

Opportunities and Constraints for more Sustainable Sanitation through Sanitation Marketing in Malawi

Case study from Mzimba and Lilongwe Districts

by

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Acronyms and Abbreviations

AfDB	African Development Bank
BCC	Behaviour Change Communication
CCAP	Church of Central Africa Presbyterian
CDA	Community Development Assistant
CHC	Community Health Clubs
CLTS	Community-led Total Sanitation
DA	District Assembly
DANIDA	Danish International Development Agency
DCT	District Coordination Team
DDP	District Development Plan
DEHO	District Environmental Health Office
DHO	District Health Office
DSIP	District Strategy and Investment Plan
DWO	District Water Office
EHO-WES	Environmental Health Officer for Water and Environmental Sanitation
EWB Canada	Engineers without Borders Canada
FGD	Focus Group Discussion
GoM	Government of Malawi
GSF	Global Sanitation Fund
HDI	Human Development Index
HSA	Health Surveillance Assistant
IDE	International Development Enterprises
IDS	Institute for Development Studies
IRC	International Water and Sanitation Centre
IWSS	Irrigation, Water and Sanitation Sector
JMP	Joint Monitoring Programme
MDGs	Millennium Development Goals
MFI	Micro Finance Institute
MGDS	Malawi Growth and Development Strategy
MK	Malawian Kwacha
MoDCP	Ministry of Development Planning and Cooperation
MoE	Ministry of Education
MoH	Ministry of Health
MoIWD	Ministry of Irrigation and Water Development
MoLG	Ministry of Local Government
NGO	Non-Governmental Organization
NSP	National Sanitation Policy
NWDP	National Water Development Programme
ODF	Open Defecation Free
OiBM	Opportunity Bank of Malawi
ORT	Other Recurrent Transactions
PHAST	Participatory Hygiene and Sanitation Transformation
RSM	Rural Sanitation Market
SAP	Structural Adjustments Programmes
SEP	Socio Economic Profile
SMHP	Sanitation Marketing Hygiene Promotion
SNV	Netherlands Development Organisation
SWAp	Sector Wide Approach

TA	Traditional Authority
TSSM	Total Sanitation Sanitation Marketing
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID HIP	United States International Agency Hygiene Improvement Project
VAP	Village Action Plan
VDC	Village Development Committee
VIP	Ventilated Improved Pit
WASH	Water Sanitation and Hygiene
WATSAN	Water and Sanitation
WB	Water Board
WEDC	Water Engineering and Development Centre
WES	Water Environmental Sanitation
WFP	Water for People
WHO	World Health Organization
WMA	Water Monitoring Assistant
WSP	World Bank Water and Sanitation Programme
WSP-AF	World Bank Water and Sanitation Programme for Africa
WSSCC	Water Supply and Sanitation Collaborative Council

1. INTRODUCTION

1.1 Rural Sanitation and Sanitation Marketing

A key development in rural sanitation is the recent widespread shift of mind sets about sanitation provision through hardware subsidies and supply-led programmes amongst donor agencies and governments. There is now an understanding that direct hardware subsidies to households and supply-led programmes tend not to result in equitable coverage and access to sustainable services. Demand-led programmes need to enhance the understanding of the motivations and constraints of households to adopt and improve their sanitation systems and sanitation delivery systems need to be understood as consumer goods (Jenkins & Sugden, 2006, p.4). Consequently, approaches now need to consider the constrained budgets and competing priorities of rural households and the promotion of incremental improvements (*'sanitation ladder'* concept) gained enhanced recognition.

Many countries introduced Community-Led Total Sanitation (CLTS) programmes to overcome open defecation and stimulate latrine adoption. Sanitation marketing, which focuses on the demand and supply side of sanitation goods and services (Godfrey et al., 2010, p.6) and offers possibilities to climb-up the ladder towards more improved sanitation, has yet not been as widely applied as CLTS. Nevertheless, the potential of sanitation marketing to increase sanitation coverage is now acknowledged by many leading players in the development sector. Studies how to incorporate sanitation marketing in sanitation programmes have been conducted by major donor agencies (e.g. World Bank or USAID). In particular, interest for the potential to complement or even integrate CLTS and sanitation marketing programmes has evolved; however, so far, there are still few programmes that are based on a purposeful combination of the two approaches.

Currently, the World Bank Water and Sanitation Program (WSP) *Global Scaling Up Rural Sanitation Project* is implementing the combination of Total Sanitation (TS) and sanitation marketing strategies with the purpose to create effective and sustainable behaviour change at scale in three countries.

Through this programme, sanitation marketing approaches have been trialled for the first time at scale in the rural context. Midterm evaluations of the project showed promising results for the application of integrated CLTS and sanitation marketing approaches in rural areas. However, not all countries showed similar progress and success seemed to be linked to institutional and private sector capacity development. Nevertheless, the project will be scaled out to over ten countries in Africa, Asia and Central and South America.

The discussion about what will be the global targets for development in a post Millennium Development Goals (MDG) world is becoming increasingly relevant. Current methods to measure

the MDG targets for drinking water and sanitation have been criticized for neglecting or failing to measure quality and sustainability issues. It is likely that post-2015 the monitoring and evaluation standards for programmes and targets will place an increased emphasis on these attributes (WSSCC, 2011a, p.2-3).

1.2 Malawi Background

Being ranked on position 153 out of 169 countries by the 2010 Human Development Index (HDI) statistics (UNDP, 2010), Malawi with an estimated population of 15.7 million (UNDP, 2010) of which about 80% is rural (MoIWD, 2009a, p.1) is amongst the poorest countries in the world. High population density and harsh climate conditions aggravate the living conditions of the rural population (GoM; UNICEF, 2006, p.13).

With the aim to “create wealth through sustainable economic growth and infrastructure development as a means of achieving poverty reduction” (MoIWD, 2009a) the Government of Malawi (GoM) is currently implementing the Malawi Growth and Development Strategy (MGDS). The GoM has acknowledged the important contribution of water and sanitation interventions in the movement towards achieving the strategy’s by making water development and irrigation (includes sanitation) to one of the six key priorities of the strategy (MoIWD, 2009a, p.ii). Awareness for the importance of sanitation on high government level has increased and in 2008 the GoM launched the National Sanitation Policy (NSP).

Referring to the access to basic sanitation, Malawi is performing relatively well in comparison to other countries in the region. In 2008, 57% of the rural population had access to basic sanitation and open defecation in rural areas has notably declined from 35% in 1990 to 11% in 2008 (MoIWD, 2011, p.3). Nevertheless, the persistence of open defecation in rural Malawi remains a problem that needs to be tackled with continuous vigour. Monitoring of the success of sanitation approaches is hampered by the fact that figures referring to the access to improved sanitation vary widely. These inconsistencies are caused by the lack of the application of a consistent definition as well as different data collection categories (MoIWD, 2011, pp.36-38). One thing that can be said with the existing data is that it is very unlikely that Malawi will meet the MDG target of 73% of the population having access to improved sanitation until 2015, because of the high percentage of latrine users that share their latrine between members of more than one household (MoIWD, 2011, p.3).

Local governments have been strengthened through decentralization programmes. The Ministry of Irrigation and Water Development (MoIWD), which is responsible for sanitation, is changing its role from direct implementation to policy and regulation and consequently the district level can

be identified as the significant implementation level for public work (GoM; UNICEF, 2006, pp.13-16).

One of the 22 guiding principle of the NSP states that “open defecation shall not be tolerated in Malawi” (MoIWD, 2008, p.9).

In order to tackle the problem of open defecation, community-led Total Sanitation (CLTS) was introduced the twelve UNICEF WASH districts¹ in 2008. Since then many governmental and non-governmental organizations in Malawi are involved in the implementation and/or capacity building process of CLTS (EWB Canada, 2010, p.1) and CLTS has been scaled out beyond the initial twelve districts (Maulit, 2010, p.1). In spite of widespread enthusiasm about the new approach for sanitation promotion amongst governmental and non-governmental stakeholders, the CLTS implementation faced various challenges including the allocation of funding, lack of coordination, monitoring and accountability as well as lack of capacity within the district governments (Maulit, 2010; EWB Canada, 2010). As a result, Maulit (2010, p.1) notes an unsatisfying sustainability of the ODF status in CLTS communities.

The importance of basic sanitation is acknowledged in the NSP; however, beyond the eradication of open defecation the improvement of existing latrines is a major concern (MoIWD, 2008, p.1). The definition of improved latrines of the NSP slightly differs from the JMP definition (section 2.8.2). Referring to the definition of the NSP an improved latrine needs to have an impermeable slab, which was formerly equated with a concrete slab. According to DeGabriele (2009a, p.7) this view is beginning to change amongst many stakeholders, who now acknowledge that local technologies can make a slab impervious using traditional materials such as compacted earth.

1.3 Research Topic and Research Objectives

The political urge to upgrade sanitation facilities and the concept shift towards locally available technologies may enhance opportunities for private entrepreneurs to start or scale up their businesses for the provision of sanitation services in Malawi.

In this context, sanitation marketing approaches are becoming increasingly popular with many stakeholders in the Malawian sanitation sector. Sanitation marketing is not a new approach in Malawi as it has been introduced in different NGO-led projects in combination with the promotion of ecosan technologies (Sudgen, 2003; Bramley & Breslin, 2010). Most recently the GoM with support of the World Bank Water and Sanitation Program for Africa (WSP-AF) has launched a sanitation marketing campaign in low-income urban areas of Lilongwe and Blantyre.

¹ Chitipa, Mzimba, Kasungu, Mchinji, Lilongwe, Mwanza, Salima, Likoma, Nkhatabay, Mangochi, Dowa and Blantyre

For rural areas the NSP (MoIWD, 2008, p.14) explicitly states the promotion and marketing of improved sanitation and hygiene options and technologies as one strategy towards achieving the objective of:

“[...] increase access to improved sanitation, promote safe hygiene practices, proper waste disposal and recycling of wastes in rural areas.” (MoIWD, 2008, p.13)

Other examples for the paradigm shift of the Malawian sanitation sector towards sanitation marketing are that UNICEF as a key player is currently carrying out a sanitation marketing related research in Malawi and that a recent proposal to the Global Sanitation Fund (GSF) proposes sanitation marketing as an activity for supporting the adoption of improved sanitation. (MoIWD & WSSCC, 2010, p.20). In addition, the African Development Bank (AfDB) currently supports the adoption of market-based strategies for sanitation promotion in several rural trading centres in four districts (Lilongwe Rural, Zomba, Mulanje and Machinga).

Nevertheless, from the past experiences, there is little evidence for the potential of sanitation marketing to sustainably change behaviours and increase coverage of improved sanitation in Malawi. The assessments done within the framework of the CLTS implementation have shown that there are structural and/or institutional constraints for successful sanitation promotion (DeGabriele, 2009a, p.29; EWB, 2010), which might also challenge the introduction and/or scale up of sanitation marketing.

Furthermore, DeGabriele (2009a, p.30) points out that there is a general lack of understanding of the strengths and weaknesses of the different sanitation approaches in Malawi. The experiences so far also suggest that there is a lack of capacity for sanitation marketing implementation and a lack of cohesiveness of sanitation marketing approaches, which could result in a mis-match between levels of created demand and an insufficiently improved supply side.

The overall aim of this study is therefore to ***analyse the constraints and opportunities for more sustainable sanitation through sanitation marketing in rural Malawi.***

Initially it was intended to approach the research by following four research objectives and associated research questions:

Objective 1: Analysis of the district governments' roles and capacity in the implementation of sanitation marketing.

- *To what extent does the district government currently involve with and/or support the private sector in sanitation programmes, policy and regulation?*
- *What kind of programme implementation, management and monitoring roles has the district government in current sanitation programmes?*

- *How strong is the advocacy for sanitation (marketing) programmes at district level and what are challenges in current sanitation programmes?*
- *Will there be any changes and/or additions to these roles/tasks in a sanitation marketing approach and will the district government be able to fulfil them adequately?*

Objective 2: Analysis of the private sector's capacity to provide sanitation technologies and services.

- *Which sanitation products or services are available in rural areas?*
- *Which challenges do private sanitation suppliers face currently?*
- *Who is currently supporting the private sector and is there cooperation between private suppliers?*
- *Is the private sector already involved in any kind of sanitation promotion?*

Objective 3: Analysis of the capacity of communities to respond to sanitation marketing approaches

- *Which sanitation options are community members aware of?*
- *Which are prevalent perceptions of the current status and benefits from sanitation?*
- *Are community members generally willing to pay for sanitation?*
- *Who addresses sanitation in the villages and what are the messages?*
- *Who or what factors influence(s) decisions for adoption and/or improvements of sanitation?*

Objective 4: Analysis of the gaps in ODF sustainability after CLTS implementation that could potentially be filled with sanitation marketing

- *What are the main sustainability problems with latrines in CLTS communities?*
- *Which of these problems might be improved with sanitation marketing?*
- *How could sanitation marketing and CLTS be combined to improve sustainability from the first stage?*
- *How could the management of district wide CLTS and sanitation marketing programmes be sequenced and coordinated?*

From the start of the research planning it was recognized that the scope of the research is ambitious and that it might be a challenge to gain sufficient evidence from pre-implementation and non-pilot stage communities. This particularly relates to Objective 4 and therefore it was decided to prioritize Objectives 1-3 and determine during the research process if Objective 4 could

be adequately addressed. During the field-based research it became obvious that it would not be possible to gather sufficient evidence to answer the research questions assigned to Objective 4, for reasons of lack of time and resources to carry out a comprehensive sustainability assessment in post-CLTS communities. However, it is acknowledged that further research addressing Objective 4 would provide an important contribution to fully understanding and addressing the issue of sustainable sanitation intervention design in Malawi. The author has therefore chosen to retain this Objective and the associated questions as part of a valid contribution to the overall research aim and highlighted the opportunity for addressing it within further research (see Chapter 6).

1.4 Dissertation Overview

The Literature Review (Chapter 2) provides the general background of the research, and identifies the scope of aspects that need to be considered for the research.

Subsequently, the Methodology (Chapter 3) provides the general background of the research in Malawi and describes how the locations for the case study were selected. Furthermore, the chapter gives an overview over the different methodological approaches and tools that have been applied to carry out the research as well as for analysing and presenting the data.

In Chapter 4 the findings of the research are presented in detail, before being discussed along the literature and put into the context of the research objectives in the Analysis (Chapter 5).

Finally, the main research aim is revisited in the Conclusion (Chapter 6). This final chapter also gives recommendations for important issues to address for project planners and implementers of sanitation marketing approaches in rural Malawi. In addition the research process is reflected and recommendations for further research that would enhance the understanding of the research topic or related topics are proposed.

2. LITERATURE REVIEW

2.1 Introduction

Sanitation marketing is a relatively new approach to support sanitation promotion and thus comprehensive literature about experiences and lessons-learned is limited. In particular, published articles are hard to find as most knowledge is contained in grey literature such as agency reports and internal documents. To illustrate the extent of the gap in independent publications Devine (2010, p.41) points out that a recent systematic literature review conducted by Evans, Pattanayak, Young and Buszin could only identify five published articles, which mention the application of social marketing strategy in the context of sanitation promotion in any depth. Despite the gap in well-documented experiences, many major players in the sanitation development sector currently consider sanitation marketing as a promising approach for their sanitation promotion programmes (e.g. WaterAid, 2011, p.20). Furthermore, the WSP Global Scaling Up Rural Sanitation Project, which has a distinct learning component, as well as the recent development of the *WSP Sanitation Marketing Toolkit* (WSP, 2011) as an interactive online resource, show the emerging interest in further learning about the potentials and application of sanitation marketing. The purpose of this literature review is twofold. Firstly, the review process provided the author with an in-depth understanding of the topic and therefore informed and structured the research process. Secondly it provides the reader with a background on the research topic in order to understand the context and objective of the research.

This review therefore aims

- to review the concept of sustainability in sanitation interventions and to give examples of sustainability assessments for relevant sanitation programme approaches for this research namely sanitation marketing and CLTS;
- to provide an introduction to the background and principles of sanitation marketing, through providing a context of its origins and drivers for the introduction/implementation of the approach as well as experiences and lessons learnt so far;
- to show the roles of different stakeholders in sanitation marketing approaches.
- to give a short overview over the Malawian rural sanitation sector focussing on its organization, current sanitation programmes and experiences with and drivers for the application of sanitation marketing as well as sectoral challenges.

2.2 Methodology of the Literature Review and Limitations

As a first step for the search of relevant literature, a list of various key words and terms was produced. As a next step the most relevant words and terms were selected. The strategy for producing the literature review followed three phases. With regard to the fact, that the topic and research problem were already broadly predefined through communications with Engineers without Borders (EWB) Canada staff, the research for literature followed an approach which could be described as '*going from the specific to the general to the more specific*'. A detailed description of the search approach is given below:

The initial first phase in obtaining literature used very precise and targeted search words and terms, focusing on databases that were thought to be most balanced, such as the University Library Catalogue, MetaLib, the WEDC Resource Centre and Google Scholar. Some Malawi specific documents were provided from EWB Canada. This helped to identify if and/or to what degree sanitation marketing is currently implemented in Malawi.

The obtained documents and articles were reviewed and literature gaps were identified. Consequently, in a second phase, the research was widened by broadening the used research terms but also by using additional data bases and search mechanisms such as the WSP website, the *Water Supply and Sanitation Collaborative Council (WSSCC)* website, the data base of the *International Water and Sanitation Centre (IRC)* and the Community-led Total sanitation webpage and general Google search. A snowball approach was then applied to gather more literature and to deepen the understanding of specific issues that were merely raised by one author but more deeply researched by another. Therefore the in-text references and bibliographies of the publications were used as a starting point for a follow-up research. Especially in journal articles or short context notes, which briefly summarize information, this approach opened up a vast source of in-depth information. The same approach was then replicated when reviewing the newly found articles, which led again to new resources. Comparing bibliographies and references also gave an idea of frequently cited key documents for the different topics and thus some quality indication.

Subscriptions to email based notification services for newly published articles and documents in the WASH sector were useful in obtaining very recent sources. The author subscribed to the *Sanitation Updates* newsletter and the *IRC Web Link* notifications. As an example, the newspaper articles about the launch of the sanitation marketing campaign in peri-urban Lilongwe and Blantyre (Ngozo, 2011; Chibaya, 2011) were obtained after receiving email notifications.

In order to keep a good overview and organization of the reviewed or scanned sources, the articles were classified after scanning in a relevance rating scheme using Roman figures between I

and V. Literature rated with I was thought to be only very peripheral relevant whereas key documents were rated with V. For record keeping these classifications were noted on print-out document; electronic documents were saved in respective folders.

In the third (advanced and thus more informed) phase of the review process the literature research was narrowed down again. This allowed to specifically target identified gaps in the reviewed literature and to follow-up more in-depth information for some of the identified issues. Besides targeted Internet and database research, personal contacts and networks were crucial for this third phase of the review. Gaining access to identified relevant literature was occasionally problematic and some documents which were not available or accessible for the general readership had to be directly requested by contacting people with potential access. To give an example, the draft of the National Sanitation Policy (MoIDW, 2008) could not be accessed online, but was provided by EWB Canada staff after an email request.

Moreover personal contacts with expert knowledge on the broad topic helped to identify relevant literature and sometimes provided further resources in order to fill gaps on specific aspect of the reviewed topics or to add another aspect to the review.

As another way to access most recent state of knowledge to the review, the review benefited from the access to pre-print conference papers of the 2011 35th WEDC Conference.

Constraints encountered in conducting the literature review where mainly caused by limited independent literature being available. A significant number of identified sources (in particular case studies on previous experiences) could be classified as grey literature and/or were written by proponents of sanitation marketing approaches. This implied a greater risk of bias in the stated results and perceptions as in many cases the researching and/or publishing agency is also the implementing agency (in many cases) no independent researchers had been involved in the generation of the publications. Consequently negative experiences are often not, or only implicitly reported. This problem is also reported in by Groeber et al. (2010b, p.7) in the context of insufficient self-criticism in CLTS and sanitation marketing project reports. The author tried to limit the bias by critically reviewing the documents and whenever possible actively searching for ways to balance or triangulate the data with second or third party viewpoints.

2.3 Sustainability of Sanitation Interventions

Despite the common linkage of success or failure of sanitation interventions with their ability to create sustainable impacts or effects, Devine (2010, p.46) points out that there is still no commonly agreed concept for the implications of sustainability in sanitation interventions.

Discussing the implications of sustainability in dynamic systems and in a CLTS (the principles of CLTS are briefly explained in Box 2-1) context Movik and Mehta (2010) refer to Scoones et al.

(2007) as there is a need for clarification what is meant by sustainability as a theoretical construct. One way of understanding and using the term sustainability would be to apply an inherent conservative concept referring to the general ability of a system to maintain itself. By contrast, sustainability can also be used and understood in a more dynamic context and applied as a normative concept referring to the achievement of defined goals. (Scoones et al., 2007, pp.33-36)

Box 2-1: Principles of CLTS

Community-led Total Sanitation (CLTS) was introduced by Kamal Kar in Bangladesh in 1999. During a facilitated triggering the community members analyse their sanitation situation and decide to take collective steps to make improvements and finally become open defecation free (ODF) by their own efforts and build the latrines without hardware subsidies. The CLTS process is usually based on four steps: *pre-triggering*, *triggering*, *post-triggering* and *scaling-up*. CLTS is a bottom-up process towards, behaviour change and latrine adoption that is led by the community as an entity rather than on an individual household basis (Kar; Chambers, 2008, p. 5-9; Godfrey et al., 2010, p.vii-viii).

One has to be aware of the general pitfall that when using and understanding sustainability as a normative concept the defined goals of the intervention become highly “value-laden and political” (Movik & Mehta, 2010, p.4). Furthermore, it needs to be questioned how and by whom overarching goals in a society can be defined and how different priorities can be balanced (*ibid.*). Following this distinction, the sustainability of sanitation intervention can be measured either by assessing if adopted latrines are maintained in their functioning i.e. kept clean, etc. or respectively by assessing if the created structures of a project (e.g. community groups) are still existent and functioning; Or – using the normative concept – by measuring the outcomes or impact of a project/programme against the preliminary defined overall objective or goal.

While reading through sustainability assessments of sanitation intervention or programmes the understanding of this different viewpoint is helpful to better understand and classify the findings of the assessment.

Many authors (eg. Devine, 2010, p.40; Mukherjee et al., 2009, p.293) apply a normative concept of sustainability to critique subsidy/supply driven interventions as they claim that these approaches have failed to trigger a lasting behavioural change. By contrast, recent demand creating approaches like CLTS and sanitation marketing are widely perceived as promising to trigger a lasting behaviour change beyond project durations but since the approaches are still relatively new there are only few evidence based evaluations to justify this perception (Mukherjee et al., 2009, pp.295-96).

The debate around the sustainability of CLTS is consequently focused around its potential to create long-term behaviour change.

Whaley and Webster (2011), who compared the effectiveness and sustainability of CLTS and Community Health Clubs (CHC)² in Zimbabwe, conclude that a weak spot of CLTS is that it relies on relatively few face-to-face interactions, which was a clear asset of the CHC approach. The results of their study reveal that long-term behaviour change that persists beyond a project's lifetime requires periodic face-to-face visits from outsiders in order to maintain the momentum and focus on the measures promoted by the intervention (ibid., p.35).

The primary goal of CLTS is to eradicate open defecation and stimulate community-wide adoption of latrine usage (Kar & Chambers, 2008, pp.8-9) and for its proponents the success of the approach is shown by the widespread achievements of creating ODF communities (Kar & Chambers, 2008, pp.7-9).

More critical voices (e.g. Mukherjee, 2009) question the extent of this behaviour change by arguing that there are inconsistencies in the definition of the open defecation free (ODF) status, the quality of the built latrines is sometimes very poor and in some cases the reliability of the ODF verification should be challenged. Mukherjee (2009, p.295) substantiates these doubts by pointing out that qualitative studies in different countries have shown that in a significant number of cases open defecation continued after declaring the community Open Defecation Free (ODF) and Bramley and Breslin (2010, p.11) come to the conclusion that the failure of effective monitoring has weakened the potential of the CLTS initiatives.

The authors of a research study on the sustainability of total sanitation campaigns in Nigeria, Nepal and Bangladesh, which had been supported by WaterAid, also admit that the measurement of long-term effects of the projects was difficult because of the relatively recent or even on-going introduction of the interventions in the countries. Within this limitation, the sustainability of the behaviour change was assessed by looking at the latrine use "beyond immediate short-term (one pit-full) life" (Evans et al., 2009, p.25) and also the replication and adoption of the latrine use by new community members. Therefore, the used sustainability proxies had to show evidence that: "Full pits were emptied and/or replaced; New members of the community (in-migrants or new adults) construct and use latrines; some individuals and households are moving up the sanitation

² The principle of CHCs is to establish a space for the discussion and debate of different health topics in the communities. Whilst CLTS is only focusing on the eradication of open defecation and (in the studied case) the practice of washing hands with soap, CHCs address a much wider range of health issues. The CHCs are open to all community members to join and operate over a period of six months. During this time weekly meetings moderated by a trained facilitator are held. Furthermore, the approach involves a 'model home competition' where the households try to win a voting on the best adoption of the health measures learned and discussed during the meetings. All members of the health club decide the voting and at the end of the six month period regular attendance of the health club meetings is rewarded with a graduation certificate. (Whaley & Webster, 2011, p.21)

ladder; Breakages, pit collapses and latrines damaged by natural disasters are replaced” (ibid., p.25).

As another example for sustainability assessments, Devine and Sijbesma (2011) studied the sustainability of a rural sanitation marketing pilot project in Vietnam using a more conservative concept of sustainability. The project pilot was designed to test the potential of sanitation marketing to improve access to sanitary latrines in rural Vietnam. Three years after the end of the project, which was implemented by International Development Enterprises (IDE) with funding from DANIDA, the objective of the study was “to determine whether outputs and outcomes had been maintained” (ibid., p.54). Breaking down this objective, the sustainability of increase in access and the continuation of promotion, demand and supply were researched. The study also used a control group to determine whether similar market developments had emerged without supporting capacity building. Finally, replication and spread of the sanitation marketing approach in close-by communities or even at district scale was also explored. In spite of positive findings that gave evidence for the continued growth of the sanitation market beyond the project timeframe, the authors report that there was a clear trend for reduced promotion activities and that without adaptation of the approach the sustainability of the project might not be guaranteed in the longer term. Recommendations are given for measures to avoid market saturation and for the necessity of quality regulations. (Devine & Sijbesma, 2011, pp.58-60)

As a general sanitation programming recommendation the authors stress that market-based approaches alone are not effective in stimulating fundamental behaviour change such as the eradication of open defecation and thus should be complemented with approaches and communication strategies that could fulfil this gap such as CLTS (Devine & Sijbesma, 2011, p.59).

Going beyond the implications and assessment of the sustainability of a sanitation programme/intervention an important question for sector professionals and policy makers is to explore *what factors or criteria* are necessary for making a rural sanitation project successful and sustainable in the long-term. Currently, WSP is trying to answer these questions through the *Global Scaling Up Rural Sanitation Project*, which is designed to lead “to evidence-based knowledge on what works to improve rural sanitation at scale” (Perez, 2011, p.1). As a premise the project linked sustainable improved sanitation and hygiene behaviours with the development of a robust supply of and demand for latrines. The final evaluation of the project is still outstanding, however, results to date including lessons learnt about financing mechanisms, data collection, monitoring and benchmarking, strengthening the enabling environment and private sector capacity building are provided by Perez (2011)

Hanchett et al. (2011) most recently published the report about their research of the long-term sustainability of improved sanitation through Bangladesh's Total Sanitation campaign. The research applied a normative behaviour change concept to sustainability by exploring the degree to which improved sanitation behaviours were sustained beyond the project life. However, the study also investigates on the positive factors of sustainability and negative factors that work against sustainability of rural sanitation (Hanchett et al., 2011, p.iii). Social, programmatic and other more diverse factors that correlated with sustained or respectively non-sustained use were identified and analysed in order to obtain recommendations for future programming of rural sanitation interventions (Box 2-2).

Box 2-2: Considerations for sustaining sanitation programming and behaviour change at scale

- Government has to have the political will to prioritize sanitation at the central and lower tiers of government. [...] Advocacy from the central government down to the local governments [...] was a factor in unifying the country around sanitation.
- Sustained sanitation programmes are needed to support behaviour change. Local government authorities require some level of sustained financing for continued sanitation promotion for an undetermined period of time.
- Financing mechanisms are needed for households that want to replace or upgrade basic latrines, or move out of shared arrangements. These mechanisms might include microfinance arrangements or well-targeted pro-poor subsidies or financing.
- Sanitation marketing can help sector professionals better understand consumer's constraints and aspirations. [...] Market research can help target an affordable level of service that gives consumers the most satisfaction, increasing the likelihood of sustained use of latrines.

Source: Extracted from Hanchett et al. (2011, p.vi-vii)

2.4 Sanitation Promotion Approaches

For a few years the failure of supply driven sanitation hardware provision and hygiene education approaches has widely been acknowledged (e.g. Mukherjee et al., 2009, pp.293-94; WaterAid, 2011, p.20) and has provoked the development of bottom-up sanitation promotion approaches (sanitation software). These bottom-up approaches aim to gain understanding of the target community and their perceptions of and motivation for improving sanitation (Peal et al., 2010, p.5).

The strategies used have faced an on-going adaptation, based on the lessons learnt from past experiences (Deverill et al., 2002, p.5; Peal et al., 2010, p.77). Starting with the UN Water and Sanitation decade (1981-1990) and the economic constraints to reduce public expenditures as a result of the Structural Adjustments Programmes (SAPs) on the one side and the increased popularity of self-reliance and community empowerment³ concepts on the other side, Movik and

³ Schumacher's Small is Beautiful was first published in 1973.

Mehta (2010, pp.2-3) give brief introduction into the political and historical dynamics within sanitation sector context that led to the emergence of community-based approaches such as CLTS. Prior to the arrival of the CLTS concept, the approach of Participatory Hygiene And Sanitation Transformation (PHAST) had been firmly established in East and Southern Africa but failed to show convincing potential to create behaviour change Movik and Mehta (2010, p.2).

A comprehensive overview over the hygiene and sanitation software that was developed over the last 40 years (Peal et al., 2010) subdivides sanitation promotion approaches into demand creating and supply chain supporting approaches. According to Peal et al. (2010, p.14) some sanitation promotion approaches may also induce behaviour change but in general this is more attributed to hygiene promotion approaches. Within their classification sanitation promotion is further subdivided into *Community-wide Approaches* (CLTS and SLTS⁴) and *Marketing of Sanitation Goods and Services* (Support of Small Scale Independent Providers (SSIP) and SaniMarts) (Peal et al., 2010).

In spite of these classifications it should be noted that the boundaries between hygiene and sanitation promotion approaches as well as between their subcategories are not always clear. Many hybrids do exist and different authors might use different categories for the same approach (WaterAid, 2011, p.20).

2.5 Principles of Social Marketing

The concept of sanitation marketing (which will be discussed in section 2.7) is based on the principles of social marketing approaches. Social marketing has been applied in different public fields since the early 1970s (Buchanan et al., 1994, p.50). For a better understanding of the general concept of social marketing a frequently cited (e.g. by Scott, 2005; Peal et al., 2010, p.87) definition of social marketing was given by Weinreich (1999, p.3):

“Social marketing is the use of commercial marketing techniques to promote the adoption of a behaviour that will improve the health or well-being of the target audience or the society as a whole.”

Scott (2005) points out that one key of success for social marketing (as for all marketing) lies in the understanding of *what the consumer wants*. This is fundamentally different from educational approaches, which inform about reasons why the target audience *should change their behaviour*. Albeit the obvious similarities in the definitions Andreasen (1995, p.7) emphasizes that social and

⁴ School-led Total Sanitation, which started in 2005 in Nepal builds upon the principles and participatory tools used in CLTS. The major difference when compared to CLTS is the target on school-children as primary recipients of the sanitation messages. (Peal et al., 2010, p.83) UNICEF summarizes community-based approaches such as CLTS and SLTS as CATS (Community Approaches to Total Sanitation) (Thomas, 2010).

commercial marketing concepts differ fundamentally in their ultimate objective. Commercial marketing strives to benefit the sponsoring organization, while the benefit of the target audience or of the broader society is more a means to an end than the focus (Andreasen, 1995, p.7). The key features of a social marketing campaign are shown in Box 2-3.

Despite this delineation of concepts and despite nowadays broad acceptance and recognition of social marketing concepts as a means to trigger behaviour change in many social fields, the beginnings of extensive applications social marketing were controversial. When social marketing in health promotion was introduced in the early 1990s, it sparked a debate about the ethical

Box 2-3: Key features of social marketing

1. Consumer behaviour is the bottom line
2. Programmes must be cost effective
3. All strategies begin with the customer
4. Interventions involve the Four P's: Product, Price, Place, and Promotion.
5. Market research is essential to designing, pretesting, and evaluating intervention programmes
6. Markets are carefully segmented
7. Competition is always recognised.

Source: Andreasen (1995: 14)

controversial assumptions and methods of the approach. In the journal *Health Promotion International* Hastings and Haywood (1991) were criticised by Buchanan et al. (1994, p.52) for neglecting the differences between social situations and commercial markets. Another issue raised was the constant risk within social marketing “to collapse into a manipulative relationship” (Buchanan et al., 1994, p.55).

With respect to ethical concerns, Andreasen (1995) stresses the fact that social marketers, claiming to act in the society's interest, must continuously critically question the ethicality of both their goals and their means. Social marketing programmes claim that they strive to “improve” societies and thus it has to be critically discussed what actually is an improvement of society and whether a set goal actually fulfils the requirements of an improvement. In addition social marketers have to be attentive that they do not apply the principle of “the end justifies the means” and, for example, manipulate their target audience but always strive to achieve a maximum of honesty, fairness, trusting and respectfulness in the applied means (ibid., pp.30-32).

In terms of demand-responsiveness an opportunity for (social) marketing is that marketers are aware of the competing priorities that determine consumers' behaviours and recognize the importance of promoting the desired behaviour change in a way that it is perceived as a top priority of the target audience (Scott, 2005). As marketing “goes beyond communications” (Scott, 2005) the aim of the (social) marketer is not only that the consumers (target audience) want to change their behaviour but also to assure that they are able to do so (ibid.). For this purpose social marketers apply the concept of the marketing mix represented by the four P's of (commercial) marketing to target their key audience. These four P's are Product, Price, Place and Promotion. Understanding the four P's enables marketers to develop “the appropriate product, at

the right price, easily available through strategic sales placement, and known about through promotion which also aims to enhance desire“ (Scott, 2005). Figure 2-1 shows how the definitions of the traditional marketing P’s are adapted to make them applicable to social marketing approaches.

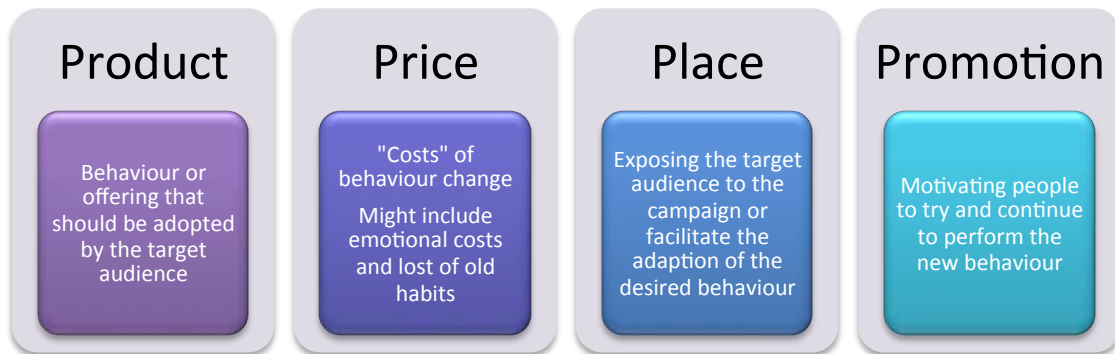


Figure 2-1: Social marketing mix (four P's)

Source: Adapted from Weinreich (1999, pp.9-15)

Weinreich (1999, p.9) sets out, that the four P’s of commercial marketing are adapted and used fairly differently in social marketing in order to fit the purpose of social marketing and therefore recommends the use of four additional P’s, *Public*, *Partnership*, *Policy* and *Purse strings* that reflect on the differences between social and commercial marketing. Scott (2005) supports the addition of Policy as the fifth P of social marketing by acknowledging that political enforcement can accelerate behaviour change and a favourable political enabling environment might be a key for sustaining the change.

2.6 Private Sector Involvement: From ‘supply-delivery’ to ‘market-based’ approaches

The essence of ‘market-based’ approaches is not to *involve* the private sector into the provision of goods and services; it should be primarily acknowledged that the private sector has always been an essential part of the sanitation service provision. Delivering hardware such as pipes or soap for hand washing as well as design, consultancy services or construction capabilities has therefore always involved private providers with different scale and grade of professionalization (Carter, 2011, p.3). Obika (2004a) argues that informal small-scale providers already build the majority of latrines in developing countries.

Hence, market based approaches are rather defined by a change of perception with users no longer regarding themselves or being regarded by others as beneficiaries but rather as paying customers who are “dignified by their engagement in the market” (Carter, 2011, p.3). Market-based approaches must consider and balance out between the demand (people’s need and

willingness to pay) and the supply side while creating mechanisms to include poor and excluded parts of the population. Nevertheless, the imperfections of water and sanitation markets have to be recognized and market-based approaches have to protect customer choice, affordability, quality of services and goods by encouraging competition, customer voice and adequate regulations as well as by creating incentives to serve marginalised population groups (Carter, 2011, pp.3-4). Cairncross (2003) blames the civil engineering training background of most technicians involved in the sanitation sector for the frequent neglect of affordability of sanitation technologies. In contrast to product engineers, civil engineers are not used to design a product for a market niche and target price and thus often lack the flexibility to modify a product according to demand criteria. Consequently, a shift in professional concepts would be necessary to increase the market orientation of available sanitation products (ibid., p.129).

An obstacle in the way to a better understanding of the character of the private sector in sanitation is the frequent collective discussion of private sector businesses in water supply and sanitation as this neglects the different nature of the existing business models and service providers in each of the sectors. In sanitation the market share of private enterprises is thought to be a lot greater than in water supply. Focussing on the sanitation sector, an additional distinction between service providers and (hardware) manufacturing businesses is thought to be crucial (Schaub-Jones, 2011, p.6-7).

Table 2-1 gives a proposal for the different types of private businesses involved in the sanitation sector.

Table 2-1: Private sector businesses in sanitation

Service providers	Manufacturing businesses	Intermediate markets
Individuals and firms operating vacuum trucks, Organizations that build and operate toilet blocks Toilet builders (often individuals working informally) Manual pit emptiers (mostly informal)	Firms that produce and distribute plastic and ceramic toilets Firms/individuals that produce sanplats Firms that promote ecosan and other innovative products (such as the peepoo bag) More hygiene related: soap manufacturers (large multinationals as significant players)	Retailers of sanitation hardware (ceramic, plastic and concrete products used in plumbing and sanitary infrastructure)

Source: Adopted from Schaub-Jones (2011, p.7)

As another way towards a better understanding and characterization of the private sanitation sector the concept of an economic value chain analysis can be applied to analyse the sanitation supply (IRC & SNV, 2011, p.13). The consideration of supply chains shows the shift towards

regarding sanitation as a system rather than as a technology (WaterAid, 2011, pp.22-23). The supply chain analysis starts with the demand and needs of the consumers and then identifies who is involved in the provision of sanitation supply such as masons, village latrine builders, component retailers, pit emptiers, credit and financial institutes, material retailers, etc. (IRC & SNV, 2011, p.13). There are different ways to visualise these supply chains, one example is given in Figure 2-2.

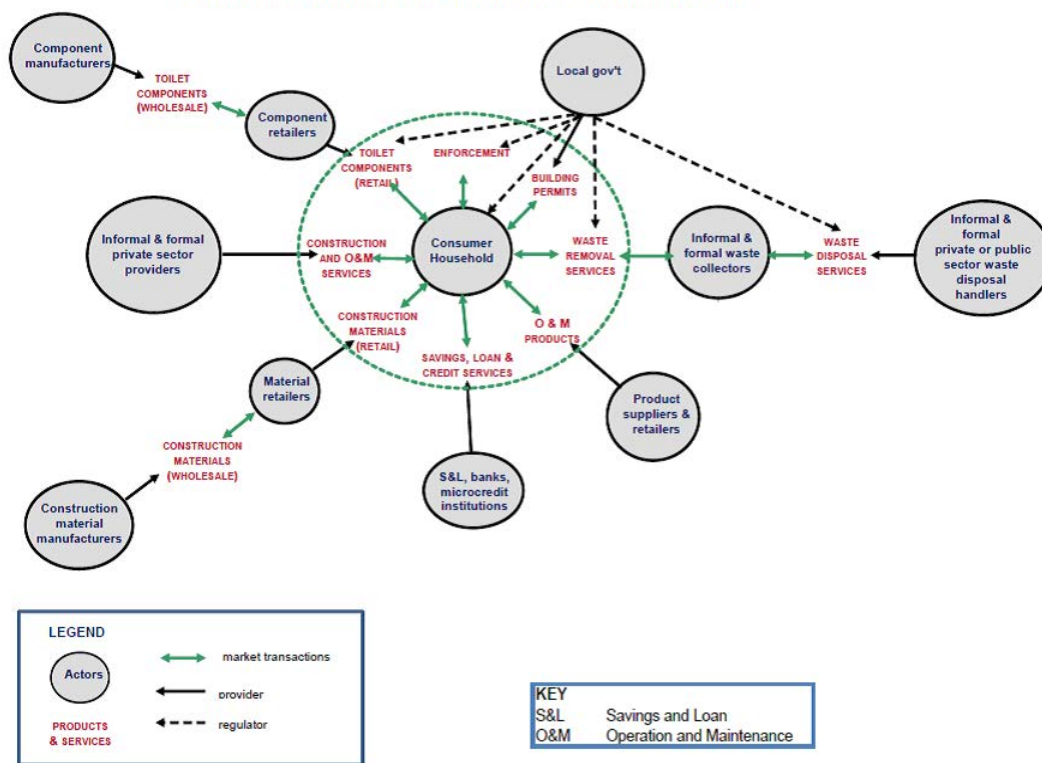


Figure 2-2: Example for a supply chain visualization (with Institutional framework)

Source: USAID HIP (2010, p.46)

The structure and degree of the formalization of 'entrepreneurship' in sanitation clearly depends on the capital outlay that is necessary to buy the required equipment and to operate as well as the level of organization that is required for the construction and management of the sanitation facility. For these reasons, urban emptying markets (using vacuum trucks) are likely to be semi-structured and communal latrine blocks are often build with subsidies and managed by NGOs or CBOs while tasks like pit latrine construction or manual emptying are mostly carried out by less formal and less professional small-scale providers, who might (even with support) struggle to grow in size and scope (Schaub-Jones, 2011, pp.15-16).

According to Schaub-Jones (2011) private entrepreneurs offer various advantages as providers in the water and sanitation sector. These include that private entrepreneurs (in particular service-oriented providers) fill niches where the public sector lacks the capacity or will to provide services. Furthermore, private entrepreneurs are considered to be more innovative in extending

the variety of service and product choices for the customer as well as they are more likely to compete for new customers and therefore scale up their service radius (ibid., p.8).

On the other hand, challenges with private sector suppliers in water and sanitation can be found in the strong importance of financial returns in the motivation of entrepreneurs and thus lack of motivation to act in a wider public interest if actions/services are perceived to be financially unattractive. Another concern is that government regulations might be ignored if they are obstructive for the realization of new innovations or found unnecessary (ibid.).

Section 2.7.6 gives more examples for constraints and challenges with market-based approaches for sanitation.

2.7 Applying Social Marketing to Sanitation: Sanitation Marketing Principles

With respect to the provided background and based on the concept of social marketing i.e. applying commercial principles to social causes, sanitation marketing is defined as “the application of commercial concepts and principles on the whole latrine promotion strategy” (Budds et al., 2001, p.174).

Peal et al. (2010, p. 86) stress that sanitation marketing is not a single approach but rather a collective term for a number of approaches that aim to make the potential consumer aware, informed and interested in purchasing a sanitation facility. While these two definitions focus on the means to prompt households to purchase a latrine Devine (2010) widens the definitions as she proposes to understand sanitation marketing as a way to promote behaviour change in four sanitation related areas: 1.) *Abandon open defecation*, 2.) *Adopting or upgrading to a latrine that effectively separates excreta from human contact*, 3.) *Adequate maintenance of the facility*, 4.) *Correct handling and disposing of children’s excreta* (Devine, 2010, p.42). However, as Obika (2004a) points out, sanitation marketing approaches do not only incorporate the effective promotion or advertising of sanitation behaviour change with well-targeted messages, they also assure a balance between demand and supply by supporting the private sector in its performance and capacity. Accordingly, Mukherjee (2009, p.294) acknowledges the complementary character of the demand and the supply side:

“Sanitation marketing treats individuals as consumers, develops sanitation product options and promotional campaigns based on consumer and market research, and strengthens sanitation suppliers’ abilities to offer consumers a range of technology and cost options with quality assurance.” (Mukherjee et al., 2009, p.294)

A common stated advantage of sanitation marketing (e.g. Cairncross, 2004, pp.2-4; Budds et al., 2001, pp.174-175) is that it takes into account the various incentives people might have for adopting a latrine, as well as the constraints that holds them of getting a latrine.

Therefore, the segmentation of the market is a key output of the formative research. Market segmentation takes into account the different socio-economic backgrounds, current sanitation practices and needs of the population. Market or consumer segmentation divides the target population into more manageable homogenous segments. By acknowledging key behaviours, motivators and obstacles, the right **range** of products and **set** of marketing strategies can be developed, so as to avoid the exclusion of parts of the population through inappropriate or inflexible measures. Consumers have various starting points relating to their sanitation practice and thus different relevant and appropriate options and strategies need to be developed distinctly. Where needed adequate support needs to be provided, which might be technical support for suppliers or support in establishing effective financing mechanisms (Thomas, 2010, p.12; Jenkins & Scott, 2007, p.24).

Marketing needs to understand the decision-making process that underlies the adoption or non-adoption of sanitation. Jenkins and Scott (2007) describe the process of household sanitation adoption in three stages (Figure 2-3).

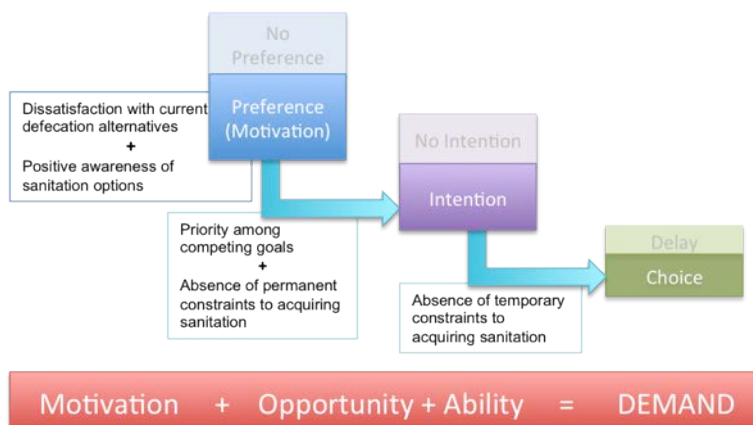


Figure 2-3: Three phases of household decision making for sanitation

Source: Adopted from Jenkins & Scott (2007, p.2430)

Preference (or Motivation), which is determined by the household's dissatisfaction with the current defecation alternative AND a positive awareness of sanitation options. If sanitation is a priority amongst competing goals and permanent constraints to acquiring sanitation are absent,

Intentions follows as the second stage. Intention reflects a general plan to build or purchase a latrine but proceeding to the stage of **Choice**, taken to mean the final decision and implementation of the plan, is determined by the absence of temporary constraints to acquiring sanitation (Jenkins & Scott, 2007; Jenkins & Sugden, 2006, p.11-17).

The decision-making process for the adoption of household sanitation is complex and determined by various competing motivators and constraints or barriers. Behaviour change frameworks offer an opportunity for the analysis of complex decision-making and behaviour change processes. Behaviour change frameworks have been used for a wide range of health issues to analyse and explain behaviours at various stages of interventions (Devine, 2009, p.2). Devine (2009)

introduces such a behaviour change framework for sanitation behaviours: the *SaniFOAM* framework, which was used to design the formative research of the WSP *Global Scaling Up Rural Sanitation* project. As the acronym *FOAM* stands for *Focus, Opportunity, Ability* and *Motivation*. The framework is partly based on the finding of Jenkins (2004) that “demand is created when consumers have motivation, opportunity and ability to purchase sanitation technology which suits their needs” (Jenkins, 2004, p.3). A clarification of these three factors is given in Box 2-4.

Box 2-4: Motivation, opportunity and ability as components of demand creation

People require **motivation** to part with hard-earned cash. And there is a considerable body of research, which indicates that latrine adoption is rarely motivated by messages about health benefits alone. More important are the immediate and direct benefits of increased convenience, comfort, cleanliness, privacy, safety, and prestige offered by home sanitation.
Opportunity means access to good sanitation product information, builders, materials, and operating and maintenance services.
Ability refers to the resources consumers must possess to make use of opportunities, including money, knowledge, skill, time, transportation, and control over decisions.

Source: Extracted from Jenkins (2004, p.3)

Focus is added to ensure that there is a focused definition of 1.) *the desired sanitation behaviours* and 2.) *the target population* (Devine, 2009, p.3).

Each of the categories is influenced by a number of various determinants (see Figure 5-1 in Analysis section), which together form the SaniFOAM framework. Revisiting Scott’s and Jenkins’ three stages of decision making, *opportunity* and *ability* are required to enable households to proceed from the stage of **preference** (*motivation*) to the **intention** to build a toilet and finally the implementation of the plan in the stage of **choice** (Jenkins & Scott, 2007, p.14).

Conceptual frameworks like the SaniFOAM concept might play an important role in the analysis of the results of the market research that should be the first step to any sanitation marketing intervention. Understanding the target market (supply and demand side) and getting the marketing mix right is crucial for the success of sanitation marketing programmes (Godfrey et al., 2010, p.viii)

2.7.1 The sanitation marketing mix

The four (social) marketing P’s: Product, Place, Promotion, and Price were already introduced in section 2.5 and will subsequently be specified for sanitation markets (Figure 2-4).

According to Peal et al. (2010, p.86) the **Product** within sanitation marketing approaches can be an item like a latrine but also a service (e.g. pit emptying) or even a change in sanitation related practices or behaviour like adopting hand washing or stopping open defecation.

The **Place** has to assure that sanitation products and services are available and accessible for the target group. This means that the supply chains have to be improved and extended to reach every

household (Cairncross, 2004, p.4). Peal et al. (2010, p.86) propose that public channels such as government extension workers, NGO volunteers as well as private shop entrepreneurs and trades people can be means to bring the market close to the customers.



Figure 2-4: The marketing mix in sanitation

Various channels of communications can be used for the *Promotion* of sanitation. Promotion of sanitation might include the use of well-researched and designed mass media campaigns, word of mouth and anything in between which helps to get the customers' attention and convince them to buy the product or make use of the service (Cairncross, 2004, p.5). The challenges and requirements for successfully promoting sanitation products, services or behaviours might be highly context specific and Peal et al. (2010, p.86) point out that the initial creation of demand for a new product is

certainly more demanding than winning market shares from competitors.

The *Price* of sanitation might be the greatest barrier for those who most urgently need it. Consequently sanitation marketing needs to assure the development of affordable options and various price ranges (Cairncross, 2004, p.4).

As in social marketing (section 2.5) different authors suggest that the traditional four P's of social marketing have to be extended with additional components in order to apply to the requirements of sanitation marketing approaches (Figure 2-4).

Again *Policy/Politics* as a fifth P is proposed, pointing out the important influence that legislation/policies might have on the context in which the sanitation marketing approach is implemented (Outlaw et al., 2007, p.5). Cairncross (2003, pp. 129) emphasizes that while the implementation through local governments is essential in sanitation marketing approaches, by-laws and regulations on local government level might also be the biggest constraints to sanitation.⁵ Gaining local governments as active champions and supporters for sanitation marketing, that modify regulations on land tenure and building consents is therefore crucial. USAID HIP suggests six P's (2010, p.10): While agreeing with the importance of Policy, it is

⁵ Cairncross does not explicitly recommend any additional P's.

proposed that *Partnerships* should be added. If subsidies are part of the programme, Cairncross (2003) recommends that in order to stimulate the production of appropriate and affordable products and to keep the production numbers independent from the subsidies, not the latrines themselves but rather the promotion should be subsidised. Consequently, there is a need to further investigate, who is providing sanitation services. The development of public-private partnerships with small-scale providers with local knowledge is recommended. Partnerships may help to optimize the operation of the different aspects of sanitation marketing programmes as different expertise and skills are needed for the manufacturing of a sanitation product and its promotion and partnerships may help to professionalize all aspects of the programme (ibid., pp.129-30).

With regard to the experiences of ‘total sanitation’ campaigns Heierli and Frias (2007, pp.39-40) suggest that the inclusion of *People* in the marketing mix is crucial as this introduces the importance of “social processes, such as group pressure, to achieve a breakthrough” (ibid., p.39) to the concept.

2.7.2 Design of sanitation marketing programmes and financing options

USAID HIP (2010) published a guidance manual for the practical design of sanitation marketing programmes, including various tools and activities. Various resources are also available from the online Sanitation Marketing Toolkit (WSP, 2011). A print overview of the toolkit, *Introductory Guide to Sanitation Marketing* was still in press at the time of this review. The detailed description of the programme design of sanitation marketing is beyond the scope of this review. In general sanitation marketing involves five steps (Figure 2-5).



Figure 2-5: Steps of sanitation marketing

Source: Adopted from Godfrey et al. (2010, p.viii)

Challenging for programme design that is guided by a clear overall objective or vision is that, as Devine (2010, p.50) points out, sanitation marketing is still a very new concept and there is still no common definition of sanitation marketing and agreed understanding of its objectives amongst practitioners. Moreover it still has not been agreed on how sanitation marketing and CLTS fit together and might complement each other (see section 2.7.4).

Lack of financial capacity is an important barrier for households to invest in sanitation. Market-based approaches for sanitation promotion have been criticized to run the risk of failing to reach

the poorest and vulnerable, who cannot afford to pay for the offered products and services (e.g. WaterAid, 2011, p.22; Thomas, 2010, p.11).

There is now an increasing debate about the equity aspects in zero-subsidy programmes which suggests that well-targeted pro-poor subsidies might be effective in helping the poorest and most vulnerable population to gain access to sanitation (Perez, 2011, p.2).

Apart from such targeted donor or government funded subsidy schemes, small-loan and micro-credit financing is increasingly recognised as a way to support households and small-scale providers in market-based programmes. WaterAid (2011, p.29) gives a comprehensive overview about different public, private and mixed finance mechanisms and their advantages and risks.

2.7.3 Business models for the private sanitation sector

Although some business models for marketing sanitation (e.g. SaniMarts) are not entirely new review and evaluation documents are hard to find and there seems to be a lack of evidence based knowledge which model(s) is (are) suitable for which conditions.

According to the outcomes of the discussions of a *Rural Sanitation Supply Chain & Finance* workshop with participants of six East and South-East Asian countries in Vietnam in January 2011, business models for private sanitation sector prevalent in the region can be divided into three categories (Krukkert, 2011):

The one-stop-shop model (Figure 2-6) is a contractor or SaniMart located at an accessible place

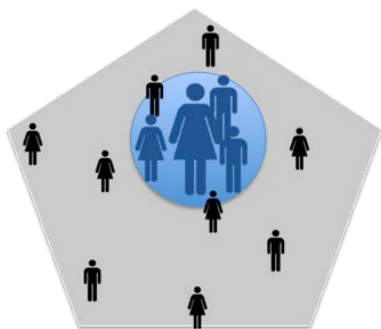


Figure 2-6: One-stop-shop model

Source: Author

selling various types of products needed for the construction and maintenance of latrines. SaniMarts have been established in several countries in order to overcome market gaps in the provision of sanitation goods and services. Experiences with the establishment of SaniMarts exist for the rural, urban and peri-urban context and for different geographic regions. However, experiences in Africa are limited compared to South Asia, where the approach has been more widely used. This gap is thought to be caused by differences in the enabling

environment between the two region and more challenging logistics in terms of access to transport, goods and services in Africa but even in South Asia the spread of the approach has lagged behind original hopes (Peal et al., 2010, pp.92-94). Ideally, SaniMarts should be staffed with a trained sanitation promoter, who should be able to give guidance about the construction, maintenance and use of a latrine. This will provide the customer with an informed choice and the SaniMart may act as a showcase for the health benefits of sanitation and hygiene. Further support is provided by a number of trained masons, who can also be hired for latrine construction (Peal et

al., 2010, p.92; Kolsky et al., 2000, p.28). The suitability of SaniMarts to improve access to sanitation and their economic viability and sustainability is still under debate:

Mendiratta (2000, p.157) draws a positive picture of the experiences of a UNICEF supported Rural Sanitation Market (RSM) project in India (in the State Uttar Pradesh) and comes to the conclusion that all RSM included in the project were economically viable and sustainable. Kolsky et al. (2000) do not confirm this view and conclude about the same RSM project (but possibly not in the same area) that their field visits suggested, “that the concept was not as successful in practice as many had hoped” (Kolsky, 2000, p.28). The latter impression is more in line with Krukkert’s (2011) evaluation that shops exclusively dedicated to selling sanitation products usually fail to be profitable and thus hardly survive. Additional weaknesses of one stop-shop-model or SaniMart approaches identified by Peal et al. (2010, p.93) are their tendency to be unsuccessful in targeting people who are not yet on the sanitation ladder and still practice open defecation and to marginalise people who have not the financial capacity to invest in sanitation improvements.

Finally, appropriate financial arrangements, such as micro-finance schemes, need to be in place in

Box 2-5: Key activities for setting up a SaniMart programme

- Training of shop managers and sanitation promoters in sanitation and marketing.
- Selection and training of masons.
- Mobilisation of customers through different promotion activities
- Home visits by sanitation promoters. Small incentives for each latrine equipped by the mart are received by both the promoter and families.

Source: According to Peal et al. (2010, p.92)

order to ensure that the SaniMarts can be self-sustaining and do not depend on project-related subsidies, which undermine the viability of the businesses. The key activities for setting up a SaniMart programme are summarized in Box 2-5.

The micro-franchising model and the network-model described by Krukkert (2011) are both improved business models for Small Scale Independent Providers (SSIPs) labelled by Peal et al. (2010, p.88).

The concept of the *micro-franchising model* is to encourage small businesses to engage in the same business idea at scale. IRC and SNV (2011, p.19) explain that micro-franchise models take into account that not everybody has the skills or wants to be an entrepreneur. Consequently, the micro-franchise model is centred around one leading business or entrepreneur owning a proven business plan (Figure 2-7). This entrepreneur or business will then help the franchisee with trainings, product development and branding as well as bulk purchases.

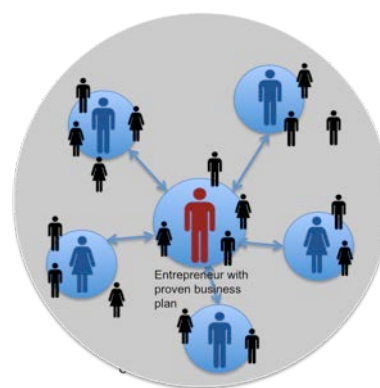


Figure 2-7: Micro-franchisee model
Source: Author

Branding is not only relevant for the franchising model but in general a means of product marketing to describe a product and make it memorable and attractive. Branding allows to “create prestige and facilitate awareness and word of mouth” (Rosenboom et al., 2011, p.35). In franchising-models, branding has the advantage to enable suppliers to benefit from the work of others who have already generated demand for the product or service (Rosenboom et al., 2011, p.35). Therefore the franchising model generates confidence in the entrepreneur, who has not to act as a lone risk-taker in an uncertain and unproven market but allows the franchisee to be “in business for oneself but not by oneself” (van Ginneken et al., 2004, p.5). There are only very few documented examples of sanitation businesses applying a micro-franchising model, especially in rural areas. For urban areas Groeber et al. (2010a, pp.3-4) give the example of the *Ikotoilet* public toilet mall franchise in Kenya. According to Devine (2010, p.48) a rural sanitation entrepreneur in East Java, Indonesia, made use of social franchising methods to enhance the business of his one-stop-shop and the *WSP Global Scaling Up Project* considers promoting elements of a social franchising approach in their target areas.

Within the *network-model* a horizontal (Figure 2-9) and/or vertical (Figure 2-8) network or cooperative of sanitation providers (i.e. masons, shopkeepers, middle-men) work together to provide services. Sometimes the network-model includes linkages between sanitation suppliers and health workers and the service provision is more or less organized (IRC & SNV, 2011, p.21). Experiences from East Java indicate that this model is suitable as a primary model to increase access to sanitation and move people from open defecation to ODF. The network model in East Java was successful in small-scale settings and with a local actor acting as a

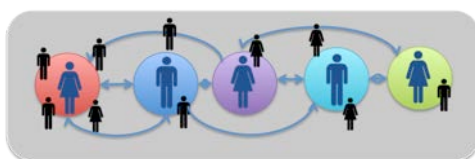


Figure 2-9: Horizontal network-model
Source: Author
(e.g. network of independent but collaborating masons in different villages)

network-catalyst. The functions of this network-catalyst were to support the access to demand data, generating demand and facilitate the arrangements with the local providers (IRC & SNV, 2011, p.21).

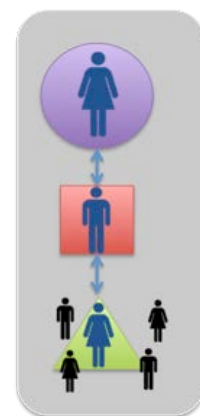


Figure 2-8: Vertical network-model
(Source: Author
(e.g. concrete supplier-sanplat manufacturer-mason))

2.7.4 CLTS and sanitation marketing – the TSSM approach

“...there seems to be reason to believe that the CLTS and marketing approaches are not only mutually compatible, but mutually complementary.” (Mukherjee et al., 2009, p.296)

Mukherjee et al. (2009, p.295) criticize the polarization between the proponents of CLTS and sanitation marketing which they found evident during the AFRICASAN II and SACOSAN III sanitation conferences (both in 2008) and attributed to the different focus of the approaches. Criticizing the CLTS approach for neglecting the supply side they stress that a more constructive dialogue would be necessary to benefit from the strength of both approaches. This recommendation is underlined by reporting the cases of positive responses to sanitation marketing approaches in Cambodia and Indonesia in areas where CLTS had already created sanitation demand (Mukherjee et al., 2009, p.296).

As mentioned in section 2.7 there is only limited experience of how CLTS and sanitation marketing approaches could be harmonized and opinions are very divergent in the sector (practical considerations for the sequencing of CLTS and sanitation marketing are given in (Box 2-6)).

Some assume that CLTS alone is sufficient to trigger behaviour change and sanitation marketing activities could therefore be focused on the supply side. Some see CLTS only as a means to enable people to make a first step onto the sanitation ladder by stopping open defecation and sanitation marketing as necessary to support households to move towards more improved systems. Other, though, assume that sanitation

Box 2-6: Sequencing of CLTS and sanitation marketing implementation

Beyond the question, of the overall aim and potential of the two approaches, programme managers have to ask themselves how to practically sequence or phase CLTS and sanitation marketing implementation on the ground. There is still not a lot of knowledge and experience for a ‘best-practice’ for sequencing CLTS and sanitation marketing. Some experiences suggest that a premature introduction of sanitation marketing programmes before the achievement of an ODF community status will dilute or even eliminate the triggering process (Thomas, 2010, p.9). Nevertheless, so far no comprehensive study has been done on this issue that would allow drawing a general conclusion or recommendation for practitioners.

marketing has the potential to create demand and improve supply at scale and recommend that both approaches should be seamlessly integrated (Devine, 2010, p.50). Godfrey et al. (2010, p.x) who conducted a review of current CLTS and sanitation marketing applications, recommend this third approach that purposefully combines CLTS and sanitation marketing in Total Sanitation Sanitation Marketing (TSSM) programmes. The authors further advise adopting the WSP TSSM approach, which works through existing government structures and makes local governments the focal point in the implementation of the programme (ibid.).

The WSP *Global Scaling Up Rural Sanitation Project* was started in 2007, with the background that whilst there has been a common understanding between governments and international development partners on the importance to enhance efforts in rural sanitation interventions, there is a significant lack of evidence based knowledge how a programme needs to be designed to have success in the improvement of rural sanitation at scale. Therefore the WSP project has two main objectives (Perez, 2011, p.1):

- 1.) to improve sanitation for a large rural population in the target area
- 2.) to improve the knowledge on an effective design and implementation of large scale rural sanitation projects

In order to achieve these objectives the WSP programme has introduced rural sanitation programmes at scale in 10 districts of Tanzania, two states in India and 29 districts in East Java Indonesia targeting to improve the sanitation of 6.5 million people in total (Perez, 2011, p.1).

The project combines the application of CLTS, behaviour change communication (BCC) and sanitation marketing in a systematic manner (Figure 2-10). CLTS is used to create initial

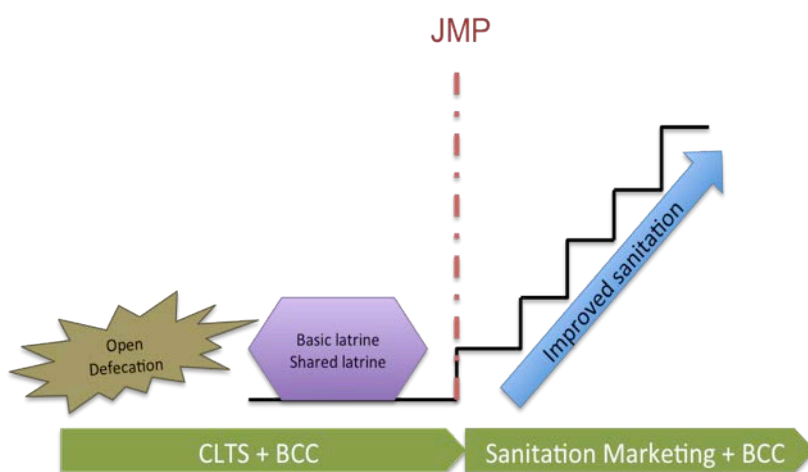


Figure 2-10: Conceptual approach of WSP Global Scaling Up Project

Source: Adopted and modified from Perez (2011, p.2)

community commitment for behaviour change and as a means to move people away from open defecation. BCC strategies are used continuously to support and sustain the behaviour change. While CLTS is targeting community behaviour, BCC is targeting individuals or households (WSP, 2011). Sanitation marketing is applied as a means to create demand for improved sanitation products and services but also to build the capacity of the local suppliers in order to enable them to provide appropriate and affordable products and services (Perez, 2011, p.2).

According to Perez et al. (2011, p.2) a major feature of the project is to work within existing institutional and policy structures. This is meant to strengthen the enabling environment for rural sanitation. The different components or dimensions of this enabling environment for rural sanitation as defined by WSP (Perez et al., 2011, p.2) are illustrated in Figure 2-11.



Figure 2-11: Dimensions of the enabling environment for rural sanitation

Source: PP-Presentation by Eduardo Perez, WSP Senior Sanitation Specialist, Loughborough University, UK, 05 July 2011

WSP is providing technical assistance to the central and local governments and the private sector but does not provide household subsidies for latrine construction or government related labour costs or on-going recurrent costs. The financing strategy of the project proposes that sanitation costs are paid by households, sanitation promotion and monitoring and evaluation costs are covered by local governments and WSP is only paying the one-time upfront costs such as those for the formative market research or costs for the development of behaviour change and marketing campaign through marketing professionals. WSP supports policy reform and advocacy efforts, analyses monitoring data and learning and captures and disseminates knowledge. With rigorous impact evaluation WSP plans to contribute to robust evidence for future project implementation (Perez, 2011, p.2).

So far the progress of the project showed very different results for the three countries. In 2009, India had already over-achieved the end of project targets for access to improved sanitation and number of ODF communities, while Tanzania was clearly lagging behind (Godfrey et al., 2010). There might be multiple reasons for these different performances but assessments of the enabling environments made it very obvious that both, the starting conditions and the degree to which each dimension had been improved towards a desirable enabling environment varied widely between the different countries. Of all implementation areas, Himachal Pradesh in India clearly has created the most favourable enabling environment, but had also quite good starting conditions when compared to others (Perez et al., 2011, pp. 27-28). Tanzania also improved its enabling environment for rural sanitation but at a slower pace (Perez et al., 2011, p.27) and is facing problems with low capacities of the supply chain (Perez et al., 2011, p.11).

Perez⁶ summarizes the key success factors learnt so far as: carrying out formative research to understand market segments and key behavioural determinants, focusing on behaviour change prior to construction, identifying and developing at scale delivery models. Furthermore, from the governmental side there is the need to have a clear and explicit rural sanitation policy and appropriate institutional reforms at all governmental levels, as well as a distinct budget allocation for sanitation and hygiene. Perez argues that one lesson learnt so far is that some countries are more 'ready' to replicate the approach than other. However, there are plans for scaling out and replicating the approach in numerous countries (Perez, 2011, p.7).

Role of local governments in TSSM

In TSSM approaches local governments are seen as the "focal points for implementation and work through sub-districts and community levels of local governments" (Godfrey et al., 2010, p.ix) Rosensweig and Kopitopoulos (2010, p.1) argue that throughout most countries decentralization processes have resulted in the mandate for rural sanitation being delegated to local governments, which have the necessary infrastructure including staffing levels and resources to play this role. In the cited report reflects the experiences of the role of local governments (at district, sub-district and village level) in three TSSM countries (Tanzania, Indonesia and India) and summarizes the roles of local governments in TSSM programmes as defined by seven specific functions: 1.) *Strategy and planning*, 2.) *Advocacy and promotion*, 3.) *Capacity building*, 4.) *Supervision*, 5.) *Monitoring and evaluation*, 6.) *Regulation*, 7.) *Coordination* (ibid., p.iii).

As a finding of their study the authors conclude that the management model of TSSM: implementation through local governments with the support of resource agencies was even appropriate where local governments were found to lack the capacity, since local government structures still remained the most appropriate institutional structure in terms of legal mandate, infrastructure and resources for TSSM implementation. By contrast, direct CLTS implementation through NGOs (i.e. trained NGO staff is triggering communities) is criticized for its lack of scalability, sustainability (since it is not institutionalized), dependence on donor funding and incompatibility with decentralization processes. (ibid., p.1) Capacity building supported by resource agencies is recommended as a means to overcome capacity gaps on local government level. The authors, however, also stress that appropriate management models have to reflect the

⁶ Eduardo Perez, WSP Senior Sanitation Specialist, presentation during WEDC Open Day, Loughborough University, UK, 05 July 2011

countries context and that the management models in all three countries are still evolving and may not have reached the form that will be eventually used for scaling up (ibid., p.iii).

Local governments must have a minimum set of resources to enable TSSM implementation as shown in Figure 2-12.

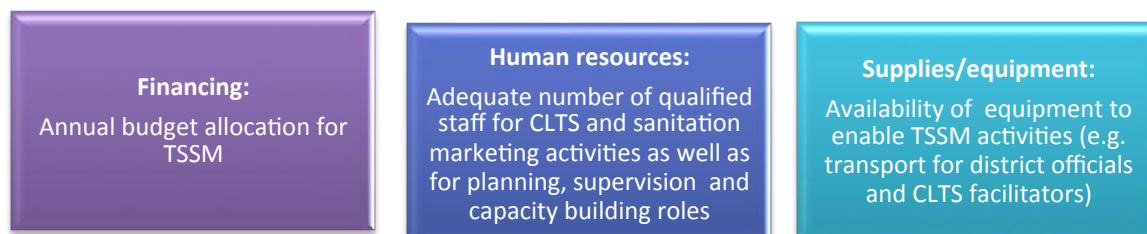


Figure 2-12: Local governments' resource requirements for TSSM implementation

Source: According to Rosensweig and Kopitopoulos (2010, p.5)

The extent of the external support for the local governments varies with respect to their initial capacity. In Tanzania, local governments were considered as generally weak and therefore were supported by a district coordinator (hired by WSP); such a position was not required in the other two countries. In all three countries support for local government capacity building is provided by resource agencies (usually national level NGOs) but the roles fulfilled by these resource agencies vary according to the context specific needs (Rosensweig & Kopitopoulos, 2010, p.10).

Specifically for sanitation marketing, Rosensweig and Kopitopoulos (2010, p.13) identify the following roles that should be carried out by local governments are:

- Support for the private sector (Mason training, developing business skill of private providers)
- Promotion of services (Demand creation for products and services offered by the private sector)
- Set-up and enforcement of legal regulations / standards (enforcement of compliance with standards, licensing of providers)

Within the TSSM programme this is complemented with the local governments' responsibility to facilitate CLTS triggering as well as playing a central role in performance monitoring of the programme and in adjusting the programme according to the needs (Perez, 2011, p.3). In all three countries local governments have performed better in CLTS implementation and capacity building than with the respective activities in sanitation marketing, where their roles were not as clearly defined (Rosensweig & Kopitopoulos, 2010, p.13). Additionally, experiences so far have shown that local governments in general focus more on their more urgent roles in implementation and somewhat neglect strategic planning (Perez, 2011, p.5)

2.7.5 Brief summary of international experiences with sanitation marketing

The most comprehensive overview of current international application of CLTS and sanitation marketing approaches as well as combined approaches that could be identified during the author's review of literature is Godfrey et al. (2010).

Various international development partners (NGOs and development agencies) have implemented CLTS at scale (mostly in rural areas). Moreover, governments of various countries have incorporated CLTS in their national strategies for rural sanitation and thus have scaled-up its implementation (Godfrey et al., 2010, p.7).

Referring to the application of sanitation marketing approaches the authors note that these approaches are currently not as widely applied, as CLTS and the majority of sanitation marketing projects that were identified are rather small-scale in size and focused mostly on the supply side (Godfrey et al., 2010, p.28).

In several countries CLTS and sanitation marketing approaches have been implemented but the *WSP Global Scaling Up Project* and USAID HIP and WSP supported TSSM project in Ethiopia are the only examples for systematically combined application of the two approaches at scale (Godfrey et al., 2010, p.10;28). It is expected that the mentioned *Introductory Guide to Sanitation Marketing* will give another comprehensive overview over up-to-date experiences with sanitation marketing as an alone standing and combined approach with CLTS.

The adoption of sanitation marketing in national sanitation policies and strategies (e.g. in Malawi, Cambodia and Nepal) shows that sanitation marketing is increasingly recognized as a way to accelerate the achievement of sanitation goals not only by donors but also by governments.

2.7.6 Challenges for the marketing of sanitation

Cairncross (2004, p.11 and 2003, p.123) concludes that sanitation marketing is currently the most suitable approach to overcome the gaps in sanitation provision. However, various author point out challenges for the marketing of rural sanitation that might limit the potential of the approach to measure up to such high expectations.

Fragmented demand: Schaub-Jones (2011) identifies fragmented demand as a particular challenge for growing sanitation businesses. As demand from individual households for sanitation services such as latrine construction or emptying tends to have a very limited frequency, private providers of sanitation services need to deal with high geographic scattering of their customers which challenges efficiency in service delivery and hinders the scaling up of these services (Schaub-Jones, 2011, pp.16-17). Seasonality of the demand (Mendiratta, 2000, p.157) further depresses rural market volume and its profitability. Compared to urban areas, rural sanitation markets face the demand for the construction and emptying services is general much smaller than

in urban markets. Rural households are more likely to dig latrines themselves and availability of space allows filled up latrines to be replaced rather than emptied.

Challenges with users' reluctances to invest in sanitation in rental accommodations are more related to urban contexts. (Schaub-Jones, 2011, pp.16-17)

According to Schaub-Jones (2011, p.18) there is still no clear understanding of the best-practice approach to support private entrepreneurs in sanitation. However, currently, mainly technical issues are targeted for support and business-skills remain rather neglected.

Fragmented distribution: Fragmented demand on the customer side is antagonized by fragmented distribution on the supplier side (Devine, 2010, p.44). Devine (2010, p.44-45) describes the supply chain for sanitation as a multiple player framework, including distributors, wholesalers, retailers of cement, local producers, masons, etc. (see Schaub-Jones, 2011 discussed in section 2.6). Vertical networks between the different segments of the supply chain do not always exist and suppliers have rarely received any formal training in sanitation. As sanitation is very unlikely their core business, they might offer only the most common products, or products with the largest profit margin and might not be aware about a large range of improved technologies and/or the correct technical specifications. Devine (2010, p.45) concludes that "the distribution channel for sanitation can thus be described as diverse, fragmented and largely informal".

Complexity of the product: According to Devine (2010, p.44) the marketing of rural household latrines is quite complex due to the variety of available options for the three main components of rural household latrines (i.e. the infrastructure (e.g. pit, septic tank), the interface with the user (floor, slab, etc.) and the superstructure). This complexity is a marketing challenge in terms that it limits the possibility to set up a standardized product and price that can be promoted and easily advertised.

As a way to address this problem UNICEF (UNICEF Bangladesh, 2002) and WEDC (Obika, 2004b) have published catalogue style illustrated booklets with low cost toilet options that enable the reader to flip separately through the options for different superstructure, floors and pits to create a combination according to the households specific needs and opportunities. Advantages and disadvantages as well as estimates for costs and durability are given for each of the parts.

Lack of information: Well-designed and functioning information channels could potentially address the challenges deriving from the fragmented character of the demand and distribution as well as from the complexity of the product. However, lack of information as a barrier in the development of rural sanitation markets is twofold: Demand for sanitation of the rural population is often unclear and unarticulated (IRC & SNV, 2011, p.17; WaterAid, 2011, p.20) On the other

side general difficulties in information flow persist, which may hinder the outreach of the promotion messages and supply information (IRC & SNV, 2011, p.17).

Lack of enabling environment: Responsibility for sanitation is often fragmented between several ministries. This leads to unfavourable institutional arrangements for sanitation. The decentralization of the water and sanitation sector may make it more difficult to carry out large national wide campaigns or surveys. Furthermore, advocacy for sanitation marketing is not very strong with many countries lacking a national sanitation policy and of the policies in place only few identify sanitation marketing as a key approach (Devine, 2010, p.46). As further constraints caused by the lack of a supportive enabling environment Devine (2010, p.46) mentions: parallel subsidies driven programmes which are counter productive in producing a viable sanitation market, suboptimal integration of sanitation marketing and community-based approaches (e.g. CLTS) and lack of skilled and adequately trained human resources with experience in social marketing for the introduction of sanitation marketing.

Challenges of programme design and high costs: Godfrey et al. (2010, p.28) point out that sanitation marketing programmes are more complex than for example CLTS programmes, which have been scaled up in many countries. Sanitation marketing requires very specialized skills e.g. for the formative market research that do not typically exist in the WASH sector.

Bringing in these skills from the commercial sector might be costly and has the disadvantage that the commercial sector might lack an understanding of the complex rural sanitation sector (Godfrey et al., 2010, p.30). Obtaining the necessary skills might even become more challenging when CLTS and sanitation marketing approaches are combined and consequently separated skills are needed at different levels to make the implementation successful (Godfrey et al., 2010, p.36). Finally sanitation marketing is not a cheap approach to promote sanitation. As mentioned before, marketing programmes require very specialized skills and the initial formative market research contributes to higher upfront costs of sanitation marketing when compared to other sanitation promotion approaches (Godfrey et al., 2010, p.36)

2.8 Malawian Rural Sanitation Sector Overview

The Malawian sanitation sector has increased its recognition and visibility. The GoM is currently implementing the Malawi Growth and Development Strategy (MGDS). The pronounced aim of the MGDS is to “create wealth through sustainable economic growth and infrastructure development as a means of achieving poverty reduction” (MoIWD, 2009a, p.1). The important contribution of water and sanitation interventions in the movement towards achieving the strategy’s aim is acknowledged by the GoM by making water development and irrigation (includes sanitation) one of the six key priority areas of the strategy (MoIWD, 2009a, p.ii).

The increase of awareness for the importance of sanitation on high government level was also shown by the launch of the first Malawian National Sanitation Policy (NSP) in 2008. For rural sanitation the NSP (MoIWD, 2008, p.13) states the objective to “increase access to improved sanitation, promote safe hygiene practices, proper waste disposal and recycling of wastes in rural areas.” The NSP acknowledges the financial challenges that are likely to be faced in terms of the funding of the programme.

In order to improve the financing of the sector and based on positive experiences from the health sector an Irrigation, Water and Sanitation Sector (IWSS) Sector Wide Approach (SWAp) was launched in 2008 (WSSCC, 2011b). A drafted governance structure and plans for the improvement of the sector’s monitoring and evaluation system for the implementation of the SWAp are available (MoIWD, 2009a, pp.5-11). A Sanitation and Hygiene Thematic Working Group (TWG) has been established under the SWAp. However, the SWAP is still not effective and progress has been slow and challenged by various organisational, financial and structural constraints (MoIWD, 2011, pp.62-62).

2.8.1 Sector organization

As part of Malawi’s decentralization process and increasing high-level governmental and donor recognition the IWSS and particular the sanitation sector in Malawi is currently undergoing major institutional transformations and reforms. The Ministry of Local Government (MoLG) is implementing the decentralization of the IWSS at district assembly (DA) level (USAID, n.d. , p.2).

The lead responsibility for the sector are currently transferred from the Ministry of Health (MoH) to the Ministry of Irrigation and Water Development (MoIWD) (DeGabriele, 2009a, p.17). Responsibilities of the MoIWD are the development of policies and the coordination of implementation and finance activities while the MoH plays an active role in sanitation and hygiene to support the policy development. Five public sector Water Boards (WBs) are responsible for urban water supply and sanitation and sewerage remains the responsibility of the municipalities. Sewer collection in the urban areas, however, will be transferred to the WBs through the NSP (WSSCC, 2011b).

The NSP (MoIWD, 2008) recognises that the implementation of sanitation and hygiene activities requires a multi-sectoral approach and the involvement of various stakeholders, including different governmental ministries as well as non-governmental player like NGOs, research and training institutions and the private sector (ibid., p.26). The set up of a sanitation department within the MoIWD, with the responsibilities of overseeing and coordinating all sanitation and hygiene activities in the country, shall further help to improve the advocacy and coordination of the sanitation sector (ibid., pp.5-6). In 2009 the sanitation department was still under

establishment. A director had been recruited but the department was not fully staffed yet (DeGabriele, 2009a, p.17). However, the launch of the Global Sanitation Fund (GSF) programme in December 2010 has restimulated the establishment of a National Sanitation and Hygiene Coordination Unit within the sanitation department, which is now fulfilling the roles of the national committee for sanitation and hygiene issues as well as being the the GSF's programme coordination mechanism (WSSCC, 2011b).

With the IWSS SWAp still not being effective the major coordination bodies for the WASH sector in Malawi are the WSSCC chapter, the WES NGO coordination group and WES Donor Group (WSSCC, 2011b; DeGabriele, 2009a, p. 23).

In 2009 the WSSCC chapter was still in the process of consolidation, with a WASH coordinator being appointed and a constitution and strategy draft being developed (DeGabriele, 2009a, p.23). The WES Donor Group meets monthly to share information about activities and progress. It is chaired by the Permanent Secretary of the MoIWD and represented by various line ministries (ibid.). The WES NGO coordination group consists of NGO active in the Malawian WASH sector and strives share knowledge and to harmonize activities e.g. through the development of a format to standardize the unit costs of NGO asset recording (DeGabriele, 2009a, p.23; MoIWD, 2011, p.18).

At district level the responsibility of drafting policies into implementation strategies is through the development and implementation of District Strategy and Investment Plans (DSIPs). The Water Departments have the leading role in water activities whereas sanitation is still led by the Health Departments (DeGabriele, 2009b, p.20).

2.8.2 Access to sanitation in rural Malawi

Available figures for the proportion of the population with access to improved sanitation vary widely (WHO and UNICEF, 2010b). Partly, that can be attributed to the inconsistent definition of improved sanitation in Malawi. Measuring the impact and/or success for a sanitation promotion approaches becomes problematic if a clear definition of what defines sanitation improvements is lacking. In Malawi the term *improved sanitation* is not used unequivocally by all stakeholders and/or through all publications/reports. As DeGabriele (2009a, p.9) points out, Malawi is officially supposed to report progress in sanitation services according to the standard definitions of the Joint Monitoring Programme (JMP) but in practice the slightly different definition taken from the National Sanitation Policy (NSP) is mainly used. Figure 2-13 gives an overview over the differences in the definition of improved and basic sanitation according to the JMP and NSP.

Basic Sanitation (NSP)	Improved Sanitation (NSP)	Improved Sanitation (JMP)
<ul style="list-style-type: none"> • Facility without any hygienic features such as a tight fitting drop hole cover, key-hole shaped drop hole and foot rest that guide the correct positioning on the drop hole. • Should allow for the safe disposal of faeces into a pit or other receptacle where it may be safely stored, composted or removed and disposed of safely elsewhere. • Should offer privacy for the user. • Should be safe for the user to use, for example not in a dangerous state, liable to imminent collapse or dangerously unhygienic. • The latrine pit or receptacle should be functional i.e. not full or overflowing; and • The latrine should be at least 30 meters from a ground water source or surface watercourse. 	<ul style="list-style-type: none"> • Same features as basic sanitation, with addition of: <ul style="list-style-type: none"> • an impermeable floor and a tight fitting lid to the latrine. • in the case of ecological sanitation (ecosan) where no lid is needed, the ecosan latrine should be properly looked after with the regular addition of soil, ash and other organic material. • According to DeGabriele (2009a, p.10) the draft NSP additionally included the access to safe hand washing facilities with soap 	<ul style="list-style-type: none"> • Hygienically separates human excreta from human contact. • Flush or pour-flush to: <ul style="list-style-type: none"> • piped sewer system • septic tank • pit latrine • Ventilated improved pit latrine • Pit latrine with slab • Composting toilet • The JMP definition does not consider any shared or public latrine facilities as improved. However, the 2010 update of the JMP report, (WHO & UNICEF, 2010a) considers latrines that are public or shared between two or more households as a single category (which remains a subcategory of unimproved sanitation).

Figure 2-13: Definition of sanitation standards by the NSP and JMP

Source: Ministry of Irrigation and Water Development (2008, pp.ix-x); WHO and UNICEF (2010a, p.23)

There has been a significant shift in mind set amongst many stakeholders (including the MoIWD and UNICEF) to break the overemphasis on cement slabs and reconsider traditional technologies as a well-compacted and maintained mud-floor latrine may meet the impervious criteria (DeGabriele, 2009b, p.7). The main difference between the definition of improved sanitation by the JMP and the NSP is caused by their different recognition of shared sanitation. Based on the assumption that many shared latrines might not guarantee hygienic separation of human excreta from human contact and moreover might not be satisfying in terms of 24h accessibility and security for all users, the JMP does not consider any shared latrines as improved (WHO & UNICEF, 2010a, p.23). The NSP, however, does not exclude shared sanitation facilities in their definition of improved latrines. According to JMP data, in 2008, 27% of Malawian households (42% of urban and 24% rural households) used shared latrines (WHO & UNICEF, 2010b). It is therefore obvious that the conflicting classifications of shared latrines contribute significantly to the wide gaps in the evaluation of Malawi's sanitation coverage.

While the Water Supply and Sanitation Collaborative Council (WSSCC, 2011b) considers Malawi not to be on track to meet the Millennium Development Goals (MDG) sanitation target⁷ (Figure 2-14) an official report on Malawi's progress towards meeting the MDGs published by the



Figure 2-14: Progress of Malawi towards the MDG sanitation target (WSSCC)
Source: WSSCC (2011b)

Ministry of Development Planning and Cooperation (MoDPC) states that current status of improved sanitation coverage (referring to the total population) is 93% and therefore already beyond the 86.2% target for the year 2015 (MoDPC, 2010, p.vii). However, there is a remarkable discontinuity in the use of terms in the

cited document: In spite of referring to the progress of the access to *improved* sanitation the document relates the access to basic sanitation to the MDG sanitation target. As an example the authors conclude that: “By 2015, it has been projected that access to *basic* sanitation is likely to reach 99%, which is above the MDG target.” (MoDPC, 2010, p.37)

2.8.3 Sanitation programmes

In the past, Malawi implemented sanitation programmes with a strong hardware subsidy component. For promotion PHAST approaches were widely used. Today CLTS, which has been introduced to the country in 2008, is the predominant approach. According to the District Strategies and Investment Plans (DSIPs) most districts officially advocate a variety of sanitation promotion approaches with the most common being PHAST, CLTS and sanitation marketing (DeGabriele, 2009a, p.12). Hardware subsidies are no longer provided in government-led programmes but some NGOs still promote some forms of subsidies (DeGabriele, 2009a, p.12).

The GoM is currently carrying the National Water Development Programme (NWDP)⁸. The NWDP is designed as a precursor for the SWAp and is implemented by the MoIWD and the five Water

⁷ The figures for the trend calculations of the WSSCC are based on JMP data

⁸ Currently the GoM is implementing the NWDP2 over the period of 2007-2012. The NWDP1 was implemented between 1995-2003 (DeGabriele, 2009a, p. 18)

Boards and is supported by many donors (DeGabriele, 2009a, p.18) The AfDB which is providing about 20% of the funds is one of the largest partners of the project. It should be noted that the sanitation component of the project is forming only 2% of the programme budget (MoIWD & WSSCC, 2010, p.11); the 2011 Sector Performance Report (MoIWD, 2011) estimates that only 1% of the NWDP is allocated to rural sanitation (ibid., p.2).

There are currently no government-led rural sanitation marketing approaches at implementation stage. In the peri-urban areas of Blantyre and Lilongwe, however, the government launched a sanitation marketing campaign as part of the *Peri-urban Water and Sanitation Project* in Lilongwe and Blantyre, which is part of the NWDP (see section 2.9 for more details) (Chibaya, 2011; DeGabriele 2009a, p.22).

Under the NWDP, UNICEF is implementing a Dutch Government funded WASH programme in 12 districts. In these districts CLTS in Malawi has been pioneered from 2008 onwards. The GoM has scaled out the CLTS implementation beyond the 12 WASH Districts and CLTS has now been implemented in all districts (section 2.8.4).

As already mentioned the GSF programme, which is not part of the NWDP, was launched in Malawi in December 2010. Plan Malawi acts as the Executing Agency (EA), which will manage and disburse the total rural district programme grant of US\$ 5 million. The programme targets six districts and focuses on areas with high level of open defecation, low coverage of improved sanitation and low investment levels in WASH activities. Sanitation marketing will be one of the components of the programme (see section 2.9 for more details) (WSSCC, 2011b). DeGabriele (2009a, pp.46-53) gives a detailed overview on the activities of different government and NGO players in the Malawian WASH sector.

2.8.4 CLTS in rural Malawi

In 2008 CLTS was introduced in the 12 UNICEF WASH districts (Maulit, 2010, p.1).

CLTS pioneer Kamal Kar was invited to the country to undertake the initial training. As a result of its first successes the GoM decided to adopt CLTS as one of the official approaches for sanitation and to scale out the CLTS implementation over the entire country. In 2010 the GoM adopted CLTS as the nationwide strategy to eliminate open defecation and reach the country's goal to become ODF in 2014 (IDS, 2011; EWB Canada, 2010, p.1). At district level the Ministry of Health (MoH) and the MoIWD are partnering in the CLTS implementation. Several NGOs have their own CLTS programmes (EWB Canada, 2010, p.2).

Challenges of the CLTS implementation in Malawi

Despite being supported by all major sanitation sector players, the CLTS implementation in Malawi has faced various challenges.

Lack of coordination amongst implementers with some implementers giving subsidies and others not, created confusion amongst both field staff and communities. In particular at district level, staff roles and responsibilities are not always clearly defined, which results in field staff and district officers being pulled in many directions; this means they are unable to prioritize CLTS in their work plans (EWB Canada, 2010, p.1).

Lack of performance measurements and accountability mechanisms at district level has led to inefficient use of district staff time due to lack of incentives and problems with the identification of the causes of poor performance (EWB Canada, 2010, p.2). In this context Maulit⁹ and Phiri (2010, p.2) also criticize the lack of data management within the districts and insufficient information flows at all levels. Databases for the evaluation and monitoring of the programmes are not established in many districts and data collection is often neglected. This results in districts having to rely on out-dated figures. Inadequate follow-ups are one reason for this gap; inadequate upward and downward information flows limit the feedback on progress and challenges within the programme and thus restrict the possibilities of improvements.

In terms of scale of the programme the CLTS implementation within the districts often only includes a few Traditional Authorities (TAs) and neglects the other areas. Maulit¹⁰ notes that the incorporation of traditional leaders, despite being acknowledged as important for the CLTS process, has been challenging so far. Finally Maulit¹¹ identifies delayed or absent funding as a problem that has occurred in the past and slowed down the progress for CLTS in the respective areas.

Sustainability of CLTS in rural Malawi

There is a clear lack in data on evaluations of the sustainability of the CLTS approach. According to the Community-led Total Sanitation website the success rate of villages being declared ODF after triggering was 37% (IDS, 2011).

The verification of the ODF status is not standardized and Maulit¹² notes that the often sustainability of the ODF status in villages that were declared ODF is questionable.

Phiri (2010) questions in a study on the effectiveness of CLTS to achieve ODF villages if the triggered villages in TA Mkanda (Mchinji district) ever achieved ODF status. By contrast a report of the District WASH Coordinator of Mchinji district (Mchipha, 2009) draws a very positive picture of the achievements of the CLTS campaign stating that nearly 50% of the triggered villages were

⁹ Email correspondence of Jolly Ann Maulit (EWB Canada) to Mike Kang (EWB Canada) and C. Nyimba (UNICEF), 11 September 2011

¹⁰ *ibid.*

¹¹ *ibid.*

¹² *ibid.*

declared ODF and that there was a significant increase in latrine coverage (Mchipha, 2009, p.1). Phiri (2010), however, challenges the ODF criteria applied by the CLTS Task Force in TA Mkanda, which defined the presence and use latrines as a ODF criteria but do not take into account the presence of drop hole covers and hand washing facilities or the type of floor. Furthermore, extension workers verified villages with 80% latrine coverage as ODF (ibid., p.1-2). In one triggered village included in the small studied sample 100% of the population still practiced open defecation. In other villages many of the latrine structures were at the risk of collapse due to termites or the use of temporary construction materials (Phiri, 2010, p.1). Possible reasons for community members not adopting latrines after the triggering might due to structural problems of the CLTS implementation, such as the fact that more women than men attended the triggering and therefore men remained unwilling to construct the latrines. Some village headmen discouraged community members from attending the meetings and the facilitation of the triggering was sometimes of insufficient quality (Phiri, 2010, p.2)

2.9 Sanitation Marketing in Malawi

There is no documented evidence that there are currently sanitation marketing programmes of any significant scale in rural Malawi. Cairncross (2004, p.5) mentions that local SaniMarts were set-up in Malawi¹³, although no further details are given, and despite targeted database and online search, no further documents could be found about these businesses. The Sanitation Marketing and Hygiene Promotion Strategy for peri-urban Lilongwe and Blantyre (MoIWD, 2009b), however, mentions the previous experiences with unsuccessful urban-based Sani-Centres, noting that “previous urban ‘Sani-Centres’ are associated with failure and corruption” (MoIWD, 2009b, p.21).

In spite of the lack of documented scaled sanitation marketing programmes, several documents could be identified that indicate that governmental and non-governmental sector players are increasingly interested in the adoption of marketing approaches in sanitation in (rural) Malawi.

The clearest evidence for the governmental commitment for sanitation marketing, are the strategy statements of the NSP (MoIWD, 2008). For rural sanitation two strategies incorporate sanitation marketing:

- Promote and market improved sanitation and safe hygiene options and technologies;
- Train artisans and sanitation promoters in the production and marketing of sanitation hardware respectively;

Source: MoIWD (2008, p.14)

¹³ Unspecific if in urban or rural areas.

Sanitation marketing in rural areas is also advocated in several DSIPs (DeGabriele, 2009a, p.12). In the DSIPs of Lilongwe and Mzimba District the adoption of a sanitation marketing approach is mentioned as a key initiative to fulfil the guiding principle of demand responsiveness (DCT Lilongwe District, 2007, p.21; DCT Mzimba District, 2008, p.21). However in order to understand the driving forces for sanitation marketing, it needs to be taken into account that the two mentioned districts are both UNICEF WASH districts. The DSIPs were consequently drafted with support of UNICEF. Going back to the original GoM and UNICEF proposal for a work programme to accelerate water supply and sanitation in Malawi, which was submitted to the Dutch Government (GoM; UNICEF, 2006) and which is the strategic framework for the UNICEF WASH project, it becomes obvious that whole paragraphs or parts of paragraphs within the DSIPs are verbatim reproductions of the UNICEF and GoM proposal.

A drive towards the application of sanitation marketing approaches in rural Malawi is also documented in the proposal to the Global Sanitation Fund (MoIWD & WSSCC, 2010). Private sector involvement and the marketing of sanitation are meant to address the concerns about sustainability and methods to upgrade sanitation from basic to improved. These concerns were raised in the context of programmes that mainly focus on the construction of basic latrines through CLTS triggering (ibid., p.14). The proposal relies strongly on marketing activities through the private sector, supported by capacity building targeted at the development of technical and business and management skills. It is planned to ensure competition, however, with regard to the viability of the businesses, the number of entrepreneurs that may receive the trainings is planned to be restricted. Moreover, district/local governments will be responsible for promotion activities and the importance of partnering with Micro Finance Institutes (MFIs) in order to provide financial support for entrepreneurs and households is acknowledged (MoIWD & WSSCC, 2010, pp.20-21;34). The 2011 update of the GSF programme (WSSCC, 2011) summarizes the focus of the programme as CLTS, sanitation marketing and the mobilization of MFIs for sanitation. The programme has the overall goal “to reduce open defecation and to increase the access to improved sanitation and safe hygiene practices” (WSSCC, 2011b).

Under the NWDP programme sanitation marketing campaigns have been launched in the peri-urban areas of Lilongwe and Blantyre funded by the World Bank Water and Sanitation Program for Africa WSP-AF (Chibaya, 2011; Ngozo, 2011). The programme is based on three pillars or key intervention areas (Figure 2-15). For the development of the strategy a market analysis was conducted and the strategy incorporates the marketing mix concept (using nine *P's* – *People, Practice, Product, Providers, Persuasion, Packaging, Price, Place, Promotion*) (MoIWD, 2009b, p.6). In terms of the proposed business model the strategy stresses the importance of learning from past experiences i.e. the failure of previous urban Sani-Centres and promotes “reinvigorated

franchised, self-sufficient, commercially-run, standardized ‘Sani-Centres’” (MoIWD, 2009b, p.20) by providing business training to the managers of the centres and linking them with production malls (MoIWD, 2009b, pp.20-21).

As sanitation promotion in peri-urban areas is beyond the scope of this review, no further details on the programme design will be given in this review. However, strategies and models developed for the peri-urban context might be replicated or

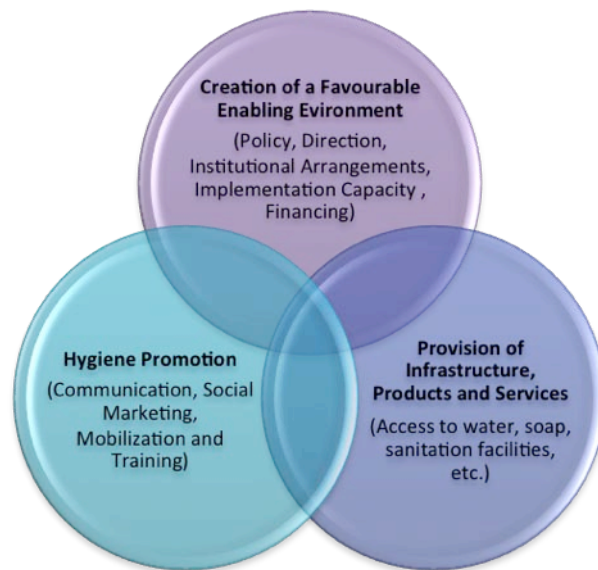


Figure 2-15: Lilongwe and Blantyre peri-urban SMHP Strategy Intervention Areas

Source: Adapted from MoIWD (2009b, p.7;9)

adapted in rural areas and therefore the inclusion of some general information was considered to be necessary.

For rural areas reports on NGO-led market based sanitation approaches referred to the Water for People (WFP) Sanitation as a Business Programme and an initiative by WaterAid and Church of Central Africa Presbyterian (CCAP) in the northern part of Mzimba district. Both programmes combine market based approaches with the promotion and marketing of ecosan technologies and services.

WFP started their *Sanitation as a Business* approach in Malawi, in 2008 (Bramley & Breslin, 2010, p.13). The key idea of *Sanitation as a Business* according to Bramley and Breslin (2010, p.10) is “to make on-going sanitation services the goal, rather than the latrine itself.” Consequently the approach envisages the major business opportunities for entrepreneurs as providing services that are needed on a regular basis, such as pit emptying, rather than one-off services, such as latrine construction.

Basing the businesses on one-off services would severely limit potential growth opportunities and require a much larger market to be sustainable. The private sector will therefore build up on-going relations with the households. As the private suppliers recognize the benefits of increasing their income through gaining more customers they will increase coverage. An ideal business arrangement leads to profit opportunities from sanitation for both households and suppliers (Bramley & Breslin, 2010, p.11).

The application of this “best-case scenario” in rural Malawi has been tried with a business model (Figure 2-16) in which rural household hire a sanitation entrepreneur who builds them a

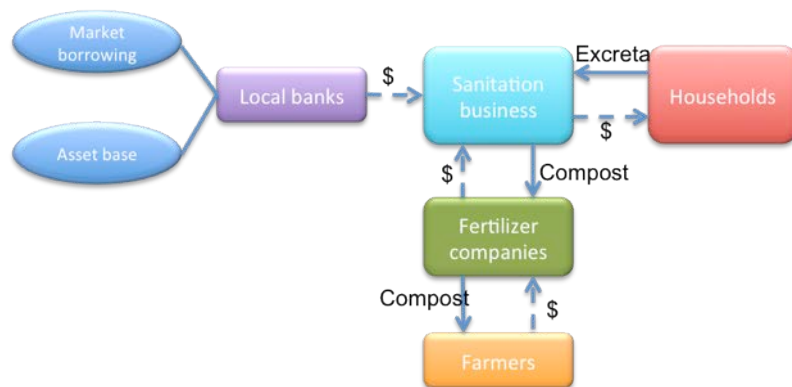


Figure 2-16: WFP Rural Sanitation as a Business Model in Malawi
 Source: Adopted from Bramley and Breslin (2010, p.13)

composting toilet without receiving any cash-payment ‘on credit’. As a payback of his investment the sanitation entrepreneurs hence has the right to collect the households compost once the latrine filled up and will sell it to local fertilizer

companies. Once the entire latrine debt is paid back the sanitation entrepreneur will still collect and sell the households’ compost, but from then on the household will receive a small payment (Bramley & Breslin, 2010, pp.11-13). For peri-urban areas WFP is applying a similar business model is used for entrepreneurs desludging conventional pits (Bramley & Breslin, 2010, p.13).

Interestingly, the perspectives of the documentation of the WaterAid and CCAP project in Embangweni (Mzimba district) vary widely; Morgan (2007) focuses on the aspects of the suitability of ecosan for the given context and only briefly mentions the entrepreneurial opportunities that have arisen through the project (Morgan, 2007, p.5), while Sugden (2003) in addition to the general project description also gives overview of the project from a social marketing perspective.

The project that started in 2002, promoted three different ecosan technologies, *arborloo*, *skyloo* and the *fossa alterna* design, which could all use cement domed slabs as the basic building unit. The masons involved in the project received subsidised cement and training for the construction of the latrines. Once the demand for the slabs had increased the subsidies for the cement were incrementally decreased. The masons were also involved in the promotion of latrine construction as lack of information was identified as a major constraint for latrine adoption in the area. At the time the report was written it was still unknown if the project would be sustainable once cement subsidies were no longer provided and masons would charge a non subsidised price that would allow them to earn a living from the latrine construction (Sugden, 2003).

2.10 Challenges of the Rural Sanitation Sector in Malawi

Challenges faced within the rural sanitation sector include the lack of coordination of sanitation and hygiene related activities and initiatives between the different stakeholders. Coordination and harmonisation of the various programmes and projects need to be improved (MoIWD & WSSCC, 2010, p.7). Key partners of the government’s sanitation initiatives continue to implement strategies and standards that do not conform to the respective government guidelines. Another prevailing problem is the uncoordinated funding of sanitation due to the lack of a national comprehensive sanitation investment plan and insufficient transparency about sanitation and hygiene investment from NGO side, which limits the opportunities for adequate planning and monitoring (MoIWD, 2009a, p.23). Lack of capacity to implement programmes and projects at scale and adequate quality is a main risk within the sector (MoIWD & WSSCC, 2010, p.7). National government funding for the water (including irrigation) and sanitation sector has been growing but is still only receiving about 2% of the GoM sector funding (MoIWD, 2011, p.15). At districts level the allocation of district financial resources to the Irrigation, Water and Sanitation Sector (IWSS) average around 0.3% with the bulk of this money being spent on allowances and transport costs (MoIWD, 2011, p.15). Good data on the distribution of sub-sector spending is limited. An estimate of the sub-sector spending in 2007 and 2008 (Figure 2-17)¹⁴ however shows that the

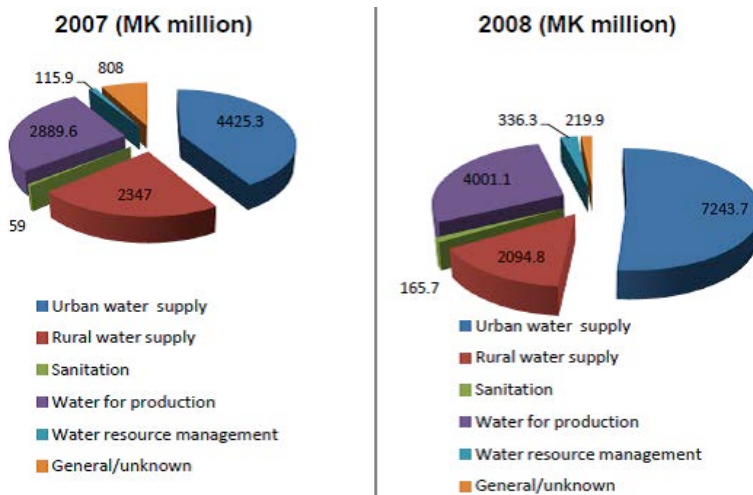


Figure 2-17: Estimates of the distribution of sub-sector spending

Source: MoIWD (2011, p.16)

financial resources being spent on sanitation have been relatively low and indicates that the rural sub-sector may have been neglected when compared to the urban sub-sector (MoIWD, 2011, p.19).

Apart from insufficient funding the IWSS is also weakened in its

functionality because of often vacant district water office posts (USAID, n.d. , pp.1-2). To give a recent example, in 2009, 1,030 of the 2,132 authorized district water office posts were vacant (MoIWD, 2011, p.57).

¹⁴ Exchange rate from Malawian Kwacha (MK) to US\$ 150:1 (exchange rate from 15.07.2011, (Oanda, 2011))

Not surprisingly the MoIWD (2009a, p.36) concludes their sector review by pointing out that “the effective implementation of the Water and Sanitation SWAp in Malawi depends on availability of conducive policy environment and adequate funding [...] without sufficient resources, effective implementation of the various undertakings [...] will not be achieved.”

Problems with inconsistent (compare section 2.8.2) or insufficient data complicate the effective monitoring of the rural sanitation sector. The MoIWD Sector Performance Report (2011) emphasizes that so far data collected within the CLTS monitoring is not appropriate to assess the sustainability of the CLTS approach and monitor the progress towards the country’s goal eliminating open defecation (MoIWD, 2011, p.48).

2.11 Conclusion

As shown through the reviewed literature sanitation marketing is an emerging sanitation promotion approach in Malawi. First experiments with sanitation marketing in peri-urban settlements have just been started. Moreover, influential donors like UNICEF have declared sanitation marketing as one of their strategies for rural areas. Most importantly the Malawian government has clearly shown its intentions to also apply this approach in rural communities by including sanitation marketing as a strategy for rural sanitation in the National Sanitation Policy.

However the review has also shown that there is still neither a lot of evidence-based knowledge of the benefits of sanitation marketing nor of ‘best practice’ for its implementation. Challenges for the successful implementation of sanitation marketing are very complex and concern all involved stakeholders. Government and private sector capacity plays an important role as it does to understand the reasons and constraints for individual households to adapt and improve sanitation. Consequently many factors need to be considered to get the right marketing mix.

Finally there are different ways to understand and assess the sustainability of sanitation interventions. The NSP refers to the Malawian Growth and Development Strategy and links improved sanitation to all Millennium Development Goals. This suggests that sanitation sustainability in Malawi should be understood as a normative concept referring to the success of an approach to increase the adoption of improved sanitation.

As Perez (Perez, 2011) pointed out different countries might have a different ‘*readiness*’ for sanitation marketing or TSSM approaches. This research now aims to give an indication of the ‘*readiness*’ of the different stakeholder in rural Malawi to support or respond to sanitation marketing approaches a means of enhancing improved sanitation adoption and therefore contribute to more sustainable sanitation in Malawi.

3. METHODOLOGY

3.1 Background of the Research

As presented in the introductory chapter several influential players in the Malawian sanitation sector have shown interest in the scaled-up introduction of sanitation marketing in rural areas of Malawi and have consequently started to advance relevant projects to different degrees of progress. EWB Canada as an independent NGO is providing technical support to several district governments in Malawi and has accompanied the CLTS implementation in the twelve UNICEF WASH districts. Due to the experiences of the CLTS implementation, EWB Canada announced interest in a research that would assess the potential of sanitation marketing in rural Malawi, taking into account the current opportunities and challenges of the rural sanitation sector.

3.2 Research Strategy

A case study approach was found to be most appropriate to answer the research questions and fulfil the requirements of the research objectives. According to Denscombe (2003, pp.31-39) case studies are particularly appropriate where relationships and connections between the different stakeholders will be a main focus of the research. This is the case in this research as rural sanitation is seen as a system of various interactions and inter-linkages between the different stakeholders (as shown in Figure 2-2, p.18). In contrast to other research methods (e.g. experiment research) case studies can be conducted when the researcher has little or no control over the events. Moreover case studies fit well with small-scale research projects as they allow concentrating the research effort on a specific research site or a small number of sites (ibid.). This study has been conducted within the framework of an MSc project and was therefore restricted in time and scale. It is recommended that case study research makes use of different sources and multiple methods, which will enhance the opportunities to validate the obtained data through triangulation (Denscombe, 2003, p.38). This research employed observation, semi-structured interviews, structured interviews, focus groups as well as the systematic review of documentary information to answer the research question.

Four main informant/data collection target groups were identified:

- *Community members* - rural sanitation users
- *Private sanitation suppliers* - private sector
- *District authority staff* - district office senior staff and extension workers

- *Key informants* - Individuals with comprehensive overview knowledge about the rural sanitation sector in Malawi, or persons with expert knowledge about a specific aspect of the research (e.g. people involved in a particular NGO programme, consultants, NGO staff, government officials, staff of donor agencies)

The methodological framework provided in Appendix A shows how the different informants were approached to answer the different research questions.

As mentioned in the introductory chapter, demand-led approaches (such as sanitation marketing) strive to enhance the understanding for individual motivation and constraints for sanitation adoptions and improvements. This research therefore aimed to focus on individual perceptions and reasons for certain behaviours and decisions. Consequently, the use of qualitative methods was thought to be appropriate. Some studies on similar topic that were included in the literature review (e.g. Hanchett et al., 2011) applied mixed approaches and complemented qualitative data with survey data. However, with time and resources of the study being limited and as the particular importance of qualitative data was emphasised by most authors, who used mixed approaches, it was decided to rely on qualitative methods. As the study was not designed as robust quantitative research considering a statistically representative sample size was no prerequisite (O’Leary, 2005, p.88). Non-probability sampling was preferred as the most practical and appropriate sampling method.

3.3 Selection of the Study Sites

The selection of the districts and communities for the case study followed a mixed purposeful sampling approach, which according to Flick (2007, p.28) puts “multiple interests and needs into concrete terms in one sampling”. In Malawi, EWB Canada supported the research with initial briefings as well as with the setting up of contacts. A preliminary criterion for the selection of the study sites was therefore to rely on districts, which currently have a cooperation and good working relationship with EWB Canada. Consequently, the 12 UNICEF WASH districts formed the pool of options for carrying out the research. In order to enhance the possibility of data validation, it was desired to carry out the research in two districts that would give to some extent a varied picture of rural sanitation in Malawi. While detailed data about the sustainability of the CLTS implementation is limited (e.g. Phiri, 2010), EWB Canada¹⁵ has overview knowledge about the strengths and challenges of the CLTS implementation in all 12 WASH districts and selection of the districts was based on advice from EWB Canada staff. Mzimba and Lilongwe district marked

¹⁵ Email correspondence from Jolly Ann Maulit (EWB Canada) to Mike Kang (EWB Canada) and C. Nyimba (UNICEF), 11 September 2011

different progress in the implementation of CLTS but are not extreme cases to either side. Because of their different geological and demographic set up as well as a significant difference in urbanity Lilongwe and Mzimba district were considered to give a good insight in rural sanitation in Malawi. A summary of the selection criteria and a justification for the selection is given in Table 3-1.

Table 3-1: Selection criteria for study districts

Selection Criteria	Justification of selection
Potential to receive support of the district staff	EWB Canada has very good working relationships in both districts. Both districts were known to show high commitment in the CLTS implementation. After an initial contact with the district offices it was agreed that the research could fit into the schedules of the district staff.
Potential to get a varied picture of rural sanitation in Malawi.	Lilongwe and Mzimba district are different in their socio-economic characteristics. Lilongwe district is the district with the highest population and a population density that is more than twice the national average. Lilongwe city is the national capital and a large urban centre. Mzimba district is the largest district of the country and has a significantly lower population density. The rural population in both districts mainly depends on subsistence farming. Although both districts show commitment in the CLTS implementation Mzimba district struggles more to conduct follow-ups than Lilongwe district ¹⁶ .
Potential to get results relevant for sanitation marketing activities	In Lilongwe district the NWDS with support of the AfDB plans to introduce sanitation marketing in three rural trading centres. Proximity to the capital city was considered to increase the probability of private sector activities. In Mzimba district the CCAP/WaterAid project tried a market-based approach, which was known from the literature review.
Acceptable travel time	Lilongwe was used as the base of the research and getting to the villages by public transport was easy. Travelling to Mzimba (Boma) takes an average of 5-7 hours. The facilitator/translator could provide a motorbike for the trips to the communities.

Selection criteria for the communities were that in each district two rural communities should be selected. In order get a broader picture of the rural context it was decided to select one trading centre and one community without trading activities in each of the districts. Moreover, it was decided that in addition one of the communities in each district should have had a recent CLTS activity and the other one not. According to these criteria the respective district extension staff, who acted as facilitators and translators during the community work was asked to identify suitable communities.

¹⁶ Communication with Jolly Ann Maulit, EWB Canada, Lilongwe, 07 June 2011

3.4 Data Collection


3.4.1 Documentary information

Yin (2003, p.85-86) notes that the use of documentary information might be relevant for most case studies. Documentary information should be used to support the argumentation of the primary data but has to be used critically as it might be biased. Therefore, the objective and target reader of the documentary information should be continuously analysed. For this research relevant documentary information included district policy or strategy documents, as well as business plans of private suppliers etc.

3.4.2 Semi-structured interviews

The use of semi-structured interviews was found appropriate for the research as they offered a method for in-depth exploring of opinions and perceptions related to rural sanitation in Malawi. Semi-structured interviews enclose a flexible interview process that allows to pursue topics of particular interest and but also offers some structure and guidance (Bryman, 2001, p.314). Although generally semi-structured, the degree to which the interviews followed a pre-defined structure or guidance varied significantly between the different informant groups, which can be justified with the composition of the different informant groups and the different purpose of the obtained information (Table 3-2). Lists for all interviewee types are given in Appendix C.

Table 3-2: Semi-structured interviews

	Informant group	Justification for extent of structure chosen
 Increasing structure	Key informant	Backgrounds of interviewees varied a lot. Interviews were used to generally inform the research or add expert knowledge to a certain aspect of the research.
	District authority staff	Questions that were relevant for health and water office staff were quite similar but for extension staff more flexibility was required. Individual perceptions and opinions were in the centre of attention
	Private suppliers	The extent to which questions of the interview guide could be used was dependent on the grade of formalization and professionalization of the business. Individual stories and perception were supported with factual information.
	Households	It was aspired that some general trends could be derived from the interview responses and thus the interviews followed a quite structured questionnaire style interview guide. Nevertheless, the criteria for structured interviews were not given as most questions were open ended and the identical phrasing of the question could not be assured because of the language barrier and the use of non-professional translators. Probing was moreover found appropriate for the open-ended questions and to assure that the interviewees had understood the questions.

Key informants

Key informants were found by snowball sampling, starting with EWB Canada staff, who used their professional network to build up initial contacts. Bernard and Ryan (2010, p.368) recommend snowball sampling especially for situations where a relatively small group of people that are in contact with each other are targeted. This is the case for rural sanitation sector experts in Malawi and consequently applying snowball sampling was very valuable for the research. Key informants may be valuable for different phases of the research (O'Leary, 2005, p.84). In the initial phase of the research the key informants helped the author to build up her own contextual knowledge by giving an insight in the Malawian sanitation sector and ,furthermore, clarified questions and doubts that had come up after the initial literature review. The key informants therefore informed the research and also brought up more research aspects to look at. In a later phase of the research key informants were used to generate data and were therefore interviewed more specifically about certain aspects of the research e.g. specific rural sanitation programmes or interventions. The key informant interviews were generally semi-structured but some of them were quite open and informal discussions. Nevertheless, some guidance was provided by a prepared set of questions that was reviewed and adjusted prior to each interview according to the background of the interviewee and the specific purpose and topic of the interview.

General topics for these interviews included:

- General information about the recent developments of the Malawian sanitation sector
- Priority areas of government and donor activities
- Institutional responsibilities and challenges
- Experiences with market based approaches in sanitation
- Main challenges of the rural sanitation sector

Finally additional questions in the key informant interviews were used to triangulate and confirm the accuracy of the data obtained from other sources (section 3.5).

District authority staff

The organization of the rural sanitation sector within the district authority level made it necessary to target three different information sources for data collection: representatives of the district water office, representatives of the district environmental health office and extension workers from health or water who have more insight of what is happening in the communities. Compared to the interviews with key informants, the district and private supplier interviews (as described below) followed the respective interview guides more rigidly as the background and knowledge of the different interviewees was more similar.

Private sanitation suppliers

At the beginning of each interview private suppliers were asked a set of standardized factual questions which were summarized in a provider profile. The subsequent interview question guide was elaborated and adapted referring to USAID HIP (2010, pp.75-79). For two sanitation constructors in one of the communities a more informal interview style was used, since only very few of the prepared questions seemed to be relevant for their very informal ad-hoc '*businesses*'. Snowball sampling was used to find the private suppliers, who were identified by extension workers, district and NGO staff and community members or among the participants of a *Business Opportunities in Water and Sanitation* workshop at the *Mzuzu Centre of Excellence for Water and Sanitation*, which was targeted at NGO representatives, water and sanitation entrepreneurs and policy makers.

Household interviews

The household interviews closely followed a questionnaire style interview guide developed and adapted referring to USAID HIP (2010, pp.62-69). Both, the author and the translator were provided with a set of numbered questions. The facilitator directly translated the questions into the local language (Tumbuka in Mzimba district and Chichewa in Lilongwe district) and translated the responses into English so that the author could take notes on questionnaire style pre-prints. This system allowed the author to directly intervene and ask for clarification or probing if answers were unclear. The sampling for the household interviews followed a systematic sampling approach. The initial transect walk gave a feeling for an appropriate number scheme to select any n^{th} house (according to the community size the pattern between the visited communities varied between every third and tenth house). The counting was started with the house closest to the end point of the transect walk. If no (adult) interview partner was available the next closest house was tried. At the start of each interview the interviewee was asked if he/she was the head of the household and if the head of the household would be available. If the head of the household was available he/she was asked to join the interview as a matter of respect and to gather additional information. Not excluding non-heads of household from the interviews was chosen deliberately in order to get a better picture of sanitation related household decisions-making and to increase the chance of women taking part in the interviews. With time being a major constraint it was decided to restrict the number of interviews to four in each community.

3.4.3 Observation and transect walks

Upon arrival and after the formal introduction to the village headman a transect walk was conducted in each of the visited communities. In one of the communities the village headman accompanied the author and the facilitator but in the other villages other well-informed villagers

were asked to take over this task. The main purpose of the transect walk was to “arrive” in the community and get a feeling for its size and set-up. During the transect walks the author draw a basic map of the visited community section (Figure 3-1).

Besides the general housing set-up the author particularly tried to capture a picture of the sanitation coverage in the communities as well as other indications for hygiene related behaviour such as hand-washing and bathing facilities (the latter were not always easy to distinguish from maize storages) or dish racks.

Observation was also used to validate information that was given in the interviews. For example, the author

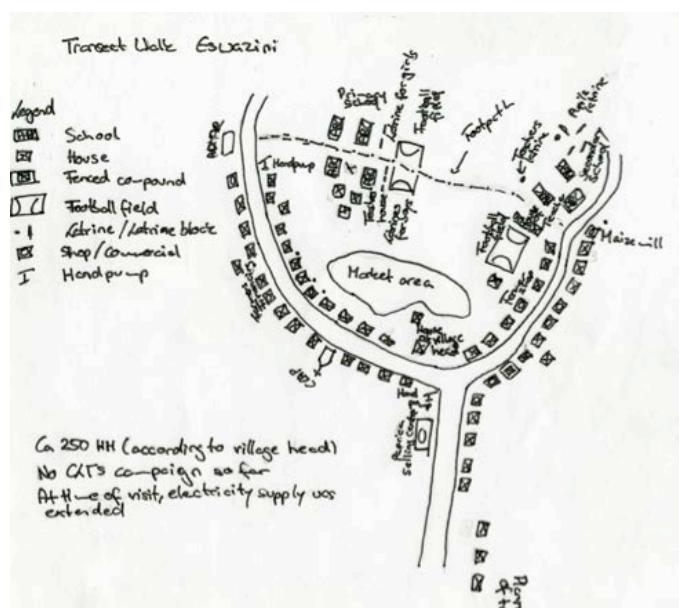


Figure 3-1: Example for village layout captured during transect walk (Eswazini, Mzimba)

asked to have a look on the latrines of the interviewed households. This helped to validate not only if the household had a latrine of the reported type but also to find out if the latrine was in use and how clean it was.

3.4.4 Focus group discussions and Spokes activity

While the household interviews focused on individual perceptions and decisions with respect to household latrines the focus group discussion (FGD) widened the picture by adding emphasis on the community aspect of sanitation. Moreover, particularly remarkable perceptions and/or behaviours around sanitation could be further investigated on in the focus groups. Attention was also paid to the consistency of views expressed in the individual interviews when compared to those expressed in a group context. Focus groups allow observing people’s different attitudes, perspectives and discussions as they operate within the context of a social network (Barbour & Kitzinger, 1999, p.5) or as Krueger and Casey (2000, p.24) put it:

“A group possesses the capacity to become more than the sum of its parts, to exhibit a synergy that individuals alone don’t possess.”

The focus groups helped to deeper investigate on the community members’ perception of their own capacity to climb up the *sanitation ladder*, what holds them back in doing so as well as how they propose to sustain improvements.

Following the recommendation of Bloor et al. (2001, p.26) a size of six to eight participants was targeted size of the focus groups. Upon recommendation of the district extension workers it was decided to conduct two focus groups in each of the communities to allow for gender segregation. Initially the author planned to recruit the participants after the household interviews but the extension workers advised that this would be too short notice and advised that community members that were targeted before the interviews should do the set-up of groups. This might be a source of bias as the author cannot rule out that community members were purposefully excluded from participating in the group discussion, but in most cases the sampling appeared to be rather random by simply shouting over to neighbouring houses or people passing by.



Figure 3-2: Facilitator explaining the principle of the spokes tool to participants of the male focus group in Levi Chisi, Mzimba District

As a warming up and to get the participants focussed on the topic, a participatory activity using the *Spokes* tool was carried out at the start of each FGD.

For the *Spokes* activity the group was asked to picture their ideal vision of a sanitation option/situation (“Where do you want to be”). The participants were then asked to mention everything they would need to get to their ideal sanitation option (“How do you get there”). The facilitator then explained the principle of a wheel (Figure 3-2): The centre of the wheel is fixed and does not move while at the outside of the wheel the greatest movement

is

happening. A wheel was drawn on a flipchart with the centre of the wheel being the zero point and each identified needs (e.g. materials, skills etc.) forming the end of a spoke. The *Spokes* tool subsequently works according to the same principles as a spider diagram. The centre of the wheel is the point where nothing of the need is available while the end of the spoke is where plenty of the need (e.g. materials) is available to get to the desired sanitation option. The group was then asked to agree on a point on each spoke that indicates “Where are you



Figure 3-3: Spokes activity in Msenda, Lilongwe District

now?" i.e. describing their situation. One participant using a stick, leaf or the crown cap of a soda indicated the point (Figure 3-3); only when all participants agreed on the position on the spoke, would the author use a coloured marker to mark the fixed point. After the position on each spoke was found the points were connected to show a diagram. Then the group was asked to think back and compare their current situation to the past. In the CLTS communities this "*Where were you before?*" referred to time before the CLTS triggering and in the two other communities to the time before other sanitation awareness campaign that had been mentioned during the interviews. Again the different positions on the spokes were discussed and marked by the participants and the result fixed by the author using a different coloured marker. The results of the *Spokes* activity were then used to stimulate a discussion around the drivers and challenges for sanitation improvements and what would be needed to enable them to move on as well as who could adequately support them.

Finally each group was asked to assume that they had reached the end of each of the spokes and thus had their 'ideal sanitation option/situation' how would they then sustain it and make it last for their children.

The facilitator translated the discussion for the author who took handwritten notes throughout the discussion. Before packing up the author summarized the most important points of the discussion and asked the participants if they agree or if they think the author missed or misunderstood any issue raised (see below).

3.5 Validity of the Study

The validity of the study was checked throughout the research process. During the data collection validity is mostly concerned with the question of how 'true' the obtained data is. As Denscombe (2003, p.186) points out there is no absolute way to verify if an informant was honest or not in an interview particularly if the interview is focused on his or her perceptions or feelings. However the author ensured that by using different ways of checking the data, the validity of the collected data was maximized.

Triangulation of the data: By using multiple source of information confidence in the obtained data could be increased. In the communities a transect walk, household interviews and focus groups were used to triangulate the data. Moreover the Health Surveillance Assistant (HSA) or Water Monitoring Assistant (WMA), who helped as a translator and facilitator knew the communities and could give some initial information. At district level staff members from different departments and different hierarchy levels were interviewed. Furthermore, key informants with and overview or expert knowledge could qualify or support expressed opinions.

Checking the plausibility of the data: The author followed the recommendation by Denscombe (2003, p.187) that the researcher should always gauge the information obtained by an informant with regard to the likeliness that the informant is in the possession of the particular insight to the topic. At some occasions the author had the feeling that informants were stating common places instead of first hand knowledge and was therefore probing if the informant could state what would be the source of this knowledge.

Reporting back to informants: Whenever possible the author summarized main points mentioned during the interview and asked the informants if she had missed or misunderstood any point. After each focus group discussion the author summarized the main points of the discussion and asked the participants to agree or to add any information before noting down the points on a flipchart. By doing this, the author also intended to increase the confidence of the informants as to show them that their expressed opinions would be valued.

Checking the validity of the analysis:

In qualitative research the validity of the study can also be undermined during the analysis process as the researcher's identity, values and beliefs play a role in data production and analysis (Denscombe, 2003, p.268). During the entire research process the author therefore tried to critically reflect her own behaviours and analysis approaches and tried to discuss preliminary findings and conclusions with outsiders as a process of 'self-analysis'.

3.6 Analysing the Data

"Analysis is the search for patterns in data and for ideas that help explain why those patterns are there in the first place." (Bernard & Ryan, 2010, p.108)

3.6.1 Data storage

All key informant and district authority staff interviews were voice recorded with a MP3 voice-recording device and stored on a computer hard drive and backed up on a USB key. In three cases it was not possible to voice record the interviews due to external reasons and therefore the interviewees were asked to speak slowly and careful notes were taken during the interviews.

The responses of the more structured private supplier interviews and household interviews were noted on pre-print formats and marked with a numbered index for record keeping.

During the focus groups handwritten notes were taken. Pictures of the flipcharts from the *Spokes* activity were taken before leaving the site. After each focus group the participants were asked if they want to keep the flipcharts but all focus groups agreed that the author should take them as and additional back up. Photos were also backed up regularly.

3.6.2 Finding themes

With the chosen data collection strategies (i.e. FGDs, semi-structured interviews with many open-ended questions) complex data was generated. According to Bernard and Ryan (2010, p.44-45) complex data is appropriate where the research aims to answer exploratory questions and understand processes. Both were the case in this research as behaviours, stakeholder relationships and community dynamics were a main focus of the research. Analysis of complex data can be challenging, as similar patterns might be harder to identify. The household and private supplier interviews were transcribed and joint in MS Excel tables. Issues relevant to answer the respective research questions were identified and the answers were then analysed using colour coding (an example for the coding is given in Appendix G). Colour coding follows the same principles as cutting and sorting, which is a recommended as an easy theme identification strategy for textual data of all levels of complexity as well as for audio data (Bernard & Bryan, 2010, p.63-69). Because of the nature of the interview questions, which were open ended and emphasized on perceptions of the interviewees that could not have been projected in advance it seemed to be appropriate to use a coding approach that would allow categories to emerge from the data. Bryman (2001, p.180; 381) suggest the ethnographic or qualitative content analysis as such an approach. While some categories that could be defined according to the interview questions initially guided the analysis others were allowed and expected to emerge during the analysis. Therefore, a constant reflection of the data during the analysis was necessary. Following these coding approaches for instance the identified themes for the household interviews were:

Current latrine situation, money, promotion, perceptions, decision-making, availability and service provision, knowledge and knowledge channels and improvements for latrines

The notes from the focus group discussions were searched for the same themes but also for additional comments relating to the reasons and challenges for/to improve latrines in the villages. The Spokes charts were reviewed analysing the qualitative degree of improvements and challenges shown in the charts and comparing it to explanations from the FGDs and household interviews. Similar, the drawings of the 'ideal' latrine were reviewed for any interesting points and again compared to the verbal statements. Although *Spokes* charts look similar to spider diagrams they are a lot less exact and any form of quantification would be inappropriate and invalid.

The voice recordings and notes from the district authority staff and key informant interviews were systematically searched for defined issues and brought together in lists and tables.

Particularly interesting quotes from the focus group discussions were transcribed any remarkable additional remarks and quotes from the other interviews were noted.

3.6.3 Presenting the Data

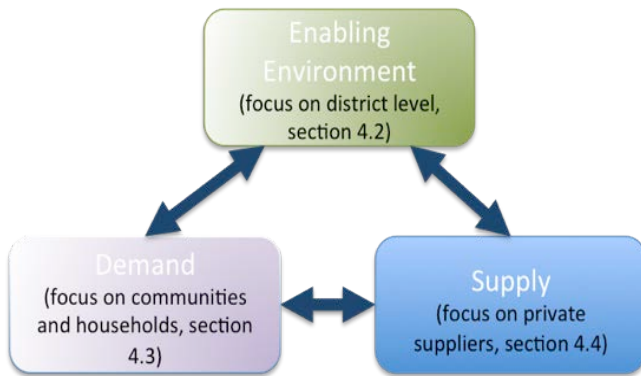


Figure 3-4: Presentation of the results in finding chapter

objectives are addressed in the different sections.

3.7 Ethics of the Research

In order to ensure that the research follows the main principles of ethical research O’Leary (2005, p.72-73) suggests that three areas need to be covered.

Ensuring that respondents have given informed consent: All informants were informed about the background and purpose of the research and asked if they would be prepared to participate. To prevent disappointment the author clearly pointed out that she was not in the position to influence the target areas of sanitation projects or donor funding. In order to assure *voluntarily involvement* and *avoid coercion* it was avoided that village leaders would accompany the interviews. All interviewees and FGD participants were informed that they could step back from their agreement for participation at all times. The translators/facilitators were briefed that it should be accepted if people rejected to answer certain question or showed implicit or explicit signs that they did not feel comfortable to answer particular questions. Only adults were involved in the research, and the nature of the research made it easy to assure that informants were *competent* and *autonomous*.

Ensuring that no harm comes to the respondents: The nature of the research and the question asked, made it very unlikely that the informants would be emotionally or physically harmed by the research. However, prior to carrying out household interviews it was probed if it was acceptable that (female) non-household heads participated in the research without asking for their husbands’ permission if the husbands were not available. Moreover, with respect to informal businesses and suppliers the informants were assured that their provided information would not be passed on to the District or City Assembly or any other institution that could potentially legally threaten them.

Ensuring confidentiality and, if appropriate, anonymity: Informants were assured that their information would be handled confidentially, would only be used for the authors purposes and not be passed on to third without asking for permission. In the report, the level of disclosure of the informants corresponds to the agreements made during the interviews. All names of community members given in the report are pseudonyms. The author respected explicit requests not to reference or cite particular data and reports that were provided as additional information. No contents of these sources were used for the report.

3.8 Limitations to the Methodology and Potential Sources of Bias

3.8.1 Language and translation

As the author had no knowledge of Chichewa neither of Tumbuka a translator was needed to carry out the community interviews in both districts. Working with an HSA in Lilongwe and a WMA in Mzimba, who also acted as translators had the clear advantage that they were familiar with participatory community work and it was easy to brief them on the importance of perceptions and careful probing for an answer. However, no trained translators were involved in the study and therefore it cannot be ruled out that occasionally not the exact terms have been translated, that some information from the respondents got lost in translation or was not translated at all. Whenever the author had the feeling that standard terms were used or the length of the response by the informant differed significantly from the translated response, she tried to politely probe if this was exactly what the interviewee had been saying.

Another potential limitation was the questions were phrased in English assuming that there would be adequate terms for translation in the local language. That might not have been the case for all terms and the translator might have been forced to modify the question slightly to make a translation possible.

3.8.2 Researcher effects

In order to get honest answers and also not to provoke any wrong expectations that could lead to disappointment the author explained the independent background of her research at the beginning of each interview or FGD. Although EWB Canada helped with the establishments of contacts, it was agreed to clearly state that the author was not working for them. This might have helped to reduce bias in responses, as the respondents knew that the author was not affiliated with any organization and thus neither benefits nor disadvantages for future cooperation were expected.

However, in the communities the author worked with district extension staff (an HSA and respectively a WMA who was also a CLTS facilitator). The respondents might have answered in a

way they thought the author or the extension workers wanted them to answer or saw potential benefits from 'impressing' the extension workers with their answer.

3.8.3 Selection of the study sites and potential for generalization

Denscombe (2003, p.35-37) points out that the degree to which it is possible to generalize from case studies depends on how far the case is similar to other cases. Therefore the researcher should address the issue of potential strength and weaknesses of the case with regard to generalization. Comparing a case to others of its type might call for inclusions of details on the *physical, historical, social and institutional location* (ibid., p.37). Most of these factors have been covered for the study sites in section 3.3 and will be further addressed in section 4.1. As the author had no possibility to gain in-depth knowledge on suitable study sites she had to rely on the advice and briefings from EWB staff for the selection of the districts and district senior and extension staff for the selection of the communities. The author tried to reduce potential bias of the research by carefully briefing the informants about the requirement of the research. However, a limitation (physical location) deriving from the selection of the districts is that no lakeshore districts and communities were included. In lakeshore districts, sandy soils make latrines highly prone to collapsing and therefore challenges for sustainability might include additional or different issues that could not be captured within the studied communities.

3.8.4 Resources and transport

Time was a constraint of this study. The field research had to be completed within four weeks, which was challenging because of the ambitious scope of the study and the local circumstances. At the time of the research Malawi was facing serious fuel shortages and electricity cuts. This made transport more difficult and expensive and limited the possibility for computer-supported work during the field study. As the author had no own vehicle and not the financial resource to rent one, she had to rely on public transport, taxis and the WMA's motorbike to visit the communities. Because of the lack of minibuses, travelling to the communities in Mzimba was only possible by motorbike. A few times a lot of valuable field time was lost because the petrol station had run out of fuel and it was necessary to wait until it was filled up again or fuel had to be organized from informal sellers.

3.8.5 Negotiating access

Denscombe (2003, p.39) argues that negotiating access to the study site may become a disadvantage in case studies. Overall, district senior and extension staffs in both districts of the study were very forthcoming and supportive. Nevertheless, the districts offices and extension posts in Malawi are notoriously understaffed (section 2.10) and consequently the district senior

and extension staff had very busy schedules and many competing obligations. This affected the research, as it was not possible to schedule the research in a time efficient way i.e. staggering the research in the two districts. The obligations of district staff were often at very short notice, which made it difficult, if not impossible to schedule any appointments far in advance. As a result, a lot of separate bus trips between Mzimba and Lilongwe were necessary to get enough data from each district. These trips were very time consuming, especially since, as mentioned before, the fuel shortages had further depreciated the public transport system, with busses being completely overloaded or cancelled.

4. FINDINGS

The findings presented in this section are based on a field research that was carried out by the author in June 2011 over a total time period of four weeks. The results of the key-informant interviews contributed to some extent to the whole section, whereas additional essential data sources are indicated at the beginning of the respective subsection (a list of all interviews is provided in Appendix C).

4.1 Location of the Study

Malawi is a landlocked country in Southern Africa. It shares borders with Tanzania in the north, Mozambique in the south and east and Zambia in the west. It is divided into three administrative regions (Northern, Central and Southern Region) and 28 districts.

The Northern Region has the least population density. According to the 2008 Population and Housing Census (National Statistical Office, 2008) its share of the total population is only 13%, compared to 42% of the population living in the Central Region and 45% in the Southern Region (ibid., p.16).

The field study took place in four rural communities in Lilongwe and Mzimba district.

Lilongwe district (Central Region) hosts Malawi's capital city Lilongwe, which is also the region's and district's capital

(Boma). Lilongwe district is the most populated district in Malawi and its population density is more than twice the national average (DCT Lilongwe District, 2007). Despite including Lilongwe as a large urban centre, most of the district's population (about two thirds) lives in rural areas (National Statistical Office, 2008, p.11).

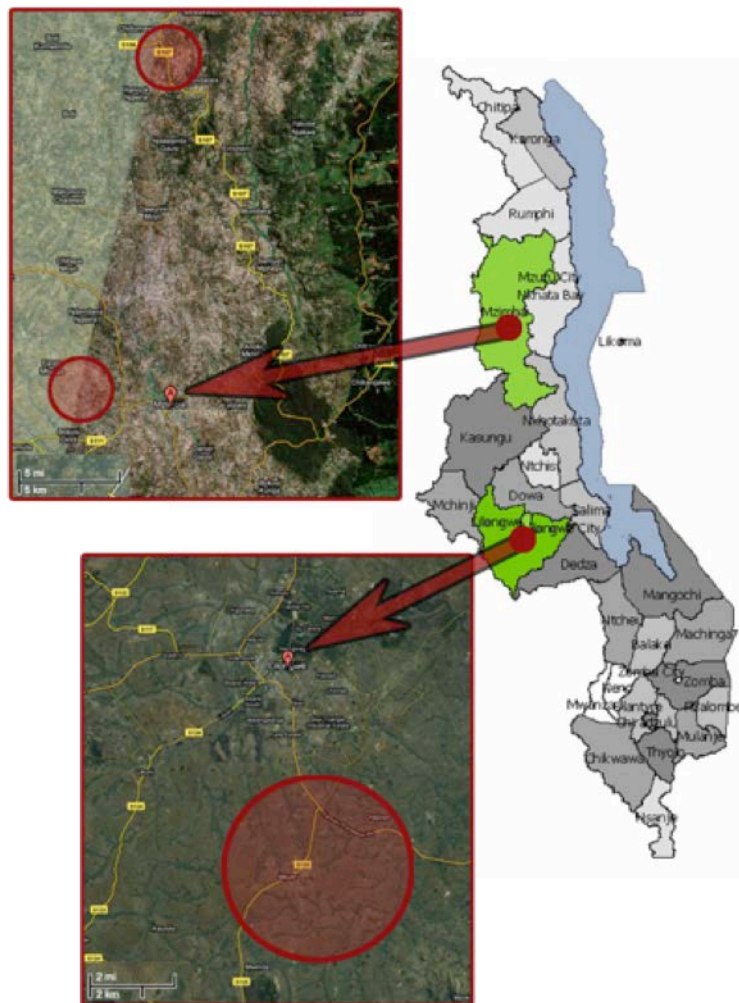


Figure 4-1: Study locations

Source: Adapted from National Statistic Office (2008, p.7); Google (2011)

Box 4-1: Side note on political context in Malawi at time of the research

A short side note concerning the broader political climate during the time of the research seems to be necessary to give the reader some more context for the following sections and chapters.

Malawi is highly dependent on donor funding about 40% of the country's revenues rely on handouts (Reuters Lilongwe, 2011). Malawi's main bilateral donor is Britain but in April/May 2011, a diplomatic row over the expulsion of the British ambassador after a leaked cable criticizing the Malawian President led to a freeze of new aid for the country. Furthermore, general economic and governance concerns within the donor community resulted in the suspension or end of the general budget support by several donors including Britain, Germany, Norway, the EU, the African Development Bank and the World Bank (Tran, 2011).

Less densely populated is Mzimba district, which belongs to the Northern Region and is the largest district in the country. The district is administratively subdivided in Mzimba South and Mzimba North. Mzimba town is the Boma but the largest urban centre is Mzuzu city, which is located in the north of the district and which is the administrative centre for Mzimba North.

In Lilongwe district, Msenda village and Chagogo (Nagiri market centre)

were included in the research. Both communities are relatively easy and fast to reach via public minibuses from the city of Lilongwe. In Mzimba district the emerging trading centre Eswazini and the village Levi Chisi were studied. Levi Chisi is only about 10km away from the Boma whereas Eswazini is relatively remote and is located about 40km north of the Boma. There are plans to further extend Eswazini trading centre. At the time of the field research the part of the road section to Eswazini was under construction and in the community itself the extension of the overhead electricity supply was just completed. Some demographic overview data about the two districts is summarized in Table 4-1.

Table 4-1: Lilongwe and Mzimba district overview¹⁷

	Lilongwe district	Mzimba district	Malawi
Area (km ²)	6,159	10,430	94,276
Population	1,897,167	853,305	13,066,320
Proportion of national population	14.5	6.5	-
Rural population	1,228,146	724,873	80% of total
Population density (people/km ²)	308 (216 rural)	82 (70 rural)	139
Dominant ethnic group	Chewa	Tumbuka, Ngoni	Chewa, Lomwe, Yao, Ngoni, Tumbuka

Source: National Statistical Office (2008); DCT Lilongwe District (2007, p.8); DCT Mzimba District (2008, p.8)

¹⁷ All figures were derived from the 2008 Housing and Population Census (National Statistical Office, 2008). The population of Mzimba district includes Mzuzu City. The proportions also include urban and rural population.

4.2 Sanitation in Lilongwe and Mzimba District

The findings presented in this subsection are fundamentally based on the interviews with district authority staff in Mzimba and Lilongwe district.

4.2.1 Sanitation coverage and access to sanitation

It is challenging to get any reliable figures for sanitation coverage in the two districts. The documentary data that could be obtained was often inconsistent and it is not always stated which definitions for improved and unimproved sanitation is used. According to the DSIP (DCT Lilongwe District, 2007, p.17), which derived its figures from the Lilongwe District Health Office (LDHO), 8.6% of the population had access to improved and 80% of the population access to some kind of basic sanitation in 2006. However, the author could not find out which definition of improved sanitation was used for these figures.

In Mzimba a socio-economic baseline survey and some household visits were conducted to assess community sanitation for the DSIP (DCT Mzimba District, 2008). However, it is acknowledged that the comprehensiveness of the household level data is limited. The figures given in the DSIP are 25% coverage for traditional pit latrines and 15% coverage for improved pit latrines (DCT Mzimba District, 2008, p.16). Again it is not clear what was defined as improved latrines. In the Mzimba Socio Economic Profile (SEP), which is the basis document for the district's planning activities, the figures not only vary widely from the ones given in the DSIP, but are also inconsistent throughout the documents. In different section of the document coverage or access data varies and terms are not used consistently. To illustrate, the document states numbers of 85.2% for sanitation coverage and 6.1% for access to safe sanitation in the sanitation and health section but later in the same chapter access to basic sanitation is reported to be 94% and in the strategy and planning framework a coverage of 5.6% for *improved* sanitation is quoted (Mzimba District Assembly Planning and Development Department, 2008, pp.92; 98; 166). The District Water Officer of Mzimba explained that the data inconsistencies were caused by the compilation of data from the water and health department, which had to be done because of the transition and split of sanitation and hygiene responsibilities. However, several interview partners admitted that there is a lack of clear understanding, good baseline data, functioning monitoring and comprehensive coordination within the rural sanitation sector. The data inconsistency and lack of clear stated definitions in the planning documents might support this opinion.

4.2.2 Institutional framework and staffing for sanitation

The decentralization of tasks and responsibilities from central to local government level has been instituted through the Local Government Act in 1998. In 2005, Malawi's new Decentralisation

Policy came into effect. In general the District Assemblies (DAs) are responsible for all activities implemented in the district. (DCT Lilongwe District, 2007, p.11) The institutional arrangements in Lilongwe and Mzimba districts are displayed in Table 4-2.

Table 4-2: Institutional arrangements

Level	Political	Administrative	Technical	Other
District	District Assembly (DA)	District Commissioner; District Executive Committee (DEC - all district heads of departments (including DHO and DWO and ministries, NGOs)	District Team (DCT - Coordination committee of DEC dealing with water supply and sanitation)	NGOs, Sub contractors
Traditional Authority (TA)	Area Development Committees	Traditional Chiefs	Area Executive Committees; Health Surveillance Assistants (HSAs); Water Monitoring Assistants (WMAs); Community Development Assistants (CDAs); NGO representatives	Private companies; NGOs
Village	Village Development Committees (VDCs)	Village Headmen	Village Health and Water Committees; Water Point Committees	Private companies; NGOs

Source: Adopted from: DCT Mzimba District (2008, p.12) and DCT Lilongwe District (2007, p.11)

Sanitation promotion in the communities is carried out by the extension staff, which are the Water Monitoring Assistants (WMAs) under the District Water Office (DWO) and the Health Surveillance Assistants (HSAs) under the District Health Office (DHO). Besides sanitation promotion, WMAs are responsible for community water supply, such as monitoring of community boreholes. The HSAs are the focal points for all health related issues in the communities. Extension workers staffing levels vary widely between the two departments. In Lilongwe district there are now around 1100 HSAs which is roughly one or two HSA(s) per village while the number of WMAs just increased to one or two per traditional authority (TA) which sums up to around 20 WMA for the whole district. In Lilongwe additional WMAs could be employed recently due to an AfDB funded project under the NWDP. Within the District Environmental Health Office (DEHO), which is a subordinate of the DHO, sanitation is part of the responsibilities of the Environmental Health Officers for Water and Environmental Sanitation (EHO-WES).

In Mzimba district, the administrative subdivision of the district in Mzimba South and North applies only to some of the departments of the DA. Consequently there are two District Health Offices (in Mzimba town (Boma) and Mzuzu) but only one District Water Office in the Boma.

In Mzimba district the DWO struggles to fill vacancies and in some TAs there is no WMA employed. Therefore, (as in Lilongwe) the realization of Water Sanitation and Hygiene (WASH) programmes relies on a strong partnership with the DEHO as most implementation is done by the HSAs. In Mzimba the DEHO targeted to have a ratio of one HSA per 1000 people. According to the EHO-WES in Mzimba South¹⁸ there is still a deficit of 100-200 HSA to achieve the aspired ratio.

Problems with CLTS sustainability and the lack of follow-ups and proper monitoring of the implementation in the districts arised partly because CLTS was introduced as part of the UNICEF WASH project. Consequently, CLTS is regarded as a project or part of a project and not as a tool to improve sanitation. This leads to the problem that HSAs demand allowances for CLTS activities even though general activities for sanitation and hygiene promotion within the communities of their responsibility are part of their job description and one could argue that these additional allowances are not justified. The other side of the coin is that the HSAs are already overloaded

*“The HSAs are regarded as ‘jacks of all trades’.
Whoever wants to implement something in the
communities relies on them.”*

(EHO-WES Mzimba South, Mzimba, 13 June 2011)

Quote: Workload of extension staff

with work on community level and have to carry out many different responsibilities and duties which causes the problem that the time they can actually allocate to sanitation is limited.

As sanitation and hygiene has just been transferred from the MoH to the MoIDW there remains a lack of clarity about the distribution of responsibilities for sanitation between the DEHO and the DWO. Within the WASH project (see section 4.2.4) the coordination of the hygiene and sanitation component practically is implemented by the DEHOs as the DWOs currently not have the capacities to carry out sanitation and hygiene promotion at community level.

4.2.3 District budget and planning for sanitation

Malawi's dependency on external funding (Box 4-1, p.63) is also acknowledgeable in the district budgets. Consequently, the districts get their budgets from two different sources: governmental funded ORT (other recurrent transactions) and donor funding that is bound to specific programmes or projects. For sanitation, the budgeting is split between the MoH and the MoIDW on national level and the District Health Office (DHO) and the District Water Office (DWO).

The Malawian health sector is now financed through a SWAp which led to some harmonization of the budgeting. When compared to the water sector the the health sector has a much higher

¹⁸ Interview with EHO-WES Mzimba South, Mzimba, Malawi, 13 June 2011

budget. However, only a small proportion of the DHO budget is spent on preventive health (including sanitation) and the bulk of the health budget is used for clinics and nursing etc.

With the allocated ORT budget the district water offices in both districts mostly cover their administrative costs. As a result, the implementation of WASH programmes relies mostly on donor funds with UNICEF currently being the most important sector player in the studied districts. Both districts have recently faced problems with delayed and inconsistent donor funding.

District officials also reported that NGOs and donors also directly implement. This results in budget intransparencies as contractors are directly hired and paid by donors and the district planning department consequently does not know how much had been spent on water and sanitation during a fiscal year, which makes future planning more complicated.

From the institutional set-up the sanitation sector faces the challenge that its decentralization process is still lagging behind. The sanitation department within the MoIDW is not fully developed yet and there is no equivalent subordinate on district level. Consequently, most of the ORT budget from the MoIDW is dedicated to water. With respect to staffing, there is no district office or extension staff exclusively dedicated to sanitation.

An interesting observation during the interviews on district level was the different perception of the current standing of sanitation in the districts activities between the health and water departments. Whilst all interviewees assigned to water (including the WASH

"I cannot say it [sanitation] is a priority. In previous years, when you talked about water you also talked a little about sanitation – that was all."

(DWO, Lilongwe, 14 June 2011)

Quote: Perception about priority of sanitation in the district

project coordinator in Mzimba) noted that sanitation was not a priority in the districts, all interviewees assigned to health stated that it was a priority. Further probing revealed that sanitation is seen as a priority in the DEHOs because in the health strategies the reduction of water borne diseases is high on the agenda.

Pushing sanitation higher on the agenda in the districts is also challenging due to the planning and decision making process that underlies the development of the District Development Plans (DDPs). The DDPs guide the districts' activities over a period of three years. The district development planning starts at village level with the development of the Village Action Plans (VAPs). In a facilitated process (which is supported by district extension workers (HSAs, WMAs and CDAs)) the Village Development Committees (VDCs) identify needs and priorities of the community (village or group of villages). The VAPs are then compiled on TA level and finally brought together on district level where they feed into the development of the district socio economic profiles (SEPs). The data compiled in the SEPs are the planning guidance for the

development of the DDPs. If the community members had not identified sanitation as a priority issue it was hard to get into the DDPs.

Consequently, sanitation is only mentioned in some short paragraphs and without going to any depth in the SEPs of Lilongwe and Mzimba District (Mzimba District Assembly - Planning and Development Department, 2008; Lilongwe District Assembly - Planning and Development Department, 2006b).

The low prioritization of sanitation in the district planning (apart from the UNICEF WASH project) is obviously also revealed in the district budget planning as displayed in the District Development Plans (DDP).

For Mzimba district, the DDP for the planning period 2009-2012 identifies 14 medium-term *District Development Issues* (which are based on the results from the SEP). These issues are ranked by priority with 'low access to safe water supply and improved sanitation' ranked as fourth priority after disease burden, low quality of education and inadequate infrastructure (Mzimba District Assembly - Planning and Development Department, 2009, p.ix). In the SEP, these issues feed into a situational analysis framework. Within this framework, sanitation is addressed by the objectives to increase public sanitation facilities and to increase the access to improved sanitation

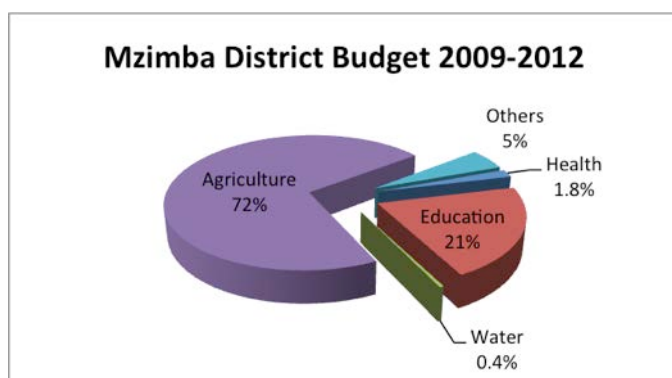


Figure 4-2: Distribution of district budget according to DDP Mzimba
 Source: Adapted from Mzimba District Assembly – Planning and Development Department (2009, p.x)

facilities in the communities (Mzimba District Assembly - Planning and Development Department, 2008, p.160-166). Despite this relatively high priority ranking, the proportion of the district budget allocated to water over the total time period is only 0.4% and for health (excluding HIV/Aids) only 1.8%. The bulk of the budget is allocated to agriculture and education

(Mzimba District Assembly - Planning and Development Department, 2009, p.x). The document also gives a budgeted summary of all projects and programmes that are planned under each of the 14 development issues. Under issue four 'low access to safe water supply and improved sanitation' (which is financed through the water budget) not a single project or programme component is dedicated to sanitation. 1.2% of the health budget is allocated to 'safe pit latrine promotion'. (Mzimba District Assembly - Planning and Development Department, 2009, p.237; 244). This means that between 2009-2012 only 0.2% of the total district budget has been dedicated for community sanitation. The educational budget, however, has some posts for the construction of school latrines.

In Lilongwe, the current DDP is still under development and only the DDP for 2007-2009 (Lilongwe District Assembly - Planning and Development Department, 2006a) could be considered. The relevance of this document might be limited, since it has been developed prior to the start of the WASH project and departmental responsibilities might have changed since then. In order to tackle the development issue of 'high prevalence of water borne diseases', a UNICEF funded sanplat construction project and a sanitation and hygiene awareness campaign project had been planned as sanitation interventions. UNICEF¹⁹ could not confirm whether this sanplat construction project had actually been realized.

While the WASH project (section 4.2.4) and the national goal to become ODF in 2015 gives the districts some medium term goals and planning direction many of the interviewed district officials stated that they thought that the districts lack a more general direction or vision for sanitation that goes beyond donor project implementation.

4.2.4 Current sanitation approaches and roles of the district government

As Mzimba and Lilongwe districts are both UNICEF WASH districts, their sanitation programmes are quite similar. Both districts have introduced CLTS in 2008. Before, PHAST was the dominant sanitation approach in both districts. Now PHAST is widely considered as a failure as it did not show any considerable results. The District Assembly through the District Coordinating Team (DCT) implements the WASH project. A WASH coordinator leads the DCT. In most districts the District Water Officer is the WASH coordinator but in Mzimba there was a designated WASH coordinator in addition to the District Water Officer. The reason for this different role distribution is that the districts were given funding to hire a District Water Officer at the start of the WASH Project as in 2007 most districts had no such positions. In Mzimba, however the DWO was already established and thus an additional post could be created with the provided funding. The DCTs are composed of the heads of the relevant departments and NGO representatives. Which heads of departments are included in the DCT slightly varies between the districts but water and health are always included. The implementation arrangement for the WASH project includes the MoIDW, the MoH and the Ministry of Education (MoE) as the three key ministries at national level. The MoIWD is the leading ministry at national level. At district level the funds for sanitation are channelled through the DWO but the DEHO plays a very active role and has, as already mentioned, more appropriate capacities of field staff. The DEHO also has some own sanitation and hygiene education initiatives and collect sanitation and hygiene related data. How involved the DWO is in sanitation depends basically on the personal commitment of the district water

¹⁹ Email correspondence with John Pinfold, Chief of WASH UNICEF Malawi, 02 August 2011

officer and the district. The UNICEF WASH project funding and thus all money for CLTS is channelled through the DWO (or respectively the WASH coordinator) which then coordinates with the DEHO.

District extension staff carries out the CLTS triggerings in the communities. The HSAs and WMAs are also responsible to carry out the follow-up visits and the ODF verifications. Whether the DCT is involved in the verification depends on the district and national verification standards are not yet established but currently under development. The districts are responsible for the training of the extension workers and CLTS facilitators and supervise and monitor the CLTS implementation. With the start of CLTS both districts stepped back from hardware subsidies.

Various NGOs also conduct CLTS triggerings or are involved in other sanitation approaches like the casting of sanplats in communities or ecosan related sanitation promotion. According to district staff, most of them support the districts non-subsidy policy, but there are still some problems with NGOs that do not follow the districts' approach.

With respect to the success of the CLTS implementation, district government staff in both districts admitted that they would struggle to conduct sufficient follow-ups, which has weakened the progress of the CLTS implementation as for example insufficient supportive follow-ups led to the drop out of natural leaders. Furthermore, some facilitators do not carry out the triggering process properly and in some parts of the districts behaviour change is slow because of persistent cultural beliefs. Despite the admitted challenges all interviewees reported that they would consider the experiences with CLTS as promising so far. The perceived positive impact of CLTS was occasionally linked with the reduction of cholera outbreaks over the last years.

As already mentioned, the strategic planning frameworks for the implementation of the WASH projects in the districts are the District Strategy and Investment Plans (DSIPs) for the period of 2007-2015. The DSIPs were developed to "present a roadmap to the realization of the [water, sanitation and hygiene related] Millennium Development Goals" (DCT Lilongwe District, 2007, p.3; DCT Mzimba District, 2008, p.3) as well as to contribute to the respective goals of the MGDS in the respective district. Both DSIPs explicitly mention the application of a sanitation marketing approach as a guiding principle of the strategies (DCT Lilongwe District, 2007, p.21; DCT Mzimba District, 2008, p.21) and consequently as a key element of the planned sanitation interventions:

"The sanitation work will be demand-led by marketing and not supply-led by subsidy. The mass marketing and sanitation promotion will be carried out across the whole district, while the specific activities to encourage latrine construction will concentrate on the same villages where water facilities will be constructed and/or rehabilitated." (DCT Lilongwe District, 2007, p.27; DCT Mzimba District, 2008, p.27)

However, all interviewed district officials stated that the district currently does not carry out any market based approaches on sanitation.

In Mzimba there is still no detailed schedule or strategy for the incorporation of market-led approaches from district side at the moment, however most interviewees agreed that market based approaches will be part of the districts' sanitation intervention in future.

At the time of the research UNICEF was revising the sanitation marketing strategy given in the DSIPs and details about the components were not decided yet²⁰.

In rural Lilongwe the adoption of market based approaches is now advanced by a sanitation marketing programme that is part of the NWDP and funded by the AfDB. The programme aims to establish commercially run sanitation centres in three selected rural trading centres in Lilongwe district. At the time of the study these sanitation centres had not been established yet, but the district was informed about the plans and had developed a budget outline for the promotion campaigns (including allowances for extension workers). Moreover, marketing and promotion messages had been developed. These promotion messages link improved sanitation to status, convenience and easiness to maintain as well as to showing respect for visitors. The initial promotion activities will be carried out by extension staff and the overall coordination will be done by the DCT. In the communities sancentre committees have been trained and these will then run the sancentres on behalf of the communities. According to the teamleader of the responsible consultancy team²¹, the sancentres will not only act as showcases for sanitation products but as well as shops for direct purchase, but also as a focal point for information and service provision. Each sancentre will have connections to a number of masons which should work like franchisees and reach out in the more remote villages. The programme aspires to avoid the pitfalls of the previous sancentres and therefore emphasizes on commercially run businesses for which the entrepreneurs themselves shall do the ongoing promotion. Selecting rural trading centres as the location for the businesses is thought to help the spread of word and attraction of more customers as people from surrounding villages would go there and do their businesses. Currently, a consultancy is involved in getting started the programme and carrying out the tendering process for the construction of the sancentres. The HSAs will train the sancentre committees and the programme will be supervised by the DCT. The DWO stated that she hoped that the programme will be self sustaining after a while, but there were no elaborated plans how this would be assured from district side once the project has phased out.

²⁰ Email correspondence with John Pinfold, Chief of WASH UNICEF Malawi, 02 August 2011

²¹ Interview with consultant involved in AfDB/NWDP rural sanitation marketing programme, Lilongwe, 21 June 2011.

4.2.5 Drivers for and critics of the introduction of sanitation marketing in the districts

Most interviewed district authority staff stated that they see potential in sanitation marketing to meet the demand for improved sanitation that had been created through the CLTS campaigns. Several times environmental protection was mentioned as an additional driver towards market based approaches that would promote improved pit latrines. Marketing sanitation was linked with cement slabs that would reduce the problems of deforestation in the districts, as people cut down logs for traditional latrines.

"It's too early to introduce sanitation marketing, we have not done enough on CLTS and behaviour change yet"

(WASH project coordinator, Mzimba, 11 June 2011)

Quote: Critic view on the introduction of sanitation marketing

Only few district authority staff but some of the key informants also expressed more critical opinions about the push towards introducing sanitation marketing.

As a major concern it was expressed that sanitation marketing should not be introduced before institutional and funding problems with the CLTS were solved and before CLTS was properly scaled up to all TAs in the districts. This would imply that the districts would first need to build up capacities so that they could fulfill their roles adequately as at the moment the districts lag behind with monitoring and (in Mzimba) implementation at scale.

An interviewee who was formerly involved as a programme coordinator in the CCAP and WaterAid ecosan marketing project reported that from his experiences the enabling environment for sanitation marketing was not adequately developed yet and that support for private entrepreneurs from governmental side was very weak.

By contrast other informants stated that they would see the benefit of sanitation marketing in particular in the partial relief of the district staff in terms of human and financial resources, as the private sector would assist the district in some of the districts current responsibilities such as promotion of sanitation.

"We believe that sanitation marketing will increase the sustainability of sanitation promotion. The government has not resources to provide sanitation so we need to bring in the private sector to act as supplier. [...] As long as there is demand and the private sector makes profit the private suppliers will continue with the provision of the services."

(NGO representative, Blantyre, 16 June 2011)

Quote: Positive perception about the impact of market based approaches

4.2.6 Loan and financing options for sanitation

Finance institution and sanitation programming managers increasingly recognize the opportunity in and necessity of setting up financing options for sanitation investments from households and private suppliers. At the *Business Opportunities in Water and Sanitation* workshop in Mzuzu a representative of the Opportunity Bank of Malawi (OiBM), presented loan programmes for small-scale entrepreneurs and there are plans to integrate household microloan options in the AfDB supported sanitation marketing programme in Lilongwe. Again the OiBM would also offer these household sanitation loan options but the exact conditions and interest rates were still under negotiation. At the time of the research it was planned that microfinance institutes could promote their loan programmes directly in the sancentres and ease the access to finance for sanitation for interested customers.²²

Due to on-going negotiations it was difficult to obtain any detailed documentary data about the OiBM sanitation loan programme. During the Mzuzu workshop a representative of OiBM²³ presented, general figures for group microloans that are targeting small-scale business providers without any valuable asset for collateral and individual microloans for people that have some kind of security asset (like a house or vehicle). The loan range for the group microloans was between MK 5,000 and MK 200,000 MK (approx. £20 to £825)²⁴ with a monthly interest rate of 2.97%. For the individual microloans loan ranges and interest rates are graded and range between MK 30,000 to MK 600,000 (approx. £120 to £2470)²⁵ with decreasing monthly interest rates from 1.8-2.5%. For more experienced business entrepreneurs, business loans up to MK 10million are available but obviously at much higher interest rates (26%).

That those loan programmes might be relevant for private sanitation entrepreneurs was shown in one of the supplier interviews. For the establishment of the public toilet block in Jenda a loan of MK868,000 (£3,570) will be required. The private entrepreneur now considers getting this from a bank since he could not find another source of (NGO) funding.

²² Interview with consultant involved in AfDB/NWDP rural sanitation marketing programme, Lilongwe, 21 June 2011.

²³ Presentation during *Business in WATSAN* workshop by representative of OiBM, Centre of Excellence, Mzuzu University, Mzuzu. 07 June 2011

²⁴ Exchange rate from Malawian Kwacha to US\$ 150:1 (exchange rate from 15.07.2011, (Oanda, 2011))

²⁵ *ibid.*

4.3 Sanitation in the Studied Communities

Results given in the following section are based on 16 semi-structured household interviews (four in each community) and eight gender segregated focus group discussion with application of the Spokes tool (one male and one female focus group in each of the communities) with an average of five to nine participants. The names of respondents quoted in the text have been changed in this section.

4.3.1 Latrine adoption and perceptions

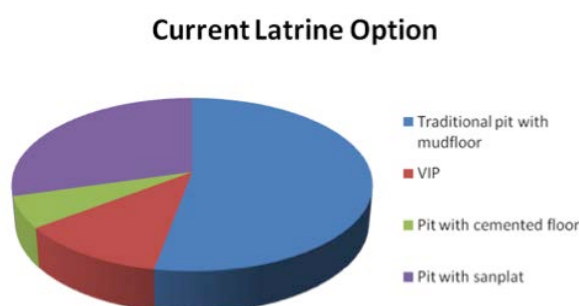


Figure 4-3: Current latrine types used by the respondents of the household interviews

All interviewed households and focus group participants claimed that they were using a latrine (some of them shared a latrine). During the household interviews these statements could be verified for the individual households by observation. It was also noted that all observed latrines were reasonably clean and obviously all in use. All interviewees claimed that all household

members used the latrine and no one was excluded for any reason. However, in all communities people admitted that there were still some non-adopters in the village/community. Observations during the transect walks confirmed that most houses in the visited communities had latrines. However, it could not be explored if some of them were shared and in which condition they were. In three of the visited communities handwashing facilities had been installed by several households. In Chagogo, however, all observed handwashing facilities had no water and were obviously not frequently used. No trend for the difference in latrine adoption in CLTS and non-CLTS communities could be found. This might be caused by the sample size and selection of the communities. A cause of bias was that in Msenda, where no CLTS activities had been carried out, a NGO provided cement for moulding slabs. Msenda therefore actually out stood positively in terms of improved sanitation facilities. Consequently, all interviewed households in Msenda had pit latrines with domed slabs (Figure 4-5, Figure 4-5, next page) and many of them also handwashing facilities with soap. In the second non-CLTS community (Eswazini) no NGO activity had been conducted and the observed latrines were more basic than in Msenda but not necessarily of lower standard than in Chagogo or Levi Chisi (both CLTS communities).

Only in one focus group participants admitted that they sometimes felt intimidated if there were a lot of people around who could watch them going to the latrine and would therefore rather opt



Figure 4-5: Pit latrine (with hand washing facility) in Msenda, Lilongwe district



Figure 4-5: Domed slab with footrests and drophole cover in Msenda, Lilongwe district

for the bush. Non-adoption of latrines was mostly related to the “lazyness” and “ignorance” of the respective community members but some respondents also mentioned that previous latrines had collapsed and some community members were not motivated enough to rebuild them. Most of the interviewees owned their house, but in one of the FGDs it was addressed that landlords that owned more than one house would not build a latrine for each house but expect their tenants to share. Due to the limited time in each of the communities the author could not find a non-exposive way to particularly target and identify non-adopter households, which thus could not be included in the study. In Mzimba district, however, district office and extension staff reported that in some communities the CLTS implementation was not working very well because there were cultural beliefs that prevented people from having a latrine. In some of these communities it would be a taboo if adults were seen by their children going to a latrine since children are told that adults do not defecate. In some parts of the district people believed that pregnant women would risk a miscarriage if they used a latrine. It was also stated that in extended family compounds with only one latrine, women would continue to defecate in the open as it was taboo for them to use the same latrine as their father-in-law. This view was also shared by some of the interviewees; however, not as a reason to defecate in the open, but as a reason to adopt an own latrine instead of sharing an extended family latrine or the bush.

When asked for their main reason for having constructed a latrine, disease reduction and improved hygiene was the most common response. Privacy, distance reduction and convenience or respect for visitors were all mentioned with a similar frequency. Again there is no clear trend between CLTS and non-CLTS communities, neither in the three communities that were recently target of more extensive sanitation promotion activities (i.e. Chagogo and Levi Chisi – both CLTS – and Msenda – NGO providing sanplat casting workshop), nor Eswazini where no extensive campaign took place recently. In Levi Chisi, however, three of the four interviewed households

stated that they considered disease reduction as important since falling sick or caring for a sick family member would affect them economically.

Responses to other interview questions (e.g. *What do you like best about your latrine? Why are these things important for you*) gave more more priority to convenience (e.g. because the latrine is close to the house or because the environment around the house needs to be clean so that vegetables can be cultivated close to the house) , privacy and comfort (e.g. because the latrine reduces smell or because it provides a roof during rainy season).

4.3.2 Awareness about different latrine technology options and supply services

Knowledge about different latrine technologies was very limited. When asked for the types of latrines they knew of, the majority of the interviewees could only identify traditional pits with mudfloor and pits with a sanplat or cemented floor²⁶. Few did know about ventilated improved pit (VIP) latrines but it was observed that people often did not know the working principle of a VIP and insisted that they need a drophole cover. In one focus group discussion the participants mentioned that their *'ideal latrine'* would have a ventpipe and a drophole cover. Being asked to draw the correct positioning of the vent pipe the group discussed and agreed that the ventpipe would need to be connected to the middle part of the pit, with the pipe making a bend to release the air in some distance to the latrine (Figure 4-6).

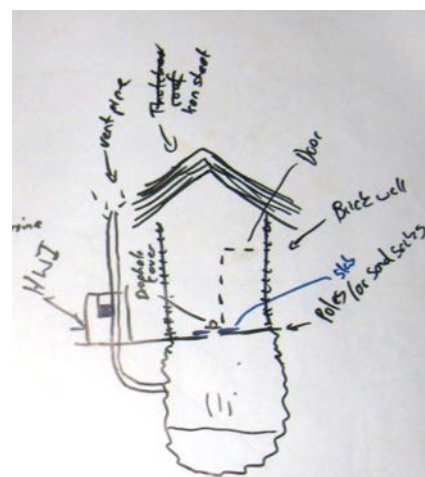


Figure 4-6: Drawing of the "ideal latrine" with ventpipe and drophole cover

Half of the respondents said they knew who provides sanitation hardware and services. Whilst there was a very different status of information between the communities, there was no gradient from more urban to more remote communities or from communities with very active sanitation promotion activities to communities with no or only few on-going sanitation promotion. In Msenda all four interviewed households knew that slabs could be purchased in St Jones on Blantyre Road. In contrast, in Chagogo, which is also not far away from Lilongwe and directly borders on the rural trading centre Nagiri, no interviewee gave a positive answer to the question. In Levi Chisi and Eswazini some respondents knew who could dig a pit or construct a latrine but nobody was informed about where to get ready-made sanplats.

²⁶ When interviewees talked about slabs, they referred to concrete platforms that cover the entire pit and might have footrests or not. By contrast, interviewees described sanplats as smaller platforms that are mounted on the latrine floor and do not cover the entire pit. Footrests were considered to be an essential part of a sanplat.

There was a clear trend that respondents stated that they copied the design of their latrine from latrines they knew i.e. from neighbours or parents etc. The two respondents (one in each community) that attended the CLTS triggering in Chagogo and Levi Chisi, stated that the facilitators gave information about different latrine options (e.g. brick-lining the entire pit to avoid collapsing, using a sanplat).

As money was frequently mentioned as an obstacle to get a sanplat or cement it was asked if the respondents knew how much the desired improvement would cost them. None of them knew exactly but all assumed that it would currently be beyond their financial opportunities.

4.3.3 Improving and upgrading of latrines

A latrine with a sanplat was the preferred latrine type for the majority of interviewees and FGD participants. Other desired options mentioned during the household interviews were VIP latrines, simple pits with a cemented floor or a domed slab (Figure 4-7).

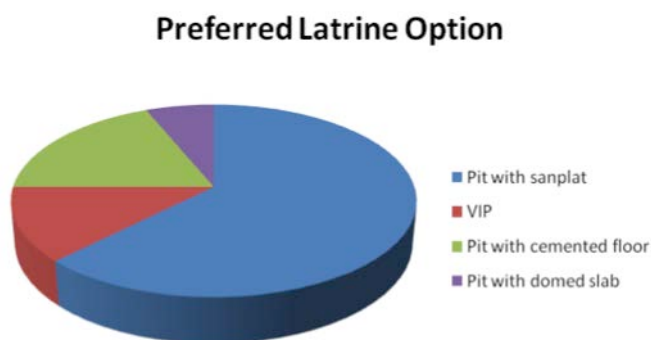


Figure 4-7: Preferred latrine type of the respondents of the household interviews

When asked for desired improvement for their current latrines many respondents reported that they would like to improve the roof to ensure that it does not leak during rainy season and also to provide shade and privacy. A few of the households aspired to have iron sheet roofs (also mentioned in some of the FGDs), but most households just wanted to improve

the thatching and pointed out that they had been lacking the time to proceed with these improvements during harvesting and that they would soon start. Smearing the walls with dark clay was important for women in Msenda, who reported that this would improve the aesthetics of the latrine.

The majority of household that currently had no concrete slab or sanplat stated that they would prefer to have one. Financial problems were the main constraints to carrying out this improvement. Although a lot of the interviewees mentioned disease reduction or health improvements as (one of) their reason(s) for having a latrine, no respondent assumed to have an additional health benefit in improving/upgrading their traditional mudfloor latrine with a sanplat or cemented floor. Here convenient usage, durability, reusability and easiness to clean would be main drivers. Other improvements like improving the roof and smearing the walls (as mentioned above) were related to comfort, increased privacy and convenience or to having a nice

environment. In one FGD women stated that they 'admire' households that had an iron sheet roof for their toilet, because it showed that these households had a convenient living environment and was related to households that had more money than the average.

In all FGDs the participants claimed that lack of financial resources was one of their biggest challenges in further moving towards their desired latrine option. Lack of materials was also mentioned but partly related to lack of money for purchasing materials. Household internal work distribution and different priorities was mentioned by one focus group as an additional challenge for upgrading and making improvements.

Mwase: [answers question 'what holds you back to move on now'] *"Most of the work is done by women."*

Cecilia: *"Men go away and drink beer."*

Eflima: *"That's also why we fail to maintain the roof because that is done by men."*

(Participants of female focus group in Msenda, Lilongwe district, 22.06.2011)

4.3.4 Promotion of sanitation in the communities

In three of the four communities, sanitation seems to be actively promoted. Sanitation in the communities is addressed mainly by HSAs, community volunteers and villages chiefs/headmen. In addition one female focus group identified under-five clinics as another important source of information for improved sanitation and hygiene behaviours. Sanitation related promotion messages mainly address the importance of constructing and using individual household latrine. District extension staff also addresses hand washing, while the community leadership seems to neglect this issue. Community leaders address the importance of sanitation in community meetings and also during funeral ceremonies, which are attended by most community members. The frequency of the promotion through village leaders could not, however, be determined. During a FGD in Chagogo the women stated that there was an intensive awareness campaign during the last cholera outbreak two years ago. Only in Eswazini did the interviewees state that there have not been a lot of campaigns and one interviewee even said that the last sanitation campaign she recalled had been implemented by agriculture extension staff in 1981. Other interviewees and the focus group participant qualified that statement, but it can be assumed that sanitation promotion had been less active there than in the other communities included in the study. During all focus group discussions participants stated that they gained more knowledge about sanitation recently and also improved their skills in the construction of latrines. Increased knowledge was identified as one of the main drivers for improvements of the communities' sanitation situation by all focus groups.

Annie: *"Two years ago we had men [for the labour] we had land but we were not able to dig latrines, why?"*

Machisale: *"I think it was because we were lacking the knowledge. If one had a latrine, many were sharing but most went in the bush."*

(Participants of female focus group in Levi Chisi, Mzimba district, 18.06.2011)

Nkata: *"That time [referring to the past] very few had knowledge and we had large bushes."*

Madalo: *"We had no knowledge then. We could even meet other people in the bush for example our father in law and we would not think 'I should build a latrine' but 'tomorrow I change the bush.'"*

(Participants of female focus group in Eswazini, Mzimba district, 19.06.2011)

4.3.5 Sanitation decision making and investments in latrines

Within the scope of the research it was not possible to conduct a robust willingness-to-pay survey. However, it was possible to ask some questions that could give some indication if rural households are prepared to invest in sanitation. Nearly one third (5 out of 16) of the interviewed households stated that they had paid for (parts of) their current latrine. These payments ranged from purchasing a whole 'package' (i.e. construction and materials) to only paying for poles and bricks as construction materials or providing the materials themselves but hiring someone for the construction of the superstructure and/or digging of the pit.

However, money was mentioned frequently as a constraint for moving on to a more improved sanitation in both FGDs and in the household interviews. The requirement and the lack of available cash was mainly mentioned in the context of buying cement or concrete sanplats, but also for purchasing an iron sheet to improve the roof, soap for hand washing or a door lock to keep non-household members from using the latrine.

Some FDG participants mentioned that the financial situation of the community members had worsened as agricultural prices have decreased since a few years. As mentioned before awareness, about the benefits of good sanitation and hygiene practices has increased and FGDs participants also mentioned that they give investments in sanitation and hygiene now a higher priority within the limited household budgets. In some of the women FGDs it was mentioned that women should have more control over the financial resources. Women in the remote rural trading centre Eswazini were quite enthusiastic about their existing options for getting access to micro-household loans and pointed out that those loans gave them more influence over how to spend money; which supports their own priorities including sanitation.

Jui: "There are groups that give us loans and funding."

Nkhata: "These loan packages we use for everything [after being asked if they used these loans for sanitation]. It is always better if the wife has money than if the husband has the money because the husband does not care as a mother does and spends the money not wisely."

(Participants of female focus group in Eswazini, Mzimba district, 19.06.2011)

Women in the study area appear to have a considerable influence on sanitation decisions. In the majority of households included in the interviews women stated to have decided themselves or together with their husbands to build a latrine or stated that they were the driving force behind their husbands' decisions.

4.4 Private Supplier Activities

The findings presented in this section are based on interviews with seven private suppliers. Two of them could directly be identified in one community, whereas the other five were not based in the studied communities. These were either identified by the community members, found through advice by key informants or among the participants of the *Business Opportunities in Water and Sanitation* workshop at the *Mzuzu Centre of Excellence for Water and Sanitation*.

4.4.1 Characterization of private sanitation suppliers

Despite the relatively small number of private sanitation suppliers that were interviewed for this study, a variety of business models could be identified. The private suppliers met during the fieldwork can be subdivided into four broad categories:

Independent private providers with sanitation as a core business



In Mzuzu (Northern Mzimba) a private entrepreneur has set up a pit latrine and septic tank emptying service popularly known as Mr Clean Malawi. This was the only supplier that could be found that had sanitation as a core business and set up the business independently without support from NGOs. Having started with manual emptying, the business now moved on to mechanical emptying technologies

Figure 4-8: Office of Mr Clean in Mzuzu

using two vacuum tankers and a gulper. The core business area are urban and peri-urban areas of Mzuzu, but the owner claims that he also finds business in more rural areas and is currently trying to get involved in a UNICEF supported rural school latrine project. In this context, the owner also reported that he started looking into opportunities for the reuse of human waste as fertilizer, which he wants to integrate in his business soon.

NGO supported private providers with sanitation as a core business

Two suppliers started their business by being involved as volunteers in NGO-led sanitation projects that promoted the marketing of ecosan technologies. For both of them this start-up support was within the CCAP/WaterAid project. One of them is based Jenda and Embangweni (where the WaterAid/CCAP project initially started) and the other is based Dunduzu close to Mzuzu. Both suppliers now moved on and run their businesses as independent entrepreneurs and run family businesses, but the initial set-up was supported by the CCAP project, which involved training, cement subsidies and financial support. In Jenda, WaterAid and CCAP provided funding to set-up a demonstration site where the entrepreneur now showcases his different latrine options.

Independent suppliers providing sanitation products/services but not as their core business

This category could be further subdivided into formal (i.e. registered) businesses and informal businesses. The two private suppliers included in the study that fall under this particular category have established concrete hardware businesses in the Southern outskirts of Lilongwe. Selling concrete slabs and drophole covers only contributes a small proportion of their business income. Both businesses are located at the main route to Blantyre but one of them is registered as a company and offers its services and product in a designated trading area (St Jones) while the other is informal and sells its product just besides the road, which is not legal according to the City Council's regulations.

Community members who are occasionally involved in the construction of latrines

These could also be classified as informal suppliers under the former category but the main difference is that these suppliers do not actually run a business and only act as suppliers on an ad-hoc basis. Some households stated that they paid cash for these services but some also said that there are community members who would build latrines without receiving any payment or only a meal or any other small gesture of gratitude. Obviously these community members did not receive any training or professional support for developing their skills and do not consider their service delivery as a "business".

4.4.2 Product and service range and flexibility of payment options

The suppliers included in the study offered the whole range of services included in the sanitation supply chain. Products and services ranked from pre-cast slabs, ready-made hand washing facilities to complete latrine constructions and pit emptying and waste reuse. However, it was not possible to identify suppliers that were directly located in the communities (not even in the two trading centres) that were involved in sanitation services on more than an ad-hoc basis. Two of the suppliers focused their businesses around ecosan technologies including slabs for the *arborloo*, *fossa alterna* and the urine-diverted *skyloos*. Both offered ready-made slabs (with or without urine-diversion) as well as the onsite construction of entire latrines including digging and superstructure construction. Moreover, they both stated that they would instruct and train their customers how to harvest the decomposed faeces (humanure) from the *fossa alterna* or *skyloo*. However, they also reported that most customers preferred to buy a simple slab and one of them even expressed that his main source of income were seedlings that he nursed using urine and humanure from his own family latrine.

The entrepreneur based in Jenda has furthermore developed a detailed business and construction plan (Figure 4-9) for a public toilet block in Jenda, which is an important bus hub where all buses

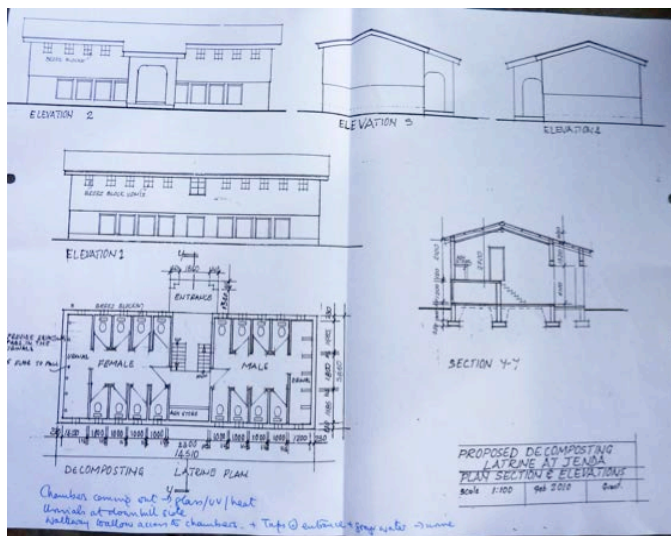


Figure 4-9: Construction plan for public toilet block at bus stop in Jenda

Source: PP-Presentation by John Meadley, Private Consultant, Mzuzu Centre of Excellence for Water and Sanitation, 09 June 2011

need to stop because of a police roadblock. The entrepreneur stated that he saw the opportunity to fill a market niche with this business as the District Assembly failed to provide public sanitation facilities in Jenda, despite repeatedly declaring to intent to do so. As the reuse of human faeces and urine is part of the business plan, the set-up of the business will also involve a manure bank as well as a gravity-fed pipe scheme that should divert the urine into a collector tank

adjacent to a banana plant. The operation of the business would require a staff of 15 people.

As stated before, the business specialized on emptying pit latrines and septic tanks also looked into the production of fertilizer from human waste. The entrepreneur stated that he assumed that the subsidies for chemical fertilizers in Malawi might potentially soon disappear; which would open up a market for locally produced fertilizer.

The most flexible payment options were offered by the two private suppliers that were formerly involved in the NGO programmes. These suppliers reported that they offered their customers payments options ranging from cash payment (in instalments or not) to payment in goods or animals like maize, chicken or goats. One payment option was especially designed for the arborloo was referred to as the “banana scheme”: The supplier provides the slab for the arborloo for free but then gets the first yield of the banana tree planted after the pit filled up.

The two hardware suppliers in Lilongwe district could not provide such flexibility in payment options and products. Selling cement slabs for latrines (Figure 4-10) was only a very small part of their business and they both stated that they could not live from this business part. One of them stated that the demand for slabs was very seasonal and that people would only buy slabs during or shortly after the rainy season when their previous latrines had collapsed. One of them sold slabs



Figure 4-10: Concrete hardware supplier with cement slabs at St Jones, Lilongwe district

with drophole covers and a fitting hole for a ventpipe. Asked why he sold this arrangement, he was convinced that the VIP latrine needed to have a drophole cover and reported that he also passes on this information to his customers. In terms of payment options, these suppliers had the disadvantages that many of them had a lot a less personal relationship with their customers and therefore reported that they insisted on cash and down payments for contract work.

4.4.3 Sanitation promotion activities through private suppliers

Only the two entrepreneurs who were formerly involved in the CCAP/WaterAid ecosan sanitation marketing programme sanitation included active sanitation promotion as part of their business promotion. Both of them expressed that they used community meetings to inform the community members about the disadvantages of unimproved sanitation facilities. In 2008, the entrepreneur based in Jenda and Embangweni launched a demonstration site for the different ecosan latrine options he offers in the relatively large and busy rural trading centre Jenda. There he explains people the functioning of the different latrines but also informs and trains interested NGO staff. Mr Clean has established an office with good visibility in Mzuzu city to promote his services. In addition, well known through various newspaper articles and now well linked to the Mzuzu City

Assembly and NGO partners. Nevertheless, given the nature of his business, he does not promote latrine adoption but is advocating the reuse of faeces within the City Assembly.

4.4.4 Policy and regulations for private supplier activities

The interviewed private sanitation suppliers stated various ways in which governmental policies and regulations affect their businesses. Most of them expressed that existing policies and regulations restricted their businesses, rather than feeling supported by any kind of governmental regulation or policy. As an exception, Mr Clean reported that he saw an opportunity to win more recognition and support from governmental side as the NSP explicitly encourages the reuse of waste. However, he also stated that he be dependent on the regulations set by the Malawian Bureau of Standards (for his fertilizer production) and on the District and City Assemblies' sludge disposal regulations that could potentially restrict his business plans. In his first experiments with growing crops on land improved by fertilizer from faecal sludge he had to 'illegally' apply the sludge on his own land.

Urban planning regulations affected the current business or the business expansion plans of three suppliers. The informal concrete hardware supplier in peri-urban Lilongwe stated that his business was always under threat of being evicted from the Lilongwe City Assembly, as it was illegal to sell anything along the road outside of the dedicated areas. Being an informal business also prevented him from building a fence to protect his goods from being stolen during night. He felt that it was not possible for him to formalize his business and move to the dedicated area as this would require money for the registration and he would also face too many competitors there.

Even the formalized private supplier in the dedicated selling area stated that this formal status still gave him no planning security for his business since the selling site was only temporary and he did not know how long he could stay there. He argued that Lilongwe is a fast growing urban centre and the municipality might have other development plans for the area. Due to the temporary status of the site the City Assembly refused to install a water supply which fundamentally complicated his business.

In Jenda, urban planning regulations kept the public toilet business plan from being realized since the District Development and Planning (DDP) office of Mzimba district had to demark an area for the entrepreneur to start his business. The entrepreneur claimed that he raised the issue several times at DDP level but nothing has happened so far, despite the DDP acknowledges that there is a need for public sanitation facilities in Jenda.

4.4.5 Support and cooperation for and within the private sanitation supply sector

There is currently no significant collaboration between the district governments and private suppliers. Only Mr Clean could reported that he had some kind of on-going relation with the

Mzuzu City Assembly as he was filling an important market niche and public service gap. No supplier could say that he (the interviewees were all male) benefited from the CLTS implementation or were linked to any CLTS facilitator or extension worker to increase his businesses in communities.

With respect to sanitation promotion and integration in sanitation programmes some suppliers were linked to NGO programmes on a more or less on-going basis. The two former CCAP volunteers still had strong links to CCAP staff. One of them still received some informal business support (gets which he pays for seedlings that he could nurse and sell at a higher price). The formalized concrete hardware supplier at Blantyre Road reported that NGOs occasionally hired him for sanplat and slab casting trainings in villages. However, this only happened on an ad-hoc basis and not a stable relationship he could rely on.

Most private suppliers relied on local supply chains, which mostly concerned the purchase of concrete components. Overcoming gaps in local (or even national) supply chains suffered from various difficulties: one supplier had an additional business in ceramic water filters that he (through CCAP) imported from India. High import taxes decreased the viability of this business. Mr Clean had to import his vacuum tankers from Japan via Internet and faced the problem that the delivered tankers were not suitable for his business as they pumps were too weak and the hoses were too narrow.

Neither continuous collaboration nor any elaborated franchising or network business models could be identified between the different suppliers. The two concrete hardware suppliers however stated that they would occasionally advise their customers about a potential latrine builder, which could be a formal or informal mason.

Nevertheless most interviewees stated that they saw potential benefit for their businesses in a more developed professional network and cooperation. Access to finances (including loan programmes) and marketing/business training was mentioned as necessary support as much as linking-up with school sanitation programmes either for latrine construction or emptying. The importance of networking between the different entrepreneurs but also between suppliers and public stakeholders was also addressed at the *Business Opportunities in Water and Sanitation* workshop in Mzuzu which aimed amongst other objectives like knowledge transfer to lay the foundation for such a network.

4.4.6 Other challenges for the businesses

Additional challenges mentioned by the suppliers completed the picture of what would be necessary to build up more sustainable and viable business opportunities in rural sanitation in Malawi.

Lack of adequate transport makes it difficult for the suppliers to reach out to more remote areas. Also their customers often did not have the possibility to leave their communities very often and thus might not know about the services. Insufficient market volume and the seasonality of the demand were mentioned as major challenges by most of the entrepreneurs. There was no agreement amongst the suppliers if financial problems are a *real* or rather a *perceived* constraint that restricted their potential rural customers. All interviewees acknowledged that the financial capacity of rural customers is limited but some of them argued that it would be the governments' responsibility to change their mind set and put more emphasis on the fact that sanitation is a basic need and monetary investments are therefore not a luxury but a necessity.

Proposed means to change the mind set and perceptions of people included community mobilization and sensitisation but also the set up and enforcement of regulations that would for example enforce the adoption of latrines and restrict the possibility to share latrines.

Mr Clean who set-up his business by himself and who had overcome stigmatisation of his business and various other start-up challenges that had affected his business and personal life stated the concern that the increasing interest of NGOs in market-based approaches might lead to unbalances in the market and unfair competition.

Some key informants stated that the *Water for People Sanitation as a Business* model (as described in section 2.9) did not work. It was argued that entrepreneurs within this business model would not have any immediate incentive and the payback period was too long so that the supplier would carry the risk of the business.

4.5 Summary of Findings

The case study in four rural communities in two districts of Malawi has shown that at district level the sanitation sector is still divided between the district health and water offices as the district water offices do not have the capacity to implement sanitation interventions with their limited extension staff. However, the health extension workers have numerous responsibilities for community development and therefore had difficulties prioritizing sanitation. In general, funding for sanitation is limited and project bound and the UNICEF WASH project is the main source of funding. Both districts currently implement CLTS as the main sanitation promotion approach. Sanitation is not clearly prioritized in the districts and there is a clear gap of long-term planning. Through a AfDB funded programme Lilongwe district has concrete plans to introduce sanitation marketing in several market centres, whereas district staff in Mzimba assumed that sanitation marketing will be introduced in near future but had no clear knowledge, how and when these general plans would be followed-up.

In the communities latrine adoption appeared to be quite high and all interviewed households had a latrine. Nevertheless, knowledge about different latrine technologies, their technical specification and supply options was limited. Differences could be identified between the perceptions of the benefits of adopting a latrine (health and hygiene improvements) and improving current latrines (more convenience). Women played an important role in household decision-making relating to sanitation and a considerable number of households had already invested cash in their sanitation facilities. Improved knowledge and awareness about the importance of sanitation was seen as a main reason for improvements in recent years. Sources of information were mainly messages from HSAs but also the community leadership was addressing sanitation at community meetings. Persisting challenges were mainly financial constraints and competing household priorities.

The identified private suppliers could be divided into four broad categories: *Independent or NGO supported private providers with sanitation as a core business, Independent suppliers providing sanitation products/services but not as their core business* (formal and informal businesses) and *community members who are occasionally involved in the construction of latrines*. A wide range of products and services was offered but most suppliers did not have a far outreach to more remote communities. Sanitation promotion was only done by the two suppliers who were formerly involved in NGOs programmes and one independent provider (pit emptying business) promoted his services. Networks between the suppliers or partnerships with the district government did not really exist and district regulations and policy elements were mainly seen as a barrier for business expansion rather than as an opportunity.

5. ANALYSIS

The following chapter aims to analyse the findings presented in Chapter 4. The categories of the marketing mix for sanitation marketing (section 2.7, Figure 2-4) serve as a framework for analysis. In doing so, the author aims to return to the three research objectives (section 1.3). An overview of how these three objectives relate to the single categories of the extended marketing mix (seven P's) is given in the summary of this chapter.

It is understood that a well-designed sanitation marketing programme strives to *create the 'right' marketing mix* and thus there is no need for a marketing mix to already be in place before a programme is started. However, if sanitation marketing will be introduced at scale in Malawi, programme managers will need to return to the categories of the marketing mix. This analysis therefore aims to show what sanitation marketing programme managers could potentially build on and where main gaps are located. Therefore the analysis will be around the roles and capacities of the involved stakeholders. Gaps in existing knowledge that need to be addressed by more research will be indicated and revisited in the subsequent chapter that will give some recommendations for future research. As a second subordinated analysis framework that is particularly important for the analysis of the households' capacity to support market based approaches, the SaniFOAM behaviour change framework (Devine, 2010; section 2.7, Figure 5-1) was used. To avoid extensive cross-referencing that might disturb the reading flow thoughts that relate back to the main categories within the framework (*Focus, Opportunity, Ability, Motivation*) are marked with ***italic and bold*** fonts.



Figure 5-1: SaniFOAM framework

Source: Adopted from Devine (2010, p.42)

For the analysis in this chapter the findings from the case study as well as from relevant chapters of the literature review will be combined with the opinions of the author. Meeting the research objectives through the analysis will set the ground for returning to the main aim of the study, which will be presented in the subsequent chapter.

5.1 Product

To discuss the three objectives within the context of the 'Product' component of sanitation marketing mix, it first needs to be recalled what the product component in sanitation marketing involves.

The product of sanitation marketing has two dimensions (section 2.7.1): Firstly, the product component describes sanitation hardware products and/or services that are offered by private suppliers. However, these products are only the means to achieve or support the other dimension of the sanitation marketing product, which is a desired behaviour change, i.e. the adoption of improved sanitation practices.

As a starting point for the analysis of what degree and how district government and the private sector can support or deliver the product component and what capacity the communities have to adopt the products, it needs to be emphasized that introduction sanitation marketing in Malawi will not be done in a green-field situation: The implementation will build on and/or will be constrained by on-going processes and dynamics in the rural sanitation sector.

CLTS is currently the dominant sanitation promotion approach in Malawi. Amongst programme managers and responsible district staff there is an understanding that CLTS and sanitation marketing need to be somehow combined and/or integrated. Nevertheless, there is no agreement or vision of how this combination/integration should be done. This is not surprising, since, as discussed in section 2.7.4, due to the novelty of the two approaches, there is generally no widely recognized or evidenced based 'best practice' for the combination and or integration of CLTS and sanitation marketing.

One could argue that CLTS is a form of marketing that uses shame and disgust as negative and status as positive motivation forces. Challenging or justifying this view is not the purpose of this analysis but the concept shall be used to point out that CLTS also involves a product, taken to mean the targeted behaviour change, which is different from the product of sanitation marketing. CLTS focuses on the eradication of open defecation while sanitation marketing aims to support people to move on to more improved sanitation and hygiene products/behaviours (section 2.7.4, Box 2-6). For these different products, different promotion tools are needed and the sequencing of CLTS and sanitation marketing has to take into account (more details are given in section 5.2).

As discussed in section 2.7 latrine adoption follows a process of decision-making (Jenkins & Scott, 2007; Jenkins & Sugden, 2006, p.11-17; Jenkins, 2004) that is determined by various motivators and barriers, which are different for moving from open defecation to basic sanitation and hence proceed from basic sanitation to improved sanitation (Thomas, 2010, p.8). In accordance, the

findings from the case study suggested a clear divide between the motivators and barriers for adopting basic latrines and respectively improved latrines, which is shown in Figure 5-2.

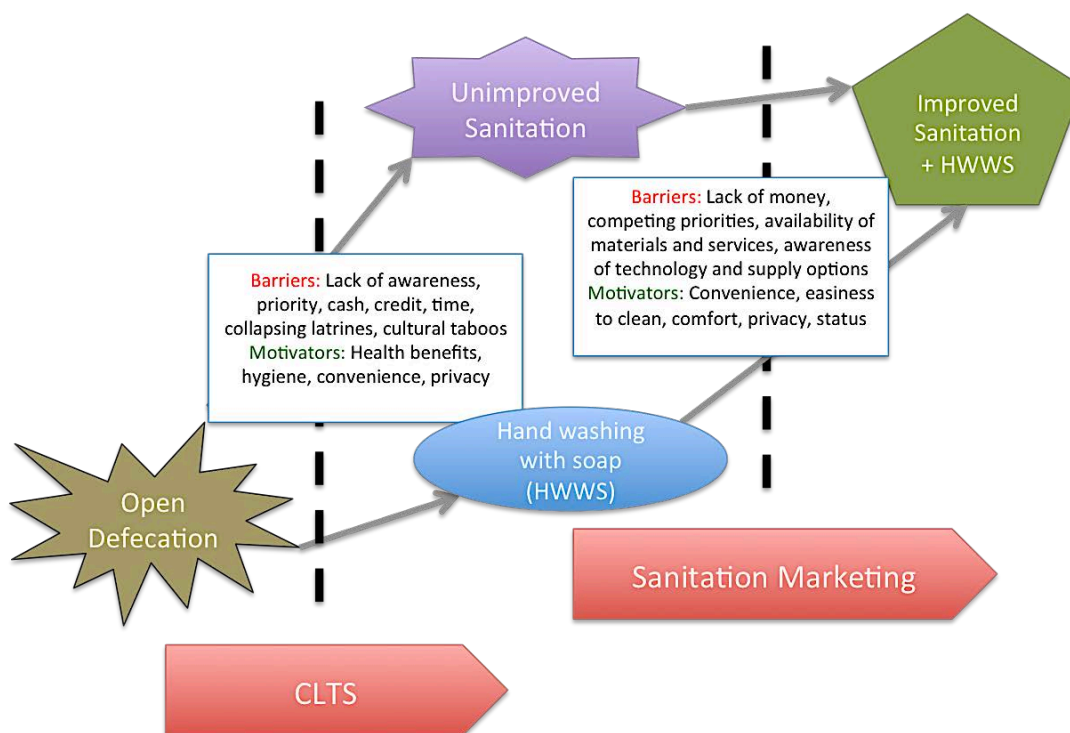


Figure 5-2: Behaviour change drivers and challenges as found in the case study communities
Source: Modified from Thomas (2010, p.8)

Accordingly, the frequently stated reason for looking into the introduction of sanitation marketing as to respond to the demand for sanitation created by CLTS (section 4.2.5) is a misconception. Sanitation marketing is not only about the supply side since demand for a particular product that is different from the product ‘marketed’ by CLTS needs to be created. Consequently sanitation marketing needs to link demand and supply side with the provision of products that “respond to the consumer demands, needs, aspirations and desires.” (USAID HIP, p.8)

Referring back to the SaniFOAM framework; although the household interviews and FGDs in the communities showed that there is a preference for *improved* sanitation, determinants that influence this **motivation** - like the importance of competing priorities - might be fundamentally different and differently weighted from those for adopting a latrine.

As discussed in section 2.7, demand, according to Jenkins (2004), is only created when the customers have **motivation**, **ability** and **opportunity** to acquire a product. This clearly distinguishes demand and desire. In the studied communities the people had the **motivation** to move on to improved sanitation products (preferably by adopting a sanplat) but were lacking the **opportunity** and **ability** to acquire them as a result of limited financial resources, lack of awareness or knowledge about technology and service options and in some cases availability of materials.

From the sanitation supplier side the customers' **opportunity** to acquire products was not limited by the general range of products offered, which was quite broad (section 4.4.2) but by the available range of products in the communities and knowledge about the technology and access option. These problems concern the *Place* and the *Promotion* of the product and thus will be discussed in sections 5.4 and 5.2 respectively.

Informants in the communities stated that increased knowledge and awareness had enabled most community members to overcome open defecation. However, now, cash was an important barrier to move on to more improved sanitation. Nevertheless, a considerable number of households had already paid for (parts) of their latrines, which indicates that there exists some willingness to invest in sanitation and as mentioned before there was also a general motivation or preference to improve or upgrade household latrines. Consequently it is worth discussing how flexible the providers could be in finding innovative product designs that reduce the costs of the products and therefore enhance **ability** for more customers to purchase their products.

USAID HIP (2010, p.2) state that it is a general misconception of household latrine programmes to expect that the capacities for the provision of affordable sanitation options exist and do not need to be developed or supported. The findings from the field research confirmed that the rural sanitation market in Malawi is far from being professionalized and therefore it cannot be expected that the existent suppliers find appropriate marketable innovations without any support. In a sanitation marketing approach it would be the role of government or respective supporting agency or consultancy to support the private sector in findings ways for product innovation that increase the potential market volume based on the outcomes of a formative research and market segmentation process. Rosenboom et al. (2011, p.28) argue that the external supported design phase in sanitation marketing approaches need to create products that are affordable, functional and desirable from the end-users' perspective as well as marketable and profitable from the suppliers' perspective.

For the consumers in the studied communities the preferred or desirable latrine option was to have a cemented slab or sanplat, on the other hand cement was regarded as the main constraint for affordability. From this basic assessment (which obviously had not the depth and complexity of a formative market research) product design could proceed in one of two ways. Either it could be tried to reduce the cement component for the sanplats and or slabs, or the necessity of concrete could be challenged and promotion would be needed to raise the awareness and attractiveness of latrines made from traditional materials or concrete-alternatives.

The latter approach would reflect the recent rejection, by many stakeholders in the Malawian sanitation sector, of the fixation on cement slabs reconsidering instead traditional latrine technologies (section 2.8.2). However, the increasing interest in marketing approaches seems to

mark a step back in this shift of mind sets, since, as mentioned in section 4.2.5, sanitation marketing was frequently related to cement slab adoption. Designing products with traditional technologies that meet the criteria of being marketable and profitable for the private suppliers might be challenging as such designs might be more adequate for self-supply.

The potential of emptying services becoming a successful product in the studied communities appeared to be very limited, even though upgrading of latrines might involve more permanent superstructures. However, in more peri-urban areas or in areas where sandy soils may require costly pit lining emptying services might be increasingly demanded. Some of the interviewed suppliers expressed that they would welcome the district government to carry out a catalytic role in building up linkages between pit emptiers and rural institutions such as schools (section 4.4.5).

5.2 Promotion

Knowledge about different sanitation hardware products and services and their availability was very limited amongst the respondents in the communities (section 4.3.2). This affects the **ability** of potential customers to adopt a desired improvement.

As shown in Figure 5-2 the nature of the *desired improvement* and the linked motivators and barriers vary. Therefore, the concept of market segmentation (section 2.7) has to be recalled as a means not only to design the right range of products (as described above) but also to develop the right set of strategies and to decide for the right sanitation intervention.

As argued by Thomas (2010) as well as Jenkins and Scott (2007) different needs, socio-economic backgrounds and starting points in the population have to be recognized (section 2.7). In rural Malawi the baseline for basic sanitation is relatively high and in the studied communities most of the households had adopted latrines. CLTS might not be the appropriate intervention for households that have already adopted a latrine and now (driven by different motivators and constrained by different barriers) want to move on to improved sanitation. As argued by Devine and Sijbesma (2011, p.59; compare section 2.3), sanitation marketing, however, might neglect the barriers of non-adopters (Figure 5-2).

The success of the coordination of the two approaches would rely on the districts governments' capacity to understand the different market segments. In both studied districts this coordination capacity might be limited as shown by the insufficient CLTS follow-ups and monitoring. Without good data about the current status of the communities it will be difficult to decide on the right combination and sequencing of interventions and their adaptation to suit the local contexts.

The weak evidence of and knowledge about the right sequencing of CLTS and sanitation marketing (Box 2-6 p.27) would make careful monitoring even more necessary as the districts could not refer to any tested implementation model.

The capacity of the private sector to enhance **ability** for latrine improvements, through knowledge transfer to customers is currently not adequately developed. As shown in the VIP examples (section 4.3.2 and 4.4.3), misconceptions about the technical specifications of latrine options were not only prevalent amongst customers but also amongst suppliers. Passing on of inappropriate installation and operation information from suppliers to their customers might cause frustration, as after an investment, the product may not show the desired effect. In the context of the introduction of scaled-up sanitation marketing, providers might also extend their technology and service options and might need to learn about the specifications of new products. Consequently, capacity and knowledge building amongst private entrepreneurs, through the district government or partners in the implementation of the sanitation marketing approach, would be necessary to fulfil the requirement to provide the customer with an informed choice (Peal et al., 2010, p.92; see section 2.7.3).

Furthermore, the **ability** to improve or upgrade a latrine is determined by intra-household role distribution and decision-making patterns. In the case study communities it was shown that one should not neglect the influence that (even non-head of household) women have on household decision making. Nevertheless, female respondents admitted the competing priorities between men and women that determine the **motivation** for improving and upgrading a latrine. Both factors need to be taken into account when using hygiene and sanitation and promotion channels to **focus** on the target population. Current sanitation promotion channels in the case study communities could be identified as HSAs, community volunteers and village chiefs, whereas private suppliers played no considerable role.

With respect to the promotion channels of sanitation marketing the two dimensions of the product component of sanitation marketing (as described above) need to be recalled.

It is unlikely that private suppliers will have the capacity to promote improved sanitation behaviours at scale and private suppliers already mentioned that it would be necessary that the (district) government more actively raise awareness about sanitation and help to change the mind sets. Devine and Sijbesma (2011, p.58) support this view by noting that from experience it is rather unlikely that smaller suppliers will actively promote sanitation even if trained to do so. Experiences (e.g. Whaley and Webster (2011), as discussed in section 2.7) have shown that sustainable behaviour change needs frequent long-term follow ups, and according to Rosensweig and Kopitopoulos (2010, p.13; see section 2.7.4) it is the district governments role to prompt this behaviour change and thus to create demand for the products and services offered by the private suppliers. The districts would therefore most likely again rely on the extensions staff, who would not only require additional training, as argued by Godfrey et al. (2010, p.36 - discussed in section 2.7.6), but also measures to relieve their already overloaded working schedules.

When this demand is created and private suppliers see the option of profitable business their success could be increased by supporting them with training about innovative product marketing. Some private suppliers were already actively promoting their products and used innovative approaches to do so (section 4.4.3). Promotion does not only include the spread of messages about the product (taken to mean an item, service or behaviour) but also making the product more visible by simplifying or branding it. As discussed in section 2.7.3, experience has shown that branding plays an important role in sanitation marketing approaches in particular if franchise approaches shall be established. It is therefore encouraging that branding was already applied by some of the interviewed rural suppliers as a successful strategy to market and promote a product or service. The most obvious example is Mr Clean, who turned himself into a brand and consequently managed to get his business name known and attributed to pit latrine and septic tank emptying services throughout the country. The CCAP/WaterAid project used to overcome the notoriously technical and unattractive names of sanitation product by using 'branded' product names like *skyloo*, which is by far catchier than *urine-diverted-dehydration-toilet (UDDT)*. These examples show that some private suppliers already think as *entrepreneurs* and regard their activities as a business that aims to increase its market share.

5.3 Price

Favourable for the introduction of sanitation marketing at scale in Malawi, is the government's recent rejection from hardware subsidy driven approaches, as according to experiences in other countries sanitation marketing does not work well where hardware subsidies are persistent (USAID HIP, 2010, p.5). The interviews with household and districts as well as the focus group discussions have shown that some NGOs still practice some form of hardware subsidies (e.g. the provision of cement for the construction of slabs). In areas where these NGOs are active, private suppliers might find it more challenging to penetrate the market and district governments might need to increase their coordination and regulation role in order to harmonize approaches.

However, if the *focus* of sanitation intervention is shifted from eradication of open defecation to improved sanitation facilities (as described above), social inclusiveness of the very poor has to be assured with appropriate means (see section 2.7.2). As discussed before, product innovation could potentially mitigate to some extent the financial constraints faced by the consumers.

The financial situation of the majority of the households included in the case study was obviously challenging but there was a general expressed willingness to invest in sanitation improvements, however to very different degrees. As described in section 4.3.5 some respondents indicated that their *motivation* to invest in sanitation has increased because increased knowledge shifted the priorities within the household budget. The *ability* for those investments, however, was perceived

to be still quite restricted as most households stated that they could not afford a sanplat or cement slab without subsidies and finance options. Respondents in one community reported that they would make use of microfinance credits and also use them for investments in sanitation improvements, but the **opportunity** of access to microfinance options was not given in all communities. The current plans for sanitation loan programmes and integrating them in sanitation marketing programmes (section 4.2.6) will potentially enhance these opportunities. Such arrangements would pick up on the recommendations of Hanchett et al. (2011, p.vi-vii) that financing mechanisms for upgrading and improving latrines are essential for sustainable sanitation programmes (section 2.3, Box 2-2).

As discussed in section 2.7.2 there are varied options for financing mechanisms in sanitation marketing. Well targeted pro-poor subsidies as a means to make improved sanitation accessible for the poorest and most vulnerable as proposed by WSP were part of the original plans for the introduction of sanitation marketing in the UNICEF WASH districts (DCT Lilongwe District, 2007, p.22; DCT Mzimba District, 2008, p.22) but given the tight district budgets and small budget allocations for sanitation it is unlikely that such subsidies would be introduced without continuous donor support and commitment.

Some entrepreneurs were able to provide very flexible payment options (section 4.4.2). However, the flexibility of payment options clearly depended on the relationship between the entrepreneur and the customer and decreased with increasing anonymity of the customers. The need for close relations to offer more flexible payment options might counter the need for businesses to increase their radius of business to become more viable.

5.4 Place

As with financing options (see above), the **opportunity** of access to sanitation products and services varied within the communities included in the case study. Public transport is hardly existent in more remote areas and currently suppliers do not really outreach to these areas. Even in the more accessible areas, private suppliers that provided sanitation services on more than an ad-hoc basis could not be identified (section 4.4.2). Confirming the experiences reported by Sugden (2003; compare to section 2.9) lack of knowledge clearly restricts access to products and services as many community members stated that they were not aware who they could contact for sanitation products and services.

As mentioned before, UNICEF has not decided yet what kind of business model will be integrated in the sanitation marketing component of the WASH project. Plans for the rural areas (AfDB, NWSP) sanitation marketing project in Lilongwe (section 4.2.4) propose an outreach component but how effective this can be adopted is still to be proven. The proposed business model

approach might increase the total market volume of the sancentre as it bundles the fragmented demand (section 2.7.6) to some extent but the market volume for each of the franchisees might remain quite small. In terms of sustainability of the sancentres themselves, experiences with the rural SaniMarts are rather critical (section 2.7.3) and a commercial orientation and some franchising alone might not be sufficient to establish viable businesses. In this context, recent experiences on sustainability of sanitation businesses in Bangladesh, reported by Hanchett et al. (2011, p.v) also indicate that businesses that sell a variety of (concrete) products are more likely to be sustained than businesses focusing exclusively on sanitation.

The private sector needs a sense of business security to be prepared to invest in and expand businesses and consequently play a more important role in sanitation delivery, but as shown in the case study suppliers that offered their services at a fixed place reported that they were lacking planning security because of insecure land tenure or legal restrictions for informal businesses. As increased private sector participation in the delivery of sanitation is a strategy of the NSP (MoIWD, 2008) there is a need for district governments to increase their supporting role and enable more secure planning for the formal businesses as well as to check the potential of finding ways to strengthen the dialogue with the informal businesses.

Through the extension staff the district governments have quite good coverage even in remote and hard to reach areas. Consequently, there would be the potential for HSAs and WMAs to support private suppliers by spreading the word of mouth and linking suppliers with interested communities. Obviously, it needs to be taken into account that the responsibilities and tasks of the extension staff are already overstretched and capacities might be insufficient without additional support.

5.5 Policy / Politics

Here, the analysis is partly guided by the WSP dimensions of an enabling environment for rural sanitation (section 2.7.4, Figure 2-11). In order to recall, these dimensions are: *Policy, Strategy, Direction, Programme Methodology, Implementation Capacity, Availability of Products and Tools, Financing, Cost-effective Implementation and Monitoring and Evaluation*. As mentioned in section 2.5 a favourable enabling environment is regarded to be potentially the key for sustaining behaviour change (Scott, 2005).

In contrast to many other countries, the GoM has launched a discrete sanitation policy (MoIDW, 2008) that includes sanitation marketing as a key strategy for sanitation promotion. However, during the case study it was identified that there was a lack of awareness about the contents of the different government strategies at district government level. This also hindered the

establishment of partnerships with private entrepreneurs (see also section 5.6), which are (as mentioned above) explicitly recommended in the NSP (MoIDW, 2008).

The ability of the district to develop and follow long-term strategies and direction has to be linked with district finances and budget mechanisms.

One of the three minimum resource requirements to enable TSSM implementation is that governments need to have an annual budget allocation for TSSM (Rosensweig & Kopitopoulos, 2010, p.iii; section 2.7.4). Moreover, as mentioned in section 2.3 (Box 2-2), Hanchett et al. (2011) recommend that local governments need to have some level of sustained financing in order to assure that sanitation programmes can be sustained and cause lasting behaviour change.

In Malawi, the implementation of WASH activities at district level crucially depends on donor (i.e. project) funding and on annual governmental budget allocations. As both districts reported that they encountered problems with inconsistent and delayed funding within the CLTS implementation (section 4.2.3) it is questionable if district governments will receive reliable financial support for additional or integrated sanitation marketing activities. This is unlikely to change until the IWSS SWAp is established and progress in the establishment is slow. As a result of this current dependency on direct project funding, donors, have a very notable influence on the general direction of the WASH activities in the districts. Therefore the districts' long-term planning and direction was very weak and hardly existed beyond the lives of individual project in Lilongwe and Mzimba district.

USAID HIP (2010) rejects the assumption that the introduction of sanitation marketing, by focusing on building up the private sector, would relieve the district governments in terms of financial and human resources

(section 4.2.5). When introducing sanitation marketing, it is the districts government responsibility to enable the private sector to play a more important and formalized

“Sanitation marketing is a form of admission of failure by the sector that it can regulate. Sometimes I worry that marketing will take the place of regulation and policy.”

(Sanitation expert, Lilongwe, 08 June 2011)

Quote: Sanitation marketing and regulation

role in the provision of sanitation services and to change its own roles and/or adopt new roles accordingly (ibid, p.8). According to Rosensweig and Kopitopoulos (2010, p.13; section 2.7.4), the set-up and enforcement of legal regulations and standards is one of the key roles of local governments in sanitation marketing. This role should also involve the regulation and licensing of providers and enforcement of standards. Several private suppliers and community members demanded more regulation and enforcement concerning latrine adoption. As mentioned in

section 2.5, Scott (2005) supports these requests by acknowledging that political enforcement can play an important role to accelerate behaviour change. Currently the districts do not actively regulate rural sanitation, while urban sanitation is regulated by the City Assemblies. Whether the district government would be able to adequately adopt an enhanced regulation role for the implementation of sanitation marketing with its current capacities needs to be challenged.

For the reasons mentioned before (section 5.3), an additional area for regulation would be the harmonization of the general direction and guiding principles of NGO and government approaches.

Moreover, the adoption of sanitation marketing would not only leave the districts with an increased need for regulation but also demands that the district government act as “key player in catalysing and legitimizing the market” (USAID HIP, 2010, p.8).

Referring back to the WSP dimension of the enabling environment for rural sanitation (see above) the *implementation capacity* and potential for *cost effective implementation* need to be analysed in this context. The institutional set-up and distribution of roles and responsibilities for sanitation between the DWO and DHO is not entirely clear (section 4.2.1) this limits clear accountability for implementation and complicates the coordination of interventions. Rosensweig and Kopitopoulos (see above) note having *an adequate number of qualified staff for CLTS and sanitation marketing activities* as another minimum requirement for TSSM. Considering the busy working schedules of district senior staff and the challenging workload and wide-ranging tasks and responsibilities of extension worker the integration of additional tasks for sanitation marketing might be challenging. The current arrangement of paying allowances for CLTS activities would probably be replicated for sanitation marketing promotion activities, which would make a cost effective implementation more difficult.

In terms of staff qualifications, Godfrey et al. (2010, p.36; compare to section 2.7.6) point out the implementation of sanitation marketing needs very specialized skills. In addition, the set of skills required gets more complex if it is combined with CLTS. From the author’s impression, capacity building in terms of number and qualifications of staff would be needed to fulfil the requirement for adequate implementation capacity.

As mentioned before, transport in Malawi can be very challenging and was an expressed constraint for the CLTS implementation. With the tight district budget it might be difficult to develop the districts transport equipment, which interferes with third and last resource requirement mentioned by Rosensweig and Kopitopolous, the availability of sufficient supplies and equipment like transport for facilitators.

Finally, it became obvious that the districts currently fail to prioritize sanitation. This failure might be partly caused by the fragmented and somehow overlapping responsibilities for sanitation on

district level that are caused by the incomplete decentralization of the sanitation sector but is also an inherent result of the participatory district planning. The way in which the DDPs are developed cause to some extent a *chicken-and-egg situation*: If communities are not aware of sanitation and hygiene they are unlikely to bring it up as a development issue during the development of the VAPs. However, the priorities identified in the VAPs feed in the programme and project planning of the DDPs and consequently it might be hard to push sanitation higher on the district agenda as long as there are other pressing issues of rural poverty.

5.6 Partnerships

Despite the supporting statements on the private sector participation in the NSP (MoIDW, 2008) the two district governments included in the research currently did not build up partnerships, neither provide active support for private suppliers. Meanwhile, several private suppliers stated that their businesses would benefit from establishing more fruitful relationships with the district government e.g. by being linked to school sanitation projects either for the construction of latrines or for emptying services (sections 4.4.4 and 4.4.5).

The current lack of partnerships and mutual support between the district governments and private suppliers leads to missed opportunities on both sides, as illustrated through the example of the obstructed public toilet project in Jenda (section 4.4.4).

One reason for the weakly (or in most parts non) developed partnerships between the private sector and the district government for rural sanitation might be the largely informal character of the private suppliers which makes them less visible and harder to approach. On the other hand, as already mentioned, there is a lack of awareness of the contents of the NSP (MoIWD, 2008) and its recommendations for increased private sector participation.

Partnerships between NGOs and private suppliers might be beneficial for the individual supplier who might receive support to build up his/her business or benefit from NGO paid contract work in communities. For other suppliers, however, who do not have access to this support, such partnerships might cause business disadvantages (section 4.4.6). The concerns reported by one private supplier are backed up by the analysis of WaterAid (2011, p.20) that comes to the conclusion:

“However, despite the best intentions of external actors, imperfections in market forces and externalities can adversely affect the market.” (WaterAid, 2011, p.20)

Rosenszweigs and Kopitopoulos (2010, p.1; section 2.7.4) conclude that CLTS implementation through NGOs, lacks scalability and sustainability. This analysis can be transferred to the implementation of sanitation marketing. Consequently, as shown in section 2.7.4, it is the district governments’ role to build capacities and support the private sector (ibid, p.13). Perez (2011, p.6)

recommends encouraging district-level small and medium entrepreneurs to enter the market and proposes that this should be done by offering incentives like time bound exclusiveness of services and technical and financial start-up support.

The lack of considerable cooperation between the private sector suppliers (section 4.4.5) indicates that the supply chain (as discussed in section 2.6) for rural sanitation in Malawi is still rather weak. With respect to the assessment of Perez et al. (2011, p.27) that the low capacity of the sanitation supply chains in Tanzania contribute to the challenges face with the TSSM implementation (section 2.7.4), the rural private sanitation sector in Malawi might need to be further strengthen in order to avoid similar problems. In this context, one emergent learning outcome of the WSP Scaling-up project is that sanitation marketing programmes “need to go beyond the traditional ‘mason model’.”(Perez, 2011, p.6) To enable the private sector to undertake this transformation requires capacity-building which is sustained in creating training institutions and centres of excellence as well as identifying private sector champions to build up business-to-business networks etc. (ibid.).

5.7 People

As explained before (section 2.7) the category *People* was introduced to the marketing mix as a response to the experiences made of ‘total sanitation campaigns’ that built on the dynamics of community action and social pressure. In Malawi, there is still no clear vision of how to integrate sanitation marketing and CLTS to make the most of the advantages of both approaches and of the mentioned dynamics. Referring back to Figure 5-2 there were different motivators for people in the communities to initially *adopt* a latrine and *improve or upgrade* a latrine. This needs to be critically analysed with regard to identifying the potential of building up community action and peer pressure.

Initial adoption of a latrine was driven by reasons such as disease reduction and maintaining a clean hygienic environment in the community (section 4.3.1). Such drivers can be easily attributed to community welfare and consequently easily be used to create (negative) peer pressure. This (negative) peer pressure and social dynamics were reflected through the way respondents in the communities (latrine adopters) used negative attributes like “laziness” and “ignorance” to comment on the behaviour of non-adopters (section 4.3.1).

Improving or upgrading the latrine with a marketable product (such as a sanplat) was determined by more individual drivers like convenience or easiness to clean (section 4.3.3). To establish community action and social pressure from such individual drivers (or motivators) is by far more difficult as *Household A* would not benefit from the comfortable use of the sanplat latrine of

Household B. In return, *Household A* could not blame *Household B* for not wanting extra convenience.

Within the WSP Scaling Up Rural Sanitation project behaviour change communication (BBC) bridges the gap between CLTS and sanitation marketing (section 2.7.4).

In accordance to the case study's findings about household motivators for latrine improvements (as discussed above), the promotion messages developed for the sanitation marketing campaign in rural Lilongwe did not link improved sanitation to health benefits but rather to status e.g. by pointing out the improved convenience for visitors. Messages related to status might also be able to trigger social dynamics and (positive) peer pressure driven by prestige or jealousy. However, from the author's impression there might be many competing priorities (such as owning a mobile phone) that might be attributed to an equal or higher benefit in status or prestige.

Another relevant point for the discussion of social dynamics is certainly the role of the community leadership and natural leaders. As described in the findings the community leadership in the studied communities was involved in sanitation promotion, but the degree to which this was happening could not be clearly determined. In sanitation marketing community and natural leaders could play an important role in supporting and sustaining the promotion of the behaviour change component of the product. However, as with behaviour change itself (as discussed in section 5.2), it is very likely that the degree of sustainable activism of the community leadership and natural leaders would depend on the level of support and attention the district government would be able to provide, e.g. with regular follow-up visits (as described for CLTS natural leaders in section 4.2.4).

5.8 Summary

Obviously, the marketing mix is only one possible framework to analyse the findings with regard to the objectives. It was not always possible to clearly classify elements of the findings as belonging to one of the marketing mix components and there are certainly multiple options of classification. However, the marketing mix enabled analysis of the findings in a framework that would help to identify opportunities and gaps for the introduction of sanitation marketing. Table 5-1 summarizes the results from the analysis and shows the relevance for the different objectives.

Table 5-1: Summary of the marketing mix framework for analysing along the objectives

Element of Marketing Mix	Objective addressed and summary of the analysis results
<p>Product Material product or perception</p>	<p>Objective 1: District governments as the implementing institutions would be required to sequence and coordinate CLTS and sanitation marketing. Currently there seems to be a lack of understanding for the different behaviour change product component of the two approaches.</p> <p>Objective 2: The private sector offers generally a wide range of products but in the communities the products might not be known and not available. Without external support the low professionalized rural private sanitation sector might not be able to develop product innovations that increase the market volume.</p> <p>Objective 3: Rural households have a general interest in improved latrine products. Pit emptying might not be a viable business in rural communities. Household demand is determined by motivation, ability and opportunity to acquire a product. For the adoption of basic and the upgrade to improved latrines, these three categories are determined by different factors.</p>
<p>Promotion Enhancing awareness, creating demand</p>	<p>Objective 1: CLTS and sanitation marketing are promotion tools for different products and address customers with different backgrounds and starting points. Careful market segmentation would be the key for effective targeting of promotion campaigns but currently data on sanitation behaviour in the districts is weak. Only the district government has the general capacity to carry out promotion that ensures a sustainable behaviour change and demand creation. However, extension staff are already overloaded with obligations and might fail to provide the necessary frequency of community support for sustainable behaviour change.</p> <p>Objective 2: The private suppliers can contribute to product promotion. In order to ensure that customers can be provided with an informed choice support would be needed to overcome knowledge gaps. Simplifying products with branding is regarded as a promising approach.</p> <p>Objective 3: Knowledge about different sanitation product amongst rural community members was very limited. Women seem to be easier to target with sanitation and hygiene messages and have a considerable influence on sanitation and hygiene related decisions.</p>
<p>Price Investing costs (money time and effort)</p>	<p>Objective 1: The district governments reject hardware subsidies for sanitation but some NGOs continue to carry out subsidy supported programmes that might bias the market for sanitation entrepreneurs. Currently, the districts do not enforce harmonization of the approaches. Targeted subsidies in market based approaches are likely to require secured external funding</p> <p>Objective 2: Product innovations might increase the affordability for sanitation products. The price range and flexibility of payment options determines the ability of rural households to invest in sanitation. However, in expanded business model with less personal knowledge and trust between the customer and provider it might become more difficult to provide flexible payment options.</p>

<p>Place Distribution channel or channel through which product reaches customer</p>	<p>Objective 3: Rural household budgets are very tight and needed for many competing priorities. However, there is an increasing willingness to invest in improved sanitation options and micro-finance options are appreciated but not available in all areas.</p> <p>Objective 1: The policy framework set by the NSP requires district governments to strengthen their relations with the private sector in order to enable increased participation. The district governments currently fail to provide the private sector with enabling places for business establishments</p> <p>Objective 2: Private suppliers' outreach is limited because of a lack of transport. Effective business models that would help to overcome the challenge of access and lack of information for the customers are so far not established. Some private suppliers face difficulties with urban planning regulations that make it difficult to plan ahead and expand their businesses.</p> <p>Objective 3: Due to lack of infrastructure and resources, the mobility of rural household is quite limited. This restricts the access to goods and services as well as to knowledge about those.</p>
<p>Politics / Policy Context / Enabling environment</p>	<p>Objective 1: Awareness about the contents of policy documents amongst district staff is weak, which limits the impact of private sector supportive policy elements and generally restricts the strategy and direction of the district. The district governments currently have limited planning capacities due to insufficient and inconsistent budgets. This affects the potential implementation capacity for market based approaches, which would require additional human and financial resources. Cost effective implementation might be limited by allowance requirements. Regulation is currently vastly neglected but will be an important additional role for the government in market based approaches. Prioritization of sanitation in the communities might be challenging as long as there are other pressing issues of rural poverty.</p>
<p>Partnerships Cooperation of various partners</p>	<p>Objective 1: Currently the district government and the private sector do not have well-established partnerships. Partnerships between NGOs and private suppliers are ambivalent and the district government would be the only institutions that could build up sustainable and scalable partnerships in a marketing approach.</p> <p>Objective 2: Through partnerships and networks between sanitation entrepreneurs, the supply chain would be strengthened which would enable the private sector to meet the demand. Currently weakly developed supply chains and networks limit the capacity of the private sector.</p>
<p>People Importance of community action and social pressure</p>	<p>Objective 3: The motivations to initially adopt and to improve or upgrade a latrine are determined by different competing priorities and values. CLTS is based on negative peer pressure but sanitation marketing messages might be successful to create positive peer pressure by building on status messages. The potential to benefit from the involvement of village leaders might be limited by the degree of support and follow-ups that could be provided by the district government.</p>

6. CONCLUSIONS AND RECOMMENDATIONS

“I have yet to see any problem, however complicated, which when you looked at it in the right way, did not become still more complicated.” (Poul Anderson, cited in O’Leary (2005, p.11)

This chapter returns to the overall aim of the study, which was to analyse the opportunities and constraints for more sustainable sanitation through sanitation marketing in Malawi.

By drawing conclusions from each of the investigated objectives this conclusion aims to provide a general sense for the capacity for sanitation marketing in rural districts in Malawi and show how sanitation marketing fits into the current dynamics of the rural sanitation sector there. Furthermore, the author aims to give some recommendations concerning the introduction of sanitation marketing to practitioners in the rural sanitation sector and indicate areas where further research is required. The chapter concludes with a reflection on the research process and achievements.

The research has shown that there are significant gaps in the capacity of the district governments as the main implementer of rural sanitation. These gaps mainly concern the district budget capacity and ability of long-term investment planning, staffing levels and awareness about policy and strategy contents amongst district staff.

These constraints are not specific to the introduction and implementation of sanitation marketing but to any sanitation approach carried out by the districts. However, the districts have only rolled out CLTS since a few years and despite some constraints and limitations appreciate its potential. Introducing a second approach would probably mean to deduct capacities from CLTS and have reduced capacities for successful implementation of both approaches.

It is widely acknowledged that for sanitation marketing it is not enough to just establish or improve the private sector supply but demand also needs to be created with appropriate promotion campaigns. As highlighted in the previous chapter, sanitation marketing as a standalone approach might neglect the barriers for non-adopters and a combination or integration with CLTS seems to be reasonable. Therefore the combination and/or integration of CLTS and sanitation marketing approaches would need to be done with a great deal of thought and planning, in order to avoid strategic and resources interference between the two approaches. Currently there seems to be no clear vision amongst stakeholders about the goals and implementation strategy for sanitation marketing approaches.

However, the introduction of sanitation marketing also has the potential to take into account the high rural baseline of basic sanitation, which is neglected by CLTS and fulfil the demands of the

strategic direction towards improved sanitation as set by the National Sanitation Policy (compare section 2.11).

In this context sanitation marketing might have the potential to increase the sustainability (as a normative concept) of sanitation in terms of supporting a lasting behaviour change towards improved sanitation.

District government

Experiences described in the reviewed literature have shown that the potential for sustainable behaviour change of sanitation approaches depends on the degree of continuous support and follow-up visits that can be provided for the target population. With the current capacities adequate support is not provided for CLTS communities and, as stated before, it is very likely that the introduction of an additional approach would lead to competing needs for the districts' staff time and financial resources commitments.

Moreover, sustainability of the approach and its outcomes would depend on the extent to which the district can enhance its long-term planning and budgeting and increase the priority of sanitation. On a positive note, institutional change and decentralization through the set-up of an individual sanitation department and the launched IWSS SWAp is already initiated. The degree to which the mentioned determinants might be successfully improved most likely depends on the progress that will be made in the development of the IWSS SWAp and the proceeding of the decentralization of the sanitation sector.

Realistically, even with a SWAp the dependency on donor funding for project implementation will remain. Given the current political difficulties (Box 4-1, p.63), it is hard to say how the relationships with important donors and the broader political climate will develop and influence the potential for successful institutional change and project implementation.

Private sector

The private sanitation supply sector in Malawi is not a greenfield situation but its current capacity and outreach is not sufficiently developed to sustain a market-based approach. The major capacity constraints of the private sector are that successful business models of improving the access of rural communities to products and information have not yet been developed and that there is a general lack of partnerships and support with and through the district governments. As shown in the reviewed literature, it is generally agreed that demand creation for improved sanitation is beyond the capacity of the private sector and consequently needs to be a public obligation. For general product and service marketing and innovation the knowledge and skills of the private sector would need to be supported. As an opportunity, some suppliers already apply smart marketing strategies and could serve as champions in extended supplier network models.

This also offers a learning opportunity for district governments (or marketing contractors) who could establish a dialogue with private suppliers and learn about their successful marketing strategies and/or also about failures that could be avoided to be replicated in scale-up promotion. Furthermore, MFIs have started to develop sanitation loan programmes that might support business start-ups and also enhance the possibilities for households (see below).

Community

The high baseline of basic sanitation and a widespread understanding of the general benefits of sanitation is certainly an asset for the communities' capacity to become interested customers for improved sanitation facilities. Nevertheless, the financial capacity of rural households is very limited and constrained by various competing priorities. In order to enhance the priority of sanitation in household budgets, a significant expansion of possibilities for the access to sanitation technologies and financing methods as well as well-targeted messages would be necessary. Without such measures, it is unlikely that general motivation or preference to adopt improved latrines is transformed in a robust market demand.

Taking into account the comprehensive picture of the opinions expressed by various informants the author's overall impression is that it is very likely that key stakeholders like UNICEF will proceed with a introduction of sanitation marketing at scale in rural Malawi in near future.

The following recommendations are thought to address some of the key issues that the author thinks need to be considered within the introduction and implementation of a market-based approach for sanitation in rural Malawi. However, the recommendations are not thought to be a complete programming guideline. Due the various and complex linkages between the single issues addressed, no ranking of priority could be applied.

- ***Harmonization and integration of programmes and approaches:*** CLTS and sanitation marketing need to be integrated in a comprehensive manner. Therefore the district needs to learn more about the sanitation situation, household motivators and barriers in the communities. The districts need to increase their monitoring of sanitation programme in order to provide good mapping data that enables market segmentation and well-targeted interventions with the most appropriate approach. Experiences on the sequencing of CLTS and sanitation marketing appropriate and continuous monitoring and evaluation of the two approaches would be required. This would enable the district governments and supporting agencies to react and adopt the approach according to any emerging lessons learnt. In addition, the district governments should increase their regulatory and coordination role to harmonize the guiding principles of governmental and NGO

implementation. NGOs need to be reminded of their responsibility to avoid unbalancing the market through uncoordinated household subsidy programmes or supplier support.

➤ ***Establishments of appropriate financing mechanisms and flexible payment options:*** The development of microfinance options through private or NGO/CBO-led credit institutes is an important aspect of pro-poor financing models. However, even these options might be beyond the reach of the poorest and most vulnerable and consequently appropriate methods for social inclusion have to be established. Private entrepreneurs also need access to small-scale loans to set-up their businesses. Mechanisms should be considered to support the entrepreneurs against the risks of investment. Flexible payment options are very important for the ability of access for poor rural households. Therefore growing sanitation businesses might need to find new ways of offering flexible payment options for their customers whilst assuring low risks for the entrepreneur.

➤ ***Supporting the private sector to build-up appropriate business models and networks:*** In order to increase the access for the customers the private sector needs to adopt adequate business models that bring the products and information about the products closer to the customer. Therefore the private sector needs to be supported with knowledge, business and networking skills. Research institutions, agency hired consultancies or NGOs need to support the private sector in the development of appropriate branded products that fulfil the requirements of the different market segments. Centres of excellence like the *WATSAN Centre of Excellence* in Mzuzu could play a piloting role in supporting the establishments of business-to-business networks.

The district governments need to establish partnerships that facilitate the private sectors involvement in sanitation and the access for households to sanitation. As stated in the previous chapter, it is important that there is a stronger engagement between the district government and the private sector to enable adaptation, flexibility and growth of businesses related to rural sanitation delivery. The establishment of business/planning security is essential within this process. Extension workers and private sector suppliers need to be linked to pass on information about supply options to potential customers in the communities. The dialogue and involvement with informal suppliers needs to be increased but appropriate ways of regulating the market and protecting business start-ups have to be found.

➤ ***Institutional and staff development:*** The establishment of the IWSS SWAp should be proceeded with enhanced priority by all relevant stakeholders to ensure more sustainable and harmonized budget lines that are more consistent and less depended on project lives. The GoM has to ensure that staffing levels at district level are appropriate and vacant

posts need to be staffed. For cost-effective implementation job descriptions of district government senior and extension staff need to be clear on the involved responsibilities and allowances need to be regulated. However, this can only become effective if the workload of extension and district staff is adequately regulated through increased human resources. For the promotion within a sanitation marketing approach appropriate skills and qualifications have to be developed on district level through trainings of existing staff and/or hiring new staff or contracting out marketing specific tasks.

As recommendations for further research the author wants to highlight the following areas:

- ***Complementarity and sequencing of CLTS and sanitation marketing:*** As stated in section 1.3, Objective 4, which was thought to have a detailed look into the gaps in ODF sustainability after CLTS and determine whether and how some of the problems could be overcome with sanitation marketing, could not be sufficiently addressed in this research. However, this objective would add immense value to the aim of the research and to general knowledge how to smartly combine and sequence programmes (sustainable intervention programming) instead of just shifting from one approach to another. The associated research questions were given in the referenced section and will not be repeated here. Notwithstanding, a research mainly focussing on this issue might have the capacities and resources to go into more details than initially planned for this research and result in recommendations for the whole project cycle of an integrated planning of CLTS and sanitation programmes.
- ***Product and service innovations:*** Particularly when considering the introduction of sanitation marketing and CLTS in an integrated way, an area for further research emerges from the current adoption and ODF sustainability problems in some CLTS community. Future research could investigate the potential that the private sector creates product innovations that are particularly appropriate for areas where CLTS is currently facing challenges or is even failing. There are also research opportunities looking into the potential for the CLTS process in such communities to be accompanied by private entrepreneurs proposing (not prescribing) a low cost option that might help to overcome or work around physical, technical or cultural constraints for adopting latrines.
- ***Community finances and decision-making:*** As pointed out in the Findings and Analysis Chapters the motivators and barriers for households to adopt latrines have to be better understood and responded to appropriately in any sanitation intervention. So far, there is not a lot of understanding how households weigh up competing priorities for investments and to what degree cash availability is a perceived or real constraint. Indications for

appropriate market prices could be derived from a willingness-to-pay survey or similar assessments.

- *Appropriate finance and payment models*: As stated before the availability of appropriate finance mechanisms or credit schemes are very likely to have a high influence on customers' ability of access to improved sanitation in market-based approaches. It needs therefore to be further investigated who can provide such finance mechanisms and where they need to be offered to provide access to most customers.

With respect to payment options, there needs to be more research what kind of flexible payment options are appropriate for growing businesses of small sanitation providers in rural areas where common arrangements like interests on arrears might not be appropriate in order to balance the customers' requirements of flexibility and the risk of the entrepreneur.

As a personal evaluation and reflection on the research, the author would summarize the study as challenging but also rewarding. The scope and nature of the study was ambitious.

The study had the character of a preliminary assessment of the potential of an approach that had not been rolled out so far. This was certainly more challenging than looking at strength and weaknesses of an approach in a pilot or implementation state. The author had to continuously analyse her own position during the whole research process and be self-critical to prevent to fall into speculation.

The case study approach with multiple sites of research and multiple sources of information was helpful to get a vast picture of opinions and perceptions of rural sanitation in Malawi. This helped to triangulate and thus validate the data. Overall, the author feels that she gained a good sense of the general capacities of the different stakeholders.

Nevertheless, the time for the research was obviously very limited. With more time in the field more aspects relating to the current sustainability problems with CLTS triggered and or ODF certificated communities could have been studied, which might have led to interesting findings how CLTS and sanitation marketing could practically complement each other (as mentioned as an are for further research above). Quantitative survey methods could have been used to support the qualitative data for instance relating to the household latrine adoptions or in terms of a market assessment of the supply side.

However, the use of qualitative methods was very rewarding. Especially during the focus group discussions aspects of personal and group motivations and barriers for latrine adoptions were revealed.

As the insight into the reality and perceptions of rural households was particularly rewarding and appreciated, the author wants to conclude the project report by handing over the voice to the rural community members, whose needs and preferences should be the focus of any market or non-market based sanitation or general rural development approach. Asked how an improved sanitation situation for the community could be developed and sustained, one FGD participants came up with a very clear and simple vision that somehow qualifies the pessimistic introductory quote:

“Community members need to be better informed and there should be places to buy materials and slabs. Slabs should be given for free to the poorest. That would help.”

(Gerson, male focus group participant, Chagogo, Lilongwe district, 16 June 2011)

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APPENDICES

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Appendix A: Methodological framework

Objective	Question	Method	Key respondent	Section in	
				Findings	Discussion
Analysis of the district governments' roles and capacity in the implementation of sanitation marketing	<i>To what extent does the district government currently involve with and/or support the private sector in sanitation programmes, policy and regulations?</i>	Documentary information Semi-structured interviews	District G. Private Sup. Key informants	4.2.6; 4.4.4	5.1-6
	<i>What kind of programme implementation, management and monitoring roles has the district in government in current sanitation programmes?</i>	Documentary information Semi-structured interviews	District G. Key informants	4.2.2; 4.2.4	
	<i>How strong is the advocacy for sanitation (marketing) programmes at district level and what are challenges in current sanitation programmes?</i>	Documentary information Semi-structured interviews	District G. Key informants	4.2.1; 4.2.2; 4.2.3	
	<i>Will there be changes/additions to these roles/tasks in a sanitation marketing approach and will the district government be able to fulfil them adequately?</i>	Documentary information Semi-structured interviews	District G. Key informants	4.2.4; 4.2.5	
Analysis of the private sector's capacity to provide sanitation technologies and services	<i>Which sanitation products or services are available in rural areas?</i>	Observation Semi-structured interviews	Private Sup. Com. Members	4.4.1	5.1-4; 5.6
	<i>Which challenges do private sanitation suppliers face currently?</i>	Semi-structured interviews	Private Sup. Key informants	4.4.5; 4.4.6	
	<i>Who is currently supporting the private sector and is there cooperation between private suppliers?</i>	Semi-structured interviews	District G. Private Sup. Key informants	4.4.5	
	<i>Is the private sector already involved in any kind of sanitation promotion?</i>	Observation Semi-structured interviews	Private Sup. Key informants Com. Members	4.4.3	
Analysis of the capacity of communities to respond to sanitation marketing approaches	<i>Which sanitation options are community members aware of?</i>	Semi-structured interviews	Com. Members	4.3.2;	5.1-4; 5.7
	<i>Which are prevalent perceptions of the current status and benefits from sanitation?</i>	Focus groups Structured interviews	Com. Members	4.3.1;	
	<i>Are community members generally willing to pay for sanitation?</i>	Focus groups Structured interviews	Com. Members	4.3.5	
	<i>Who addresses sanitation in the villages and what are the messages?</i>	Focus groups Structured interviews	Com. Members	4.3.4;	
	<i>Who or what factors influence(s) decisions for adoption and/or improvements of sanitation?</i>	Focus groups Structured interviews	Com. Members	4.3.1; 4.3.3; 4.3.5	

Appendix B: Schedule of the field work

Date	Activity	Location	
Sat	04-Jun	Flight to Lilongwe	London-Lilongwe
Sun	05-Jun	Orientation in Lilongwe	Lilongwe
Mon	06-Jun	Orientation meeting, contact sharing with EWB Canada	Lilongwe
Tues	07-Jun	Orientation meeting, contact sharing with EWB Canada Key informant interview	Lilongwe
Wed	08-Jun	Key informant interview Travel to Mzuzu	Lilongwe Lilongwe-Mzuzu
Thu	09-Jun	Attendance of <i>Business in WATSAN</i> workshop Interview with sanitation entrepreneur Interview with key informant Travel to Lilongwe	Mzuzu Water & Sanitation Centre of Excellence
Fri	10-Jun	Supervisor update Travel to Kasungu Update with EWB	Lilongwe Lilongwe-Kasungu Kasungu
Sat	11-Jun	District authority staff interview Coordination of Community Field work	Mzimba
Sun	12-Jun	Community interviews	Eswazini (Mzimba District)
Mon	13-Jun	District authority staff interviews Travel to Jenda Private Supplier Interview Travel to Lilongwe	Mzimba Mzimba-Jenda Jenda Jenda-Lilongwe
Tues	14-Jun	District authority staff interview Organization of community interviews	Lilongwe
Wed	15-Jun	District authority staff interviews Private supplier interview	Lilongwe Lilongwe
Thu	16-Jun	Community interviews	Chagogo (Nagiri trading centre / Lilongwe District)
Fri	17-Jun	Discussion with UNICEF consultant Travel to Mzimba	Lilongwe Lilongwe-Mzimba
Sat	18-Jun	Community interviews	Levi Chisi (Mzimba District)
Sun	19-Jun	Community interviews	Eswazini (Mzimba District)
Mon	20-Jun	District authority staff interview Community interviews , Private supplier interviews Travel to Lilongwe	Mzimba Levi Chisi (Mzimba District) Mzimba-Lilongwe
Tues	21-Jun	Key informant interview	Lilongwe
Wed	22-Jun	Community field work (Msenda) Interview with private supplier (St Jones)	Lilongwe District
Thu	23-Jun	Travel to Mzuzu	Lilongwe-Mzuzu
Fri	24-Jun	District authority staff interview Private Supplier Interview Travel to Nhkada Bay	Mzuzu Mzuzu Mzuzu-Nhkada Bay
Sat	25-Jun	Interview Transcribes and Data analysis	Nhkada Bay
Sun	26-Jun	Interview Transcribes and Data analysis	Nhkada Bay
Mon	27-Jun	Interview Transcribes and Data analysis	Nhkada Bay
Tues	28-Jun	Interview Transcribes and Data analysis	Nhkada Bay
Wed	29-Jun	Interview Transcribes and Data analysis Travel to Lilongwe	Nhkada Bay Nhkada Bay-Lilongwe
Thu	30-Jun	Discussion of results and follow-ups	Lilongwe
Fri	01-Jul	Discussion of results and follow-ups	Lilongwe
Sat	02-Jul	Flight to London	Lilongwe - London
Sun	03-Jul	Arrival in London	London

Appendix C: Lists of interviews and focus groups

Focus groups			
Characteristics of the group	Number of participants	Date	Location
Male, trading centre	7	12/06/2011	Eswazini
Male, trading centre	7	16/06/2011	Chagogo
Female, trading centre	10	16/06/2011	Chagogo
Female, village	6	18/06/2011	Levi Chisi
Female, trading centre	6	19/06/2011	Eswazini
Male, village	7	20/06/2011	Levi Chisi
Female, village	7	22/06/2011	Msenda
Male, village	6	22/06/2011	Msenda

Household interviews		
Community	Number of households	Date
Eswazini (Mzimba)	1	12/06/2011
Chagogo (Lilongwe)	4	16/06/2011
Levi-Chisi (Mzimba)	4	18/06/2011
Eswazini (Mzimba)	3	19/06/2011
Msenda	4	22/06/2011

Private supplier interviews			
Business characteristics	Date	Location	
Formerly involved in CCAP/WaterAid programme	09/06/2011	Dunduzu (Mzimba North)	
Formerly involved in CCAP/WaterAid programme	13/06/2011	Jenda (Mzimba South)	
Informal supplier (concrete slabs)	15/06/2011	Peri-urban Lilongwe	
Ad-hoc suppliers in communities (pit construction)	20/06/2011	Levi-Chisi (Mzimba South)	
Formal supplier (concrete slabs)	22/06/2011	St Jones (Lilongwe)	
Pit and septic tank emptying business	24/06/2011	Mzuzu	

District authority staff interviews		
Position	Date	District
WASH Project Coordinator	11/06/2011	Mzimba
WMA	11/06/2011	Mzimba
District Planning and Development Officer (DDP)	13/06/2011	Mzimba
EHO-WES	13/06/2011	Mzimba (South)
District Water Officer	14/06/2011	Lilongwe
HSA (senior)	14/06/2011	Lilongwe
EHO-WES	15/06/2011	Lilongwe
EHO-WES	24/06/2011	Mzimba (North)

Key informant interview		
Position and/or function	Date	Location
Plan Malawi WASH representative	07/06/2011	Lilongwe
Private Consultant, Malawian Sanitation Sector Specialist	08/06/2011	Lilongwe
Former CCAP Sanitation Specialist	09/06/2011	Mzuzu
Water for People WASH representative	16/06/2011	Blantyre
Consultant involved in AfDB NWDP sanitation marketing in rural areas	21/06/2011	Lilongwe

Appendix D: Interview guide for household interviews

Date:		Name of village/community:	
Sex:		Head of household: YES / NO	
Tenant/Landlord:		Comments:	
Size of household			
Total:	No. Children (4-15years)		
No. Adults:	No. Infants (0-3years)		

0	Do you have a latrine?	Yes → Continue with B	No → Continue with A
A (Latrine non-adopters)			
A 1	Where do you defecate?		
A 2	Have you ever had a latrine?	Yes → Continue with A2a	No → Continue with A2b
A2a	What made you stop using the latrine?		
A2b	Have you ever considered building a latrine?	Yes → Continue with A2bi 1-6	No → Continue with A2bii
A2bi1	What made you consider installing a latrine?		
A2bi2	What prevented you until now to install a latrine?		
A2bi3	What types of different latrines do you know?		
A2bi3a	Which ones have you tried?		
A2bi3b	Which is your favourite one?		
A2bi3b1	What makes you prefer that latrine?		
A2bi4	What kind of latrine would you like to have?		
A2bi4a	What makes this latrine desirable for you?		
A2bi5	Would you build the latrine entirely yourself?	Yes	No → Continue with A2bi5a 1-2
A2bi5a1	Do you know someone who could help you with building the latrine?		
A2bi5a2	Would you pay someone to build your latrine?	Yes → Continue with A2bi5a2i	No → Continue with A2bi5a2ii
A2bi5a2i	For which parts / work would you pay?		
A2bi5a2ii	Why not? What holds you back?		
A2bi6	Who could give you advice about building/maintaining a latrine?		
A2bii	Why not?		
A3	Who in your household decides about building a latrine?		
A4	Do you think other members of your household want a latrine?		
A5	Has someone spoken to you about sanitation before/Have there been any campaigns?	Yes → Continue with C1ai-iii	No → Continue with C1b
B Latrine Adopters			
B1	What made you decide to build a latrine?		
B1a	What was the main reason you built a latrine?		
B1ai	Why is that important to you?		
B1b	Did you make the decision to build a latrine alone or were others involved in the decision?		
B2	What types of latrines do you know?		
B3	Which have you seen/tried?		
B4	Are all of them available in this area?		
B4a	Why? Why not?		
B5	Of the latrines you know, which one is your favourite?		
B5a	What makes you like this latrine best?		
B6	What type of latrine(s) do you have?		
B6a	Do you have more than one latrine?	Yes → Continue with B6ai	No → Continue with B7
B6ai	Why?		
B7	Do all household members use the latrine?		
B8	Are there different patterns in using the latrine for different household members?		
B9	Why did you choose that particular style?		
B10	Did you pay for (parts of / services for) your current latrine?	Yes → Continue with B10a-b	No → Continue with B11
B10a	What did you pay for?		
B10b	How did you know where to get service/hardware?		

B11	Do you know who provides sanitation services/hardware?		
B11a	What do they provide?		
B12	From where or who did you get the idea of constructing that particular style?		
B13	What do you like best about your latrine?		
B13a	Why are these things important to you?		
B14	Are there things about your latrine that you dislike?		
B14a	What makes you dislike these things?		
B15	If you could make some improvements to your latrine, what improvements would you make?		
B15a	Why would you make these improvements?		
B16	What holds you back to make these improvements?		
B17	Who in your household decides about building / improving a latrine?		
B18	Do you think other members of your household want a different latrine?		
B19	What do you think other members of your household like/dislike about your latrine?		
B19a	What makes them like/dislike these things?		
B20	What will you do once the latrine fills up?		
B21	Has someone spoken to you about sanitation before/Have there been any campaigns?	Yes → Continue with C1ai-iii	No → Continue with C1b
C Sanitation Promotion			
C1ai	Who?		
C1aii	What was the main message?		
C1aiii	Was it a CLTS triggering?	Yes → Continue with C1aiii1-3	No
C1aiii1	Did the facilitator(s) mention different latrine options – which?		
C1aiii2	Did the facilitator(s) inform you where you could get help / advice for the construction of a latrine?		
C1aiii3	Did the facilitator(s) mention where you could get materials/hardware?		
C1b	Do you know if there were campaigns other community members attended?		
C2	Does your community leadership address sanitation?	Yes → Continue with C3	No
C3	How?		

Appendix E: Interview guide for private supplier interviews

Provider Profile		
Name of supplier	Age/Sex	Location of business
Type of business		
→ If answer is only hardware supply: - Who constructs the latrines? - Who empties the latrines?	→ If is pit construction: - Where do you get the required materials?	
Is the business a part time or full time occupation? → If part time: - Why? (What are constraints for full-time business?) - What are other occupations and sources of income? - What would you need to formalize your business?		
How many people are involved in the business? - Specify how?		
What area that is approx. provided with services? (Which villages?)		
How long have you been doing that business? - Did you get any training? - → If yes: ○ Who provided that training? ○ What did you learn?	- → If no: ○ How did you learn your business?	
Business profile		
What kind of sanitation technologies do you offer?		
What other services do you offer?		
Which product/service do people prefer?		
Where do you get your hardware? → If rural retailer: - Do you co-operate with urban suppliers?	→ If urban supplier: - Do you out-reach in rural villages?	
How do people pay for your service? - Are there different payment options? - Can customers pay in instalments?		
Promotion / Demand Creation		
Do you know about operation and maintenance requirements of the different latrines? - Do you provide your customers with that information?		
How do people know about your business?		
Do you actively promote your services / gain new customers? → If yes: - How?		
Did your business profit from the CLTS implementation?		
Do you know if CLTS facilitators mention that there are supply options?		
(External) support and limitations		
Are there any regulations or policies influence the way you are running your business? → If yes: - Which? - How?		
What do you see as the most important constraints of your work? - Do you have any idea how to overcome those? - What would be needed to overcome these problems?		
Do you think you need (additional) training? → If yes: - What kind of training would you think would improve your business? ○ Why/How?		
Did you get any financial support for setting up the business? → If yes: - What kind of support? - Who provided the support?		
Is/was there any other support for you to set-up / run your business? → If yes: - What kind of support? - Who provides/provided the support?		
Would you like to receive any support? → If yes: - What kind of support? - Who do you think might be able to give you the kind of support that you need?		
General		
Do you plan to expand your business? → If yes: - How?		
What would generally help to improve your business?		
What do you think detains people of making use of your services/purchasing your products?		

Appendix F: Interview guide for district authority staff interviews

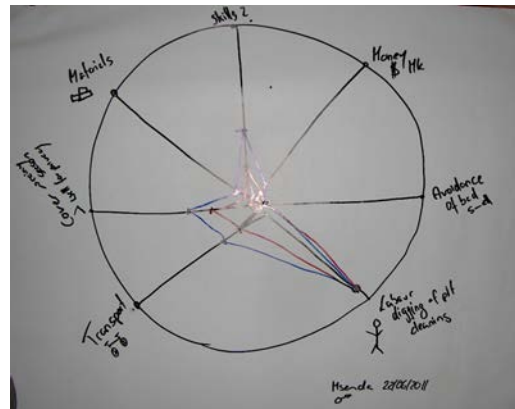
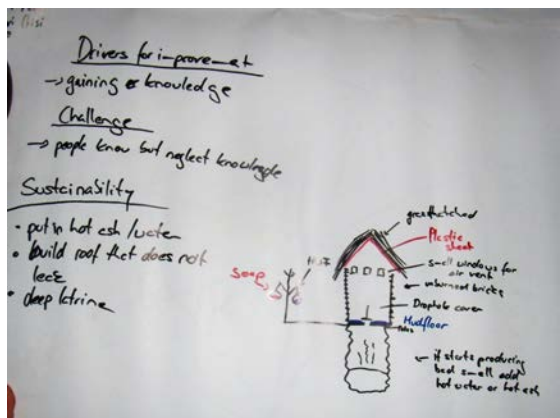
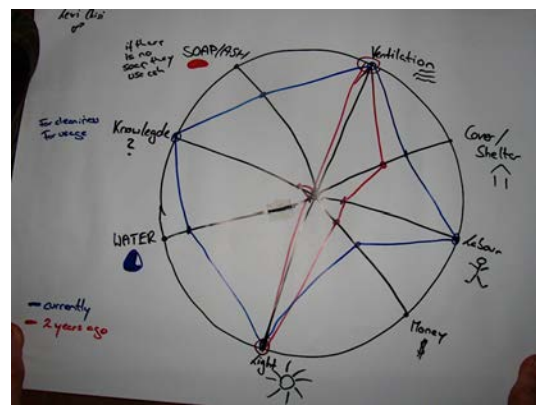
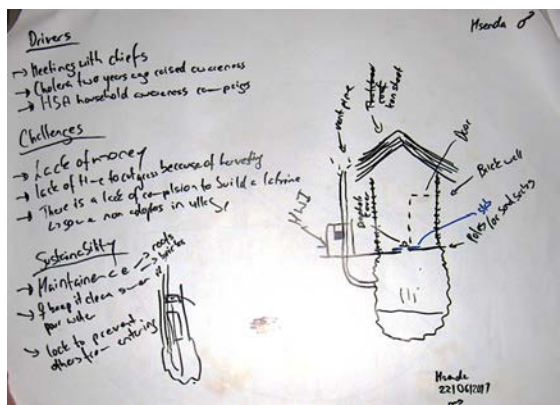
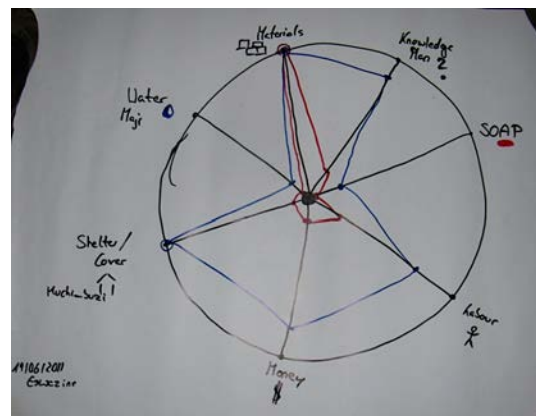
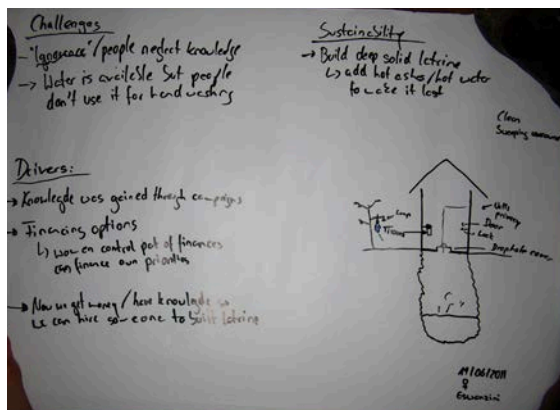
District:	Name:	Position
<p>Is sanitation mentioned in the district development plan?</p> <p>→ If yes:</p> <ul style="list-style-type: none"> - Is it a priority? <ul style="list-style-type: none"> ○ How does that prioritization show? 		
<p>What is the current approach in sanitation in the district?</p> <ul style="list-style-type: none"> - Are there any short-term/long-term goals? - How do you monitor the success of the programme? 		
<p>When you budget for sanitation what does this include?</p>		
<p>Where do you see success/challenges in that approach?</p>		
<p>How do you think households that have no latrine or want a better latrine could be supported?</p>		
<p>Who supports the district in the implementation of the sanitation programme?</p> <ul style="list-style-type: none"> - How? 		
<p>How many members of staff are allocated to sanitation?</p>		
<p>What are the skills/experiences/professional backgrounds of the staff?</p>		
<p>Which proportion of the district budget is allocated to sanitation?</p> <ul style="list-style-type: none"> - How much of the budget do you manage to spend / How much of the budget did you spend last year? 		
<p>Do you currently support market based approaches in sanitation?</p>		
<p>Are there any regulations, policy elements that support private sanitation suppliers?</p>		
<p>Are there any plans to incorporate sanitation marketing in the district development strategy?</p> <p>→ If yes:</p> <ul style="list-style-type: none"> - What were the drivers for including sanitation marketing? - Do you already know who will be involved? / How you will monitor and manage this approach? - How do you think could sanitation marketing help to achieve the districts sanitation goals? - Do you think the district government needs support introduce a sanitation marketing approach? - → If yes: <ul style="list-style-type: none"> ○ What kind of support? ○ Who should provide this support? 		

Appendix G: Example of data analysis coding



Spread sheet for household interviews with colour coding

Appendix H: Examples of Spokes tool and 'ideal' latrine charts



From top left to bottom right: Eswazini (female) - Eswazini (female), Msenda (male) - Msenda (male), Levi Chisi (male) - Levi Chisi (male)

blue lines on Spokes diagrams refer to the current situation and red lines to the past