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**Participatory Hygiene and Sanitation Transformation
(PHAST): A methodology for sustainable hygiene and
sanitation behavior change with experience from the Bawku
West District of Ghana**

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Abstract:

Despite many efforts by both government and non-governmental organizations in providing water and sanitation infrastructure as well as health and hygiene promotion and education in the Bawku West District of Ghana, little has been achieved in reduction of water and sanitation related diseases and improvement in hygiene behaviors. This may be partially attributed to the ineffectiveness of the approaches and processes used in the sanitation, hygiene and behavior change education in the communities and institutions. The principal objective of this paper is to share World Vision Ghana's experiences in using the F-Diagram as a hygiene, sanitation and behavioral change promotion tool which can be used to enhance effective participation by communities and schools in the hygiene promotion and behavior change process. Results indicate that the F-Diagram is an effective tool for communicating water, sanitation, hygiene and behavior change messages. Its use can create awareness among community people including children of the negative consequences of poor sanitation and hygiene practices. It has also generated high participation in community decision making on water, sanitation, hygiene issues and the desired behavior changes. Identification of applicable tools consistent with the principles of community participation is important in effective sanitation, hygiene and behavioral change promotion.

Introduction

Recognizing the importance of safe drinking water and improved sanitation and hygiene facilities in poverty reduction and transformational development, World Vision Ghana began the Ghana Rural Water Project in 1985. The water and sanitation project is designed to complement other development interventions, and to serve as an entry point for World Vision's assistance to communities. Believing in community members' innate capacity to effect change, World Vision involves project communities in identifying water, sanitation and hygiene problems and solutions through a participatory process and approaches.

The Bawku West District is one of the districts in the Upper East Region of Ghana. It has a total population about 180,436 (CWSA, Tamale, April 2008). The district has benefited from some water intervention organizations such as Community Water Project (COWAP), Rural Aid, and Bawku West Development Agency (BEWDA) in the past. Most of these interventions have been in the form of hand-dug wells and boreholes with few latrines constructed. Despite the intervention in the area, water and sanitation related diseases such as cholera, typhoid, diarrhoea and hepatitis B are still prevalent.

Causes for the prevalence of these diseases are related to lack of maintenance of broken down water facilities (Akudago et al., 2007) and difficulties in behavioral change and community participation in water,

sanitation and hygiene (WASH) issues before and after the installation of the wells. The approach that was used to sensitise community members on WASH issues before and after the provision of WASH facilities might also be a contributing factor to the water and sanitation related disease in the area.

In order to enhance the effective participation of communities and schools in hygiene promotion and behavior change process, the F-Diagram tool has been chosen and adopted in Bawku West District where World Vision is implementing water, sanitation, hygiene and behavioral change activities.

The F-Diagram is one of the many tools in the Participatory Hygiene and Transformation (PHAST) methodology which seeks to vividly describe in detail the fecal oral transmission route. It is a cycle characterized by F's as follows:

- Fluids-the drinking of contaminated water
- Fields-the contamination of soil, crops, fruits etc by human excreta
- Fingers-faecal contamination of fingers/hands
- Food-eating food contaminated with faecal matter
- Flies-which spread diseases from feces to water and food.

In addition to the above, the F-Diagram is characterized by pictures of activities to break/reduce fecal-oral contamination. The methodology uses a variety of visual tools to advance communities discussion on water, sanitation and hygiene issues.

World Vision Ghana's experiences in using the F-Diagram as a hygiene, sanitation and behavioral change promotion tool in its community transformational development process in the Bawku West District is described below.

Implementation of the F-Diagram Tool in Bawku West District

As in any community development work, community entry protocols were adhered to.

These protocols for the initial meeting included the following:

1. All key stakeholders in the districts were informed of World Vision Ghana's water, sanitation and hygiene intervention in the District;
2. Governmental departments such as the District Water and Sanitation Teams (DWST), Environmental Health and Sanitation Department, Ghana Health Service, Ghana Education Service and other decentralized departments were involved and collaborated with for synergic effect;
3. Upon entering the communities, field staffs introduced themselves to the chiefs and elders through the assembly men and women to explain the purpose of the World Vision WASH team in the community.

After this initial meeting, the team requested additional meeting time for further interaction with the communities. During the subsequent meetings, the following activities were carried out in a participatory way.

Step 1: Community mapping and profiling were undertaken to enable the WASH team to have a better understanding of the community in terms of its topography, physical layout, demography, resources, existing leaders, and institutions.

Step 2: Defecating areas were identified through a transect walk with some community members especially youth and children.

Step 3: After further familiarization with the community members, the community was divided into manageable groups for community dialogue on issues on water, sanitation and hygiene using participatory approaches.

Step 4: All the groups were brought together to discuss the findings of each group regarding water, sanitation and hygiene in the community and possible solutions were identified using resources in their communities with little external support. At this point, the F-Diagram was introduced to clearly identify and emphasize the current WASH sanitation and its implication on the health of individuals and the communities at large.

FINDINGS/EXPERIENCES

- The use of the F-Diagram was particularly useful when coupled with community mapping as it enabled the community members, including children, to clearly understand their water and sanitation needs. In all the communities, the people became aware of the effect of their poor sanitation and hygiene practices, including open defecation, failure to wash their hands at critical times and covering of their foods. Using the F-Diagram for the discussion, community members understood how their food and water sources are contaminated and the health and cost implications. Many of the women in particular, attributed diarrhea cases in their communities to their own poor hygiene and sanitation practices. This awareness and the link between poor sanitation and ill-health has led to high demand for safe drinking water and household and institutional latrine facilities in all the. The use of the F-Diagram tool in sanitation and hygiene education and behavioral change promotion has enabled the communities to understand diseases caused by poor environmental sanitation and hygiene practices.
- The use of F-Diagram facilitated planning of water, sanitation and hygiene activities in the communities. Through facilitation, communities developed their own plans of how to solve their water and sanitation needs.
- In addition, the F-Diagram provided a vivid explanation of the fecal-oral transmission routes in a very simple way. As a result of this deep understanding which children developed in fecal-oral transmission routes using the F-Diagram tool, the children have begun facilitating peer-to-peer education in schools and communities as shown in the picture below. In Figure 3, a school child is explaining fecal-oral transmission route with the aid of the F-Diagram to his colleagues

Furthermore, the use of the F-Diagram in target communities in the Bawku West District encouraged free expression on hygiene and sanitation issues by women and girls who in most cases, due to cultural reasons, are skeptical and careful in participating in community discussions. Women were particularly enthusiastic in discussing the consequences of the community's hygiene and sanitation practices as well as suggesting practical solutions. Using the F-Diagram, it was discovered that, many women were ignorant about the dangers of their children's feces. It is always important to target women for behavioral change since they are the principal caregivers in the household. Therefore the understanding of women for sanitation and hygiene is key to reducing water and sanitation related diseases.

- The F-Diagram is fun! It is also fun using the F-Diagram as a sanitation and hygiene promotion tool to educate community members on the fecal-oral transmission route and it has generated much interest in water, sanitation and hygiene issues among all groups of people in the communities as shown in picture 7.

LESSONS LEARNED

Some of the lessons learned as a result of the use of the F-Diagram include the following:

- Identification of applicable tools consistent with the principles of community participation is important in effective sanitation, hygiene and behavioral change promotion. The methodological approach of the F-Diagram in explaining the fecal-oral transmission route has helped in the

understanding of the effects of open defecation on water sources, food, health and well-being. It also motivated the actions to be taken to solve these problems.

- The process and approach to identifying community development problems are very important and central to encouraging community participation and the resultant program sustainability. Through the careful and well-chosen process and approach to hygiene and sanitation promotion, World Vision communities in Bawku West now understand the consequences of open defecation and the need to own and use household latrines, have safe drinking water sources like boreholes, and contribute to the repair and maintenance of water and sanitation facilities.
- In these villages, issues about sanitation and hygiene, especially feces, are not normally discussed openly due to cultural reasons. People shy away from this topic. However, the use of the F-Diagram tool broke down these socio-cultural barriers, making the F-Diagram an effective tool in initiating and sustaining discussion on sensitive yet important development issues and eliciting significant response from all social groups in a community. The F-Diagram characterized by colorful visual representations is attractive to children as they participated equally in the discussion on the effects of open defecation and poor sanitary practices. This is very important because behaviors that these children learn at an early age are internalized and reflected in their actions later in life. They are also likely to pass on these behaviors to their peers, families and their offspring.
- The F-Diagram can be used as a springboard for introducing Community Led Total Sanitation (CLTS) as well as School Led Total Sanitation (SLTS) since the visual tools speak strongly against the practice of open defecation.
- This tool has led to the demand for latrines in the target communities. Moreover, it helped the communities to develop innovative and practical ways to stop open defecation. The use of the F-Diagram was particularly useful when coupled with the Sanitation Ladder as it offers the community some technological choices as well as some options like the 'dig and bury' option. This therefore can lead to a gradual improvement in safe excreta disposal until the households are able to reach a capacity where they can afford their own standardized latrines. This together with appropriate hygiene practices, such as handwashing with soap, will lead to healthy communities. This is very important because, without appropriate hygiene behavior, the provision and use of latrines alone will not be able to prevent contamination. This is clearly illustrated by the F-Diagram and its various preventive measures.
- The level of formal education was no barrier to understanding and analyzing sanitation and hygiene problems for the communities. Opportunities were given to community members, no matter their age and educational background, to actively contribute to the process. This was demonstrated clearly by the people in Bawku West communities when the PHAST tool was used.
- It is not enough to tell community members verbally that defecating openly can cause diseases because of invisible germs. However, the F-Diagram offered a solution as it gave a visual explanation and understanding of the link between open defecation and their health status

CONCLUSION

The F-Diagram is an effective tool in communicating water, sanitation, hygiene and behavior change messages. It has created awareness among community people including children of the negative consequences of poor sanitation and hygiene practices. It has also generated high participation in community decision making on water, sanitation, hygiene issues and the desired behavior changes.

Identification of applicable tools consistent with the principles of community participation is important in effective sanitation, hygiene and behavioral change promotion

Reference

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