AN ETHNOGRAPHIC STUDY OF SANITATION AND DEFECATORY PRACTICES IN PERI-URBAN COMMUNITIES: THE CASE OF PRAMPRAM IN THE GREATER ACCRA REGION OF GHANA

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is a result of my own research work carried out in the Ningo-Prampram District under the supervision of Prof. K.A. Senah and Prof. P. B. Adongo of the University of Ghana and Prof. Helle Samuelsen of the University of Copenhagen. Neither this thesis nor a part has been presented for another degree in this university or elsewhere. References cited in this work have been duly acknowledged.

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Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of a thesis laid down by the University of Ghana, Legon.

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ABSTRACT

This study sought to interrogate factors leading to the low patronage of improved sanitation facilities in peri-urban settings. The study's main emphasis was on the Prampram community located in the Ningo-Prampram District of the Greater Accra Region in Ghana. A recent study by the Joint Monitoring Programme for water and sanitation (JMP) shows that, in Ghana, only 14% of the people have access to improved sanitation or decent toilet facilities. Ghana was graded 48th among 51 African countries in terms of meeting the Millennium Development Goal (MGD) target 7, which aimed at increasing (by half) the number of people who have access to improved sanitation by 2015. The study, therefore, interrogated issues in relation to socio-cultural practices, socio-economic lives of the various groups as well as their hygiene and sanitation practices that inform the people's preferences for household toilets and how this translates into their uptake of sanitation. The study adopted an ethnographic approach and drew on data collected over a period of eight months to understand perceptions and preferences for various sanitation options in the Prampram community. The field work involved participant observation, informal conversation, in-depth interviews and focus group discussions. The study concluded that dirt, sanitation or hygiene can only be operationalized within a social context. It was observed that the study community's perception of dirt as "matter out of place" as defined by Mary Douglas; their perceptions of smell and contagion; their concept of public and private spaces; and the socialization process that children go through contribute to their hygiene behaviours and sanitation practices.

DEDICATION

This work is dedicated to all who are in the fight against open defecation worldwide and especially in Ghana. May we never give up despite the challenges. Aluta Continua!!!

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Despite the contributions of all the people mentioned towards the completion of this thesis, I take sole responsibility for any shortcomings or errors that may occur in the representation or interpretation of field data.

L A. A.

LIST OF ACRONYMS

CAP	-	Country Action Plan
CAQDAS	-	Computer Assisted Qualitative Data Analysis Software
CBO	-	Community Based Organisation
CHPs	-	Community-Based Health Planning and Services
CLTS	-	Community Led Total Sanitation
CWSA	-	Community Water and Sanitation Agency
CWSP	-	Community Water and Sanitation Project
CSIR	-	Council for Scientific and Industrial Research
DANIDA	-	Danish International Development Agency
DEHSU	-	District Environmental Health and Sanitation Unit
DHMT	-	District Health Management Team
DHRC	-	Dodowa Health Research Centre
DWSP	-	District Water and Sanitation Plan
DWST	-	District Water and Sanitation Team
EHA	-	Environmental Health Assistant
EHO	-	Environmental Health Officer
EHP	-	Environmental Health Programme
EHSU	-	Environmental Health and Sanitation Unit
EHSD	-	Environmental Health and Sanitation Division
EPA	-	Environmental Protection Agency
ERC	-	Ethical Review Committee
ESICOME	-	Expanded Sanitary Inspection and Compliance Enforcement
FGD	-	Focus Group Discussion
GES	-	Ghana Education Service
GHS	-	Ghana Health Service
GNA	-	Ghana News Agency
GSG	-	'Go Sanitation Go!'
GWCL	-	Ghana Water Company Limited
ICT	-	Indigenous Contagious Theory
IDWSSD	-	International Drinking Water Supply and Sanitation Decade
IRB	-	Institutional Review Board
IRC	-	International Research Centre

JHS	-	Junior High School
JMP	-	Joint Monitoring Programme
KVIP	-	Kumasi Ventilated Improved Pit
MAF	-	MDG Accelerated Framework
MDG	-	Millennium Development Goals
MLGRD	-	Ministry of Local Government and Rural Development
MMDAs	-	Metropolitan, Municipal and District Assemblies
MoE	-	Ministry of Education
MoH	-	Ministry of Health
MWRWH	-	Ministry of Water Resources Works and Housing
NCCE	-	National Council on Civic Education
NCWSP	-	National Community Water and Sanitation Programme
NDC	-	National Democratic Party
NDPC	-	National Development Planning Committee
NEPAD	-	New Partnership for Africa's Development
NESSAP	-	National Environmental Strategic Action Plan
NESPoCC	-	National Environmental Sanitation Policy Coordinating Council
NGO	-	Non Governmental Organisation
NHIS	-	National Health Insurance Scheme
NiPDA	-	Ningo-Prampram District Assembly
NPP	-	New Patriotic Party
NSP	-	National Sanitation Policy
NTWGS	-	National Technical Working Group on Sanitation
OPD	-	Out-Patient Department
PTA	-	Parent-Teacher Association
RWST	-	Regional Water and Sanitation Team
SHC	-	School Health Committee
SHEP	-	School Health Education Programme
SHS	-	Senior High School
SIP	-	Strategic Investment Plan
SMC	-	School Management Committee
SUSA	-	Sustainable Sanitation Project
SWA	-	Sanitation and Water for All

UNCSD	-	United Nations Conference on Sustainable Development
UNDP	-	United Nations Development Programme
UNICEF	-	United Nations Children's Fund
VIPs	-	Ventilated Improved Pits
WATSAN	-	Water and Sanitation Committee
WB	-	World Bank
WHO	-	World Health Organisation
WMDs	-	Waste Management Departments
WSP	-	Water and Sanitation Programme
WSS	-	Water Supply and Sanitation
WSSCC	-	Water, Supply and Sanitation Collaborative Council

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

SANITATION: THE GLOBAL PERSPECTIVE

1.1 Introduction

This thesis is about sanitation, the defecatory practices of a community and local means of managing human excreta. The study is part of the Sustainable Sanitation (SUSA) Ghana project. SUSA's main objective is to identify existing barriers to improved sanitation and to propose models for providing hygienic latrine technologies and waste management solutions that address the sanitation needs in poor, rapidly-urbanising townships in Ghana. Three other studies under the SUSA project cover issues such as the technological options suitable for peri-urban settings; the occupational health and safety of waste managers; the financing mechanisms needed to increase sanitation; and cost-effective ways of monitoring sanitation using mobile technology. This study focuses on the socio-cultural factors that inform people's defecatory practices.

Safe disposal of human excreta has been, and continues to be, a big challenge for preventive health. In fact, this challenge has implications for the planning, the designing and the implementation of sanitation policies. The purpose of having and using a latrine is to remove human excreta from human contact (Shordt & Cairncross, 2014). WHO and UNICEF records have shown that inadequate sanitation, hygiene and water contribute to 88% of diarrhoeal disease and the deaths of about 1.5 million children under five years. Furthermore, diarrhoea kills more young children globally than malaria and tuberculosis together (WHO & UNICEF, 2009). Diarrhoea also affects the health and nutritional status of children and keeps them out of school (Black & Fawcett, 2008).

Although all people excrete germs in their faeces, not all excreta are dangerous. However, one gram of excreta may contain ten million viruses, one million bacteria, one thousand parasite cysts and one hundred parasite eggs. A low infective dose (only about 100 viruses or 10,000 bacteria) can make another person ill if it is passed to him or her via food, water, the finger, or flies (Curtis, 1998). There is, therefore, the need to prevent human contact with faeces. However, human contact occurs, usually, due to the lack of a latrine and/or the improper use of sanitation facilities. Excreta management, thus, becomes not only a public health and engineering issue, but also a phenomenon of interest to sociologists and anthropologists. Waste is generated by human beings and thus, its generation and disposal are human issues, which are worth investigating by social scientists. Although a lot of effort has been made to increase the demand for improved sanitation after the declaration of the Sanitation Decade by the United Nations (UN), not much has been achieved, especially in sub-Saharan Africa and much of Asia.

Malinowski (1921) as cited in Goldschmidt (1996), observes that individuals have physiological needs (such as reproduction, food and shelter), which include the primary need for elimination, and that institutions exist to meet these needs. These physiological needs (which include the need to defecate in the appropriate manner), if unmet, will have a direct impact on the health of a population and contribute to the incidence of sanitation-related diseases, such as diarrhoea, cholera, typhoid and dysentery, and even death among children below the age of five (UNICEF, 2009). This view is reinforced by the address of the former UN Secretary General, Kofi Annan delivered to the 54th World Health Assembly in Geneva, in which he said, “We shall not finally defeat AIDS, tuberculosis, malaria or any of the other infectious diseases that plague the developing world, until we have also won the battle for safe drinking water, sanitation and basic health care” (Annan, May 2001:1).

The lack of potable water and improved sanitation, as noted earlier, has been and continues to be the epicentre of most global and local epidemic outbreaks. Yet it is puzzling that this fact has been neglected for so long. Indeed, up to about the 1980s, many donors, especially the Bretton Woods Institution, saw investments in sanitation as uneconomic (Bohman, 2010). They were regarded as 'social investment', which therefore did not qualify for their support. To the Bretton Woods Institution it was uneconomic to invest in social issues in line with the change in the global perspective on social welfare policy on investment by the state.

The concerns of the donor agencies and Western powers were part of the Structural Adjustment Programme (SAP) that called for the withdrawal of the state from the overall running of the economy through liberalization and privatisation. The World Bank called for the reduction in state expenditure in the social sector like health. To them any investment into the health sector that did not yield any profit was not worth it (World Bank, 1972). As a result WHO was the first international organisation to call global attention to the need to establish Water Supply and Sanitation (WSS) sector services in the developing world. International assistance for the WSS on a larger scale developed only in the 1970s, with a number of donor agencies coming on board (Grover, 1998). These international discourses have their historical antecedents.

In 1972, the United Nations Environmental Program (UNEP) was established during the Stockholm Conference with the aim of raising awareness on environmental issues. The World Bank, at the time, was seen to be promoting the central sewerage system policy as 'the only satisfactory way of removal of human wastes' (World Bank, 1972: 243). This was in line with its urbanisation policy that was premised on the view that solving urban water

and sewerage problems would have a greater public-health impact, since urban areas have greater population density. The major challenge, however, was with access to water and safe disposal of sullage. This was because, unlike electricity and telecommunication, most developing countries perceive water supply to their citizens as a social service, and so charging for such services is a politically sensitive issue, a perception whose origin dates back to the colonial era (Bohman, 2010).

In 1976, a separate conference on human settlements was organised in Vancouver, Canada to specifically address WSS issues. There, all participating governments committed themselves, as much as possible, to providing quality water for both urban and rural areas in their countries by 1990 (UN, 1976). It was also agreed that governments would improve and accelerate sanitation. However, no specific targets for implementation were mentioned. Attention was primarily focused on water supply during this period (Grover & Howarth, 1991).

The first UN conference dedicated solely to water issues was held in Mar del Plata, Argentina, in March, 1977. This conference was described as a landmark for international cooperation on water supply and sanitation issues because it considerably helped to accelerate the focus on WSS activities in developing countries as well as within the international donor community (Biswas, 1997; Black, 1998). This was because the problems in the sector had become urgent and needed increased attention and financial assistance. The global development mantra of the Mar del Plata conference was "All peoples, whatever their stage of development and their social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs' (UN, 1977: 1).

A major outcome of the conference was the launching of an International Drinking Water Supply and Sanitation Decade (IDWSSD, 1981–1990). The main goal of the Decade was to give all people access to clean drinking water and basic sanitation services by 1990 (UN, 1989). The Decade was devoted to the realisation of national plans, which had been drawn by low-income countries for drinking water supply and sanitation. The Water and Sanitation Program (WSP) of the UNDP and the World Bank was established during the launch of the Water Decade, which was aimed at supporting collaboration between international agencies during the decade. An evaluation of the programme identified some factors that militated against its successful implementation. These are the lack of finance; poor institutional coordination and legal constraints; the over-reliance on government for subsidies; and the non-involvement of women in such water and sanitation projects.

During the final year of the International Drinking Water Supply and Sanitation Decade (IDWSSD, 1990), the Global Consultation on Safe Water and Sanitation for the 1990s was held in New Delhi, India, where the huge funding gaps facing the WSS sector in developing countries were discussed. It was observed that it would require five times the then current level of investment to achieve full coverage by the year 2000, using conventional technologies and approaches (UN, 1990). As a result, the focus changed from finding the appropriate technologies to addressing governance issues (Bohman, 2010).

All this while, the issue of sanitation, though mentioned at an earlier stage, did not form part of the MDG targets. It was not until the Johannesburg Earth Summit in 2002 that sanitation was put at the top of the agenda, and was made one of the millennium targets (MDG 7). The aim of MDG 7 was to halve the proportion of people without sustainable access to improved drinking water and basic sanitation by 2015 (World Bank, 2004). Towards the end of the

IDWSD, it was decided that governments should cease being providers; they should be regulators and facilitators in line with the emerging thinking in the political economy that favoured public-private partnerships (PPP).

Although MDG 7 aimed at doubling the number of people who had access to improved sanitation by 2015, the WHO and UNICEF Joint Monitoring Programme's report on water supply and sanitation (WHO & UNICEF, 2013) indicated that the world was not likely to meet this goal because 2.5 billion people still lacked access to improved sanitation and a large majority (that is 70%) of these live in rural areas (WHO & UNICEF, 2014). The Joint Monitoring Programme (JMP) for water supply and sanitation was instituted by WHO and UNICEF to monitor the water and sanitation targets for the MDG.

According to a WHO and UNICEF report (2014), over the past 22 years since the 1990s, the number of people practising open defecation fell by 21%, from 1.3 billion in 1990 to 1 billion in 2012, constituting 14% of the global population who are without any form of sanitation facility and continue to defecate in unapproved places. According to the report, nine out of 10 people who practise open defecation live in rural areas, although the number in the urban areas is gradually increasing (WHO & UNICEF, 2014). Southern Asia and sub-Saharan Africa countries, including Ghana, continue to have the lowest levels of coverage of sanitation and is a concern in international development circles. Out of the total number, 25% are located in sub-Saharan Africa, with the majority (949 million) living in the rural and peri-urban areas (WHO & UNICEF, 2013).

Another effort in the global front to project sanitation was the designation of 19th November as World Toilet Day by the United Nations General Assembly in 2001. It was a day to raise

awareness of all people who do not have access to a toilet, despite their human right to water and sanitation (UN, 2010). Before then, the WHO was also celebrating 7th April of each year as the World Health Day to draw worldwide attention to a subject of major importance to global health each year. The concern includes diseases that are sanitation and environment related. All this shows that both sanitation and health are of global interest.

1.2 Urbanisation and Sanitation Services

As efforts were being made on the global front to solve the problem of low sanitation coverage in sub-Saharan Africa and Southern Asia, these efforts were also being compounded by rapid urbanisation, which characterized these regions. It is estimated that by the mid-21st century, the urban population of Africa will triple and that of Asia will increase by 61%, with close to 90% of the increase being in the urban areas of Africa and Asia (UN, 2014). An estimated 430 million (of an anticipated 1 billion) Africans would be living in cities by 2020 (Corcoran, Nellemann, Baker, Bos, & Osborn, 2010). Globally, the urban population has increased from 36% in 1990 to 51% in 2010 (WHO & UNICEF, 2012). Africa is currently urbanising faster than in the late 1990s and is expected to be the fastest-urbanising region between 2020 and 2050 (Gordon, 1996). This kind of rapid urbanisation has implication for the ecosystem. Forests will be cut down for roads, houses and other developmental projects, which will indirectly impact on our health (Gilbert & Gugler, 1982).

The problem of low sanitation coverage in sub-Saharan Africa and Southern Asia is compounded by rapid urbanization, which especially has an impact on sanitation and defecatory practices. This is because rapid urbanisation often brings about densely-populated areas, which are normally associated with inefficient and deficient infrastructure

and poor hygienic conditions. The situation is worse in small towns and peri-urban settlements, which are already under-resourced (Thompson, 2001). These areas fall out of local government development plans because the authorities do not normally recognise them. Hence, they lack basic social amenities, such as water, electricity and toilet facilities. Apart from being treated as unofficial settlements, there are other challenges with improving infrastructure such as water and sanitation planning in peri-urban communities due to the lack of space. This will require a multifaceted approach that will involve not only the main sectors in charge of sanitation, but also external support agencies involved in the implementation of water and sanitation projects. How do these global efforts reflect on the Ghanaian situation? In the subsequent discussion the researcher's focus will be on the Ghanaian context.

1.3 The History of Sanitation in Ghana

According to Burger (1963), one cannot understand the present if one does not understand the past. As such, the sanitation problem in Ghana will be traced as far back as the colonial times through to the present era. In Ghana, it is estimated that more than half of the population will live in urban areas by the year 2020 if current trends continue (Nabila, 1988). This, however, does not correlate with economic growth and infrastructural development.

1.3.1 The Colonial Era

There is no literature on the traditional ways of managing faecal matter during the pre-colonial period although reference to it in ordinary language indicates a degree of offensiveness: for instance, the Akans will say *meni woanum*, literally meaning, 'I defecate into your mouth'. Given the way Ghanaian languages treat faecal matter, it is to be expected that people had ways of avoiding it. Hence, in the local languages when one wants to

mention faeces the word *sebi* meaning 'excuse me to say' and all kinds of eulogies or aliases are used when making mention of faeces. This gives some indication of how faeces was viewed in the past; as something private that should not be discussed in public.

The actual history of systemize sanitation started with the colonial era. No public or private toilets existed. Hence, according to Addae (1996), excreta and rubbish were deposited anywhere and everywhere: in alleys, town outskirts, and on beaches. There was no organised means of collecting and disposing of wastes. None of the towns, except Cape Coast, which was then the capital of the Gold Coast colony, had streets. However, oral tradition has it that, although rubbish was disposed of indiscriminately, faeces was always kept out of the home. Ghana passed its first public health law, that is, the Towns, Police and Public Ordinance in 1878, which recognised among others that buildings could only be erected with the permission of the governor.

Later, traditional pit latrines were constructed at the outskirt of the community through communal labour. The construction of these traditional pit latrines depended solely on local indigenous knowledge, and the latrines came in various forms. The construction did not follow any specific design, with some people using solely mud for both the superstructure and the slab, while others used wood. The pits were covered anytime they got full, and new ones were dug, while some parts of the superstructures were used to reconstruct new toilets. Their location at the outskirt was to minimise the stench and prevent flies, which could cause sanitation-related diseases. Although unimproved, according to public health standards, these facilities still served as a means of reducing the practice of open defecation. They also served as a point of socialising, especially for the women who went in groups and used the

opportunity to catch up on gossip and solicit advice from friends and relatives. The conversation could continue even to the toilet and while they were defecating.

According to the Public Records and Archives Administration Department (PRAAD) report of 1909 (as cited in Bohman, 2010), the focus on sanitation during the colonial era started with an outbreak of a bubonic plague in Accra in 1909. A British medical practitioner, Simpson, was then sent by the Colonial Office to make an assessment of the situation by visiting three towns in Africa, namely: Freetown, Lagos and Accra. His report indicated a poor situation with regard to water supply, sewage disposal and storm water as well as the unplanned nature of the towns that were growing rapidly. The rapid urbanisation, which was due to the scaling up of economic activities coupled with the unplanned growth of the towns, made the laying of pipes and drains difficult. Mr. Simpson was of the opinion that the colonial administration needed to take responsibility for providing a water supply and sanitation for the local people and establish efficient sanitary administration. The formal responsibility of urban sanitation at that time had been handed over from the central government to the Accra Municipal Council in 1896. The Accra Municipal Council was, however, unable to collect revenues and taxes to carry out its sanitary duties due to its unpopularity (Patterson, 1979). Meanwhile, the European officials in the colonies were also concerned about their health. Simpson's report indicated thus:

> While there is no special health or sanitary department belonging to each colony, interested in and responsible for this work, and whose function it is to see that unhealthy conditions are removed and that similar ones are not permitted to arise, they will remain and continue to break up the health of Europeans who by reason of their duties have to visit or reside in these places (PRAAD, 1909: 15).

According to Bohman (2010), the concern for the health of the Europeans, compelled them to start work on a water supply in Accra by providing a drainage and sanitary infrastructure as a necessary step and a preventive measure to provide a decent environment for the

colonial administration in the Gold Coast. This, invariably, influenced the differential allocation pattern and access to water and sanitation facilities among the different strata of society, which still exists to date. Another reason, according to Bohman, was to prevent a further reduction of the local population, which had already been heavily reduced by the slave trade in order not to impede economic development. Simpson's report, therefore, alerted the colonial authorities of the alarming sanitary situation and served as a catalyst for the first colonial intervention in the public water supply in Accra. This was to be extended to the other areas later.

Before this time, as cited by Bohman (2010), most towns had developed without sufficient household toilets. As a result, most people relied on public pan latrines, which had to be manually emptied. The few septic tanks available were overused and not functioning properly. Those without access to public latrines resorted to open defecation, while others used domestic utensils, which they emptied into drains (Bohman, 2010). The then Governor, Allan Burns, proposed that the latrines be connected to the water-borne sewerage systems, but this could not materialise due to the fact that most of the components had to be imported and there was the lack of shipping space during the Second World War. Meanwhile, the population of Accra, which was 17,892 in 1901, grew ten times to 192,047 as at 1954 (Acquah, 1972), making the sanitation situation worse. In the case of water, the low-income or local areas were not targeted, as indicated below:

It would be expected that when new houses are erected, light and water would be installed in them, but this is not the case except in houses built for non-Africans and a small number of wealthy Africans. Houses for letting purposes usually lack these amenities. There is also an absence or an inadequate number of latrines, bathrooms and kitchens (Acquah, 1972).

The above statement is an indication that lack of infrastructure including sanitation was a challenge even during the colonial era and continues to date.

1.3.2 Post-colonial Era (1957 – 1983)

The sanitation situation in the immediate post-colonial era, between 1957 and 1983 remained largely the same, if not worse. About 68% of the population in Accra lived in houses without latrines and 41% without bathrooms during this period (Ayee & Crook, 2003. The administration of sanitation had been transferred from the central colonial administration to the municipal government. The commonly-used sanitary facility at the time were public toilets and faecal sludge treatment sites, which were mainly built, operated, and maintained by the then municipal councils. No user fees were charged for the use of latrines and public stand pipes. However, municipal staff were paid to manually collect faecal sludge from latrines and bring it to treatment plants.

This period was characterised by the political economy of toilets with the IMF disallowing the local government to run the public toilets. The toilet facilities were therefore to be managed by private entities. Hence, in 1981, the Committee for the Defence of the Revolution (CDRs)[1] were commissioned to build and manage the new toilets. Others took over the management of the existing ones and then introduced user fees for their maintenance (Ayee & Crook, 2003).

[1]An off-shoot of the then People's National Defence Council (PNDC), the ruling military government, led by Flight Lieutenant Jerry John Rawlings.

Although conditions improved at the initial stage, the CDRs, according to Ayee & Crook, (2003), began to divert the funds raised and, as a consequence, the condition of the public latrines deteriorated and they were handed over to the MMDAs (Ayee & Crook, 2003). The MMDAs introduced the franchise system for private individuals to operate and maintain the facilities by charging user fees and giving a percentage of the proceeds to the Assemblies. The majority of the people who were given the opportunity to manage the toilets were assembly members. This management system failed because the managers were neither rendering proper accounts to the Assembly nor maintaining the facilities. The public toilets were left in a deplorable state, causing people to resort to open defecation instead of paying to use the unkempt toilets. Public-private partnerships for public toilets and treatment sites were introduced on a pilot basis in some MMDAs and later extended to all districts in Ghana in the 1990s. This model improved the conditions of public toilets considerably (Ayee & Crook, 2003).

In an effort to reduce the rate of open defecation and encourage patronage of the public toilets, different technologies such as the Ventilated Improved Pit (VIP)[2], Kumasi Ventilated Improved Pits (KVIPs)[3], Aqua Privy[4], and the WCs were introduced by the MMDAs. This was to bring a variety of choice for the people influenced by affordability and preference. Apart from the public toilets, there was the extension of the sewer systems in Accra, Kumasi and Takoradi in the late 1980s to encourage households to build their own latrines. Sewage treatment sites were built at the points the faecal sludge was to be dumped.

[2]VIP- dry toilet dug with or without lining with a vent pipe. It cannot be reused the moment it gets full.
[3]KVIP – dry toilet with alternating lined pit with vent pipes. One pit is used at a time and closed for it to decompose then later scooped for manure and re-used.
[4]Aqua privy – has a septic tank which is ceded with water and microorganisms which helps it to decompose and is dislodged when full.

Apart from the government, other external support agencies and donors have been supporting the sanitation sector in Ghana over the past decades. These include the World Bank; Danish International Development Agency (DANIDA); the European Union (EU); Canadian International Development Agency (CIDA); Agence Francaise de Development (AFD); African Development Bank (AfDB); Japan International Cooperation Agency (JICA); and international Non-Governmental Organisations (INGOs) including (but not limited to) UNICEF, World Vision, Plan International and WHO.

1.3.3 The Present Sanitation Situation

Presently, only 14% of the entire population of Ghana has improved sanitation, a situation not that different from the global picture. According to WHO and UNICEF (2014), 59% of the global population use shared latrines[5] and 19% still practise open defecation. The JMP monitoring the MDG on water and sanitation has observed that, globally, Ghana has the highest number of people (59%) using shared or public toilets worldwide: this is an unimproved sanitation by the JMP standards. In addition, 8% use unimproved toilets, such as pan latrines[6] and traditional pit latrines[7], while about 19% of the people practise open-defecation. Although in the urban areas open defecation decreased from 11% to 7%, for rural communities this has rather increased from 29% to 33% (WHO & UNICEF, 2014).

[5]Shared toilets refer to "facilities, often Ventilated Improved Latrines (VIPs) or standard latrines, which are shared by several households" "Household toilets are facilities that are primarily for the use of the household". Communal toilets correspond to "toilet blocks shared by a large group of users, and for which a fee for use is often charged. Public toilets are open to all in the community, including visitors and commuters, or "may be reserved for exclusive use of a particular community" (Schaub-Jones et al., 2006: p. 5).

[6]Pan latrine refers to toilets that use pans or buckets and are emptied regularly.

[7]Traditional pit latrines are dug pits with sticks or wood cut across on which people stand to defecate. They are fenced and roofed with either wood, thatch, mud, palm fronds, bamboo or iron sheet (see pg. 160 fig 19, 20, 21 & 22).

Table 1.1 gives the sanitation situation from 1990 to 2012.

Table 1.1: Sanitation Coverage in Ghana (1990 – 2012)

			Urban (%)				Rural (%)				National (%)			
Year	Popn	% urban population	Improved	Shared	Other unimproved	Open defecation	Improved	Shared	Other Unimprove	Open defecation	Improved	Shared	Other Unimprove	Open defecation
1990	14,629	36	12	44	33	11	4	20	47	29	7	19	42	22
2000	18,825	44	16	59	16	9	6	31	32	31	10	43	26	21
2010	24,392	51	19	73	2	6	8	43	16	33	14	58	9	19
2012	25, 366	53	20	72	1	7	8	44	15	33	4	59	8	19

Source: WHO & UNICEF JMP Report (2014)

Against the background of this poor sanitation situation, Accra in particular has an annual outbreak of cholera especially during the rainy season (June – August). In 2011, the GHS recorded 4,000 cases and 60 deaths (GHS, 2011). The situation turned worse in September 2014 when Ghana recorded the highest cases of cholera with 14,411 cases with 127 deaths and a case fatality rate of 0.9% (GHS, 2014). As at September 2014 the WHO office in Ghana recorded cases of cholera resulting in 127 deaths.

The cases were recorded from 74 districts in eight out of the ten regions in the country. The hardest hit areas were in the Greater Accra Region, which recorded 12,871 cases and 93 deaths. Most of the cases came from slum settlements such as Glefe, La, Weija, Ofankor, Agbobloshie, Amasaman, Ogbodjo, Bukom, James Town and Korle Gonno (GHS, 2014).

The issue of sanitation has been, and still is, one of the major challenges of both past and present governments. Although most political parties include issues on sanitation in their manifestos, none of them that have come to power has been able to achieve the targets promised. For instance, in 2004 the National Democratic Congress (NDC) promised to

supply materials (including local materials) for latrine construction; extend subsidies on latrine construction; enforce laws on sanitation by the District Assemblies and Committees; increase public education on hand-washing and good sanitation practices; and provide hand-washing facilities at public institutions, especially schools. They also promised the adoption of the Community Led Total Sanitation (CLTS) strategy to promote sanitation; implement the "Sanitation for All Ghana Compact"; and have it managed sustainably by the new National Sanitation Authority as a special body under the Local Government Service with independent sources of funding (NDC 2008 Manifesto, p.7). In its 2008 Manifesto the NDC promised to take bold and comprehensive measures to deal with the appalling filth in the country, and the related health problems of the people caused by inadequate, inappropriate and ineffective waste management systems and practices – all in the first 100 days in office.

The National Patriotic Party's (NPP) manifesto also pledged to work towards improvement of environmental sanitation through education and enforcement of bye-laws of the Assemblies. Greater attention was to be given to environmental sanitation and hygiene in the basic school curriculum (NPP 2008 Manifesto: 17). The Convention People's Party (CPP) devoted just a few lines to water, sanitation and hygiene, and mentioned that it would liaise with the Ministry of Health to educate the public on the disposal of human waste and the management of such waste as not to become a health hazard. Few details of these pledges were given, and they were not considered matters of priority on the campaign platforms despite their importance to the very people the political parties seek to rule (Smith-Asante, 2012). No political party in power has fulfilled their electoral promises on sanitation issues although some efforts have been made (MLGRD, 2011).

Currently, the government has instituted the National Sanitation day, which is observed on the first Saturday of every month as a clean-up campaign to desilt chocked gutters, clear weeds, collect refuse and sweep the environment. Although this has yielded some results the apathetic nature of residents and business owners as well as the inability of the MMDAs who are spearheading the initiative to cart the refuse from site after the clean-up is not encouraging and threatens the sustainability of the programme. Another effort to promote hygiene practices is the participation of Ghana in the Global Handwashing Day celebration on 16th October annually.

Access to and enjoyment of safe and clean drinking water and good sanitation is meanwhile a basic human right and is essential to the full enjoyment of life (UN, 2010). Enjoying the right to sanitation entails the facility being available, safe, acceptable, affordable and accessible to all regardless of their religious, economic and social status. In addition, it should give the beneficiary the opportunity to participate in the implementation process. Citizens of developing countries cannot be said to be realising their rights to safe sanitation, because of the unavailability of improved sanitation facilities and the non-involvement of the beneficiaries in the implementation of most sanitation projects.

The Ministry of Local Government and Rural Development Report of 2007 indicated that, in Ghana, poor environmental health conditions are a major drain on the country's weak economy, because the country incurs high health expenditure on sanitation-related diseases and loses productive working hours because of illnesses (MLGRD, 2007). Poor environmental sanitation-related diseases, though preventable, continues to be the major reason for seeking medical care in the country's health facilities. National epidemiological patterns have remained fairly constant over the years with diseases related to poor

environmental sanitation being the most frequently reported. For instance, malaria, a sanitation-related disease accounts for about 41% of all out-patient attendance (GHS, 2007). Other sanitation-related diseases, such as diarrhoea, skin and eye diseases, cholera, typhoid and intestinal worms, together account for 16% of out-patient attendance in Ghana (GHS, 2011).

Poor environmental sanitation and unregulated economic activities have resulted in the pollution of many water bodies in the country consequently depriving communities that depend on these water bodies of their livelihood (MLGRD, 2007). The tourism sector of Ghana, earmarked as a significant source of income, employment and foreign currency, also suffers from poor sanitation. It is estimated that Ghana could earn as much as US$8.5 million annually if sanitation is improved (WSP, 2012).

A report from the Water and Sanitation Programme (WSP) indicates that poor sanitation costs Ghana Gh¢420 million each year (an equivalent of US$140 million), while open defecation costs Ghana US$79 million per year (WSP, 2012). Out of that amount, US$19 million is said to be lost each year in access time because each person practising open defecation spends almost 2.5 days a year finding a private location to defecate, leading to large economic losses (WSP, 2012). In addition, the loss of dignity and privacy or the risk of physical attacks and sexual violence all add to the cost as well as the additional fund used and time spent to treat illnesses due to poor sanitation (WSP, 2012). Women bear the larger cost as caregivers who may spend additional time accompanying young children, the sick or elderly relatives to defecate (Tarkwalba & Mariwah, 2014). The cost is even higher for those who do not have access to a toilet and so may spend additional time looking for a

private location for urination as well. According to WSP (2012), eliminating open defecation would require the provision of about one million latrines countrywide.

The WSP report further estimated that US$215 million was spent on approximately 19,000 Ghanaians, including 5,100 children under 5 years, many of whom later died from diarrhoeal diseases. Nearly 90% of this situation is directly attributed to poor water, sanitation and hygiene (WSP, 2012). Accessing health care is estimated to cost US$1.5 million, while US$54 million is estimated for diarrhoea-related health care, which places a heavy burden on households and government expenditure on health care (WSP, 2012).

Unfortunately, it is the poorest of the population, constituting about 20%, who are more likely to practise open defecation, and are more likely to be confronted with these challenges (WSP, 2012; WHO & UNICEF, 2012). For the poorest, therefore, poverty has far-reaching consequences: they are more likely to experience poor sanitation, which may result in ill health. Dealing with illness may require spending money and productive time at the hospital. The enumeration of all these are captured in Winslow's statement: That "people are sick because they are poor, poorer because they are sick and sicker because they are poor" (Wernsdorfer, 1976).

1.3.4 Managing the Sanitation Situation

As discussed earlier, Ghana is faced with many sanitation challenges, which is a cost to the nation. As a result, several attempts have been made by the government, private sector and external donor partners to solve these problems. Some of the interventions have been in the area of building institutional capacity through documentation and the development of human resources. External donor communities including DANIDA, UNICEF, World

Bank/UNDP, EU and other international NGOs have been promoting the construction of household latrines in their various areas of operation through subsidies (DANIDA, 2010). The private sector and especially individuals have contributed to the scaling up of sanitation in Ghana. Studies have found that, although the supply-driven approach with subsidies has had some success in providing improved latrines in South Asia especially, a follow up at a later date revealed that the facilities were not being used or maintained and most were in a state of disrepair (DANIDA, 2010). Giving subsidies to beneficiaries of household latrines was found not to be sustainable and did not promote the scaling up of sanitation and increased community dependency instead of generating real demand (WSP, 2000).

Some of the approaches developed by the government to solve this problem include the adoption of the Paris Declaration of the Water and Sanitation Decade 1990. The government has also incorporated sanitation into most strategies and major policy documents such as the New Partnership for Africa's Development (NEPAD). The entire policy framework on sanitation was based on the Ghana Poverty Reduction Strategy II (GPRS), the Millennium Development Goal targets and the Government's coordination with donor assistance (Water Aid, 2005). Environmental sanitation is incorporated into all sectors of Ghana's economy, particularly in health, education, environmental protection and improvement of human settlements, services, tourism and general economic productivity (MLGRD, 1999).

The Ministry of Local Government and Rural Development together with the Ministry of Water Resources, Works and Housing (MWRWH) is currently responsible for developing sanitation policies and coordinating funding for the sub-sector. These sanitation policies are expected to be implemented by metropolitan, municipal and district assemblies as part of the government's decentralisation process and with the support of the Environmental Health and Sanitation Division (EHSD) and the Community Water and Sanitation Agency

(CWSA). The CWSA is an executive agency under the Ministry of Works and Housing (MWH) with responsibility for water supply and the delivery of water-related sanitation to rural communities, including small towns (CWSA, 2007).

The Environmental Health and Sanitation Division (EHSD) is the policy division of the MLGRD created under section 161 (1) of the Local Government Act, 1993, which enjoins the EHSD to see to the overall management of environmental sanitation in the country with its main aim being to ensure safe, clean and healthy human settlements throughout the country. The EHSD currently has a total of 2,240 staff stationed in all the 216 MMDAs (MLGRD, 2014). They are, however, faced with many challenges with logistics and human resource capacity. These challenges make it difficult for them to carry out their mandate of inspecting homes, educating the public on proper hygiene practices, waste management and promoting household toilets. Some efforts are, however, being made to create awareness through the annual National/District Sanitation Week celebrations held on 19th November every year by the MLGRD; and the newly instituted monthly clean up campaigns by the ministry. This is, however, yet to yield the needed impact since most citizens do not participate because they are not compelled to do so and there are no sanctions against those who do not attend.

The EHSD also developed the National Sanitation Policy and the National Environmental Strategic Action Plan (NESSAP) in 1999, which became active only after its revision in 2009. Its aim was to add to the effort in achieving the Millennium Development Goals (MDGs) and towards improving total human development and quality of life. There are other environment and sanitation Acts such as: the Local Government Act of 1994, Act 462; the Environmental Protection Agency Act of 1994, Act 490; and the Environmental

Sanitation Policy of Ghana of 1999. All these acts and regulations emanate from the National Environmental Action Plan. Sanitation, therefore, seems to be woven into the responsibilities of all the ministries without a main ministry to oversee the entire sanitation problem. As a result, implementation becomes a big challenge, considering that several government agencies and ministries are involved.

A coordinating council, the National Environmental Sanitation Policy Coordinating Council (NESPoCC) was put in place in January, 2000 to expedite the implementation of the National Sanitation Policy. The national laws, specifically the Criminal Code (Act 29) of 1960 and the bye-laws of all the 110 MMDAs were revised and were to be enforced to ensure compliance of sanitation rules, which is a major challenge.

In order to achieve the MDG target for basic sanitation three main interventions have been identified. These include scaling-up of Community-Led Total Sanitation (CLTS) countrywide; rolling out a micro-finance credit scheme to support household latrine construction; and implementing decentralised treatment or disposal systems, incorporating harvesting and re-use of by-products like biogas (MLGRD, 2011). The roll-out is being implemented at the local level by the MMDAs.

Having had some insight into the genesis of sanitation globally and at the national and community levels and the technological and managerial challenges associated with the uptake of sanitation the focus now is on some socio-cultural factors that have been identified as contributing to low sanitation uptake (Jenkins & Curtis, 2005). Only a few studies have been done in this direction. Meanwhile, the scaling up of CLTS, which is the main approach adopted by Ghana to increase the demand for sanitation, will require gaining a better

understanding of the socio-cultural factors that influence hygiene and sanitation behaviours; and is what this study hopes to achieve.

1.4 Problem Statement

Globally, an estimated 2.5 billion people lack access to basic sanitation and 1.1 billion still practice open defecation (WHO & UNICEF, 2012). Although access to sanitation is a fundamental human right (UN, 2010) it is a privilege to most people in sub-Saharan Africa where the average coverage of adequate sanitation facilities is 15 percent. Ban Ki-moon, the former UN Secretary General indicated that "safe drinking water and adequate sanitation are crucial for poverty reduction, crucial for sustainable development and crucial for achieving any and every one of the MDGs" (Ki-moon, 2010). Achim Steiner, another former staff of the UN, has reiterated that "Achieving MDG 7 Target 7c which is halving the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015 is an important precondition for achieving all the other MDGs" (UNEP, 2006; Steiner, 2006). This, therefore, makes the achievement of this target very crucial for the attainment of the other MDGs to reduce poverty, illiteracy, gender inequality and child mortality as well as improve maternal mortality and combat diseases.

Although efforts have been made in the past to link disease epidemics to water supply and sanitation practices (White et al., 1972; Kolsky & Blumenthal, 1995; Saravanan, 2011) not much has been achieved because of the emphasis on using bio-epidemiological evidence to understand environmental and behavioural health perspectives relating to water contamination and epidemics (Curtis, 2000). In addition, past approaches to implementing sanitation and hygiene programmes in rapidly urbanising townships have not worked and will need to be changed (Whittington, Lauria, Choe, Hughes, Swarna & Wright, 1993)

because they have focused mainly on the provision of hardware, such as toilets (EHP, 1999). Meanwhile, studies have shown that the determinants of household choice for sanitation, for example, are associated with factors in relation to attitudes and perceptions other than health or the design and construction of latrines (Jenkins, 1999; Ayele, 2005).

Although socio-cultural factors have been identified as contributing to the choice for household sanitation, only a few social scientists and anthropologists have made some effort to understand the sociological perspective in defecatory practices and the occurrence of diseases. As a result, not much is known about the role of culture, i. e., beliefs and norms in dealing with diseases and especially the management of human excreta as is being interrogated in this study. Van der Geest (1998; 2007) is among the few anthropologists who have devoted themselves to the study of defecatory practices as compared to issues on the family for instance. This is because talking about defecation is not for civil conversation and its study is very sensitive and not considered attractive to many sociologists and anthropologists.

Hence, only a few studies have paid much attention to defecatory practices and the local management of human excreta as critical aspects of efficient waste management practices (Jenkins, 2001; van der Geest, 1996; Senah et al., 2012). In order for sanitation projects and hygiene promotion programmes to be accepted and practised, there will be the need to incorporate cultural preferences and practices of communities into the design of sanitation infrastructure.

Of the literature available, most do not highlight the role of beliefs, local knowledge, norms, values and morals in relation to hygiene practice and disease occurrence. For example, van

der Geest in his study, “The Akan Shit” dwelt mostly on the conception of defecation but did not relate it to health. His interest was on how people handled faeces but was less concerned with its disposal. Curtis was also more concerned about the aesthetics and dignity in relation to hygiene and hand washing than its health implications. Senah, Okine and Ackun (2012) in their study titled “Where shall we shit?” mainly interrogated the sanitation policy concerning the provision of public facilities by the government.

Ghana is rated as having a higher coverage (59%) of shared or public (unimproved) latrines than most other African countries; especially, in low income settlements (Boadi, 2004; WHO & UNICEF, 2014). These public toilets are not well maintained, and they create long queues during peak periods thereby contributing to the practice of open defecation (Boadi, 2004).

A baseline survey conducted in Prampram, the study area, by the Dodowa Health Research Centre and the Copenhagen University under the Sustainable Sanitation (SUSA) project indicated that most of the households (75%) did not have their own toilets. Out of this number, 49.5% used available public toilets, which were not well-maintained, leaving most community members to defecate on the beach or in the bush.

This study, therefore, focused on beliefs and cultural practices that influence defecatory preference and practices, taking into consideration their socio-demographic characteristics, social structure, and socialization processes. It also hopes to build on existing literature and contribute to another perspective to the on-going theoretical discourses on sanitation.

1.5 Objectives of the Study

1.5.1 The General Objective

The study examines the sanitation and defecatory preferences and practices in Prampram in the Ningo-Prampram District. Ultimately, the study intends to interrogate sanitation policies and practices that will lead to the uptake of providing domestic toilet facilities.

1.5.2 Specific Objectives

In furtherance of the above objective, the study seeks to achieve the following specific objectives:

1. To investigate socio-demographic factors that influence hygiene behaviour and defecatory practices in Prampram;
2. To examine the processes of childhood socialization and their effects on hygiene and sanitation behaviours and practices; and
3. To explore the community's perceptions of faeces in relation to dirt, smell, contagion and place and the influence of their perceptions on hygiene and defecatory practices.

1.5.3 Research Questions

In order to address the above objectives, there is the need to interrogate the main factors that motivate people to practise good hygiene and defecatory practices, taking into consideration the socio-cultural, political and economic factors. The study, thus, posed these questions:

1) How can socio-demographic dynamics of the Prampram people influence the management of human waste at the community level?
2) What processes of socialization do children in Prampram go through in order to acquire these hygiene and sanitation behaviours and practices?

3) How does the community's perception of faeces (dirt, contagion, smell and place) influence their hygiene behaviours and defecatory practices?

1.6 Scope of the Study

As explained earlier, this study is a sub-set of a larger study. Its focus is on Prampram, a peri-urban coastal community with its peculiar characteristics, which may or may not relate to other coastal communities within Ghana or beyond. Hence, given the scope, some of the conclusions may not apply to other communities due to their uniqueness; but the study will open other avenues for discussions on sanitation and defecatory practices.

Sanitation, generally, covers a wide range of activities, which include management of human excreta, storm water, grey water, solid waste, hazardous waste and industrial waste. Human waste relates to body waste, namely excrement, excreta, excretory product, and excretion-waste matter (such as urine or sweat but, especially, faeces) discharged from the body. Sanitation and human waste or excreta were used interchangeably. For the purpose of the study, the definition of sanitation refers to the safe disposal or management of human excreta, which means preventing human contact with faecal matter, as defined by the JMP (WHO & UNICEF, 2012).

1.7 Organisation of Study

The study is organised into eight chapters. Chapter One introduces the study with a background to the study. This is followed by the problem statement, objectives, justification and how the study has been organised.

Chapter Two reviews literature on socio-cultural factors that contribute to the demand for sanitation facilities. The literature review focuses on perceptions held by community

members on hygiene and defecatory practices. The main theoretical underpinnings of the study dwelt on Mary Douglas' concept of dirt as 'matter out of place' and its influence on people's defecatory practices.

Chapter Three gives a background to the study site, tracing its history from the period of the migration of the people and settlement patterns. Their social structure, political and family systems and their current sanitation situation were interrogated.

Chapter Four highlights the methodology of the study. It discusses in details the qualitative considerations adopted for the study. It delves, especially, into the ethnographic approach adopted, which is aimed at eliciting the views of community members with regard to their sanitation preferences and practices. The chapter deals, basically, with the research design, sampling, instrumentation and analysis.

Chapters Five, Six and Seven deal with the findings and analysis. Chapter Five highlights issues relating to socio-demographic factors that influence hygiene behaviour and sanitation practices. These include the social structure as well as the available infrastructure that enables the individual to practise their hygiene behaviours.

Chapter Six explores the socialization process children go through to acquire knowledge and develop hygiene or sanitation behaviours. It concludes by illustrating the processes in the form of a defecation ladder, showing the progression in child defecatory practice in relation to their age.

Chapter Seven interrogates the community's perception of dirt, contagion and smell and

how these inform the people's hygiene behaviours/practices. Their concept of private and public spaces and how this relates to their management of such spaces is assessed.

Chapter Eight, which is the final chapter, summarises and concludes the study by making a linkage between the historical, socio-demographic, political and economic factors as well as community perceptions that influence hygiene behaviour and defecatory practices in Prampram. Based on the findings, recommendations are made to guide policy framework on hygiene and sanitation delivery and practices in peri-urban communities.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL PERSPECTIVES

2.1 Introduction

The issue of sanitation and more broadly its relationship to health has been a cause of concern to many. Today, with great leaps and bounds chalked by science and technology the literature on sanitation is quite respectable. As one surveys available literature, it is however obvious that there is a dearth of literature on defecatory practices. This is to be expected, for in very 'civilized' society faeces and defecation are not often issues of public discourse. This chapter reviews existing literature on the subject of defecation and faeces within the overarching context of sanitation. It starts by interrogating the socio-demographic characteristics that influence the defecatory preferences and practices of community members. It goes further to analyse the form of socialization children go through to acquire these defecatory behaviours and how that plays into adulthood. It finally identifies some community perceptions of dirt, smell, contagion and place and how that influences their adaptation of some defecatory practices. Mary Douglas' concept of dirt 'as matter out of place' served as the main theory on which the study dwells.

2.2 Factors Influencing Sanitation Preference

A better understanding of the perspectives of the local people has been identified to contribute immensely to the adoption of many interventions (Jenkins, 2001; Hajjar et al., 2013). This entails an appreciation of the cultural significance of the practice(s) to the people (Mara & Cairncross, 1989), the perspectives of the people, and the context within which the behaviour is practiced (Hall, 1984). Hence, the personality, economic status as well as what the individual has been educated to believe, informs his or her hygiene behaviour and practice.

For example, a faecophilic culture like that of the Chinese teaches tolerance for handling faeces. Thus using faeces as fertilizer is tolerated. Dittmer (2009) in his study of four African countries discovered that among the Bwaba ethnic group in Burkina Faso, it was believed that, if one was given food, one was expected to defecate in the field of the food giver (and fertilise the crops) as an act of reciprocity. Also, in Mali and among the Idoma people in Nigeria, open defecation was seen as an ancestral practice. Therefore, open defecation is culturally encouraged in Idoma communities as it is a taboo to defecate in a building, and many older people still refuse to defecate in any sort of enclosed area. Banda, Sarkar, Gopal, Gorindarajah, Harijan, Jeyakumar, and Balraj (2007) in their study of the people of rural Southern India observed that the majority (74.2%) of respondents who defecated in fields believed there was no stigma associated with this traditional practice. Cost was not an issue in many cases as they could afford mobile phones, televisions and weapons for protection and chose not to invest in toilets.

However, faecophobic cultures like those of the Indian Hindu and the Akans of Ghana, find faeces abhorrent and ritually polluting; even the words used to describe it are regarded as offensive (Esrey et al., 1998; van der Geest, 1998). This will definitely affect the choice of sanitation facilities, which will be one that will not let them come into contact with faeces. Also, in Mali, Ghana and Nigeria respondents felt ashamed or embarrassed when seen approaching a toilet (Dittmer, 2009). The handling of human waste, to the Hindus for example, is a designated job for the 'untouchable' or 'sweeper caste' communities who have the responsibility, under the Hindu caste system, to dispose of human excreta (Ramaswamy, 2005). The faecophobic tend to prefer 'wet' toilets like the flush, where the faeces are taken away from their immediate surroundings and from any body contact.

Van der Geest, however, sees this as a paradox, where the faecophobic Akan who is so obsessed with avoiding faeces tends not to be that concerned with where the faeces finally ends up. He describes it as 'the hygienic puzzle' in the sense that being faecophobic causes people to be so afraid of faeces that they simply take it off their consciousness. As a result, they end up being confronted with the very dirt they tried hard to avoid. The people of Kolkata in India are also known to pay more attention to private cleanliness and bodily purity but are indifferent to dirt and filth caused to the environment. To them, once waste is pushed out of the physical boundary of the house, it then belongs to the 'public' domain, open for public desecration (Mukhopadhyay, 2006). The same is said of the Indians who are particular about the removal of faeces from the private sphere and yet do not design infrastructure to remove it from the public sphere (Srinivas, 2002). What these authors fail to recognise is the fact that the people are concerned that their immediate environment is clean in consonance with their culture. Where sewerages end up may not be the concern of many.

The role of religious beliefs in sanitation preference, therefore, cannot be under-estimated because of its influence in the choices of the people. A study by Nawab, Wotiz and De Luca (2006) into the cultural preferences in designing ecological sanitation systems in North West Frontier Province in Pakistan indicated that Muslim practices of anal cleansing together with the strict religious prohibition of contact with urine and faeces were factors that influenced their reluctance towards adopting the urine-separating latrines. The majority preferred flush toilets and saw any other form of latrine as old fashion, backward and a taboo. To most people, the water closet (WC) ensured that the faeces were taken from their immediate surroundings, so served their purpose. In addition, the WC, being a wet system enables them to practise ablution after defecation (Nawab et al., 2006). In a study by Cotton (1998), the

placement of a latrine in the northeast corner of the plot was unacceptable to their religion and hence the people refused to use the facility. People therefore view things through their own cultural and religious lenses to decide on their defecatory preference and practices (Douglas & Wilddavsky, 1982).

Apart from the cultural and religious values, personal 'comfort' has been found to influence people's defecatory preference and practices, In the study by Nawab et al. (2006), although most people opted for the WC, the aged, who were in the minority, preferred the bush, because they wanted something that they could easily relate to or was closer to what they were used to. They also enjoyed the fact that there are no queues so they were under no pressure to finish quickly as is the case using the public toilet. They indicated feeling at ease while defecating in open air where they could escape the smell of others (Nawab et al., 2006). None of these qualities to them can be found in a latrine or flush system. Others felt the available technologies were not their preferred choice and would want to invest in something trendy like the WC and not the dry toilets like the KVIP or Ecosan.

A study undertaken by Dittmer (2009) in four countries in West Africa (Mali, Burkina Faso, Nigeria and Ghana) found that the fear of being possessed by demons or losing one's magical powers was the leading cause of open defecation across all the areas where the study was carried out. In Ghana, nearly half of the respondents in Tamale (NR) believed that public toilets were surrounded by evil spirits and, therefore, should be avoided; and a significant group of respondents in Wa, in the Upper West Region of Ghana, believed that latrine use would strip the user of his or her magical powers (Dittmer, 2009). This seems to be a perception that has been passed down for generations.

On the other hand, Dittmer found that in some Idoma communities, husbands do not allow their wives or daughters to share latrines with them, and will generally refuse to pay to build latrines for the use of female family members.

2.3 Gender and Sanitation Practices

Hygiene and defecatory practices also have a gender perspective. A study in Chittagong, Dhaka, Nairobi and Hyderabad by Joshi, Fawcett, and Mannan (2011) illustrated that excreta disposal systems packaged and delivered as low-cost "safe sanitation" do not match the sanitation needs of a very diverse group of urban men, women and children. It is of little surprise that the delivered systems are neither appropriate nor used, and are not sustained. This is because in many cultures women need separate facilities from the men. This may be especially important for menstruating women. Women often require more privacy and will boycott facilities that they feel give inadequate protection.

In most cultures, women have the primary responsibility for providing water and ensuring sanitation and hygiene at the household level (Tukwarlba & Mariwah, 2013). Women therefore play a crucial role in influencing the hygiene behaviours of young children. A study in two communities in India, for example, found that poor women who worked outside the home for long periods had less time to see to the hygiene and sanitation needs of the family, especially the children. Hence, their compounds and environs were found littered with children's faeces (Chauhan & Gopalakrishnan, 1983). This problem can be compounded when toilet facilities are located far from the home, making it difficult for women to supervise the defecatory practices of their children.

Elmendorf and Isely (1981) confirmed that in areas of domestic chores and hygiene the women (56.4%) are most involved. According to them, women do the work, take management decisions in and around the house, educate the children and are change agents in contact with other women. Taking account of the central role of women in health and hygiene, it is logical that most hygiene education programmes work mainly with women: this unfortunately excludes men. Meanwhile, it is expedient that all hygiene programmes address men as well as women (Van Wijk, 1985).

In Ghana, women are noted to be mainly involved in the handling of waste and hygiene issues as compared to their male counterparts. Kwawe (1995) has attributed this to the demands marriage places on women –to cook, fetch water and clean the house. It therefore stands to reason that, through socialization, the female child learns from her mother how to clean, dispose of waste and keep the house in order. Tukwalba and Mariwah (2014), on their part, believe that the duty of women as waste handlers is a social creation that occurs during their socialization process and that women accept waste management as part of their domestic duties, although it is supposed to be a shared responsibility. Kwawe (1995) argues that, since it is the woman who generates the waste as a result of her domestic chores, it is her duty to find the means to dispose of her own waste. To him, the man should be left out of waste management in the home, because he is hardly at home to generate as much waste as the other members of the family. This argument is however untenable because it is not enough reason for men not to assist with creating a hygienic environment in the homes since the effects are borne by all members of the family, including the man.

Another issue worth mentioning regarding gender and sanitation relates to how females deal with menstrual hygiene in the absence of toilet facilities, where they can conveniently

dispose of the menstrual bold or soiled pads as well as water to clean up (UNICEF, 2010).This is especially critical, for girls of school going age, who sometimes have to stay out of school due to the absence of toilets in their school.

The different roles assigned to boys and girls at different ages influence their hygiene practices as well as defecatory behaviour. Clough (2011) in her study of the industrialized nations of the North and West identified a link between sex differences and patterns of hygiene. She observed from her study that standards of cleanliness are generally higher for girls than for boys especially under the age of five when children are more likely to be under close adult supervision. She noted that the link between sex differences and patterns of hygiene was as a result of a feminist analysis of the content of social roles assigned boys and girls in societies of the industrialised nations of the North and West (Clough, 2011). The study revealed that the masculine gender role assignment leads to the acceptance of playing in dirt and mud for boys and not for girls. The gendered social expectations regarding cleanliness, according to Clough, are also reflected and reinforced by gender differences in children's clothing, participation in sports, and adult supervision of children's play (Caldera et al., 1989; Cough, 2011).

Pomerleau, Boluc, Malcuit, & Cassette (1990) in their study of environmental gender stereotypes in the first two years of life, found that girls do not engage in sports as much as boys and prefer to play indoors. A study on gender differences on hygiene standards showed that a significant number of students training to be preschool teachers in the UK "expected boys, but not girls to be reckless, untidy, cheeky, brave, noisy and naughty; and expected girls, but not boys to be tidy, clean, quiet, sensible, obedient, passive and well-behaved" (Sikes, 1991). In all, the girls are socialized to behave hygienically while the boys are

excused to behave as they please. This invariably influences their hygiene behaviour and defecatory practices as they grow. The next section will throw more light on the socialization process children go through to acquire hygiene behaviour and defecatory practices.

2.3 Child Socialisation and Defecatory Practices

Sociological socialization is very important in the formation of the human personality. Whatever children learn from the beginning is invariably what they carry through life although some things are unlearned. People's hygiene and defecatory behaviours are largely as a result of the adults that influenced them when growing up. Indeed every man or woman has been a child and whatever an individual becomes is largely due to both the environment and the form of socialization he or she goes through (Bronfenbrenner, 1994).

The role of hygiene behaviour in the occurrence of childhood diarrhoea cannot be underestimated. Studies have identified the association between the hygiene behaviours of caregivers and the incidence of childhood diarrhoea. For example, in Sri Lanka and the Philippines, researchers found that failure to dispose of stools hygienically by caregivers was related to an increased incidence of diarrhoea in young children (Baltazar, J. C., and. Solon F. S., 1989). In Ghana, childhood diarrhoea is said to be common among children under five years (UNICEF, 2009). These hygiene behaviours have been proven to have been acquired from infancy (Curtis, Danquah, & Aunuger, 2009).

Bronfenbrenner's ecological systems theory helps us to gain more understanding of the child socialisation process (Bronfenbrenner, 1994). Bronfenbrenner's ecological model, adds another dimension to the development of the child's hygiene behaviour. This theory centres

on the total development of the child, including the interactions between factors in the child's maturing biology, its immediate family or community environment and the societal landscape in which it grows. This is done through interaction with the environment (home, school or peer group), that is the microsystem; things that have indirect influence on the development of the child, that is the exosystem; and the cultural values within which the child operates, that is the macrosystem (Bronfenbrenner, 1994). These theories will help to gain more insight into the processes children go through to acquire hygiene behaviour.

2.4 Participatory Approach in Sanitation Delivery

In the past, the approach adopted by most projects in the implementation of sanitation programmes have contributed to the low demand in sanitation facilities. Public sanitation programmes have been supply-driven, with minimum input from the beneficiaries (Black, 1998; Tearfund, 2007). The programmes used a 'top-down' (katascopic) approach, with no input from the community with regard to the design, implementation and construction of the system (Black, 1998). In such instances systems are designed by outside experts (Cummings, 1997; Black, 1998) who do not take into account the values and beliefs of community members (Black, 1998) ultimately resulting a situation where there is lack of a sense of ownership and responsibility on the part of the beneficiaries (Elmendorf & Isely, 1983). Water and sanitation projects disregarded the needs of women, the poor and other underrepresented sectors of society such as the disabled (Batteson et al., 1998), and overlooked hygiene and sanitation (van Wijk & Francis, 1997).

Against this background, the Water and Sanitation Decade (1980) highlighted the need to respond to consumer demand in order to achieve sustainable progress. This paradigm shift came to be known as the needs or demand-driven or bottom-up (anascopic) approach. The

underlying principle was and continues to be the involvement of all stakeholders, especially the main users of the system in all the phases of water and sanitation projects. Here, beneficiaries are seen as consumers of services and, therefore, active participants in the decision-making process. The 'anascopic' approach required the use of participatory instead of the didactic approach to hygiene and sanitation promotion. The Participatory Rural Appraisal (PRA) tools used to achieve this include: the Self-esteem, Associative Strength, Resourcefulness, Action Planning and Responsibility (SARAR) methodology; and Participatory Hygiene and Sanitation Transformation (PHAST) tool kit. The former highlights the individuals or community attributes such as their self-esteem, associative strength, resourcefulness, action planning and responsibility while the latter aims at mothers and caregivers of children under five years in order to reduce the incidence of diarrhoea among such age groups (Gomez & Nakat, 2002).

With this approach, households are provided with services they want and for which they are willing to pay. The challenge with this approach is the fact that most of the vulnerable in peri-urban communities may be compelled to opt for a higher service facility as a result of the setting but may not be in the position to pay for such services (Allen et al., 2006). Although this approach has improved the demand for sanitation facilities in rural communities in Ghana under donors such as DANIDA, UNICEF, EU and IDA, this has not been able to address the problem of low coverage. This was because the solution ought to consider the socio-cultural context within which these behaviours take place. Without a thorough assessment of the local socio-cultural context of a project during the planning stage, the project is not likely to succeed (Blum & Feachem, 1983). Hence, the new Community Led Total Sanitation (CLTS) demand-driven approach is being promoted worldwide as well as in Ghana (Kar & Chambers, 2008).

Didactic approaches, based on education about germ theory and threat of diseases and their causes, did not ensure improved hygiene behaviour. The regular daily conduct of individuals and their habits were found, to some extent, to be based on making informed decisions, considering the resources available to them and the timeframe within which these decisions are to be taken (Moberg, 2006). For example, where open defecation offers people adequate privacy, convenience and safety, they may not wish to change their so-called 'bad' habits as perceived from a broader public health perspective.

It is, therefore, a complex venture to try and predict when one or more of the above motivations might become persuasive or compelling for an individual, a household or a community to change their behaviour to an acceptable one (Tearfund, 2007). Lessons from projects in Burkina Faso and Zimbabwe suggest that, in order to change behaviour, there will be the need to first understand what drives and motivates it. Behaviour change is difficult to achieve and requires considerable resources (WSP, 2002).

2.5 Motivation for Demand in Sanitation Services

Motivation for practising good hygiene has moved from health benefits to aesthetics, disgust and dignity (Curtis, 1998). Meanwhile people's motivation for acquiring latrines have changed from the health benefits to prestige, convenience, and for the sake of visitors. Mothers in Bobo-Diolasso, according to Curtis, saw little connection between hygiene and diarrhoeal diseases, but rather hygiene was very important to them as a positive social value. As earlier indicated, there are things that motivate individuals or groups to practice good hygiene. In the past, it used to be on the grounds of health benefits but that has not been effective because many people do not seem to understand the link between improved sanitation and hygiene behaviours and health and poverty (Scott, Curtis, Rabie & Garbrah-

Aidoo, 2002). Rothschild (1999) has indicated that the degree to which a target population is prone, resistant or unable to adopt a new behaviour is determined by self-interest (motivation), opportunity and the ability to voluntarily adopt the new behaviour (cited in Jenkins & Scott, 2007). Having an idea of what motivates people to demand improved sanitation helps in preparing the right approach to promoting sanitation. Studies have revealed a myriad of motivators.

According to Scott, Curtis, Rabie & Garbrah-Aidoo (2002), the elderly, the sick and the disabled find defecating in the open an inconvenience, so convenience will be key in their decision to own a sanitation facility. A study by Jenkins and Curtis (2005) in rural Benin found the main drivers for constructing latrines involved prestige, well-being, and situational goals and not health benefits. In Ghana the top three motivators identified were for sick or old relatives, to offer safety at night and for convenience (Jenkins & Scott, 2006). Shordt and Cairncross (2014), in a multi-country research on sustainable behaviour discovered that convenience, safety and cleanliness served as motivations for adopting sanitation and not necessarily the faeco-oral transmission of disease. The study showed that cleanliness and neatness were particularly salient motivations for a wide range of hygiene behaviours. Neatness, to them, is culturally tied to notions of moral and social purity.

A household in a developing country without adequate sanitation goes through a complicated and lengthy process when deciding to use improved sanitation: the decision is either to construct a new toilet or improve on the existing one. According to Jenkins and Scott (2006), the decision to adopt a new sanitation facility further goes through three adoption stages, namely: 1) developing the preference for an improved sanitation facility over the present defecation practice or having the intention; 2) making the choice to install

a toilet taking into consideration the personal benefits of the change; and 3) the availability of the products and the financial implications.

In addition, the 'right' choice of technology is said to be an important determinant of uptake and use of sanitation facilities. This is because technology options, which seem to be inappropriate to meet the needs of a specific group, constitute practical barriers for the adoption of that particular technology. These groups comprise of people from different ethnic and social settings, homogenous or heterogeneous, rural or urban, planned or unplanned settlements (Tearfund, 2007). There are gender perspectives to the technology, whereby some women are known to prefer squatting to sitting when using the toilet, for fear of contracting infections such as leucorrhoea or candidiasis.

In Ghana, the uptake of latrines is said to be low because existing technologies are poorly designed, are in poor condition, are unsafe and cost-prohibitive (Bartram, Lewis, Lenton, & Wright, 2005). A study on household sanitation preference in Kumasi, Ghana's second largest city, reported that 45% of respondents preferred the Kumasi Ventilated Improved Pits (KVIPs), a dry toilet designed by the Engineering Department of the Kwame Nkrumah University of Science and Technology (KNUST), while 54% preferred water closets (WCs). Those who preferred WCs were not necessarily people of the higher income groups, neither were those who opted for the KVIP of the lower income groups (Whittington et al., 1993). The main reason for preference for the KVIP was because it was cheaper and did not require the use of water, which was a challenge in the metropolis. This gives an indication that, although some technologies may be the preference of the people, they may not be feasible and an alternative will have to be sought. Another challenge is finding skilled artisans to construct some of the latrine options to function effectively (WSP, 2003).

Finance is also a major challenge to sanitation uptake. It requires some capital, which most people with lower income are unable to raise and, therefore, would have to rely on credit facilities for financing (WSP, 2003). This hinges on the ability of the people to pay considering the fact that most of the feasible sanitation options in densely-populated peri-urban settings tend to be beyond the means of the very poor (Tearfund, 2007). They therefore have to rely on loans, which are more often given for income-generating activities that are likely to yield returns than for improving community and household infrastructure. Even for the micro credit facility that may be available to the poor borrower, the interest rates do not make it affordable (Jenkins & Sugden, 2006). Repayments are for shorter periods due to the risk involved, hence loans are not attractive to the poor (Tearfund, 2007).

In addition to the challenge of affordability to peri-urban dwellers, most governments' policies on sanitation now consider sanitation more as a private commodity, where households are to make their own efforts to acquire it (World Bank, 2004). The governments of developing countries have therefore been making minimal allocation of resources to sanitation over the years, with only 10% of total investment into sanitation. Although an estimated capital investment of about US$406 million is needed for sanitation and hygiene promotion, the government invests very little and expects a substantial amount to be borne by households, the majority of which do not have the means (WSP & UNICEF, 2010). This is in spite of the massive benefits that will accrue to the nation, improved sanitation and hygiene reduce the incidence of water and sanitation-related diseases by 54%, while improved water supply alone reduces the incidence by 30% (WSP, 2010). Water and especially sanitation are seen as socially-good interventions but not very profitable and therefore do not attract a lot of investors. The private sector would rather invest in services such as telecommunication, which seem to be the priority for many people and are in high

demand because they are perceived as yielding some economic benefits (Bohman, 2010). Hence, although the poor and marginalized may have toilets as their priority, not much effort is made to meet this need by either governments or the private sector.

In other jurisdictions, the lack of evidence on the effectiveness of improved sanitation as a sole intervention in the prevention of diseases has contributed to the low attention given to sanitation. Most sanitation programmes have ancillary components, so attributing behaviour change or improvement in health to a specific intervention can be misleading (Esrey, 1991). Sanitation interventions also take years to implement, and several factors should be present for the intervention to be successful (Barreto, Genser, Strina, Teixeira, Assis, Rego, Teles, Prado, Matos, Santos, dos Santos, & Cairncross, 2007).

The achievement of the MDG 7 target on water by 89% of the global population by 2012, three years before the 2015 deadline, confirms the relative importance of water to most governments. On the other hand, only 64% are using improved sanitation. Although there has been some gains in access globally, it has been uneven because of sharp geographic, socio-cultural and economic inequalities in access among the marginalised and vulnerable (WHO & UNICEF, 2014).

Jenkins and (2005) on the other hand, believe it is the lack of knowledge of or misinformation about existing sanitation interventions as well as bad experiences of beneficiaries with respect to the technologies introduced in the past that have contributed to the low demand for toilet facilities. In some cases, people were unaware of the sanitation

interventions being promoted so did not access it as was reported in Kumasi, Ghana (Whittington et al., 2005).

To Bohman (2010), the lack of a toilet facility does not seem to be the priority of the majority of people living in low-income dwellings in Ghana due to the pressure of meeting some basic needs like food and shelter. Hence, a majority of households either rely on public toilets or practise open defecation while a few own household toilets. In some instances, toilets are said to be converted into rooms for renting due to the high demand for accommodation especially in the urban and peri-urban settings. Although this is against building regulations, an Environmental officer who was interviewed, this is possible due to the lack of both supervision and the enforcement of the law by building inspectors and Environmental Health Officers. According to Bohman (2010), unlike water, which seem to have no alternatives, people seem to have other options when it comes to sanitation and that accounts for the low uptake. Furthermore, although many private sector actors are into the provision of water, only a few are willing to invest in sanitation, due to the low demand (Bohman, 2010).

Clearly, the above discussions have enumerated several factors identified as contributing to the low uptake of sanitation globally and in Ghana. These include infrastructural or technological barriers, economic restraints, approaches to sanitation promotion, behavioural factors and socio-cultural factors (Whittington & Lauria, 1993; Jenkins & Curtis, 2005; Nawab, 2011). Senor (2010) notes that cultural barriers, market failure and the lack of information prevent households from making informed decisions about sanitation. Kwarteng, Awuah and Nyarko (2009) attributed the situation to the lack of space for the appropriate facility; the availability of public latrines, which reduces the motivation to own

a household facility; the tenancy and tenure of occupancy; and the low income of the target population.

Having had some understanding of factors contributing to the low uptake of sanitation and highlighting issues relating to hygiene behaviour and defecatory practices, the next session will help us gain more insight into the theoretical underpinnings guiding the study.

2.6 Theoretical Perspective

The literature review has indicated that a number of competing concepts help to explain human defecatory practices such as the concept of dirt, smell, contagion and place. On the basis of this, a number of concepts that co-explain human defecatory practices and preferences as identified in literature and in relation to the focus of the study will be applied. Mary Douglas' theory of dirt as 'matter out of place' which is a symbolic concept of hygiene, will form the basis of most of the discussions. This theory is derived from her most popular book, "Purity and Danger: An analysis of the concept of pollution and taboo" (Douglas, 2002). This theory places dirt within a social context and is viewed in relation to the 'what' and 'where' dirt/faeces is being dealt with. Her theory, according to van der Geest (2007), was silent on 'whose' dirt, which to him is very critical in understanding the whole concept of dirt and it being out of place. As such, the researcher incorporated van der Geest's analogy on the author of the dirt. In other words, the 'whose' of faeces. Mary Douglas' theory has also been criticised by Marquella, (2011:162) as not accounting for all the "inconsistent nature of social realities", and as such other concepts and theories were integrated into this study to give an in-depth appreciation of the issues raised. They include the concept of smell, contagion, space and place as well as the socialization process as they relate to sanitation and defecatory practices. Theories that help to understand and rightly

apply these concepts are: Edward Green's indigenous contagious theory (ICT) on issues concerning contagion; the Miasma theory on smell; and Bronfenbrenner's ecological theory on the socialization process. The next section details the application of the concepts.

2.7 Concept of Dirt

Dirt has always been assessed with a biomedical view by public health practitioners in relation to disease causation. The concept of dirt has been found to be a means for people to order their life. According to the functionalists, 'order' is the heart of culture and the classification of dirt helps people to understand how that order is constituted and how to determine what is good and what is bad, what is right and what is wrong, what is inside and what is outside. Mary Douglas postulates that "where there is dirt there is a system" and that "dirt is the by-product of a systematic ordering and classification of matter", which is faeces in our circumstance (Douglas, 1976, p.35). Hence, excretions from the body, including faeces, have been found to be the most strongly-felt 'matter out of place' and, therefore, the most informative pointers of cultural boundaries (van der Geest, 2007). This explains why the people of Kwahu Tafo in Ghana will always want to excrete faecal matter from their bodies lest it contaminates their system and give them diseases. Dirt is also a category, according to Douglas. Thus, to her, there is no dirt, only matter in the 'right' or 'wrong' context. The way dirt is conceptualised is therefore based on the context and from an individual's perspective of what fits and what does not fit.

MacLaughlin (1971) [as cited in Curtis, 1998], reiterates that dirt is the evidence of the imperfections in life. He suggests that there is no such thing as absolute dirt. For example, soup when served is considered food; however, the leftovers in the bowl will be termed dirty. Secretions, such as sweat, pus, vomitus, urine, menstruation, sexual fluids and faeces

are inescapably dirty and represent elements and acts that, many cultures tend to see as repellent and abnormal in spite of their constant presence in human life (Satre, 1943; Reinhart, 1990; cited by Curtis, 1998).

Dirt, according to Douglas' definition, therefore, constitutes a form of disorder and is subjective. Using her famous example to articulate this point, hair on one's head is considered good, but the same hair on the floor is bad, it is dirt. Thus, although the object (hair) has not changed, it is only the context that has changed its reference. Curtis (1998) also defines dirt as "evidence of the imperfections of life". Hence, to him someone who is unable to control his bowels is not fully human and is still a child. "Incontinence constitutes one of the most devastating experiences in a human life. Such a person not only has a disorder, but has become a disorder, a synonym for 'dirt' (van der Geest, 1998:5). George (2008) also adds that the control of bowel movement is a mark of the level of civilisation.

Douglas goes further to explain, using this analogy, that having hair on your head is considered good, but hair in food is bad. This is suggestive that the act of defecation is not bad in itself but defecating at unapproved places is what makes the practice bad. Thus, if dirt can only be defined by context, both actual and socially constructed, then dirt can only be contextualised within a framework. This, invariably, influences how people manage waste, because it is left to the discretion of the individual or group of people to determine which practice is in place or out of place. The relativity of dirt can, thus, be seen "in the place where the object is or where the activity takes place, the manner in which its presence is communicated and the identity of the actor who is directly associated with the matter or activity" (van der Geest, 2007:383). In other words, not only is the matter (faeces) the ultimate determinant of what constitutes dirt but where it is located and how it is presented

are very relevant when assessing the dirtiness or social aspects of faeces, with regard to its in or out-of-place character.

Apart from 'where' dirt is situated, 'whose dirt'" also makes a lot of difference to how faeces is perceived. Whether the faeces is that of a child, the individual, a close relation or a stranger produces varying degrees of disgust. To van der Geest, that which questions "whose faeces" determines the experience of disgust much more than the social life of the dirty matter. For example, a study by Curtis (2001) in the Netherlands found that people could easily change their children's diapers but would find it difficult to change those of other people's children. The study discusses the case of the defecatory practices of Prampram in light of Mary Douglas' theory of dirt as a 'matter out of place' in relation to 'what' kind of dirt, 'where' the dirt is placed and 'whose' dirt it is, using the concepts of smell, contagion, space and place.

2.7.1 Community Perceptions of Smell and Defecatory Practices

According to Rheinlander, Keraita, Konradsen, Samuelsen and Dalsgaard (2013), bad smell from human waste has been identified worldwide as representing a major barrier to the uptake of sanitation with some social, morale, aesthetic and disease related concerns. During the latter part of the 19th century, diseases were often assumed to be caused by the airborne emanations of rotten plant and animal matter, filth and decay. These emanations were, sometimes, known as "miasmas". They could either be localised or be within a large geographic area; they could be the temporary result of some disturbance or they could be permanently associated with a particular place, such as a swamp. The bad smell that was associated with filth and decay was considered to be an essential part of causing the infections, so eliminating the bad smell resulted in removing the source of the disease. A

case on point is that of Sardinia, in Italy which had the highest mortality index due to malaria from the 1880s to after the Second World War and associated the cause of the disease to miasmas. Malaria which is pronounced 'mala' and 'aria', which in Italian means 'bad air' and so they believed the draining of ponds and mashes would do away with the miasmas. It is held that diseases, such as cholera, malaria, chlamydia or Black Death, were also caused by a miasma. This prevailed until the end of 1880 with the discovery of quinine and its prophylaxis as the main cure of the disease (Tognotti, 1998).

Although the miasmic theory of disease causation was eventually displaced in the 19th century by the discovery of germs and the germ theory, the fact remains that people still attribute diseases to bad odour. A study conducted in Nigeria on the miasmic theory and malaria had people still attributing some illnesses to bad odour and so advocated the need for the theory to be revisited since it has some semblance with African knowledge concerning disease causation (Awoyemi, 2005). A study by Knudsen, Phuc, Hiep, Samuelsen, Jensen, & Dalsgaard (2008) among rural farmers in Vietnam described the smell emanating from the human faeces used as fertilizer as 'dangerous'.

The persisting belief that bad smell causes diseases has served as a barrier in the promotion of household toilets especially in developing countries including Ghana (van der Geest, 2007). In Niger and Malawi, 25% of latrine owners perceived bad smell from human faeces to be a disincentive for installing latrines (Grimason, Davison, Kafwe, Tembo, Jabu & Jackson 2000; Diallo et al., 2007). Valarie Curtis in her cross country study of 11 countries both in Africa and Asia discovered that people were generally concerned with the aesthetics as against biomedical parasites. Hence, people would rather opt for the water closet, which to them is odourless as against any dry toilet, which gives off bad odour although they may

not be able to afford it. This, to a large extent, has contributed to the low demand in household toilets (Curtis, 2009). Smell therefore plays a key role in influencing sanitation behaviour across cultures and socio-economic divide and so should be taken into consideration in future sanitation interventions (Rheinlander et al., 2013).

2.7.2 Concept of Space, Place and Defecatory Practices

Space and place are crucial when discussing issues relating to why people practice open defecation. Space is the "embodied" or "practiced" place hence a space becomes a place when it is live with activities (Tuan, 1977). Spaces are sites owned by the government and accessible to everyone without restrictions (Kohn, Wieland, Parkinson, & Upreti, 2004) and often referred to as a public space (Mitchell & Staheli, 2006). Place on the other hand, deals with either having a sense of a place or an attachment to a place, both of which have implications for hygiene and defecatory practices (Hay, 1998). According to Hay, having a sense of place causes people to have some kind of bonding to those places, and as such efforts are made to take care of such places especially for those who have stayed in the communities for longer periods.

Tuan (1977) therefore postulates that "What begins as undifferentiated space becomes place, as we get to know it better and endow it with value" (p. 6). Hummon (1992) is, however, of the view that "people's sense of place involves having both an interpretive perspective on the environment and an emotional reaction to the environment" (p. 262). These influence how people respond to the environment, either positively or negatively. People's attachment or reaction to the environment are all within a social context and contribute to their 'sense of place' (Jorgensen & Stedman, 2001).

From the above analogy therefore, people's 'sense of place' will determine 'where' dirt/faeces is placed making it a 'matter out of place' or not as postulated by Mary Douglas. To van der Geest, where the faeces is placed becomes a matter of much concern because it is the 'where' of the faeces that makes it either a matter 'in' or 'out of place'.

2.7.3 Perceptions of Contagion and Contagiousness

Community perception of contagion also influences sanitation and defecatory behaviour. Edward Green's ICT and Mary Douglas' concept on pollution helps in situating contagiousness or pollution in the light of disease causation. For example, bodily essences such as blood, pus, and female bodily fluids such as menstrual blood and vaginal fluids are commonly perceived as potent and dangerous in many parts of Africa (Green, 1999:142). According to Mary Douglas, such diseases that are related to digestion, which could be urine or faeces tend to be seen as pollution illnesses (Douglas, 2002). Edward Green's Indigenous Contagious Theory also helps to give a better understanding of the relationship between indigenous belief and disease causation which also influences people's defecatory and hygiene practices.

According to Douglas, cholera, diarrhoea and bilharzia, can be said to be pollution diseases. A survey of traditional healers' belief about diarrhoea in Zambia showed that the majority believed it was caused by either 'bad air' or 'worms', followed by 'bad food', breastfeeding from a pregnant mother, parents having sex with other partners, witchcraft, bad weather, and poor hygiene. Several of them attributed diarrhoea to be transmitted by flies that have come into contact with exposed stools and then touched food. Ways of preventing diarrhoea, as suggested by respondents, include boiling drinking water, keeping homes clean, and washing hands after visiting the toilet. All these were geared towards 'removing

contamination or dirt', which some respondents claimed was being practised by the ancestors even before the coming of the Europeans. Some had also acquired the knowledge through hygiene education by health personnel or by the radio or TV (Kaltenthaler & Drasar, 1996a:77). Respondents from southern Bantu in Botswana however, believed that the cause was as a result of sorcery and attributed it to an invisible snake (Green, 1999). Such beliefs invariably influence people's health seeking as well as their hygiene and defecatory behaviour.

According to Carroll (1872; cited by Green, 1999), in the earlier systems of medicine, the belief was held that one disease could change into another or might manifest itself differently in different people. Diseases were not as a result of an action on the human body by a disease-causing agent, but instead, were the result of individual susceptibilities and individual interactions with the environment. As a result, not everybody was susceptible to diseases; some people were thought to be more likely to become ill than others. Certain kinds of sickness were also associated with particular places, such as the tropics, or with certain times of the year, such as the summer. This also transcended to socio-economic groups, with the belief that some socio-economic groups shoulder different disease burden than others, while the disease burden in urban areas can be different from the disease burden in a rural environment. Disease causation was therefore multifaceted; involving the physiological makeup of the individual, the socio-economic background and the geographical location.

Magic, witchcraft, sorcery and spirit possession has been stereotyped as representing African indigenous medicine (Freeman & Motsei, 1992). Samuelsen (2010) identified four different modes of disease transmission among the Bissa of Burkina Faso as being: ingestion

of improper substances; breaking of social taboos; sorcery and improper interaction with spirits. Asuni (1979) in his study of Nigerian traditional healers stipulates that infection and germs are "alien concepts" that may be incompatible with the knowledge of traditional healers. However, Edward Green has proposed the "Indigenous Contagion Theory (ICT)". It comprises three interrelated types of etiologic belief: "naturalistic infection" or the germ theory; "mystical contagion" or pollution; and environmental dangers (Green, 1999). He argues that popularized disease causation in Africa, including witchcraft, sorcery and magic have fostered a "myth of excessive supernaturalism" by the then educated anthropologists. He believes the ICT can help foster awareness of common ground shared by biomedicine and traditional healers and so create a more balanced view of ethno medicine. The Bemba of Zambia, for example, believe that tuberculosis is an 'illness of the air' while the Bambara of Mali classify smallpox, measles and other contagious illnesses as 'wind illness' (Imperato, 1974). The people of Swaziland associate colds, influenza, tuberculosis, severe malaria, headaches and some contagious childhood diarrhoea to illness carried through the air and inhaled (Green, 1999).

The belief in the air as a carrier of contagious diseases is a phenomenon also acknowledged by biomedical scientists just as indigenous beliefs. Green therefore does not support the notion that supernatural forces reign paramount in Africa's framework of disease. To him, Africans rather emphasise naturalistic and impersonal causes of illness, rather than human agency and unforeseen forces.

CHAPTER THREE

PROFILE OF PRAMPRAM

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY SITE

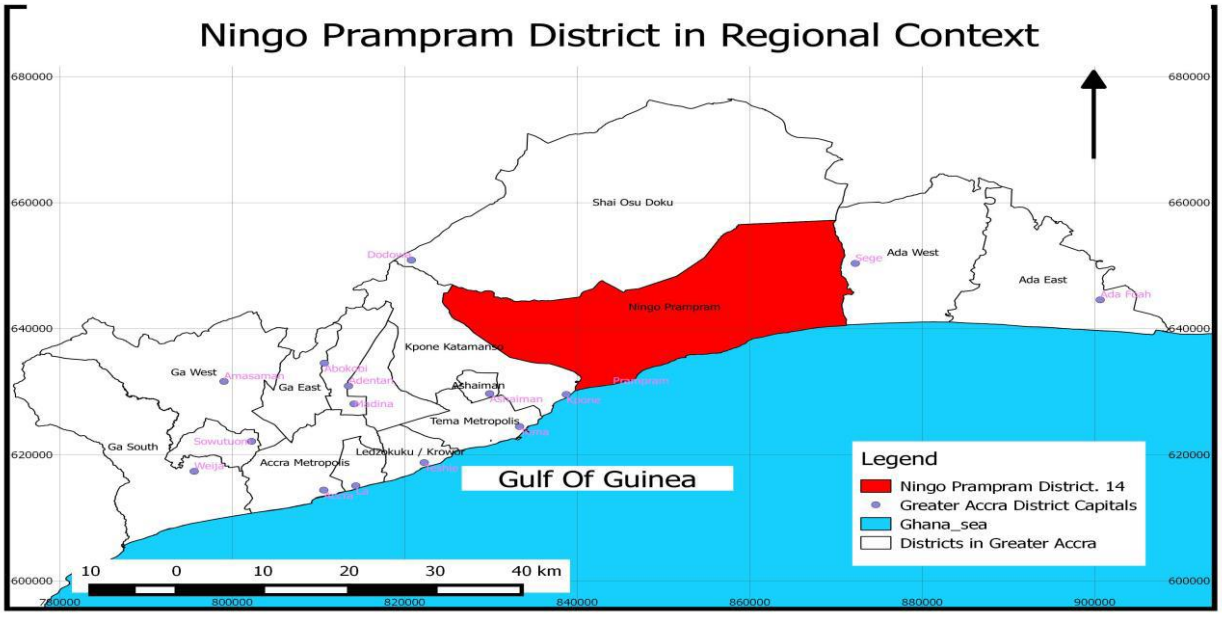
3.0 Introduction

This chapter provides some insight into the life of the people in the study site starting with their history, geography, settlement pattern, and ending with their social institution (systems of governance, kinship, marriage and lineages, as well as the socio-economic activities). These are discussed in relation to their influence on hygiene and defecatory practices of the people. A general profile of the district is given initially so as to enable an appreciation of the wider context of the study location.

3.1 Ningo-Prampram District

Prampram, the study site, is located in the Ningo-Prampram District in the Greater Accra Region of Ghana and it is the district capital. The district was carved out of the former Dangme West District in June, 2012 with the promulgation of Legislative Instrument (LI 2132). The district has an estimated population of 70,923 (GSS, 2014) and it is situated in the south-eastern part of Ghana and is part of the Greater Accra Region. It occupies a total land area of about 622.2 square kilometres. The district is located about 15 km to the east of Tema and about 40 km from Accra, the capital of Ghana. The district is bounded in the north by the Shai-Osudoku District; in the south by the Gulf of Guinea; in the east by the Dangme East District and on the west by the Kpone-Katamanso District. The district has a coastline stretching over 37 kilometres, giving it enormous access to a large fishing area. Its closeness to Tema, the harbour city and Accra has a positive impact on the district especially with regards to accessing social facilities and infrastructure. The figure below shows the geographical location of the district and its capital.

Figure 3.1: **Map of Ningo-Prampram District**



Source: GSS, 2010

The Ningo-Prampram District is one of the most humid as well as one of the driest parts of the country. Temperatures are quite high for most of the year, with the highest experienced during the main dry season (November–March). The highest temperature is 40^{o} C, leading to a very high rate of evaporation, which leaves most parts of the district dry and with parched soils and ponds. Although this serves to benefit the salt-making industries, the low and unreliable rainfall patterns affects farming, which happens to be one of the main occupations of the people (NiPDA, 2013). These environmental changes, which are a global phenomenon, have an impact on subsistence farmers in Prampram as well. Farming is therefore a vulnerable occupation for those who depend on it as their main source of livelihood. Apart from the unstable climatic and environmental conditions, most of the farmlands have been sold for residential and commercial purposes, depriving most people of their livelihood.

The district also boasts of 107 public schools, made up of 32 Junior High Schools (JHS), 42 primary and 31 pre-schools. There are also about 93 private schools and 2 Senior High Schools (SHS); the Prampram SHS and Ningo SHS. They are the only public second cycle institutions in the district.

The district has 15 health facilities with 10 being public and the remaining five private. Services rendered by the health facilities include laboratory, pharmacy, school health, family planning, reproductive and child health and maternal services. More difficult cases are usually referred to the Tema General Hospital, which is about 15 km drive from Prampram. Physical access to health care delivery is therefore not a major problem in the Ningo-Prampram District due to the presence of these health facilities (GSS, 2014). The five most common diseases found in the area are malaria, acute respiratory infections, skin diseases and ulcers, hypertension, and diarrhoea (NiPDA, 2013).

Concerning other social infrastructure like electricity only about 30% of the settlements in the district are linked to the national electricity grid. Largely, the district is 76.4% rural and 23.6% urban and has a higher population density (of 128 persons per km) than the national average of 63 persons per kilometre.

Accessibility to potable water in many communities (especially in the rural areas) and in some sub-urban communities is generally inadequate. It has a total coverage of 50.1% with Ghana Water Company Limited (GWCL) as its main source of water supply (NiPDA, 2013).

Concerning sanitation, most of the households (55.1%) interviewed do not have toilet facilities and therefore resort to fields, bush and beaches. Other households (27.1%) in the district use the public toilet (WC, KVIP, Pit and pan) as places of convenience. About 26.1 percent of households use the WC; about a fifth of households (26.1%) in the district have bathrooms for exclusive use of members, while another 22.9 percent use a shared separate bathroom in the same house. For waste disposal, most households (32.3%) burn their solid waste and 30.5 percent dump in a public dump (container). Another 4.4 percent have their solid waste collected. For liquid waste disposal, throwing of waste onto the compound (58.5%) and onto the street (26.9%) are the two most common methods used by households in the district (GSS, 2014).

The common toilet facilities available in the district are largely public in nature and include WCs, KVIPs, household VIPs and pit latrines (See Chapter One Pg19). Open defecation is a common practice in the district, especially in communities along the coast. It is against this background that the researcher now focuses on Prampram, the district capital and the study site.

3.2 The Prampram Community

Prampram, the study area is a rapidly growing township resulting from the in-flow of migrants from Tema, and the siting of a private university (the Central University College) close by. Prampram is located 45km east of Accra, on the Tema-Aflao Highway. It is bordered on the west by Kpone, on the east by Ningo, on the north by Dawhenya and on the south by the coast, with its beautiful scenic beach sites dotted with hotels. The main road leading to the community is tarred as well as other access roads to the nearby communities like Ningo and Kpoete. It has a total population of 14,897 (GSS, 2014). Prampram is made

up of ten communities, four of which have been selected for this study. These selected communities are Kley, Olowey, Lower East and Lower West. Together, these have a total population of 7,203.

3.2.1 Historical Origin of the People

There are a few unpublished written records on the historical origin of Prampram, which seemed fragmented with conflicting information. Hence most of the historical origins of Prampram are embedded in oral tradition. There was therefore heavy reliance on accounts given by the elders and opinion leaders of the community and a few words from the unpublished work by Addico (1996), an indigene of the town. Besides oral tradition, the researcher combed several libraries for literature without success. The people of Prampram are said to be among a large section of migrants who arrived from Same, which is located between Oyo State in Nigeria and the eastern parts of present-day Benin. They settled on the Plains of Togologo in 1680 which is now Togo and later, began to disintegrate and disperse in various directions (Addico, 1996). The people of Osudoku settled on the Osu Hills, the Shais and Krobos on the Shai and Krobo Hills respectively, while the Adas, Ningos and Pramprams (Gbugblas) went to settle along the Volta River and the coastal area of the Gulf of Guinea. Thus, Dangme is made up of the people of Prampram, Ningo, Ada Shai, Kpone and Krobo but due to their affinity with the Gas in the west, the people refer to themselves as Ga-Dangme. They have Dangme as their first language and Ga as their second language, because they are believed to have the same origin as the Ga people, who migrated by sea.

In Prampram, the major ethnic groups are the Ga Dangme, who constitute the majority, followed by the Ewe, the Akan, the people of Northern descent and some other minor ethnic groups. The people of Prampram claim to be the first to have settled at their present state. They were made up of four maximal clans, namely, the Larkplɛ, Kley, Anewey and Olowey.

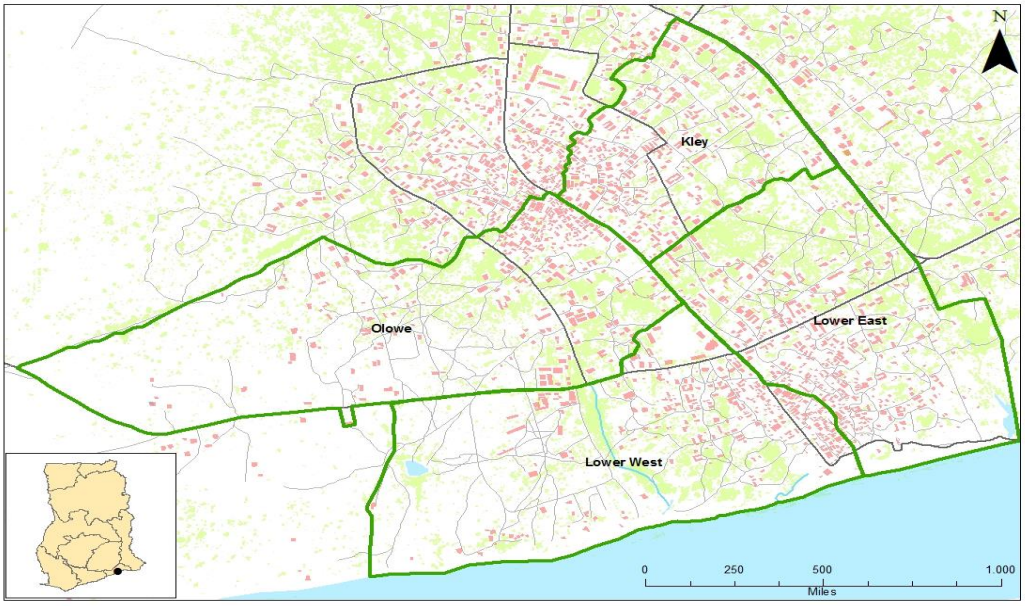
Prampram's emergence on the global scene can be traced to around 1850 when the British took over Prampram from the Danes. The Danes had established important trade links with Prampram. They built Fort Venon to serve as a trading and administrative outpost, which still stands conspicuously on the coast of Prampram. Trading was in palm oil, cloth, gun powder, among others. Under the Danes' rule the first police station for the then Gold Coast was built in Prampram. Other records have it that the forte was used to house slaves. Hence, the name Prampram (Gbugbla) onomatopoeic, allegedly means the shaking and clanging of chains of the released slaves from the Forte Venon as they walked through the town. These are said to be the descendants of the people of Anawey (Addico, 1996). Other accounts give the name as 'Moogbla', meaning persevering people or pull, which could be in reference to the slaves as they pulled their chains along the coast.

3.3 The Spatial Settlement and their Relationships

In view of the fact that data were collected in four sections/quarters of Prampram, the next discussion describes some relevant aspects of these settlements and how they relate to their defecatory practices. The four main clans, which settled in Prampram as earlier indicated, are the Larkplɛ in the Lower East and West and the Kley, the Anewey and the Olowey, who settled at the North-Western portion. Within these settlements can be found three major groups as identified by Kilson (1961) in her study of the Gas in Ga Mashie.

As earlier indicated, the Gas and Dangmes are from the same descendants so share common characteristics. Borrowing from Kilson's (1961) grouping we have the traditional rural, the traditional old and the westernised suburban settings. The traditional rural setting, according to her, is characterised by low levels of education, malnutrition and poverty; the traditional old town seems to be densely populated; while the westernised suburban is characterised by urban affluence. Of the four settlements in Prampram, Lower East may be compared to the traditional rural and traditional old, due to its low literacy rate, malnutrition, poverty as well as its densely-populated nature. The old settlements of Lower West and Olowey may also be likened to the traditional rural setting, while Kley shares some characteristics of the westernised suburban with its urban affluence. The fringes of all settlements, which are newly developed, are characteristic of the urban affluence. Fig.3.2 shows the locations of these settlements to be discussed in details in the next session. This is to help appreciate their peculiarity in relation to their location, demography, available social amenities, socio-economic activities, and literacy rates; and how these factors influence their hygiene and defecatory behaviour.

Figure 3.2: **Map of Prampram Demarcating the Study Sections**



Source: SUSA Baseline, 2011

3.3.1 Lower East

The Lower East settlement, which is mostly the Larkplɛ, is located at the south-eastern part of the community along the coast. It covers about 3 square kilometres, and is more densely populated compared to the others. Most of the old houses are built of wood (some from old canoes), bamboo or mud and later renovated. Both the renovations and extensions are done with cement to conform to modern trends. The common materials for roofing are aluminium, slate, bamboo or straw, while the yards are fenced with sticks, palm fronds, bamboo, old fishing nets and old canoes. The first settlers stayed in Lower East and as such most of the family houses (*tsɛ wem)* and shrines are situated in this area. Most rituals and functions like naming ceremonies, marriages and funerals take place here.

The densely-populated nature of the settlement renders most of the homes overcrowded. Several generations of relatives live in these homes As a result, some people make extensions to the rooms on their fathers' plots or acquire their own plots of land, build and then move out of the family house.

Sanitation

Sanitation is a major problem in Lower East. The congestion leaves virtually no land for the construction of household toilets, especially in the already-built-up areas. Therefore, the core or the main Lower East settlement has very few household toilets. Most of the toilets are located at the outskirts of the town where there are new settlements. Both my interaction with some community members and my observation indicate that the few household toilets belonged to migrant settlers or indigenes who worked out of the community and have returned home after their retirement. Some of the indigenes who have built their own houses constructed no toilets so were either patronising the public toilets or practise open

defecation. For the old settlement, it is not possible to construct household latrines because they were densely populated and all the available space had been used for accommodation facilities.

With regard to public toilets, the Lower East community has only one 10-seater KVIP for a population of 2,967, leading to long queues during the early morning rush hours and it fills up in no time. There is only one container provided by the District Assembly for refuse disposal, which gets full within short periods and causes people to dispose of refuse indiscriminately.

Schools

There is no school within the Lower East community so children hardly go to school. Children are often found loitering around, swimming or playing in the sand. Some of the schools close-by run the shift system, a situation where, as a result of inadequate schools, some children go to school in the morning and others go to school in the afternoon and this encourages truancy. A lot of the young boys and their fathers go fishing, while young girls engage in food vending or petty trading with their mothers.

3.3.2 Lower West Quarters

Lower West is located at the south-western part of the community and west of Lower East. Both the Lower East and West communities comprise the Lower Town, and are all from the same clan, the Larkplɛ. It has a population of 1,671 (SUSA, 2011), half of which used to be in Lower East but moved out to settle in the west for more space, privacy or to undertake an economic activity. Lower West has acquired the characteristics of a rapidly-urbanising community with some urban characteristics such as affluence, middle-income earners with

a high level of education and access to amenities, such as toilets. This is especially at the newly-developing areas. This, however, does not cut across the entire settlement. Those who are very close to Lower East share similar characteristics with the people of Lower East, as described above.

Stretching to the western part of the beach towards the Kpoete community are hotels and holiday houses for visitors and tourists. The beaches of the hotels are generally clean due to the presence of hotel security guards.

Lower West has the only vocational institute in Prampram, which trains students in catering and dressmaking. There are two basic schools, both church-based: the Anglican Primary and Junior High School (JHS) and the Seventh Day Adventist (SDA) kindergarten. The SDA Primary and JHS have relocated to their new site on the Ningo-Prampram road about five km from the community. This move has affected school attendance because some parents cannot afford the children's transport cost and would not allow them to walk the long distance.

There are two public toilets in Lower West, one WC at the lorry station and a KVIP near the police station. The latter has been abandoned due to structural defects. It is water-logged and has not been used since it was built. It is currently being used as storage by the fishmongers who trade close by. The one at the lorry station is also very far (about 1km away) from the community. Users are charged 50 pesewas per visit which is not affordable for many of them.

During visits to the beach, especially in the early hours of the day (between 4.00am to 5.00am) one often finds men, women and children defecating. According to the Baseline Data, 69.9% of the people in Lower West defecate at the beach (the highest among the four communities); while 12.6% use the public toilets. According to the survey, only 7.7%, own toilets. Therefore, Lower West records the highest in terms of beach defecation.

3.3.3 Kley Quarters

Kley has the smallest land size compared to the other communities. Farm lands are gradually being sold for residential purposes. It has a population of 1521 (SUSA, 2011) and can be found along the main road to the town. Commercial activities take place here, and as a result, it is the busiest part of Prampram and appears more urbanised in comparison with the other settlements. The main street in Kley is lined with shops that sell provisions, cosmetics, household goods and clothing. There are a number of food vending and drinking spots, which are heavily patronised in the evenings. There are a variety of foods ranging from banku (a maize meal) with okro stew, fried rice and chicken (referred to as “check-check”), fried yam, boiled yam/plantain with palaver source, and kenkey (a maize meal) with either grilled or fried fish and pepper, which is the staple food in Prampram.

Most homes visited do not cook in the evening, and this explains why many people patronise these street foods. Children are the major clients of these foodstalls. Usually, they buy in large quantities indicating that they buy the food for themselves and for others.

Residents engage in both fishing and clerical work. They also have many artisans, such as masons, carpenters and painters who work in Tema, Ashaiman, Kpone and other surrounding towns. Many hostels have sprung up in Kley due to its proximity to the Central

University College, a private university college and because these hostels provide better accommodation for the students. Kley has a better road network and well-planned buildings. Kley has the characteristics of a heterogeneous society and although most people live in compound houses, they do not eat from the same pot; some do not share common facilities like toilets with neighbours. The main drainage in Prampram is located at Kley and Lower West. Residents throw waste water and urine into the drainage and as a result, it emits a very offensive odour. This notwithstanding, commercial activities (especially food vending) takes place along this drain.

Statistics from the DHRC indicate that most residents in Kley are comparatively highly educated. Unlike their counterparts in the south, many of the informants indicated having attained education up to the Junior High School level. One of the counsellors for their Traditional council is a university graduate. The only Senior High School and five basic public schools are located in Kley and it is likely that their proximity may be contributing to the high literacy rate in the community. All these schools have toilets for use by the children, with a cubicle or two allocated to teachers. One has, however, been abandoned and the rest are in a deplorable state. These toilets have been vandalised by the community members and so they have virtually been abandoned by the school children.

Because the community is sparsely-populated, land is available at the outskirts for the construction of household toilets. Thus, most of the educated either have their own household latrines, shared with neighbours, or were patronising the public toilets. It is, therefore, not surprising that Kley recorded the highest number of household latrines (35.6%) according to the baseline study. There are three public KVIPs, and although Kley recorded the highest in terms of residents having household toilets, it also recorded a high

percentage (47.5%) in terms of the practice of open defecation (SUSA, 2011). This may be due to many landlords not being willing to share their toilets with tenants and even, sometimes, with their own family members, especially children who are often accused of making the toilet untidy. There is also the fear that children may accidentally fall into the toilet.

3.3.4 Olowey Quarters

Olowey is located at the north-western part of Prampram and occupies the largest land space. It has a population of 1,628 (SUSA, 2011), and a large stretch of farm lands. However at the time of the study, the situation was gradually changing due to the sale of lands for residential and commercial purposes. Although a farming community, there are also fishermen, fish mongers, petty traders and some in white-collar jobs.

There are two public schools and one private school. There are three public toilets: a 14-seater KVIP toilet, which has been closed down; an Aqua privy, which is currently in use; and a pour flush, which is under construction. There is, therefore, only one public toilet available for the entire community, which has the highest population of residents (42%), according to the SUSA baseline survey (SUSA, 2011). This has led to long queues during the early hours of the day, which compels many residents to resort to the use of the bush. Others use the bush with claims that they cannot afford the fees charged for the use of the public toilet.

Indeed, the peculiar characteristics of the various sections or quarters within Prampram as enumerated above gives a better meaning to the socio-demographic characteristics of the individual sections and its influence on their defecatory practices. Having given a brief on

the sections of the Prampram community, discussions in the next section highlight social amenities within the entire community.

3.4 Social Infrastructure/Amenities in Prampram

Prampram is connected to the national grid in terms of the supply of electricity and has health, educational, water supply and sanitation facilities.

3.4.1 Health facilities

Prampram has one public health centre and one private clinic that provide the people with health care services. These are the Prampram Health Centre and the Ebenezer Clinic. There are five Community-based Health Planning and Services (CHPS) Zones set up to make health service accessible to all. There are also Community Health nurses who have been assigned to various localities within the communities to organise ante-natal and post-natal clinics so as to make these services accessible to both pregnant women and mothers who otherwise would not have sent their children to the clinic. There are two medical doctors, two physician assistants and 147 nurses in the entire district. The doctor-to-patient ratio is estimated as 1:38,193, and the nurse-population ratio is 1:520.

The common diseases reported at the Out-Patient Department (OPD) include malaria, diarrhoea, acute respiratory infections (ARI) like colds and coughs, skin diseases, hypertension, rheumatism and joint pains, anaemia, intestinal worms, home accidents and acute eye infections (DHD, 2014. Some of these diseases are water, sanitation and hygiene related. The health centre operates the National Health Insurance Scheme (NHIS) and those who have registered are benefiting from “free” medical treatment, although not all the drugs are provided. Some refused to register, because it was introduced by the then ruling National

Patriotic Party (NPP) and, therefore, the then opposition National Democratic Party (NDC) members did not want to be beneficiaries. This shows how politics influences people's behaviour and practices in local communities.

Most of the people, especially those who had not registered with the NHIS did self-medication by buying over-the-counter drugs from the available chemical shops, which number about eight in the community. These chemical shops serve as the first point of call for many of the people when they are sick, but because the doctor-to-patient ratio is high, many of the local residents resort to self-medication, spiritual assistance or herbal treatment and only go to the hospital as a last resort. Illnesses, for which medications are sought from these chemical shops, include diarrhoea, headache, fever, stomach-ache, colds and flu, bodily pains and malaria. Whilst some chemical shop attendants do not have any form of training, but rather learnt on the job, others did undergo some training in Rapid Diagnostic Test (RDT) for malaria. They therefore had some knowledge on the basic treatment to give for malaria cases.

Some community members patronised drugs sold by peddlers whom Senah (1997) refers to as "Ambulant Village Pharmacists". These normally come to the village either on foot, on bicycles or in vans, especially on Tuesdays when most of the fisher folks and farmers are at home. Peddled drugs seem to enjoy wide patronage because they are cheap and peddlers have a way of convincing the people of the efficacy of the medicine they sell though many of them do not have any training in pharmacology. Some of the drug vended in the community are herbal preparations. According to Senah (1997), the unwillingness of pharmacists to operate in the rural areas thereby leaves these drugs in the hands of "village pharmacists".

Concerning the educational facilities, Prampram has 18 pre-schools, 17 primary schools, and 12 JHS, which are either owned by the government or private individuals or churches. There is a drastic reduction in children's progression from primary school to the JHS. For example, a total of 2,994 pupils from both the private and public schools were enrolled in the primary school, but only 751 (25.1%) of them made it to JHS. This shows that most of the children end their education at the primary level. Prampram is said to have recorded the second lowest in the Basic Education Certificate in Examination (BECE) in the entire Ningo-Prampram district. The teachers interviewed pointed out that some children just refused to go to school, while some parents felt that the children were better off joining them in fishing and so were unwilling to invest in the children's education. There were also economic reasons, where some parents, especially those with large families, did not have the resources for their children's education. Some were of the view that most of the children who went to school end up jobless.

In effect, most of the children either stop schooling along the line or do not go to school. Low literacy has a great impact on the economic prospects of the people because the majority of illiterates end up with low-paid or menial jobs, which contribute to a low standard of living (Robison, 1998). Consequently, their means of survival is threatened, thereby making it difficult for such people to invest in other things such as constructing toilets, which to them may not be considered a priority need. During school hours, it is common to see children of school-going age playing at the beach.

3.4.2 Water Facilities

Generally, the challenges with accessing potable water and sanitation in Prampram are as pertains in the districts. Underground water is salty due to the closeness of the sea. This makes the drilling of boreholes and wells impossible. In addition, the absence of surface

water potential for treatment and connection makes access to potable water a major challenge in the district. The community thus depends on the public water supply (GWCL), which is woefully inadequate for community members due to its irregular flow. The irregular flow of water started from the year 2000. This has contributed to high incidence of water and sanitation-related diseases, such as yaws and ring worm, diarrhoea, cholera, typhoid schistosomiasis and guinea-worm (GHS, 2013). The cause of some of these diseases is attributed to evil forces and sufferers are often taken to prayer camps and herbalists.

In 2012, a renovation work was initiated to replace all the old pipelines, and this has greatly improved the situation. This notwithstanding, the water flows once a week or fortnightly. Hence, every home has a storage facility for water, due to the irregular supply (NiPDA, 2013). These are mostly 4-litre yellow containers, cement reservoirs and plastic storage tanks. Some individuals also store water to sell when the taps are not flowing. This seems to be a very lucrative business for many. Some water tankers also render services occasionally to some of these vendors who in turn sell to community member and the middle class who have large water storage. The tanker service sometimes distributes water to public institutions including schools and health clinics. Fig. 4 shows some of the water storage containers in the community.

Some of the Water Storage Devices

Figure 3.3: Water Storage for the Middle Income

Figure 3.4: Water Storage for the Low Income

Figure 3. 5: Household Underground Water Storage

Figure 3. 6: Private Business Watervending

Source: Field Data, 2013

3.4.3 Sanitation

The overall sanitation situation (both liquid and solid waste) in Prampram is a reflection of what obtains in the district and indeed, the whole of the country. The District Environmental Health Officer (DEHO) indicated that the community, initially, had traditional pit latrines, which had separate entrances for males and females. These traditional pit latrines were normally built at the outskirts of the community, since they were considered unfit to be sited close to human settlement. This was followed by the use of public pan latrines, which were emptied by conservancy labourers. After some time, it became obvious that the pan latrine posed health risks to both the conservancy workers and the environment; and they were subsequently banned by the Supreme Court although a few still use it. A few communal toilets were built during the colonial period and used free of charge by the public. KVIPs were later built and managed by the district assemblies.

The poor sanitation conditions in Prampram, over the years, have been due to inadequate funds for heavy investment in both liquid and solid waste management. Presently, the commonly used latrines are the KVIPs, septic tanks, vault chambers, pour-flush and WCs. Apart from the District Assembly, other funding agencies and NGOs such as DANIDA, World Vision and PRONET constructed and promoted institutional and household latrines. At the time of the study, there were nine public toilets and seven institutional toilets for the schools. Few individual households own VIP, KVIP or WC. There are inadequate and poor drainage systems and generally negative attitudes of the people towards ensuring a clean environment (NiPDA, 2013).

Due to the lack of household toilet facilities in Prampram most of the school toilets (with the exception of those newly built by the SDA Basic School), have been taken over by community members. Some of the school toilets have been vandalised making them unsafe and unhygienic for use by the school children. The children are therefore left to find their own means of attending to nature's call while in school. Some either go to the bush nearby or go home and sometimes end up not coming back. Of the few household toilets seen in Prampram most of them were in Upper Town (Olowey and Kley). They were mostly VIPs, KVIPs and a few WCs. Some were being shared by more than one household. A few landowners, however, indicated not using the toilets with tenants because they tend not to take good care of the toilet and are unwilling to contribute to its upkeep.

Disposal of refuse is often done along the beach or in bushes. Much of the waste is polythene bags that sometimes contained faeces. At the time of the study, there were only three waste containers placed some distance away from the community. These become full at short intervals and are not frequently emptied, leading to overflow of the refuse. Consequently, most of the residents resort to dumping refuse at unauthorised places. Some resort to burning their refuse when the containers overflow. A private waste management organisation, Zoom Lion Company Limited has been contracted by the District Assembly to collect and dispose of the waste. The company charges 20 to 40 pesewas, corresponding to the size of the container. To avoid paying, some of the community members dump their refuse either in the refuse container, along pathways or in the bush at dawn. In order to avoid paying daily to dump refuse some accumulate them before disposing them. In many homes children are made to defecate into polythene bags which are wrapped and added to the domestic refuse bins attracting flies and becoming a source of contamination. The unwillingness to pay for dumping refuse has affected the revenue generation capacity of the

private waste company (Zoomlion) to enable it to cart the refuse as often as necessary. Figure 7, 8 & 9 shows pictures of the various modes of waste disposal in Prampram.

Figure 3.7: Refuse Dump Site by a Footpath

Figure 3. 8: Refuse Dump Site Near the Beach

Source: Field data, 2013

Figure 3.9: **Overflowing Assembly Refuse Container**

Source: Field Data, 2013

Although the above discussions have given some insight into how the presence or absence of social amenities go a long way to influence the behavioural patterns of individuals and the society as a whole, this however cannot be said to be the sole reason for the poor environmental management. The attitude of people and the means by which they were socialised also plays a major role in hygienic behavioural practices. In the subsequent section, findings will focus on the social structures and interactions within Prampram and how it contributes to hygiene and defecatory practices.

3.5 Social Structures

3.5.1 Family/Kinship Arrangements

The family is very important in the socialization process. This section delves into what constitutes the family, family orientations, residential patterns and the lineage system and how they impact on the hygiene and defecatory practices of the members. The family plays a very important role within the social life of Prampram just as in any African community. Prampram like all the other Ga-Dangme groupings is a patrilineal society where the child belongs to the paternal agnatic kin. He enjoys rights and owes duties to his kin group. He belongs to his father's house that is *tse wem*. He is accepted into the patrilineal house through a naming ceremony and enjoys a full living and home rights as a son of the lineage.

In this community, the family constitutes not only the nuclear family but also the extended family that comprises a large number of blood relations who trace their ancestry to a common ancestor and are held together by a sense of obligation to one another (Gyekye, 2003). The family, according to Gyekye (2003), inculcates into its members communal values such as solidarity, mutual helpfulness, interdependence and concern for the wellbeing of every member. As a result, members of a family grow up thinking of himself or herself

as part of a group: they believe strongly in family unity. The usual "tsɛkobi and nyɛkobi" or cousin relationships, be it maternal or paternal, is very dear to them. It also fosters unity among members.

This family orientation encourages the sharing of common amenities like bathrooms, kitchens and in the case of compound houses, toilet facilities. The head of the lineage is the "weku-yi", who should be an elderly man often beyond the age of 60 years, because old age is associated with wisdom. The asafoatsɛ, the clan warriors and wɔnɔ, the Chief Priest, are the next in command. While the *asafoatsɛ* mobilises the people for war, the Chief Priest is the spiritual leader who consults the gods concerning the outcome of a war. The *tsɛ mɛ* (that is the male elders) preside over the *hiamle*, which is the male quarters/compound, while the *nyɛ mɛ* (female elders) preside over the *yiemle*, that is the female quarters/compound (Field, 1960). The elders' main roles are offering advice and settling disputes. The elderly women, amongst other routine duties, are in charge of washing and preparing corpses for burial. They keep strict hygiene practices in the process by always washing their hands with soap and Dettol, a disinfectant, after bathing the corpse. As a result, they demand items such as soap, a disinfectant, powder, perfume and a bottle of schnapps in order to do their work.

The residential pattern of the people of Prampram is either patrilocal or duo-local. In the patrilocal residence, the woman goes to live in the house of the husband and becomes a wife to all in her husband's clan. Thus, the house becomes the ancestral home to her children. In the case of the duo-local residence, the married couple live in separate homes but in the same community, where the women who relate through matrilineal descent and their young children live in the woman's house. On the other hand, patrilineally-related men and their older boys live in the man's house. Girls who belong to the patrilineage live with their

mothers for about 10 years, before joining their fathers. In this later arrangement, wives send food to their husbands and afterwards spend the night with them. Although it is not as common a practice as it was in the past, there are more families along the coast of Prampram who practise the patrilocal system than there are in Upper Town. This confirms how social change has influenced the living arrangements among the Gas as indicated in Nukunya's study of the changing faces of the patrilocal systems (Nukunya, 2011).

The patrilineal usages and nuances do not permit women and their daughters to inherit lands but allow boys to inherit their fathers. Land is therefore given a masculine value and women can only own lands through their sons or by buying. For this reason, only women of high socio-economic status can be landowners. However, this practice is fast changing due to the change in modern trends. Today, some people will sell their landed property to their kinsmen, regardless of traditional dictates. The driving forces for the changing land ownership patterns in Prampram could be attributed to the pace of development, poverty, a high land demand for industrialization, and growing commercial activities in the area. The landlessness of women and their inability to acquire landed properties could have influence on their ability to obtain toilets. Although some women wish they had their own toilets, they were handicapped by not having access to a land to construct it. Others too do not have money even if they have the land to construct a toilet. Thus, women often find themselves powerless under the patriarchal system.

3.5.2 Political and Economic Arrangements

The traditional political structure composed of the Paramount Chief, followed by Mankralo, the sub-chiefs, the Divisional councils, Asafoatsemɛ, Shippi and the counsellor. Administratively, Prampram Area Council covers towns such as Dawhenya, Afienya,

Mobole, Mangotsonya, Ostebleku, Mataheko, Ablekuma Kofokorpe, Abbey Korpe, Miotso, Markutse, Abia and Yoodue Korpe. The Paramount Chief is a member of the Regional House of Chiefs and heads the Prampram Traditional Council. He presides over other sub-chiefs from Afienya, Mobole and Dawhenya. Prampram has two chiefs, the Paramount Chief representing Upper Town and another chief for Lower Town. The Wetso Matsehi heads the various sub-divisions. The Council of Elders is made up of the Chief; the Manklalo; the Kingmaker; the Sɛtsɛ gmai, the Stool Father; the Chief Priest, Nii Labia; and Nii Shippi, the head of the Asafoatsɛ mɛ. The Asafoatsengua heads the two main divisions of Prampram, that is, the Larkplɛ in Lower Town and the people of Upper Town. Prampram has four main "wɛtso" or clans headed by Wem Nokutama. The clans are as follows: the Anewey Quarters of Fante Descent; the Kley Quarters; the Olowey and the Larkplɛ. These traditional power structures are still active in Prampram and play a very influential role especially in the enforcement of traditional customs and rites. For example, during the period of Kplɛdo they place a ban on noise making and drumming which every resident including the local government is to adhere to.

The local government structure, on the other hand, is headed by the District Chief Executive as the political head and the District Coordinating Director (DCD) as the administrative head. They have sub-units such as the Development Planning and Coordinating Unit, headed by the District Planning Officer (DPO); the Environmental Health and Sanitation Unit, headed by the District Environmental Health Officer; and other decentralised departments and agencies such as the Ghana Health Service (GHS), Ghana Education Service (GES), the Judicial Service and Ghana Police Service. There are sub-district structures including Area Councils and the Unit Committees where most developmental projects take place.

Records from the Ningo-Prampram District Assembly indicate that about 62% of the population of the district falls within the economically-active age group (15 and 64 years). These are made up of farmers (12.3%), who are normally found in the hinterland, and 8.1% fishermen (SUSA, 2011). Farming, which used to be the predominant occupation of the people, has decreased because most of the farm lands have been lost to residential accommodation and industry. Fishing still thrives as one of the major occupations, especially for those in Lower Town. Traders form 11.8% and engage in the sale of building materials, clothing, household wares, etcetera, while others are in food vending (especially "kenkey", a local meal made from maize). Masons, carpenters, seamstresses and hairdressers represent 10.3% of the total workforce of the district. There are public and civil servants in the decentralised ministries, departments and agencies (SUSA, 2011).

Although 62% of the population fall within the active working class, only 48.1% constitute the workforce, while the non-working class, comprising the unemployed, students and under–aged make up 51.9% (DHRC, 2011). This puts a lot of burden on the workforce, who have challenges with low yields and the seasonality of the fishing and farming industry and the lack of access to land for farming or any commercial venture. Another challenge facing the fishing industry is the use of unapproved fishing methods such as the use of dynamite, undersized nets and hydrogen bulbs to do fishing, and these practices are harming aquatic life.

Land tenure system in Prampram makes it difficult for people to acquire land for personal or commercial activities. Archival records show that, although there are stools, land ownership is normally vested into the families (Bohman, 2010). To a large extent this has contributed to the many land disputes in the area. In the past, waste and forest lands in particular were owned communally and members of the community could hunt, pasture and

cut firewood. Non-indigenes were however excluded. Most of the family lands are currently held in trust by the heads of the clans. The family heads decide which land is to be developed and the purposes for which the lands could be used. Some of the lands that were allocated to the district assembly to be used as sanitation sites for the disposal of refuse and construction of public toilets had been reclaimed by the families concerned. Acquiring lands for developmental projects including toilets becomes difficult due to the fact that one has to deal with various heads of clans, which can be very frustrating. The problem is compounded by the influx of real estate developers who have made the cost of land prohibitive.

3.5.3 Religious Beliefs

Prampram has the major religions - Christianity, traditional religion, and Islam with the majority (82%) being Christians (SUSA, 2011). The people of Prampram were initially predominantly traditional worshippers. They believed in the existence of a supreme being – God, who created all things but Himself, an uncreated being who should be sought and worshipped. They believed in the adage that *noko tsɔwe dzukwɛ mawu*, meaning 'no one teaches the child to know God'. This is interpreted to mean that the individual, from birth, has some knowledge of the Supreme Being. Thus, for example, when a child lies down looking up into the sky, which is believed to be God's abode, it is said to be making inference of the existence of God. They also believe that God is everywhere, and the eminence of God can be seen through the Dangme expression, *kɛ oyɛ hela ne ode mawu, ode kɛ wu kohio* that is, 'if one wants to say something to God, he or she should say it to the wind'. The people refer to Him as *Nyuŋmɔ*, *Mawu*, *Ɖuntsɔ* and worship Him through tutelage spirits, who also work through priests.

There are 31 shrines in Prampram and their leader *La Loi* is a female. According to the history of the Dangme, all the tutelar spirits in Prampram were brought by their ancestors when they came to settle on the land. The people revered them as their protectors, and as a result, a special ritual, *Kplɛdo*, is performed usually in the month of April for a period of three weeks to thank them. According to a priestess, these spirits only protect and do not harm; spirits who destroy are abhorred. They detest human blood and, as a result, they eat only crabs for their meal. Anyone who brings any foreign spirit that kills people or demands human blood is expelled from the town. Hence, *Kplɛdo* is celebrated only for the tutelary spirits recognised in Prampram. Every clan has a shrine with a priestess to serve. These priests and priestesses, according to the chief priest, train young women who are normally evoked by the spirits to serve them. They go through three years of apprenticeship, after which they graduate to full priestesses through some rituals and celebrations. *Dzamleshi* is the greatest of all the tutelary spirits.

Although the history of the Ga-Dangme portrays them as a people who mainly practised the traditional form of worship evidenced by shrines in every family house, most of the people profess to be Christians. Muslims are few. There were others who practised both Christianity and traditional worship. Although they go to church, consulting either the ancestors or tutelary spirits in times of need is thought to be normal. Nukunya (2003) describes the African converted into Christianity as nominal. Busia (1950) as cited by Nukunya (2003) likened the impact of Christianity on the converts to a “thin veneer”, who reverted to their old beliefs when his/her Christian beliefs are threatened by difficult situations. Brokensha (1966), in his study of the people of Larteh, has noted that the people accepted Christianity whole-heartedly and made it their own institution, without abandoning their traditional beliefs; they practised both religions side by side.

They also had some beliefs in witchcraft and evil spirits so had ways of protecting themselves against their attacks. Belief in the 'evil eye' causes some people not to leave their faeces in the open in order to avoid an evil eye from bewitching them. Pregnant women were found to cover themselves with cloth to avoid any 'evil eye' from spiritually attacking the unborn baby. This they did by consulting the shrines, *Mallams* or some prayer camps within the community and at its outskirt. They normally receive amulets which they use as a form of protection against witches, wizards and evil forces. Consultations were done when sick because it is believed that some diseases are caused by evil spirits hence the need to go through spiritual cleansing to get healed. This confirms the assertion by Odotei (2008) that the world view of the Ghanaian does not assign only physical causes to ailments but also spiritual causes.

3.6 Social Activities

The people of Prampram observe two festivals in a year: *Kplɛdo* and *homowo*. The *Kplɛdo* is celebrated in commemoration of the annual visit of the town's ancestral and tutelar spirits, particularly *Lalue Baaki* (the Mother) symbolised by a drum and *Digbleh* (the Father). This drum is out-doored once a year and is carried only by the Chief Priest. During the festival, this special drum is beaten and people dance to the admiration of others, especially foreigners, who join in the dance. It takes mainly the form of drumming and dancing and offering of sacrifices to the gods to thank them for a successful year and to seek their protection against any kind of ill and danger during the coming year. The celebration starts with a ban on noisemaking that covers a period of three weeks. The final celebration to climax the activities ends at the beach, where some rituals are performed by the Chief Priest to pray for unity and a bumper harvest. The drum is dipped into the sea to signify the

cleansing of the people and the land from all diseases. Afterwards, the people jump into the sea to cleanse themselves of any disease or bad omen.

The Homowo Festival, on the other hand, signifies "hooting at hunger" and coincides with the harvests of crops and fish. The history of Homowo is traced from a severe period of famine experienced by the people during their migration to their present location. They were inspired by the famine to embark on massive food-production exercises, which eventually, yielded them a bumper harvest. They were, thus, "hooting at hunger" that is "homowo" because of their bumper harvest (Agyepong et al., 1997). The *Homowo* Festival is also celebrated by the Ga people.

An ancestral food, "*kpokpoi"*, is prepared from corn dough and eaten with soup prepared from palm fruits and served for all family members and friends. *Homowo* annually rekindles love and affection among kin and kith. *Homowo* is the occasion to renew marriage vows and good relationships between in-laws through the presentation of firewood. Departed members of the families are remembered through wailing at dawn (Agyepong et al., 1997).

The history, demography, social and political institutions of Prampram is presented to help make a linkage between the waste, hygiene and sanitation situation and the findings in subsequent chapters. In the next chapter, an exposition is given on the processes taken to collect data, the people interviewed, and analysis of the data collected.

Based on the above description of the study site (the social institutions, settlement patterns, and administrative and political structures), some points can be summarised about waste, hygiene and the sanitation situation and problems in the area. These include: their waste

management; inadequate and poor state of public toilets; and defecatory practices. These problems will be further investigated in subsequent chapters.

CHAPTER FOUR

DATA COLLECTION APPROACHES

4.1 Introduction

This chapter describes the processes of collecting data to address the objectives of the study reflecting eight months of fieldwork in Prampram. The method of data collection, qualitative or quantitative, has been an area of dissenting views with an on-going debate as to which is more appropriate for the social sciences. Proponents of the quantitative approach are of the view that "interpretive research should be made to conform to appropriate definitions of scientific research and that qualitative research should not be funded if it fails to conform to these criteria" (Artkinson & Delamont, 2006: 751; Erickson & Gutierrez, 2002: 221). Hammersley (2005a: 3) is of the view that, by comparing the two, qualitative research tends to suffer because there is a myth that quantitative researchers have clear-cut guidelines, which are available for use by policymakers. However, the question is posed as to whether society can be studied scientifically, more so when it is not out there to be observed objectively. Peter Burger (1975) argues that statistical figures do not make sociology; it is putting them into a sociological context that makes them meaningful because by focusing on statistical figures the real meaning and motives of people studied remain untouched and unclear.

Qualitative research, on the other hand, studies real-world situations as they unfold naturally, it is non-manipulative and non-controlling and it is also opened to whatever emerges (Patton, 2002). Hence, considering the objectives of the study, the qualitative approach was best suited for the study. This is because the study sought to investigate the meanings of people's defaecatory practices, a real world situation and so demands an investigative approach. Defaecatory practice is a sensitive subject where the true picture is

likely to be distorted or the correct information withheld due to embarrassment. The qualitative approach helped to investigate the 'why' and the 'how' of certain decisions and actions taken with respect to defecatory practices and not just the 'what', 'where' and 'when'. In order to get the emic view of the people with regard to their hygiene and defecatory practices, the ethnographic approach was adopted. Ethnography assisted in gaining a better understanding of the shared and learned patterns of values, behaviours, beliefs and language of the people of Prampram in relation to their defecatory practices (Harris, 1968; cited in Creswell, 2013). It also helped to unravel issues within the community hinging on power, empowerment, inequality and inequity (Creswell, 2013) as the people meet their primal need to defecate.

I drew inspiration from Malinowski (1921) who worked in the Trobriad Island; Evans Pritchard (1940) who worked among the Nuer and Dinka Azande of Southern Sudan, and Margaret Mead (1928) who worked among the people of Samoa. In articulating the orientation of anthropology and by extensive qualitative research work, Malinowski, the founder of anthropology observed thus:

> The final goal, of which an Ethnographer should never lose sight of ..... is, briefly, to grasp the native's point of view, his relation to life, to realise his vision of his world. We have to study man, and we must study what concerns him most intimately, that is the hold which life has on him. In each culture, the values are slightly different; people aspire after different aims, follow different impulses and yearn after different forms of happiness (Malinowski, 1961:25).

Taking a cue from Malinowski's admonition, the interest of the informants was paramount throughout the process of the research. The ethnographic approach as earlier indicated was adopted in order to study the people in their naturally-occurring settings, capture their social meanings and have first-hand information from the people being studied. This was achieved through participant-observation. Here, the social behaviour and social relations of the

people were studied within their cultural contexts. Adopting participant observation proved to be the best approach to get the differences between norms and action, that is, between what people say they do and what they actually do.

Every qualitative researcher brings his or her value to bear on a study. The researcher, therefore, admits that her own values and biases may be present in the work, being a behavioural change specialist. However, conscious effort was made to bracket this subjectivity in order to view issues from the perspective of the people.

Although the SUSA project selected Prampram as the study site it was apt for the study because: first, it is urbanising fast and its traditional character is changing; and second, it has few toilet facilities. Most of the people living in the community are indigenes and have lived together for generations and share a common language, behaviour and attitudes. Themes that were selected were to inform the analysis of the life of the people. These include themes pertaining to the physical environment; social and political structure; kinship and social relations; socialization processes and community perceptions. The researcher's main interest, as an ethnographer, was to identify some of the inequities in access to sanitation facilities and to use the research to advocate for change, especially in the way sanitation programmes are being implemented by the government, NGOs, the private sector and the communities.

A total of eight months (from October, 2012 to August, 2013) was spent undertaking the fieldwork. The initial five months were used to collect the main data; then a break for about three months to analyse the initial data in order to identify gaps; followed by the second phase of the field work (three months) used to address gaps identified and to exit successfully from the field.

The main data collection was done through visits to the field site (Prampram) to study the socio-cultural behaviour of the selected communities within Prampram (Olowey, Kley, Lower East & West). Some of the activities of interest were rituals, customary rites, social activities and daily routine activities. Much probing was done to gain deep insight into what the people of Prampram knew and were doing to solve the problem of open defecation and the sanitation problem in the community. This was done through participant observations, in-depth interviews and focus group discussions. The researcher acted as a 'human instrument', relying on her senses, thoughts and feelings throughout the process (Fetterman, 1989).

The observational field notes became one of the major sources of data especially because many participants became less cautious and resumed their normal daily activities after the researcher had been immersed in the community. However, many perceived the researcher as one of them and was referred to as kinswoman, but remained a visitor to some others.

Prior to the study, a baseline survey had been undertaken by the SUSA Project to ascertain the sanitation preferences and practices of the people. Hence, the main interest of the study was to gain more insight into the cultural meanings and assumptions underpinning these hygiene and sanitation preferences and practices by systematically capturing the views of the people (Brewer, 2000).

4.2 Community Entry

Before any contact could be made with the informants, courtesy calls were made to the chiefs and elders representing the traditional leaders; and to the District Chief Executive and District Coordinating Director who represented the District Assembly. Afterwards, attempts

were made to build relationships within the community, which aided easy access to the community. In order to gain better access to the people and participate directly in their daily activities, the researcher rented a house in the community which became the researcher's field home for the next eight months. This gave her the opportunity to observe early morning sanitation practices.

Tei, a next door neighbour was the researcher's first contact on arrival in the community. He proved to be a very supportive person and assisted in identifying the homes of some important links like the chief and his elders, the Assembly members and other prominent persons. He showed the researcher places where foodstuff and other items were sold. Due to the fact that the DHRC had already established overall contacts with the District Assembly, and has used several field assistants in the community, it was fairly easy to organize in-depth interviews and FGDs as well as households to be observed.

During the initial interaction with the community members, it became apparent that most people preferred to speak Dangme, the main language spoken by the people, even though quite a number could communicate in Akan (Twi), which the researcher is familiar with. Fortunately, the field assistant is a native of the town and can speak fluent Dangme. This helped in establishing cordial relationships and assisted the researcher to gain more insight into issues raised by informants during interactions in the community.

As part of preparation towards the conduct of the field work, the Dodowa Health Research Center (DHRC) issued introduction letters to be presented to various relevant institutions within the study area. Ethical clearance certificates had to be obtained from both the DHRC

and Ghana Health Service, which took over 6 months. The researcher could therefore not start with field work until then and this delayed data collection for six months.

A copy of the introduction letter was first presented to the District Assembly through the District Coordinating Director to formally introduce the researcher to the local authority in Prampram and to discuss the purpose of the research. The cooperation and support of the Assembly was assured for a successful research. Institutions that were presented with letters of introduction included the District Health Management Team (DHMT) and the Environmental Health and Sanitation Unit (EHSU), both in Prampram. Next, a visit was made to the traditional leaders; that is, the chiefs, elders, opinion leaders and the assembly members in the study areas who offered their support and gave the names of other appropriate people to contact for the needed information.

Entry into the community was also facilitated through the assistance of four assembly members who served as the "gatekeepers", making various contacts within the community and with all those whose input into the study would be needed: the Chief and Elders of Lower Town; the *Mankralo* (the king maker); *Nii Labia* (the Chief Priest); *Nii Shippi* (Head of the *Asafoatsemei* or warriors); the District Directors of Health; and the National Council on Civic Education (NCCE). Although the researcher started working with four Assembly members only two were always available to assist as two were engaged with other activities: one saw it as a waste of time when he realized he was not going to gain personally from the study.

The District Assembly was recognized by all parties, including the traditional authorities, as the head of the entire district. The District Assembly assured the research team of their

support and assistance should they be needed. Hence, although the researcher's initial point of call was to the traditional leaders, she was asked to first report to the District Assembly before coming to them, which she did. Consent was later given to interact with community members and visit their homes. The major complaint from the elders, however, is the lack of feedback from researchers on the results of their findings. They were assured that there would be a dissemination of findings at the end of the study. This has been done.

Because the community was in dire need of toilets most community members had high expectations from the study and so in order to avoid raising hopes of a possible intervention, emphasis was placed on the fact that the study was for academic purposes. Community members were, however assured that findings from the research would be fed into future sanitation projects in the community. This was to forestall any financial demands from community members. The gatekeepers, on their part, advised me on some of the customs that needed to be observed. These included avoiding a visit to the shrine during menstruating, entering the shrine with footwear and taking of photographs of certain rituals especially at the initial stages of the *Kplɛdo* Festival.

After observing all protocols, the researcher with the assistance of two local guides undertook a transect walk through the community. The objective of the transect walk was to explore the general state of the community, especially the sanitation (sanitary) condition by observing, listening and asking questions. Through the transect walk additional input were made into the kind of questions to ask and on how to segment the community in the selection of informants. It helped in gaining first-hand knowledge of the community and to identify the main problems within the different segments of the community. The settlement patterns and spatial location of different socio-economic groups were identified. The

transect walks were conducted over four sequential days, covering each of the four segments of the community. Notes were recorded and pictures were taken. The information obtained served as a guide to the observation of community activities, the selection of respondents for the study, and to developing questions for the interview guide.

4.3 Selecting Research Participants

Ideally total coverage of the population should have been undertaken using questionnaires. However, due to the orientation of the study and to the diverse tools used to collect the data (in-depth interviews, FGDs and observation), different means were adopted in selecting the participants. Much of the time in the early stages of the field work was spent having interactions with various groups within the community. For example, the researcher normally joined the youth groups as they played draughts or during their Keep Fit Club meetings; the fishmongers as they waited for fish at the beach; and the fishermen who had either returned from fishing or did not go for fishing and were relaxing under their shed.

As observed by Malinowski, these interactions give the people the opportunity to be at ease to lead their normal life without much effort. It also tends to regard the researcher as part of the life of the people (Malinowski, 2002). Hence most of the men started referring to the researcher as *mi yo* (my wife) or *mi nyaanyo* (my friend) anytime she visited them. These discussions created conducive moments, which the researcher capitalized on to ask some sensitive questions on open defecation without incurring the anger of the people. Through this process the researcher was able to observe the people in their natural state without many inhibitions. Some of the people served as key informants while some members of the Keep Fit Club were used as one of the groups for FGD. Selection of the households for observation was based on the initial contacts and interaction in the community and with the

help of the gatekeepers. Apart from identifying informants and participants through contacts and interactions, the nature and type of question/s to be posed to respondents or discussants were of utmost importance.

All the informants and discussants for the study were purposively selected. They were people believed to have rich information and from whom one could learn much about issues of central importance to the purpose of the research (Patton, 1990). Informants and participants were made up of adult males and females and the youth living in the community. A set of selection criteria was developed which aided in hand-picking the informants and participants. Informants for the in-depth interviews were drawn from the four study sites within the Prampram community, namely, Olowey, Kley, Lower East and Lower West.

These communities were pre-selected by the SUSA Project and as explained earlier on they have peculiar socio-economic and demographic characteristics as a result of the differences in their physical locations, which invariably influence their defecatory preferences and practices. The criteria for selecting key informants included: being an indigene or migrant who had lived in the community for at least ten years; having good knowledge of the history of the community; and should be above 18 years old. These criteria were given to the various assembly members in the four communities to identify fifteen residents from each of their communities. Of those recruited, some were unwilling to participate hence additional informants were identified. In all, 51 key informants were recruited and interviewed. The breakdown of informants is as indicated in Table 4.1 below.

Table 4.1: **Informants for In-depth Interviews**

Name of Community	No. of Males	No. of Females	Total
Kley	8	6	14
Olowey	7	5	12
Lower West	8	4	12
Lower East	4	9	13
Total	**27**	**24**	**51**

Source: Field data, 2013

Selecting informants from different geographical locations with diverse backgrounds and characteristics was to elicit a variety in responses, which will enrich the findings (Kidder & Judd, 1986). Care was taken to give equal opportunity to male and female representation. However during the field work a few of the women were busy so they were replaced with some men who were willing to participate. Twenty case households were selected from the four identified communities for observation. Some of the heads of the households had participated in the in-depth interviews. The criteria for the selection of the households included homes with children below the age of five. Both male and female headed households were considered. Informants were chosen from households with different socio-economic status, that is, both low and middle income groups. Although the intention was to get the view of both fathers and mothers on the nurturing of the child, most of the informants ended up being women caregivers or mothers. This was because only the women were mostly met at home during the visits. On a few occasions, however, some fathers were met and their views were sought as well; and this enriched the discussions to some extent.

Twenty-eight participants between the ages of 18 and 75 years were selected for the Focus Group Discussions (FGDs). The age range was to get diverse views from the different age groups. There were three groups in all comprising male and female adults and youth groups. The discussants were purposively selected with the assistance of the focal person and the research assistant. The adult male group was made up of ten elders in Lower Town who

were believed to have much knowledge on the history of the community. Since it was getting difficult to get the group the researcher was invited to one of their bi-weekly meeting to conduct the focus group discussion. This turned out to be very informative. The women's group were mostly made up of workers of Zoomlion who were found sweeping the beach. The researcher consulted the group to explain her mission, the purpose of the study and asked for volunteers. Eight women agreed to meet her at one of the hotels after close of work. Some of the issues the discussion touched on included: women's challenges as waste workers; meeting defecatory needs; challenges in acquiring improved household latrines; and ensuring a clean home and community which adds to their busy schedules. The youth group was mainly made up of members of a Keep Fit Club who invited the researcher to join in their meeting to share ideas. At the meeting, issues relating to the peculiar challenges the youth face in meeting their defecatory needs came up, which the researcher felt was worth capturing. They therefore agreed that the researcher should come at the next scheduled meeting to conduct the focus group discussion. They were eleven in number.

All the groups were homogenous in nature and this helped to "create a level playing field" and encourage the participation of all (Eliot & Associates, 2005). The disadvantage however was the lack of cross-fertilization of ideas during such homogenous discussions as they lacked a variety of thoughts.

4.4 Data Collection Tools and Techniques

The main data collections tools applied in this research were participant observations, in-depth interviews and Focus Group Discussions. The triangulation of data sources was to serve as a means of validating the information and data gathered from the field. This is to ensure consistency or dependability, credibility, neutrality and transferability of data

(Lincoln & Guba, 1985; Golafshani, 2003; Denzin, 2012). In the next section, the main processes taken to collect data is discussed.

4.4.1 Participant Observations

Given the sensitive nature of the study and the fact that most people do not really do what they say, the researcher adopted participant observation as a means to gather additional and more accurate information on the people's behaviours. It is an appropriate tool to use to get accurate information, especially on a topic as sensitive as defecation practices. The observations involved systematically selecting, watching and recording behaviour and characteristics of people. The researcher did unstructured observations by entering the field with no predetermined thoughts as to the distinct behaviours to be observed, except the fact that some hygiene behaviours were of interest to the study.

Observations were carried out both at the community and the household levels. At the community level, activities observed were daily waste-disposal practices at public refuse dump sites, the use of the public latrine, and open defecation in the cemetery and on the beach. Daily life, as it unfolded at the beach and in the communities along the beach, was observed from early morning, when fish landings and selling took place, until evening, when the late boats arrived. This observation was done to get a detailed impression of life, especially of the coastal communities in terms of how they use the beach, sea water and the surroundings as well as their social interaction and commercial activities that take place.

The observations were done at different periods during the field work as expanded in Table 4.2 below:

Table 4.2: **Workplan for Observations on the Field**

Period	Activities	Things observed
1st to 3rd Week	Observation at the household	Personal hygiene Brushing of teeth Bathing Washing of dirty cloths Domestic hygiene Sweeping Disposing of waste Cleaning of utensils Environmental hygiene Weeding surroundings Stagnant water from bath house
4th to 6th week	Observation of individual defecatory practices	Open defecation in the bush Open defecation at the beach Open defecation at the refuse dump site Open defecation in gutters Open defecation at the cemetery Defecation at the public toilets Defecation at household latrines
7th to 9th week	Observation in the community	Public toilets Cemetery sites Refuse dump site Beach Lorry station Abandoned market Football park/playing grounds Shrines

Source: Field data, 2013

As enumerated in the table above, there was also observation of the households and it focused on personal hygiene during the first three weeks into the field work, then used the 4th and 5th week to observe people's hygiene and defecatory practices starting from early in the morning when households are involved in their early morning 'cleansing rituals', such as sweeping of the compound, disposing of refuse and visiting the toilets. In addition interaction among households, socialization processes, religious practices and how these influenced people's hygiene and sanitation preferences were observed. The observations gave more insights into the actual sanitary practices of the people.

Every visit was preceded by an appointment with the head of household. Although most of the household heads indicated waking up as early as 4.30am, the researcher, sometimes, found them still in bed on arrival. An average of six hours was spent per visit in each household. Care was taken to cover the entire daily activities of households by alternating the period of visit. Some visits were either made from the early hours of the day until the afternoon (that is, from 4.30am to 1.30pm) or from the afternoon (that is 1.30pm) until the households retired to bed around 9.00pm. An average of four visits was made to each household. A field notebook was kept in which the daily activities observed in the households were recorded. Records were kept per household.

Recording activities in the presence of the observed was sometimes problematic, thus, sometimes the researcher had to sneak out to quickly record some of the scenes, activities and conversations she was likely to forget. This was normally done in situations where the researcher had to spend long periods in the homes and there was the likelihood of forgetting some important cues. Some of the scenes were captured on camera or videotape. This was done with the consent of the informants. The field assistant also took notes of some of the conversations that were in the Dangme language. Debriefing sessions were held at the end of each day; these doubled as planning sessions for the next day's programme. The profile of each household was developed, capturing their socio-demographic data as well as observations made during each visit. The observations were later written up as field notes. All the field notes were coded in NVivo. There was triangulation of observations, in-depth interviews and FGDs to authenticate findings.

The household heads were mainly concerned with the actual purpose of the study and were apprehensive concerning the motive of the frequent visits. As a result, most of the initial

meetings were very formal and "unproductive". However, after several visits and interactions with the households, their fears were allayed and they opened up to share their experiences. Following the example of Evans Prichard (1940) the researcher identified a role within the household at each visit. Some of the roles included accompanying members of the household to fetch water, disposing of refuse, sweeping, cooking, washing and carrying babies or playing with children as mothers undertook their household chores. Fig. 4.1 shows the researcher assisting a "kenkey" (corn meal) seller in her food preparation.

Figure 4.1: Researcher Assisting in the Home

Source: Field data, 2013

This involvement helped the researcher to integrate into the family to some extent. This brought about some cordiality and reduced inhibitions and tensions, although not totally, since as noted by Malinowski and Evans Pritchard, a stranger will still remain a stranger no matter the rapport that may be established.

4.4.2 In-depth Interviews

Since not all cues can be obtained through observation, the researcher also conducted some in-depth interviews. This was to gain in-depth knowledge and understanding of what had

been observed. These include hygiene behaviour and defecatory preferences and practices. In addition, the people's understanding of diseases and contagion, their perceptions of smell and how these influence their defecation preferences and practices were obtained through in-depth interviews. According to Plummer (2001), in-depth interviews bring out people's knowledge, views, understandings, interpretations, experiences and interactions as well their perceptions on the subject of discussion.

A total of 51 in-depth interviews (made up of 32 adult males and females and 20 caregivers from households) were conducted using an interview guide based on the objectives of the study. Other key informants were made up of representatives from the Traditional Council, the District Assembly, Environmental Health Unit, Ghana Health Service, Ministries and Departments and religious/spiritual leaders. The details of personalities interviewed are attached hereto (Appendix II). The main reason for interviewing these key informants was to get the background information on the history of the community and the sanitation practices pertaining to the past and the present. Their respective roles as traditional and religious leaders, and staff of the Environmental Health Unit helped to throw more light and give meaning to the current sanitation situation and defecatory practices. Some of the key informants were identified by the researcher during her daily interactions with community members where they shared personal experiences with regards to the sanitation situation from the past (when they used pit latrines) to the present use of KVIPs and WCs. They proved to be indispensable sources of information on the community's sanitation practices.

Appointments were made with the respondents at their own convenience and most meetings were held at either their residences or their workplaces. This notwithstanding, the researcher could still not hold some of the interviews at the stipulated times because she either did not

meet them or they were engaged in other things so had to reschedule the interview for another date. Although the interviews were to last for an average of one hour some took one and half hours while others had to be done in two sessions either because they were busy or another engagement cropped up during the discussions. Although a generic interview guide was prepared to cover the main objectives of the study some varieties emerged depending on the personality being interviewed and their wealth of knowledge. A copy of the guide is attached hereto (Appendix III).

4.4.3 Focus Group Discussion

As the in-depth interviews progressed, some concepts, perceptions and common practices emerged hence it became apparent that there was a need for a Focus Group Discussion (FGD) to supplement, confirm or clarify information obtained from the community regarding their knowledge, beliefs, attitudes and behaviours with regards to sanitation. The researcher organised three FGDs. These consisted of a youth group who were members of a Keep Fit Fun Club (11 members); an adult female group made up of workers of Zoomlion, a waste management company (8 members); and a male adult group made up of fishermen (10). FGDs, according to Denzin and Lincoln (2000), create platforms for collective rather than individual ideas to be shared. It encourages group participation and enables group members to express their ideas freely. Hence, the selection of the groups by researcher was to encourage participation, avoid intimidation and solicit the opinions of the age bracket (the youth and adults) as well as the sex bracket (male and female) with regards to their perceptions, preferences and practices on hygiene and sanitation.

All the meetings were held at the convenience of group members. The FGD for the youth and adult males were held at their meeting place while that of the women was held at the

forecourt of one of the hotels along the beach after they had closed from work. The FGDs proved to be very insightful and informative because it produced data and insights that would have been less accessible if the researcher had not interacted with the groups. Interaction among group members helped to stimulate memories, experiences and ideas in participants, as they listened to one another's experiences. Table 4.3 gives a summary of the methods that were adopted for the various research questions.

Table 4.3: **Summary of Data Collection Approach**

Research Objectives	Data Source	Method	Sampling Size
1. To analyse the effect of socio-demographic factors on defecation preferences and practices of community members.	• Secondary data from the community leaders and the EHSU • Key Informants • Household-Inclusiveness • age, sex, occupation, socio-economic status	• Desk study • Transect walk • Observation • Key informant interviews	• NA • Community • 20 households • 20 households
2. To explore community's perceptions of dirt, contamination and contagion in the management of human waste.	• Households • Key Informants • Community groups • Caregivers	• Observations • In-depth interviews • FGD • In-depth interviews	• 20 households • 51 key informants • 3 groups of a total of 29 people • 20 households
3. To assess the processes of child socialization in hygiene and defecatory practices (child sanitation ladder)	• Households • Caregivers • Community groups	• Observation • In-depth interviews • FGD	• 20 households • 20 households • 3 groups of a total of 29 people

Source: Field data, 2014

4.5 Ethical Considerations

A work is regarded as good research only if it took into account both moral and ethical considerations. According to Mason (2002), a researcher should be as equally concerned with producing a moral or ethical research as in producing an intellectually-coherent and

compelling one. This to him can be achieved if we not only carry out data generation and analysis morally, but also plan the research and frame the questions in an ethical manner. Hence the researcher's main interest was not only on obtaining ethical clearance from the recognised authority but also ensuring that the process of obtaining the data as well as the questions asked did not infringe on the sensitivity of the informants or participants. This was because the subject matter (defecation) is a sensitive issue and this became apparent during the pre-testing of the field instruments. Sensitive questions were identified during the pre-testing and reworded.

As required, ethical clearance had to be sought from the Institutional Review Board (IRB) of the Dodowa Health Research Centre, because the research was going to be conducted in their area of jurisdiction, and then, a reviewed version was taken to the Ethical Review Committee of the Ghana Health Service for final approval; the latter being the body in charge of approving all research related to health. It took six months to obtain the ethical clearance due to the bureaucracy in Ghana's Public Service and this caused considerable delay in the start of the fieldwork and invariably the submission of the thesis. Meanwhile, during the fieldwork it became obvious that some of the informants did not see the importance of the consent form and were unwilling to sign them.

Thenceforth, a community entry (where the elders and opinion leaders were duly informed of the presence of the researcher in the community and her mission) was done. Consent was obtained at the household and individual levels before the study was commenced. Interaction with indigenes, coupled with pre-testing, which was done earlier determined sensitive questions and ways to address them.

To avoid invading the privacy of participants, prior appointments were made for each visit. Participants were assured of confidentiality and anonymity of the data being gathered. Some of the measures taken by the researcher to ensure that their identities were safeguarded were storing the raw data in the forms of digital recordings, photographs or videos on laptops and field notes at a safe place as well as the use of pseudonyms.

4.6 Data Management

The qualitative data in the forms of field notes, digital recordings of interviews, transcribed conversations, documents, photographs, videos and memos were organised into different files and kept in a safe place. All the field notes were recorded in a field journal and then later typed at the end of each day. A soft copy of the documents was made to forestall loss of data.

All the 51 in-depth interviews and 3 FGDs were transcribed verbatim into English, and these were transferred into electronic storage as and when they were completed. Transcription and translation of data were done as and when each group was ready to be transcribed. This was to avoid accumulating too much data as transcription could be time-consuming and could end up delaying the analysis. In all, the transcriptions were done in three batches. A professional and experienced person was identified from the Dodowa Health Research Centre to assist with the transcription and translation. This was to help limit bias. The transcription started in March, 2013 and ended in January, 2014; it took rather a longer period than the researcher had anticipated and happened to be one of the most challenging periods in the research.

To test the quality of the transcription, back transcription was done, where some of the transcribed data were translated back into the original language and then the recordings were listened to in order to make a comparison and check for consistency and originality. This was done by a teacher who holds a Diploma in Dangme Language from the University of Education, Winneba. Both the transcriber and the teacher were requested to treat the tapes and transcripts as confidential materials that were not to be discussed elsewhere, due to ethical reasons. A clear file-naming system was chosen and followed to make it easy to identify files. A data-tracking system was developed, and document transcription or translation procedures were established.

4.7 Data Analysis

The process for analysing the data collected included describing, summarising and interpreting data for each of the study units and for each group of study units. Analysis of the work was initiated while the field work was still on-going; and the advantage was that there was the opportunity to collect further data for clarification in situations where there was ambiguity of thoughts.

The researcher adopted an inductive approach to analyse the data. This was to allow the research findings to emerge from the frequent, dominant or significant themes inherent in the raw data, without the restraint imposed by structured methodologies. By using the inductive approach, the researcher hoped to condense the raw data extensively and establish a clear link between the research objectives and the summary findings from the raw data and to ensure that those links were both transparent (able to be demonstrated to others) and defensible (justifiable), given the objectives of the research (Thomas, 2003).

The researcher used NVivo 10, a Computer Assisted Qualitative Data Analysis Software (CAQDAS) to process and analyse the data collected. She found the steps developed by Bryman (2008) very helpful. The NVivo was used to organise and analyse interviews and field notes (Bryman, 2008). Analysing qualitative data is an iterative process, which includes exploring, coding, reflecting, doing more coding, querying, reflecting, visualising and writing up, which the researcher duly followed. As earlier indicated, all the field data were transcribed and back transcribed to ensure authenticity and consistency (Creswell & Miller, 2000). The first batch of recordings and transcripts were reviewed several times in order for the researcher to become familiar with the data and to identify priori themes. Adopting Byman's steps in the NVivo analysis, all the transcripts from the in-depth interviews and FGDs together with the field notes were imported into the NVivo 10 software, coded and grouped into three major themes. The first theme dwelt on the socio-demographic characteristics of the informants, and information gathered covered their ages, educational backgrounds, marital statuses and family structures and how they inform their sanitation and hygiene behaviours. The second theme dealt with the socialization process that children go through to acquire these sanitation behaviours, while the third theme focused on the perceptions of the informants. The perceptions highlighted included their perceptions about dirt, smell, contagion, place and space.

These major themes were further broken down into sub-themes or categories, either guided by literature, directly from the informants, or developed by the researcher. However, distinctions were made on which of the categories constituted that of the researcher, the informants or from literature.

The theories and literature discussed in the earlier chapters assisted in describing or explaining some of the findings and making a comparative analysis.

4.8 Assessing Data Quality

Consistency, credibility and stakeholder checks are important for the establishment of the trustworthiness of a data analysis. To check for consistency, the researcher recruited a private individual to do an independent coding. He was given the research objectives and some of the raw texts from which the categories had been developed and, then, asked to create new categories from the new text. His categories were compared with those of the researcher and many similarities were detected. The credibility check was done by inviting some of the community members, that is, the Assemblyman and a householder to comment on some of the categories or interpretations made. Here, clarifications were sought, and some corrections made (Erlandson, Harris, Skipper & Allen, 1993).

The researcher went further to check for credibility of her work by presenting her preliminary findings to stakeholders in the water and sanitation sector, who included some of the policymakers at a Stakeholders' Workshop organised by the SUSA Ghana Project in collaboration with the DHRC. Comments from the stakeholders were incorporated into the work. Triangulation of methods was done to check for consistency with data from the various sources, such as observations, in-depth interviews and FGDs, and to bring about authentication of findings.

4.9 Conclusion

This chapter presented the processes taken by the researcher to collect relevant and credible data and the means by which they were analysed to arrive at the findings, which have been thoroughly discussed in the subsequent chapters. Other issues of importance that have been highlighted include how the researcher gained access into the community and became a participant observer in order to gain the emic view of the people concerning their hygiene and defecatory practices. Processes of obtaining ethical clearance to undertake field work, selection of informants, conducting of in-depth interviews and focus group discussions were also discussed. Finally, the challenges faced and the experiences gained while undertaking this study were presented in this chapter.

CHAPTER FIVE

CHILD SOCIALIZATION, DEFECATION AND HYGIENE PRACTICES

"The child is the father of the man and the man the father of the child"

(William Wordworth, 1898)

5.1 Introduction

Socialization is very important in the formation of human personality. In interpreting the above axiom, whatever children learn from the beginning is invariably what they carry through life though some things are unlearned. According to Shiner and Caspi, (2003) personality continues from childhood to adulthood. The view is held that people's personalities form when they are children and that a person will have the same qualities as an adult that he or she had as a child. According to Albert Bandura, the leading proponent of social learning theorists, learning occurs within a social context. It considers that people learn from one another through observations, imitation, and modelling (Ormrod, 1999). It can therefore be inferred that people's hygiene and defecatory behaviours, to a large extent, are as a result of the people that they had to observe, imitate or model while growing up. Bronfenbrenner's ecological model adds another dimension to the development of the child's hygiene behaviour through interaction with the environment (home, school or peer group), that is, the microsystem; things that have indirect influence on the development of the child, e.g. stress from parent's workplace, that is the exosystem; and the cultural values within which the child operates, that is, the macrosystem (Bronfenbrenner, 1994).

Indeed every man or woman has been a child and whatever an individual becomes is largely due to both the environment and the form of socialization he or she goes through. In order to have a better understanding of how people acquire certain hygiene and defecatory behaviours the researcher found it necessary to observe and interact with mothers and caregivers to determine how children are nurtured in hygiene and defecatory practices.

This chapter sought to gain a better understanding of the processes by which children in Prampram learn hygiene through interactions with their immediate social environment.

The central themes identified include socialization; the child as a member of society; age specific patterns of hygiene practices; and issues relating to gender, hygiene and defecatory practices. The social learning theory and Bronfenbrenner's ecological systems theory form the premise of the discussion. The social learning theory broadly explains the fact that the child learns from others through observations, imitation, and modelling; while Bronfenbrenner's theory centres on the total development of the child, including the interactions between factors in the child's maturing biology, its immediate family or community environment and the societal landscape in which it grows (Bronfenbrenner, 1994). Child hygiene and defecatory practices are therefore viewed from the child's immediate relations, other indirect factors bearing on the family as well as societal values.

5.2 The Child as a Member of the Society

As discussed earlier, the Dangme are patrilineal. Therefore, the child belongs to the patrilineage (Odotei, 2008; Nukunya, 2011). A new-born goes through some rites before becoming a member of the family. The people of Prampram, like the people of the other Ga Dangme communities, perform the naming ceremony, which is referred to as *Kpodziemo*, to welcome the child as a member of the father's lineage. It is performed at least a week after the birth of the child, because children less than one week are not regarded as members of the society, hence, when they die, no funeral is performed for them.

The researcher observed that this ritual takes place with pomp and pageantry (e.g. drinking, eating, playing of music, dancing, presentation of gifts, etc). According to the caregivers

interviewed, it is within this period (0-6 months) that the father takes custody of the child and takes formal responsibility for its upkeep. This does not happen in all situations, because some fathers shirk their responsibilities to the child just after the ceremony, leaving the mother to take care of the child by herself or with the help of her family. In some cases, however, to maintain the paternal lineage and fulfil the genitor's responsibilities, a paternal grandfather could take over the genitor's role, being of the same kith and kin. Responsibility for the upkeep of a child differed: while informants from the middle class believed it was both parents, those in the lower class felt most of the fathers did not take care of the children and so the responsibilities, most often, solely lies on the mothers. However, overall, field work in the Prampram area has revealed that, despite the strong patrilineal traditions, pre-school children are commonly brought up by their mothers.

The early days of the child are signified by a close contact with the mother. The child is given the most attention from infancy. During visits to the homes, infants are normally found carried either by their mother, elder sibling or a relative. They are hardly seen left on the bare floor; they are normally put on a mat or cloth. Some even have nets placed on them to protect them from flies and mosquitoes. Infants at this age were normally found being bathed during home visits, either in the morning, afternoon and evening. Their clothes are always found very clean. The mothers ensure that the children are always wearing either diapers or pampers and cleaned up immediately the babies soil themselves with faeces or urine. The soiled diapers are then washed and the dirty water thrown away on the compound or in the bush. Soiled pampers are, normally, wrapped and disposed of in the nearby bush or in their refuse bin and later disposed of either in the bush or in the refuse container. It is the belief that the faeces of children is not harmful and so can be disposed of without much consideration. Hence, an informant who was asked why children's faeces are normally

thrown into the bush replied: "The child is not that old so does not take in solid food. He only drinks breast milk which is not harmful so I normally throw his faeces into the bush" (Adult Female, 35 years).

In the Dangme community, just as was found in an Akan society (van der Geest, 2001), husbands and other members of the household and neighbours judge a woman's character by the cleanliness of her clothes, cooking utensils and state of compound, and, most of all, the level of cleanliness of her nursing child. Hence, during early visits to homes, children or mothers were often found sweeping the compound, washing clothes, cleaning utensils or bathing infants. When one of the women was asked why she was so conscious about always keeping her compound clean, she replied: "*As for this community, if you do not keep yourself, your compound or your children clean, you will be insulted as a dirty person and you will not gain the respect of the people".* The cleanliness of their children was paramount and is evidenced in the way they were often met bathing the children during visits. According to the mothers, children are not allowed to bathe themselves until the age of 6 or 8 years, because it is believed that before this stage, they will not bathe well and may end up developing bad body odour, which is a stigma in the society. A mother (45 years) made the point aptly: "*I don't allow children to bathe themselves. For example, I bathed my daughter, Abi, till she was nine years, because she is a girl and I have to make sure she does not carry any scent on her in her adult life*". Bad body odour is demeaning, and no mother will like her child to be insulted as having bad body odour and so everything is done to avoid it. One of the measures taken to prevent bad body odour besides frequent baths include applying lime (citrus arauntifolia) to the armpit of the children before bathing them.

Given the structure of the home where related kith and kin of various generation lie together, the home is the unit of socialization, a place where learning begins. It is the child's first

encounter with the world around it. In Brofenbrenner's ecological models of human development, the microsystem, that is, the child's immediate environment, which comprises the family and the school, is where the child develops. This interaction extends from the parents and peers (Brofenbrenner, 1994). In Prampram, most people indicated having acquired hygiene behaviours and practices from their mothers and grandmothers who served as their mentors. Some of the behaviours and practices include bathing twice daily, brushing teeth, washing clothes, sweeping of compound and disposing of refuse. These are introduced according to the age and the capability of the child. The most common personal hygiene behaviours first introduced to the child, according to the mothers are: washing the face, cleaning/brushing the teeth, bathing and combing the hair. Hand-washing before eating and toilet training are also taught in the child's early life. Although hand-washing is a common practice taught by parents, the use of soap is not emphasised. However, soap may be used to wash hands after meal. Depending on the age of the child, the mother either does it for the child or supervises the child to do it. A grandmother indicated:

> At Ali's age (2 years), when he finishes eating, I wash his hands, and so, when there is soapy water around, he will wash his hands in it himself, and little by little, when he is three or four years, he will know that when he finishes eating, he has to wash his hands (adult female, 54 years).

According to the mothers interviewed, the need for children to wash their hands with soap after eating is to prevent the child from getting pepper into the eyes and not necessarily to prevent oral infection from microorganisms. The practice of hand washing with soap is not only taught in the homes but also in the schools so according to a grandmother: "Whatever I teach my grandchildren is also taught in their school. So, whenever they are being reminded to do the right thing, they reply "Our teacher has already taught me that" and even make you to feel ashamed. The children, therefore, learn both from the home and the school"

Children are introduced to oral hygiene from early childhood, because people who have bad oral hygiene (halitosis) are often shunned. Interactions with mothers and caregivers showed that oral hygiene begins immediately the child is born. The belief is that some mucous or saliva gathers in the throat at birth, which should be cleaned thoroughly, or else the child will develop bad breath at a later age. Consequently, mothers often dip a small towel in tomato juice or saline water to clean the baby's mouth and down the throat. The cleaning is done daily to clear the lactose coating that forms on the baby's tongue due to breastfeeding. As the child's primary teeth start coming out, some parents use chewed sponge or a stick to clean the mouth of the child, since the child cannot chew properly at this stage. As the child grows, mothers allow the child to chew the sponge while they do the cleaning for them to ensure that it is well done. Childhood oral hygiene goes through a process, as explained by a mother: "*I, first, use the cotton wool dipped in salt water to clean when they (children) are babies, then I chew the stick and clean their teeth for them. With time, they chew themselves and let me clean for them, and gradually, they do everything by themselves"* (Grace, female, 52 years).

In recent times, however, toothbrush and toothpaste are commonly used. Some informants indicated they use both. During the household observation, most of the children were found brushing their teeth. However, some of the mothers said they personally preferred both because they believe the chewing stick or sponge cleans better, while the paste refreshes the mouth. The use of the toothbrush and toothpaste is irrespective of the parents' educational or socio-economic background since most families visited, both from the middle and lower income groups, were using toothbrush and paste to clean the children's teeth. According to the parents who train the children to use the brush and paste, they initially brush the teeth of

the children themselves. As the children grew, they supervise them to do it, and then, eventually, it is done by the children themselves by age six.

5.3 Socialising the Child in Defecatory Practices: The Child Defecation Ladder.

According to George (2008), toilet training is the first attempt to turn a child into an acceptable member of society, and it thus serves as the barometer of civilisation and the home is the unit of socialization to assist the child acquire these behaviours. Apart from hygiene behaviours, children were also found to go through stages in acquiring defecatory practices, and age plays a very important role in this process (Curtis, 1995). Borrowing from the CLTS concept of "Sanitation Ladder" and from observation and interaction with some mothers, the researcher came out with the concept of "The Child Defecation Ladder" to explain the relationship between a child's age and the type of defecatory socialization he or she adopts. The sanitation ladder is a process whereby individual households or community members gradually adapt the use of an improved latrine in a stepwise manner, starting with the dig and burry, to the use of traditional pit latrine, then the VIP, KVIP and eventually to the WC.

The sanitation ladder was propounded by Kar and Chambers (2008) as a process of assisting community members to obtain open defecation free status. In adopting this process the researcher tried to demonstrate the various stages children go through to acquire defecatory behaviour according to their age. Brofenbrenner's ecological theory will help us to appreciate how, through these processes, children learn to defecate from the home, the closest social environment, (either from the use of diapers, chamber pots or the compound) to the bush, beach or refuse dumps, which is the larger social circle of defecatory

socialization in Prampram. The illustration in Table 5.1 below encapsulates the age-steps of the child's defecatory practice code named the 'Child defecation ladder'.

Table 5.1: **Child Defecation Ladder**

Stage	Age	Toiletry Practices
1.	Below 6 months	Child defecates in diapers/pampers
2.	Age 6 months to 1+ year	Child is assisted to use the chamber pot or defecates in the compound or sit on mother's joined feet to defecate
3.	Age 2 years to 3+ years	Child either uses toilet at home, defecates in the compound or goes with parents to defecate (either at the beach or in the bush)
4.	Age 4years to 5+ years	Child follows siblings to defecate (either at the beach or in the bush)
5.	Age 6+years	Independent toiletry behaviour: child goes alone or with peers or siblings

Source: Adopted from Kar and Chambers' Sanitation Ladder Concept (2008)

This was reiterated by the women in the FGD, most of whom indicated introducing their children to toilet training within the first three years of the child's life.

5.3.1 Below 6months: Uninhibited Toiletry Behaviour

During household observations children from birth to 6 months were mostly found in either diapers, linen or pieces of old cloth. The diapers were normally thrown away when they get soiled while the linen were washed daily. A few mothers who were in the middle income class indicated introducing their babies to the use of the chamber pot at this stage because they believe it helps the child to develop self-discipline at an early age and also controls bedwetting. Some however, wait until the child can sit alone without any support before

they introduce him or her to the chamber pot. The faeces of infants at this age, as earlier indicated, was treated as normal and harmless because the child only takes breast milk from the mother, which is not contaminated. According to the discussants in the women's FGD, even if the faeces of the baby at this age drops into a portion of one's food the entire food is not to be thrown away but the unsoiled part is to be eaten. Throwing it away has some spiritual connotations, which signifies disowning the child and that will cause grief to the child's spirit. According to them the baby is innocent so its faeces cannot cause harm. Thus, infant's faeces are normally treated with less caution than the adult's.

5.3.2 Age 6 Months to 1+ year: Toilet Training

This is the stage where most mothers stated that they introduce their infants to toilet training by use of the chamber pot. At this stage the faeces of the child starts turning solid and giving off odours so gains some attention from the mother or caregiver. For the few who were found using the chamber pot, the age at which children were introduced to the chamber pot differed. A youth among the FGD shared her experience that during her infant years, her grandmother used to put her feet together in a circular mode, for the children to squat on and defecate.

During discussions with mothers and caregivers, they all indicated introducing the children to the chamber pot at different stages of the child's development. While some indicated starting at birth, some started when the children were around three months old and others started when the child could sit up by itself (around six months). All these are done with the mothers supporting the children. As they grow older, they sit by themselves without any support. The views of three mothers explain the differences:

(A) As for me, the moment the child is born, I start using the chamber pot. I put it in-between my thighs and position the child's buttocks every morning as I breastfeed him or her. If you do that, the child will not urinate or defecate on him or herself as he or she grows up (Ruth, female, 38 years).

(B) At three (3) months, I would have already introduced him to the chamber pot. So, every morning, when I put him on the chamber pot, he will know that I want him to defecate. So, when I bring the chamber pot, he knows what it is. So, when he wants to 'pupu' (defecate) and you don't bring the chamber pot, he will not 'pupu' (Rebecca, 32 years).

(C) I make them start when they are six or seven months old when they can sit by themselves. So, wherever I go, I have a chamber pot with me. When I travel and they don't see the chamber pot, they don't ease themselves. So, when they are three or four years and they can sit on the toilet, then they start using the toilet (Getty, 40 years).

A study by Curtis et al. (1995) in their study of the people of Burkina Faso show that children defecate in linen while they were young but they start using the chamber pot the moment they were able to hold their heads (4-5 months). As indicated by the mothers above, the period during which a child is given toilet training ranges from age 0 to about 18 months. In a few instances, this was extended to about 3 years. In the case of the Digo in East Africa, the belief is that infants can learn soon after birth and begin motor and toilet training in the first weeks (2-3 weeks) of life. By their approach the child is trained in elimination (urinate or defecate) by the fifth or sixth month (deVries, 1977). Not all the children in Prampram, as observed, are introduced to the chamber pot during toilet training. Some mothers make a "potty" style with the legs for the child to sit on to defecate on the ground, others simply let the children squat and defecate into polythene bags which they later added to the refuse bin at home or throw into the bush, a phenomenon known as "parcel and ship", "wrap and throw" or "flying toilets". The success of the early training of a Digo child suggests that sociocultural factors are more important determinants of toilet training readiness than is currently thought.

The educational level of parents, especially mothers, was identified as a major factor that contributed to the hygiene practices of children. In the first scenario, the mother starts the training with the chamber pot and gradually introduces children to use the toilet at home.This appears to be the trend for many educated and a few uneducated mothers who were interviewed. Children from educated or middle income parents seem to progress from the pot to the use of toilet facilities, while some children from uneducated or low income parents often follow the example as narrated in the second scenario, where some start using the pot but end up defecating on the floor as toddlers and, then, in open space, as they grow.

More families in middle-income groups indicated disposing their infants' faeces in the toilet than the low income mothers. This was confirmed in a study by Nath, Chowdhury, & Sengupta (2010) in India, where hygienic practices were found to improve with improvement in economic status. Hence, higher levels of hygiene practice were recorded for higher socio-economic groups. This can be attributed to the fact that members of these groups have the means of acquiring sanitation facilities, such as toilets, unlike their low-income counterparts.

Faecal disposal of child's faeces is also done according to the nature and the changes of the fecal matter taking place when of the child grows. The liquid and non-smelly faeces of a baby (below 6 months) who is only breastfeeding is normally thrown behind the house or in a nearby bush, because it is perceived as not dangerous or offensive. However, from 6 to 12 months when children are introduced to solid food, the faeces of children are normally wrapped in polythene bags or swept and added to domestic refuse or thrown into the bush or dumpsite because it is offensive. According to some mothers, some children naturally hate dirt and would not want their diapers or pampers soiled. Thus they are able to signal

when they want to defecate or when they have soiled themselves and want their diapers or linen changed. Children would signal by grimacing or crying to draw the attention of the caregiver. Such children, in Dangme are referred to as *ahiaa* (being too sensitive or fussy). Ayo, a grandmother explains this phenomenon: "*there are some children who naturally hate dirt. Such children would not want to wear soiled or wet diapers and so, will cry till their diapers are changed or they take it off by themselves, if they can*".

5.3.3 The Weaning Stage (1- 2+ years)

This is the period between breastfeeding and the introduction to solid food. According to the caregivers interviewed, in the past, children could breastfeed until the age of four; some were said to breastfeed even while in school. Most mothers spoken to indicated that once children learn to crawl, walk, speak and eat other foods apart from breast milk, they often leave them on their own to play by themselves or with other siblings.

Most children at the weaning stage were sometimes found defecating in the compound and this was common practice among the lower income groups at Lower Town. During the FGD among the youth, most of the discussants indicated they used to defecate in the compound as infants. A Senior High School graduate shared her experience: "As for me, I have been squatting to defecate since my infancy. That's how my grandmother taught me, and I am used to that. So, even if you ask me to use the WC, I will squat on it, because when I sit on it, I do not feel the urge to defecate, and so, the faeces delay" (Youth female, 20 years). All the youth present confirmed this and said the squatting posture makes it easier for defecation because there will not be the need to apply pressure. The preference for the squatting posture to defecate may contribute to the practice of open defecation. The transition in defecatory practices is summarised by a mother as follows:

> When our child was a baby, he used the chamber pot, but when he was about 1 year, he refused to use the chamber pot, so started defecating on the floor. Now that he is 4 years, he does not defecate at home; he goes to the bush or the refuse dump site to defecate (Adult female, 44 years).

While middle income mothers were observed adhering to strict hygienic and defecatory practices in the homes visited, those in the low income homes were less strict and gave the children a lot of liberty as narrated by the mother as above. As observed in a survey by Opolot (2010), weaning and toilet training were considered to be more permissive and casual in nature by the Baganda group than by the others reiterating the fact that different approaches are adopted in the toilet training of their children by mothers with different socio-economic backgrounds.

Apart from their defecatory practices, children at the weaning stage normally look dirty and unkempt. It is believed that they belong to the earth, and so they have to be familiar with the earth. To mothers sand does not constitute dirt, and this notion is carried through to adulthood. Mothers believe sand makes the children stronger, because, according to them, children who are left on their own to play on the floor tend to walk faster than those who are always carried. Generally, Prampram mothers compare their children with their city counterparts who, according to them, do not start walking early due to their restricted lives. This comparison was also made by some mothers from Lower Town between children born at their end of the town compared to those of Upper Town, especially Kley. They claimed children of the Lower Town were stronger and walked faster. A survey of child-rearing practices among four ethnic groups in Uganda confirmed the fact that individual independence was particularly more valued by one ethnic group, the Baganda, than by the Iteso and had influence on the development of the child (Opolot, 2010).

It was a common scene to find people pick UP food that had fallen on the ground, brush the dirt and eat with the expression, "*African germs don't kill*". Seeing dirt as part of nature, undoubtedly, has contributed to the practice of improper hygiene, which leads to the high incidence of diarrhoea both in the Prampram community (as indicated by statistics from the Health Centre) and the nation as a whole (GSS, 2012). Edward Green's notion that Africans emphasise naturalistic and impersonal causes of illness, rather than human agency and unforeseen forces (Green, 1999) is therefore challenged here.

5.3.4 Growing Up and Gaining Independence (3-4+ years)

By the time the child is weaned off breast milk and is independent of the mother he or she is expected to be able to control his/her bowel movements. This period signifies the end of the anal stage, where the child is assumed to be old enough to be independent. The children of this age are often found eating without the assistance of an adult. However, children from middle class homes in Prampram are not left on their own at this age; they still received a lot of attention, because they are still considered infants. According to the mothers, children gaining independence at an early age allows them to do other chores. Thus, children receive divided attention, especially in situations where the mothers are expecting another child or have delivered a new baby. Mothers indicated that, by age three, the children are always in the company of their older siblings, playing and learning some basic skills, such as eating by themselves.

Although the independence of children is an advantage to the mother, it reduces the attention given to children because children are left to care for themselves or are taken care of by older siblings. The children therefore tend to learn from the older siblings and sometimes follow them as they go to defecate. This influences their defecatory practices. Children are found in the company of older siblings and peers going to defecate in the bush or

individually, a child may squat at a corner of a compound to defecate. Often they do not wipe clean because they are not supervised.

5.3.5 The Young "Parent", Reproducing Hygienic Behaviour (5 –6+ years)

Following Bandura's social learning theory, children imitate and model in their learning process (Bandura, 1977). Hence, most of the children, after becoming independent of the mother, and having imitated them, also start modelling after them by taking care of their younger brothers or sisters in turns. They learn from their mothers and older siblings, and in return, apply the knowledge in the care of their younger siblings. Some of these young caregivers are as young as five years and are normally seen just babysitting as their mother does her household chores or sells her wares. As they grow older, they help in carrying their little siblings, feeding them or supervising them, and accompanying them to defecate, mostly in the bush, at the beach or on refuse dumps.

Hence, the younger generation of children learn from both their older siblings, who would have learnt from other older siblings and their parents. They, therefore, reproduce hygiene behaviour from an early age and apply it as they grow and so become a receptacle of whatever is taught, whether good or bad, and this forms their hygiene behaviour in later life. As they grow, it becomes difficult to change some of these acquired behaviours. Hence, when a youth was asked during a FGD session about his sanitation preference, he replied: *"I prefer going to the beach. I do not even think I can do it in the WC, because I am used to doing it at the beach. I have done it there since infancy*" (Adult Male, 24 years).

The public toilets from the perspective of all informants are not child-friendly due to: its design (big squat hole that a child can fall through); the bad state that most of them are in;

and the bad odour that it produces. According to them, it is a taboo and a bad omen for a child to fall into a latrine. When such an incident occurs, a child is taken through expensive cleansing rituals. This explains why adults were mostly seen alone going to the public toilet. When adults go with their children to defecate, they direct the children to the nearby refuse dump site or to the bush behind the public toilet to defecate. Only a few children enter the toilet with their mothers. Even in homes with toilets, children are not allowed to use the household VIP/KVIP for fear they may either soil the place or fall into the toilet. According to an elderly man, it is a belief that adult faeces are "heavy" and may contain some spiritual powers which can harm the child if the child is exposed to it. Although some indicated throwing away the child's faeces into the toilet, this was not often the case; during the observation, children's faeces were either wrapped in polythene containers and added to domestic refuse or thrown into the refuse container. Only a few were seen carrying the pot to empty into the public toilets.

It can be concluded, therefore, that the children's defecatory practices evolve with certain age-steps of the child, influenced by the socio-economic status of parents. Parents gradually allow the child to defecate in larger social circles, moving from the closest social environment to the larger community circles according to Bronfenbrenner's ecological theory. The process is shorter for those who are trained to use the toilet right after using the chamber pot. Age and quality of care are, therefore, very important factors in a child's adoption of some defecatory practices. The age of the child, for example, is associated with how his or her faeces is handled. The faeces of an infant is normally classified as harmless, due to the belief that the child is "innocent" and only feeds on the mother's breast milk, which is clean. Most mothers and caregivers felt that the baby's faeces was normal and

could be handled without much problem, as compared to the adult's faeces. Adult faeces is treated with a certain level of disgust.

5.4 Gender, Child Hygiene and Defecatory Practices

In most cultures, women have the primary responsibility for providing water and ensuring sanitation and hygiene at the household level (Curtis et al., 1995). There are some expectations regarding personal hygiene among the gender. In Prampram there is a link between sex differences and patterns of hygiene behaviour. Standards of cleanliness are, generally, higher for girls especially those under the age of five than for boys. Hence during the FGD with the adult males, most fathers indicated that their girls are usually neater than the boys. The reasons given were that girls mostly spend time with the mothers and tend to learn a lot from them concerning personal and domestic hygiene. During an interview, a father, retorted thus: *"As for neatness, I will say the girls are neater than the boys, and they learn to take care of themselves at an early age, as compared to the boys. This is also because girls are often seen with their mothers, learning from them, and also doing things under their supervision*" (Adult male, 54 years). Boys were often found playing in the sand and looking dirty during visits to the homes while the girls were found assisting their mothers in the kitchen. Boys are, therefore, more likely to be exposed to dirt and germs than girls. However, in Lower Town, girls were often found playing with the boys and were equally dirty.

A study in Guyana on parental socialization preferences had parents rating neatness and cleanliness as more desirable for girls than for boys in all age groups (Clough, 2011). Another study on gender differences in hygiene standards showed that a significant number of students training to be pre-school teachers in the UK expected girls, but not boys, to be tidy, clean, quiet, sensible, obedient, passive and well-behaved (Sikes, 1991). This was

because girls have always been seen as gentle and docile while boys tend to be rough and tough. These reinforce the expectations that females are the epitome good of hygiene, which expresses itself in motherhood and childcare and domestic cleanliness.

The researcher observed that in Prampram, just as in most homes in Ghana, women are in charge of household chores. This pertained to both residents in Lower Town, the traditional section of the community as well as Upper Town. The boys were found disposing of refuse and fetching firewood, and assisting the girls to fetch water and, sometimes, to wash the cooking utensils. According to all mothers interviewed, the boys, normally, perceive hygiene-related activities in general as the work of girls, because they hardly see their fathers engage in these activities. The boys, according to the mothers, always assumed the kitchen, for example, is the domain of women and girls. For most of the mothers interviewed, it is a responsibility and a pride to keep their homes clean, and anything short of that makes them less of a successful woman, which is similar to van der Geest's study among the people of Kwahu Tafo (van der Geest, 2007); and Takwalba and Mariwah (2014) among the people of Ashaiman; both in Ghana. There were instances during visits when mothers entrenched this practice of segregation by warning the boys anytime they got close to the kitchen with the words, "*Your place is not in the kitchen*". Girls who would be playing while cooking were reprimanded with words such as "*Your duty as a woman is to cook for the family. So you better come and learn before you disgrace me in future".*

In Africa, division of labour among children makes some activities gender-specific. There are no laid down rules regarding gender and work, but the roles are mainly socially-constructed. Domestic chores, like cooking, cleaning, sweeping, washing of clothes and taking care of babies are perceived as the sole preserve of women (Tsiboe & Marbell, 2004).

There are traditional beliefs in relation to some of these practices. Informants from both Upper and Lower Town of Prampram indicated that, in the past, boys were not allowed to hold a broom for fear that they will become impotent in later life. As such, they were rather tasked to dispose of refuse. Many interviewed however do not hold this belief. On a few occasions, the researcher found boys sweeping in homes visited. This was especially in cases where there were no older girls to do it. Some of the men from the middle income households during the in-depth interviews indicated helping their wives with household chores like; sweeping, washing clothes and bathing children. This is especially when their wives were engaged with other activities. Most of the men lived in an apartment with only their families. They, however, went further to explain this was not possible in the compound or family houses because such gestures are normally frowned upon.

Discussions so far, however, do not imply boys are free from performing household chores. Both girls and boys are required to perform daily chores as assigned to them by their parents. Some of the chores boys undertake include fetching of water, disposing of refuse, gathering of firewood or going to the farm or sea to assist parents. The girls normally assist their mothers to cook, sweep, bath their siblings and fetch water and firewood. They also take care of the younger ones and supervise them when they go out to defecate. In most homes visited, although the mothers had indicated that the above specific roles had been assigned to all members of the family, the majority of the household chores ended up being done by the girls and their mothers because the boys and their fathers were hardly found in the homes. Most mothers, especially, those from low income households, when asked about their workload felt it was their traditional duty as women to keep the home clean so were not bothered. According to them, that was what they were taught by their mothers, which they are teaching their children. The girl child learns from infancy that it is her responsibility

to take care of the home, which includes practising hygiene and waste management; hence, the heavy workload of women.

Apart from the role of gender in domestic and environmental hygiene, defecatory preference has gender connotations. Discussants from the youth group indicated that boys or men, for example, are able to openly defecate anytime of the day. They even sometimes went in groups to defecate in the bush or at the beach. When asked whether exposing themselves to each other was not a problem, they explained that it depended on the person. If it was their peers they did not really mind, however, they got embarrassed if it was someone they were shy of, for example, a girlfriend. Women and girls, on the other hand, have to either wait until the evening or go to a hideout to defecate; a situation which the women discussants in the focus group complained exposes them, and especially the girls, to the risk of either being raped or bitten by snakes. This was confirmed by discussants in both the adult and youth focus group. It is, therefore, not surprising that most of the women informants and discussants were very passionate about the need to have their own toilets. Their only impediment was the funds and the technical competence to have one constructed. They, therefore, tend to depend on the men to build the latrines.

5.5 Conclusions

This chapter investigated the processes by which children in Prampram learn hygiene and defecatory practices through observation, imitation and modelling within their immediate social environment (microsystem) to the society at large (macrosysem) using Bandura's social learning theory and Bronfenbrenner's ecological models of human development respectively. The child was first recognised as a member of society being raised from a

home, the unit of socialization. The home (microsystem) serves as a place where the child begins to learn some hygiene behaviours and toilet training.

The home serves as the child's immediate environment and is the child's first encounter with the world around it (Bronfenbrenner, 1994). As a result, observations were made mostly in the homes of informants to ascertain how children were socialised in hygiene behaviour. Children were found to go through steps to learn these defecatory practices starting from birth to 7 years. This stepwise process was code named by the researcher as the 'Child Defecation Ladder', borrowing from the 'Sanitation ladder' concept by Kamal Kar, the originator of the CLTS approach. Defecation in the compound was more common among low income households as compared to children in the middle income households.

On the issue of gender and child hygiene and defecatory practice, it was observed that society had different expectations of girls and boys. The high expectation for the girls meant they had to be tidy at all times and to be carers of homes modelling after their mothers even at tender ages, and end up carrying the workload with the mother.

Having had an insight into how a child is socialized into hygiene behaviour and defecatory practices, the next chapter helps us to appreciate how these practices come to influence hygiene and defecatory preferences and practices of adults in Prampram.

CHAPTER SIX

DEFECATORY PREFERENCES AND PRACTICES IN PRAMPRAM

6.1 Introduction

The previous chapter dealt with the socialization process that children go through in the process of acquiring hygiene behaviours. This chapter focuses on the prevailing defecatory practices in Prampram, taking into consideration the opportunities and resources available to individuals or community members and how they are utilised. Analysis is made of the state of the physical environment and how that contributes to hygiene preferences and practices.

6.2 Sanitation Preferences and Practices

6.2.1 Introduction

Meeting one's primal need to defecate is as important as eating, because one cannot ignore the urge for long. As a result, it is very crucial and forms an integral part of one's existence. Without being able to defecate, most Ghanaians will feel that they are poisoning themselves, since they believe that the daily ritual of defecating is a form of cleansing the body of filth. According to van der Geest, one feels relieved, freed from a burden or 'liberated' after a visit to the toilet (van der Geest, 1986). Lea is of the view that "both being able to let go, and being able to hold on are valued and welcomed; just as not being able to let go when necessary and not being able to hold on are sources of embarrassment and discomfort" (Lea, 1999: 12). A regular and orderly bowel movement, therefore, represents the rule and order and a life under control. This can only be achieved if the facility to use for this purpose is available and in a state conducive to be used.

However, to meet this crucial need is a big challenge for many who reside in Prampram. The factors espoused to contribute to this are environmental and infrastructural. These include the availability of facilities, the state they are in and how accessible they are to the people. A congenial 'defecation' environment needs to be created in order to motivate people to practise improved hygiene behaviour and adopt sanitation practices.

An earlier baseline survey had indicated that the majority (75.7%) of the people of Prampram practise open defecation (SUSA, 2011) and over 50% indicated not being satisfied with their present sanitation options (Spencer, 2013). Some residents use the public toilets and only a few had their own household toilets. This was confirmed during this study. The following sections will give details on the sanitation preferences and practices of the people of Prampram.

6.2.2 The Practice of Open Defecation (OD)

Open defecation in the Prampram community is well known (SUSA, 2011). Reasons given for the practice are numerous ranging from the need to avoid contracting diseases as a result of the smell that emanates from the existing KVIPs as compared to the "serene atmosphere" the open defecation (OD) offers. An informant resident in Lower East put it thus: *"the fresh breeze from the sea while defecating at the beach and the scenery atmosphere is that which makes me enjoy defecating at the beach*" (Adult male, 56 years). An informant in Kley when asked his view about defecating in the bush replied: *"defecating in the bush does not pose much problem because the sun normally dries up the faeces within a short time preventing flies from being attracted to it".* Other reasons were inadequate toilet facilities, high user fees and the high cost involved in constructing individual household toilets. A fisherman

informant put it this way: "*why pay for diseases when you can have free fresh air*?" The distance between the facility and location of the users was also mentioned as a hindrance.

This study further reveals different locations where OD takes place and the category of people who practice OD. The locations for OD were: in the bush, at the beach, on refuse dumps, in uncompleted structures and in drains. Open defecation also takes place along footpaths and at old abandoned cemetery site. These places offer them some form of privacy due to less human activity.

The practice of open defecation did not cut across all segments of the community. It was widely practised among people of lower socio-economic status, the majority of whom were in Lower East. People from the middle income bracket, especially those living in Kley and Olowey, mostly patronised the public toilet, shared toilet facilities with neighbours or had their own latrines. The location of open defecation is proximity determined. The proximity is in relation to the time one had the urge to defecate. For example, an informant could use the beach in the morning but use the bush at night or vice versa because of the varied location they had the urge to do so. There were however a few who will strive to attend to natures' call at their preferred location irrespective of where they had the urge. This persistence in terms of location notwithstanding, residents in Kley and Olowey use the bush because they live in the hinterland and are more likely to be farmers. Those in Lower East and Lower West who are mostly fisher folks defecate along the beach. Details of the discussion on the defecatory sites are found below.

6.2.2.1 Open Defecation in the Bush

Open defecation, according to the JMP, is when human faeces are disposed of in fields, forests, bushes, open bodies of water, beaches or other open spaces or disposed of with solid waste (WHO & UNICEF, 2014). As indicated above, the practise of OD in the bush is prevalent among residents in Kley and Olowey and is mainly due to its proximity. Although these two areas had a higher number of residents owning household latrines, the practice is still common for the reasons discussed above. Another reason critical for the practice of OD was the unwillingness on the part of landlords to share their household facility with their tenants. Whereas the landlords accused the tenants for their failure to make the facility clean and make financial contribution towards dislodging when the pit gets full; tenants felt the landlords charged exorbitant prices for the maintenance. There were conflicts emanating from keeping the facility clean.

Those who patronise the bush feel that defecating in the bush does not pose much of a problem: the sun normally dries up the faeces within a short time preventing flies from being attracted to it. Interaction with the men's group showed that pigs used to roam around in the bush and readily fed on the faeces. According to the male discussants, it was thus unlikely for one to see thuds of faeces, especially along many bush paths.

6.2.2.2 Defecation at the Beach

The practice of open defecation was common at the beach such that a special place has been designated for open defecation with the other sites used as (1) fish landing site, (2) canoe carving area, and (3) fish mongering area. The open defecation site has been sub divided into two: for the males and for females. Children came either with parents, siblings or peers and sometimes ended up swimming after defecation. A greater number of the users of the

beach are actors who conduct their economic activity at the beach. They are either fishmongers, fishermen or traders who ply their trade at the beach. They therefore spend a lot of their time at the beach. One fisherman intimated: *"we spend all our time either at the beach or sea due to the nature of our work. As a result we normally either defecate in the sea when fishing or at the beach on our return either resting or mending nets*" (Adult male, 55 years).

The picture as shown in Figure 6.1 below depicts an early morning defecation scene at the beach by both adults and children. Childhood defecatory socialization is not discounted here.

Figure 6.1: **People Defecating at the Beach**

Source: Field Data, 2013

6.2.2.3 Motivation for OD at the Beach

Some informants held the view that the sea was self-cleansing, and so could not be contaminated. It cleans the beach of all faeces at the end of the day. For example, a discussant in the women's focus group posed this rhetorical question:

> What significant impact does our 'small' faeces have on the sea, considering the large volumes of untreated sewerage dislodged directly into the sea daily by cesspit emptier? People in the city do it in their homes, and the tankers (cesspit emptier) come and dump it in large quantities in the sea. What difference does it make if we go and do it directly there. The sea is capable of cleansing itself (Adult female, 54 years)

Another informant, who is currently using the pan latrine when asked where he empties the faecal sludge replied; *"Of course, into the sea. Where else? Because that is the best place to put it, since it won't smell and worry anyone"* (Adult male, 65 years). Like others, he felt it was safer to deposit human waste into the sea because of its self-cleansing ability without considering its environmental and ecological impact. There were other attributes of the sea such as being a purifier, preservative and medicine. As a purifier, all cleansing rituals were done in the sea: for example, the installation of chiefs, widowhood rites, and cleansing of the chief priest. The seawater, according to the fishermen is used as medicine to treat stomach aches and infertility. When asked why such a revered property could also be used for open defecation, their response was "the sea is a mighty cleanser". The strong belief in the potency of the sea has contributed to the practice of open defecation at the beach.

At the beach pigs were identified by some fishmongers as cleansers. According to them, in the past, pigs used to be reared in the community and they used to feed on faeces so acted as cleansers or scavengers, keeping the community clean. The rearing of pigs has, however, been banned because they were destroying some of the items used for performing rituals. A nearby community is currently rearing pigs so the researcher made a visit to the community and found the pigs busily acting as scavengers and picking whatever they found at the beach. The beach was free of faeces. According to the fishmongers, it was thus, unlikely for one to see thuds of faeces, especially along many bush paths. Dittmer's (2009) study encountered a similar situation, which served as disincentive for people to invest in toilets.

Although most informants and discussants held the view that the sea was a self-cleanser, a few held contrary views. For example, an informant who is a fishmonger, intimated: *"It is not true that the high tides or sea water will wash the faeces away because you sometimes find the faeces at the beach in the morning. It depends on the time you go and it is also not always true that there is high tide to sweep it off.*' Apart from its attributes, its scenery atmosphere and fresh breeze served as a motivation for all informants and discussants.

6.2.3.4 Socio-demographic Factors Influencing OD

Some other observations were made about the practice of OD in Prampram. The practice was a function of physical strength. The strength required in squatting without any support was demanding so the aged, the weak, the sick and people with certain forms of physical disability were totally ruled out. The aged normally defecated in the homes, either in chamber pots or into polythene bags and later thrown away into the bush or public toilets. An informant's reason for constructing a household latrine as discussed earlier, was to provide a place of convenience for his aged parents. The age range was between children around 3 years to adults around 65 years. Infants and the aged were hardly ever found defecating either in the bush or at the beach.

In terms of gender, there were more men than women practising OD. A number of factors account for this: OD is normally practised in secluded areas and the women fear such places; women risk being raped; there is the fear of being bitten by a snake; and as part of their socialisation women tend to need more privacy to practice OD compared to men. Instances of sexual harassment of the young girls were reported during the FGD with the youth while the women's group confirmed the harassment both girls and women go through, the lack of privacy and fear of being bitten by a snake.

Open defecation was practised either by individuals or in groups. During observations children were often found walking in groups to defecate. Some of the youth discussants indicated going in groups to defecate. This, according to them, was especially common among those who smoke.

6.2.2.5 Open Defecation as a Last Resort

Although most people interviewed indicated that they had practiced open defecation, to many of the informants it served as a last resort. Some informants said it is a public embarrassment or social disgrace when found defecating in the open. It is a big problem in Prampram that many try to avoid. A female nurse shared her experience thus: "I normally try and wake up very early at dawn to go to the beach to defecate in order to avoid being seen by others and avoid embarrassment; especially being a nurse and advising people against the practice". Even the use of the public toilet was embarrassing to some informants. Another female discussant indicated pretending to pass by the public toilet and then enter quickly when no one was watching. She hides the toilet roll in order not to make it obvious that she is visiting the toilet. The same sentiments were shared by the youth discussants. To avoid this, some use their friends' toilets. This, according to them, gets embarrassing with time. Similar experiences were shared by the men's and women's groups. A teacher in one of the basic schools also narrated his experience in this regard:

> One day, I was teaching in school when I had the urge to defecate. Since there was no toilet in the school, I rushed to a nearby bush, hid behind a tree and started doing my own thing. Later, I heard footsteps approaching, so I peeped and saw one of my students. She was embarrassed seeing me and so she ran in another direction. I felt so much ashamed that the rest of the faeces vanished into my stomach. But what could I have done? (Adult Male, 38 years)

Another challenge in open defecation, according to a youth discussant, is looking for a clean spot in the bush in the early hours of the day when many people defecate. There is the

tendency of stepping into one so a lot of caution is taken in identifying a fresh spot to defecate. To avoid getting his feet soiled with faeces, he always wears slippers when going out to defecate. A female informant also expressed the fear of an enemy using her faeces for ritual purposes as the reason for her non-patronage of the public toilets. According to some workers of Zoomlion, a waste management company, a colleague mistakenly swept an enemy's faeces and this led to her death. A male discussant also shared an experience of a neighbour who found faeces behind his house and had to perform some rituals to avert any intended harm. Hence, issues of fear of embarrassment, problems of finding a clean place to defecate, fear of ritualistic use of faeces, are all influencing defecation practices. However the strongest factor among these is the embarrassment. This confirms a study by Dittmer in four African countries where respondents in Mali, Ghana and Nigeria indicated feeling ashamed or embarrassed when seen approaching a toilet (Dittmer, 2009).

6.2.3 Shared Sanitation: Compound or Communal Toilets

WHO and UNICEF define shared toilets as latrines used by more than one family as found in compound houses or by the entire community or the public, as is the case of communal or public toilets (WHO & UNICEF, 2014). These, according to the JMP, are not improved sanitation. Prampram has a total of nine public or communal toilets with seven institutional toilets. These are mostly Aqua privy, VIP, KVIP, pour flush and WC. The compound shared toilets exist in family houses in Prampram and are mainly pit latrines, VIP, KVIP and WC. Most of these public or communal toilets were constructed by the District Assembly and are being managed by private individuals through the franchise system.

6.2.3.1 Household Shared Toilets

Shared toilets, especially in family houses are commonly used not only in Prampram but also in Ghana as a whole (WHO & UNICEF, 2014). The communal nature of most African countries makes shared toilet facilities the most common option. The JMP declared Ghana the country with the highest number of shared (unimproved) latrines. Ghanaian organisations are challenging that shared toilets should not be considered an 'unimproved' type of sanitation. Informants indicated using both the public toilets and sometimes practising open defecation. Sharing of household toilets with tenants, or neighbours in Prampram, as indicated in an earlier section, is problematic. A prospective landlord resident in Lower West shared his experience:

> This storey house was built by our great grandfather who had many children from different mothers, so it is difficult for us to mobilise as a unit. Even when it comes to the daily cleaning of toilets and bathroom, it is always a fight among the women as to who should clean the toilet at any point in time. We had an old toilet which became full, but no one was ready to contribute towards the dislodgement of the waste and renovation of the toilet. So, those of us staying on the ground floor came together to construct a new toilet, which we are now using. The rest go to the beach to defecate. So, we are just praying to God to help us finish our house so we can leave here.

This response touches on several issues – sibling rivalry, the rights and responsibilities in ancestral houses, and facility maintenance. What is clear, however, is that, even among relatives, the care and use of a toilet facility is a challenge.

6.2.3.2 Public/Communal Toilets

In Prampram, apart from shared toilets in compound houses and households, most community members patronise the few public toilets. Although it is the most common means of meeting one's daily need to defecate, it is a source of much concern to all residents in the four quarters interviewed. Some of the issues comprises the state that most of them are in, access, cost, suitability of children, distance and maintenance. Of the nine communal

toilets, three are located at Olowey, two in Lower East, one in Lower West and three in Kley. Two of these are privately owned. The main communal latrines used in Prampram include: traditional pit latrines, KVIP, Aqua privy, WC and pour-flush. Below are examples.

Figure 6.2:**Communal KVIP Latrine**

Figure 6. 3: Institutional KVIP Latrine

Figure 6.4: **Communal Pit Latrine**

Figure 6.5: Communal Pan Toilet

Source: Field data, 2013 Sanitary Condition of Toilets

Of the communal latrines, the KVIP is the most commonly used and has the most complaints due to the bad odour. Although it is designed to improve ventilation, all informants complained it was offensive and this is as a result of: improper usage, both pits are used instead of one at a time; poor ventilation, non-functioning vent pipes or they are not well positioned; and are used above the designed population. Most of the fly screens on the vent pipes are torn, allowing flies access to the toilet. These cause maggots which are found around the squat-holes, making them unattractive for use. Some people also find the squat-holes cumbersome to use, since they are too small and require care least one soils the place. Generally, these public toilets have been associated with dirt and filth, with thuds of faeces often lying around the squat holes, attracting flies. The toilets also emit heat, octane gas and bad odour believed to cause ill health (Obika et al., 2002). As a result, many men remove their shirts before entering the toilet to prevent the smell from lodging in their shirts as shown in Figure 6.6 below.

Figure 6.6: **A Cloth Hanging on the Wall of a Public Toilet**

Another factor contributing to the poor state of the public toilets is the indiscriminate disposal of anal cleansing materials. In Prampram, the common anal cleansing materials found include old newspapers, tissue paper and household rags. At the public toilets, old newspaper or tissue paper is provided to clients as part of the fee paid. Although those who buy the anal cleansing material are supposed to use it in the toilet, there were a few instances during observation when some people paid for use of the toilet, collected newspaper from the caretaker but went ahead to the bush to defecate. According to the caretaker of one of the toilets in Olowey, this is a common practice in the community and may be because particular toilets smell so badly that people prefer to defecate in the bush but make use of their preferred cleansing material.

In the public toilets visited, waste baskets had been provided into which used papers are put. The caretakers provide these baskets to prevent users from littering the cleansing materials on the floor and to prevent them from dropping the used papers into the pit to cause frequent dislodgement which cost a lot of money. These baskets were, however, found to attract flies and contribute to the bad odour in these toilets.

The situation in the schools as observed was more problematic. According to the teachers, most of the school toilets had been taken over by the community members, making the place unsightly. Only a few of the schools provide anal cleansing materials and so school children, most of the time, have to find their own cleansing material. Thus, materials that were found being used in the schools included tissue papers, exercise book sheets, newspapers or rags. These were either deposited into containers or left on the floor and are later re-used by some pupils. This has serious health implications since these children are likely to soil their hands

and may not be able to wash their hands because most schools visited did not have handwashing facilities. The few that had did not have soap.

Among the different communities, Olowey has the highest number of residents using the public toilets because it has quite a number of middle income and literate dwellers who do not own toilets but prefer to use the public toilet over open defecation despite their bad state. Lower West has only one communal toilet, which is a WC: few of its residents use it because it is far from the community and the user-fee charged is high (GH 0.40p). Lower West therefore recorded the highest number of people practicing open defecation at the beach.

For those who did not use the public toilets, their major complaint was that the toilets smell and they believe the bad smell and the heat from the pit can cause them to contract infections such as leucorrhoea which they term 'white' or *odepoo*. According to a female informant:

> If you frequently sit on a KVIP, you will get white (leucorrhoea). One of my friends had that problem, so we went to see a doctor. We were told the public toilet and the things we sit on can let you get that disease. So it doesn't make me to sit on the KVIP. With the WC, when I go and it has been flushed, I will flush it again before I sit on it. (Adult female, 45 years)

Safety was also identified as one of the key things people look out for in toilets during the baseline survey conducted in the community. This was especially so in the case of children. Hence, although some children use toilets while in school, unfortunately, they are not allowed to use the communal latrines. The researcher observed that some of the public toilets have structural defects, which makes their use unsafe. Many discussants gave this as one of the reasons for not using the public toilets.

Due to the lack of toilet facilities there are always queues around the public toilets during early morning rush hour. This was a concern to many of the informants. The situation

worsens during funerals and other social activities such as marriage and naming ceremonies, as well as the *Homowo* and *Kpledo* festivals that bring in many visitors. To avoid long queues informants indicated getting up very early to visit the toilet but are sometimes still confronted with the unavoidable long queues. The situation sometimes gets embarrassing and uncomfortable for the elderly especially who cannot stand for long periods nor hold on to the urge to defecate. Under these conditions, many of those interviewed said they revert to the beach or bush in order to avoid soiling themselves and being disgraced. In his study of the sanitation situation in Ghana, Boadi (2004) found the long queues as one of the reasons for the non-usage of the public toilets.

According to informants the few existing toilets are quite a distance from their homes. Residents of Lower West, who live along the coast have to walk for about 1.5km to the main lorry park to use the only available public toilet, a WC. This serves as a disincentive for both adults and children, especially when they have diarrhoea. They therefore rather resort to the sea, which is just a stones-throw from their homes. It is almost impossible to use the facility at night given the need to walk that distance. Even worse is the fact that most of these toilets are locked up at night hence inaccessible to people who might even want to use them.

6.2.3.3 Management of Public Toilet

The public toilets are being managed by private individuals employed by the District Assembly who are responsible for the daily cleaning and maintenance of the facilities. Some of the services they render include sweeping and scrubbing the floor of the toilet, burning of waste materials and sometimes disinfecting the toilets with chemicals to reduce the odour. They also sell anal cleansing materials such as tissue papers and newspapers to users, which

seemed to be a very lucrative job. Indeed, it is apparent that because of the income generated by the sale of items and user fees, some seem more concerned with the collection of user fees than with the cleaning of the toilet. Some toilets visited were unsightly, making them even more unattractive to potential clients.

One discovery is that the toilet managers are not being properly supervised, and some had virtually been left on their own without rendering any account to the Assembly. It was alleged that one manageress, for instance, had operated since 2010 without rendering an account to the Assembly. Her explanation was that she took a loan to dislodge the toilet and the Assembly agreed that she should use the proceeds to defray the debt. Neither the caretaker nor the Assembly could tell when the contract ends. As Aryee and Crook (2003) have observed, toilet user fees are a major source of revenue for the assemblies. Although Prampram is in a new district that complains of lack of funds to run its operations, it is yet to come to terms with the fact that, with toilet user fees, it was sitting on a 'gold mine' yet to be exploited.

The major issues regarding use and perceptions of public facilities was that they are structurally in a bad state, not well maintained and offensive to users. They were also not found to be suitable for use by children and the aged. The lack of enough facilities creates overcrowding and queues, which residents try to avoid by using the bush or beach. The fees charged are a disincentive for many. It was observed that there are different challenges faced by residents in the use of the household shared verses communal latrines. Whereas challenges with household shared are more social in nature (conflicts), problems with public facilities are highly influenced by maintenance, technology and fee issues. This invariably influences one's decision to either use a household shared or communal latrine.

6.2.4 Household Toilets

6.2.4.1 Introduction

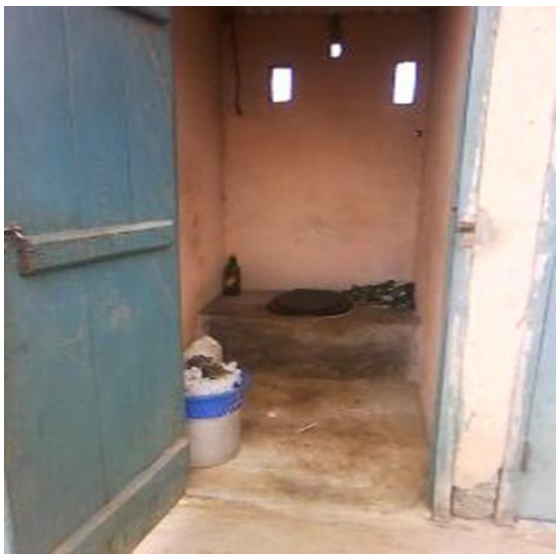
Few of the residents own household latrines in Prampram. As explained earlier, most of these are located in Olowey and Kley which are developing modern communities. The toilets are, basically, made up of VIP, KVIP and WC toilets (see Fig. 6.7 -6.10).

Figure 6.7: Household Ventilated Improved Pit (VIP)

Figure 6.9: **VIP with a Seat**

Figure 6.8: A Water Closet

Figure 6. 10: Kumasi Ventilated Improved Pit (KVIP)



Source: Filed Data, 2013

Most of these facilities were built by the house owners themselves while a few were given subsidies received through a DANIDA supported project in the 1990s. These DANIDA projects aimed at providing subsidies to households that were willing to construct their own toilets. The assistance was given in the form of bags of cement, iron rods, vent pipes, roofing sheets and fees for the latrine artisans. The house owners were to dig their pit, provide sand, water, and moulded blocks and feed the artisans. Only a few house owners were able to take advantage of the support.

6.2.4.2 Motivation for Investing in Private Toilets

Interviews with household heads who had constructed their own household toilets expressed their main motivation as the prestige, privacy and convenience toilets offered them. To them owning a toilet facility is prestigious, while defecating in the bush or on the beach is degrading as expressed by an informant resident in Kley:

> Having your own toilet makes you respected in the community. When you get a visitor you feel proud to show him your toilet to use instead of taking him to the public toilet. You can also use it anytime you have the urge to defecate especially, during the night. (Adult male, 47 years).

During the FGD with the men, it became apparent that most owners of household latrines had prestige as a major drive to obtain a latrine. This was especially in situations where one's visitors will have access to a relatively 'modern' place to attend to nature's call. This, to them, earned them respect from their neighbours. For the women's group, the convenience and privacy gained from using household toilets are their motivation. The discussants indicated the most embarrassing moment to be when one is confronted with having to meet or squat close to someone with whom they have an avoidance relationship (e.g. in-laws).

Other motivations for constructing a private toilet is the fact that it ensures that the defecatory needs of the elderly and sick especially can be conveniently met as earlier on discussed. A resident in Lower West expressed her joy in obtaining a household latrine as follow:

> In the past I used to be afraid going out to defecate at night and will have to ask someone to accompany me. I now have my own and can use it anytime. Also, unlike the public toilets that are not well kept, I am able to keep my toilet very clean and so keep my family clean and healthy all the time (Adult female, 43 years).

Similar studies by Jenkins and Scot (2006) in Ghana identified improved quality of life of the individual when using improved household toilets. A male informant resident in Olowey reiterated the above with the economic benefit derived from using an improved sanitation facility, such as the reduction in the incidence of sanitation-related diseases like diarrhoea and cholera. According to him, less illness means more productivity and an improved quality of life of the individual.

6.3 Willingness and Ability to Pay for Sanitation

6.3.1 Introduction

Although most people interviewed for this study, agreed that owning a household latrine had enormous health and social benefits to them and their families, adults across all areas of the community complained of the prohibitive cost involved in constructing a toilet. This was explained by an elderly male community member from Lower East:

> I don't think if we had enough toilets in the town we will go and defecate in the open. Some of us have a sense of shame. I, for instance, would have preferred my own toilet but I do not have the means. The problem is most of us are poor and cannot afford so we need the government through the Assembly to help construct more" (Adult male, 62 years).

The SUSA baseline survey showed that 87% of respondents' first priority for a toilet was a water closet, if cost was not an issue, followed by a KVIP toilet, which was considered more realistic (SUSA, 2011). The daily minimum wage, at the time of the research was around GH¢6.00 ($1.80) (Ghanaweb, 2014), resulting in an average monthly income of GH¢180.00 ($54.00). Hence a WC, of an average cost of about GHc 2,000.00 ($500) was far beyond the means of most people in Prampram. When asked during FGDs most female adult discussants said they are willing to save and pay between GHC200 ($121.20) and GHC300 ($142.80) for a latrine. Only one male informant, a teacher resident in Lower East said he could afford to invest GHC2,000 ($606.00).

In addition, a WC is likely to be an unrealistic technical toilet design for many households in Prampram due to the chronic, irregular and insufficient water supply to the community, making it impossible to flush the toilets frequently. Some informants complained of the high water table of most lands near the sea that makes it impossible to construct and keep safe septic tanks.

However, community members from across their socio-economic status, sex or age did not seem to have in-depth knowledge on the costs or technical implications of constructing a WC. Hence, when asked their sanitation preference, most would automatically choose the WC, even though they were unlikely to be able to afford it or construct it. This was confirmed by observations in the community that only people of middle income groups settled in their own houses had invested in private WCs. These people included mainly literates and people who had lived and worked outside the community for some time and had returned after retiring from active work.

6.3.2 Women's Cost Concerns

Women expressed special concerns about the unrealistic costs of sanitation: especially house wives from Lower East and some part of Olowey expressed that their working husbands did not feel very motivated to spend income on latrines. The reason given by a female informant was because the men were hardly at home to experience the inconveniences faced by women and children who are forced to practise open defecation or spend money using the public toilets.

Most women interviewed indicated receiving between GHC100 ($28.50) and GHC400 ($125.00) monthly from their husbands to cater for the home. With an average family size of 6 in Prampram (DHRC, 2011) having to cater for 4 children with this amount, they complained, did not even cover feeding cost and other essential expenditures such as school fees.

The researcher, for the above analysis, therefore agrees with Obirih-Opareh and Post (2002) that poor peri-urban residents cannot or will not pay the full costs involved in upgrading sanitation provision. It is possible, however, that people would be more willing to contribute if they could see an immediately visible benefit to their household and perhaps neighbourhood. It is for these reasons that new approaches using community-based micro-enterprises and community-based joint ventures to provide 'local public goods' (Batley, 1996) have been tested over the past decade (Ayee & Crook, 2003).

Apart from the cost element there were also challenges with available land or space to construct these household toilets considering the densely populated areas like Lower East,

an already built up ancient settlement. Generally, the informants have to go through some challenges as enumerated above in order to construct an individual's own toilet. These challenges, to a large extent, have contributed to the practise of open defecation in the community. Most informants, regardless of their sex, age or residential location seemed to have accepted the prevailing sanitation situation as the norm as they often replied with statements such as: "*This is the situation we find ourselves in so what can we do*?" or "*This is what we came to meet*". Others even get offended and would ask; "*Where do you expect us to defecate when the government is not providing us with toilet facilities*? *Since we have the beach and bush that's the only option left for us*".

Expectations among community members in terms of support from the Assembly or NGOs to construct latrines was very high. Most informants at the end of the discussions will ask how they could be supported, to which the researcher indicated the study was part of the process of assessing the problem in order to find sustainable solutions to them.

6.3.3 The "Ideal Toilet"

The new technology being promoted currently by the community themselves is based on their local knowledge on what is feasible within their context as an "ideal toilet" as found in Fig. 6.11.

Figure 6.11: New Public Toilet – Pour Flash

Source: Field Data (2013)

This facility was constructed by the Landing Beach Committee of Lower Town with proceeds from the sale of pre-mixed fuel. This was to serve as a place of convenience for people who undertake economic activities at the beach as well as households closer by to discourage the practice of open defecation at the beach. It stood as their perception of an "ideal toilet" because it is odourless, well ventilated, and has both squatting and sitting pots to cater for especially the elderly who prefer to sit and those who would like to squat on the bowl.

6.4 Conclusion

The chapter has given a vivid description and insight into the environmental and socio-economic factors contributing to the sanitation preferences and practices of the people of Prampram. This has been achieved by giving the reader an insight into the existing sanitation facilities and their contribution to some defecatory practices. Some of the issues identified

include inadequate public toilet facilities and their poor state, compelling many people to practise open defecation. Most of the public toilets have bad odour and generate a lot of heat, which, according to the women, causes leucorrhoea ('white') and so discouraged many from patronising the toilets. Others complained of the distance they have to walk to access the facility and its inaccessibility at night. They complained of the long queues they experience during the morning and on festive occasions. Having to pay for the use of the facilities is a challenge for most of the informants, considering their socio-economic status and the fact that the facilities are not being managed well.

Clearly, issues relating to people's sanitation preference is as a result of several factors such as the availability of the facilities; the state of the facilities; the ability and willingness to pay and the attitudes of the people relating to faeces. In the next chapter we discuss the cultural, emotional and symbolic perspectives of the community's perceptions of dirt, smell and contagion. This is in order to put the above findings about defecatory preferences and practices into a wider perspective and understand more aspects of local defecation patterns and views

CHAPTER SEVEN

DIRT, SMELL, CONTAGION AND DEFECATORY PRACTICES

7.1 Introduction

In the past, most water and sanitation programmes, even those with health goals, have all too frequently focused on the provision of hardware like latrines to impact on the actual hygiene practice (EHP, 1999). However, local perceptions of hygiene have been identified to play an important role in hygiene practices (Nath, Chowdhury & Sengupta 2010). Wesler (2008) observed that perception and practice together with the provision of sanitation facilities have a significant impact on reducing the burden of communicable diseases, such as cholera, diarrhoea, typhoid and hepatitis. The previous chapter highlighted the existing sanitation situation in the community and how this has contributed to the defecatory preferences and practices of the people. This chapter is devoted to examining the local perceptions of dirt, smell, contagion, place, and space and how these inform hygiene behaviours and defecatory practices. Mary Douglas' theory of dirt as 'matter out of place' will form the basis of the discussion. The discussion begins with the concept of dirt.

7.2 Community's Perception of Dirt

Faeces is the main object of discussion in this study, and faeces will be used to symbolize dirt (van der Geest, 2009). Hence, the researcher sought to gain a deeper understanding of how the people perceive dirt and how it influences their hygiene and sanitary practices. Dirt in the Dangme language is *mu* or *emudzie*. All informants as well as discussants in the men, women and youth focus group interpreted *mu* as something which is unsightly, dirty, to be gotten rid of, or avoided. For this reason, although open defecation is practised in the community, the researcher hardly found faeces within the confines of the residential areas with the exception of that of children, which, as explained in previous sessions, is considered

harmless. Informants from all sections of the community as well as from different economic backgrounds associated dirt with the lack of personal hygiene; that is, not bathing, brushing the teeth, combing the hair and the lack of domestic hygiene such as sweeping, cleaning of cooking utensils and keeping the room tidy. In general, anything that creates disorder in the home or is out of the norm as summarised by DD, an informant, is 'mu'. He said

> Anything that will not be hygienic to the society or unsightly to the individual. For example, when you wake up and you don't bath it is 'mu'. If you don't paste or chew stick or sponge people will say, 'see how his mouth is dirty'. Even your hair, if it is not combed you are termed to be dirty. Also, when you do not put things at their right place it causes the place to be untidy. For example, hanging clothes around the room instead of keeping them in a bag or wardrobe or leaving dirty clothes unwashed (DD, male, 45 years).

To them anything that makes a place untidy constitutes dirt. Dirt could either be in the form of an action behaviour or an object. For behaviour most of the informants associated dirt with the lack of good personal and domestic hygiene like; not bathing, not brushing the teeth, not cleaning of cooking utensils and plates and not sweeping of the compounds. In terms of a material object, informants associated dirt with faeces, urine, vomitus, and animal carcass. This buttresses the fact that the Dangme are very much concerned about their personal and domestic hygiene, especially keeping their compounds very clean. So, according to a male discussant in the FGD of the youth:

> Most landlords, for example, will not rent out their rooms to bachelors, because they feel the men (according to tradition) are not to sweep for fear of them losing their manhood so they will end up leaving the place unkempt since there is no wife to sweep for them (Adult male, 34 years).

The researcher during visits to homes observed that the first thing most people do upon waking up is to wash their faces and clean their teeth (with brush, chewing sponge or chewing stick). The women or the girls sweep the compound, while the boys dispose of refuse. The women fetch water for the home, bathe the children or supervise them to bathe,

prepare or buy food and then take the children to school. Sweeping the compound is very crucial to the people of Prampram, since it is the first sign of being a good wife or mother. Sweeping of compounds also tends to be a source of conflict in many compound houses where the work is shared among the various households. As they go through these early morning routines, they are confronted with issues regarding hygiene and sanitation practices, which differ, depending on the background of the individual and their gender as discussed in the previous session.

Within particular societies, attitudes towards faeces and toiletry practices are relative over time. Hence, ideas about how faeces should be managed change historically and are not fixed forever (Inglis, 2002). For example, in Prampram, the disposal of faeces and the local perception of dirt have gone through many phases over the years, starting with 'dig and bury' to the construction of communal pit latrines, use of pan latrines, VIP, KVIP and presently pour flush and WCs.

In almost every stage, what was prevailing was recognised as the best or most acceptable form of excreta management. Pit and bucket latrines, which did not pose much of a problem in the past, were now disgusting to many of the community members. As a result, most opt for the WC in spite of the water challenge in the community. According to a respondent, she preferred the WC because "*This is the modern trend, and everybody wants to be modern and also it does not smell"* (Adult, female, 26 years).

In addition to seeing the old systems as outmoded, disgusting and dirty, most of the elite often refer to the low-income groups as 'unhygienic' and 'uncivilised' due to their open defecation practices. A retired educationist lamented thus:

> As for these my people most of them are uneducated and uncivilised, so it is difficult to change them. We have been educating them, but they are very stubborn. We haven't given up though; little by little we will get them to change. Things I don't like about them are about how they dump refuse and defecate in bushes.

All of those interviewed admitted practising open defecation at least once in their lifetime, citing the circumstances in which they found themselves as the reason for the act. An opinion leader shared his own experience as follows:

> The toilet in our house got full, so I started defecating in the bush, since the public toilet was in a very bad state. One day, I was squatting in the bush when a woman came to meet me. Both of us felt bad, and from then on, I decided to build my own toilet. This time, I built a WC since the old types are all unhygienic and outmoded. (Adult male, 68 years)

This confirms Inglis' argument that: "*The meanings attached to faecal products vary as the circumstances in which the superordinate group deals with their own faecal waste is altered*" (Inglis, 2001: 219). The situation of the middle class has altered, so the 'others' are viewed as 'dirty'. According to Bourdieu (1992), how a nation, race or class judges the toiletry practices of others is dependent on their own toiletry habitus, which comprises the faecal practices and technologies characteristic of the majority of that group (Bourdieu, 1992; cited in Inglis, 2001).

7.2.1 The 'Where' of Faeces

As later conceded by van der Geest (2007: 383), where faeces is found justifies it being either a matter 'in place' or 'out of place'. He states for example that faeces that is found in pipes of sewerage systems are just dirty, but when found on a sandwich it becomes unspeakably disgusting. In the study, most of the respondents were of the view the location of dirt is what called for some concern. To them, so long as the dirt (faeces or refuse) is out there in a designated place, it ceases to be a matter of concern. However faeces or refuse found along the footpath and on the beach in the view of many, especially the middle income earners, is unacceptable. According to them, in the past, most refuse dump sites and public

toilets used to be located at the outskirts of the town and so, out of their purview. As a result, dirt became more of an issue of "out-of-sight-out-of-mind" and was tolerated. A respondent remarked:

> All our refuse is taken to the refuse dump sites because that is where they are supposed to be. When a child soils the diaper, for example, or defecates in a chamber pot, we dispose of it in the refuse dump or bush. Children too can defecate at the dumpsite and that poses no problem. So long as they are located elsewhere, they cease to be as dangerous as found in homes (Adult female, 54 years).

This is what an opinion leader said: "*I feel it's something which should not be left for people to see, it should be hidden*" (Tettey, Adult male, 48 years).

This buttresses an assertion by van der Geest that faeces only creates some disgust when reference is made to it in discussions when the dirt is "removed from its orderly place (i.e. the refuse dump sites, bush or beach) and placed before our eyes" by the mere fact of talking about them (van der Geest, 2007: 383). Hence, although they exist, they always remain unseen or 'hidden' in the eyes of many and so are rarely discussed, keeping them out of their minds or conscience. This can be likened to Erving Goffman's (1959) concept on front stage and backstage, which is used to describe the relationship between the roles actors play at a given moment and the various audiences these roles involve. The role represents the behaviour, while the actors represent the society. Many things happen backstage, which are unknown to the audience, just as keeping the backyard of many households or community members, where many unacceptable activities take place out of the sight of the visitor or outsider. The frontage is, however, portrayed as being clean without blemish.

Speaking of faeces elicits disgust. Hence, although defecation is a daily routine for the Dangme, informants never directly excused themselves to visit the toilet in the presence of the researcher. They rather used euphemisms such as *min yaa gorme*, *min yaa aboo mi* or "min yaa private", all meaning I wish to visit the toilet. In their thinking, faeces that is out

of sight, out of conversation and out of mind, is clean (van der Geest, 2007). Thus, subjectively, something can either be in or out of place. The experience of dirt, therefore, becomes inherently social. So long as dirt is hidden, it ceases to be dirt, unless it is excreted as expressed by this respondent: *"When you vomit and shit, we say they are things that come from within us, and things that come from us are not to be seen, so we classify them as dirty" (Adult male, 54 years).*

From his analogy, when the dirt is within the individual, it ceases to be a source of the problem, but it only creates disgust when it comes out of the individual; the Dangme refer to this as "mu". Meanwhile, faeces, when kept for a long time within the individual, signify poisoning of the body. Hence, to many of the respondents, defecation was a daily routine. To some, however, not visiting the toilet for a day or two gives them headaches. As a result some community members, in the bid to get rid of the faeces daily, apply an enema to assist them to free their bowels. Hence, the picture of the new public toilet has a table with wares for sale which include medicines used for enema. In the past the syringes were added for hiring as depicted in Figure 7.1 below.

Figure 7.1: **A Boy Hiring Syringes**

Source: Courtesy Prof. Senah

7.2.2 Type of Dirt

According to MacLaughlin (1971), as cited in Curtis (2001), "Dirt is the evidence of the imperfections in life" and he suggests that there is no such thing as absolute dirt. Secretions, such as sweat, pus, vomitus, urine and faeces, according to Satre (1943), cited by Curtis (1998), are inescapably dirty. According to Reinhart (1990) cited in Curtis (2001), pus, vomit, urine, menstruation, sexual fluids and all body substances excretions are repellent and abnormal, despite their constant presence in human life.

In Prampram, classifications of dirt include faeces, refuse, vomitus, phlegm, saliva, carcass of animal and menstrual blood. The kind of dirt being dealt with influences how it is handled. For some, body secretions, which include faeces, saliva, vomitus and menstrual blood, are the most repugnant of all. Different kinds of dirt emit varying responses. While some create disgust and repugnance, others are tolerable. For instance, although human excreta are generally disgusting, urine is not, because, according to them, urine is water and has the ability to vanish from sight. An informant sums it all up thus:

> We do not classify urine as dirty, because we see it as water and it can even be used as a medicine to treat toothache. When you urinate in the sand, it is drained, so you do not see it again. So, it does not become dirt (Adult male, 40 years).

Some kinds of dirt are classified as more dangerous than others (and the degree of disgust or tolerance to dirt is related to the smell). Some find faeces the most disgusting. According to a respondent, "*Faeces is very dirty that is why within seconds it should leave the home, since can give disease, so I will classify faeces as the most dangerous among dirt*". This classification may explain why in Prampram people are anxious to dispose of faeces and waste outside the home – in bushes and the beach. Domestic toilets keep faeces away – it is contained and not seen.

The characteristics or type of faeces (e.g. watery, solid, with phlegm, etc) was of concern to the respondents in relation to health conditions. They study the colour, smell, form and substance and especially the presence of worms just as is done at the hospitals. These informed how the faeces is handled because of the fear of being contaminated with diseases.

The extent of smell of the faeces is used as a barometer to measure the extent of disgust as well as its ability to cause diseases (Rozin & Fallon, 1987; cited by van der Geest, 2007). Hence, one gets disgusted only by seeing or smelling that which is causing the disgust. However, to him, the most important context of faeces is the person or agent who produced the dirt (faeces) (van der Geest, 2007).

Others are of the view that phlegm and saliva are more dangerous because they contain some germs in them which cause diseases. A discussant expressed his thought this way:

> Even when someone spits phlegm and he or she doesn't cover it with sand and another person mistakenly steps on the phlegm, he or she can catch the germ. Especially, someone with tuberculosis disease, when you stay close to someone with that sickness and the person coughs without covering his or her nose with a handkerchief, you are likely to also contract the disease. That is what we have been told (Adult female, 32 years).

It appears that frequent community education by health officials has influenced local knowledge on disease causation. However, traditional beliefs in this regard are still strong; they exist alongside modern health knowledge.

7.2.3 Whose Dirt?

Apart from the type of dirt, 'ownership' or 'authorship' makes a lot of difference as to how it is perceived in the community. Whether the dirt is generated by a close relation or a stranger produces varying degrees of disgust. According to van der Geest, "The strength of

the disapproval towards a matter out of place depends among others, on the identity of the actor directly associated with it" (van der Geest, 2007). To him, the question of 'whose faeces?' makes a lot of difference. Reacting to one's own faeces or to faeces of one's own child or a neighbour's, is different. Most informants as well as discussants in the FGDs, for example, indicated that, while they were comfortable handling their own faeces, handling that of other people is problematic. Mothers can easily change their children's diapers but would find it difficult to change that of other children. These are, usually, due to the smell and the authorship of the faeces. The faeces of a stranger is the most difficult to handle because of the lack of bonding between the handler and the author of the faeces.

This invariably contributes to the handling of faeces in the community, especially in situations where a toilet is being shared with total strangers or people they do not share any familial ties with. As earlier indicated, some landlords refuse to share their toilet with their tenants ostensibly due to their unwillingness to be involved in the daily cleaning of the toilets. However, it may be surmised that the desire not to share a toilet with non-relatives lies at the core of this behaviour.

In conclusion, to the people of Prampram, faeces is not any "matter out of place "but its degree of 'dirt-ness' is seen in relation to where the faeces is or where the defecation (activity) takes place, its smell and the identity of the defecator. Hence, to van der Geest, not only is the matter (faeces) the ultimate determinant of what constitutes dirt, but also whose it is, where it is located and how it is presented are very relevant when assessing the qualities of faeces with regard to its in or out-of-place character (van der Geest, 2007).

7.3 The Concept of Smell

As earlier indicated, smell plays a very important role in determining whether faeces is in or out of place in the Dangme culture: smell invariably influence defecatory practices. No one will want to be associated with bad smell: in the baseline study 75.8% of the respondents did not patronise the existing toilets because of the bad smell that is emitted from the toilets (SUSA, 2011). Bad odour from human waste has been identified to have some social, moral, aesthetic and disease-related concerns for the adoption of improved sanitation (Rheinlander et al., 2013).

Among the Dangme-speaking, perhaps just like other people, smell from whatever source has several connotations. Generally, there are three types of smell: good, bad and neither good nor bad (as in the case of fresh fish). In linguistic terms one 'hears' smell. Thus, very commonly, in Prampram, one may say for instance, "I hear the smell of palm nut soup". This is good or positive. Similarly one may say, "This fresh fish has a strong smell". This also does not mean that the fish is bad. Unfortunately, there is no equivalence of the later concept in English. Within the discourse on faeces, community members generally define smell as something that is offensive, repugnant and disgusting, indicating the level of tolerance. In Prampram, bad smell is known as 'bonde', 'fu'. These descriptions are, normally, used to describe things that have pungent smell. Human beings are said to have nauseating smell. Thus, 'Ohe dze fu', means your body stinks. This is a form of serious insult, especially if used by a man in reference to a woman. In some instances, the elders may ask the man to pacify the offended woman with some drinks and a goat. The latter was used for rituals to cleanse her of the imputed filth. As discussed earlier, filth and woman are not good bed fellows.

During interviews with community members, the public toilets were identified by most respondents as presenting with the most pungent smell and since the people have strong reservations against being associated with bad body odour they are discouraged from patronizing the toilets. Vida, a food vendor, remarked, "*Why should I pay to use the public toilet only for people to say I smell bad? I would rather go to the beach, which is free and airy*" (Vida, female, 34 years).

Under these circumstances, the people like to avoid visiting the public toilets; manifesting a smelly body after visiting the toilet is indirectly announcing to all they had visited the toilet, which is embarrassing to many. This has contributed to the practice of open defecation in Prampram.

The effect of the smell has contributed to many people not wanting to build toilets close to their homes. Consequently, in the many homes visited, apart from those who have the WC, others have the KVIPs/VIPs a distance away from their houses because to them faeces, which is dirt, is supposed to be out of the immediate surroundings. As a result, the WC is the preferred option for most of the people. This became evident during the FGD when one of the discussants, a fishmonger, expressed this view: "*As for the KVIP, it is outmoded. Now, everything is modern, so we too want the modern toilet like the WC, which does not smell. You also do not see your faeces and you can build it in your home".*

Some are, however, of the view that, although the preferred option is the WC, it is not suitable because of the irregular supply of water in the community. There is not enough space to construct septic tanks, especially in the already built-up, densely-populated areas like Lower East in Prampram.

In Prampram, smell is associated with certain occupations. For example, fishermen are identified as a group with a peculiar smell of stale fish, especially if they did not wash down after returning from fishing. A District Assembly worker had this to say:

> In the past, the whole place used to smell, because the fishermen will not bath and will be moving around trying to mingle with the people. They smelt so bad I didn't want to be close to them. However, now there are many bathhouses where people can go and shower, so they smell good and it is no more difficult to be around them (Ben, male, 32yrs).

Another group mentioned by the informants are the "night soil carriers". According to Drobnick (2006), culture has an influence on how odours are perceived and plays an important role in structuring society, especially in the discrimination between members of social groups. He goes further to say that some members of a particular ethnic or racial group are, normally, associated with some peculiar smell, and it could be as a result of the food they eat or their occupations. Smell plays a vital role in the adoption of sanitation facilities in the study communities, and this was observed through the meanings respondents ascribed to smell and its perceived impact. Smell has contributed to the abandonment of existing toilet facilities and people resorting to open defecation in Prampram.

7.3.1 Smell and Disease Causation

Generally, community members feel that inhaling the faecal smell can give them infections. A female informant says: *"I personally think toilet is very dirty because it smells bad and when you stay close to it for a long time, it may cause one to fall ill."* A wood carver indicated that **"***Inhaling the smell from the toilets disturbs me the whole day and, sometimes, I feel like vomiting and even I don't feel like eating*". Others feel it gives them malaria, nausea, vomiting and cold.

Most informants and discussants identified malaria, headache, cold and cough as being caused by bad odour. The people believe that when they inhaled the bad odour, it goes into their throats and gives them upper respiratory diseases. During a focus group discussion, some of the women and girls complained of candidiasis and associated it with the use of the toilet, the smell of faeces as well as the heat emanating from the squat holes.

The effect of bad smell on the individual is believed to be determined by the make-up of the individual and the object causing the smell. According to a fisherman:

> A rotten fish does not smell as bad as a dead animal, and so, rotten fish does not cause one to fall sick; but a dead animal which is lying on the rubbish dump will cause you to fall sick through the smell and the houseflies that settle on it (Adult male, 48 years).

7.3.2 Dealing with Smell

Community members have devised different means of dealing with smell depending on the source. In the case of the smell in the public toilets, people try as much as possible to breathe infrequently and rush through defecation. Others have special clothes that they wear when visiting the public toilet. Before entering a toilet, a man may hang his shirt outside or on the wall of the toilet; women may hang their cloth on the toilet wall as shown in fig 6.6.

In the past, in order to deal with the smell some toilet managers use carbide, a combustible substance, to reduce the intensity of smell and the volume of faeces when the toilet was getting full. However, it was reported that there was an instance when a toilet caught fire due to the use of carbide. Despite the use of chemicals to deal with the smell, some toilets are still very offensive to most users. Although the managers expressed similar sentiments concerning the odour, they blamed it on the design of the toilets and the pressure exerted by the population and not the maintenance as purported by most informants.

7.4 Sense of Place

Prampram is a prototypical example of the impact of migration on the social structure of a community and the dynamics that come into play when a community moves from a homogeneous to a heterogeneous one, with all the attendant complexities. People, especially the migrants, have a 'sense of place' as the indigenes do. They often see themselves as temporal settlers and so do not invest in permanent structures like the construction of latrines. Many of the settlers live in rented houses. Kobby, a teacher, explained the situation by stating:

> How can I build a toilet in somebody's house? First of all, he may not even agree, and secondly, what happens if I have to leave or he ejects me? As for me, I am only renting the place and I do not have the power to build a toilet. The landlord is responsible for getting one built for his tenants and not the other way round. (Adult Male, 40 years)

The teacher is right in many ways, because the sense of temporariness makes it difficult for tenants to make any meaningful investment. However, by the Ghanaian Rent Act, landlords are supposed to provide tenants with a toilet but in most cases they do not. It is instructive that currently the Dutch Government, in corporation with the Ministry of Local Government and Rural Development, is running an advertisement on the local radio stations to educate prospective tenants to accept to hire a premises only when it has a toilet facility. How can this advertisement work especially in the urban areas where demand for houses outstrips the supply? It is estimated that Ghana has about one million housing deficit. Most family houses do not have toilets and family heads share the challenge of their family members' inability to show commitment towards building one due to the lack of a sense of ownership. A family house is jointly owned by the few who are alive, the many who are dead and the many more to be born into a lineage (Senah, 2000).

There is a problem of land ownership. Most lands in Prampram belong to families, and it is the prerogative of the head of the family to take custody of these lands. According to most of the respondents, land issues have become a big problem and many people are losing their lives as a result. A respondent remarked: "*If I am not mistaken, Prampram has more land cases in court than any other community*" (Adult female, 54 years).

As indicated earlier, land acquisition has become problematic in Prampram due to competition from real estate developers. In addition, another attraction of Prampram is a proposed international airport to be built in the area. With many land disputes brewing, people do not feel safe to invest in land they may lose at a later date. This situation is not unique to Prampram. A study in South Africa confirmed that the main reason for the failure of households to construct latrines is land insecurity (Manase et al., 2001; Rydhagen, 2002).

The lack of access to land not only affects the construction of sanitation facilities, but also the socio-economic status of the people, since they cannot have access to land for farming to generate income and be able to afford to build or pay for a latrine.

7.4.1 Public verses Private Spaces

Public spaces have different attributes, depending on the context within which they are situated. The attributes of distinguishing a public space from a private space are access, agency and interest (Benn & Gaus, 1983). Kohn et al. (2004) defines public spaces as sites owned by the government, accessible to everyone without restrictions and fostering communication and interaction among its users. Mitchell and Staheli (2006) are, however, of the view that, if a space allows one to be there without restrictions, then it is a public space. The researcher's arguments are, therefore, premised on these definitions.

The private spaces identified during the study are in relation to people's homes, compounds and immediate surroundings, which are always kept very clean. Public spaces in the community include government or community lands, fields, unclaimed lands, refuse dump sites and the beach. Some of these government or community lands include an abandoned market stall, an old cemetery site and designated sanitary sites. The 'unclaimed' and 'abandoned' lands are often subject to land litigation. There are some uncompleted buildings, littered with refuse and faeces. A market constructed by the District Assembly has been abandoned since 2009.

Most of the women interviewed prefer to sell in front of their houses, apparently, because they do not want to pay market tax to the Assembly. Prampram, therefore, has no functional market and the proposed market site has been overgrown with weeds and littered with plastic (polythene) bags, some believed to contain faeces. People defecate in the stalls and the bushes around the site. The most common public space is the beach, which, to them, is open to all. The private arena is thus, generally kept clean, while community members generally do not feel responsible for keeping the public arena/land clean.

Apart from the beach serving as a public place accessible to all, the community members associate the sea with so many attributes such as a cleanser, purifier, detoxifier and 'waste sink'. They associate the sea with a flush toilet/WC, where the waves clean up faeces at high tide. To them, defecating into the sea serves a more aesthetic purpose compared with the unhygienic public toilets and the bush. It also serves as ritual purposes: for example, when a new chief, a priest or a chief fisherman is about to be installed they are bathed in the sea as a form of cleansing to climax his induction into office. A widow or widower is made to bathe in the sea to symbolically cleanse herself or himself of the link with the dead spouse.

The sea has a self-cleansing power. Thus, according to the people, it is impossible to contaminate the sea, regardless of what is put into it. Hence, faeces can in no way contaminate the sea.

These spaces, which are owned either by the government, the traditional authorities or the general public, are available to everyone without any restrictions. For this reason, they are areas referred to as "public spaces" (Mitchell & Staheli, 2006). As to be expected, they are not being managed well. On the contrary, the private spaces, which belong to individuals, are kept explicitly clean. As it is known of the Ghanaian, personal and domestic cleanliness is part of everyday life. The management of private spaces reflects how women sweep their homes and compounds, clean their cooking utensils and wash their dirty clothes and babies. Community members believe their private spaces should have some form of "order" (Douglas, 2006). They believe faeces must be removed from their homes (the private space) to the public space (dump site) as earlier indicated.

7.4.2 "M'nya Private": The Privatisation of Public Space

As said earlier, people expropriate public spaces for private use. Defecating in the open, therefore, becomes a private activity in the public space. In the mind of many people, the public space could also be 'hidden spaces' (Vearey, 2010). For example, during one of the researcher's household visits, Akweley, one of the respondents she was chatting with, excused herself saying, *Mi nya 'private'*, and then dashed off into the bush behind her house and defecated. She had succeeded in creating her own privacy within that public space and created borders in the process. These are either real borders, which can be seen physically, or internal subjective borders.

There is the concept of public spaces as "no man's land", and this encourages the abuse of such places. In Hardin's study, people in common or public spaces maximise their own benefits (in this case, the urge to defecate) and ignore the needs and feelings of the others and, in addition, expect others to take responsibility for these areas (Hardin, 1968). When an informant was asked who would take care of these "no man's lands", he replied, "*But that is why we have the Zoom Lion (refuse clearing company). It is their work to keep the community clean. If there is no dirt, they will not have any work to do. They are paid to keep the place clean."*

However, the use of public spaces is sometimes met with local resistance (Jewitt, 2011). This is especially so when members of the community feel that the few designated public spaces are being kept only for the middle-income group. They show their displeasure through acts of hooliganism so that neither they nor the middle class can benefit from it. For example, in Prampram, the few football parks are being sold out, and the youth have indicated their resolve to vandalise any structures that would be put up, should the attempt be made. Others feel their sanitary sites have been sold out leaving them with nowhere to dump their refuse, hence the indiscriminate dumping of waste.

Jewitt (2011) gives the example of an Indian community where parks used by the middle class for recreational purposes are used for open defecation by the urban poor. Addressing such problems can be difficult, as individuals' (private) acts of defecation soon become a significant public problem that is difficult to monitor. This situation reflects a wider tension between the private production and public management of faeces (Poovey, 1996; Laporte, 2000; Hawkins, 2006). Gay Hawkins argues that waste that is most threatening to the self has to be rendered out of sight as quickly as possible, hence transforming faeces to effluent,

from private waste to public problem (Jewitt, 2011). It can be said that the community's perception of public spaces as "no man's land" has encouraged the misuse of such places. In a way, such defiance by the poor is a way of articulating their felt needs.

Although defecation is said to be a private activity, adults, the youth and children in Prampram tend to defecate in groups, especially at night where darkness provides them with a form of privacy. Going to defecate in groups has been an old tradition. For many scholars, defecation is a highly private activity. van der Geest (1998) has observed that the Kwahu would not like to be seen going to the toilet. Black and Fawcett (2008) refer to it as the 'last taboo' simply to emphasise the 'privateness' of the act of defecation. To a large extent, among the adults in Prampram, defecation may be described as 'publicly private'. This description is clearly challenging in a cultural context where people who meet each other on the way to defecate are not expected to greet. Yet, in Prampram, going to toilet, especially at night, is a group affair.

According to some elderly informants, this became the norm when public toilets were located at the outskirt of town, and people were scared to go by themselves. The same applied to those who visited the beach at night. The young men in the FGD asserted that it was fun calling friends and going in groups to defecate at the beach and afterwards, bathe in the sea. Some also explained that, because some of the youth share cigarettes or marijuana, they preferred to go to the bush to defecate as a group.

7.5 Cultural and Religious Beliefs and Hygiene/Defecatory Practices

Some socio-cultural factors or beliefs identified by Dittmer (2009) in the Northern part of Ghana as contributing to the practice of open defecation include: the fear of being possessed by demons and loss of magical powers when using public toilets; continuation of ancestral ways of life; and comfortability with the practice of open defecation.

An informant's reason given for not patronising the public toilet during an interview was because she was afraid her faeces could be bewitched. According to her, people normally went to the public toilets with Schnapps or eggs to pronounce curses on their enemies. As a result she does not patronise it in order to avoid her faeces being used for a curse. This was confirmed by some other informants who even went further to attribute this to some of the reasons why children were not allowed to use the toilet. This was because, apart from the fear of the children falling in or soiling the toilet, it was also believed that the spirits of adults were stronger than children so it was dangerous to expose the child to the faeces of adults. This could lead to the child either being bewitched, getting sick or dying. Hence even in some homes children are not allowed to use the toilet with the adults. This however does not cut across the majority of informants.

A study in the Northern part of Ghana by Water Aid identified fear of being possessed by demons or losing one's magical powers as the leading cause of open defecation across all the areas where the study was carried out. Nearly half of the respondents in Tamale, according to the study, believed that public toilets are surrounded by evil spirits and therefore should be avoided. Some respondents in the Wa East District believed that latrine use will strip the user of their magical powers (Dittmer, 2009).

Many informants and discussants in the women's focus group complained of the location of the public toilet and the fact that they were too exposed as one could easily be seen walking in the direction of the toilet or entering it. This makes it obvious to people your intention and this to them causes some shame and embarrassment. This is because, although everyone defecates, people will not want to be seen going to defecate. To these women, going to the bush therefore gives some sense of 'privacy' in the sense that people cannot easily tell where you are going and what you are going to do.

Some discussants of the women FGD believed open defecation is an ancestral practice passed down through generations. Phrases such as "we came to meet it", "that is what we have learnt from infancy" underscores this view. Some informants believed it had become a norm hence the lack of commitment by all to solve it. The Idoma communities of Nigeria also find it a taboo to defecate in a building or super structure, so many older people still refuse to defecate in any enclosed area. Husbands do not allow their wives or daughters to share latrines with them, and will generally refuse to pay to build latrines for the use of female family members. Most of these perceptions persisted in the past but are gradually changing in most communities, although a few still practice them.

Some of the means by which people protect themselves from these evil forces is by tying amulets around their waist or arm. Figure 7.2 below is a protective amulet and beads tied around the wrist of a baby.

Figure 7.2: **Amulet around wrist of baby**

Source: Field data, 2013

Generally diseases in children including frequent diarrhoea are associated with evil forces hence the amulets are to protect the child from any form of harm. This confirms the assertion by Odotei (2007) that the world view of the Ghanaian does not assign only physical causes to ailments but also spiritual causes.

As a result of the belief that public toilets and dump sites are associated with evil spirits, in the past their location was always on the outskirts of the community. These 'matters out of place' belong in the margins of social life and this explains keeping most of the refuse dump sites and the communal toilets on the outskirts of town in the past.

There is a belief in relation to the construction of toilets. This belief is said to constrain the youth from putting up or owning a toilet. According to some young men, it is the norm that only the elderly can build even if a young man is capable of doing so. If he is desirous of building, then his father does so on his behalf. This principle applies to any structure a young man wants to build. According to some informants, young men are therefore afraid to build houses, because it is perceived as an affront to the gerontological tradition of the community. It is said that some young men who went against this belief died prematurely.

Given such a belief, many young men are not encouraged to construct their own houses or even toilets in their family houses. A few, however, attribute their inability to construct and own a toilet in the family house to the lack of space in the over-populated old settlement.

7.5.1 Taboos, Rituals and Faeces

In the study area, many taboos exist to instil fear and discipline into the system. Some of the taboos relate to faeces and sanitation; and include people defecating close to people's homes, defecating into a canoe. Paafio, an elder observed thus:

> Human beings are always prone to doing the wrong thing but will be disciplined only when put under restrictions. In fact, in time past, when someone defecated and he or she left it over the night, in the morning, people would curse the faeces. As they cursed the faeces, it was the perpetrator who was cursed. So, in the olden days, people dug and buried their faeces so as not to be seen by others and be cursed. It is not so these days as people go about defecating everywhere without being scared of the consequences.

According to him, the sanitation situation at the time was better than today, because people were afraid to be cursed or brought before the elders. Any breach of a taboo attracted a fine or ritual cleansing of the offending individual.

Another source of feminine 'filth' is menstruation. Thus, a woman in her menstruation period is regarded as unclean. This, according to the women discussants, has contributed to polygynous marriages, because the woman was said to be unfit to cook for the husband and to have sex with him. During such periods, the other wife took care of the man. Most women and girls during the FGDs also expressed their discomfort using the public toilet during menstruation, especially those that do not have doors. This is because they do not provide the privacy they need especially during such periods. According to a female discussant, the situation is worse when defecating in the bush or beach during this period when a lot of

effort is needed to avoid being seen and also soiling the place with one's menstrual blood, which could have some spiritual connotations.

For example, Helman (2000), in his study on beliefs about menstrual blood among the Zulu of South Africa, indicated that menstruating women were believed to have a contagious pollution, which was dangerous both to other humans and to the natural world. It was believed that men's virility might be weakened by such blood, especially if they had sex with a menstruating woman. She was not to walk among cattle or crops during her menstrual period, else the cattle would fall ill and the crops might be ruined (Helman, 2000). This could be a means to forestall any contamination of food through improper hand-washing practices during the period of menstruation. In Prampram, it is also a taboo to go to the shrine when menstruating. According to the Fetish Priest, if a woman ignores this and goes to the shrine whilst menstruating, her menstrual flow will not cease until some rituals were performed.

According to the trainer of girls who perform the puberty rite ("ashime"), teenagers or women who do not undergo the puberty rite ("dipo" or "ashime") before getting married are looked down upon and considered dirty. People in the community would always use that as an insult at the least provocation. This rite is, however, not performed by all the members of the community; it pertains to specific families. Some men are not likely to marry a woman who has not undergone the "dipo" or "ashime" rite for fear of bringing a curse upon their marriages. It is believed that some of the women tend not to conceive where the "dipo" is not performed for them. A case was cited of an older woman who had been married for several years and could not conceive because she had not undergone the "dipo". She came to join the younger ones to have it done for her. After she had gone through the rite, she was able to deliver.

Dipo was a means of preventing teenage pregnancies and serves as a means of training young girls into womanhood. To them, the "dipo" is a means of purifying the girl and getting her ready for marriage. Any child who goes through it is termed clean, while those who do not go through this ritual are termed dirty or smelling, a serious insult to a Dangme woman.

7.5.2 "Whatever you do, some of them will still go and defecate elsewhere ……."

The above was the view of one of the assembly members when he was asked why people practise open defecation in Prampram. This was reiterated by some informants from the men's focus group. They were of the view that it is attitudinal. To them, although a number of factors contribute to defecatory practices, most of the people are just making excuses and would not act differently if conditions were improved.

Indeed the new toilet facility is an epitome of what the community sees as a good or improved toilet and it addresses most of their concern regarding the KVIPs. Yet many of the community members do not patronize it. Some adults, as well as children, are seen by-passing the public toilet and going to the beach to defecate. Their reasons were that they could not afford the fees charged, that was thirty pesewas (GHc0.30). Hence it is not only a matter of suitability but also its affordability.

Others attribute open defecation to indiscipline and advocate for strict enforcement of the bye-laws which enjoin all homes to have toilet facilities and to institute punishment for people who practice open defecation. Dittmer in a study of four West African countries, which included Ghana, identified indiscipline as one of the main reasons why many people continue to openly defecate (Dittmer, 2009). What Dittmer and others refuse to acknowledge is the fact that people will not just decide to behave contrary to the norm

without reason. Official and technocratic views are often different because they use different lenses. Some of the community members who were interviewed had genuine reasons for not patronizing the new facility: beside the high user-fee, the new public toilet is not centrally placed, but located close to the beach which is at the outskirts and accessible largely to Lower East residents who already have a public toilet.

7.6 Conclusion

The people of Prampram view faeces within the context of dirt, contagion, smell and place. This view has significantly contributed to the peoples' sanitation and hygiene practices. Faeces is dirt; it is a 'matter out of place'. Faeces in homes or within the individual is said to be very dangerous and has to be disposed of as quickly as possible. So long as it is out of their purview, people feel safe. However, faeces of the child are assumed to be harmless; the child is innocent, and its faeces is acceptable within homes.

The people express revulsion towards bad odour, and it is one of the major reasons why patronage of existing public toilets is low. They would rather practise open defecation than to be confronted with the smell of other people's faeces. Smell is associated with diseases and is even feared more than the faeces itself. The people's concept of private and public spaces is found to contribute to their zest to keep their private space (which is their immediate environment) very clean, but disregard the public space, which, in their minds, is "no man's land". These perceptions, invariably, give meaning to some of the sanitary practices identified in Prampram.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

This dissertation set out to investigate the socio-cultural practices that influence the hygiene behaviours and defecatory practices of the people of Prampram, a peri-urban community in the Ningo-Prampram District. This study is necessitated by the fact that the world's population and that of the peri-urban communities are increasing at a fast rate. This, invariably, has impacted upon water and sanitation situations, especially in the developing world. According to Gibson (1988), as the world's population strives to meet its basic physiological needs such as eating and drinking, excreting and reproducing, it risks polluting the global environment with its own naturally-occurring bodily wastes.

Efforts have been made in the past to improve sanitation situations, especially with respect to liquid waste management by providing toilet facilities and promoting hygiene. However, these have not yielded many results, especially in sub-Saharan Africa, where about 25% of the population still practise open defecation. In Ghana, only 14% of the population has access to improved sanitation and 19% practise open defecation (WHO & UNICEF, 2014). Prampram, the study population, is no exception; 75.7% of the people have no access to improved toilet facilities and, thus, defecate in the open (SUSA, 2011). This poses health hazards to children and adults. Inadequate sanitation, hygiene and water contribute to 88% of diarrhoeal disease and the deaths of about 1.5 million children under five years.

The issue of sanitation meanwhile did not form part of the MDG targets until the Johannesburg Earth Summit in 2002 when it was put at the top of the agenda and was made one of the millennium targets (MDG 7). The aim of MDG 7 was to halve the proportion of people without sustainable access to improved drinking water and basic sanitation by 2015 (World Bank, 2004).

Efforts have been made since the declaration of the sanitation decade both globally and at the national level with support from donors such as DANIDA, the World Bank, JICA, and EU, to mention a few. Yet, the coverage for sanitation still remains very low. Studies have identified some factors contributing to the low demand for improved sanitation that include infrastructural or technological barriers (Whittington et al., 1993); approaches to sanitation promotion (Jenkins & Scott, 2006); cultural barriers and lack of information (Senor, 2010); socio-cultural factors (Nawab, 2011); a general lack of demand for improved sanitation (Jenkins & Scott, 2006); and change of socio-demographic characteristics that Prampram, a peri-urban community, also exhibits.

The main objective for the study is to examine the sanitation and defecatory practices and preferences in Prampram in the Ningo-Prampram District. Specifically, the study hoped to:

- investigate socio-demographic factors that influence hygiene behaviour and defecatory practices in Prampram;
- examine the processes of childhood socialisation and their effect on hygiene and defecatory behaviours and practices; and
- explore the community's perceptions of faeces in relation to dirt, smell, contagion and place and the influence of their defecatory preferences and practices.

The study is premised on Mary Douglas' theory of dirt as a 'matter out of place' in addition to Edward Green's indigenous contagion theory, Bronfenbrenner's ecological theory and miasma theory. All the theories assisted in conceptualising dirt such that both policy makers and programme implementers will appreciate the socio-cultural underpinnings of hygiene behaviours and defecatory practices to help in the execution of future sanitation and hygiene programmes.

In order to get a better understanding of the meanings given to these practices, the study adopted a qualitative approach using an ethnographic approach through observations, in-depth interviews and focus group discussions to obtain data on the defecatory practices of the people of Prampram. In all, 51 informants, made up of men, women and the youth, participated in the study within the four segments of the community: Lower East, Lower West, Kley and Olowey. The main themes derived from the analysis include socio-demographic factors that influence people's hygiene and defecatory behaviours; the role of child socialization in defecatory behaviour; and community perceptions of dirt, smell, contagion and place on defecatory practices.

This final chapter thus, provides a summary of the findings of this study in tandem with the stated objectives. In addition, it presents the significant contribution the study has made to knowledge and literature and the implication of the findings for policy planning, implementation and advocacy.

8.2 Key Findings of the Study

The data obtained from the field have brought out the following findings, which were based on the specific objectives as follow:

Objective 1: Socio-demographic factors influencing hygiene behaviour and defecatory preferences and practices.

- The level of education of the people of Prampram is low. Most informants are primary school graduates. Residents in Kley have the highest number of literates compared to the other three, with Lower East having the least literates in the community. Households with a high level of education and economic status patronise either the public toilets or have their own household toilet. This confirms the WHO and UNICEF Joint Monitoring Platform, which associated the decline of the percentage of the population practising open defecation with increasing levels of education (WHO & UNICEF, 2014). This confirms the fact that education plays a role in reducing the incidence of open defecation.
- Gender was found to influence defecatory practices and hygiene behaviour. The major motivations for the women to obtain a toilet are privacy and security. Some of them complained of being spied on while defecating in the open while others shared instances of being harassed or raped, especially at night. Women accepted waste management as part of their core domestic duties, a societal construct, which has been promoted through the socialisation processes. Hence, roles like cooking, cleaning, washing, sweeping and fetching water were ascribed to the females in the home, which most of them felt proud to do. This view was shared by Tukwarlba and Mariwah (2013) in their study in Ashaiman, a suburb of Accra.

- In Prampram, the family system is often expressed in living in compound houses where facilities such as kitchens, bath houses and toilets are shared communally. The densely-populated nature of most of the settlements makes it difficult to promote individual household toilets.

  In addition, patrilineal inheritance renders most women landless. They therefore do not have access to land even if they want to undertake a project they will have to rely on the benevolence of the men to obtain a piece of land.
- The social change has contributed to traditional leaders not exerting as much power as in the past to ensure that community members adhere to laid down rules. The high inflows of migrants, who are unwilling to invest into permanent structures like a toilet is a contributory factor.
- The lack of infrastructure such as toilets, the poor state of the existing public toilets and the distance of these toilets to the homes did not create the enabling environment for the practice of good hygiene and so contributed largely to the practice of open defecation in Prampram.
- The main existing toilets in Prampram were pit latrines, VIP, KVIP, Aqua privy, pour flush and WC. The most preferred was the WC followed by the pour flush. Both technologies took faeces out of their purview and did not emit bad odour and therefore addressed their major concern of faeces not being too close to their abode as well as the emission of bad smell which to them can cause diseases.
- The willingness and/or ability to pay for either the use of a public toilet or to construct a household toilet depends on the economic status of community members. Most households attribute their inability to construct latrines to the unemployment situation and the lack of vocational and technical skills to enable them to earn high income to take care of not only their basic needs but other needs as well. Others are

used to free use of latrines as pertained in the past. The bad state of most of the public toilets contributes to the unwillingness to pay for use of the toilets.

- Proximity to facilities influence where people defecate. Most of the people who live in the hinterland like Kley and Olowey, indicated their preference for the bush while those along the coast (Lower East and West) prefer the beach. Their reason is because these places are easily accessible as compared to the available locations of public latrines.

Objective 2: Examine the processes of childhood socialisation and their effect on hygiene and defecatory behaviours and practices.

- The total development of the child is found to largely depend on the interaction between factors in the child's immediate surroundings as well as the larger environment that is among the family system and extending to the community and the school system.
- Age was identified as playing a very important role in the nurturing of children. The formative years of the child are very crucial for internalising hygiene behaviours. Infant's faeces is considered harmless because it is considered 'innocent' without any form of contamination. Hence, infant faeces is not handled with as great a care as that of adults. Infants are, therefore, allowed to defecate within the compounds.
- Children go through a 'Child Defecation Ladder'. The critical point where the child is socialised into defecatory practices is the transition between the use of the chamber pot and the use of the toilet or the open space. This socialisation process impacts upon adult defecatory practices in Prampram.
- The educational level of the mother plays a significant role in training children to acquire hygiene behaviours and defecatory practices. Most educated mothers give

more attention to the hygiene and sanitation needs of their children in the most efficient manner than the uneducated.

Objective 3: Explore the community's perceptions of faeces in relation to dirt, smell, contagion and place and the influence of their defecatory preferences and practices. These perceptions are culturally constructed and situated within the social context.

- The Prampram community perceives faeces or dirt as 'matter out of place' as propounded by Mary Douglas and expressed within a social context. Their major concern is 'whose' faeces (whether a child, adult, relative or a friend); 'where' it is located (within or out of their purview); and the 'kind' of faeces (watery, loose or solid, an indication of containing a disease). To most of the people in Prampram, it is a matter of out-of-sight-out-of-mind and this has contributed to the practice of open defecation in Prampram.
- Smell or bad odour is a major factor for their low or non-patronage of the existing public toilets. To many informants, they would rather practise open defecation than to be confronted with the smell of other people's faeces. Smell is associated with diseases such as leucorrhoea ('white'), cold, headache and others, and poses more of a threat than the faeces itself.
- The perception of public and private space contributes to how such places are used. These public spaces known as "no man's land" refer to unoccupied lands, abandoned plots due to disputes, old cemetery sites and government lands, and the beach. Such places are used for open defecation and indiscriminate disposal of refuse. The beach was largely used due to their perception of the sea as a cleanser, purifier, detoxifier, a waste sink and a natural WC. On the other hand, their private spaces like their homes and immediate surroundings were always kept very clean.

- The people of Prampram had knowledge of the Western concepts of germ theory propounded by Louis Pasteur, as the transmission of an organism from one host to another. This they demonstrated with the faeco-oral route of disease transmission, which they learnt from their interaction with health personnel. They, however, visit prayer camps and seek the help of herbalist when struck with some diseases they did not seem to have solutions to. They therefore, combine orthodox medicine with herbal treatments and spiritual support with the belief that all had specific functions in the healing process.

These findings provide perspectives on the socio-cultural factors that come to play when individuals in peri-urban communities try to meet their defecatory needs. The issue of defecation therefore encompasses not only the availability of the infrastructure, but its accessibility (distance and condition) and peoples' ability and willingness to pay comes into play. The socialization process children go through and the perceptions of the people as noted contribute immensely to the hygiene and defecatory behaviour of community members and invariably affect sanitation uptake.

It must be emphasised however that to deal holistically with the problem of sanitation will include not only socio-cultural dimensions but also the infrastructure (appropriate technology for the setting), nature of settlement (urban vs peri-urban), and financing mechanism to assist the vulnerable to construct their latrines.

8.3 Recommendations

The overarching objective of this study is to inform policy makers of the means of increasing demand for improved sanitation in order to reduce the incidence of open defecation and its associated public health implications and to contribute to discourse on sanitation provision

and waste management, especially in peri-urban communities. Based on the findings therefore, the following recommendations are made:

- Increasing access to education is one of the surest ways by which there could be improvement in sanitation delivery and defecatory practices. The government through the Ghana Education Service should see it as a sense of urgency to implement its Free Compulsory Universal Education (FCUBE) policy to ensure that every child gets educated. This will go a long way to improve the sanitation situation in the country as found by other studies (WHO & UNICEF, 2014).
- Socio-demographic and economic factors, such as age, sex, economic and educational background, and social setting (homogenous or heterogeneous), have been identified as contributing to the uptake of sanitation in peri-urban settings. There will be the need for the District Assembly through its Environmental Health and Sanitation Division to have a better understanding of the demographics of communities where interventions are to take place and to involve the community members and individual households to make input into planning and especially design of sanitation facility to ensure it meets the expectations of the users and thus encourage patronage.
- External Support Agencies, International NGOs, CWSA and the EHSD should ensure that gender is mainstreamed into all sanitation programmes to ensure that the views of women are well articulated. Women should be involved in the implementation of sanitation projects because of the peculiar role they play in the management of waste in the homes, and due to their special need for privacy and security in the design of sanitation facility.
- The EHSD should speed up the process of scaling up the CLTS approach as well as instituting a financing scheme to increase sanitation coverage in the country. In the

interim, the District Assembly through the EHSU should ensure the existing public toilets are well maintained to encourage usage. Perpetrators of open defecation should be duly sanctioned to serve as a deterrent to others.

- The Environmental Health and Sanitation Division, Behaviour Change Communication (BCC) experts as well as Hygiene Promoters should note that there is no one solution to the peri-urban sanitation challenges. Solutions should take into consideration the social context within which the identified behaviour is being practised. As such, all activities geared towards improving hygienic and sanitary practices should be targeted to a specific audience and should be in line with their socio-cultural practices and belief system.
- Knowledge on hygiene and defecatory behaviours are acquired both at home and at school. Community Health nurses, EHOs and other health and hygiene promoters should target both mothers and caregivers in the home. Hygiene promotion/education should be done in schools through the School Health Education Programme (SHEP) at the school level to ensure hygiene messages are reinforced both at home and in the school to sustain hygiene behaviour change. The education on defecatory practices especially, should be intensified during the formative years of the child (1-4 years) when children are transiting from the use of the chamber pot to the use of toilet facilities.
- The Ningo-Prampram District Assembly should ensure that all government lands or disputed lands are cleared regularly so as not to create “no man’s lands” which are conducive for the practice of open defecation. There is also the need for more behaviour-change communication to correct the community’s perception of these public spaces, which are classified as “no man’s land”.

- Sanitation bye-laws including the deadline for the construction of toilets in all rented apartments, especially new ones should be enforced by the Environmental Health and Sanitation Division.
- The provision of improved sanitation in Prampram and other peri-urban communities has both technological and financial implications that are sometimes beyond the means of community members. The DA should assist house owners with appropriate technologies and link them up with microfinance companies to assist them access loans to build their own toilets. Sanitation programmes should be designed for the poorest of the poor and the disabled identified to make toilet facilities accessible to all.
- The main facilities available to most of the people of Prampram are the public toilets that are all in a bad state so it is being recommended that the Ningo- Prampram District Assembly ensures that they are well maintained to minimise the bad odour. In addition, fees charged for the use of the public toilets by private operators and caretakers should be reasonable to encourage more people, especially the poor, to patronise these toilets.
- Future designs of both household and public toilets by the assembly and private developers should improve ventilation to prevent bad odour so as to improve patronage.
- Since the government is already saddled with a lot of responsibilities and cannot take up all these additional task, there will be the need for the community themselves to make attempts at solving some of these sanitation problems. Some members who are in the position to construct their own latrines should to be encouraged to do. The chief and elders could also seek support from within and outside the community. Efforts should also be made to ensure that all new buildings have sanitation facilities.

8.4 Contribution to Knowledge

The main aim of the study on socio-cultural factors influencing defecatory practices was to identify new ideas that provide a better understanding of the subject and add to existing knowledge. The study made a lot of interesting discoveries which will, in the long run, inform policy on future sanitation programmes and provide insight into defecatory preferences and practices contributing to the low sanitation uptake. The study identified some gaps in the literature gathered and these include:

'Child defecation ladder'

The study goes to reiterate the fact that children go through step-wise stages in adopting hygiene and defecatory practices. This was adapted from the concept of the 'sanitation ladder' by Kamal Kar, the originator of the Community Led Total Sanitation approach. It was developed in comparison with child development theorists such as Freud, starting from the oral to the anal stage. It started from the introduction of the child to diapers/linen, to the use of chamber pots, and then either to the bush or to the public/household toilet. The most critical stage was where the child is either introduced to the change over from the use of diapers or linen to use of chamber pot or defecating within the compound. Emphasis on health education to mothers and care givers will have to consider these critical periods to intensify education to ensure children's transition is smooth and they acquire the right hygiene behaviour.

Concept of Public vs Private Space

Public spaces are sites owned by the government and accessible to everyone without restrictions hence classified as "no man's land" while the private space deals with having a sense of a place or an attachment to a place. Individual private spaces tend to be well kept

and hygienic while the public space is normally neglected leading to mismanagement. .The need for health and hygiene promoters or behaviour change experts to start focusing on creating the link between the public and private space and the need to apply the same sense of ownership to both.

Creation of the concept of dirt, smell, place and contagion nexus

Although all these concepts have existed on their own to explain defecatory practices, the researcher was able to make a link between all of them in order to understand the defecatory practices in Prampram. She demonstrated the fact that dirt is defined within a social context and depends on where it is found, the type of dirt and whose dirt. These inform people's hygiene and defecatory practices.

8.5 Areas for Further Research

Although the ethnographic study of the sanitation and hygiene behaviour of the Prampram community yielded the requisite outcome for the study, it is, however, recommended that a comparative ethnographic study of two or more communities be done to present comprehensive results of the theme under study. Moreover, the study was solely qualitative in nature. It would be of interest to do further research using the mixed method approach and compare the outcomes. The study concentrated on defecatory practices, and so, further studies could examine solid waste management. Finally, the extensive nature of hygiene and sanitation issues makes it imperative for a segmental assessment, instead of investigating it as a whole. Therefore, the study recommends that hygiene, waste and defecation issues must be examined independently and thoroughly for a detailed and insightful outcome.

8.6 Reflexivity on the Research Process

As a postscript, it is prudent to share some of the insights gained and issues that arose during the process of conducting the research. This section throws more light on the journey through the research process, challenges faced and measures taken to mitigate them. Some experiences gained as a result of the study and how these have influenced the final outcome of the research are also discussed.

In conducting an ethnographic study, the researcher's background knowledge, beliefs and practices are likely to have some impact on the data and so there is the need to eliminate these effects from the data (Hammersley & Atkinson, 1983). This is what Le Vasseur (2003: 411) terms "bracketing". By this, attempts were made to ensure that all opinions and prejudices are [temporarily] suspended in order to focus attention on what is essential in the subject matter.

As earlier indicated, the researcher's public health background could have some effect on the data. Hence, in order to eliminate this effect, direct contacts were made with the people through interaction and participating in their social activities in order to gain a better understanding of the people (Wolff, 1964; Jules-Rosette, 1978a, 1978b). This helped in shaping the orientation of the researcher. Although no researcher can totally dissociate herself from her data (Salsberry, 1989), efforts were made by the researcher to minimise subjective perspectives during the analysis, interpretation and the discussion of data. The researcher was able to achieve this by continuously listening to the recordings and making reference to the transcripts to ensure that the views being expressed were that of the informants or discussants. Using the transcripts and listening to recordings frequently helps to internalize the views of the informants and is recommended for future researchers.

Sanitation and hygiene, as a topic, poses its own challenges. This is because it is normally considered a private issue that should not be discussed in the open, as that is often demeaning. People, therefore, have the tendency to always portray the ideal situation and not what pertains in reality. Thus, the choice of the ethnographical approach as the main method was to facilitate acquiring insight into the people's real life situation and the meanings associated with hygiene and sanitation practices. Although the method chosen aimed at eliminating some of these barriers, it cannot be said to have completely dealt with these. At the early stages, there were instances when women would rush to sweep the compound upon seeing the researcher or caution children to 'behave' because there was a visitor. Some women who felt 'improperly' dressed because they only had a piece of cloth tied around the chest, would excuse themselves to go and put on 'proper' clothes. However, after three or four visits, the researcher was no longer regarded as a visitor and so people felt at ease in her presence. The researcher was able to achieve this by identifying roles during visits and participating in domestic chores such as the preparation of meals, sweeping, washing and eating of the meals. This, she found, was very helpful and through that, she gained the trust of the people; something she will encourage other researchers to emulate.

Some of the community members showed some scepticism about the motive for subjecting the community to frequent interviews. This was because the community is one of the research sites for the DHRC. An informant made the following comment when approached:

> "You people you have come again. So what "koraa" (at all) do you want? We have told you all we know so now you are aware of all our problems so just go ahead and help us solve them instead of always coming to ask us questions. Now, all we need is to get our business plan so that you help us with the money to construct a 32 seater KVIP which I am ready to manage" (Adult Male, 43years).

The frustration expressed by the informants mirrored the community members' views on research fatigue. Malinowski in his study of the Trobriand Islanders tried mitigating these resentments by donating tobacco (Malinowski, 1921). In this case, some biscuits or soft drinks were provided after each interview as a compensation for the time spent and gradually, others got wind of it and so started showing enthusiasm to be part of the research. In the researcher's view however, communities such as this, which is the research field of an institution should not be subjected to further studies by students because it creates too much demand on the people and makes them research fatigued.

The researcher's status as a woman researcher in a patriarchal society was sometimes interrogated by the men especially, who felt the researcher, as a mother and a wife, should be home taking care of her husband and children. This is what transpired during one of her interactions with some fishermen who were mending their nets at the beach:

Researcher: Good afternoon.

Fisherman: Good afternoon, Madam. We've met again. How're you?

Researcher: I'm fine, and I hope you're doing same.

Fisherman: We're fine. It's only that the catch isn't much this time. What work do you do?

Researcher: I'm a student.

Fisherman: (He chuckles). You, old woman, going to school? What does your husband say about this?

Researcher: He's ok with it.

Fisherman: If it were me, I wouldn't agree to it, because who should cook for me and take care of me in your absence? Then, by the time you come, another woman will be there to do that for me. Is your husband also in school?

Researcher: Yes

Fisherman: Then, your marriage is school marriage. I'll get you a place in Prampram and teach you how to marry. Or is your husband 'kojoto' (meaning not sexually active)?

Researcher: I already have 4 children and want to further my education.

Fisherman: Oh, then you've done very well. But all the same, try and be going home to take care of your husband and the children. It's very important.

Researcher: Thank you for your advice, but I go every weekend, when possible to see them. I also cook for the week and keep it in the fridge so they have enough for the week. Thanks all the same for your advice and for sharing some time with me. I'm very grateful.

Fisherman: That is good. I am glad to hear that. Next time, when you come and we have fish, we'll give you some so you take home. Please, also come and visit us and talk to our daughters, so they'll become like you.

Researcher: Ok. I've heard you. I'll do that, and thanks in advance for the fish. I need to leave, so, see you when I return from the weekend. Bye bye.

Fisherman: Bye.

The above interaction with the fishermen is a clear example of some of the challenges female researchers go through, as most respondents perceive research to be the work of men. The cultural setting does not approve of women leaving their homes, because they believe that the work of the woman is to keep the home. Prampram being a patriarchal society was no exception. The research approach adopted however helped to correct such perceptions, in the sense that many of the people, by the end of the study, acknowledged the need to promote the education of the girl child. This was expressed in the way they always wanted to be associated with the researcher by inviting her to their homes and introducing her to their daughters and advising them to follow her footsteps. She in return advised them to be serious with their studies. Future researchers should be mindful of such sentiments and be ready to deal with them as they emerge.

In all, the study gave the researcher the opportunity to gain more insight into the life of the people of Prampram and how that informs their defecatory preferences and practices.

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APPENDICES

Appendix I: Consent Form for Head of Household - Observation

Introduction

Good …….....….My name is Leticia A. Ackun. I am a PhD student of the University of Ghana and the University of Copenhagen and affiliated to the Dodowa Research Centre in the Dangme West District. We are conducting a study on the socio-cultural issues that informs people's sanitation preferences and practices in peri-urban settings. The information we gather from this study will be used to improve the implementation of future sanitation projects in the Dangme West District as well as Prampram.

Participation and confidentiality

Your household has been selected to participate in this research. Visits will be paid to your household during the period of research to interact with you and your family on issues relating to sanitation preferences. This is entirely voluntary and you can stop your participation at any time during the research period. All the information you provide during the study will be kept confidential and none of the personal information that we obtain which could identify you will be used in any report that is written up.

Duration of interview

There will be an initial visit of 3 days which will last at least half day per visit. There will also be some follow up visits.

Benefits and incentives

We do not give incentives to participants however you will be given a soft drink and some pastries to refresh you after your participation in the discussion. This is in appreciation of the time you have spent sharing your views on the issues relating to the study. Also by

participating in the study, you will be contributing to the understanding of the issues relating to improving health in the community. The information will help in planning future water and sanitation activities. The findings of this study will be shared with the community, researchers, health staff, local government officials, and other stakeholders at the district and national levels and will be published in international journals for others to learn from.

Data capture and management

Your responses will be recorded as field notes, on a tape recorder or on a questionnaire, and later transferred into an electronic database by use of a computer. To ensure anonymity, no reference will be made to your name when entering responses electronically. Instead, a number will be assigned to you. All the electronic data will be kept for 2 years/sometime after all publications have been produced.

You are at liberty to ask any questions. If at any time you have any concerns or issues regarding the study please contact:

Dr. Margaret Gyapong Dodowa Health Research Centre P.O.BOX 1 Dodowa Tel: 0244 573138	Prof. Kojo Senah Department of Sociology University of Ghana Legon Accra Tel: 0243 771 547

Statement by participant

The content and purpose of the study has been read to me and I have been assured of confidentiality of my responses. I have had the opportunity to ask questions. I agree to participate voluntarily in this study and give my consent to the publication of findings.

Video and Photography

I grant permission to use the followingrecording methods to be used: (please initial)

____ video recording

_____ photograph(s)-

Additional conditions for my participation in this research are noted here:

Signature/Thumb print of participant:_____

Date: _____

Day/month/year

Statement by the researcher/person taking consent

I confirm that the participant was given the opportunity to ask questions about the study, and all the questions asked by him/her have been answered correctly to the best of my ability. I confirm that the participant has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of
Researcher/FieldAssistant_____

Signature_____ Date_____

Day/Month/Year

Appendix 11: Informed Consent form for key Informants

Introduction

Good …….....……My name is Leticia Agyeiwaa Ackun. I am a PhD student of the University of Ghana and the University of Copenhagen and affiliated to the Dodowa Health Research Centre in the Dangme West District.

Purpose of Research

Sanitation has been identified as one of the major challenges in the Dangme West District as a whole and this includes your community. We are conducting a study on the socio-cultural issues that informs people's sanitation preferences and practices in settlements such as yours. The information we gather from this study will be used to improve the implementation of future sanitation projects in the Dangme West District as well as Prampram.

Type of Research Intervention

This research will involve participating in an in-depth interview that will take about an hour.

Participant Selection

You are being invited to take part in this research because we feel that your experience as a responsible member of this community can contribute much to our understanding and knowledge of local sanitation practices.

Participation and confidentiality

Your participation in this research is entirely voluntary and you can stop at any time during the research period. All the information you provide during the study will be kept

confidential and none of the personal information that we obtain which could identify you will be used in any report that is written up.

Duration

The research will take about six months in total. During that period, we will visit you two times to conduct the initial interview and then for a possible follow up when the need arises. The interview will take between 60-90 minutes.

Risks

We are asking you to share with us some very personal and sensitive information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take part in the discussion/interview if you don't wish to do so. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview.

Benefits

There will be no direct benefit to you, but your participation is likely to help us find out more about what informs people's sanitation preference which will help in designing future sanitation projects and help to improve health in the community. The information will help in planning future water and sanitation activities. The findings of this study will be shared with the community, researchers, health staff, local government officials, and other stakeholders at the district and national levels and will be published in international journals for others to learn from.

Incentives

We do not give incentives to participants however you will be given a soft drink and some pastries to refresh you after your participation in the interview. This is in appreciation of the time you have spent sharing your views on the issues relating to the study.

Data capture and management

Your responses will be recorded as field notes and on a tape recorder and later transferred into an electronic database by use of a computer. To ensure anonymity, no reference will be made to your name when entering responses electronically. Instead, a number will be assigned to you. All the electronic data will be kept for a maximum of 2 years after all publications have been produced.

Who to contact

You are at liberty to ask any questions. If at any time you have any concerns or issues regarding the study please contact:

Dr. Margaret Gyapong
Dodowa Health Research Centre
P.O.BOX 1
Dodowa
Tel: 0244 573138

Prof. Kojo Senah
Department of Sociology
University of Ghana
Legon
Accra
Tel: 0243 771 547

Statement by participant

The content and purpose of the study has been read to me and I have been assured of confidentiality of my responses. I have had the opportunity to ask questions. I agree to participate voluntarily in this study and give my consent to the publication of findings.

Video and Photography

I grant permission to use the followingrecording methods to be used: (please initial)

____ video recording

_____ photograph(s)

Additional conditions for my participation in this research are noted here:

Signature of participant:_____

Date: _____

Day/month/year

For those who cannot read

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of witness_____ **Thumb print of participant**

Signature of witness _____

Date _____

Day/month/year

Statement by the researcher/person taking consent

I confirm that the participant was given the opportunity to ask questions about the study, and all the questions asked by him/her have been answered correctly to the best of my ability. I confirm that the participant has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of
Researcher/FieldAssistant_____

Signature_____ Date_____

Day/Month/Year

Appendix III: Consent Form– Focus Group Discussion

Introduction

Good ……My name is Leticia Agyeiwaa Ackun. I am a PhD student of the University of Ghana and the University of Copenhagen and affiliated to the Dodowa Research Centre in the Dangme West District. We are conducting a study on the socio-cultural issues that informs people's sanitation preferences and practices in peri-urban settings. The information we gather from this study will be used to improve the implementation of future sanitation projects in the Dangme West District as well as Prampram.

Participation and confidentiality

You have been selected to participate in this research. This is entirely voluntary and you can stop your participation at anytime during the research period. All the information you provide during the study will be kept confidential and none of the personal information that we obtain which could identify you will be used in any report that is written up.

Duration of interview

The discussion will take between 60-90 mins.

Benefits and incentives

We do not give incentives to participants however you will be given a soft drink and some pastries to refresh you after your participation in the discussion. This is in appreciation of the time you have spent sharing your views on the issues relating to the study. Also by participating in the study, you will be contributing to the understanding of the issues relating to improving health in the community. The information will help in planning future water and sanitation activities. The findings of this study will be shared with the community,

researchers, health staff, local government officials, and other stakeholders at the district and national levels and will be published in international journals for others to learn from.

Data capture and management

Your responses will be recorded as field notes and on a tape recorder and later transferred into an electronic database by use of a computer. To ensure anonymity, no reference will be made to your name when entering responses electronically. Instead, a number will be assigned to you. All the electronic data will be kept for 2 years/sometime after all publications have been produced.

You are at liberty to ask any questions. If at any time you have any concerns or issues regarding the study please contact:

Dr. Margaret Gyapong
Dodowa Health Research Centre
P.O.BOX 1
Dodowa
Tel: 0244 573138

Prof. Kojo Senah
Department of Sociology
University of Ghana
Legon, Accra
Tel: 0243 771 547

Statement by participant

The content and purpose of the study has been read to me and I have been assured of confidentiality of my responses. I have had the opportunity to ask questions. I agree to participate voluntarily in this study and give my consent to the publication of findings.

Thumbprint of Participant/Signature	**Date: Day/month/year**
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.

Video and Photography

I grant permission to use the followingrecording methods to be used: (please initial)

___ video recording

_____ photograph(s)

Additional conditions for my participation in this research are noted here:

Statement by the researcher/person taking consent

I confirm that the participant was given the opportunity to ask questions about the study, and all the questions asked by him/her have been answered correctly to the best of my ability. I confirm that the participant has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of
Researcher/FieldAssistant_____

Signature_____ Date_____

Day/Month/Year

Appendix 1V: Interview with Head of Household

Introduction:

We are students from the University of Ghana and in collaboration with the Dodowa Health Research Centre are doing a study of Prampram. We will be here for a period of four months to learn from you on general sanitation issues. We want to find out if you are willing to be part of this research. (Introduce Consent form and go through with participant)

If accepted, proceed and explain that there would be the need to record sometimes but everything is going to be kept confidential and safely.

1. Family name
2. Number of household
3. Head of household (M/F)
4. Tribe/clan?
5. Family tree: Head, Children, grandchildren and relations in the household.
6. Details of each member of the household
    a. Settlers or indigenes
    b. If settlers where they originated from
    c. How long they have settled in community
    d. Their bio data (name, age, sex, educational background, religion, marital status, occupation
7. Type of dwelling for household (thatch, mud, brick, sancrete wood etc)
   Number of rooms, who occupies which, furnishing,
8. Economic status
    a. Sources of income (who contributes to what?)

b. Expenditure pattern

c. Other properties (furniture, car, bike, cows, goats, chicken etc)

9. Observations in the kitchen area eg type of cooking utensils, eg stove, kitchen machines eg electrical appliances

10. Observation in the living room (furniture, television, radio, DVD, fridge etc)

11. Observation in the rooms (type of bed, how spacious or crowded etc)

12. Observation in the store room. Kinds of things stored there.

13. Sources of water (for drinking, cooking, bathing, washing etc)

14. Where **ALL** members defecate (adults & children)

15. Sanitation facility? (Households with their own toilet)

    a. Type

    b. Cost

    c. Materials Used

    d. Who contributed?

    e. Who constructed? (from community or outside)

    f. General appearance (inside & outside)

        i. Squat hole

        ii. What is used for anal cleansing and where kept?

        iii. Chamber pots visible? Clean or used. If used covered?

    g. Maintenance

        i. How regular the toilet is cleaned

        ii. Who does it

        iii. Presence of handwashing facility/soap near toilet. What is there?

Appendix V: Guide for Transect Walk

Introduction

The selected 4 communities (Olowey, Kley, Lower East & Lower West) will be observed exclusive of each other. Permission will be obtained from chief/opinion leaders before this is carried out. Volunteers (people who have lived long and are very familiar with the place) will be selected with the assistance of the Dodowa Health Research Centre.

NB. This data should be duplicated for **each** of the communities (Olowey, Kley, Lower East & Lower West)

1. Demographic data of Community
    a. Population
    b. Description of the community (eg.Settlement patterns, public institutions etc)
    c. Employment patterns
    d. Migration patterns
2. Types of household structures according to the segments/quarters
3. Main sources of water for all purposes (drinking, washing, bathing etc). Ask permission and take pictures.

Where people normally defecate

E.g. open space, beach, communal latrines and individual household latrines (Ask permission and take pictures)

4. General environmental sanitation of the community, Eg weedy places, public toilets, Refuse dump sites (Ask permission and take pictures)

5. What men/women/children (boys & girls) are engaged in during the period of taking the walk.
6. What are the main economic activities you can identify?
7. How is authority exerted in community? Respect for the rulers. Any clashes between the youth and authority
8. Note any sense of belonging, pride or shame for community expressed by the people.
9. Beliefs expressed
10. Community resources
    a. What facilities exist? Eg. Community center, palace, shrines and their names etc.
    b. Common diseases of community. Percentage among adults, children & Babies
11. Health facilities (private/public), drug/chemical shops, etc
12. Religious groups in the community including prayer camps.

Appendix VI: Observation Guide – Household Level

Observations will be participatory. Researcher will take part in daily chores and seek informal conversations with households. Several sub-sequent unplanned visits ranging from a few hours to whole days, including early mornings and late evenings will be made. General as well as specific observations will be made.

The Main themes for observations will include;

- General behaviour and daily routines
- Hygiene and sanitation practices
- How children are nurtured on hygiene practices,
- Socio-economic status of households.
- Issues on Smell

Observations will be unstructured, and daily detailed logbooks/observational diaries will be filled in with pictures and notes for each household.

Name of community:

Name of Household:

Household Id No.:

Registry of Visits (for each visit a registry will be filled out):

Xst visit:

Date & Time:

How many hours spent:

Persons present in the household for observation & interviews:

Family 'tree' (all family members will be included):

Head of household; (age, occupation, tasks in the household and caregiver role for small children)

Spouse: (age, occupation, tasks in the household and caregiver role for small children)

Children: (age, occupation, tasks in the household and caregiver role for small children)

Grandparents: (age, occupation, tasks in the household and caregiver role for small children)

Family history and religion:

Settlers or indigenes, tribal lineages? What is the religious affiliation per member (probe into when/how any changes or adoptions?)

Household/family Profile including assets and infrastructure:

Ask permission to be taken around the house and inside the home (i.e. if you have been able to strike acquaintance)

Around the house

Type of house (mud or sancrete, plastered etc.)

Type of roofing (corrugated, bamboo etc.)

Observation at the courtyard (bathhouse type, toilet type, area where children bath, cooking area

Observations in the kitchen area eg type of cooking utensils, eg stove, kitchen machines eg electrical appliances,

Observation in the living room (furniture, television, radio, DVD, fridge etc.)

Observation in the rooms (type of bed, how spacious or crowded etc.)

Observation in the store room. Kinds of things stored there.

Activities for the day (will be recorded for each visit)

Topic for observation	*Detailed description*	*Researchers notes*
General behaviour and daily routines *(Observe routine activities)* Researcher will establish daily program with main events: Getting up (who , how, time etc)		

Going to work -Cooking (who, how, what, time meal etc) Leisure time Getting to bed		

Topic for observation	*Detailed description*	*Researchers notes*
Sanitation and defecation practices children, and adults Time of the day for defecation Routine: what do they do before and after Type of facility used Children defecation practices *(do they go alone, accompanied by who)* Handling of human waste (where do they dispose of faeces and how they handle, who when*(storage and removal from household, reuse as compost?)*		
Topic for observation	*Detailed description*	*Researchers notes*
Hygiene Practices to be observed and described for Adults, Care givers and children under 5 years Washing of face Brushing of teeth, Sweeping of compound Ordering of household Cleaning of kitchen		

Fetching, storing and handling water Bathing Handwashing routines (with and without soap) Washing clothes *(Soap, water use, routine, time, et*		
Topic for observation	*Detailed description*	*Researchers notes*
Child nurturing and hygiene practices Child going to defecate either by himself or by the help of a Caregiver Use of the potty Cleaning of child after defecation (by child alone/under supervision, or by caregiver Child following caregiver as she/he goes to defecate (bush, beach or communal toilet)		

Topic for observation	*Detailed description*	*Researchers notes*
Other relevant topics to observe Theory on contagion Ways of cleaning yourself after contact with dirt Are they concealing dirt e.g. covering the bucket or potty before taking them out Interaction with people when disposing of faeces		

Facial expressions of disgust or fears (all emotions) Means of protection Avoiding direct contact. Where they put the bucket or potty		
Topic for observation	*Detailed description*	*Researchers notes*
Other relevant topics to observe Notions on smell People's facial expression as they get near or handle toilet Covering of nose when entering a toilet Removing of cloths before entering toilet Walking fast past toilets		

Appendix VII: In depth Interview Guide

Introduction

The interview will be conducted as sequential conversations, when visiting the interviewee over the period of one month duration. All questions may therefore not be asked at the same visit.

The interview is semi-structured and allowing the interviewer to ask probing questions after each interview question to get more details from the respondent.

The main themes for the interview are: the participant's perception on: the social and physical environment, defecation, contamination and contagion, dirt, diseases and smell.

Introduce yourself and assistant and purpose of the research. Ask if he/she can have some time to share his or her opinion on some sanitation issues in the community. Assure him/her of confidentiality. Go through the consent form with the participant and if he/she agrees let them sign or thump print the consent form. Ask permission to record and assure it will only be used for the research purpose and will not be released to any authority.

Role of the social and physical environment

Could you share with me the history of Prampram with regards to sanitation delivery? What was the practice in the past and what is it in the present?

What are your views on the sanitation situation in Prampram?

What do you like about Prampram? Which things do you dislike with regards to sanitation in your community?

Physical facilities

What kind of toilet facility does members of your household use?

Can you share the sanitation situation in your home with me?

What is it like to own, share or use the public latrine?

Can you share a personal experience on the last time you had to defecate either in the bush or beach?

In your view what is contributing to open defecation in the community?

Dirt

Introduction: It may seem a bit strange, but as part of the research I am very interested in knowing more about dirt and dirty things in this place and how you deal with dirt.

Dirty things

1. What things do you normally classify as dirty or associate with dirt?
2. What kind of dirty things exist in this place:
    a. Probe; Around the household, inside the household, in the community
3. Why are these things dirty?
    a. Probe; human faecal matter
4. What do you do to avoid these types of dirt?
    a. Probe; Inside the house, outside the house, in the community?
5. Who in your house are involved in these activities?
    a. Probe; men, women, children
6. Do you find it more difficult to deal with any of the types of dirt? Which types?
    a. Probe; human faecal matter

7. Why? Probe!

Dirty places

8. What are the places you would call ‘dirty places’ in this community?
    a. Probe; beach, public toilets, waste disposal sites?
9. What makes them dirty?
10. When are they most dirty? Why?
11. What do you do when you visit these places to avoid getting dirty?
    a. Probe; special behaviour, protection etc.

Perceptions of dirt and disease

1. How does it make you feel if you get in contact with dirt?
2. Probe; for different types of the dirt?
3. Why does it make you feel like that?
4. Are any of the types of dirt which you have mentioned related to any sicknesses or diseases?
5. Which sicknesses?
6. How are they related?
    a. Probe; Get detailed descriptions of what happens in the person/body when disease is happening

Contamination and Contagion

Perception of what is contagious:

1. In your mind, what makes something contagious?
2. Which things are contagious?
3. Why are they contagious?

Avoidance strategies of contagions:

4. What do you do to avoid the things which can be contagious?

   Probe; for yourself, for your children, for your family?

5. Are any of these things difficult to do?
6. Why? Describe.

Disease and contagions

Introduction: In the health system, there is something doctors call 'contagious diseases'.

1. Do you know of any of these diseases? Which ones?
2. Has any member of your family or a relative suffered from a contagious disease?
3. Can you describe the disease?
4. Do you know where, how, when the person got the disease?
5. And Why?
6. How was it treated?

Role of Smell

Introduction; Interviews conducted with members of this community have indicated that smell plays a major role for people.

1. Which bad smells can you think of in this community?
2. Where are these smells coming from?
3. Why do you think these smells are bad?

Avoidance strategies

4. What can you do to avoid these smells?
5. What are other members of your family doing to avoid these smells?
6. Is anything difficult about avoiding smells? Why?

Smell and discomfort/disease

7. How do you react to bad smells when you are confronted with them?
8. What about; (probe for specific types of smells which they have mentioned)
    a. Garbage
    b. Faecal matter
    c. Rottening organic materials
    d. Stinking water
9. Can any types of smell cause you to feel sick?
10. Which smell?
11. How do you feel?
12. Why do you feel sick?
13. Can any smell cause any diseases?
14. Which diseases?
15. Have you had any experience with that?
16. Can you tell me about what happened?

    Probe: which smell, when, where, how?
17. What do you do to avoid getting that disease again?

Appendix VIII: Interview Guide for Care givers

Introduction

Care givers play a very important role in the nurturing of children in all spheres of life including their acquisition of certain hygiene behaviours. The interview with care givers will throw more light on how children acquire

Teaching children about hygiene and sanitation

1. When did you start talking to your child about personal hygiene?
2. What was the first thing you taught your child?
3. Who else is involved?

Child's Hygiene Practice

1. Could you please share with me what happens when your child wants to defecate?
2. Where does your child defecate?
3. Does he/she go alone or follow an adult?
4. Who assists him/her?
5. How is he/she assisted?
6. What does your husband do in assisting with the upkeep of the child/children?
7. At what age was your child able to do the following by him/herself:

   Bath, visit the toilet, clean him/herself after defecating, washing his/her hands with soap etc?

8. How did he/she learn to do these things?

Theory on contagion

1. How did you feel when you accidentally smeared your fingers with faeces when cleaned yourself or your child after defecation the last time?

2. What did you do and why?

3. Discussion with some people in the community indicated that faeces cause diseases. What is your opinion about this and how can this happen?

4. How do you go about disposing of your baby's faeces as compared to disposing that of a grown child (between 1-5yrs)?

Role of smell

1. What is your perception about smell and what things around you can you associate with smell?

2. Can you share your experience on any occasion when you were confronted with a bad smell? How did you deal with it?

Appendix IX: Focus Group Discussion Guide

Introduction

Welcome and thank participants for honouring invitation to be part of the discussion. Self-introduction of all present starting with researcher and assistant. Set the scene for them to relax e.g. let them know the discussion is going to be in their local dialect and everyone is free to speak his/her mind. There is no right or wrong answer and everyone is to participate. Explain what the research project is about and discuss purpose of meeting, that is, to solicit their view on hygiene preferences and practices.

Seek their permission to use a recorder since it will be difficult to write the rich experiences they will be sharing with you. The outcome of this meeting will be used for a research to help future sanitation interventions. Assure them they will remain anonymous and no names will be mentioned as a form of identity to allay their fears. After they grant you the permission the recorder can be turned on.

The Researcher and her Assistant should agree on who will be the moderator or secretary beforehand.

Participants will be asked to do self-introduction to indicate their occupation.

NB. The recorder should have been checked prior to the meeting to ensure it records well and clearly and at which range?

The discussion will be covered in two sections with the same group.

Part 1

Environmental sanitation status of the community

How will you describe the Prampram community and your living area when it comes to the sanitation status of the area? (Probe; the waste situation, the latrine situation, the water situation)

Could you please mention 3 of the biggest sanitation challenges and why?

What do you consider to be a good choice of sanitation for people living here and why?

Discussions with some community members indicated that many people prefer to use the beach or bush. Why do you think that is the case.

Latrine choices

1. What are the biggest challenges for people living here to get their own toilets? And why?

2. Could you share with us some of the benefits you see in having your own toilet instead of:

a. Sharing,

b. Using public toilet or?

c. Open defecation?

4. Which latrine is the most preferred choice and why?

5. In your opinion what can be done to increase the uptake of sanitation in this community?

Part 2

Notions of Dirt

What in our environment do we consider as being dirty? What comes to mind first when dirt is mentioned?

What are the different words used to describe dirt in this community? What are some of the meanings given to them. Could you please share with us any historical facts related to dirt in this community?

There is a notion that dirts either come from the environment or our bodies. Could you please describe what they are?

In your opinion what are some of the effects of dirts in our community?

In some cultures some dirt are seen as more dangerous than others? Can you please share with us what pertains here? What are the distinctions normally made between the type of dirt and how we respond/react towards it? Eg. Dirt from vomit, menstruation, faeces etc?

The dirt from the environment and that from our body which is normally considered more dangerous and what are the reasons?

Local Theory on Smell

In some cultures smell plays a very important role in the life of the people. Are there some issues relating to smell in this community that you will like to share with me?

What are the local names given to smell? Please indicate the different names given to the type of smell (pleasant and unpleasant smell).

What are your reaction to smell when you are confronted with it?

What are the general perceptions in relation to smell in this community?

Theory on Contagion

What common diseases within our community are classified as contagious and how do they become contagious?

Apart from diseases are there other things that bring about contamination in the light of physical, social and psychological? How are they caused?

Ending FGD: Ask if they have any other contributions or comments to make. It could be outside the discussion and thank them for their participation and contributing to the research. Refresh them afterwards.

NB. As the tape is turned off be attentive to relevant information that my be discussed and take note.

Appendix X: Ethical Clearance

GHANA HEALTH SERVICE ETHICAL REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted

My Ref: GHS-ERC: 2
Your Ref. No.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: 233-302-681109
Fax: 233-302-683124
Email: ...

27th August, 2012

Leticia Agyeiwaa Ackun
Department of Sociology
University of Ghana, Legon
Accra

ETHICAL APPROVAL - ID NO: GHS-ERC: 08/07/12

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

"Managing Human Waste: Practices and Preferences in Peri-urban Communities in the Dangme West District"

This approval requires that you inform the Ethical Review Committee (ERC) when the study begins and provide Mid-term reports of the study to the Ethical Review Committee (ERC) for continuous review. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Please note that any modification without ERC approval is rendered invalid.

You are also required to report all serious adverse events related to this study to the ERC within seven days verbally and fourteen days in writing.

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.

Please always quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
DR. CYNTHIA BANNERMAN
(GHS ERC VICE CHAIRMAN)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra