

# Effectiveness of National Sanitation Day as a community-participatory approach for improving environmental sanitation in Edina Traditional Area, Ghana

Effectiveness  
of National  
Sanitation Day

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Received 4 February 2019  
Revised 14 May 2019  
8 July 2019  
Accepted 18 August 2019

Justice Mensah

*Directorate of Academic Planning and Quality Assurance,  
University of Cape Coast, Cape Coast, Ghana*

## Abstract

**Purpose** – Poor environmental sanitation affects environmental quality and health. Ghana is a developing country whose sanitation profile has been one of the lowest in the world in recent years. This has prompted various views regarding effective approaches for improving sanitation in Ghana for better environmental quality and health. The purpose of this paper is to examine the effectiveness of National Sanitation Day (NSD) as a model for improving environmental sanitation in the Edina Traditional Area (ETA), Ghana.

**Design/methodology/approach** – The study used key informant interviews and focus group discussions to collect qualitative data from purposively selected participants from predominantly fishing and farming communities in the ETA, Ghana. Data were analysed thematically and presented using interpretive narratives and most significant stories.

**Findings** – Results showed a high level of community awareness of the model but low participation in the intervention, culminating in the model's ineffectiveness to make any meaningful impact on improved sanitation in the study area. Key factors responsible for the model's ineffectiveness include apathy, inadequate logistics, politics and attitude.

**Practical implications** – Government should engage more effectively with the municipal assembly, private sanitation companies and community level authorities to address the political, logistical, attitudinal and institutional challenges associated with the model to ensure effective participation in the NSD for better sanitation outcomes, leading to improved environmental quality and health for sustainable development.

**Originality/value** – This is one of the few studies that have evaluated the effectiveness of the NSD in Ghana since the model was introduced in the country in 2014. The outcome of the study could inform sanitation management policy, practice and research in Ghana as well as other developing countries that may adopt or adapt Ghana's model.

**Keywords** Effectiveness, Ghana, Community participation, Environmental sanitation, National Sanitation Day

**Paper type** Research paper

## Introduction

Poor sanitation is responsible for one of the heaviest disease burdens worldwide. It is estimated that poor sanitation and unsafe water account for about 10 per cent of the global burden of disease (UNICEF, 2016). Improper environmental sanitation management (ESM) also contributes to poor environmental quality and sustainability. According to Rai (2015), poor environmental sanitation practices pollute the environment (land, water bodies and air), resulting in excessive amounts of harmful chemicals in the ambient atmosphere, health challenges and threats to life support systems.



In the year 2000, the global community took a decision to reduce the proportion of people in the world with no access to clean water and sanitation by half by 2015, through the implementation of Millennium Development Goals (MDGs) (Lopez *et al.*, 2006; WHO, 2009). Further to this, the United Nations (UN) declared year 2008 as the International Year of Sanitation to compel government bodies of its member countries to make sanitation a priority in their respective policies and programmes. Additionally, the UN included sanitation in the Sustainable Development Goals (SDGs) in 2015, having realised that the sanitation challenges persisted at the end of the implementation of the MDGs in 2015 (Ilevbare, 2016; Mohammadi *et al.*, 2018). Although these efforts yielded some positive results, sanitation still poses challenges to development in many parts of the world, especially in developing countries. The persistent challenges posed by sanitation to human and environmental health necessitate intensification of efforts at improving sanitation for improved environmental quality and health. According to WHO (2009), this is particularly imperative for the less developed nations, where the unacceptable sanitation phenomenon is most prevalent.

Ghana is a developing country whose sanitation profile has been one of the poorest in the world in recent times (MDG Report, 2015). The sanitation problems in Ghana are complicated due to a number of factors. Studies (Mensah and Enu-Kwesi, 2019; Woode *et al.*, 2018) show that poor municipal planning, inadequate sanitation infrastructure, weak law enforcement regime, inadequate funding, social dynamics including poverty and low education, as well as poor attitude to sanitation are some of the main factors responsible for the complicated nature of sanitation management in Ghana. Due to the complex nature of the problem, it requires multi-stakeholder approaches to tackle them (Degebase *et al.*, 2017). Sanitation management experts (Agyepong, 2011; Day, 1997; Ekane, 2013; Hamdi and Goethert, 1997) argue that participatory planning approaches that focus on local level solutions and multi-stakeholder involvement are considered effective ways of addressing sanitation challenges. In particular, the experts stress the effectiveness of the multi-stakeholder participation dimension, whereas the community participation theory (Abrams, 1964; Arnstein, 1969; Choguills, 1996; Kar, 2005; Botes and van Rensburg, 2000) also supports the experts' argument.

Guided by the experts' argument and the tenets of the associated sanitation theory, the government of Ghana experimented with the National Sanitation Day (NSD) in 2014, as a community-participatory model for addressing the complicated sanitation problems in the country. The NSD approach was modelled along the lines of the traditional and indigenous communal labour model, which was community-propelled and inclusive in orientation and character. However, with Ghana still being ranked among the dirtiest countries in the world even after the introduction of the NSD (MDG Report, 2015), the questions that arises relates to the effectiveness of the NSD model. Therefore, this paper argues that the effectiveness of the NSD model, having been experimented for over four years, should be assessed so that corrective measures, where necessary and needful, could be taken to ensure that the model achieves its intended objective. The purpose of this study, therefore, is to evaluate the effectiveness of the NSD as a novel sanitation management approach in Ghana. The rationale for undertaking the study is to provide empirical information on the effectiveness of the NSD to inform ESM policy and practice in Ghana and also to serve as guidelines for other developing countries that might want to adopt or adapt the model for improving environmental quality and health for sustainable development.

### Literature review

Literature indicates that two important participatory strategies that have been adopted to improve environmental sanitation in most developing countries are the household-centred environmental sanitation (HCES) and the community-led total sanitation (CLTS), which have focused primarily on community empowerment (Daramola *et al.*, 2016; Hotta *et al.*, 2014).

The Environmental Sanitation Working Group of the Water Supply and Sanitation Collaborative Council is credited with this HCES, which aims at providing opportunities for sanitation stakeholders at various levels to participate in the planning and implementation of ESM (Abalo *et al.*, 2017; Degebas *et al.*, 2017). HCES approach is a communicative planning framework that focuses on bottom-up methodologies where planners solicit the participation of a variety of stakeholders in a democratic planning process (Abalo *et al.*, 2017; Hamdi and Goethert, 1997; Utami *et al.*, 2018). The literature also indicates that the participatory approach has proved successful in some communities in countries such as Tanzania, Costa Rica, Burkina Faso, Kenya, Tanzania, Laos, Nepal and Bangladesh (Abalo *et al.*, 2017; Lüthi *et al.*, 2010; Kar, 2005). However, Faniran (2016) also reported that the approach did not yield the desired results in Nigeria. The CLTS, on the contrary, involves facilitating processes to inspire and empower communities to stop open defecation by building and using latrines, without offering external subsidies for the purchase of hardware infrastructure (Carrard *et al.*, 2009; Lüthi *et al.*, 2010; Kar, 2005; Woode *et al.*, 2018).

Cognizant of its complex sanitation challenges and their implications for the development of the country, Ghana has been making efforts to improve sanitation through various policies and programmes, which have been executed using various models or approaches, including the HCES and CLTS approaches (Woode *et al.*, 2018). However, these have not solved the problem. One of the key reasons for the slow progress in achieving improved sanitation standards in Ghana is that the government's approaches to ESM have not been participatory enough to secure the support of the general public (Mahama, 2013; Mensah and Enu-Kwesi, 2019). The ESM approaches have often been top-down until recently when the government realised the need to adopt the NSD strategy, which is considered to be community-participatory and inclusive.

It is also important to emphasise that, historically and traditionally, ESM for improved health and environmental quality has been a communal affair in many local communities in developing countries (Faniran, 2016). For example, since the colonial days through independence to date, there have been days earmarked for communal cleaning exercises in most local Ghanaian and Nigerian communities, especially in the rural and semi-urban settings. During the communal labour days, economic and social activities are discontinued until community members have collectively cleaned up public places as well as their private homes and compounds (Abalo *et al.*, 2017). In the early days, punishments were meted out to individuals who failed to partake in these communal activities for no tangible reasons. Therefore, the traditional communal labour model has, since its introduction, been taken seriously by all and sundry. However, with the advent of modernisation, these traditional mechanisms for improving environmental health and quality have been weakened (Faniran *et al.*, 2017; Mensah and Enu-Kwesi). This has led to the rise in the level of indiscriminate defecation and waste disposal practices that have resulted in many communities in Ghana being engulfed in filth.

Due to the insanitary environment, Ghana experienced an outbreak of cholera in 2014, which resulted in the death of many Ghanaians (Mireku-Gyimah *et al.*, 2018). This prompted the government at the time to intensify efforts at finding a solution to the environmental sanitation challenges. The Government of Ghana, through the Ministry of Local Government and Rural Development, sought to rekindle the indigenous communal sanitation consciousness of the citizenry by declaring a NSD in an attempt to improve sanitation and environmental sustainability in the country (Matheaw, 2017). Thus, the first Saturday of every month starting from 1 November 2014 was declared by the Government of Ghana as the NSD for cleaning communities in the whole country and to educate the populace on waste sorting techniques as well as best defecation and waste disposal practices (Matheaw, 2017; Suna, 2015). In this connection, community members were expected to collaborate with their local representatives, waste management companies and

opinion leaders to rid their environment of filth (Abalo *et al.*, 2017; Suna, 2015), with the expectation that the nation's problems of poor environmental quality and health would be solved, or least, reduced to the barest minimum. However, the enthusiasm and commitment of the people in respect of this experiment appears to have waned after four years of the declaration and implementation of the NSD, raising questions of relevance and effectiveness of the model (Matheaw, 2017).

It is argued, therefore, that the novel experimental model – NSD – which was introduced to solve the complicated sanitation problem in Ghana needs to be evaluated for its effectiveness so that remedial measures can be taken, if need be hence this study. This study used Edina Traditional Area (ETA) as a case study in evaluating the effectiveness of the NSD experiment in Ghana. The area was selected because it is one of the poverty endemic areas in Ghana and also among the most insanitary enclaves in the country in terms of the ignoble open defecation and indiscriminate waste disposal practices, which affect the quality and sustainability of the physical environment, in spite of the area's tourist attractions. Thus, the paper contributes to the quest for sustainable solution to the complex sanitation menace in the study prefecture in particular, and the country at large. Additionally, it contributes to increasing Ghana's pace towards the achievement of the SDGs on sanitation and environmental sustainability.

### **Theoretical and conceptual discussion**

The study is underpinned by the tenets of the community participation theory. According to Choguill (1996) and Botes and van Rensburg, (2000), the community participation theory relates to active involvement of individuals and groups to improve on unsatisfactory conditions in a community or influence policies and programmes that affect the quality of lives in the community. The theory works on the principles of “unity is strength”, believing that a group of people normally wields an advantage over a single individual in getting a voice heard or a piece of work executed, especially in the case of poor communities. Based on the assumption that community has both social and spatial dimensions, community is conceptualised as a group of people sharing common interests and living within a geographically defined area (Ohmer, 2010). Abrams (1964) on the contrary saw a community as a mythical state of social wholeness in which each member had a place and life was regulated by cooperation rather than unhealthy competition and conflict. Hamdi and Goethert (1997) opposed this view, claiming that communities are not necessarily organised and cohesive, and may lack the communal sense and social identity. Hamdi and Goahert further argued that it is possible for people to come together to form a community on ideological grounds and so the geographic space argument may not always hold. Besides, people within a community can come together to achieve a common objective even if they have some differences.

Development institutions such as the World Bank and the Department for International Development see participation as the idea of people being given an active role in programmes or projects that directly affect them (Mnaranara, 2010). The institutions argue that it is only rational to give control of affairs and decisions power to people most affected by them. The concept of participation works on the principle that, since no government or authority has the means to solve all the community problems, it is necessary to involve the people in matters that affect them so they can also contribute their quota in various forms (Abrams, 1964; Mohammad, 2010; Sidorenko, 2006).

Participation theory, according to Stoker (1997), stresses the idea of empowering stakeholders, especially the direct beneficiaries of an intervention, to be citizens rather than spectators in taking decisions, managing resources and undertaking other activities that inure to the benefit of the people. The theory hinges on the assumption that the ultimate beneficiaries of a development intervention must be at the forefront of the development efforts (Chambers, 1994; Mwiru, 2015). The main tenet of the participation theory (Brydge, 2012;

Purnomo *et al.*, 2017) is that it is important to involve the stakeholders in planning and implementing the development projects that affect them in order to ensure ownership, sustainability and success of such endeavours.

According to Arnstein (1969), community participation is about redistribution of power to enable the people, especially the poor citizens presently excluded from the political, and socio-economic processes, to be included. Arnstein uses a Ladder of Citizen Participation to explain that it is necessary to unveil the manipulation of people in community projects by professionals and policy-holders. The ladder has eight rungs, with each rung corresponding to a different level of participation. The rungs are manipulation, therapy, informing, consultation, placation, partnership, delegated power and citizen control. The rungs at the bottom of the ladder are the ones with least citizen participation or “non-participation” and include manipulation and therapy. Informing, consultation and placation occupy the middle rungs of the ladder and border between manipulation at the bottom and citizen control at the top and is termed as “tokenism” where the people are allowed to participate only to the extent of expressing their views but have no real say that matters. The last three rungs, partnership, delegated power and citizen control at the top of the ladder, are termed “citizen power” and this is where true and meaningful participation takes place.

Combining the two concepts, “community” and “participation”, community participation can be conceptualised as the process by which community members, government officials and development partners collaborate to undertake a development project in a formal or informal partnership. Community participation was an outcome of the public pressure demanding “environmental justice” and so by extension the idea or principle could be adopted for improving environmental sanitation in a given geographical space (Utami *et al.*, 2018). The advocates of community participation believe it is not only a means of getting things done but it also has lasting benefits to people who engage in it.

Botes and van Rensburg, (2000) hinted that, broadly speaking, community participation can be of two types, namely top-down and bottom-up initiatives and programmes. These two processes differ on the basis of whether governments/implementing agencies or the communities have the overall control of the programme. While the top-down approach is imposed, the bottom-up is self-chosen by the people but there can be an overlap between the two. However, Stern and Dillman (2006) explained that in the top-down model of participation, the government or the implementing agency decides and provides for the communities, leading to lethargy among the community members. Stern and Dillman (2006) presented an alternative to the top-down model in the form of a “partnership model” where the governments and communities work together in planning and making decisions with long-lasting results. In the view of Shabangu and Khalo (2008), the concept of participation connotes a “means” and an “end” in development interventions theory. As a means, it is a form of mobilisation to get things done and where it is interpreted as an end, the objective is not a fixed quantifiable development goal but a process whose outcome is increasingly meaningful in the development process (Mariana, 2008; Mohammadi *et al.*, 2018).

The ecological perspective of the community participation theory explains how living in poor communities can negatively impact residents and how through communal efforts the citizens can be empowered to act, leading to positive outcomes for the residents. The perspective argues that community residents’ individual and collective efforts and capacities could be leveraged to address unpleasant community challenges such as environmental sanitation (Sidorenko, 2006). Ohmer (2010) reinforced the argument by opining that citizen participation enhances the effectiveness of community-based social work strategies by strengthening residents’ participation in democratic processes, empowering them to press for their needs and developing community problem-solving skills and capacities. Additionally, studies (Sidorenko, 2006; Mwiru, 2015; Purnomon *et al.*, 2017) have proven that neighbourhood social processes, such as community participation, can help reduce the negative effects of

living in poor communities, thus making community participation an important method for promoting community-based interventions. Mohammadi *et al.* (2018) concluded that community participation is a vehicle through which individuals and community-based organisations such as the youth, faith-based organisation, traditional authorities could partner with government and other development partners to improve the local social systems and physical environment for sustainable community development.

### Methodology

This study was undertaken in the ETA in the Komenda-Edina-Eguafo-Abrem Municipality of the Central Region of Ghana. The choice of this site was informed by the fact that the area is the hub of socio-economic and cultural activities such as fishing, tourism and festival in the country. It is also a historic area, being the first part of Ghana and West Africa to experience Western civilisation from Europe (Reed, 2006). The Portuguese arrived in the capital of the traditional area, Elmina in 1471 and built a castle in the area in 1482, which is currently a world monument of historical importance, attracting global attention through tourism (Reed, 2006). However, environmental sanitation (open defecation and poor waste disposal practices) is so poor in the area. This, not only affects the quality and sustainability of the physical environment, but also the promotion of tourism and fishing activities in the area, which have high potential for livelihood opportunities for the local people in particular, and the people of Ghana at large.

The study used the qualitative design. This study design was adopted because of its flexibility for probing for adequate empirical information relating to the objective and theoretical underpinning of the study. The approach also allows for exploration and examination of issues in detail, using the inductive method. Therefore, the rationale for using qualitative approach was to have detailed information regarding the views, opinions, experiences and perception of key informants in order to understand the social and attitudinal issues associated with the complicated sanitation problem in the study area. It is important to point out that a similar study had already been conducted in a different geographic setting in Ghana, using the quantitative approach. But, according to Patton (2002), the sanitation problem is so complex that most of the key issues of concerns cannot be captured with constructs and variables that can be measured with numbers and analysed through rigorous statistical procedures. Furthermore, Cheng and Metcalfe (2018) posited that the qualitative design could be used for evaluative studies involving complex phenomena. Most sanitation studies in Ghana have been conducted at the household level using quantitative approaches, thus, relegating data that are not amenable to statistical analysis to the background. This study was undertaken at the community level and was primarily interested in the key informants' views and not household views, hence the use of qualitative approach for the study.

Data were gathered from key informants in 9 out of 25 communities in the study area, which has 8 coastal (predominantly fishing) communities and 16 forest (farming) communities. Three out of the eight coastal communities were selected. These were Elmina, Bantuma and Ampanyi. Elmina was purposively selected because it was the capital of the traditional area, whereas the other two coastal communities were randomly selected from the remaining seven coastal communities using the simple random sampling technique. Six out of the sixteen forest communities were also selected using the simple random technique (the lottery method). The selected farming communities were Abeyee, Amoanda, Atonkwa, Bronyibema, Essaman and Sanka. The community level study participants were opinion leaders such as youth leaders, traditional authorities, religious leaders, assemblymen, as well as ordinary residents (farmers, fisher-folks, traders, artisans and civil/public servants). Additional data were gathered from Environmental Health Officers of the KEEA Municipal Assembly as the government representatives and two staff of Zoomlion Sanitation

Company in the ETA. The selected communities, categories of respondents and data collection methods are presented in Table I.

The farmers, traders, fisher-folks and artisans were engaged in focus group discussions (FGDs) using FGD guides, whereas the rest of the participants were involved in In-depth (IDI) interviews using IDI guides. The instruments covered issues on awareness about the NSD, participation in the day, views on effectiveness of the model in terms of comparing the sanitation situation in the communities before and after the introduction of the NSD, as well as the challenges of the model. Participation was operationalized in terms of taking part in decision making and partaking in activities such as communal cleaning exercises in respect of the NSD. Data collection took place in November and December, 2018 by the lead researcher and three trained research assistants who were conversant with the English and local languages as well as qualitative research. The instruments were approved by research supervisors at the Institute of Development Studies of the University of Cape Coast.

Convenient dates, times and venues were arranged with the participants beforehand. This offered an opportunity to interact with the participants in their own environment, language and time to explore adequately to understand their experiences and perceptions regarding the issues at stake. For ethical reasons, the purpose of the study was explained to each participant who agreed to take part in the study. For anonymity and confidentiality sake, the respondents were also assured that the study was intended for academic purpose and so the data or information they would provide would not be divulged to any third party, neither would their names be directly associated with any portion of the resultant report in a manner that would disclose their identities. The respondents signed or thumb-printed informed consent forms depending on their literacy levels to confirm their voluntary participation in the study. Data were recorded with the consent of the participants and where permission for recording was declined, detailed hand-written notes were taken. After conducting 16 FGDs and 27 IDIs, data saturation was reached since at this point no more new information was emerging, implying enough information to answer the research question had been obtained and so additional information was needless. Eight of the FGDs were conducted with females and eight with males. They were separated because, for cultural reasons, some females and males were not comfortable talking frankly in the presence of the opposite sex. Each FGD consisted of between 6 and 12 participants.

An iterative data analysis process started with the transcription of the raw field data and typing of field notes that were then read several times in order to be familiar with it. Data-driven coding was done manually to compress the transcribed data into easily understandable concepts and notes. This took the form of categorising the data into

Ecology/occupation	Communities	Focus group discussions	Key informant interviews
<i>Coastal</i>			
Fisher-folks	Elmina	3	Municipal Sanitation Officers (2)
Artisans	Bantuma	2	Zoomlion Company Staff (2)
Traders	Ampanyi	2	Environmental Protection Agency Officer (1)
<i>Forest</i>			
Farmers	Abeyee	2	Assemblymen/women (3)
Artisans	Amoanda	1	Youth Group Leaders (4)
Traders	Atonkwa	1	Queen mothers (2)
	Bronyibema	2	Community Chiefs (3)
	Essaman	2	Religious Leaders (2)
	Sanka	1	Ordinary Residents (4)
			Civil/Public/Servants (4)
	Total	16	27

**Table I.**  
Selected communities,  
participants and data  
collection methods

concepts and patterns, with notes written in pencil on key issues. Another round of coding followed the initial coding in the form of axial coding that further summarised the coded data. Coding saturation was attained when it was realised that there were no additional data to develop properties of the categories. In other words, there were no new codes occurring in the data. Data were built around central themes or patterns and then categorised and examined to gain deeper insights into the meaning of the data. Data were validated in order to ensure accuracy, reliability and consistency and dependability of the results. This was done through discussion with the research assistants and allowing them to provide comments on the organised data. Based on the comments, linkages among the themes were distilled and the findings and outcomes synthesised guided by the research objectives. The analysed data were presented as a final report under broad themes using the thick descriptions and interpretive narrative approach. Most significant stories and direct quotes from respondents were also captured for further illustrations and emphasis. Though as a qualitative study, statistical analysis was not very necessary, simple frequencies and percentages were computed and used to support the qualitative descriptions, where possible and necessary. The rationale was to compare the basic statistics with findings from other similar studies.

### **Results and discussion**

The section is structured under the following sub-topics: community awareness of the NSD, participation in the NSD, effectiveness of the NSD and challenges of the NSD. The section is followed by conclusion and policy implications.

#### *Community awareness of the National Sanitation Day*

Environmental awareness could increase environmental stewardship and the likelihood of peoples' participation in ESM. Promoting this awareness, according to Abalo *et al.* (2017), is a key factor that needs to be given attention in promoting the NSD for the expected results. Community level respondents were asked about their awareness of the NSD. Responses from both the IDI and FGDs indicated high awareness of the NSD as exemplified by the following quotes:

We are aware that the government has set aside a day in every month as NSD on which the community members mobilise themselves or are mobilised by the community leaders and government representatives such as the assemblymen and women, for communal cleaning exercises. This started about four years ago. When it started, announcements were made on the radio and television so we heard about it (FGD, Male Artisans, Essaman).

Yes, I am aware of the special sanitation initiative known as the NSD. It occurs on the first Saturday of every month. (Traditional Chief, Abeyee).

I know about the NSD in Ghana. It was launched in 2014. The first Saturday of every month is a National Sanitation Day in Ghana (Male Civil Servant, Bantuma).

We heard something about the NSD but because of the communal labour system which existed before the introduction of this new model, the new one is not so popular in this community (FGD, Female Farmers, Sanka).

Yes we know about the NSD. It was announced on radio and TV some time ago. The local assemblyman also talked about it (FGD, Female Traders, Ampanyi).

It can be deduced from the stories above that awareness about the NSD was high in the communities in the traditional area. Apart from these five quotes, the responses from most of the other interviewees and discussants confirmed that awareness about the NSD was high. In fact, the traders, artisans, traditional authorities and most other categories of



respondents in all the communities said they were aware of the NSD. Some were able to indicate that the NSD happened on the first Saturday day of every month and made reference to the media through which they heard about it. The media included the radio, television, local information centres and local assemblymen, thus confirming their knowledge about the NSD intervention. It was only one interviewee (ordinary resident) at Abeyee who said she was not aware of the NSD.

However some, very few though, of the fisher-folks and farmers confused the NSD with the communal labour which had been in existence before the launch and implementation of the NSD. This implies that there was the need for more information on the NSD so that people would be able to distinguish it from the existing arrangements for community sanitation management programmes. It must be noted that the distinction would enable the residents to accord the NSD the importance and attention it deserves, which could increase participation and effectiveness of the intervention. This analysis is consistent with findings by Shrestha (2011) in a study on “community perception of sanitation in Nepal”. Shrestha observed that awareness of environmental sanitation by community members had the potential to increase participation in communal clean-up exercise.

It became evident from the responses of the key informant interviews that 26 out of 27 (96.3 per cent) were aware of the NSD. Similarly, Abalo *et al.* (2017) reported a high level of awareness (95 per cent) of the NSD in their similar study on the NSD at Aboabo in Ghana, which is consistent with the finding (96.3 per cent) of this study.

### **Participation in the National Sanitation Day**

Awareness is necessary but not a sufficient factor for ensuring the effectiveness of an intervention. One of the key indicators of effectiveness of the NSD as identified from literature (Abalo *et al.*, 2017; Day, 1997) is the participation by the stakeholders, especially at the community level. This is important because the rationale behind the NSD idea was to engender community participation for improving sanitation. Respondents were asked to give their perspectives of the level of community participation in the NSD based on their experiences since the model was introduced. The following most significant stories quoted from some of the participants’ responses, typify the views of the various categories of the study participants on the issue of participation in the NSD:

Participation has not been encouraging at all. We, are fishers. We go to sea every day except Tuesdays which are taboo days for fishing here. So almost every Tuesday there is communal labour in the town and it is during such occasions that we clean the community. On Saturdays we go for fishing so not many of us can take part in the NSD which falls on Saturdays. For the communal labour, if you do not take part you will be sanctioned by the community chief and his elders so people take it seriously but the NSD is voluntary and so there are no sanctions attached to non-participation in it (FGD, Fishermen, Bantuma).

In this community most of the residents are farmers. The farmlands belong to different clans and the various clans have different taboo days on which the gods of the land prohibit people from farming on the land. Nonetheless, the general taboo day set aside by the community is Wednesday and it is on this day that the community people undertake communal labour to rid the community of filth or undertake any communal project for community development. It is a weekly affair and so people take note of that and comply accordingly in order to avoid punishment by the community authorities. This has been the practice here since time immemorial and it has been quite effective so far. We have heard that the government has declared a NSD which is observed on the first Saturday of every month. However, we have never participated in the NSD since it was declared because we have our own day for undertaking such activities. No consultation was done by the government before the NSD was launched and implemented. The government should have rather strengthened the local structures for effective community level sanitation management for ownership and mass participation purposes (Traditional Chief, Abeyee).

It can be adduced from the quotes that the government did not engage with local level leadership before the day was fixed which confirmed Manteaw's (2017) assertion that the NSD programme was ineffective because it was top-down, conceptually incoherent; inherently paternalistic and therefore lacked community ownership. It is clear that the lack of local ownership resulted in apathy and lack of participation. It also reinforces the community participation theory's emphasis on the need to use the bottom-up approach for community-based initiatives such as the NSD. Contrastingly, however, Perkins *et al.* (1996) observed that civic responsibility and community attachments in poor communities are positively related to participation in grassroots community development efforts. Additionally, it confirms Ainstein's classification at the lower rungs of the ladders that are associated with non-participation. For example, the lowest rung conform to non-participation, whereas the middle rungs conform to tokenism, neither of which is associated with effective participatory results.

At Elmina, Atonkwa, Bronyibema, Essaman and Bantuma, it was opined by civil servants, youth leaders, assemblyman, traditional leaders and religious leaders, respectively, that at the onset of the NSD, the intervention was greeted with high turn-out and fanfare because the publicity that heralded it was quite high and so the people were expectant. According to the respondents, when it started, community members collaborated with their elected representatives, sanitation management companies and opinion leaders to clean the community. The government representatives such as the municipal chief executive, the municipal co-ordinating director and environmental sanitation officers as well as the paramount chief and some of the sub-chiefs were present during the first few editions of the intervention. However, what started on a very promising note soon began losing enthusiasm, fervour and effectiveness because the subsequent ones after the first few editions did not witness such massive participation.

It is gathered from the foregoing that, in both the coastal and forest communities, participation in the NSD was low. However, it can be argued that it was even lower in the forest communities than the coastal ones as participation was even zero in some of the forest communities such as Abeyee where it was reported that the community had never participated in the NSD since its launch in 2014. This could be explained by the fact that in the coastal communities such as Elmina and Bantuma, the municipal chief executive was reported to have participated in the first few editions but this did not happen in any of the forest communities.

### **Effectiveness of the National Sanitation Day**

For the purpose of assessing the effectiveness of the NSD, respondents were asked to make perceptual comparisons of the sanitation situation in the communities before and after the implementation of the NSD model. As explained under methodology concerning the qualitative study design, both focus group discussants and individual key informants were asked to indicate their views on the issue of effectiveness of the NSD. Although the data concerning this issue were analysed and presented qualitatively in accordance with the study design, simple frequencies and percentages were also computed and reported. The rationale for this was to give readers some basic statistical information on the effectiveness of the NSD to support the qualitative evidence.

An interview with a male civil servant at Bantuma and FGDs with female artisans, female fishmongers and male farmers at Essaman, Elmina and Amonada, respectively, showed that the NSD had not been remarkably effective in their respective communities. All these respondents (100 per cent) reported that, before the NSD was launched, people were defecating at the beach and in the bush. They added that drains and gutters were choked and the streets were dirty because people were littering indiscriminately. These respondents observed that the unacceptable sanitation practices were still happening after

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four years of the implementation of the NSD. Each of the respondents further added that the sanitation situation was not any better because the problem was largely attitudinal and so until the laws are strictly enforced by the government, insanitary conditions will continue to define the landscapes. Typical of the community level respondents views, in an interview with a male civil servant at Elmina, he reported that:

NSD or no NSD there is no change with regard to environmental cleanliness in this community. This is attributable to the poor attitude of the people toward sanitation. People still defecate at the beach and dispose of waste anywhere, so the essence and purpose of the NSD is defeated.

The above reports are consistent with Matheaw's (2017) observation about the effectiveness of the NSD as a method for improving environmental sanitation in Ghana. Matheaw (2017) observed that, the NSD has been ineffective because after its launch and implementation, "Ghanaian streets still remain filthy with waste; drains are clogged with plastic waste; people still defecate in the bush and at the beach since many people in the communities still lack toilet facilities in their homes". According to Matheaw, "these are an indication that the sanitation challenges are endemic and require more than 'ineffective monthly sanitation fanfare' like the NSD".

All respondents were asked whether the community people's response to the NSD had been consistently encouraging since it was launched. The rationale was to determine the effectiveness of the NSD model in term of massive participation and consistent adherence to scheduled times. In the farming communities of Bronyibema, Atonkwa and Sanka, it became evident that the NSD had not been effective in terms of community response regarding turn-out for the events and adherence to scheduled days. During the FGDs with the farmers, artisans and traders, as well as interviews with traditional leaders, they said that the turn-out for the NSD events was massive only during the early days of the implementation. The same respondents pointed out that with passage of time, the turn-out for the NSD reduced drastically by the month until it got to a time that the day was not observed at all when the time was due. In addition, the most significant stories gleaned from the artisans, farmers and traders responses indicated that, considering the sanitation situation with respect to the state of the physical environment and attitudes of the people to sanitation, there was virtually no difference between the pre-NSD era and the post-NSD era.

A religious leader, fishmongers and a civil servant at Ampanyi, Bantuman and Elmina, respectively, pointed out in interviews and FGDs with them that the NSD was a "nine-day wonder". It was gleaned from these participants' reports that in these coastal communities, the very first edition witnessed a massive turn-out because it was new and the sensitisation that preceded it was great. According to the religious leaders and civil servants, the radio and television stations as well as the newspapers and local assemblymen/women publicised the day very well in the communities; hence, the relatively massive turn-out was observed during the first few editions. However, these same respondents were all quick to add that the NSD was not effective because there was not much difference in terms of the sanitation situation before and after the NSD, whether the issue was considered from the angle of community participation, improvement in physical environment or people's attitude towards sanitation.

Respondents were asked whether the NSD was observed in the last three months preceding the date of interview or FGD. The rationale was to find out whether the NSD was still being observed or not. The response was "no" from all participants of the FGDs in all the study communities, whereas all the individual interviewees also said no. This means that all participants (100 per cent) reported that the NSD was no longer being observed at the time of data collection. In addition, it was reported by all respondents that, whether before or after the NSD, sorting of solid waste by community members was not done. This is contrary to best practices in ESM and constitutes a further confirmation of the

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ineffectiveness of the NSD in ETA. It will be recalled from the literature review that one of the objectives of the NSD, according to Suna (2015), was to sensitise the populace on solid waste sorting and other best practices on waste management.

The traditional authorities in all the communities except Abeyee pointed out in separate interviews with them that the youth, Zoomlion Company, the government representative such as the municipal chief executive, environmental sanitation officers, as well as other prominent people in society took part in observing the NSD during the first few editions and so the masses were somehow motivated to join. The traditional authorities (chiefs and queen mothers) also reported that there was also some form of education on the need to stop open defecation and indiscriminate littering as well as sorting of waste. Logistics, including shovel, rakes, litter bins and vehicles were made available by Zoomlion Company and the Municipal Assembly in some communities such as Elmina and Bantuma. However, according to the same respondents, the enthusiasm that characterised the first edition started waning in the subsequent editions because publicity reduced and the logistics that were available for the first edition also either reduced drastically or were no longer forthcoming. In conclusion, these respondents submitted that the communities became quite clean during the first few editions but it was momentary, so judging from the angle of sustained participation and lasting substantial impact, the NSD could be credited with very little achievement, if any at all. This supports the evidence (Faniran, 2016) from monthly environmental sanitation exercise in Ibadan municipality, Nigeria that the landscape of the study area was often dotted with heaps of uncollected waste several days after the completion of the clean-up exercise.

In the case of the Abeyee community, all the focus group discussants and key informants categorically said the effectiveness of the NSD could not be talked about because the community never participated in it. In the words of a farmer at Abeyee:

[...] one can't talk about NSD in this community. We have heard about it but this community has never observed the day as such. I have been in this community all this while, so if anything of the sort ever had happened, I would have known about it because it's a communal affair and not private matter [...].

The story was not any remarkably different from what was reported at Sanka and Atonkwa where it was made clear by all the participants the community that there was nothing to show regarding the effectiveness of the NSD. The youth, the farmers as well as the traditional and religious leaders in all the communities pointed out that unlike the communal labour model which was quite effective, the NSD was not effective in terms of community participation. In an interview with a queen mother at Sanka, for instance, she stated that, through their usual communal labour and assistance from a philanthropist, a public toilet had been provided for the community in 2016 but no achievement could be attributed to the NSD in the community. On his part, an assemblyman at Bronyibema had this to say during the interview about the effectiveness of the NSD:

When the ESD was introduced the community became clean for some time. However, it was very short-lived so in terms of effectiveness regarding sustained participation and education, it cannot be said to have achieved much but at least some awareness has been created no matter how insignificant. It was good the government introduced it but it has not been sustained to enable it realise its full potential in terms of benefits to be derived from it.

In an interview with an Environmental Health Officer (EHO) from the KEEA Municipal Assembly, he made this point; "what I can say regarding the NSD's achievement or effectiveness is that, it has reinforced the communal labour model which existed before the NSD model was introduced. It has, to some extent, re-awakened the communal spirit and consciousness of the people about the need to utilise community efforts and energy to improve sanitation. If for nothing at all, the day is marked not only with clean-up exercises

but also some sensitisation on sorting of waste, open defecation, indiscriminate littering and the need for every household to have a toilet facility. This, I believe has gone down well with at least some of the residents". The EHO further indicated that since NSD was instituted after the cholera outbreak in 2014, the communities in the ETA had not recorded any such outbreak again so it could be argued that it had helped to save the people from the frequent occurrences of sanitation related diseases. In addition to this, a Zoomlion Officer indicated that with the introduction of the NSD, some skips and litre bins had been provided for some households and at vantage points in some communities such as Elmina, Bronyibema and Bantuma for collection of waste, thus helping to keep the communities clean. According to the Zoomlion staff, what still needed to be worked on was the attitude of the community people to environmental sanitation.

In general, the traders and artisans were of the view that there had not been much improvement, if any at all, in people's attitude towards sanitation in the communities with the declaration of the NSD. In the collective view of the artisans, the education component of the day had been inadequate and ineffective, the logistics were no longer provided for the community cleaning exercises, whereas defaulters were not being sanctioned. According to the traders the issues was that, unlike the communal labour system where defaulters were sanctioned for not participating in the exercise, those who refused to take part in the NSD were not punished; therefore, people felt that participation in the NSD was optional or voluntary and so they could choose to attend or not.

The EHO interviewed could not be specific on whether NSD had so far been effective or not. In his response to a question on his opinion on the effectiveness of the intervention he stated that "whatever it is, lessons have been learned that should inform new approaches in managing issues of environmental sanitation in the communities". According to the officer "it is clear now that sanitation consciousness cannot be raised through top-down edicts that ignore the existential realities of people living in their local communities. There is the need for effective approaches and this should begin with awareness creation and partnership building to help the local people to come to terms with why they should contribute to a clean and healthy environment".

From the key informants' interviews, about 78 per cent of the respondents said the NSD had not been effective, whereas the rest were undecided regarding its effectiveness. From the foregoing, it could be argued that the dominant view held by the respondents about the NSD was that it had so far not been effective as a community-participatory sanitation management approach. This corroborated the finding by Faniran (2016) in his study on solid waste management during monthly environmental sanitation exercise in Ibadan municipality, Nigeria. In the study, Faniran (2016) observed that the huge sums of money expended on the collection of solid waste emerging from the NSD exercise had not yielded desired results.

### **Challenges of the environmental sanitation day**

Having established that the NSD had so far not been effective, the next question that was posed to the study participants bordered on the contributory factors to the model's ineffectiveness. In this respect, it was learnt from the community-based duty-bearers such as the traditional, religious and youth leaders that they were not consulted at the planning stage of the intervention. A traditional leader at Abeyee, for instance, had this to say:

[...] we were not consulted at the planning stage of the model. All we heard was that the government had set aside the first Saturday of every month as a NSD in Ghana. We have always advised that it is proper to involve us in planning programmes that affect us and will need our participation. Involving us at the planning stage will enable us make inputs that could inform the planning and implementation because we know the local terrain better. Now we have our own day for community cleaning exercises and that of the government as well. If they had involved us at the

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planning stage we could have advised them to let the NSD coincide with ours, in which case we could have strengthened it to make it more effective. The apathy towards the NSD which we are witnessing now would not have been so [...].

The response above which was shared by other local chiefs and other opinion leaders justifies why the participation theory frowns on the top-down approach for community-based interventions. In this regard, Stern and Dillman (2006) as well as Mwiru (2015) explained that with the top-down model of participation, the government or the implementing agency decides for the communities and this brings about lethargy among the citizens or the community members. According to the authors, the bottom-up approach is an alternative to the top-down fosters partnership between the governments and communities to work together in planning and implementing the project or programme.

In the view of some artisans, farmers, fisher-folks, youth, religious leaders and civil servants, the challenge related to politics. In an FGD with male artisans at Elmina, for instance, it was reported that some of the residents had lukewarm attitude towards the NSD because their party was not in power. This quote illustrates this argument:

When the NSD was introduced in the previous government's time, people who were sympathisers of the political party in power were quite active but since the new government took office, some of those people have relaxed. Members or supporters of the new administration were also doing the same thing when the old administration was in power. In this country, the lines are virtually drawn between the two major political parties and the respective members and supporters of these parties do not want to support their opponents to succeed in order to take credit.

A Zoomlion officer, on the contrary, said there was little motivation to participate because soon after the day was observed, the community became dirty again due to negative sanitation behaviour of the general public. This evidence further corroborated Faniran's (2016) finding that few hours after observing the sanitation day in Ibadan, the landscape often became dotted with waste. Furthermore, the youth leaders at Bronyibema and traders from Elmina and Bantuma reported that logistics such as shovels, spades and, wheelbarrows, litre bins and vehicles were often insufficient during NSDs for collection of waste for final disposal. As a result, they argued, that the garbage that was heaped from the de-silted gutters or drains were not collected and disposed of, so it found its way back into the gutters and drains, and therefore, there was little incentive or motivation to participate in the NSD.

Some opinion leaders saw the NSD as synonymous with communal labour and wondered if the rationale was to replace the age-old communal labour system with the NSD, whereas other opinion leaders saw the publicity of the day as low. The following quote summarises the voice of the said opinion leaders on the NSD:

Participation in the NSD has been low because we were engaging in communal labour before that day was declared. Apart from that, the publicity of the day has been low. So far publicity has been carried out principally through radio and television. Other community based avenues for publicising the day such as the opinion leaders, churches, mosques and youth groups have been ignored, or at best, underutilised. Besides, the day is observed mainly on regional basis and mostly in big towns so the people in the villages think that it is a regional affair. Even at the regional level, active participation has so far been limited to the regional capitals. The observance of the day needs further decentralisation to engender massive grassroots participation (FGD, Male Farmers, Atonkwa).

This quote supports the evidence about the role of publicity in creating awareness and engendering effective participation in the NSD for improved environmental sanitation. Dhokhikah *et al.* (2015) found that awareness creation through radio, television and print media are important for mobilising community members for sanitation but even more effective at the community level is the dissemination of the information by the community-based structures such as the traditional authorities, the religious leaders and the youth.

In an FGD with female farmers at Sanka the general consensus was that while the traditional communal labour model was championed by the traditional leaders who were non-partisan but rather unifiers, the NSD was being spearheaded by people perceived as politicians, using the initiative to score political marks. This was confirmed by some civil servants, traders, artisans and an assemblyman who argued that if politics was not taken out of the implementation of the NSD, the sustainability of the day would be threatened and eventually jeopardised. This report is in line with Saei's *et al.* (2012) observation and consequent warning about the negative effects of politics on sanitation management in New Delhi and Manila Metropolises in India. Furthermore, a civil servant at Elmina reported that:

For me I see the sanitation challenge we are facing in this community in particular and Ghana in general as attitudinal in nature. There is too much apathy and carefree attitude in our society. People defecate anywhere and dispose of waste anywhere not because they do not know that what they are doing is not good or are unaware of its implications. In the same vein people refuse to take part in the NSD not because they are not aware of it but they simply do not care. Some people have practised open defecation and indiscriminate waste disposal for a long time and are used to the practice, and therefore are finding it difficult to change for the better. Such people have the same negative attitude towards the NSD as well and that is why turn-out is either so low or nil. Since the new government took over from the previous one in 2017 the day has been observed only a few times and attendance was low on most occasions. For the first two in 2017, because of the euphoria of the change of government the supporters of the current government mobilised themselves and attended massively, just like the supporters of previous government did in 2014, but since then they have also stopped. So far the intervention has not been effective due to apathy and politics.

This quote goes to further consolidate the views that non-participation in, and for that matter ineffectiveness of the NSD could be attributed to attitude, politics and other institutional factors.

### Conclusions and policy implications

It is evident from the study that community awareness of the NSD in the study prefecture was high (96.3 per cent) but participation in activities that marked the day was low. Abalo *et al.* (2017) made almost the same finding (95 per cent awareness) and conclusions in their similar studies in Aboabo in Ghana. The evidence suggests that the planning of the NSD took the top-down approach instead of the bottom-up approach; hence, the citizens at the grassroots were involved only at the implementation stage but not at the planning stage. This is contrary to the tenets of the theory of community participation which advocates the involvement of the beneficiaries of an intervention in both the planning and implementation of the intervention in order to ensure ownership and sustainability of the endeavour.

The general view was that the NSD was ineffective as the sanitation situation and for that matter environmental quality was not substantially different from what the situation was before the introduction of the model. Key factors responsible for the NSD's ineffectiveness as a community-participatory model for improving environmental sanitation in the ETA included politics, apathy, inadequate logistics, inadequate publicity and poor attitude to sanitation. Additionally, the NSD created the impression that responsibility towards environmental quality improvement in local communities could be deferred to a later date and that all the community members needed to do as a people was to gather at the end of the month to clean instead of making sanitation management a culture. This appeared to be the underlying unwritten message of the model, which defines cognition and public perception. Thus, the NSD has failed to make the desired impact on environmental quality because it appeared to be conceptually flawed as it was reactive in its approach to addressing a situation which has become notoriously pervasive and obstinately ingrained in individual and community behavioural fabrics.

The observance of the day should be further decentralised to engender more massive grassroots participation. Community-based structures such as the traditional authorities, youth organisations, religious organisations, market women should be well mobilised, organised and motivated to partner government and private sector and other civil society organisations to participate actively in the observance of the day. The date for the NSD could be realigned to coincide with the day set aside by the community members for their communal labour for cleaning the communities so that the people would embrace the idea. In that case, the name of the model could be changed to National Sanitation Week so that every community will have a day in that week as an NSD to coincide with the community's own day and arrangements for community sanitation activities.

Politicians and political party supporters should be cautioned against politicising the implementation of the NSD in order to encourage community people from all political persuasions to collaborate to observe the day. The government should make logistics available for the NSD. The government should involve the local community leaders in planning the activities that mark the day so as to ensure total ownership and commitment on the part of the leaders who will in turn mobilise the masses to embrace and support the day. Local sanitation companies such as the Zoomlion should be encouraged by the government to participate in the day by providing logistics and personnel to support the community members for effective participation in the day for better sanitation outcomes for sustainable development. Ultimately efforts should be directed by the government, through education and regulation, at making sanitation part of the people's culture rather than an occasional or periodic affair.

### **Limitations of the study and suggestion for further research**

The study used the qualitative approach which has its own limitations, including the use of relatively few respondents as well as qualitative analysis and interpretation which are often associated with some level of bias. Although the choice of this design is justified and great was taken to ensure valid, replicable and reliable results, it is suggested that other researchers use the quantitative or the mixed method design to undertake similar studies where more rigorous statistical methods could be used.

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### Corresponding author

Justice Mensah can be contacted at: [justice44mensah@gmail.com](mailto:justice44mensah@gmail.com)

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