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Effectiveness of the Home Improvement Campaign Cluster Approach in increasing acceptability and use of latrines in the Karamoja sub-region.



December 2022



Acknowledgements

We acknowledge the contribution of the entire study team which ensured the compilation of this report. We would like to express our gratitude to Catholic Relief Services (CRS) - Nuyok team for entrusting and giving us the opportunity to assess the effectiveness of the Home Improvement Campaign (HIC) Cluster Approach in increasing acceptability and use of latrines in the Karamoja sub-region. We are particularly thankful to Mr. Achunge Felix, Nuyok Water, Sanitation and Hygiene (WASH) Technical Advisor for his technical support and guidance throughout the entire assignment.

We particularly, recognise and appreciate the overall team leadership and technical support provided by Mr. Kaddu Zachary (Team Leader) and Mr. Emadu Daniel (WASH Expert) throughout the completion of this report. We also recognise the support of our field team for the great support given in this assessment. To our Field Supervisors and Research Assistants, we say thank you.

We are deeply grateful to all cluster and non-members who shared their time and experience during the assessment process. Particularly, communities of Moroto, Nakapiripirit, Napak and Nabilatuk districts.

Finally, we acknowledge the great support from Lukwago Frank, Tenywa Hussein and Bwamiki Grace.

Consultants:

Jeeva Consult International Ltd

Cover Page Photo Credit: A homestead with a latrine, bathing facility and handwashing tippy-tap in Opopongo village, Nyakwae sub-county, Abim district, Karamoja (December 2021, Felix Achunge, CRS)

Disclaimer: This assessment was made possible by the support of the American people through the United States Agency for International Development (USAID/BHA). The contents of the report are the sole responsibility of Catholic Relief Services (CRS) and do not necessarily reflect the views of USAID BHA or the United States government.

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Acronyms

ABEK	Alternative Basic Education for Karamoja
ADRA	Adventist Development and Relief Agency
ADWO	Assistant District Water Officer
BHA	Bureau for Humanitarian Assistance
CDC	Centre for Disease Control
CLTS	Community-Led Total Sanitation
CRS	Catholic Relief Services
CU5	Children Under Five years of age
DFSA	Development Food Security Activities
EH	Environmental Health
FFP	Food for Peace
FGD	Focus Group Discussion
FY	Financial Year
GoU	Government of Uganda
HIC	Home Improvement Campaign
IRB	Institutional Review Board
KII	Key Informant Interview
LC1	Local Council One
MTE	Mid Term Evaluation
OD	Open Defecation
ODF	Open Defecation Free
PHAST	Participatory Hygiene and Sanitation Transformation
PLW	Pregnant and Lactating Women
REC	Research Ethics Committee
RWANU	Resiliency through Wealth, Agriculture, and Nutrition
SDG	Sustainable Development Goals
SOW	Scope of Work
TASO	The AIDS Support Organization
UN	United Nations
UNCST	Uganda National Council of Science and Technology
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
VHTs	Village Health Teams
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization
WUCs	Water User Committees

Executive Summary

Background of the Home Improvement Cluster Campaign

Nuyok Program, implemented by Catholic Relief Services and its consortium partners, is a six-year USAID-funded program aimed at improving food and nutrition security, enhancing livelihoods, and building resilience to shocks for rural families in North-Eastern Uganda's Karamoja sub-region. The program focuses on four key areas: governance and gender equity, community capacity to manage shocks, diversified livelihood opportunities, and health, nutrition, water, sanitation, and hygiene for pregnant and lactating women, adolescent girls, and children under five.

WASH component of the program was designed to reduce health risks by promoting appropriate sanitation and hygiene behaviors through Community-led Total Sanitation (CLTS), rehabilitating defective boreholes and training Water User Committees (WUCs) on borehole operation and maintenance. The results from the RWANU Evaluation and Nuyok Mid-Term Evaluation conducted in 2020 which showed that 42% of the target population had gained access to basic sanitation, and only two of the ten villages triggered using CLTS approach had achieved Open Defecation Free (ODF) status. Through adaptive management, CRS shifted from CLTS to the Home Improvement Campaign (HIC) Cluster Approach. Outcomes from Nuyok WASH interventions include increased access to clean and safe water, and improved hygiene and sanitation practices at the household and community level.

Objectives of the Nuyok HIC Assessment

The purpose of the study was to assess the effectiveness of the HIC Cluster Approach in increasing the acceptability and use of latrines in the Karamoja sub-region of Uganda. The study aimed to answer the following specific questions:

1. How has the HIC approach contributed to change in attitudes towards latrine construction and use?
2. How has HIC improved the quality of latrine construction and maintenance?
3. What are the barriers and enablers to latrine construction and use?
4. What measures can be taken to improve the quality and sustainability of sanitation?

The findings of this study will help CRS plan effective WASH interventions in the future and generate learnings that can be shared with other partners and stakeholders.

The Methodology

A cross-sectional study design using qualitative methods was adopted to collect data on the effectiveness of Nuyok HIC Cluster Approach. The study was conducted in four operational districts (Abim, Nakapiripirit, Nabilatuk, and Napak) and involved purposive sampling of cluster members and non-cluster members, as well as key informant interviews and observation of latrines. A total of 220 participants took part in 22 focus group discussions, and 60 latrines in 12 villages were inspected for quality assessments. The data collected was analyzed using Atlas.ti software to examine how HIC Cluster Approach was changing attitudes towards latrine construction and use.

The Key Findings

Hygiene situation before Nuyok HIC

- **Community Members that practiced open defecation:** The study assessed the issue of open defecation in target communities before the implementation of the HIC Cluster Approach. The study found that various groups of people practiced open defecation, including pregnant women, people with disabilities, drunkards, the elderly, discriminated people and young children, and people/households without latrines.
- **Factors that promoted Open Defecation (OD):** The study conducted in Nuyok activity area in Karamoja sub-region found that promotion of open defecation was caused by several factors. These included long distances between homes and latrines, financial constraints,

limited access to information on the dangers of open defecation, and age also promoted open defecation in Karamoja.

- Participants in focus group discussions mentioned that people working far from their homes resorted to open defecation as returning home to use the latrine was not practical. Financial challenges and poverty were also significant barriers to the construction and maintenance of latrines. Lack of knowledge and awareness on proper latrine use and the dangers of open defecation was also found to have contributed to the continuation of open defecation in the community. Young children were found to practice OD as they were perceived as too young to use the pit latrines without dirtying or falling into the pit.
- Pregnant women were afraid of harming their unborn babies in latrines, while people with disabilities needed appropriate and inclusive latrines or support from others to access and use latrines. The elderly required support for daily activities, and discrimination caused low self-esteem for affected people who resorted to open defecation.

Effectiveness of HIC Cluster Approach in addressing OD Practice and improvement of sanitation

- Home improvement campaign approach was found to be effective in addressing open defecation practices and improving the overall sanitation situation in Nuyok program areas. The approach involved community mobilization, training on latrine construction skills, rolling out latrine construction and community social support, community-based monitoring and evaluation, and sustainability.
- Community members, including the vulnerable, were involved in the hygiene and sanitation campaigns, and the approach encouraged a sense of ownership and commitment. HIC approach also provided hands-on training sessions on latrine construction and distributed tools for latrine construction to clusters to strengthen community social support on latrine construction.
- Cluster members were actively involved in monitoring the community's sanitation and hygiene practices and ensuring that latrines were completed, and villages were on track to becoming ODF.
- The involvement of government structures in the HIC approach ensured sustainability of the campaign and outcomes in the communities.

Observation about latrines

- Most latrines observed were constructed after the introduction of HIC approach and resulted to improved sanitation in the communities.
- Latrine utilization was higher in ODF villages, sharing was less compared to non-ODF villages. Most (87.3%) of pit latrines were positioned at least 30 meters away from the nearest water source, preventing contamination.
- The structure and design of latrines still need improvement, including preventing urine pooling, providing privacy, and having proper squat hole covers and walls.
- Latrines in ODF villages are cleaned more frequently, but there is still a need for improvement in latrine cleaning and maintenance practices. Most of the latrines did not have a functioning hand washing facility.

Social and Cultural Norms around latrine ownership and use:

- The study found that social and cultural norms play a significant role in latrine ownership and use. Nearly half (46.4%) of the respondents believed open defecation was not a shameful act. However, the majority (58.2%) of the respondents did not agree that it was okay for women and girls to defecate in the open.
- The majority (50.9%) of the respondents did not agree that open defecation does not make people sick.

Attitudes and perceptions around latrine ownership and use

- Most participants stated that latrines were not used due to bad odor (67.9%), latrines did not provide privacy (63.0%), latrines were always littered with human fecal matter (62.5%), and that the location of latrines posed a security threat (66.1%).
- These challenges were addressed in the HIC Cluster Approach by improving odor control, privacy, cleanliness, and security during the cluster member trainings.

Challenges in implementing HIC Cluster Approach

- Some communities were unwilling to accept the approach, households stated that they had inadequate construction tools and materials.
- Cultural beliefs and practices also hindered the implementation, leading to refusals by some community members to use latrines.
- Non-commitment from some cluster members resulted to low household interest and limited skill to construct a latrine thus affecting the coverage and quality of some latrines.

Conclusion and Recommendations**Conclusion**

- HIC approach was found to be effective in increasing the use of latrines in the target communities in Karamoja sub-region of Uganda. The approach trained community members (cluster members) on latrine siting, construction, use and maintenance practices, resulting in durable and well-sited latrines. However, maintenance and cleanliness of latrines need more attention and emphasis for any project implementing this approach.
- The barriers to latrine construction and use included dominant cultural norms, inadequate mobilization of community members, limited commitment from some cluster members, and inadequate construction tools and materials.
- The active and trained cluster members were key in overcoming these barriers and increasing latrine acceptability and use in the community. The establishment of a resident capacity within the community that can continue to address the issue of latrine construction and use is seen as a key factor for sustainability.

Recommendations

- HIC Cluster Approach should include social behavior change components to increase latrine use and maintenance.
- Incorporate sanitation marketing to improve ownership, durability, and cleanliness of latrines.
- Align HIC approach with existing government structures LC1s, VHTs, Parish Chiefs and Health Assistants to ensure post-activity follow-up and sustainability.
- Reach out to all members of the community including non-cluster members to ensure universal access to latrines facilities.
- Involve key stakeholders, such as district water and health offices and community-based services.

1. Introduction and Background Context

1.1 Introduction

This report presents a brief background to CRS and the Nuyok program as well as a rationale for the assessment of the effectiveness of the Home Improvement Campaign Cluster Approach in increasing acceptability and use of latrines in Abim, Nakapiripirit, Nabilatuk, & Napak districts of the Karamoja sub-region.

1.2 About CRS and Nuyok Resilience Food Security Activity

Catholic Relief Services (CRS) is leading a consortium of six partners in implementing a six-year \$43.6 million program funded by the USAID Bureau of Humanitarian Assistance (BHA) to build resilience to shocks, enhance livelihoods and improve food and nutrition security for vulnerable rural families in Karamoja Sub-region, Northeastern Uganda. The program, named Nuyok (which means “it is ours” in the local language) is being implemented in Abim, Nakapiripirit, Nabilatuk and Napak Districts and is expected to have measurable impact on more than 269,000 direct participants in 548 villages. Nuyok sought to strengthen governance, promote gender equity, build community capacities to manage shocks and stress, strengthen traditional and diversified livelihood strategies and improve nutrition and health, including water, sanitation, and hygiene (WASH), for pregnant and lactating women (PLW), adolescent girls and children under five years of age (CU5). The program began implementation on 29 September 2017 and was expected to come to an end by 30 September 2022 but was extended to 30 September 2023 to implement its exit and sustainability strategies.

The WASH activity was designed to comprehensively reduce risk to ill-health among CU5s, adolescent girls and PLW from poor sanitation by promoting appropriate sanitation and hygiene behaviors using the Home Improvement Campaign (HIC) Cluster Approach, rehabilitation of high yielding boreholes and, training Water User Committees (WUCs) on borehole operation and management. It also involves awareness raising for communities on the safe water chain. Key intermediate outcomes from the WASH activity include increased utilization of clean and safe water, as well as improved community hygiene and sanitation practices at household level.

1.3 Rationale for the Home Improvement Cluster Campaign assessment

Karamoja sub-region faces significant challenges in WASH, especially low sanitation coverage with only 13%¹ of households having access to appropriate human excreta management and handwashing facilities (*Country Specific Information, Karamoja Report, 2017*). The Nuyok Gender and Youth Analysis also observed that there were very few latrines in the villages visited, with evidence of open defecation across the four districts (Nuyok Gender and Youth Analysis Report, 2018). Eliminating open defecation in Karamoja has proven challenging and is seen as one of the causes of poor health outcomes with links to malnourishment and stunting. Results from USAID Karamoja FFP baseline study conducted in Karamoja also showed that sanitation conditions in the Nuyok DFSA areas were very poor, and about 8% of households had access to basic sanitation facility (Karamoja FFP Baseline Study Report, 2019). To improve sanitation conditions in Nuyok DFSA areas, Nuyok adopted CLTS approach and later transitioned to HIC. Nuyok began implementing the HIC approach in 2019, and after six months of HIC rollout, Nuyok conducted a Mid Term Evaluation (MTE) in March 2020. The results showed that 42% of 16,616 people (LoA target) for improved sanitation had gained access to basic sanitation. In the same period, two out of ten villages earlier triggered using CLTS approach and later enlisted in the HIC cluster had achieved ODF status (Nuyok MTE Report, 2020).

¹ https://www.usaid.gov/sites/default/files/documents/1866/Karamoja_CSI_final_edited_4.10.17.pdf

2. Study Purpose and Methodology

This section presents the methodology which was used to conduct the assessment for the effectiveness of the Home Improvement Campaign Cluster Approach in increasing acceptability and use of latrines in Karamoja Sub-region while highlighting the learning question. The section further presents the techniques for data collection, data analysis, and ethical considerations among others as detailed.

2.1 Study purpose

The purpose of the study was to assess the effectiveness of HIC Cluster Approach in increasing acceptability and use of latrines in Karamoja sub-region. The findings of this assessment will help CRS and other development agencies plan effective WASH interventions in future. It will also generate learnings and document success of the current Nuyok WASH intervention to be shared with other partners and stakeholders.

2.2 Overall learning question

The overall learning question was “how effective is the home improvement campaign approach in increasing household’s acceptability and utilization of pit latrines in the villages?”.

2.3 Specific learning questions

The study sought to answer the following specific questions:

- 1) *How has the HIC Cluster Approach contributed to change in attitudes and perceptions of households towards latrine construction and use in the villages?*
- 2) *How has the HIC Cluster Approach improved quality of construction, maintenance, and cleanliness of latrines at household level?*
- 3) *What are the barriers and enablers to latrine construction and utilization, using the HIC approach?*
- 4) *What specific measures can be taken to improve quality and sustainability of sanitation particularly increasing latrine construction, use, and maintenance?*

2.4 Methodology

The following methodology was selected based on the entire assessment goals as well as the research questions therein.

2.4.1 Research design

Specific to this study, a cross-sectional study design was adopted utilizing qualitative methods to collect data on the effectiveness of HIC Cluster Approach in increasing acceptability and use of latrines. While the qualitative approaches; were mainly used to collect primary data, some elements of quantitative methods were used to collect secondary data thereby enabling re-analysis and presentation of data already collected by the program over the past years.

2.4.2 Study area

This study was conducted in the Nuyok operational districts of Abim, Nakapiripirit, Nabilatuk, and Napak where the HIC Cluster Approach was being implemented. Two sub-counties were reached from each district.

Table 1: Selected sub-counties and villages for the study

District	Sub Counties	Villages
Abim	1. Abim [OD Free]	1. Geregere North 2. Apelkere
	2. Alerek [Not OD free]	3. Olem Central
Nakapiripirit	3. Kakomongole [OD Free]	1. Lorengedwat 2. Lopeduru
	4. Moruita [Not OD free]	3. Cheptumot
Nabilatuk	5. Lolachat [OD Free]	1. Natirae 2. Nasinyonoit C
	6. Lorengdwat [Not OD free]	3. Lonangat
Napak	7. Lokopo [OD Free]	1. Kachodo 2. Lolita
	8. Lopei [Not OD free]	3. Naragae
Total	08	12

2.4.3 Study population

In this study, the following categories of participants were included in qualitative elements, the focus group discussions (FGDs) and key informant interviews (KIIs), Cluster members, Non-Cluster/Community Members (Younger and Older Men and Women), Assistant District Health Officer – Environmental Health (ADHO-EH)/Assistant District Water Officer in charge Sanitation (ADWO-Sanitation), Health Assistants, WASH Supervisors /officers /agents/mobilizers, Parish Chiefs and the local councilors (LC1)/Traditional Leaders.

2.4.4 Sampling approach

Purposive sampling technique was utilized in selected respondents for the key informant interviews while convenience sampling was applied in selecting focus group discussion participants. undertaking the assessment, sampling and selection procedures were as follows.

- for each district at least, two sub counties were sampled purposively:
 - ✓ one with presence of at least one village declared ODF and
 - ✓ another where no village was declared ODF.
- In a sub county with ODF villages, two villages were selected purposively i.e.,
 - ✓ one with a sustained ODF status for at least two years and
 - ✓ another with ODF relapse status.
- For a sub county where no village was declared ODF,
 - ✓ one village was randomly selected.
- Selection of cluster members was done by the researcher based on the lists provide by Nuyok project staffs.
- Participants who were non-cluster members were selected randomly by partner staff with the help of the researcher and community leaders.

Table 2: Sample of key informants

District	Key informants	Number
Abim	ADHOs	- 1 [in-charge of environmental health]
	Sub county Health Assistants	- 1
	WASH (supervisor, officer, agents, mobiliser)	- 1
Nakapiripirit	ADHOs	- 1 [in-charge of environmental health]

	Sub county Health Assistants	- 1
	WASH (supervisor, officer, agents, mobiliser)	- 1
Nabilatuk	ADHOs	- 1 [in-charge of environmental health]
	Sub county Health Assistants	- 1
	WASH (supervisor, officer, agents, mobiliser)	- 1
Napak	ADHOs	- 1 [in-charge of environmental health]
	Sub county Health Assistants	- 1
	WASH (supervisor, officer, agents, mobiliser)	- 1
Total		12

2.4.5 Sample size of FGDs

Four FGDs with the non-cluster members for each participant's category were conducted, Six FGDs for the cluster members and 12 KIIs. A minimum of 220 (110 males and 110 females) cluster and non-cluster members (younger and older, men and women) were targeted to participate in 22 FGDs, with each FGD having not more than 12 participants and a minimum of 6 participants but 10 participants were the required standard number.

In each district, a maximum of six FGDs were conducted, non-cluster members constituted four FGDs and cluster members constituted the remaining two FGDs. FGDs with non-cluster members were segregated by age and sex, (i.e., male, and female youth men aged 15-35 years, adult males and females aged 36-65 years). There was a total of 12 KIIs, three per district.

Table 3: Sample size of FGDs to be conducted per district and per village

District	Sub Counties	Villages	# Of FGDs with cluster members	# Of FGDs with non-cluster members			
				Young women [15-35]	Older women [36-65+]	Young men [15-35]	Older men [36-65+]
Abim	1. Abim [OD Free]	1. Geregere North	1				1
		2. Apelkere		1			
	2. Alerek [Not OD free]	3. Olem Central	1		1	1	
Nakapiripirit	3. Kakomongole [OD Free]	4. Lorengedwat	1	1			
		5. Lopeduru					1
	4. Moruita [Not OD free]	6. Cheptumot			1	1	
Nabilatuk	5. Lolachat [OD Free]	7. Natirae	1			1	
		8. Nasinyonoit			1		
	6. Lorengdwat [Not OD free]	9. Lonangat	1	1			1
Napak	7. Lokopo [OD Free]	10. Kachodo	1		1		
		11. Lolita				1	
	8. Lopei	12. Naragae		1			1

	<i>[Not OD free]</i>						
Total	08	12	06	04	04	04	04

2.4.6 Observation of constructed latrines

A total of 60 latrines in 12 villages were inspected for quality assessments. as shown in the table below.

Table 4: Number of latrines to be observed per village

District	Sub Counties	Villages	# Of FGDs with Cluster Members
Abim	1. Abim <i>[OD Free]</i>	1. Geregere North	5
		2. Apelkere	5
	2. Alerek <i>[Not OD free]</i>	3. Olem Central	5
Nakapiripirit	3. Kakomongole <i>[OD Free]</i>	1. Lorengedwat	5
		2. Lopeduru	5
	4. Moruita <i>[Not OD free]</i>	3. Cheptumot	5
Nabilatuk	5. Lolachat <i>[OD Free]</i>	1. Natirae	5
		2. Nasinyonoit C	5
	6. Lorengdwat <i>[Not OD free]</i>	3. Lonangat	5
Napak	7. Lokopo <i>[OD Free]</i>	1. Kachodo	5
		2. Lolita	5
	8. Lopei <i>[Not OD free]</i>	3. Naragae	5
Total	08	12	60

2.4.7 Data collection, management and analysis

Data collection was undertaken with quality control measures in place to ensure quality, accuracy and well representation. Data collection tools included FGD guide, KII guide and the observation checklists which were used on the latrine quality assessments. Qualitative interview responses were transcribed directly from Lebtur/Nga'karimojong to English. The transcripts were processed, coded, and synthesized for analysis. Atlas.ti software was used to analyze qualitative data. Specific themes of interest in this study included, how HIC Cluster Approach was bringing change in latrine acceptability and use.

3. Key Findings and Results

This section presents in detail key study findings. The section explores the participants' demographic data, sanitation, and hygiene situation before the HIC approach, the effectiveness of the HIC Cluster Approach and its contribution to improvement of sanitation situation in the operational area. It further explores the sustainability of the approach, the characteristics of observed latrines, social and cultural norms around latrine ownership and usage. Finally, the section presents challenges the implementing team encountered while implementing HIC Cluster Approach.

3.1 Demographic data of the participants

There were 206 FGD participants in the study overall, of which 104 were males and 102 females (Table 1). In addition, four (4) Assistant District Health Officers-Environmental Health, four (4) Sub County Health Assistants and four (4) WASH supervisors/Officers participated in the KIIs. Most participants (66.7%) were 25 years and above. There were more married participants (89.4%) while an almost equal proportion of participants had between 0-2 children (34.8%) and 3-5 children (35.4%) they looked after.

Regarding education type, more participants (33.5%) were not learnt, 28% had attended some level of primary education and 26.7% had attended Alternative Basic Education for Karamoja (ABEK). Over 80% of the non-cluster members that took part in the discussions were aware of HIC. The socio demographics of the participants are detailed in the table annexed.

3.2 Sanitation and hygiene situation before Nuyok HIC

Proper sanitation is one of the major interventions necessary for the prevention of diarrheal diseases across the world as it involves safe disposal of human excreta. It has been noted that sanitation interventions lower the risk of diarrhea morbidity by 25%, with evidence of further reduction by 45% with effective hand washing. As part of the assessment, it was important to generate an understanding of the general hygiene and sanitation situation in the target communities before HIC Cluster Approach intervention.

3.2.1 Open Defecation (OD) problem

The Joint Monitoring Program of the UN refers to open defecation as, "the practice of defecating in fields, forests, bushes, bodies of water, or other open spaces with negative consequences to dignity and children's nutrition". Elimination of OD forms priority in realization of improved health, nutrition, and productivity. Centre for Disease Control (CDC) quoting data from WHO and UNICEF (2020), noted that 494 million people globally practiced OD. In Uganda, OD has remained a challenge, worse with communities in Karamoja sub-region having only 36.1% of the people accessing a latrine facility (Water and Environment Sector Performance, 2022).

This assessment found out that before HIC approach was implemented in the target communities; OD was evident as different community members opted using the bush rather than latrines. Participants in the study revealed that different categories of people chose fields, the bush or open spaces for defecation even when latrines were readily available. OD brings about contamination of water sources and food fields thereby leading to spread of diseases such as cholera, diarrhea, and dysentery.

"... before this project, open defecation was rampant in the communities. People used to freely go to the bush to ease themselves, they also practiced other inappropriate methods like the 'flying toilet' where one defecates in a kaveera (polythene bag) and throws it a long distance away. [KII\Health Assistant\Nabilatuk].

Findings from the FGDs and key informants showed that pregnant women, people with disabilities, drunkards and the elderly mostly practiced OD in the target communities as per details provide below.

1. The pregnant women

Pregnant women were reported to practice open defecation for the fear that they may lose their unborn babies in the latrines.

"There used to be belief that if a pregnant mother enters the latrine there is a likelihood that the child may drop in the latrine when they go there..."

[Non-Cluster Members\Nakapiririt]

2. People with disabilities

Living with disability comes with challenges to access depending on the form of disability, which may present cognitive or physical limitation. The assessment found out that prior to the introduction of HIC Cluster Approach, people living with disabilities practiced OD. People with disabilities require an inclusive latrine facility and others support to be able to access and properly use a latrine.

"...people living with disabilities such as the lame and the blind did open defecation because of their inability to find their ways to latrines, a blind person can never find her/his way to the latrine and will never even try to find way to latrine with the fear of entering the latrine or getting him/herself knocked by something" [Older men. Non-Clusters Members\Abim].

3. The drunkards

The drunkards in this context meant people who excessively consumed alcohol and lost their sobriety or cognitive abilities. It was reported that the drunkards excreted anywhere including on roadsides. Dealing with this situation was so difficult since drunkenness had to be dealt with first to stop the practice of open defecation.

"Drunkards found themselves defecating openly and most of them feared using the latrine that they might lose their steps and enter or fall inside the latrine. Some drunkards found themselves defecating openly without knowing what they had done." [Non-Cluster Members\Nakapiririt].

4. The latrine phobic people

According to the Anxiety Disorder Association of Victoria, Inc. (2012), Latrine phobia is a very common medical condition classified as an anxiety disorder associated with fears of: not being able to urinate or defecate, having an accident in public, the latrine being too far, being locked in a small space, being heard, or seen, being scrutinized, latrine cleanliness or risk to infection. The assessment findings indicated that such people with latrine phobia also contributed to open defecation as they avoided using latrines due to fear of latrine smells, flies, the risk to infection and accidents from a collapsing latrine.

"...also, those that fear to use the latrine because they say that the latrine smells bad and when they see flies around and inside the latrine, they fear that they might contract dangerous diseases and might also fall inside the latrine, defecated in the open." [Non-Cluster Members\Nabilatuk].

5. The elderly

Another category of people reported to be practicing open defecation were the people with advanced age. Most elderly are weak and frail and present with poor coordination, stability, and balance. With such challenges, the elderly requires to be supported to go about daily activities. The elderly who may not have necessary support can easily end up defecating anywhere.

"Elderly people still practiced OD because sometimes they feel like defecating but have no energy to reach the latrine or by the time they realize, feces would have come out and they just continue doing it thus practicing open defecation. I find it normal to defecate in the open, I am already old and even can never get ashamed. It is only young people who should get ashamed when doing open defecation" **[Older men. Non-Cluster Members\Abim].**

6. The discriminated people and young children

Discrimination refers to the unjust or prejudicial treatment of different categories of people, especially on the prohibited grounds such as race, age, sex, disease, or disability. It was reported that the discriminated people especially on grounds of diseases also did not use latrines irrespective of whether they had access or not. Since discrimination caused low self-esteem, those affected opted for OD. Young children who are unable to use latrines, are also sent to the bush or nearby places to defecate.

"...anyone suffering from highly contagious illnesses like TB is not allowed or prohibited from sharing the same latrine; other people use on ground he/she might spit on floor or wall of the latrine and when another person enters, he/she might get germs and end up getting infected too therefore living such people with no option but to defecate anywhere openly" **[Non-Cluster Members\Nabilatuk & Napak].**

"It is still young children who practice open defecation here in Napak because we the mothers are afraid of them entering inside the latrine and also playing around the latrines which is not hygienic to their health" **[Non-Cluster Members\Nabilatuk & Young women\Napak].**

7. People/households without latrines

The people who did not have latrines or could not access latrines contributed to open defecation. Latrine owners are reluctant to share their household latrines with households that do not have latrines. Those without latrines also fear embarrassment in case those with latrines deny them access to the facilities. With such challenges, the people who did not own latrines and had no access ended up practicing open defecation.

"...those without latrines still do practice open defecation because sometimes they are not given the keys for the latrine or when they are in bad terms with the owners of the latrine and would fear to ask the key to the latrine and end up doing open defecation since they will be left with no option but open defecation" **[Older men. Non-Cluster Members\Abim].**

3.2.2 Factors that promoted open defecation in the villages

This section explores the underlying causes of poor sanitation and OD in Nuyok activity area within Karamoja sub-region before introduction of HIC Cluster Approach. Through FGDs with community members and KIIs at district and sub county level, a range of factors that contributed to the widespread practice of OD were found. This section delves deeper into these findings, highlighting

the perspectives and experiences of the community members and providing insight into the ways in which these factors have contributed to poor sanitation in the Nuyok activity area.

1. Long Distances to the latrine

The study found that distance between homes and latrines was a significant factor that promoted OD in the study area. Participants in FGDs highlighted that when people are working or engaging in activities far from their homes, it is not practical for them to return home to use the latrine. As a result, they resort to OD in the areas where they were working. This is particularly true for people who engage in activities such as farming, grazing livestock, or cutting poles for construction in remote areas where there are no latrine facilities available. Additionally, participants noted that due to insecurity in the study area, people felt unsafe to walk a distance at night to access a latrine. This was particularly relevant for women and girls who were more vulnerable to violence and insecurity.

“...I may be having a latrine at my home, but when I go to cut poles up the hill there, I spend the full day there. Do you think that I can return home to defecate and go back? I just defecate there because you cannot put toilet in every bush”.

[Older men. Non-Cluster Members\Abim].

This means that the latrine facilities had to be constructed in a place that is not far from the dwelling unit to that security is addressed.

2. Financial constraints

The cost of constructing latrines was found to be a crucial barrier to improved sanitation and hygiene in the communities studied. Participants in the FGDs emphasized the financial challenges they face in constructing latrines and highlighted the need for support and aid in addressing these challenges. Many individuals, particularly those who are older or disabled, expressed their inability to construct latrines on their own due to financial constraints. Additionally, poverty among the communities was found to be a significant contributing factor to the lack of resources for latrine construction. Participants also shared their fear of constructing another latrine when it is full, as the cost of disposing off the waste or constructing another one is high to them. These financial barriers to latrine construction were found to have an impact on continued open defecation in these communities, as individuals resort to OD due to their inability to construct and maintain latrines.

“Absence of help or assistance either materially or financially for constructing a latrine lowers abilities of elderly and disabled people constructing and owning a latrine. these groups of people can only own a latrine through support and assistance from those who are able” **[Non-Cluster Members\Napak]**

Therefore, it was necessary for any project implementing this approach to consider the financial barriers to latrine construction. The projects can come up with innovative but sustainable ways to provide construction tools to clusters to use as a group to construct latrines, such as cost share. That was found true in most of the communities where the study was carried out, poverty is widespread, and the lack of resources was a major obstacle to the construction of latrines and other sanitation facilities.

3. Limited access to Information on dangers of OD

The results from the focus group discussions (FGDs) suggested that limited access to information on proper latrine use and the dangers of open defecation contributed to the continuation of

open defecation in the community. The participants emphasized that many members of the community, particularly children, the elderly, and other groups, lacked the knowledge of how to use latrines and the importance of proper sanitation. Additionally, some members of the community had grown up seeing their parents practicing open defecation, which they perceived as normal. This lack of knowledge and awareness perpetuated the practice of open defecation in the community.

“Some members of the community here did not know anything bad about OD because they grew up seeing their parents doing it which makes them think it is a normal practice. Such people needed information on the dangers of OD practice.” [KII\Water Official\Nabilatuk].

This drew attention to the importance of community-based health education and awareness-raising programs that target specific groups such as children and the elderly, as well as the overall community on the benefits of proper sanitation and hygiene.

4. Age

The study found that children aged 3 to 4 years were one of the main groups that practiced OD in the study area. This was due to the belief that they were too young to use the pit latrines without falling in or dirtying the latrine. Parents and caretakers would instead show them areas around the compound or close to the latrine where they could defecate in the open. However, this practice was not always effective as some mothers were not able to remove children's feces daily, leading to the buildup of feces in the compound, veranda, and at the roadside.

“Children are prohibited from using latrines on ground that they are still young to direct feces properly into the pit hole and that they might fall inside or dirty the latrine” [Cluster Members\Abim]

This accentuated the need for providing information and education on proper sanitation practices for caregivers and providing appropriate sanitation facilities for young children for example child-friendly latrine, which are specifically designed for young children and have features such as lower, narrow squat holes, and can be easily cleaned.

5. Perceived social norms towards latrine use

Findings from the study also revealed that social norms played a significant role in promoting open defecation in the study area. One of the common social norms that influenced open defecation was the belief that pregnant women should not use latrines. This belief was rooted in the fear that the child may drop in the latrine during the process. This norm was particularly prevalent among pregnant women, who tend to avoid using latrines. Furthermore, menstruating women and girls were considered unclean and was believed that they will make the latrine dirty if they use it. These perceptions led to abandonment of latrines use among pregnant or menstruating women and girls.

“There used to be belief that if a pregnant mother enters the latrine there is a likelihood that the child may drop in the latrine when they go there. Also menstruating women and girls were considered unclean and if they were to use the latrine, they will make the latrine dirty” [Non-Cluster Members\Nakapiririt]

Another social norm that promoted open defecation was the fear that using a latrine can cause a person to die, particularly among the elderly. Some people also believed that latrines have bad

odors and may cause diseases, which discouraged their use. These fears were echoed by several focus group participants during the study.

“There are some cultural beliefs among people who say that if you dig a pit latrine in your home you are casting in deaths and more graves and when they see you digging or trying to construct a pit latrine, they will wait with expectations that maybe someone has died in your household.” [Non-Cluster Members\Nabilatuk]

Additionally, some cultural beliefs perpetuate open defecation by claiming that defecating in the backyard or garden acts as manure to the soil, leading to faster crop growth. This belief was commonly expressed by younger men during the study, who stated that many farmers in the area continue to practice open defecation to fertilize their land.

“Some people claim that when you defecate, in your backyard or garden it acts as manure to the soil so that when crops are planted, they grow very fast.” [Non-Cluster Members\Abim]

These norms reported by the participants called attention to the relevance of behavior change communication and awareness-raising campaigns targeting these specific beliefs and fears in changing norms and encouraging latrine use hence addressing social norms in the efforts to promote better sanitation practices and eliminate/decrease open defecation in the community. Also key to note was the need to improve on latrine designs to cater for safety and inclusiveness.

3.3 Previously used approaches to improve sanitation and hygiene

Prior to the implementation of the HIC approach, various methods were used to improve sanitation and hygiene in the study areas. This section of the report provides an overview of those approaches, the strategies employed, and the outcomes achieved. Through the examination of these previous efforts, the report can provide insight into the effectiveness of the different approaches and how they may have influenced the success of the HIC approach in the study area.

I. Enforcement Approach

Enforcement as a sanitation approach refers to the use of legal and regulatory measures to ensure that individuals and communities comply with agreed sanitation and hygiene standards. In enforcement, Local Governments develops ordinances consistent with the Public Health Act, as lower administrative units develops bylaws consistent with the ordinances all geared towards upholding good sanitation and hygiene in the community.

To curb open defecation, enforcement measures may be way of:

- **Fines and penalties** - Local authorities impose fines and penalties on individuals and communities that engage in open defecation or fails to maintain proper sanitation in their households and communities.
- **Prosecution** - In cases where individuals or communities persistently engage in open defecation or violate provisions in the Public Health Act, sanitation ordinance or bylaw, such individuals may be subjected to prosecution.
- **Naming and Shaming** – periodically names of defaulters are compiled and announced or displayed in public places to shame such individuals. This specifically applies to non-compliant leaders or prominent individuals within the community.

The enforcement approach was used to improve sanitation and put an end to open defecation in targeted areas. It employed bylaws and penalties to ensure compliance with communally agreed sanitation and hygiene standards. Participants in this study reported that government officials,

such as Health Assistants and District Health Officers, were involved in educating the community about the laws and provisions in Uganda Public Health Act related to sanitation and hygiene. Community leaders, such as local councils, also played a role in enforcing bylaws and imposing penalties on those who did not comply with sanitation and hygiene regulations.

“The LC1 together with us the cluster members formulated the bylaws to improve on sanitation and hygiene and it was clearly stated that whoever refuses to construct latrine in his or her household would pay a fine of UGX 50,000 to the LCI.” [Cluster Members\Napak].

The enforcement of bylaws through fines for those practicing open defecation was not effective as it lacked consistency and had low coverage because of limited resources to facilitate law enforcement officers. To be successful, the enforcement approach should be implemented alongside behavior change intervention such as HIC, CLTS and Participatory Hygiene and Sanitation Transformation (PHAST). Additionally, it also required bylaws to be agreed by a larger section the community and sensitization done extensively to all individuals to achieve a common understanding of the required standard practices.

“Previously though the police enforced laws on open defecation but that did not work very well like Nuyok [Older Men\Nabilatuk].

2. Community Led Total Sanitation (CLTS)

The CLTS approach is a participatory method for triggering and facilitating community-wide behavior change towards the adoption and sustained use of improved sanitation facilities and practices. CLTS was one of the approaches previously implemented in the Nuyok activity area prior to the introduction of HIC Cluster Approach. The approach focused on creating a sense of collective responsibility and ownership among community members following the understanding that OD leads to ingestion of feces. The community should take action to stop OD without relying on external support.

“The CLTS only relied on triggering the community. Triggering involved creating disgust within the community for example through mapping defecation area in the community, walk of shame etc. and it is now up to the community” [KII\WASH Officer\Nakapiripirit].

This meant that the communities had to take choice of whatever mechanism of latrine construction with minimal support on latrine strength, location, and inclusiveness.

CLTS approach involved sensitizing communities to construct and use latrines and other sanitation facilities, without necessarily considering skilling them on construction techniques thus quality and durability is not a priority.

“With the CLTS approach we told people to construct latrines and use them, we also tell them to construct other sanitary facilities like the drying racks, bathroom, drying lines, rubbish pits and all that at the household” [KII Health Assistant\Nakapiripirit].

CLTS approach did not address the issue of latrine construction skill at household level, quality, and location. It did not also consider vulnerability in some households as a factor effecting achievement of ODF because such households will not construct and use latrines. Lastly, CLTS was perceived as an approach that involved lengthy processes.

“The CLTS approach did not encourage a communal approach that caters for the vulnerable households who cannot construct sanitary facilities on their own [KII WASH Officer\Nakapiripirit].

“This approach is a very long process and it stopped before villages had been ODF.” [KII\Assistant District Health Officer\Abim].

In conclusion, prior to the introduction of HIC Cluster Approach in Nuyok activity areas, CLTS and Sanitation Enforcement were some sanitation improvement approaches implemented according to participants interviewed. However, from the study findings, open defecation, low latrine coverage and use persisted. The assessment noted that pregnant mothers, people with disabilities, drunkards, those with latrine phobia, the elderly, those with contagious diseases, young children, and those with no access to latrine facilities continued to defecate in the open. It further found out that open defecation problem continued to exist in places where; workers were distant from latrine facilities, households had financial constraints, individuals lacked information on dangers of open defecation and social norms still promoted open defecation.

The HIC Cluster Approach therefore had to overcome these challenges to be effective in ensuring acceptability and use of latrine facilities in the activity area.

3.4 Effectiveness of the HIC Cluster Approach in addressing OD practice and improvement of sanitation

HIC approach was a strategy used to improve access to safe and sustainable sanitation in Nuyok program areas building on areas where CLTS approach had not addressed. Through a thorough examination of the literature and the data collected from community members, this section provides an in-depth understanding of the effectiveness of HIC Cluster Approach in addressing OD practice and its contribution to improvement of sanitation situation in the communities studied. It also provides valuable insight into the factors that contributed to the success of HIC approach and the challenges that need to be overcome to achieve sustainable improvements in sanitation.

In general, home improvement campaign approach was found to be effective in addressing OD practice and improving the overall sanitation situation in Nuyok program areas. The approach contributed to this improvement in several ways as discussed below:

I. Community mobilization

According to the participants in the study, HIC Cluster Approach involved community members themselves in the lead of hygiene and sanitation campaigns. The Cluster Approach encouraged a communal approach that ensured latrine construction support for vulnerable households that cannot construct sanitary facilities on their own. Furthermore, study participants noted that HIC clusters approach promoted a sense of ownership in the communities from the peer support strength. Additionally, the approach involved parish chiefs and LC1s and other stakeholders to work closely with the cluster members and project staff to mobilize communities and promote hygiene and sanitation.

“HIC Cluster Approach encourages communal work that caters for the vulnerable households who cannot construct sanitary facilities on their own unlike CLTS that only relied on triggering the community” [WASH Officer\Nakapiripirit].

“I cannot say it is only HIC, but it is combined efforts from the sub county officials like the parish chiefs that we always collaborate with; we also collaborate with the LC1s” [WASH Officer\Nabilatuk].

Ensuring that everyone, including the vulnerable takes part in sanitation promotional activities within a community, coupled with working with existing government structures is an effective method of achieving acceptability and sustainable use of latrine facilities especially in Karamoja sub-region. This addresses the challenges identified from the earlier approaches that were used to promote sanitation; especially where some categories of people continued to practice OD. Involvement of community members and making sanitation promotion a communal issue helped to create a sense of ownership and commitment among community members, which was critical for the success of the home improvement campaign Cluster Approach.

2. Training on latrine construction skills

The HIC Cluster Approach ensured trainings for cluster members in the villages on latrine siting and construction techniques. The training sessions were practical hands-on on dimensions for the pit, slab, squat hole, walls, doors, roofs and roof eaves and verandas. The study participants reported that the hands-on training received from Nuyok activity helped them to understand how to measure the length and width of pit holes and squat cover holes, which led to better latrines constructed. These trained cluster members also rolled support to other community members who did not benefit from the trainings. The cluster members served as community technical consultants and promoters of latrine construction and use in respective communities.

“The trainings we received from Nuyok helped us to teach others on how to measure length and width of pit hole and squat cover hole” [Cluster Members\Napak]

“The trainings were adequate because we have learnt how to site a latrine and also attributes of a good latrine” [Cluster Members\Napak]

Very often, sanitation approaches pay attention on software targeting mindset change by only raising awareness on the negative effects of poor sanitation and come short of giving skills on construction of the hardware necessary to achieve the goal. In this case, HIC approach bridged the gap in the hardware and thereby facilitating a desired change among communities in Karamoja that have existed for long without latrine construction and probably lack the skill in it. This makes HIC Cluster Approach effective in attaining acceptability and use of latrine facilities while also addressing sustainability since latrines are constructed with accessibility and durability in mind.

3. Rolling latrine construction and support

The HIC Cluster Approach was effective in improving latrine construction in the community by not only providing trainings, but also latrine construction tools. Study participants reported that tools such as pangas, pickaxes, rakes, hoes, and spades that were distributed to clusters helped in the construction of latrines. These tools either provided by Nuyok activity directly or borrowed from other members in the community made it easy for them to first construct their personal latrines and then help others in the community to also construct theirs.

“We as the cluster members led by example because we first constructed ours and other members of the village saw it, they were also motivated to construct and own their individual latrines.” [Cluster Members\Nabilatuk].

“Home improvement campaign program made it very easy for us to construct latrines due to new methods of taking measurements, how to site and availability of tools provided” [Cluster Members\Abim].

Rolling out latrine construction from the first adopters (those who willingly joined the clusters), then later to the laggards was an effective method to reach out to the entire community. This showed laggards that it was possible to own and properly use a latrine in the same community setting. The provision of construction tools after training clusters made it possible to put the tools to proper use in achieving Nuyok sanitation goals. This made HIC Cluster Approach effective in achieving acceptability and use of latrine facilities in Nuyok activity areas.

4. Community based monitoring and evaluation

The approach was designed to achieve adequate community-based monitoring and inspection of latrines and hand washing facilities in the communities. That is because Nuyok believes communities will do what is inspected but not what is expected of them. The cluster members with support from the LC1 were actively involved in monitoring and inspection of community's sanitation and hygiene facilities and practices. That helped in identifying issues and finding ways to address them. This ensured Nuyok project conducted more follow-ups than other sanitation approaches, thereby ensuring that the community members were on track with their sanitation and hygiene practices. It also made communities feel they oversaw sanitation improvement in the villages.

“Nuyok project conducted more follow-ups than the district officers that only triggered the communities during the CLTS approach [KII\Health Assistant\Nakapiripirit].

“HIC facilitated joint monitoring of villages to ascertain whether the communities were still rigid and find other ways of helping them” [KII\Health Assistant\Nabilatuk].

In summary, HIC Cluster Approach was effective in monitoring communities and ensure latrines were constructed and used and open defecation stopped in some villages. By adequately conducting follow-ups, involving cluster members in monitoring, and providing technical guidance to household members communities' acceptability and use of latrines was made possible in the intervention areas.

5. Sustainability

The involvement of government structures in HIC Cluster Approach is helpful in achieving sustainability of sanitation improvements in the communities. The collaborative efforts with the extension workers and technical staff in the line departments makes the authorities aware of the structures and operations under HIC Cluster Approach and thus make post Nuyok activity support possible.

“We have been collaborating with government through the sub counties which has had an impact, government is now involved in awareness creation, trainings and routine monitoring and inspection, and data collection on hygiene indicators. [KII\WASH Officer\Nakapiripirit]

HIC Cluster Approach placed a strong emphasis on operation and maintenance of latrines, which is crucial for sustainability. This was achieved through promoting a change in mindset, where community members were encouraged that for longevity of the latrine facilities, practices for proper utilization and maintenance had to be instituted and periodically executed.

“The advantage of HIC is the sustainability part. It advocates for change of mindset to adopt proper use of latrines and maintain them for sustainability of the change” [KII\WASH Coordinator\Abim]

The HIC Cluster Approach was effective in addressing the sustainability issue. Working with government structures which will continue to exist as well as introducing operation and maintenance of latrine facilities are critical aspects in sustainability.

6. Personal hygiene and cleanliness

HIC approach advocated for personal hygiene and cleanliness at household level, which helped to ensure that latrines were kept clean and used properly. This included sensitizing on how to maintain personal and household hygiene, cleaning their compounds, cutting, and slashing grass around homes to keep them free from dangerous animals and objects.

“Some of the community members have put into practice all the teachings we have so far received from Nuyok program like how to keep personal hygiene, cleaning the compound, cutting and slashing grass, around our homes to keep them free from dangerous animals like snakes.” [Younger men. Non-Cluster Members\ Nabilatuk]

HIC approach promoted the construction of individual latrines and reduced sharing which is usually associated with difficulty in maintaining the latrines clean. The health education further changed the mindset of users to ensure that latrines are kept clean.

“No more sharing of latrines which has made it possible to sustain and use latrine for long since it does not get full very fast when not shared” [Cluster Members\Abim]

By working with community members to ensure cleanliness of sanitary facilities, HIC Cluster Approach was effective in achieving acceptability and use of the constructed latrine facilities.

Overall, the assessment established that the approach was shown to be an effective strategy for addressing open defecation practice and improving the overall sanitation situation in Nuyok activity areas in Karamoja Sub-region. By working with community structures and training on latrine construction, and providing construction tools to clusters, the approach helped to increase access to safe and sustainable latrines.

3.4.1 Notable changes because of the HIC Cluster Approach.

The HIC approach was adopted to expedite attainment of open defecation free status in target communities. The assessment aimed at finding those changes that HIC approach brought in the target communities. The findings from this assessment indicated that HIC Cluster Approach brought positive changes at individual, household, and community level. The changes are discussed below as reported.

1. Improved pit latrine cleanliness

The trainings from Nuyok activity discouraged shared latrines, promoting individual household latrine construction which are easy to clean and maintain. The findings from the FGDs and the KIIs conducted indicated that HIC Cluster Approach had ensured each household constructed and used their own latrine and so enhanced ownership and proper maintenance in a clean state. With individual households using their own latrine, cleaning and maintenance practices has improved.

"High level of cleanliness due to ownership of latrines. Households find it easier to clean and maintain their own latrines compared to shared ones"
[Cluster Members\Abim].

HIC Cluster Approach ensuring every household constructed and used a latrine made it an effective approach in achieving effectiveness and proper use of latrine facilities in Nuyok intervention area.

2. Increased shared responsibility

The assessment noted that the approach had caused a change in shared responsibility. Previously women had been socially assigned a role of cleaning a pit latrine while men were responsible for constructing latrine. With HIC Cluster Approach, both women and men participate in latrine construction and cleaning activities without segregating roles to a specific gender.

"HIC approach brought more changes than previous approaches and these includes clean homes with latrines, rubbish pits and tippy taps, more latrines constructed, use and ownership is now clear compared to the past were households used to mainly share latrines thus no one takes responsibility to clean or repair. [Cluster Members\Nakapiripirit\Kopetatum].

"Women also take part in pit latrine construction, slabbing, roofing and it use and because of this training to both women and men of the communities this is something that has never happened before because latrines were meant to be constructed by men and not women, women now feel as part of community". [Cluster Members\Nabilatuk].

3. Improved disposal of human excreta, children's feces inclusive

The assessment found that the HIC approach achieved positive behavior change as the pregnant women, elderly, people with disabilities among others who were earlier reported to be among those that defecated in the open due to wrong perceptions had all started using latrines consistently.

"Previously, pregnant women used to fear using the latrines because they thought that their unborn children would fall inside but now since Nuyok activity came it has opened their minds and they now use latrine except when a woman is in labor pains." [Younger men. Non-Cluster Members\Nabilatuk].

Proper management of fecal matter is beneficial providing proper barriers to fecal-oral routes. This implies water sources and surroundings are kept from contamination and aesthetics of the surroundings enhanced, hence creating safe living environments. From the introduction of the HIC approach, these changes have been noted in the Nuyok target communities.

4. Increased latrine construction and ownership

In 2016, latrine coverage was low in Karamoja sub-region, standing at 30% compared to national average of 77 percent.² Increased latrine ownership is beneficial for sustainable latrine use. The findings from this assessment indicated that there was increased latrine ownership resulting from implementation of the HIC in the target communities. The study participants reported that there was increase in construction of quality latrines and so durability was guaranteed.

² UNICEF Sanitation Report 2015/2016

"There has been increased number of latrines in the community and people no longer practice open defecation but defecate in latrine" [Cluster Members\Abim].

"We used to site the latrines poorly and they collapsed. The training from the Nuyok activity gave us insight on siting and has helped us to position our latrines in safe places making them durable" [Cluster Members\Abim].

Latrine ownership means proper cleaning and carrying out periodic operation and maintenance activities thereby ensuring that the latrine is always fit for use. The latrine construction training and support offered to the cluster members as well as the provision of the construction tools by Nuyok program was reported to have led to the increase in latrine construction and ownership. This clearly shows that HIC Cluster Approach had a sustainability strategy.

5. Reduced latrine sharing

Shared latrine refers to one which is used by two or more households. Shared latrines are always unclean because no one wants to clean fecal matters produced by another person except for children. The unclean shared latrines triggers a series of poor practice of latrine use which may led to full scale open defecation. The findings from this study show a decrease in shared latrines among households.

"No more sharing of latrines which has made it possible to sustain and use latrine for long since it does not get full very fast when not shared" [Cluster Members\Nakapiripirit].

Reduction in shared latrines makes HIC Cluster Approach an effective in achieving acceptability and use of latrines since every household has their own latrine and can keep it clean and in good maintenance state.

3.4.2 Sustainability insight into HIC achievements

Considering the changes brought about by HIC Cluster Approach, a look into their sustainability aspects is also important in backing the overall performance. Sustainability measure for this HIC Cluster Approach is inclined on two major factors. Skill enhancement and established structures.

a. Increased knowledge and information on improved sanitation practices

The practical method of knowledge exchange was more effective and yielded many results. The attained knowledge on latrine, construction and use led to ownership and will be sustained by the community members. This approach has worked for community members with financial constraints, the local artisans are able to give construction support affordably.

b. Established structures

HIC approach first targeted forming community members into small groups of 9-10 members called the clusters, in their clusters, members acquired skills and passed on the information and knowledge to other non-cluster members. The cluster members are strong structures built in the communities for sustainability; since the cluster members are from the respective community and can still carry on the work when new households emerge. The study registered clusters members as willing to carry on the work beyond Nuyok program activity end period. The latrines which were constructed with durability in mind may last long and continue to be utilized.

“...yes, I think we can continue with this work (latrine construction and use) since we now know how to train people to build latrines. Maybe we can do it at a fee or even continue to train when we are approached with an objective of improving sanitation in our areas [Cluster Members\Nakapiripirit].

3.4.3 Drivers of sanitation and hygiene changes identified because of the HIC Approach

The assessment also looked at drivers of changes reported as attributed to HIC. Those drivers of change included those because of the HIC and other not related to HIC. These factors are both individually and collaboratively attributed to the changes observed in the communities.

1. Impactful training and community openness to learning

HIC approach as implemented in Nuyok activity started with training cluster members on the proper latrine construction and use. The trained members then rolled the support to other non-cluster members in the respective communities.

“Trainings we underwent changed our perception on latrine use and added us more skills and knowledge on latrine measurement, construction and use” [Non-Cluster Members\Nabilatuk. Young women\Napak].

2. HIC design

The design of HIC approach targeted local community members called the cluster, those clusters were trained and since they were from the same community, it was easy to snowball skills and practice acquired to the other non-cluster members and the entire community later became aware of how to construct or who to consult within the community. The approach also promoted the use of locally available construction materials such sacks for measuring latrine widths and length, poles for slabbing and others.

“...and another thing I can say that really helped to achieve the changes was the way Nuyok activity used the local people we know to reach us; even the materials they were training us to use, are readily available here.” [Non-Cluster Members\Nabilatuk. Young men\Napak].

3. Support with construction tools

Nuyok supported each cluster formed and trained with pit latrine construction tools. The objective was to enhance clusters’ ability to work as a group and support other community members (non-cluster) to construct their latrines so that the entire village uses latrines and gets declared ODF. The FGDs showed that cluster members supported the most vulnerable people like the women, people living with disabilities and the elderly were supported to construct latrines. This support enabled vulnerable groups who earlier practiced open defecation to accept and use latrines.

“The tools provided for construction of latrines like spades and pangas for cutting logs and also slashes for cleaning where the latrines can be built have been helpful for constructing and extending support to the vulnerable” [Non-Cluster Members\Nabilatuk. Young women\Napak].

4. Impactful Collaboration

HIC approach as implemented by Nuyok activity was complemented by work from Adventist Development and Relief Agency (ADRA), local leaders and health committees already

present in the communities. Other trainings were given to the community by the complementing partners. It was critical to note that HIC Cluster Approach did not duplicate or contradict other programs in the implementation area.

"The increase hygiene and sanitation knowledge was due to regular training given by Nuyok and NGOs like ADRA, local leaders, and health committees within villages and outside" [Cluster Members\ Napak].

3.5 Latrine observation

Latrine observation involved physically inspecting and assessing the condition and usage of latrines in the study area. The information collected through latrine observation provided valuable insights into the effectiveness of HIC approach to sanitation interventions and identify areas for improvement. This section of the report presents the findings of latrine observation conducted as part of the study and gives a detailed description of the latrines observed, their physical condition, and the behaviors and practices of users. The study team observed 55 latrines with 15 latrines observed in Abim, Nabilatuk, and Nakapiripirit, whilst 10 latrines observed in Napak.

The research team observed latrines in the two categories of villages where the study was conducted; that was, non-ODF and ODF³ villages. Twenty-five (45.5%) of the latrines observed were from non-ODF villages, whereas 30 (54.5%) were from ODF villages. The number of latrines observed in each village category is presented in the table 4.

3.5.1 Age of latrines

Findings show that the average age of the latrines observed was 3.1 years. The minimum age of the latrines seen was 1 year, and the maximum age was 12 years.

In Abim district, 33.3% of the pit latrines observed were less than 2 years old, 26.7% were between 2 and 4 years old, and 26.7% were between 4 and 8 years old. About 13.3% of the pit latrines observed were above 8 years old. This indicates that about 60% of the latrines observed were constructed after the introduction of HIC Cluster Approach in Nuyok intervention areas. And the other 40% were a result of other approaches used before HIC.

In Nabilatuk district, 26.7% of the pit latrines observed were less than 2 years old, 46.7% were between 2 and 4 years old, and 26.6% were between 4 and 8 years old. None of the pit latrines observed were above 8 years old. Implying about 73.4% of latrines observed were constructed after introduction of HIC Cluster Approach.

In Nakapiripirit district, 60% of the pit latrines observed were less than 2 years old, 40% were between 2 and 4 years old, and none of the pit latrines observed were between 4 and 8 years old or above 8 years old. This implies about 100% of the latrines observed were constructed after introduction of HIC Cluster Approach.

While in Napak district, all the pit latrines observed were less than 2 years old. Indicating that about 100% of the latrines observed were constructed after introduction of the HIC Cluster Approach.

Overall, the majority (50.9%) of the pit latrines observed were less than 2 years old, while only 3.6% of the latrines were above 8 years which suggests that most latrines observed were relatively new, with an average age of 3 years correlating with the introduction of HIC Cluster Approach. This

³ It is important to note that the term ODF in this context means the village has been declared as open defecation free village by a certain standard, it does not necessarily mean that all households in the village have access to a functional latrine or are using them.

confirms the findings that HIC Cluster Approach had effectively led to improvement of sanitation in the target communities.

3.5.2 Latrine utilization:

In non-ODF villages, 20% of the latrines observed were used by less than 7 people, 72% were used by 7-12 people, and 8% were used by 13-18 people. In ODF villages, 40% of the latrines observed were used by less than 7 people, 46.7% were used by 7-12 people, 13.3% were used by more than 13 people. This indicates that in the ODF villages where HIC Cluster Approach had successfully achieved acceptability and use of latrines, there was less latrine sharing among households just like it was earlier noted.

3.5.3 Distance of latrine

Distance of latrine from water source

Overall, 87.3%⁴ of the pit latrines observed in the four districts were at least 30 meters away from a water source. This suggests that most of the pit latrines in the area are located at a safe distance from water sources, which prevents contamination of the water. It is also worth noting that Napak district has 100% of the pit latrines located at least 30 meters away from a water source.

The above indicates that HIC Cluster Approach had guided communities well on siting latrine facilities as to avoid contamination of water; this was well achieved in Napak district. It is however important to pursue the 23.3% of latrines that are less than 30 meters from the water sources in Abim, Nabilatuk and Nakapiripirit districts to ensure they are re-sited and do not pose a threat to water sources.

Distance of latrine from the house

The findings show that in the districts of Nabilatuk, and Napak, the majority (81.8%) of pit latrines were located at least 10 meters away from the house. However, in the district of Abim and Nakapiripirit, a relatively high percentage (20% and 33.3% respectively) of pit latrines were found to be less than 10 meters away from the house. This could indicate that there is a lack of awareness or adherence to proper sanitation guideline in Abim and Nakapiripirit district, as it is recommended to locate pit latrines at least 10 meters away from the house to minimize the risk of flies contaminating food and water with faecal matters picked from the latrine.

Latrines in low lying zones

The findings indicated that in Abim district, 50% of the pit latrines are in low-lying zones, where there is a possibility of rainwater flooding the pit. In Nabilatuk district, 78.6% of the pit latrines were in high zones, while in Nakapiripirit district, 53.3% of the pit latrines were in higher zones. In Napak district, all pit latrines were in higher zones. The overall percentage of pit latrines located in low-lying zones is 32.1%. This indicates that HIC Cluster Approach had most latrines properly sited to avoid effects of water stagnation, logging or flooding which affects usage of latrine facilities. In Abim district half of the latrines were in low-lying ground because of the geography of the area. Most Abim settlements are surrounded by mountains. This calls for an adaptative latrine design with raised slabs to prevent flooding.

Possibility of smelling latrine faecal matter from the house

In the four districts where the study was carried out, the majority (81.8%) of the observed latrines, users reported that they could not smell latrine faecal matters from their dwelling units, while 18.2% reported that they could. This suggests that the majority (81%) of households have good latrine operation and maintenance practices including odour management techniques such as use of ash to

⁴ Abim 80%, Nabilatuk 86.7%, Nakapiripirit 86.7% and Napak 100% of the latrines observed were located 30 meters away from the water source.

disinfect latrine squat hole and suppress smell or covering the squat hole to prevent smell from coming out. However, the fact that a small (18.2%) proportion of latrines still had smell issues, indicates that there exist maintenance problems or probably difficult soil conditions that need to be well analysed and addressed.

3.5.4 Latrine structure/design

Latrine slab is not smooth or has cracks

Findings show that in Abim district, 73.3% of latrine slabs were smooth. In Nabilatuk district, 60% of latrine slabs had cracks, while in Nakapiripirit district, 63.3% of the latrines had smooth slabs. In Napak district, 70% of latrine slabs were smooth. Overall, 63.6% of latrine slabs in the four districts were smooth, while 36.4% had cracks. Furthermore, findings indicate that this was similar across Non-ODF and ODF villages, with around 36% of latrine having cracked slabs.

Cracks make it difficult to clean the latrines. Although most of the latrines had smooth floors, cracked floors were present in both ODF and non-ODF villages. This suggests that probably HIC cluster training provided did not adequately skill all cluster members on pit latrine slabbing and, some households cannot afford to construct a smooth slab.

Latrine slab permits urine to pool

The findings show that in the districts of Abim, Nabilatuk, Nakapiripirit, and Napak, about 56.4% of latrines did not permit urine to pool on the slab. In both Non-ODF and ODF villages, there was a significant (43.6%) proportion of latrines which allowed urine to pool. Urine pooling leads to unpleasant odours and unsightliness and makes latrines unattractive to use.

HIC cluster training needs to consider this aspect in the latrine construction training as well to enhance maintenance of latrines in clean condition.

Latrine privacy

Majority of latrines in Nakapiripirit (66.7%), and Napak (70%) did not have a door that can be locked from the inside to provide adequate privacy for the use compared to Abim and Nabilatuk that had only 13.3% of latrines without lockable doors. Lack of adequate privacy comes with associated fear to use the latrine, potentially resulting in open defecation. While implementing HIC Cluster Approach, effort should be made to ensure privacy is incorporated to the design.

Latrines with large sized squat-holes

The findings showed that in all the districts, most latrines (83.6%) had squat holes of appropriate size, while a small portion (16.4%) have a squat hole that is too large. Large squat holes can bring safety issues particularly among young children; but also fears among people who suffer latrine phobia. HIC Cluster Approach successfully ensured latrines with squat holes of the right rise were constructed. Those with large squat holes could have been the older latrines earlier constructed before the HIC Cluster Approach was introduced.

Latrines with squat-hole covers

The study noted that majority (54.5%) of the latrines did not have a squat hole cover, while only 45.5% did. Thirty-two of latrines in non-ODF villages had squat hole covers, whereas in ODF villages it was 43.3%. Tight-fitting squat-hole covers are an important component of a latrine is an effective fly management parameter. Latrines with no functional squat-hole covers are high risk in promoting faecal-oral routes through flies. This aspect needs to be factored in the training of clusters for effective barriers to transmission routes for faeces in communities.

Latrines with cracked walls

The data shows that in the districts of Abim (80%), Nabilatuk (53.3%), Nakapiripirit (80%), and Napak (70%), 70.9% of all latrines observed have walls that are not cracked and 29.1% of latrines have walls that are cracked. Cracked walls make it difficult to clean in case of instances where they get soiled. Cracked walls also indicate poor maintenance state. The training of the clusters achieved many well-constructed walls. The cracked walls probably meant they were from the older latrines which needed more maintenance work. Emphasis therefore needs to be put on operation and maintenance of the latrine facilities.

Latrine structures that do not provide semi-darkness

Findings indicate that in Abim and Nabilatuk district, 40% of latrines did not provide semi-darkness while in Nabilatuk district. In Nakapiripirit district, 60% of latrines did not provide semi-darkness and in Napak district, 60% of latrines did not provide semi-darkness. Overall, 54.5% of latrines did not provide semi-darkness while only 45.5% do. This indicates that nearly half of the latrines observed did not provide semi-darkness. Some individuals associated semi-darkness with privacy, however proper lighting also indicated better ventilation. More work is therefore needed to provide for privacy.

Latrines with lots of flies

The findings suggest that in the districts of Abim, Nabilatuk, Nakapiripirit, and Napak, there is a lower presence of flies in latrines with 78.2% of latrines with a low presence of flies. However, the percentage of latrines with a lot of flies is higher in non-ODF villages (32%) compared to ODF villages (13.3%). This implies that in majority of the latrine facilities, households had instituted proper fly management methods such as smoking, adding ash or that the soil structure was well drained.

3.5.5 Latrine cleanliness and Maintenance

Number of times the latrine is cleaned

The data indicates that latrines in non-ODF villages are cleaned less frequently than those in ODF villages. The most common cleaning frequency in non-ODF villages is once a week (58.3%), while for ODF villages, the most common cleaning frequency is twice a week (22.2%). This indicates that latrine cleaning and maintenance practices may be less consistent or effective in non-ODF villages, which can lead to unpleasant odours and poor overall sanitation conditions. Additionally, the findings indicate that there is a need for improved latrine cleaning and maintenance practices in ODF villages as well. Though ODF villages have more frequent cleaning than non-ODF villages, the fact that the highest percentage of latrines are cleaned only twice a week (22.2%) which highlights that there is a need for more attention in terms of latrine cleaning in the various communities.

Pit latrines risk to collapsing

The assessment indicated risk to collapse in 46.7% of latrines in Abim, Nabilatuk 40%, Nakapiripirit 33.3% and 20% in Napak. Overall, across all four districts, 36.4% of pit latrines faced the risk to collapse. Much as the greater proportion (63.3%) of the latrine facilities had no risk to collapse, almost a third of them did, this means that more efforts should be put in the cluster trainings to ensure safety.

Latrines with faeces observed in the pit

The data showed 40% of latrines in Abim, 80% of latrines in Nabilatuk, 73.3% of latrines in Nakapiripirit, and 90% of pit latrines in Napak had faeces in their pits. Given that most of the pit latrines were newly constructed and being used by a moderate number of people in the community, the findings indicate that majority of pit latrines are being used and are not just construction sites anymore, with very few not being used properly. Regular monitoring of pit latrines is needed to ensure they are being used and functioning properly especially in the communities of Abim.

Latrines with faeces and urine observed on the latrine floor

The findings indicate that across all four districts, 43.6% of latrine floors were not clean at the time of the study. About 33.3% of latrine floors were not found clean in Abim, 53.3% in Nabilatuk, 46.7% in Nakapiripirit, and 40% in Napak. Faecal matter on latrine floors is likened to point open defecation and leads to diarrheal disease spread. This also indicates that people are not fully aware of the importance of keeping the latrines clean, also correlates with the hard-to-clean floors. Easy to clean floors have concrete slabs, Sato-pans or screeded with cement. Consideration had to be made on making latrine floors, walls, and doors easy to clean, which can be factored in the cluster members training.

Latrines with a functioning hand washing facility

The findings indicate that there is a significant lack of functioning hand washing facilities with soap and water in all districts. In Abim, 60% of households do not have access to such facilities. Similarly, in Nabilatuk, 86.7% of households do not have access to them. In Nakapiripirit, 100% of households do not have access to such facilities. In Napak, 90% of households do not have access to these facilities. Overall, 83.6% of households do not have access to functioning hand washing facilities with soap and water. This lack of access to hand washing facilities can increase the likelihood of the spread of diseases and decrease overall hygiene in these areas. HIC Cluster Approach seemed to have concentrated more on latrine construction and use, hand washing with soap lowers incidences of diarrheal diseases by up to 40%.

3.6 Social and cultural norms around latrine ownership and use

Nuyok activity in the target districts in Karamoja sub-region identified latrine quality and state of maintenance as key factors associated with latrine use. Nuyok understands that individual behavior is influenced by social processes, and that these sociocultural factors associated with latrine use needed to be factored in the implementation processes. These socio-cultural drivers of defecation behaviors reflect latrine construction and use determinants, such as enhancement of pride, dignity, privacy, convenience; also, shame, aesthetics and why one would prefer open defecation to using a latrine. Setting community norms, and mindset change were factored in HIC approach in the Nuyok implementation area.

Social norms have been found to be important in providing punitive action to non-compliant individuals in the community; the assessment established that social and cultural norms affected women and girls, elderly, disabled people, and pregnant women in their respective communities in various ways:

Below, we discuss the social and cultural norms affecting latrine use in the various communities visited during the assessment by providing data on the determinants of individual sanitation practices in communities with almost similar cultural practices. Defecation is a complex behavior driven by personal and societal determinants.

1. Open defecation is not a shameful act

Open defecation has been and is still a major challenge in Karamoja sub-region with evidence in most communities. Open defecation practice goes on without shame and consideration of the resultant negative health impact to the greater community.

Findings from the assessment show that nearly half (46.4%) of the of the respondents interviewed believed that open defecation was not shameful, while 53.6% believed and agreed that open defecation was a shameful activity. Napak district had a majority (90%) of the respondents saying open defecation was not shameful, while Abim district had the majority (75%) of the respondents agreeing that open defecation was shameful. Nakapiripirit had a tie

with a half (50%) saying open defecation was shameful. Above data indicates that communities in Napak were more likely to practice open defecation comfortably than those in the other 3 district who feels open defecation was harmful. More attention be put on awareness raising on the dangerous effects of poor sanitation practices in Napak

2. Open defecation is okay for women and girls

Open defecation is not acceptable by any category of individuals in a community; even when done by a single individual, the effect on health may reach the entire community. Open defecation further compromises the safety of women and children as it makes them vulnerable to gender/sexual harassment when they walk long distances into the bush to defecate. Although open defecation is an issue that can affect everyone, but women and girls are often at more risk of experiencing violence and multiple health problems.

Majority (58.2%) of the respondents did not agree that it was okay for women and girls to defecate in the open in their communities. In Napak, all (100%) of the respondents agreed that it was ok for women and girls to defecate in the open. Abim district had the highest of respondents (84.2%) saying it was not okay for women and girls to defecate in the open. With exceptions of Napak district, there was considerable improvement in the community social norms in ensuring that women and girls equally accessed latrine facilities. HIC Cluster Approach ensured more latrines were constructed and this could have resulted in improving access to latrine facilities by all individuals in the communities.

3. Open defecation is okay for the elderly

Open defecation particularly among the elderly is in most cases out of convenience. Sometimes the elderly gets so vulnerable from physical incapacitation, sickness, insecurity or may face difficulty in constructing a latrine facility, if without social support, open defecation becomes inevitable. Also, because they are liable to soil the latrine and are pointed out as those who do not properly use the latrines, they end up preferring open defecation to avoid confrontations with other household members.

There was a 50%-50% tie between those that agreed that open defecation was okay for the elderly and those that did not agree that open defecation was okay for the elderly. In Napak district, 100% of the respondents agreed that it was okay for the elderly to defecate in the open. Nabilatuk also had a great proportion (75%) agreeing that open defecation is okay for the elderly. Abim district had the highest (85%) proportion of respondents not agreeing that open defecation was okay for the elderly. With exception of Napak district great strides were made to ensure that the elderly access latrines; the cluster members must have supported the elderly to construct their own latrine facilities hence limiting the challenges the elders faced.

4. Open defecation does not make people sick

The belief that open defecation does not make people sick is widely spread and believed among people with low education background which is a characteristic prevalent among majority of the communities in the Karamoja sub-region. Earlier approaches, especially CLTS has achieved mild results regarding sensitizing of communities on the health dangers associated with open defecation in their communities.

The majority (50.9%) of the respondents did not agree that open defecation does not make people sick. In Napak district, majority (90%) of respondents agreed that open defecation does not make people sick. Abim district had majority (63.2%) not agreed that open defecation does not make people sick. With exception of Napak district, the majority believed that open

defecation made people sick. However, a considerable proportion still believed that open defecation did not make people sick.

5. Open defecation is okay if the latrine is occupied

Due to the high number of latrine users in the household or the community; for latrines that are shared in the community, possibilities of finding a latrine occupied by another individual were quite common prior to introduction of the Nuyok HIC program. Most (58.9%) of the respondents did not agree that open defecation is okay if the latrine is occupied. Napak district had all respondents agreeing that open defecation is okay if the latrine is occupied; Abim district had the highest (80%) proportion of respondents who did not agree that open defecation is okay if the latrine is occupied. With exception of Napak, the findings show that the increase in latrine construction and use, reduced the likelihood of latrines being occupied.

6. Open defecation is okay if no one sees you

Most (51.8%) of the respondents disagreed with the notion that open defecation is okay if no one sees you. Abim had the greatest proportion (70%) of the respondents not agreeing that open defecation is okay if no one sees you. All the respondents in Napak district agreed that open defecation was okay if no one sees you.

7. Having a latrine next to the house makes the house impure

One of the norms expressed by majority of cluster members during FGDs included statements affirming that community members perceived that having a latrine in their household made their houses impure. The Majority (66.7%) of the respondents agreed that having a latrine next to your house makes the house impure. Napak district has all (100%) respondents agreeing that having a latrine next to the house makes the house impure. Nabilatuk district however, had majority (71.4%) of the respondents not agreeing that having a latrine next to the house makes the house impure.

8. Pregnant women are not supposed to use latrines

To cut the spread of feces and therefore fecal-oral disease transmission in the community, all members must use the constructed latrines. Having even pregnant mothers defecating in the open will keep diarrheal diseases continually spread in the community.

The majority (57.1%) of the population agree that pregnant women are not supposed to use latrines. In Napak district, all (100%) of the respondents agreed that pregnant women are not supposed to use latrines. Nakapiripirit district however, had the highest (60%) proportion of respondents not agreeing that pregnant women are not supposed to use latrines. There is still a need to factor this in HIC approach targeting mindset change as per these myths.

Although cluster members acknowledged the existence of these social and cultural norms as discussed above, it was interesting to note that for majority of FGDs conducted with non-cluster members, they highlighted that there were no such norms known to them that prevented any individual from constructing and using latrines:

"In our community, there are no taboos or laws prohibiting these categories of people from using the latrine and they are using them as usual ..." **[Older Men. Non-Cluster Members\Abim]**

"Even before women, girls and pregnant women were never prevented from using latrine, they have been using and they are still using, no laws or belief that prevent" [Older Men. Non-Cluster Members\Abim]

3.7 Attitudes and beliefs around latrine ownership and use

Lessons learned from the implementation of various sanitation programs in Africa and elsewhere during the past two decades show that programs that provide or subsidize latrine construction without addressing behavioral changes result in unused sanitation facilities, and the facilities themselves are often not maintained. Achieving sustainable sanitation depends not only on the provision of sanitation facilities but also, and most importantly, on the compliance of individuals to using them. Individual or community attitudes and perceptions underline the importance of psychological factors in predicting latrine ownership and consistent latrine use which in most cases act as challenges for majority of sanitation programs in Karamoja sub-region.

In this section, we assessed the communities' attitudes and perception of latrines, before the introduction of HIC approach to identify possible barriers to their construction and use, and eventually propose adaptations of strategies to overcome challenges regarding attitudes and perceptions towards latrines.

1. Latrines are not used because they have a bad odor

Foul smell is one of the deterrents to latrine use, an individual in extreme cases may prefer open defecation other than braving a smelling latrine facility. More than half (67.9%) of participants in the FGDs (Cluster members) agreed that latrines in their communities are not used because they had unpleasant odor. In Napak, all (100%) of the respondents agreed that latrines were not used because they had unpleasant odor.

Of all the districts, Abim district had a majority (63.2%) of the respondents did not agree that latrines were not used because they had an unpleasant odor. With exception of Napak, foul smells from latrine facilities hamper convenience as one critical attribute to latrine use. There is need to ensure smell control practices are instituted in all latrines constructed this means factoring it during the cluster member trainings.

2. The latrines do not provide privacy

Latrine use must be kept a private activity, any incident of exposure or being seen while in the latrine facility may turn counterproductive on sustainable use, one may become embarrassed from an experience of being seen and then prefer open defecation. The assessment found out that majority (63%) of the respondents did not agree that latrines do of provide privacy; with Nakapiripirit district registering the highest (100%) of the respondents not agreed that latrines do not provide privacy. Napak district however, had all (100%) of the respondents agreeing the latrine facilities do not provide privacy. This correlates with the earlier findings that latrine facilities did not have properly lockable doors. HIC Cluster Approach therefore needs to put more attention to latrine doors.

3. Latrines are always littered with human fecal matter

Cleanliness of latrine is usually associated with its proper and consistent usage. Compounded with this attitude and perception, majority of participants (62.5%) reported that latrines in their communities are littered with fecal matter, most of the times and this greatly affects their use by community members. This also correlates with earlier findings that noted that most of the latrine facilities had fecal matter and urine on the latrine floors; it is likely that as HIC Cluster Approach paid attention to durability, issues of cleanliness were not effectively addressed.

4. Location of latrines pose a security threat

The assessment noted that the majority (66.1%) of participants agreed that the location of latrines pose a security threat in some of their communities. Napak had all (100%) of the respondents agreeing that latrine location posed a security threat. However, in Abim, Majority (52.6%) of the respondents did not agree that latrine location posed a security risk. With Karamoja having a challenge of cattle rustling which sometimes results in the death of some of the community members, latrines function as hot spots for threats especially at night and this was acknowledged by some of the participants. The security aspect must be carefully analyzed and factored in the training of clusters to improve on latrine siting.

3.8 Challenges in implementing HIC Cluster Approach

HIC approach prioritized latrine construction, ownership and use to end open defecation in Karamoja area. The challenges to implementing the HIC Cluster Approach could best be obtained from the cluster and non-cluster members. Below were the reported challenges in the implementation process.

i. Unwillingness of some community to accept the approach

Community members included various people with different backgrounds, all of them could not embrace the approach basing on different reasons. The cluster members mentioned that they experienced refusals from some community members when they tried to approach them. The issue of cultural beliefs and practices also affected the implementation process some members could not adopt latrine use and preferred to continue practicing ODF.

"Some other members were very unwilling to accept the program and when approached to explain to them what the campaign was about and how it would bring positive change in the communities "[Cluster Members\Abim].

"Some beliefs and cultures discourage people from embracing what these cluster members are trying to do for example children not allowed to use latrine and where else if not in the bush or anywhere in the compound" [Cluster Members\Nabilatuk].

ii. Inadequate mobilization

The other implementation challenge mentioned was the inadequate mobilization especially for the construction tools which was supposed to be done by the cluster heads. The FGDs cited that they could not find construction tools in some areas which hindered the work. This challenge influenced the number of latrines constructed.

"When influencing the community members, the cluster heads have not mobilized for more construction tools. Since cluster members only influence but tools for construction are not in place and this is what I think they are not doing so well to enable the community to own more latrines" [Cluster Members\Nabilatuk. Young women\Napak].

iii. Limited commitment of some cluster members

The non-commitment of some cluster members in executing their duties was another challenge in the implementation. Several responses around some members giving up on their roles with weak excuses affected the implementation processes. This affected the coverage of the interventions as the level of labor was limited. The non-commitment of

members also affected the quality of the latrines constructed as some collapsed in brief time due to the failure of members to perfectly do the work of training.

"Lack of commitment on the side of new groups formed, some could not attend trainings and meetings when called instead give excuses and I think such people should be encouraged and given close monitoring and supervision of their work" [Cluster Members\Abim].

"Some of these cluster members failed to teach and help us in measuring the length of the pit and also how to look for a good site to construct the latrine and some of us just gambled to measure that is why some latrines have collapsed within a short period of time." [Young men. Non-Cluster Members\Nabilatuk]

In summary, the challenges to HIC Cluster Approach included such barriers as prohibitive dominant norms and cultures, inadequate mobilization, limited commitment from some cluster members, and inadequate construction tools in the community. To be improved and effectively achieve acceptability and use of latrines in the communities, HIC Cluster Approach needs to consider these improvements.

3.9 Limitation of the study

The study did not record any major limitations and challenges which could grossly affect the quality of the findings but a few of those noted included the following.

1. Public Holiday:

The first limitation was related to the scheduling of data collection on a public holiday (Independence Day) in Nakapiripirit. The former Resident District Commissioner (RDC) of Nakapiripirit did not grant the field team permission to conduct any interviews on a public holiday. As a result, the field team had to reschedule the interviews for the following day, which disrupted the original plans and forced the field team to make new arrangements for other interviews. In future, data collection on public holidays of national significance should be avoided.

2. Vehicle Breakdown:

The second limitation of the study was caused by the poor road infrastructure in the study areas, which resulted in the breakdown of one of the field vehicles. This delay made it difficult for the field team to reach the study areas in Nakapiripirit and Napak on time. Fortunately, the team received another vehicle and support from Caritas Moroto Diocese and managed to reach the respondents and conducted interviews. This delay made some respondents who had arrived earlier in the morning to feel fatigued by the time the team arrived.

3. Insecurity:

The third limitation of the study was related to insecurity in Napak. The field team did not have enough time to complete all interviews as scheduled because it was getting late in the evening. The field mobilizer recommended that the team leave the field earlier due to the increasing incidence of cattle raiding in Napak. As a result, two FGDs and one KII were not conducted, and some respondents who may have had valuable information were not interviewed due to time constraints.

4. Limited scope of work (SoW):

The SoW was limited to only studying the effectiveness of latrine construction, use and not handwashing. This was a technical limitation in the study design and therefore the research team could not provide any conclusions on the handwashing aspect of the HIC Cluster Approach.

4. Conclusion and Recommendations

4.1 Conclusion

Home Improvement Campaign (HIC) approach has been implemented in several villages as a means of improving household sanitation and hygiene. This study looked to assess the effectiveness of HIC Approach in increasing acceptability and use of latrines in Karamoja sub-region as well as its impact on the quality and sustainability of sanitation. The study aimed to answer four specific questions related to HIC approach, including the contribution of the approach to attitudes and perceptions, the impact on latrine construction, maintenance and cleanliness, the barriers and enablers to latrine construction and use, and measures that can be taken to improve the quality and sustainability of sanitation. In this section, the findings of the study and the implications for the HIC approach are discussed.

The Home Improvement Campaign (HIC) approach has had a positive impact on latrine construction and use among households in villages. The approach focused on creating awareness, promoting behaviour change and providing support for latrine construction and use. The approach involved community mobilization and collective decision making, which increased a sense of ownership and responsibility among households. As a result, there has been an increase in households with access to latrines and a decrease in open defecation practices. HIC approach also emphasized the health benefits of using latrines and proper hygiene practices, which improved understanding among households of the connection between latrines and their overall health. The provision of technical and financial support for latrine construction was also instrumental in promoting latrine construction and use. HIC approach has led to significant improvements in access to improved sanitation facilities and has effectively changed attitudes and perceptions towards latrine construction and use.

HIC Cluster Approach has been successful in improving the quality of latrines at the household level in communities where it was implemented. The approach emphasized the use of locally available and affordable materials, as well as construction techniques that are appropriate for the local context, leading to the construction of latrines that are more durable and hygienic. The approach also encouraged community ownership and responsibility for latrines, leading to improved maintenance and cleanliness. As a result, households were more likely to keep their latrines in good condition and maintain proper hygiene practices. The success of the HIC Cluster Approach highlights the potential of community-led approaches in improving sanitation in rural areas and the importance of involving households in the design and implementation of sanitation programs.

The Home Improvement Campaign (HIC) approach was implemented in several villages in Karamoja to improve sanitation through increased latrine construction and utilization. There were several barriers to latrine construction and utilization identified, including financial constraints, lack of information and knowledge, negative attitudes, and logistical challenges. On the other hand, enablers to latrine construction and utilization included awareness and motivation, community support and involvement, and provision of technical assistance. Addressing these barriers and utilizing the enablers helped to increase the uptake of latrine construction and utilization among households. This highlighted the importance of considering both barriers and enablers when implementing a program aimed at improving sanitation at household level, as well as the role that community involvement and technical assistance can play in improving sanitation outcomes.

Evidence from the study highlighted several factors that affected the construction, use, and maintenance of latrines in the villages studied. Improving the quality and sustainability of sanitation requires addressing these barriers by focusing on the identified enablers. One key enabler is community mobilization and awareness-raising activities, which can change attitudes towards latrine construction and use and build a sense of collective responsibility for sanitation and hygiene.

Furthermore, continuous provision of households with technical and financial assistance, to overcome the barriers of cost and complexity of latrine construction and maintenance will ease the maintenance of the latrines at household level.

To ensure the sustainability of latrines, constant maintenance and cleanliness are important, and households need to be provided with necessary materials and equipment, as well as information and training on how to use and maintain their facilities. Additionally, cultural and social norms that influence latrine construction and use need to be addressed through community meetings and engagement of influential community members such as religious leaders and local officials. In conclusion, a multi-faceted approach is still needed to improve the quality and sustainability of sanitation, particularly with regards to latrine construction, use, and maintenance. Addressing the identified barriers can create an enabling environment that supports latrine construction and use and ultimately improve the quality of life for households in the villages.

4.2 Recommendations

Based on the findings of the study, HIC approach has had a positive impact on latrine construction, use, and maintenance in the villages. However, there are still several challenges and barriers that need to be addressed to ensure long-term sustainability and improved quality of sanitation in the region. In this recommendation section, we aim to provide actionable recommendations for households, the community, the district leadership, CRS, and its partners to improve the quality and sustainability of sanitation in the villages. These recommendations have been developed based on the identified barriers and enablers and aim to address the specific needs and challenges of each target group. The goal is to create an enabling environment that supports latrine construction and use and helps to improve the overall quality of life for households in the villages.

Household Level Interventions

Based on the evidence from the assessment, it is recommended that households take the following actions to improve the quality and sustainability of sanitation in their communities:

- Households should engage in community mobilization and awareness-raising activities, as these can help to change attitudes and perceptions towards latrine construction and use. By working together with other members of the community, households can build a sense of collective responsibility for sanitation and hygiene and can help to create a supportive environment for latrine use.
- Households should take advantage of the technical and financial assistance that is available to them, as this can help to overcome the barriers associated with the cost and complexity of latrine construction. By working with trained technicians and taking advantage of financial support, households can improve the quality of their latrines and ensure that they are constructed in a way that is sustainable over time.

Community-level Interventions

At community level, the following recommendations should be considered.

- Regular maintenance and cleanliness are important factors that can impact the sustainability of latrines. It is recommended that communities be provided with the necessary materials and equipment, as well as information and training on how to use and care for their facilities. Regular monitoring and supervision can also help to ensure that latrines are utilized and maintained effectively.
- It is important to engage influential members of the community, such as religious leaders and local officials, in the promotion of good hygiene and sanitation practices. This can help to address cultural and social norms that influence latrine construction and use, and to promote positive behaviour change.

District Level Interventions

By implementing the recommendations below, district leaders can also play a crucial role in promoting latrine construction, use, and maintenance in the villages where HIC approach has been implemented.

- Regular monitoring and supervision of the HIC approach achievements are important to ensure it remains effective and make any necessary adjustments to improve the quality and sustainability of the latrines constructed, ensure that they are being used, and properly maintained.
- Work with other development partners and other stakeholders to increase the provision of technical and financial assistance to households to overcome barriers associated with the cost and complexity of latrine construction. This will help to encourage more households in the region to invest in improving their sanitation facilities.

CRS and implementing partners

- HIC Cluster Approach protocol should be reviewed to explicitly describe steps geared towards behavior change; not only in effective latrine construction but also to facilitate mindset change from a rational point view of the fecal-oral routes
- To enhance quality of latrines especially smooth washable floors, walls, doors, and foul smells, co-opting some aspects of the sanitation-based marketing approach in to the HIC Cluster Approach would beef up durability and cleanliness of the latrines hence improving them from the contamination and infection control perspective.
- To foster sustainability further, the approach should be designed to align its structures (e.g., clusters) within those already created by government. Such structures as; water and sanitation committees, the village health teams so that post the Nuyok activity, follow up by government is made feasible.
- The approach should describe deliberate efforts to reach to all members in the community including non-cluster members who may not be willing to join. Taking into consideration the United Nations (UN) Sustainable Development Goals (SDG) 6 of leaving no one behind when delivering sustainable availability of water and sanitation.
- The Approach should describe how it involves key stakeholders especially in the line departments - District Water Office, District Health Office, District Community Based Services (the Health Assistants, Community Development officers and Parish Chiefs) among others.
- Focus should also be put on what next beyond the Home Improvement Cluster Approach so that it just does not end at latrine construction and use and probably achievement of open defecation free status; but consider what happens beyond all this attainment.

Annex A: Tables of Analysis

Table 5: Demographic characteristics of the participants

	Cluster Members (N=63)	Non-Cluster Members (N=143)	Total (N=206)
Gender			
<i>Male</i>	34 (54.0%)	70 (49.0%)	104 (50.9%)
<i>Female</i>	29 (46.0%)	73 (51.0%)	102 (49.1%)
Age			
<i>15-24 years</i>	21 (33.3%)		21 (33.3%)
<i>25 and Above years</i>	42(66.7%)		42(66.7%)
Marital Status			
<i>Married</i>	58 (92.1%)	125 (87.8%)	183 (89.4%)
<i>Widow</i>	4 (6.3%)	4 (3.1%)	8 (4.3%)
<i>Single (living with parents)</i>	1 (1.6%)	13 (9.2%)	14 (6.2%)
<i>Divorced/separated</i>	0 (0.0%)	0 (0.0%)	0 (0.0%)
Number of Children			
<i>0-2 years</i>	21 (33.3%)	51 (35.7%)	72 (34.8%)
<i>3-5 years</i>	21 (33.3%)	53 (36.7%)	74 (35.4%)
<i>More than 5 years</i>	21 (33.3%)	39 (27.6%)	60 (29.8%)
Relationship Type			
<i>Monogamous</i>		104 (73.0%)	104 (73.0%)
<i>Polygamous</i>		39 (27.0%)	39 (27.0%)
Education Type			
<i>ABEK</i>	26 (41.3%)	25 (17.3%)	51 (26.7%)
<i>Primary</i>	17 (27.0%)	41 (28.6%)	58 (28.0%)
<i>Secondary</i>	8 (12.7%)	12 (8.2%)	20 (9.9%)
<i>Tertiary</i>	0 (0.0%)	4 (3.1%)	4 (1.9%)
<i>Not Learnt</i>	12 (19.0%)	61 (42.9%)	73 (33.5%)
Literacy Levels			
<i>Illiterate</i>	28 (44.4%)	88 (61.2%)	116 (54.7%)
<i>Can read only</i>	15 (23.8%)	22 (15.3%)	37 (18.6%)
<i>Can read & write</i>	20 (31.7%)	34 (23.5%)	54 (26.7%)
Primary Livelihood			
<i>Crop Farming</i>	53 (84.1%)	139 (96.9%)	192 (91.9%)
<i>Livestock/ Husbandry</i>	4 (6.3%)	0 (0.0%)	4 (2.5%)
<i>Wage/Salary</i>	1 (1.6%)	1 (1.0%)	2 (1.2%)
<i>Mining</i>	0 (0.0%)	0 (0.0%)	0 (0.0%)
<i>Firewood/Charcoal</i>	5 (7.9%)	3 (2.0%)	8 (4.3%)
<i>Others (specify)</i>	0 (0.0%)	0 (0.0%)	0 (0.0%)

Table 6: Knowledge about HIC

	Cluster Members (N=63)	Non-Cluster Members (N=143)
Have heard and are aware of what is done under HIC	117 (81.6%)	117 (81.6%)
They have heard but not aware of what is done under HIC	23 (16.3%)	23 (16.3%)
Have not Heard and are unaware of the HIC approach in their village	3 (2.0%)	3 (2.0%)

Table 7: Use of Pit Latrines

	Cluster Members (N=63)	Non-Cluster Members (N=143)	Total (N=206)
Household latrine/non-shared		89 (62.2%)	89 (62.2%)
Shared pit latrine		35 (24.5%)	35 (24.5%)
Practice open defecation		19 (13.3%)	19 (13.3%)

Table 8: Social and Cultural Norms around latrine ownership and use

	Abim	Nabilatuk	Nakapiripirit	Napak	Overall
Open defecation is shameful					
<i>Agree</i>	75.0	56.3	50.0	10.0	53.6
<i>Disagree</i>	25.0	43.7	50.0	90.0	46.4
<i>Total</i>	100.0	100.00	100.0	100.0	100.0
Open defecation is ok for women and girls					
<i>Agree</i>	15.8	43.7	30.0	100.0	41.8
<i>Disagree</i>	84.2	56.3	70.0	0.0	58.2
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Open defecation is ok for the elderly					
<i>Agree</i>	15.0	75.0	30.0	100.0	50.0
<i>Disagree</i>	85.0	25.0	70.0	0.0	50.0
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Open defecation does not make people sick					
<i>Agree</i>	36.8	43.7	40.0	90.0	49.1
<i>Disagree</i>	63.2	56.3	60.0	10.0	50.9
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Open defecation is ok if the latrine is occupied					
<i>Agree</i>	20.0	37.5	30.0	100.0	41.1
<i>Disagree</i>	80.0	62.5	70.0	0.0	58.9
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Open defecation is Ok if no one sees you					
<i>Agree</i>	30.0	43.8	40.0	100.0	48.2
<i>Disagree</i>	70.0	56.2	60.0	0.0	51.8
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Having a latrine next to the house makes the house impure					
<i>Agree</i>	70.0	28.6	80.0	100.0	66.7
<i>Disagree</i>	30.0	71.4	20.0	0.0	33.3
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Pregnant women are not supposed to use latrines					
<i>Agree</i>	55.0	43.8	40.0	100.0	57.1
<i>Disagree</i>	45.0	56.2	60.0	0.0	42.9
<i>Total</i>	100.0	100.0	100.0	100.0	100.0

Table 9: Attitudes and Perceptions around latrine use and ownership

	Abim	Nabilatuk	Nakapiripirit	Napak	Overall
Latrines are not used because they have a bad odor					
<i>Agree</i>	36.8	82.4	70.0	100.0	67.9
<i>Disagree</i>	63.2	17.6	30.0	0.0	32.1
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
The latrines do not provide privacy					

<i>Agree</i>	52.9	5.9	0.0	100.0	37.0
<i>Disagree</i>	47.1	94.1	100.0	0.0	63.0
<i>Total</i>	100.0	100.0	100.00	100.0	100.0
Latrines are always littered with human fecal matter					
<i>Agree</i>	47.4	52.9	70.0	100.0	62.5
<i>Disagree</i>	52.6	47.1	30.0	0.0	37.5
<i>Total</i>	100.0	100.0	100.0	100.0	100.0
Location of latrines pose a security threat					
<i>Agree</i>	36.8	76.5	70.0	100.0	66.1
<i>Disagree</i>	63.2	23.5	30.0	0.0	33.9
<i>Total</i>	100.0	100.0	100.0	100.0	100.0

Annex B: Data Collection Tools



Focus Group

Discussion guide for



Focus Group

Discussion Guide -Clu



Focus Group

Discussion guide for r



Key informant guide

for community leader



Observation checklist

for quality of pit latrine

Annex C: Informed Consent Forms



Assent form-
younger men-HIC stu



Assent form-younger
women -HIC study(15



Consent form for
cluster members.docx



Consent form
non-cluster members



Consent form
Non-clusters-young a



Consent
form-KIs.docx



Consent
form-Observation of j

Annex D: Approved Research Protocol



Nuyok HIC cluster
approach Study pro