

SAFE Pwani's WASH Project in Partnership with P&G 2020 - 2021

Introduction

2020 saw SAFE Pwani move their long-term WASH Project, delivered in partnership with Procter & Gamble to a new area of the South Coast, Ndavaya. The highly successful clean water programme was initially threatened by the COVID-19 crisis, as the Government moved to shut down all community outreach activities in the region. But SAFE Pwani were given permission by the County Commissioner to continue their activities and expand their work to include COVID-19 education within the performances and training. Once again, this project was able to greatly improve the health of some of most disadvantaged communities in coastal Kenya, with water treatment increasing from 6% of the community, to an impressive 99%, an 800% increase in hand washing facilities, and five of the target villages being declared Open Defecation Free (ODF) zones.

S.A.F.E.'s WASH Programme is effective, time tested and makes use of community-led total sanitation (CLTS) methods, theatre, education and community facilitated discussion to effect positive and sustainable behaviour change.

The project aims are:

- Activate positive behaviour change within the community towards water, sanitation and hygiene
- Improve the health of under 5's by reducing the prevalence of waterborne diseases.
- Create a community self-sustainable ODF zone

These aims will be achieved through SAFE Pwani's objectives:

- Empowering the community to take positive steps to manage their health through the provision of clean and safe drinking water
- Using theatre and the CLTS approach to spread awareness about sanitation and hygiene.
- Promoting the building and usage of latrines
- Encouraging practical community sanitation and hygiene standards and working with the leadership to uphold them.

Ndavaya Area Information

Ndavaya is in Kinango sub county. The 2019 Population and Housing census estimated the population of Kinango Sub County as 94220 with 16048 households and a population density of 58 people /km². Ndavaya Division is one of the seven divisions in Kinango Sub County, lying 15km south west of Kinango town and has an estimated population of 38170 with 6110 households. Currently, Ndavaya location is divided into four sub locations: Mwandimu, Ndavaya, Gulanze and Kifyonzo.

When SAFE Pwani initially surveyed the location in 2017, there were areas of Ndavaya that had no toilets and lacked clean drinking water, contributing to high rates of water borne diseases. The team also saw that the community had little information on WASH, it is for these reasons that it was selected for the fourth phase of the SAFE Pwani WASH Project, with Gulanze being picked as the focus area.

Activities

Overview

To be able achieve the programme's objectives, the team replicated the activities from the previous successful phases of the WASH Programme.:

Date	Activity	Description	Number of people reached
3rd – 7th February 2020	Baseline research and survey *Survey done in March	The baseline was carried out to ascertain the level of knowledge and understanding within the community. The team also collected data from health centres and schools	1151 households 2 dispensaries
17th – 21st February 2020	Community Entry Meetings	Introduced the SAFE Pwani WASH programme to the residents of Ndavaya through 6 meetings in the different villages of Gulanze sub location.	352
	Distributor Training	Identification and training of S.A.F.E. distributors from within the community, representatives were chosen from each village and a final thirteen were selected for permanent roles in the project.	52
15th – 22nd March 2020	First Performance Theatre	Community theatre outreach that educated, entertained and shared WASH information with the community.	1268
First week of every month	Distribution of water purifiers	Continuous activities carried out by SAFE Pwani's field workers (distributors) which involved data collection and presentation, distributing water treatment products and community education.	7889 per month
First week of every month	Monthly stakeholder meetings	Monthly stakeholder meetings with county administration, health officials, village representatives and partner organizations.	16 per month
24th - 28th June 2020	Monitoring and evaluation	Project supervision, monitoring and evaluation. 210 households were assessed for sanitation and hygiene while 108 households were assessed for water quality.	318 households
20th - 25th October 2020	Rehearsals	Actors and actresses went into camp for a week to rehearse for the performance in a COVID free bubble. This was done to protect the actors and the community members.	

26th October 2020 – 5th November 2020	Second Performance Theatre	Community theatre outreach that educated, entertained and shared information with the community.	1694
24th February 2021 - 4th March 2021	Monitoring and evaluation	Project supervision, monitoring and evaluation. 208 households were assessed for sanitation and hygiene while 101 households were assessed for water quality.	309 households

Community Entry

These initial meetings introduced the programme and its objectives to the leaders and stakeholders of the target community, involving them from the start in order that they understand their role within the project. A total of 352 people attended the six meetings convened in different villages of Gulanze sub location.

The SAFE Pwani Project Managers led the meetings, in partnership with the area Assistant chief, Village Administrators, the Ndavaya PHO and the community health volunteers (CHVs).

The team began by taking the participants through the different aspects of WASH:

- Water and food contamination
- Effect of contamination to people and the community
- Cost of treatment of waterborne diseases
- Prevention of contamination
- Water treatment
- Hand washing
- Good human waste disposal
- Building and use of latrine - health and financial benefits

A key aim of the SAFE Pwani WASH programme is to help villages achieve Open Defecation Free (ODF) status, Therefore, the team also spent time explaining the minimum non-negotiable ODF requirements:

- Privacy for the latrine user
- Functional hand washing facility
- Drop hole cover
- Firm structures with a door
- Absence of faeces around the village

Way Forward

At the end of each meeting, the leaders selected three people from each village, who together with their village chairperson, would support their local community to adhere to the WASH agenda. These representatives would then be given a one-day induction workshop to build their capacity as project distributors. A total of 52 people were selected from the community.

Agreements were also made between the community, the administration, and the health department, on the roles and commitments each stakeholder group will play throughout the project's life.

a) The community

- The community will treat their drinking water using the water treatment products provided and other recommended treatment options, following the instructions exactly.
- Build latrines and ensure they are used and maintained properly, keeping to the deadlines set out below.
- Ensure hand washing facilities are present and used in every household.

b) The County Administration and Health Department

- Monitor the progress that the community is making, ensuring that they build and maintain latrines.
- Monitor distributors and assist them to overcome any challenges they might face in the course of their work.

c) SAFE Pwani

- Identify, train and support distributors
- Ensure the water treatment product is available in the community
- Educate the community on WASH and water treatment using theatre
- Monitor and evaluate the programme, assessing progress and suggesting recommendations for challenges faced.

Distributors Training

The distributors are the most important element of the WASH programme. Alongside the distribution of the water treatment product, they give out WASH information within their villages, and demonstrate how to use the water treatment product. The distributors also collect monthly data and information to assist in monitoring and evaluating the programme.

The distributor training was facilitated by the SAFE Pwani staff, and the Ward Public Health Officer (PHO). The following topics were covered:

- Health information on water pollution and water borne diseases
- Different methods of water treatment
- P&G purifier of water product demonstration
- Work and function of a distributor
- Monitoring and evaluation

The distributors are expected to:

- Educate and provide water treatment demonstrations to the community
- Distribute the water treatment products
- Monitor WASH progress through the collection of monthly WASH data
- Record and report success and challenges faced by the community
- Give recommendations on how the programme could better meet its objectives.

Baseline Survey

SAFE Pwani carried out a baseline survey to find out what the situation in Gulanze was prior to SAFE Pwani's intervention.

Interviews with the County Health Stakeholders established the following points:

1. There was no clean and safe water in Gulanze.
2. The key water sources are: Dams, rivers, earth pans and SAPO Kiosks. The water from these sources is not treated
3. In a few areas there had been some distribution of water treatment chemicals by SCOPE and the Ministry of Health, but the distribution was neither consistent nor reliable.
4. Although testing is not being done in the Health Centres due to lack of the capacity to do so, patients are presenting with symptoms of waterborne diseases.
5. There is water pollution through animal and human waste. Animals share water sources with people and open defecation allows human faeces to mix with water.
6. Latrine coverage is low.
7. There have not been efforts to improve the WASH situation until the recent arrival of the new public health leadership who has prioritised WASH, however, they lack the resources to run a successful campaign.
8. The leadership had been trained on Community Led Total sanitation (CLTS) but no effort had been made to implement the learning due to lack of will, unified approach and funds for implementation and follow-up.

Water Situation

At the beginning of the team's activities in Ndavaya, no treated water was available. The piped water that is provided at the Sapo kiosks in Gulanze comes from a borehole at Dudu in Kifyonzo and it is not treated. Plans were underway by the county to treat dam water at Mwakang'ombe, however, these are yet to materialise.

The community's main water sources are pans, dams, rivers, rain harvesting and sometimes water brought in by the County Government. There are some special cases where water is treated with chlorine or the community is supplied with water treatment products at a household level, but these initiatives are neither consistent nor sustainable. Schools and hospitals receive water from the County Government or private suppliers at a subsidised rate.

The below table shows the rates of water treatment prior to the intervention.

Village	Homes teads	Househol ds	Under 5years	Above 5 years	Total Populatio n	Amount of water collected (litres)	House holds treating water	Amount of water treated	% of water treated
GULANZE A	47	101	211	560	771	36720	8	10120	28%
GULANZE B	55	86	116	366	482	10040	20	1880	18%

MWAGIA	87	112	110	497	607	14560	1	40	0.27%
BUMANI	75	115	149	530	679	11060	2	140	1.27%
KANZILI	38	83	92	435	527	7420	0	0	0%
NGANJA	68	68	84	421	505	7920	5	180	2.27%
NGAURO	64	99	250	520	770	12320	9	350	2.84%
DZOYAHEWA	59	60	91	392	483	9700	3	80	0.82%
KAWELU	65	78	73	380	453	2160	0	0	0%
AMANI	84	84	82	440	522	16838	4	60	0.36%
JITAAKILI	63	101	133	695	828	15150	8	490	3.23%
NG'AZAMATSO	48	67	66	334	400	6940	1	100	1.44%
MWACHANDA	90	97	134	635	769	6560	5	260	3.96%
TOTAL	843	1151	1591	6205	7796	146328	66	13700	9.36

Summary of the Baseline information:

- Only 9.3% of the total water collected was being treated
- Out of the 1151 households surveyed, only 66 treated their water.
- Kawelu and Kanzili were not treating water at all, while the village with the highest number of households treating water was Gulanze B with 20 households treating water. Gulanze A had the highest percentage of water being treated, at 28%. Although fewer houses were treating the water, the volume of water being treated in those households was higher.
- The common treatment methods used were:
 - Shabu (white stone)
 - Water treatment products such as water guard, aqua tab and P&G purifier of water.

Health Situation

The lack of diagnostic equipment at the dispensaries means it is difficult to identify and properly treat water borne diseases. The cases that S.A.F.E. picked for this report were just suspected water borne cases collected due to the patients presenting with symptoms such as diarrhoea and stomach ache.

Gulanze Dispensary			Total
Month	Over 5 years	Under 5 years	

August 2019	14	27	41
September 2019	15	24	39
October 2019	32	18	50
November 2019	22	22	44
December 2019	22	31	53
January 2020	33	36	69
	138	158	296

Challenges in Health Centres

Although anecdotal evidence exists from the health officials, distributors and residents, SAFE Pwani had a hard time accessing follow up data from the health centres. The health centres are understaffed and some records are not up to date. The health workers' strike in 2020 was also a factor in the missing data.

The team is however going to work with the health centres to improve the record keeping. This will be beneficial for accurate tracking of the impact of interventions on the health of community members.

Latrine and hand wash situation

According to the baseline survey, the ratio of toilets present to people was 1:26. There is 1 hand wash facility for every 2 toilets, only 116 out of the 123 facilities were in use, and only three quarters of these had soap.

Village	Population	Toilets Present	Hand Wash Facilities Present
Gulanze A	771	28	10
Gulanze B	482	24	0
Mwagia	607	36	1
Bumani	679	14	13
Kanzili	527	6	3
Nganja	505	17	7
Ngauro	770	19	12
Dzoyahewa	483	19	4
Kawelu	453	10	0
Amani	522	21	19

Jitaakili	828	20	5
Ng'aza Matso	400	49	27
Mwachanda	769	33	22
	7796	296	123

Household Education and Distribution of Water Purifiers

The monthly distribution of the water treatment product started in April following the first outreach tour.

Month	Average Population Reached	Total number of Sachets Distributed	Total amount of clean water provided to community (litres)
April 2020	8280	48549	485490
May 2020	8233	49574	495740
June 2020	8188	48796	487960
July 2020	8257	49320	493200
August 2020	7900	48042	480420
September 2020	8202	49212	492120
October 2020	8163	48984	489840
November 2020	8180	49089	490890
December 2020	8028	47818	478180
January 2021	7836	47900	479000
February 2021	7803	47044	470440
March 2021	8063	48702	487020
April 2021	5433	24360	23460
TOTAL	7889	607390	6073900

Each month, the distributors distributed the water treatment product, collected data on the uptake of water treatment, building of latrines and hand wash facilities. They also recorded any challenges facing the community in implementing good WASH practices and relayed these challenges to the team:

- Some residents are sceptical about drinking the treated water because they don't believe there is anything wrong with the water they had been drinking before.
- Some residents believe that drinking treated water causes ulcers, complaining that the treated water smells like bleach and is not appealing.
- Some are not following the proper procedure and are using the wrong equipment, thus contaminating the water, putting their health in danger.
- A few of the distributors are not consistent in their supply, favouring some families over others. This had made some households miss out.
- Some people do not think that clean water and latrines are a priority. They say they need food instead of sachets of water purifier.

Over the initial four months of distribution, SAFE Pwani reached an average of 8239 people per month, this was higher than the expected number of 7796 reported in the baseline survey. This population surge occurred due to the large number of people returning to their villages due to the economic effects of the COVID-19 lockdown restrictions in towns. In April 2021, there was a shortage of the product in Kenya, therefore a smaller number of households was reached.

Monthly Stakeholders Meetings

Stakeholder meetings are a new activity which were instigated at the request of the Kinango PHO, who had recently transferred from a different ward and where he had used the stakeholder meetings with high success rates. These are strategic meetings involving all project stakeholders in order to discuss the progress of the programme and address challenges. The challenges faced by the stakeholders are discussed and weighed and the best solution is picked having had the full participation of everyone present.

The stakeholders engaged included:

1. Kwale County Government – Health and Village Admin.
2. KWAHO- Kenya Water for Health Organization
3. Office of the Assistant Chief, Gulanze
4. Gulanze Community Representatives

The monthly stakeholder meetings have not only improved SAFE Pwani's work by ensuring that they have regular updates from both the distributors and the village elders, but have also improved the contribution of the village elders to the project. The village chairmen are now taking responsibility for identifying and handling the members of the community who are not embracing WASH practices, and working with their distributor and the SAFE Pwani team to educate them to bring them around. This had been a key area for improvement that the team had focused on. In the previous phases of the water project, the village admin had not always supported the distributors, making their work more challenging.

Community Theatre Outreaches

SAFE Pwani uses high quality mobile theatre to educate, entertain and engage the community about different aspects of WASH. Theatre is a powerful tool, it encourages dialogue about the current health situation within the community at that particular moment and how the residents can come together to improve it.

Community Outreach Tour - March 2020

Two tours were planned for the year, the first of these was in March. The tour took place just after the first case of COVID-19 in Kenya was reported, and SAFE Pwani were given permission to continue due to their role in the Kwale County response to COVID-19. The performance was updated to include education about how to prevent and contain the spread of the virus, in addition, a hand washing demonstration was included alongside the water treatment demo. This tour was the first introduction of SAFE Pwani to the new community, and was important to create community trust of the team and the water treatment product.

DATE	VENUE		VILLAGE	ATTENDANCE			
				Male	Female	Children	Total
16/3/2020	1	Mlongo Chaka Mkale	Bumani	21	29	67	117
16/3/2020	2	Gulanze Polytechnique	Mwagia	28	28	22	78
17/3/2020	3	Kinemini	Mwachanda	4	16	2	22
17/3/2020	4	Ngonzo	Gulanze A	21	31	67	119
17/3/2020	5	Gulanze Centre	Gulanze B	23	37	62	122
18/3/2020	6	Marere	Jitaakili	10	27	16	53
18/3/2020	7	Jitaakili ECDE	Jitaakili	18	23	43	84
19/3/2020	9	Kwa Jawa	Dzoyahewa	19	22	42	83
19/3/2020	10	Kwa Kamanza	Ng'aza Matso	10	22	28	60
20/2/2020	12	Mkala mwarua	Nganja	22	44	62	128
20/2/2020	13	Kwa Mgaza	Gulanze B	16	41	73	130
21/2/2020	14	Kawelu Centre	Kawelu	18	36	81	135
21/2/2020	15	Mzee Tana	Ngauo	26	48	63	137
TOTAL				236	404	628	1268

The tour was cut short due to the tension brought by the spread of COVID-19, staff feared a lockdown and wanted to return home to their families.

Community Feedback

After the performance, the SAFE Pwani team carried out water treating demonstrations and the audience tested the water, gave comments and asked questions. Audiences were impressed by how effectively the product cleaned the water, and although some complained that the water smelled like bleach, they said that the water was much better than what they were used to drinking. The audience in all of the venues wanted to get the treatment product and were introduced to their distributor and informed that the product would be distributed to their homes in the coming month.

Questions asked	Answers
Is there any type or condition of water that can't be treated?	If the water is too dirty, mixed with oil, smoke, soap or rust - then it cannot be treated.
In case the water cannot be treated, can you use it?	Untreated water can be used for any other work/house chores, but not for drinking.
Will the treatment product be sold or is it going to be free of charge?	It is going to be free of charge.
After stirring the water for five minutes, we are told to let it settle for five more minutes. After that you sieve it and leave the water for another twenty min. Why should the water stay for twenty minutes?	The treatment product is made up of aluminium sulphate and chlorine. The aluminium takes ten minutes to work, while chlorine takes thirty minutes. Drinking the water without leaving it for the full time will mean you are drinking only partially treated water.
Some of us make an effort to build toilets but they get spoiled when it rains. What do we do, can you help us?	CLTS approach does not recommend any financial or material assistance, therefore build one as per your ability. It's advisable to dig a v shaped pit to avoid it collapsing.
Should we use our treated water for drinking only or we can also use it for other chores around the house?	Treated water can be used for all purposes, but due to the limited supply, SAFE ask the community to only use treated water for drinking.
When water is warm the dirt in the water could go up instead of settling down. What should I use to take out the dirt?	Use a cup to remove the dirt before sieving with a piece of cotton cloth.
For how long can the treated water stay safe?	It depends on your storage mechanism, but you can use it for 7 days if it's not in contact with any dirt/dust.
After washing my hands can I use my clothes to wipe them?	No, you have to let them dry or use a clean tissue paper.
When treating water using the sun rays, do you have to use the water while it is hot? I believe when it gets cold it is not safe anymore?	It is safe to let the water cool down first prior to drinking it.
During rains, we tap water flowing along palm leaves because we don't have sheet roofs. What should we do if this water can't be treated due to debris?	Allow the water to settle for a while then sieve before treating.

What do you use if you don't have a white cotton cloth to filter the treated water?	It does not have to be white in colour, but it has to be made of cotton. White is preferred because it promotes clean standards and reduces risk of using a dirty cloth to sieve the water.
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COVID-19 questions

Questions	Answers
If someone sneezes on you directly, how do you protect yourself?	You should wash yourself with water and soap immediately.
Are we not allowed to go to drink local brew (alcohol)?	No, you are not allowed to for now since bars are crowded and speed up the spread of COVID-19. It is better that you buy it and drink it at home.
When are doctors going to test us for COVID-19?	The community health volunteers will answer that question, but if you get symptoms, you should immediately go to the hospital. If you see someone with symptoms, then advise them to go to the hospital right away.
Am I not allowed to hug my own wife?	Yes, you can hug her but first take a shower and change your clothes if you have been outside the house.
The soap that we have to use for COVID-19 prevention hand wash is green in colour and is found in Mombasa. Is that true?	No, you can use any soap to wash your hands.
We boil drinking water but we use one container, can that endanger us from getting infected by/with COVID-19?	Yes, if the container is contaminated by someone with COVID-19. The container therefore needs to be disinfected after every person's use to minimise subsequent users' risk of contracting the virus.
Does exchanging money put you at risk of contracting COVID-19?	Yes, either wash or sanitize your hands after handling money.
Is it necessary for my husband to visit the hospital after traveling before coming home?	If he is coming from a high-risk area then he needs to do a 14-day self-quarantine before being out in the community

Challenges faced during the tour:

- Rain made some areas inaccessible by cars, making the staff travel on foot over long distances to get to some venues. The road networks are also not good making the transport system unreliable in the interior parts of Ndavaya. This delayed performances and others had to be cancelled.

- Distances between the venues are large; this tires out the actors before the performances begin.
- COVID-19 lockdown measures cut short the performance tour because the staff are from different parts of the Coastal region of Kenya and a continuation would have seen them locked away from their families for an undefined period of time.
- The senior residents were sceptical of the product and were not ready to test the treated water. The team suggested that they should at least boil water but they did not want to because they believed that the water is good and that the diseases they experienced were normal.

Community Outreach Tour – October 2020

The second performance tour was carried out in October 2020. The performance was updated to include the feedback of the stakeholders and the findings from the M&E which took place in June. The COVID-19 control measures were still in place, therefore SAFE Pwani made adjustments to the plans. Every member first had to be tested before joining the team in a health bubble for rehearsals in a restricted environment. This was done to protect the community members and the staff.

For the performances themselves, the team sourced venues where they could create a barrier between themselves and the community to allow for social distancing and to protect the integrity of the bubble which had been created.

The first and second tours had a few differences in terms of approach. The first tour was an introduction to the water treatment product, its importance and how it works. The second tour allowed for greater depth of dialogue and engagement with the community because they had had time to put information into practice - therefore there was more for the team to observe. The audience was encouraged to take part and share their feedback.

Core challenges highlighted in the M&E and included in the performance:

- Misuse of Purifier of water
- Poor disposal of used Purifier of water sachets
- Water sources being too dirty to be treated properly
- Building and use of toilets
- The COVID-19 situation

GULANZE				ATTENDANCE			
DATE		VILLAGE	VENUE	MALE	FEMALE	CHILDREN	TOTAL
26/10/2020	1	AMANI	KWA CHAI	2	2	15	19
26/10/2020	2	MWAGIA	KANISANI KWA MJERA	9	27	21	57
26/10/2020	3	KANZILI	KANZILI ECD	12	36	48	96
27/10/2020	4	NDAVAYA	ACC OFFICE NDAVAYA	30	24	72	126

27/10/2020	5	MWACHANDA	KANISANI KWA SAMWEL	11	15	22	48
27/10/2020	6	BUMANI	MZEE NYOTA	2	7	31	40
28/10/2020	7	KIFYONZO	MBULUNI DISPENSARY	59	64	67	190
28/10/2020	8	NGAURO	NGAURO PRIMARY	20	11	90	121
29/10/2020	9	MBULUNI	MKANG'OMBE DISPENSARY	16	27	126	169
29/10/2020	10	KIWELU	KWA ZIA	4	16	22	42
29/10/2020	11	GULANZE A	KWA MWERO MZUNGU	4	21	24	49
31/10/2020	12	NGAJA/ GULANZE A	KURERA MWARUA	7	17	59	83
31/10/2020	13	GULANZE B	KWA GAMBARI	7	12	17	36
31/10/2020	14	BUMANI	BUMANI PRIMARY	15	9	29	53
2/11/2020	15	MWACHANDA	MZEE NZAPHILA	3	12	21	36
2/11/2020	16	NG'AZA MATSO	KWA ABDULRAHMAN	1	4	22	27
2/11/2020	17	AMANI	MZEE CHAKA BENYANJE	4	18	34	56
3/11/2020	18	DZOYA HEWA	KWA CHIWAYA	5	17	38	60
3/11/2020	19	NG'AZA MATSO	NG'AZA MATSO NURSERY	3	13	40	56
3/11/2020	20	MWAGIA	KANAGONI	22	41	114	177
4/11/2020	21	GULANZE B	KWA MDZELE	3	9	14	26
4/11/2020	22	NGANJA	KWA CHITUPA RUWA CHILO	7	15	26	48
4/11/2020	23	NGAURO	KWA MWADUKA	12	15	52	79
TOTAL				258	432	1004	1694

Facilitation/ Demonstration

The focus of the facilitation was to highlight the successes and address the challenges that the community are facing. This was done by understanding the cause of the challenges, appreciating their effort and at the same time being firm in order to correct mistakes, educate and give support.

Observation: A volunteer from each of the villages that had ongoing distribution of Purifier of Water was called upon to demonstrate how they treat water. The aim was to see where the real challenges were and address them.

Education: Communities were educated through questions and answers sessions, and sharing of testimonials by the PHO and other health workers present.

Awarding success: As a motivation tool, the facilitators recognized the gains made and applauded the villages that had achieved the ODF status, and also encouraged those who had not achieved the certification. During facilitation, the facilitators awarded presents to those who participated in order to promote positive discussion within the community.

Performance Tour Results

General Findings:

- Water treatment knowledge was high in Gulanze
 - Water treatment knowledge was high. In every venue, there was a volunteer who was able to accurately treat their water. The audience were also on the lookout, any small mistake by the volunteer was corrected on the spot.
 - This knowledge still needs to be translated into practice since some households are without treated water. This is an attitude and practice change that will be progressively achieved as the project continues.
 - The areas surrounding the health facilities lack WASH information therefore, the team focused on these three centres. During the next tour, the team will perform at the remaining two centres of Mbwaleni and Mbita.
 - The SAFE Pwani team were impressed by the great and innovative work distributors were doing to ensure that vital information on WASH reaches the community. Following a performance in her village distributor Grace Umazi gave a talk about how providing safe drinking water safeguards children's health.

- Toilet presence
 - Great strides have been made in latrine coverage. At some shows, 100% of those in attendance said that they all have toilets. At the time of the tour, five villages had achieved ODF status and four others awaited verification.
 - The latrine coverage had increased to 78% from the initial 27%. Villages such as Kawelu and Kanzili are yet to embrace building and using toilets. This is unlike the attitude in other villages where residents are actively improving the sanitation in their homesteads. Residents from villages that were declared ODF zones were open to change.
 - Some households are sharing one latrine, therefore SAFE Pwani along with the project stakeholders are pushing for each house to have its own latrine.

- Good reception from the community and the administration
 - SAFE Pwani received a good reception from the highest office in the division- The Assistant County Commissioner's office. The Ndavaya administration has been supportive of the whole project.
 - The Gulanze community were ready to receive the team at their homesteads, the venues were prepared prior to our arrival with space cleared for the performance. With the limited resources, the community managed to prepare hand washing facilities where all the people arriving at the homestead could wash their hands.
 - Except for a disruptive audience in Bumani, kwa Nyota, the audience were disciplined and ready to learn and were a joy to work with.

Challenges Faced

Despite the success achieved, there were noted challenges that needed to be addressed:

- Misuse of Purifier of water
 - As well as treating drinking water, some residents were preparing water for laundry
 - People had put Purifier of water in one of the dams in Kanzili village.
- Poor disposal of used Purifier of water sachets is creating excess plastic pollution in the community.
- Water from some sources was not reacting as expected when using the Purifier of water. In some cases, the water is not becoming clear in areas where the water is extremely dirty.
- Building and use of toilets - there were villages yet to complete building of latrines. It was also observed in Ngauro that people had built toilets but were not using them.
- COVID-19
 - During the first six months of the project, SAFE Pwani and partners educated and assisted homesteads to build hand washing facilities, but by the time of the second tour they had stopped using them. Some were broken and had not been replaced.
 - There was a notion within the community that there was no COVID-19, audience members said “there is no COVID-19 in Gulanze only in Mombasa”. After the facilitated session there was a shift and the team saw that some villagers had reverted back to wearing masks.

Addressing Challenges

- It was observed by the stakeholders that the most challenging areas were those that were not visited on the last tour, therefore there is a need to prioritise them in community education.
- In villages where there has been a laxity to build and use latrines the distributors and village leaders will increase inspections and community education in their areas.
- Continue to educate the community on coronavirus and the need to observe the Ministry of Health directives on COVID-19 control.

Project Supervision, Monitoring and Evaluation

M&E was carried out on both a monthly and bi-annual basis. The monthly M&E was carried out by the distributors themselves; the team then carried out an in-depth analysis of the information twice over the course of the year to back up the data collected by the distributors to ensure its accuracy. The bi-annual M&E surveys also went further in depth, allowing for a greater variety of information to use to measure the progress of the programme.

Monthly Distributor Monitoring **Sanitation coverage**

Month	Completed	Percentage Increase	Without Toilet	Broken
April 2020	398	N/A	106	2
May 2020	487	22%	156	19
June 2020	602	24%	100	1
July 2020	745	24%	68	1
August 2020	735	-1%	52	5
September 2020	850	16%	55	6
October 2020	864	2%	46	8
November 2020	897	4%	26	21
December 2020	882	-2%	39	31
January 2021	872	-1%	35	31
February 2021	860	-1%	28	38
March 2021	881	2%	39	25
April 2021	701	-20%	70	39

Since the start of SAFE Pwani's intervention, there has been a tremendous improvement in latrine building each month. The number of complete latrines rose from a baseline figure of 296 to 881 complete toilets by the end of March 2021 which is a 198% increase. The April numbers are much lower than the previous month because they are linked to the distribution route the distributors use. Since there was a decline in distribution in April, the number of toilets counted was much lower. A census, independent of the distributor route, of the toilets present was conducted in early May. It showed that the number of completed toilets present was 848.

Five villages in Gulanze achieved great success in the past year. Mwagia, Jitaakili, Mwachanda, Dzoyahewa and Ngauro were ODF certified.

The success has been attributed in part to the good relationship between the village chairmen. Distributors and all stakeholders. Inspections and follow-ups are done by all the stakeholders - KWAHO, PHO'S Office and Chief's office.

Challenges in sanitation

1. Difficult community members: Some members' perceptions have not changed, they refuse to construct latrines, not because they lack resources but because they feel that it's not important.
2. Leaders with no toilets: Some leaders lack toilets in their homesteads. Lack of leadership and role models discourages community members from taking the right ODF steps. The Assistant Chief and the PHOs office are trying to push these leaders to comply.

Bi-annual Monitoring and Evaluation

The data for the biannual monitoring and evaluation was collected through questionnaires, observations and collecting testimonials. In every village, no less than eight households were assessed on water treatment and 16 households were assessed on sanitation and hygiene, on average there were 310 households treated per survey

Monitoring and Evaluation Results						
Village	Completed latrines present		Hand Wash facilities present		Amount of water treated daily in litres	
	June 2020	February 2021	June 2020	February 2021	June 2020	February 2021
Gulanze A	4	2	12	0	320	165
Nganja	6	14	12	14	260	160
Gulanze B	3	10	8	7	330	150
Kawelu	6	10	12	4	240	60
Amani	10	11	11	7	320	100
Kanzili	4	8	13	10	260	150
Ng'aza Matso	15	12	15	10	260	200
Mwachanda	4	16	12	16	180	115
Dzoyahewa	10	15	15	16	220	170
Jitaakili	14	15	16	13	240	120
Bumani	5	9	14	3	220	270
Ngauo	11	16	15	14	260	115
Mwagia	13	12	15	14	160	160
Total	105	150	170	128	3270	1935

Water treatment

99% of the respondents in June of 2020 used the P&G Purifier of Water to treat their water. They were treating a combined 3270 litres of water per day, which is around 30 litres per household per day. The knowledge of how to treat water shown by the respondents was impressive. 92% of the respondents had knowledge on water treatment. This went up to 96% in February of 2021.

The preferred treatment option stated during the February 2021 M&E remained the Purifier of water with 99% of the respondents using it. The drought experienced in the area during February explains the reduction in the amount of water treated. The total amount of water collected for drinking and other uses went down from 14000 litres to 9985 litres. The total amount of water being treated was 1935 litres of water per day, which is about 19 litres per household per day.

Latrines

The ratio of toilets present to people was 1:16 in June 2020, a significant improvement on the baseline survey which showed a ratio of 1:25. In February 2021, the ratio improved further to 1:10 in February 2021. Of the latrines present in June 2020, only 15% were being shared by different homesteads, this reduced further to 14% in February 2021. The toilets present in June of 2020 were in a good condition, latrines scored an average of 73% in terms of privacy, and 71% for quality of the floor. In February of 2021, privacy had gone up to 88%, and floor quality up to 91%.

Hand wash Facilities

The ratio of hand wash facilities to toilets was 1:2 in June. 81% of the interviewed households had hand wash facilities during the period and 95% of these were in use. The number of hand wash facilities present was on the higher side because the survey was carried out at the height of the Ministry of Health's campaign for citizens to have hand washing facilities at the entrance of each homestead as part of the COVID-19 control measures. This is also the main reason why 53% of the hand wash facilities were located more than three meters from the latrines. SAFE Pwani monitored the effect of reduced COVID-19 containment measures on the number of hand wash facilities and saw the number decline from July onwards.

By February of 2021, although the percentage of households with hand wash facilities had dropped to 60%, the ratio of hand wash facilities to toilets had improved to 1:1. This is mainly because there were more households reporting a reduction in availability of water. The team was however encouraged to note that of the 60% hand wash facilities present, the percentage of hand wash facilities present and in use had actually improved to 96% and that their distance from the toilets had reduced in most households. 92% of the hand wash facilities present are now located within three meters of the toilets as compared to 47% in June.

Project Impact

SAFE Pwani's project was well received in the community. The benefits were seen across the community on multiple levels, and by different stakeholders. The following are some of the sentiments shared from residents, distributors and health officials:

Health Worker, Ndavaya

My name is Esther Njuguna. I work with the department of Public Health. We have worked with S.A.F.E. for a while now. I started working with them in September to distribute water treatment products to the community in Ndavaya. The MCH mothers and the mothers attending ANC (antenatal clinic) were the target group. I would distribute to them the product and explain how it is used, and follow up later to find out if there were any changes. They are happy their water is cleaner and there are fewer diseases. As part of the Ministry of Health, we ask that the supply of the product continues so that the community can continue benefiting.

Public Health Officer (PHO), Ndavaya

My name is Nzavila Wato Chidziwe. I am the PHO in charge of Ndavaya ward. Just before SAFE Pwani came to Ndavaya, we had done a sanitation survey. We shared that report with SAFE Pwani and we started working with them. Challenges have been there, but for now, the latrine coverage in the whole ward has really improved. Diarrhoeal cases in the ward and in particular Gulanze sub location have really gone down. It is like we do not have any case of diarrhoea now in Gulanze, because the main cause was poor sanitation and the water that the public was taking was contaminated with faeces. Now, the supply of water treatment products that is used in treating water the whole of Gulanze, brought those cases down to almost zero. So in Gulanze sub-location for now, people do not have diarrhoeal cases, and that was the project area for SAFE Pwani. Sanitation has really gone up. We thank SAFE Pwani so much for the intervention. They have assisted the public so much with the intervention, and out of that the result is that the latrine coverage has gone up and diarrhoeal cases have gone down.

Distributor, Ngauro

My name is Simon Chirunga. I come from Ngauro Village and I distribute water treatment products. Honestly, before SAFE Pwani came to Gulanze, and to Ngauro, there were twelve toilets only. Once we started working together with SAFE Pwani, the number increased to approximately seventy-eight toilets in an area with one hundred households. Some households have built the toilets collaboratively and are sharing them. People are no longer defecating in the forests; everyone now uses toilets. The village is cleaner because people are no longer defecating under trees.

We (distributors) were trained and we now share the knowledge on water treatment to the people we distribute the water treatment products to. We now use clean water and the treatment product is in demand so that they can drink clean water for better health. We are better placed now with clean water. We are grateful and ask for five more years besides the two they (SAFE) said the project is for, so that we can get more information from them and role models. We have also faced a few challenges in the beginning when people did not want to build toilets, but continued engagement showed the community the importance of having toilets and of drinking clean water.

Community Health Volunteer, Gulanze

My name is Luvuno Musa Mwamongo. I am thankful to SAFE Pwani. We did not have clean toilets and did not know the importance of using toilets but we have now learned and worked together with SAFE Pwani to improve our toilets. Many know the importance of using toilets, and treating water because water from the water pans was dirty. We taught the community how to properly treat water and they are now used to using clean water, treating the water correctly, and knowing the importance of toilets. Therefore, SAFE Pwani has really helped us since we started collaborating. We are more knowledgeable and are confident with the information learned through SAFE Pwani.

Health worker, Mbuluni Dispensary

My name is James Mwahuya. I work at Mbuluni Dispensary. I am lucky to have worked with SAFE Pwani's WASH project that has really helped us in Kifyonzo sub location particularly through distribution of water treatment products and concerning toilets and their construction. People are thankful because they previously had diarrhoea but that has now gone down because of the water treatment product being used to treat water. The toilets have also improved, people are building toilets and people are grateful because toilets have contributed to the villages being ODF (open defecation free). When it comes to monitoring and evaluation, the villages like Gulanze, have been helped greatly because they are better off and have seen the benefits of SAFE Pwani. All in all, I would like to thank SAFE Pwani a lot, because they have done a great thing in Kifyonzo sub location.

Resident, Amani village

My name is Hamisi Tembe. I am a resident of Amani Village in Mwachanda. We have benefited a lot since SAFE Pwani started working here. We have new toilets. We are using the water purifier to treat dirty water from the water pans. Diseases such as diarrhoea have reduced among the children. We are grateful to them for providing the water treatment and urge them to continue with the same spirit. Thank you.

SAFE Pwani Observations

- Community members are being proactive in treating their water. Some are even reaching out to the distributors to get more water purifying products when they had run out. The number of people drinking purified water is increasing in the target villages and the neighbouring villages have expressed interest in being part of the programme.
- The task of purifying water and the knowledge is being shared to all members of the community. In Kanzili, some small children demonstrated that they can treat water with the water purifier correctly.
- The administration and leadership in Ndavaya have been supportive throughout the entire process. Partner organisations have offered supplementary services that have been essential in getting villages under this project certified as ODF zones. KWAHO has facilitated the assessment of the villages that is required before the certification can be done. This partnership has helped ensure that villages are declared ODF zones as fast as possible, this has boosted morale within the ODF villages and given other villages something to aspire to, prompting surges in latrine building.

Way forward

- To continue distribution of water treatment products to the designated areas
- Push for more villages to be declared ODF zones through partnership with the leadership and the Ministry of Health.
- Plan to distribute water purifiers to all health centres targeting antenatal care and MCH departments.
- Focus educational activities on the areas that SAFE Pwani feel lack WASH information to drive forward change in this area.

- Educate communities that share water sources with the villages that SAFE Pwani are working with.
- Work with the leadership, P&G and other stakeholders to find alternative water treatment solutions for the project going forwards.

Stakeholders Contributions

The success of the project was made possible by the presence of different partners and stakeholders who worked hard in their different capacities. They were also key in reinforcing SAFE Pwani's messaging. We are very grateful to them for their support and cooperation throughout the project.

	STAKEHOLDER	DEPARTMENT/OFFICE	THEIR CONTRIBUTION
1	Ministry of Health Kwale	Ndavaya Public Health Office	Main partner. Planning, consultancy and education
2	Ministry of interior coordination- NG	Ndavaya ACC Office	Logistics, security and mobilization
3	KWAHO	Samburu Office	Technical partner, consultancy and education
4	Ward Administrator- Ndavaya	Gulanze	Mobilization and logistics
5	Ndavaya chief's office	Gulanze Asst chief	Education, Security, mobilization and enforcement
6	Gulanze Asst chief	Gulanze village chair	Planning, Security, mobilization and enforcement
7	Gulanze Public Health Office	Gulanze Health Committee	Planning, Education, mobilization, consultancy and enforcement