they have other challenges relating WM?
9. What is plan for 2016-2020 regarding WM?
10. What challenges regarding WM in that plan?

APPENDIX 5

Interview with GLM members;

1. How you been feeling about your position?
2. What do you think about WM?
3. What is need to be done
4. Why Khula or Swaziland needs WM?
5. What positive? What negative about WM in Khula?
6. Did you have challenges in Khula relating WM?
7. If yes, what kind?
8. What positive you have experienced while introducing WM to Khula's dwellers?

9. What could be done more there?
10. What challenges might occur?
11. How GLM been assisting drop-off point management team?
12. Any challenges?
13. Have you been assisting with planning?
14. With what success?
15. What they are lacking?
16. What can be done more?

APPENDIX 6

Interview with Mr. AMZ Sihlongonyane

1. How you end up to this business?
2. How WM is good for sd and Khula?
3. What is your role with Khula's drop-off point
4. How do you feel about it?
5. How often trucks pick up waste?
6. Any challenges to sell/buy waste?
7. What do you think should be done by community that it will stay for long time?
8. What challenges occurs?
9. Something should be done differently?
10. How can WM sustain on long run?
11. Why communities should practice in WM?
12. How communities can do it? Other suggestions
13. Where waste is taken and for what purposes?

APPENDIX 7

Interview with counselor:

1. Do you know exactly how many people are living in Khula/Mnyamatsini?
2. How many in Mnyamatsini/Khula are depending on their land?
3. How you been selected in your position?
4. How do you feel about you position?
5. What are your responsibilities?
6. Who is head of your work?
7. What challenges you get?
8. What positive about your work?
9. Who is funding Mnyamatsini/Khula?
10. How community members are participating in paying something?
11. or are they?
12. Is it tax?
13. Who is providing infrastructure for Mnyamatsini/Khula? (health care, education, WM, roads)
14. Who will inform if something is not functioning?
15. Who should take care of waste?
16. How should WM be practiced in Mnyamatsini/Khula?
17. Who is providing financially to take of WM?
18. How you are dealing with disposals?
19. How WM could be promoted?
20. What are for community dwellers motivating and de-motivating factors?
21. Who could provide transportation for waste material?

22. What is vision/plan for Khula?

23. Regarding WM?

APPENDIX 8

Interview with Dr. Ababu Tiruneh (partner from UNISWA):

1. What do you think about this project?
2. How do you see that WM is important in Khula and in Swaziland?
3. According to you, how dwellers in Khula have been responding to WM?
4. What challenges you have seen?
5. What could be done to those challenges?
6. According to you, is this right approach to WM which this project is implementing?
7. Who else should be involved or is this right group of people for co-operation?
8. Is location of drop-off point suitable and accessible for people?
9. Would you change something? if yes, what?
10. How do you think SWM could sustain in Khula? in Swaziland?