

Factors contributing to Low Sanitation and Hygiene Coverage: A Case of Blair Ventilated Improved Pit Latrines in Matetsi Ward, Hwange District

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Abstract

The study aimed to establish factors contributing to low sanitation and hygiene coverage as well as determining the knowledge, attitudes and cultural practices of the community members on sanitation and hygiene. This study adopted a qualitative research paradigm with the descriptive research design being the preferred research design. Sustainable Livelihood Approach was used as a concept underpinning this study. The research findings revealed that, low sanitation and hygiene was due to poverty within the community. The community has a negative attitude towards sanitation and hygiene programmes, and inadequate resources reduce the number of households with sanitation facilities. The research therefore recommended that, the community be adequately educated through awareness programmes, be provided with enough resources so as to increase coverage in sanitation and hygiene and that programme implementers regularly supervise sanitation and hygiene programmes.

Key words: Sanitation, Defecation, Blair Latrine, Hygiene, Community Mobilization

1.0 Introduction

Universal access to adequate sanitation is a fundamental need and a human right. Securing access to proper sanitation and hygiene would go a long way in reducing illness and death, especially among children. A safe and sustainable water supply, basic sanitation and good hygiene are fundamental for a healthy, productive and dignified life (Joint Monitoring Programme for water and sanitation, 2006). Clean water, combined with safe sanitation and improved hygiene practices prevent diseases, saves lives, and transform communities. Sanitation and hygiene programmes aim to mitigate health burden prevalence, where interventions could make a major difference,

and where the present state of knowledge is poor on cholera surveillance and prevention of other diarrhoeal related diseases (WHO and UNICEF, 2008).

It was only in the 1980s, due to the work of a few pioneering thinkers, that they realised that rural sanitation worldwide bore little resemblance compared to urban sanitation (Pruss et al., 2002). During the late 1970s, development of new, simpler and more appropriate technologies, for example, Blair Ventilated Improved Pit Latrines (BVIPL) and Twin Pit Pour Flush Latrines (TPPF) began. Subsequently, there was increased thinking about how to improve long term operational sustainability through community management (DANIDA, 2000). During the 1980s and early 1990s, the approach of supply-driven latrine construction with subsidies provided to a target group with certain preconditions. The approach was highly successful in boosting the coverage numbers. This method was particularly successful in South Asia where sanitation latrine construction targets of tens of thousands per year were common (UNICEF, 2008).

According to Jenkins and Sudgen (2006), in the early 1990s there was growing concern that even with the availability of new, appropriate technologies, sanitation systems were not being used or maintained, but were frequently falling into disrepair. Later, the approach to sanitation changed to include not only subsidies, but also hygiene education, including mass media campaigns. However, increased access to latrines and increased knowledge about hygiene was not necessarily sufficient to motivate hygiene behaviour change.

Since 1990, 2.1 billion people have gained access to an improved form of sanitation, such as flush toilets or latrine with a slab globally (WHO, 2008). This reveals pronounced disparities, with the poorest and those living in rural areas least likely to use an improved sanitation facility. According to World Health Organization (WHO, 2012) 2.4 billion people globally do not have access to improved sanitation and hygiene facilities. That is one of the reasons for the spread of diarrhoeal diseases in the world. About 2 million people die every year due to diarrheal diseases; most of them are children less than 5 years of age (WHO, 2010). The most affected are the populations in developing countries, living in extreme conditions of poverty, normally peri-urban dwellers or rural inhabitants. Lack of access to proper sanitation remains a critical public health issues worldwide (WHO, 2010).

Globally, regionally and nationally, the provision of sanitation facilities in rural communities usually gets less attention as compared to urban communities where sewer systems are provided (Burns and Hungler, 1995). Currently, there is a global acknowledgment that the major share of the responsibility to improve sanitation rests firmly with the African and South Asian regions. To that end, a number of African countries have or are developing sanitation policies and sanitation implementation programmes (Mheta and Knapp, 2004). Devine (2009), states that sanitation is not given the attention it requires by governments, civil society or donors as evidenced by the meagre priority assigned to the issue in most poverty reduction strategies. It is often stated that water is life but sanitation is dignity. If so, then it is a puzzle why sanitation is often left behind. This is evidenced by most schools and health centres that are still built without toilets. Access to toilets lags behind and sanitation has failed to be translated from commitments to national policy and into budget lines in the ministries of finance in most countries (Newborne and Smet, 2008).

According to WHO (2010), Zimbabwe has gone up and down in terms of sanitation and hygiene services. The attainment of independence in 1980 coincided with the declaration by the United Nations of the decade for drinking water supplies and sanitation. The post-independence era saw a boom in sanitation and hygiene. This was supported by a highly motivated civil service, generous external support, receptive communities who demanded services of certain quality and standard and an enabling environment through national policies and strategies. Sanitation and hygiene are

essential elements of human development and poverty alleviation, and constitute an indispensable component of primary health care (van Vliet, et al 2011).

According to WEST ATLAS (2008), Zimbabwe is currently affected by recurring droughts and a declining economy with limited resources to maintain and operate sanitation facilities and services. This is negatively affecting the availability of safer sanitation and hygiene facilities. As a result, vulnerable populations are exposed to an increased risk of diseases such as diarrhoea, cholera and dysentery, further compromising the immunity of a population already affected by a high HIV/AIDS prevalence (UNICEF, 2010).

WHO and UNICEF (2010) states that the cholera pandemic of 2007 to 2009 which resulted in the loss of more than 4000 lives in Harare was as a result of lack of inadequate water, sanitation and hygiene services, poor waste management and a deteriorating health delivery system among other contributing forces. This resulted in all development partners to look at options to learn from successful sanitation and hygiene interventions elsewhere so as to shape appropriate programmes to improve sanitation and hygiene services delivery at community level. Rural Water, Sanitation and Hygiene (WASH) as an adaptation of the Community Led Total Sanitation (CLTS) approach is an effort to improve access to sustainable and safe sanitation. It is an adoption of hygiene behaviour and practices that contribute to the reduction of risk of cholera, particularly in the rural community (UNICEF, 2013)

Although Hwange District launched broad ranging sanitation and hygiene programmes and stepped up investment in sanitation and hygiene in 2011; the district faced considerable challenges in reaching the Millennium Development Goals (MDGs) in sanitation and hygiene by 2015. For instance, the residents of Matetsi ward are still using the bush as toilets. According to Water Aid (2011), the overall goal of the rural Water, Sanitation and Hygiene (WASH) programme was to contribute to the reduction of morbidity and mortality due to sanitation and hygiene related diseases. The objective was to reduce by 25% those without access to safe sanitation in rural areas of Hwange through contributing to WASH sector recovery, as well as modelling of best practices for national replication and informing national policy, strategy and guideline development (Rural Wash News, 2015). It is for this reason that this study was formulated to evaluate factors contributing to low sanitation and hygiene, particularly in the sanitation aspect, thus, the coverage of Blair ventilated pit latrines.

Hwange District, situated in the North Western part of the country is one of the 33 districts in implementing the Rural Wash Project in the country. It is funded by the UNICEF and the implementing partner is Mvuramanzi Trust together with the Ministry of Health and Child Welfare (MOHCW). Hwange District is made up of twenty five rural wards. The project is being implemented in four (4) rural wards in Hwange district with other targets flowing out to other outside wards. Matetsi Ward 1, the area of study is located in Hwange District, Matabeleland Province of Zimbabwe. It is bordered in the north by the international boundary of Zambezi River and it stretches 50km between Hwange and Victoria Falls and lies along Bulawayo – Victoria Falls road. Matetsi Ward 1 of Hwange district has a projected population of 4104 of which 2125 (51.8%) are males and 1979 (48.2%) females. Matetsi ward 1 has a total of 927 households (Zimbabwe National Statistics Agency 2012).

The area is chiefly populated by the Tonga and Nambya tribe who rely on agriculture farming. It has a total of twelve (12) villages. Matetsi Ward 1 lies under Natural Agro Region V which is characterized by erratic rainfall averaging 450mm – 550mm per annum and temperatures ranging between 21°C during winter and reaches a maximum of 38°C in dry season (Meteorological Department Record, 2009). The ward is well known for its over reliance on the hunting quota for income. Livestock such as cattle and goats are also used as a source of income. However, very few

people own livestock and as a result have few other opportunities to generate income. They are, therefore, forced to rely on subsistence farming with crops such as sorghum and millet or drought resistant maize varieties.

The Matetsi ward has the lowest sanitation and hygiene coverage in the district. Four (4) wards in Hwange District were sited to benefit in the programme and these are Matetsi, Mabale, Silewu and Kamativi. Out of the four (4) wards, only Ndajila village in Mabale ward has attained free open defecation status (Rural Wash News, 2015). However, out of the four (4) wards, Matetsi has the lowest coverage in terms of Blair ventilated improved pit latrines (BVIP). Hence, there is need to investigate on the causes of low coverage of sanitation in Matetsi ward 1 of Hwange district. Due to some efforts through the donor community, a few individuals few structures available at their homes. The minimum requirements for sanitary facilities for every household are that, at least every household should have a single compartment pit latrine toilet, a refuse pit, a properly constructed two- sink plate washing basin and a pot rake (WHO, 2010).

1.2 Statement of the problem

Despite several interventions over the years, sanitation coverage in the Matetsi ward remains low. This is actually one of the lowest coverage in Hwange district. In the recent years, programme implementers have provided households and communities with materials for the construction of latrines but District statistics on sanitation has proven that very few of these beneficiaries actually commence the construction of latrines, let alone complete construction in the ward. The question that then needs to be asked is why there is low sanitation coverage even when beneficiaries are provided with all the necessary inputs and materials. Without detailed assessments, it is not possible to state if low coverage of ventilated pit latrines in the ward is due to poor mobilization or other social factors.

1.3 Purpose of the study

This study assesses the factors on the low coverage of Blair ventilated improved pit latrines in Matetsi ward 1 of Hwange district.

1.4 Objectives of the study

- To establish the knowledge and attitudes towards Blair ventilated pit latrines.
- To investigate the effect of economic challenges on Blair ventilated pit latrines coverage in Matetsi ward.
- To assess if the cultural aspects of Matetsi community are the cause of low Blair ventilated latrines coverage in the ward.

2.0 Literature review

The concept underpinning this study is the Sustainable Livelihood Approach (SLA). SLA is responsive and participatory (Chambers and Conway, 1991). The communities are given the opportunity to plan, implement and evaluate their projects. This is because they know their resources, opportunities and constraints better. Constraints are challenges or barriers which inhibit exploitation of natural resources. If the project is not resilient to shocks like droughts, it fails to recover its original form. The fundamental objective is to enhance sustainability in the five dimensions namely physical (basic infrastructure such as roads, water and sanitation), environmental, social, economic and institutional. SLA is people centred in that outsiders implement what communities' desire. It also recognizes that communities are heterogeneous hence the needs of its members are differ. Implementation of the SLA is multi-level in that policy,

for example, is crafted at national level while implementation is at local level. Under the SLA, projects and programmes are implemented in public-private partnerships. External support has to recognize the dynamic nature of the livelihood strategies hence should adjust accordingly.

According to Morgan (1990), the Blair Latrine was developed in Zimbabwe during the early 1970's in response to a felt need. At that time pit latrines were known for their bad smells and uncontrolled fly breeding. They were both unpleasant to use and posed a serious health hazard. People often preferred to use the bush as a toilet. This may have been more convenient in remote areas and during dry season. But in more densely populated areas and during the rainy season, such a method was undesirable. Morgan (1990) asserts that the Blair Latrine has been used by the Ministry of Health in its rural sanitation programme since 1975. The Blair Latrine was designed and developed at the Ministry of Health's Blair Research Laboratory. According to Morgan (1990), the first experimental ventilated pit latrine was built in 1973, and after two years of testing, it became available for use by the Ministry of Health in May 1975. At that time, details of the Blair latrine research and development were sent to South Africa and Botswana, where similar toilets were also constructed. The Blair Latrine later became known as the Blair ventilated improved pit latrine (BVIP). Over 500 000 Blair latrines have been built in Zimbabwe since 1975, serving over 3 million people (Morgan, 1990).

According to Morgan (1990), the Blair ventilated improved pit latrine (BVIP), is a pit latrine with a black pipe (vent pipe) fitted to the pit, and a screen (fly screen) at the top outlet of the pipe. The development of the BVIP latrines managed to sustainably reduce two main disadvantages of traditionally designed pit latrine, namely the odours problem and fly nuisance. The traditional pit latrines consist of a simple pit covered with logs and usually have no roofs and sometimes have walls. They are easy to build and require no specialist skills and cost practically nothing. BVIP latrines are cheap, easy to construct and materials required can be obtained from a local hardware. BVIP latrines also solve the problem of outbreaks of water borne diseases due to their capability of promoting hygiene and sanitation by eliminating flies and smell (Morgan and Mara, 1990). The facility requires minimal volumes of water for cleaning the squatting hole hence curbing the water wastage problem.

According to Water Aid (2011) a one compartment pit latrine slab has two holes of which one is the squatting hole, the other being the vent hole. During function, fresh air enters the pit through the squatting hole and draws out odour through the vent pipe, so it prevents the accumulation of odour in the toilet. Flies follow the same route as the air does, enter the squatting hole, into the pit to the vent pipe but cannot escape. This is so because of the screen which allows air escape but trapping in the flies. Engel and Suliso (2014) assert that the principal mechanism of ventilation in BVIP latrines is the action of wind blowing across the top of the vent pipe. The wind creates a strong circulation of air through the superstructure, down through the squat hole, across the pit and up and out of the vent pipe. Unpleasant faecal odours from the pit contents are thus sucked up and exhausted out of vent pipe, leaving the superstructure odour-free. The smell is carried upwards by the chimney effect and flies are prevented from leaving the pit and spreading disease (Morgan, 2009). To ensure that there is a flow of air through the latrine, there must be adequate ventilation to the superstructure. This is usually achieved by leaving openings above and below the door.

According to Evan et al., (2009), there are economic benefits to gain from improved sanitation, both direct and indirect. Improved sanitation results in fewer illnesses among users which imply lower healthcare expenses and thus direct economic benefits. Moreover, the days the user needs to stay at home from work due to illness decreases and that is an indirect economic benefit (Minh and Hung, 2011). In addition, illness which implies limited or no possibility to income may impose

severe consequences for a person with low or very low income. The small or non-existing economical margins can lead to a vicious cycle where the person cannot recover satisfactory due to lack of nutrition and medicines, hence not being able to work and thereby worsening the economic situation, moreover the health sector (Banerjee and Duflo, 2011). There is a correlation between open defecation, disease and sustaining poverty (United Nations, 2013).

Improved disposal of human waste protects the quality of drinking water sources. At present, more than 200 million tons of human excreta, as well as big quantities of waste water and solid waste, go uncollected and untreated each year (UNICEF 2014). This waste pollutes the environment and exposes millions of people to disease and dirt. Most prevalent diseases, such as diarrhoea or worm infections, are spread by germs. Germs pollute the environment and cause sickness. Contamination can be stopped through the provision of safe toilets and the protection of water sources. Faecal-oral transmission can be stopped through hygienic storage and preparation of food, protection of water between source and consumption and washing your hands with soap after toilet use, before eating, before preparing food and after cleaning babies (UNICEF 2014).

3.0 Research Methodology

This study adopted a qualitative research paradigm. The qualitative research paradigm involves research that focuses on discovering and understanding the experiences, perspectives and thoughts of participants.

3.1 Research Design

This study used the descriptive research design which describes systematically the facts and characteristics of the community of Matetsi ward on latrine coverage problems. Descriptive research design is used to gather information about a given aspect of a reality as it appears at the particular moment, therefore no manipulation of the independent variables.

3.2 Population

The study population was the residents of Matetsi ward and twelve (12) local Environmental Health Technicians (EHTs). Matetsi ward has a population of 4104; including women, men and children. There are 927 households in the area of study. The involvement of the local EHTs was of paramount importance in the investigation of factors contributing to low sanitation and hygiene in Matetsi ward.

3.3 Sample size

In this study, a sample was taken from the target population of Matetsi ward. Ninety two (92) households were taken as sample which is almost 10% of the total study population. Out of twelve (12) Environment Health Technicians (EHTs) in the ward, only three (3) were sampled and represented all the technicians.

3.4 Sampling technique

This study used the non- probability sampling. Convenience sampling was used to solicit information from the area of study. Convenience sampling is a non-probabilistic method of selecting participants in a qualitative research, that is, not everyone gets a chance of being selected (Marshall, 1996). In this method, respondents or participants were selected on the basis of their availability or presence at households. Purposive sampling was also used to collect information from the Environmental Health Technicians (EHTs) in the ward. Creswell, (1994) describes

purposive sampling as where subjects are selected because of some characteristics to achieve a certain goal.

3.5 Data collection instruments

In research a data collection instrument is a tool used by a researcher in collecting the data (Polit and Hungler, 1999). This study used a questionnaire and conducted face to face interviews. The questionnaire was used to collect data from households while interviews were meant for the EHTs. The questionnaire was written in English and then translated in vernacular language (isiNdebele) to cater for those who are unable to read English and also for the reason that Matetsi is in Matabeleland North province where many can speak and read isiNdebele. The questionnaires were given to the head of every sampled household to elicit information on the status of their sanitation facilities. The questionnaire also helped to keep the respondents anonymous. Anonymity helped in acquiring honest information since the respondents were not afraid of being victimized in the event of giving negative responses or comments. Ninety two (92) questionnaires were distributed.

Interviews were conducted with the three (3) local Environmental Health Technicians (EHTs). Interviews are a significantly more individual type of exploration than polls and will be utilized in this study (Shaughnessy et al, 2006). They are a wellspring of obtaining first hand data. It includes the social occasion of information through immediate verbal connection between the researcher and the respondents. According to Keyton (2001), interviews allow the researcher to probe more deeply, and the researcher has an opportunity to collect both verbal and non-verbal cues.

4.0 Study Findings

Descriptive data analysis technique was used to analyse and to give interpretation to the processed data. Ninety two (92) questionnaires were distributed to households and eight seven (87) respondents filled in the questionnaires. The other five (5) respondents were not available at the time the questionnaires were collected. Age groups of respondents indicate that 3(4%) was below 17 years, 15 (17%) were in the 18-25 years, 36(41%) in the 26-45 years, 20 (23%) in the 46-64 years and 13(15%) were above 65 years. The largest group of respondents was 26 – 40 years age group, who comprised 36 (41%) of the sample population in the study. The second largest population portion was 46 – 64 years age group which constituted 20 (23%). This serves to indicate that most participants are mature individuals in the production age group. The study also revealed the involvement of the youthful segment of the population. The gender distribution showed that respondents that participated in the study included 48 (55%) males and 39 (45%) females. This implies that the population consists of the largest number of male headed households. The possible justification being that people rely mainly on crop farming in Matetsi ward, men own majority of the farming land which is the traditional culture in Zimbabwe that men are the owners of farming land.

Respondents were asked about their knowledge and attitudes on the use of BVIP latrines. Results indicate that 78 (90%) of the sample population have knowledge on the use or importance of BVIP latrines and 9 (10%) of the population responded that they do not have any knowledge on the use or importance of BVIP latrines. It can be deduced that the possible reasons for the attainment of highest percentage of people with knowledge, health and hygiene education is given on a regular basis in the ward. The response on attitudes towards BVIP latrines showed that 79 (91%) of respondents has a positive attitude towards BVIP latrines and 8 (9%) of the respondents have a

negative attitude toward BVIP latrines. The results indicate that those with a negative attitude towards BVIP latrines are resistant to change, thus, they are used to the bush open defecation system. However, the results show that only a small fraction of the community are resistant to change. It can be deduced that 8 (9%) of the respondents does not attend awareness meetings or workshops hence, the negative attitude on sanitation and hygiene issues. This could be the group with cultural perceptions towards sanitation and hygiene.

Respondents were asked about economic challenges encountered in constructing a BVIP latrine. 44 (51%) of the respondents indicated that they encountered or still encounter economic challenges in constructing a BVIP latrine. The results indicate that a large proportion of respondents are generally poor hence the poor coverage of sanitation in the ward. The possible reason is that the people in the community rely on rain fed agriculture and have very few opportunities to generate income. 43 (49%) respondents indicated that they did not have any economic challenges in constructing a BVIP latrine. It can be deduced that 43 (49%) of respondents might have benefited from donors. Of the 44 (51%) respondents who indicated that they had economic challenges 15 (34%) mentioned challenges of procuring of cement, carrying of materials like river sand, pit sand and stones. 11 (25%) highlighted challenges of paying the builder while 18 (41%) indicated that they had no money for construction. The results reveal that there is poverty in the Matetsi ward and that unemployment is rife among the community. This explains why respondents looked up for land reform in the resettlement to provide for opportunities for having occupations in agriculture.

Results also showed cultural aspects of the community on the use of BVIP latrines. 70 (80%) of the respondents do not have a culture that disregard the use of BVIP latrines and 17 (20%) of the respondents have a culture that restricts them to use BVIPs. Such a distribution shows that the community is far from attaining a free open defecation status. Of 17 (20%) of the sample population who have cultural perceptions on the use of BVIP latrines 10 (59%) of respondents believe that the mother-in-law or father-in-law cannot share a BVIP latrine with daughter-in-laws. This is rife in villages with old Tonga speaking people who value their culture so much. They feel it is taboo to share a toilet with outsiders, thus they treat daughter-in-laws with respect as new members of the family. 7 (41%) of respondents revealed that they are not comfortable with sharing their latrines with neighbours. The study established that culture, among other factors like economic, environmental and human effects can lead to low success in the implementation of any programme intended. In this case, the community in Matetsi ward 1 value their in-laws and respect each other to such an extent that they should not enter the same toilet seat. This may lead to poor participation in the implementation of sanitation programmes. Culture is so strong that it can outwit an intention to behavior change.

The interviews conducted with the three (3) EHTs indicated the following responses. Poverty is the major cause for low sanitation and hygiene coverage in the ward. People cannot afford to build BVIP latrines due to poverty and drought. This was cited by all the EHTs during separate interviews. The study also established that sanitation and hygiene programmes were receiving inadequate resources. They revealed that local shops do not sell cement; therefore, it becomes expensive to buy it elsewhere and transport it to the communal homes. During the interviews, the EHTs revealed that those with grain wish to do butter trading but no one is willing to exchange cement with grain as the price of grain fluctuates. They also mentioned the issue of dependence syndrome, of wanting the donor community to do everything for them, even to the extent of supplying locally available materials. Inadequate resources can lead to low sanitation and hygiene coverage. When people get used to receiving aid, they develop a dependence syndrome. When the donor

community has nothing to offer, it becomes difficult to change their mind set even if the project is meant to benefit them.

From the results obtained during interviews it can be said that generally there is lack of community participation. The community is not cooperative towards sanitation and hygiene programmes. The EHTs also agreed that when calling for a meeting, the people would first enquire if they would benefit any material things. If they are promised what they do not value, the meeting would get the lowest turn up. All the EHTs complained that the majority of the community members always ask why Sanitation and Hygiene programmes demand a lot of participation and is not like food aid or poverty alleviation programmes where a lot of benefits are obtained and as a result it causes low success rate. When there is lack of community participation, development lags behind. Commenting on the residents' attitude, all the EHTs revealed that the community has now accepted the Blair ventilated pit latrines but the challenge is getting building material ready and paying the builders. The interviews also revealed that it is expensive to construct the BVIP and so households would rather stay without having one. They cited economic challenges as a major problem faced by the community.

All the three parties interviewed mentioned of vacating of homes by most community members during the farming season to their fields as one of the contributing factors to low sanitation and hygiene coverage. During this period, which starts in mid - November to late April, most families move to the fields for sowing and weeding, then protect their crops from wild animals which roam around the fields destroying crops. It was revealed that it is very difficult to mobilize farmers for any programme during this period. It can be deduced that the villagers would rather spend most of their time in the fields or construct their houses other than spending time or money on BVIP latrines.

5.0 Conclusions

- Poverty is the major factor contributing to low sanitation and hygiene coverage in the ward.
- Attitude and dependence syndrome within the community are the other most contributing factors leading to low sanitation and hygiene coverage.
- Cultural practices also hinder the acceptance and support of the sanitation and hygiene programmes by the community leading to uncooperativeness.
- Inadequate resources reduce the number of beneficiaries of sanitation and hygiene programmes which also lead to decrease in sanitation and hygiene coverage.
- agricultural farming season hinders the construction of BVIP latrines,

5.1 Recommendations

The study does hereby as a mitigatory measure recommend the following:

- Health practitioners in particular Environmental Health Technicians (EHTs), Environmental Health Officers (EHOs), Field Officers (FOs) and Sanitation and hygiene programme managers in NGOs to intensify education through awareness programmes, putting emphasis on the value of sanitation and hygiene to health of individuals.
- Project or programme implementers to supervise sanitation and hygiene programmes for proper construction of latrines.
- Project or programme implementers to provide adequate resources that are enough to benefit more community members to increase coverage.
- Project or programme implementers to hold health awareness programmes aimed at changing the behaviour of the community especially on sanitation and hygiene programmes.
- Influential leaders to coordinate sanitation and hygiene programmes to encourage community participation.

- Project or programme implementers to include incentives, for example, hygiene promotional T-shirts, sun hats, bags and umbrellas when undertaking sanitation and hygiene programmes and when mobilization is being done to win community support.

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