



CENTRES for
HEALTH &
EDUCATION
PROGRAMMES

Empowering | Promoting Health, Education and Development | Improving lifestyles

CHEPs Update #39 July – Sept 2022



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ABOUT US

The Centres for Health and Education Programmes (CHEPs) is a registered Non-Governmental Organisation (NGO) in Kenya. Its goal is to empower, promote access and improve quality of health and education for the benefit of under resourced individuals and communities.

VISION

CHEPs' envisions the underprivileged across Kenya empowered with equal access to quality health and education services, improved agriculture and environment for a dignified lifestyle.

MISSION

CHEPs' mission is to empower the underprivileged individuals and communities of Kenya, while instilling hope and dignity, by providing sustainable and quality health, education, agriculture, environment conservation, development and humanitarian projects through local initiatives, resources, and involvement of local volunteers willing to serve the community.

PROJECTS

Health care: Eye camps, orthopaedic camps, emergency medical treatment, limb prosthesis

Water, sanitation & Hygiene (WASH): Wells, trucking clean drinking water to villages and schools, installing water storage tanks in villages and schools, construction of latrines in schools, promoting toilets in every household, distribution of water chlorination solutions

Education: Student sponsorship, student mentorship centre, set up libraries, solar lights, books' distribution to students, classrooms, furniture for schools, distribution of bags and stationery for students

Agriculture: Farming support and training, irrigation projects, kitchen gardens, animal husbandry

Environment: tree planting, organizing clean-up/hygiene projects in villages

Humanitarian: Emergency food relief during famine & drought, welfare of street children, feeding programmes

IMPACT

SUMMARY OF ACHIEVEMENTS THIS QUARTER

Programme Area	Activity Area	Indicator	Result
HEALTH	Eye camps	Number of eye camps held	2
		Number of people screened	2,777
		Number of surgeries (cataract) performed	158
	Orthopaedic camps	Number of orthopaedic camps held	1
Number of surgeries (orthopaedic) performed		22	
EDUCATION	School latrines	Number school latrines constructed	3
	School feeding programme	Number of schools supported with food for students and teachers	25
		Number of students reached through school feeding programme	1700
	Stationery support	Number of students given books and stationery	100
WATER, SANITATION & HYGIENE (WASH)	Wells	Number of wells completed	22
		Number of villages where wells were dug	4
	Water storage	Number of villages supported with water tanks	5
	Community Led Total Sanitation	Number of latrines constructed in households	73
	Food distribution	Amount of food distributed (tons)	11 tons
	HUMANITARIAN (EMERGENCIES)		Number of villages provided emergency food relief
		Number of households provided emergency food relief	377
		Number of people given clothes	120
AGRICULTURE	Farmers training	Number of community groups trained in farming	2
		Total households trained on sustainable self-irrigating garden systems	7

CUMULATIVE ACHIEVEMENTS TO DATE

<u>SR.NO</u>	<u>INDICATORS OF ACTIVITY PROGRESS</u>	<u>RESULT</u>
1	Number of people provided with food support in emergencies	286,281
2	Number of villages provided food support in emergencies	125
3	Amount of food distributed in emergencies (tons)	1,190
4	Number of eye camps organized	123
5	Number of people screened for eye conditions	52,656
6	Number of people provided eye glasses for refractive errors	15,046
7	Number of people provided with eyedrops for various eye conditions	37,196
8	Number of cataract blind people operated to see again	6,546
9	Number of patients provided occupational therapy for various conditions	32
10	Number of individuals assisted for emergency medical treatment	85
11	Number of amputees provided with limb prosthesis	28
12	Number of students ever supported with fees	246
13	Number of students currently supported with fees	84
14	Number of university students ever supported with fees	89
15	Number of university students currently supported with fees	1

16	Number of disabled students ever supported with fees	16
17	Number of disabled students currently supported with fees	1
18	Number of boarding schools supported in food for fees project	13
19	Number of students benefited from food for fees project	524
20	Amount of food distributed in food for fees project	OVER 40 TONS
21	Number of student mentorship centres set up	3
22	Number of books distributed	7,809
23	Number of schools/institutions given books	40
24	Number of libraries set up for schools/communities	4
25	Number of classrooms constructed	20
26	Number of latrines constructed by CHEPs	70
27	Number of latrines constructed by communities in households through CLTS programme	2016
28	Number of desks given to schools	930
29	Number of solar lights given to schools	32
30	Number of solar lights given to institutions	42
31	Number of households received solar lights	254
32	Number of trees planted	17,342
33	Number of wells dug	507
34	Number of wells rehabilitated	557
35	Number of dried wells re-dug	50
36	Number of water storage facilities constructed	56
37	Number of kitchen gardens supported	329
38	Number of farmers supported	4,961
39	Number of large irrigation (greenhouse)/farming projects	3
40	Number of goats distributed to poor families	90
41	Number of official presentations made at scientific conferences	6
42	Number of scientific journal publications	1
43	Number of workshops, seminars & community presentations	8
44	Number of conferences and workshops organized	3
45	Number of clothes distributed	2,800
46	Number of schools/institutions given clothes	10
47	Number of water filters distributed	200
48	Number of families received water purification chemical	9,400
49	Number of families received water buckets for water storage	10,577
50	Number of households educated on COVID-19	10,000
51	Number of masks produced	42000
52	Number of masks distributed	42000
53	Number of thermo gun given to schools	6
54	Number of sanitary pad kits produced	10,001
55	Number of sanitary pad kits distributed to school going girls	9,500
56	Number of schools provided disposable sanitary pads	10,001
57	Number of houses constructed for seniors	30
58	Number of individuals assisted with wheelchairs	2
59	Number of schools enrolled in feeding program	25
60	Number of school laboratory constructed	2
61	Number of adolescent health talks to schools/community	3



HEALTH

- ORTHOPAEDIC SURGERIES
- EYE CAMPS
- REHABILITATION



ORTHOPAEDIC CAMPS

BACKGROUND

Road traffic injuries kill more than 1.3 million people every year and are the leading killer among 15-29-year old age group. Low and Middle-Income Countries (LMICs) like Kenya account for 93% of all road traffic accidents (RTAs) deaths worldwide and close to 50 million cases of disability. In Kenya RTAs cost the country 5% of Gross Domestic Productivity (GDP).

Orthopaedic fractures are the commonest injuries that occur. Most of the times, such injuries affect young breadwinners that get involved in accidents while at work or on their way to or from work. More commonly of late, are motorcycle riders who form the bulk of orthopaedic patients. Many are however unable to afford the high cost of surgery and because they are commonly required to pay for it upfront, many remain unoperated and their fractures heal poorly leading to disability. Furthermore, since they cannot be discharged from hospital with major fractures, they remain ridden in hospital beds for protracted durations, accumulating costly bills. Since they are the breadwinners, the families are commonly unable to meet the cost upon discharge leading to even longer hospital stay and further accumulation of bills. Furthermore, the family loses a breadwinner, since their breadwinner could not access surgery and ends up disabled and unable to resume their jobs, plunging the family into poverty. The little assets that they may have accumulated over the years are commonly disposed to clear the accrued bill, sinking them deeper into poverty. This leads to a vicious cycle of poverty as the breadwinner sinks into it, and the dependents lose empowerment opportunities such as education resulting in them also growing up in poverty, and subsequently giving rise to another generation of poverty stricken off springs.

First CHEPs Orthopedics Outreach

Most public health facilities in low-income countries like Kenya are crowded with trauma patients. Sharing of beds as well as nursing of patients on any available space including the floor and corridors is a common sight in public hospitals in Kenya. Many patients are admitted daily due to trauma sustained following road traffic accidents and many of them unable to afford surgery hence remained in the ward, unoperated with a ballooning hospital bill.

In order to assist such patients access surgery and heal quickly so that they can resume their breadwinning responsibilities, CHEPs has rolled out a free orthopaedic surgeries programme. Our first camp was held, in September 2022, at Thika Level 5 Hospital located in Kiambu county, close to the popular Thika super highway.

In collaboration with Thika level 5 hospital staff, CHEPs was able to operate on 20 needy patients, who had remained admitted in hospital over lengthy durations, all free of charge. The surgeries were conducted with support from Turkish Cooperation and Coordination Agency (TIKA), Beta Charitable Trust (BCT), the hospital and the family of Late Basheerali A. Nasser Peera.



CHEPs Programmes Manager Dr. Faraj Alkizim conducting surgeries during the camp



The above radiographs belong to a 15 yr old boy who is currently on his final year of primary school. He sustained a fracture of his right femur (thigh bone) while playing football in school. His parents who are small scale farmers were unable to afford his surgery leaving him admitted in hospital for close to a month, missing out in school yet he is due to sit final examinations at the end of the year. He was operated free of charge during the CHEPs camp and discharged to resume school and prepare for the crucial primary school exam.

The above radiographs belong to a 68 year old mother of 5 children who sustained a fracture of her femur (thigh bone). She is a subsistence farmer and could not afford the high cost of surgery remaining in hospital for more than 6 weeks before benefitting from the CHEPs free camp. She was thereafter discharged to reunite with her family.

A total of 20 needy patients were operated during the camp, two of them having two surgeries. This is as an effective mode of preventing poverty as it encourages self-sufficiency. We expect that once operated, such patients will regain their ability to continue working and providing for their families and communities. On the other hand, failure to operate on them will result in disability, plunging them, their families and communities deep into poverty.



EYE CAMPS

BACKGROUND

It is alarming that 2.2 billion people worldwide have vision impairment, half of them preventable and correctable. The commonest cause of distant vision impairment is refractive error accounting for 88.4million people, and cataract blindness makes up 94 million, while that of near vision impairment is presbyopia accounting for 826 million. Also of concern is the fact that 90% of visually impaired people live in low-income settings, a large proportion of them unable to access ophthalmic services.

CHEPs has over the years been on a mission to improve eyesight of destitute communities by conducting free eye camps all over Kenya. During the camps, we screen and treat various eye ailments using a variety of medication and correct visual impairment by giving out spectacles all free of charge. We also perform eye surgeries to treat cataract blindness and other surgically corrected ailments all free of charge to the beneficiaries.

We have so far held a total of 123 free eye camps across the country during which:

- 👉 52,956 people have been screened for eye conditions
- 👉 Over 15,046 pairs of spectacles were given out to correct visual impairment.
- 👉 Over 37,396 eye drops of different types were dispensed to treat eye diseases.
- 👉 Over 6,755 blind people have been operated for cataract to restore their vision.

DURING THIS QUARTER

- 👉 **2 camps were conducted**
- 👉 **580 patients attended to**
- 👉 **200 issued with spectacles**
- 👉 **405 given eye drops**
- 👉 **209 operated to restore vision following blindness**

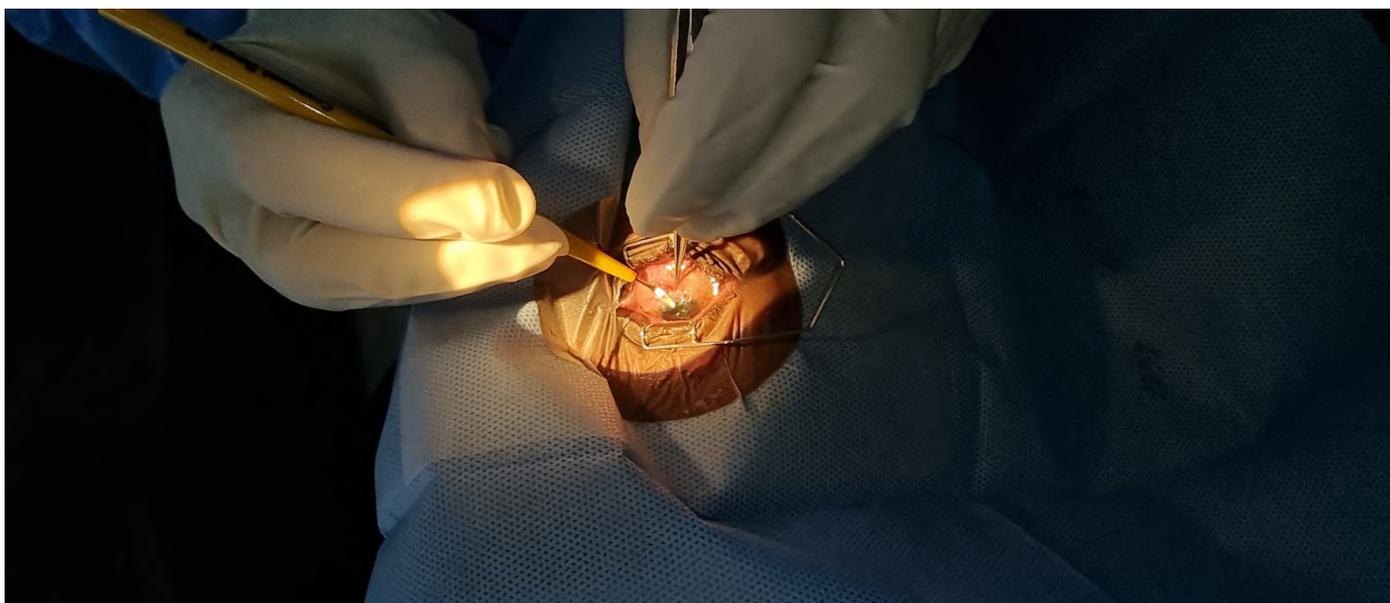
On follow up, all cataract surgeries were successful with vision restored in the patients. No complications have been reported, and all the beneficiaries were satisfied with the services and results and have expressed heartfelt gratitude to all those involved in their treatment. Most of them were elderly, who had lived in a state of blindness for many years but could not access treatment due to financial and awareness constraints.

CHEPs 122nd EYE CAMP- July 2022

The camp was held in Olkalau, Nyandarua county located and 160km North west of Nairobi.

The following services were offered free of charge:

- Total number of patients served –300
- Eye drops dispensed to treat various eye diseases – 200
- Cataract blindness diagnosed and operated– 55



CHEPs 123rd EYE CAMP- July 2022

Held in Garissa which is located 370 km from Nairobi and 200 km from Kenya's border with Somalia. Garissa has a total population of over 1,020,000 people, most of whom live nomadic lives. Patients came from very distant villages, many of them elderly, weak and malnourished. A total of **154 surgeries** were performed to correct and restore vision. Among the patients were 5 children who were operated under general anesthesia. On follow up, all cataract surgeries were successful with vision restored in the patients





REHABILITATION

BACKGROUND

Globally over 1 billion people are reported to have various forms of disability. This amounts to 15% of the world population. However, many disabled persons suffer discrimination and stigma and are therefore neglected with no access to health care. It is also reported that over half of disabled people in low- and middle-income countries cannot afford proper healthcare.

CHEPs has therefore established a rehabilitation facility for children with disabilities at our Kawangware slum, Nairobi, multipurpose community centre. We have a full-time occupational therapist who undertakes daily rehabilitation of disabled children. So far 36 children with a wide range of disabilities including cerebral palsy and brain damage, have signed up for the services which are provided free of charge.





EDUCATION

- INFRASTRUCTURE SUPPORT
- SCHOOL FEEDING
- STATIONERY SUPPORT

BACKGROUND

It is estimated that over 46% of the Kenyan population live below the poverty line. Such people are unable to access education due to various challenges including inability to afford levies, geographical proximity and lack of facilities among other challenges. These have forced children living in extreme poverty to be locked out of education. Poverty and education are intertwined at multiple levels. Such children grow up uneducated, preventing them from becoming productive members of a very competitive society. They in turn give rise to poverty stricken off springs, which in turn are unable to access education giving rise to a viscous cycle. The situation only gets worse with the rising cost of living and increasing competition among societies. It is there imperative to break this cycle, and the most sustainable intervention is that of promoting access to education to curb poverty. CHEPs strives to enhance literacy among communities by addressing these challenges. We have constructed classrooms, toilets, science and computer laboratories, sponsored students, provided girls with menstrual kits and donated books furniture, supporting school feeding programs among other projects.

SCHOOLS INFRASTRUCTURE SUPPORT

LATRINES CONSTRUCTED FOR 3 SCHOOLS IN CHAKAMA

It is reported that:

- 2.5 billion people (37% of global population) to date lack access to adequate sanitation
- Every 20 Seconds, a child dies due to poor sanitation
- 80% of diseases in developing countries are caused by unsafe water and poor sanitation
- Access to good sanitation and safe water could save 1.5 million children per year

Access to safe sanitation in Kenya is a major obstacle to attaining good health and well-being. Proper human waste disposal systems are unheard of in many remote parts of Kenya. It is reported that only 65% of the Kenyan population has access and the number falls lower to 56% in rural areas. Chakama, a remote location that comprises of 47 villages in Kenya's Kilifi county, has even worse statistics. According to a survey conducted by CHEPs in 2021, 87% of villagers had no access to safe sanitation and relieve themselves in the bush. This number even rises to 100% in some of the villages. Furthermore, only 365 of the total 4800 households in the entire Chakama had latrines. This demonstrates that the practice of open defecation is rampant in the area, leading to contamination of water and food sources and resulting in diarrheal diseases that are costing lives.

Chakama, Kilifi County

Chakama is a remote area located within Kenya's Kilifi County, one of the poorest of the 47 counties in Kenya. The community lives under very harsh conditions, and lacks access to essential needs including clean water, food, healthcare, electricity, and sanitation. Having no access to sanitation, the community is forced to defecate in the open, posing to them great danger due to the high likelihood of water and food contamination, leading to outbreaks of diarrhea diseases that often lead to mass mortality.



Open defecation, a common practice in rural parts of Kilifi, Kenya

CHEPs aims to save millions of lives through provision of suitable safe sanitation. We do so through partnership with the communities where we educate them on the dangers of open defecation and support them to construct their own latrines. Through this Community Led Total Sanitation programme, more than 2000 domestic latrines have been constructed across Chakama. For learning institutions, we educate the students on hygiene and encourage them to become ambassadors for the same within their communities. We also construct for schools latrines and have so far constructed more than 10 blocks for various schools.

Through generous support from Care Aid Africa, CHEPs has constructed 3 blocks of latrines for Kathama Primary, Raukani ECD and Zowerani Pre-primary schools. The schools are located in 3 remote villages of Chakama having student populations of 357, 36 and 54 respectively. These latrines will provide the students and their teachers with facilities to safely dispose their waste and protect them from diarrheal diseases.





The interior of each cubicle is made of well plastered walls and floors for easy cleaning

SCHOOL FEEDING PROGRAMME

Children of rural communities face disadvantages in education due to a combination of factors including food insecurity, inadequacy of schools, as well as high malnutrition and stunting rates. Accordingly, such children systematically achieve lower competency levels. Chakama is one such location where school children are disadvantaged. Schools there face low enrollment of pupils and high dropout rates due to numerous challenges they face. Prolonged drought that has so far lasted 3 years has affected Chakama exposing residents to the risk of starvation. Worst affected are the younger children who are forced to remain at home in order to preserve the little energy that they acquire from the little food available.

Since last year CHEPs has been supporting school feeding in Chakama location. We commenced with supporting 10 Early Child Development schools every month. This quarter, CHEPs extended the support to all the remaining public schools in Chakama making a total of 25 namely Bahati, Benzaro, Kwamagandi, Chambuu, Majengo, Zowerani, Kalongoni, Raukani, Kararacha and Habura ECD schools, Kalongoni, Galana Ranch, Kulalu, Mwanza, Shakahola, Bofu, Hawewanje, Chakama, Matolani, Paola Katsuhanzala, Kathama, Kibora, PCEA Bombi, Adimaye, Majengo, and Balaga primary schools and Chakama Secondary school. Close to 5 tons of food is supplied to them every month for the daily meals of more than 1720 students. This has been fruitful as enrolment and attendance of pupils in all the schools has significantly increased.



On 29th September, Supa Loaf Bakeries, through CHEPs, donated 60 loaves of bread to children studying in Zowerani ECD school. We hereby acknowledge their generous support.

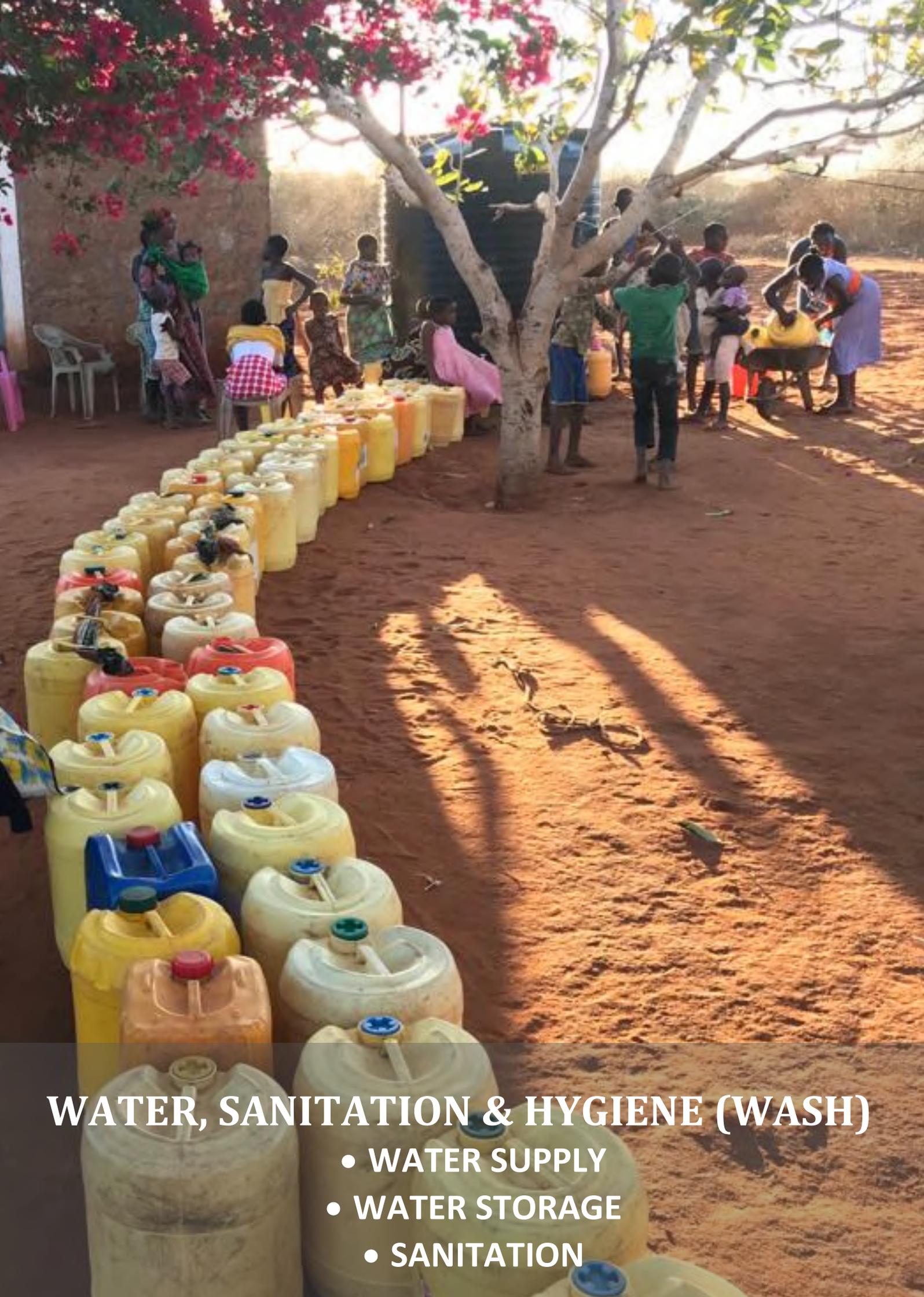


CHEPs CEO Dr. Muhsin Sheriff (left) accompanied team from Supa loaf among them being Malindi Territory Sales Manager Omar Bakar (far right) who was sponsored by CHEPs for his university education.

SCHOOL STATIONERY

CHEPs endeavours to support communities living in Chakama to break off the poverty cycle by enhancing education in the location. Other than poor infrastructure, majority of students learning in schools within the villages lack basic books and stationery. This quarter CHEPs distributed books, stationery and school bags to 100 needy students studying at Kalongoni primary school, Chakama.





WATER, SANITATION & HYGIENE (WASH)

- WATER SUPPLY
- WATER STORAGE
- SANITATION

WATER SUPPLY

It is reported that:

- Lack of access to safe drinking water is the number one crisis worldwide
- At least 1 billion people all over the world lack safe drinking water, more than 80% of whom live in rural areas
- 2.5 billion people (37% of global population) to date lack access to adequate sanitation
- Such people are forced to practice open defecation, which has been shown to cause diarrhoea, the second leading killer of children below 5 years of age
- Every 20 Seconds, a child dies due to poor sanitation
- 80% of diseases in developing countries are caused by unsafe water and poor sanitation
- Access to good sanitation and safe water could save 1.5 million children per year

The situation in Kenya is no different. With 80% of its land found in arid and semi-arid areas, recurrent droughts, increased water demand and poor management of water supply have led to 17 million out of the 40 million people living in the country to lack adequate access to the valuable commodity.

CHEPs aims to save lives through provision of safe water and improved sanitation facilities. We strive to improve the accessibility of water to alleviate thirst, improve farming, and lower poverty among marginalized communities. This is done by providing water to the worst affected communities through digging wells, drilling of boreholes, construction of sanitary facilities, educating communities on hand washing, hygiene, and disease prevention.

Achievements to date:

-  Dug 530 shallow wells
-  Rehabilitated and cupped 537 wells
-  Re-dug 50 dried wells
-  Drilled 3 boreholes
-  Installed hand pumps for 2 institutions
-  Constructed 49 sanitary facilities
-  Installed 21 water storage facilities
-  Set up 12 hand washing stations

Key results of these include:

-  Increased access to safe, and adequate water and sanitation, resulting in reduction of diseases
-  Water availability for drinking and domestic use by households
-  Increased school attendance by children who no longer walk long distances to fetch water
-  Women have more time to undertake other socio-economic activities
-  Increased household income as a result of using water for income generating activities such as farming
-  Afforestation and environmental conservation to mitigate drought

WATER SUPPLY IN TANA RIVER COUNTY

Tana River County is one of the 47 counties of Kenya, located 582 Km from Nairobi. The county has a population of approximately 315,943 people most of them marginalized, extremely needy, and living under very harsh conditions, lacking essential needs including water, food, education, healthcare, electricity, and sanitation. The county was named after the River Tana, which cut through it, leading to the formation of villages around it as the communities settled nearby to farm and tap into its water for irrigation. The river however changed its course some years ago, leaving the communities with neither water for irrigation nor drinking. They were therefore forced to turn to digging a few shallow wells, and trekking long distances to fetch water, both of which cannot sustain their farming, resulting in widespread hunger in addition to thirst, over the year. Sanitation on the other hand is exceedingly poor leading to regular outbreaks of diarrheal diseases that are causing loss of lives.

Young children are commonly seen carrying jerrycans every day in search of water at the expense of schooling, lowering the communities' literacy, and thereby aggravating the vicious cycle of poverty. The men were forced to turn to menial jobs at the nearest major towns to earn a living, while the women remain behind to look after the families, fetch water and collect firewood.

CONSTRUCTION OF SHALLOW WELLS

This quarter, CHEPs dug and constructed 22 shallow wells complete with hand-pumps in Tana River County. Suitable beneficiary families, which were in desperate need of water, were assigned the wells as the custodians. The digging and construction was successful and the custodian families and those living nearby are now relieved of the long distances they used to trek searching for water. It is estimated that each well serves on average 100 people daily.



WATER TRUCKING AND STORAGE

Chakama's estimated population of about 5000 households, scattered in the 46 remote villages, are living in extreme poverty. For many years, the area has been neglected, therefore lacks basic infrastructure including electricity, piped water and access roads. They rely mainly on subsistence farming to obtain food, however due to harsh environmental and climatic factors, and since they mainly rely on rainfall to water their crops, they grow very little food, therefore suffering chronic food insecurity.

Other than hunger, thirst is a major challenge with no reliable source of water. Majority of villagers walk tens of kilometres daily in search of water. In order to alleviate the suffering of villagers, CHEPs has been constructing water storage facilities and distributing drinking water through water trucking in the different villages. This quarter through support from Beta Charitable Trust, we constructed an additional 5 water tanks bringing the total to 23 so far. These are distributed in Majengo, Kalongoni, Kanduru, Kibora, Kararacha, Roka katsangani, Ropih, Mwanza phase 1, Bombi adhole, Muyeye, Kwa Mwangandi, Paola, Ramada, Balaga, Habura, Bakaye, Soweto, and Kwachuye village



Kwachuye village



Soweto village



Bakaye village



Habura village



Balaga village

Following installation of the water storage tanks, CHEPs is regularly distributing clean drinking water to the various villages through water trucking supported by Beta Charitable Trust. This quarter we have distributed 65,000L of clean drinking water to Ramada, Muyeye, Kibora, Kanduru, Soweto, Roka, Kalongoni and Bofu villages. This is not sufficient for all the villagers and is mostly limited by the high cost of hiring water bowsers for the exercise as well as the unavailability of the bowsers for hire. In the long run, we plan to purchase our own bowser to be readily available for water distribution at a lower cost so as to ensure regular and reliable refilling of the tanks.



WATER DESALINATION

In order to provide a sustainable water source for distribution to villagers in Chakama, CHEPs, this year, installed a high volume, solar powered, desalination plant through support from Lady Fatema Trust. The plant is purifying saline borehole water which, after being certified by government agencies as safe for consumption, is being distributed to villagers free of charge. This quarter, over 100,000L of purified drinking water was given out free of charge to needy residents of Chakama.



COMMUNITY LED TOTAL SANITATION CAMPAIGN

According to a survey conducted by CHEPs, 87% of villagers in Chakama had no access to safe sanitation and relieve themselves in the bush. This number even rose to 100% in some of the villages. This year, CHEPs embarked upon creating open defecation free villages through community led total sanitation (CLTS) approach. This entails promoting communities to analyze their sanitation and defecation practices and take corrective measures to ensure that they are open defecation free. The communities are then guided in constructing low cost latrines for their daily use to properly dispose their waste. Households with latrines significantly rose from 7% in March, when we started the campaign, to 73% currently. We look forward to an open defecation free Chakama in the near future.



CHEPs team led by CEO Dr. Muhsin (in green cap) meets community members to discuss CLTS



Some low-cost latrines constructed by community members following CHEPs campaigns

EMERGENCY RESPONSE TO DIARRHOEA OUTBREAKS

Every year nearly 2 billion cases of diarrhoea are diagnosed worldwide. Despite being an easily preventable and treatable disease, diarrhoea is the second leading cause of mortality, after pneumonia, in children below the age of 5 years. Annually, diarrhoea kills close to 1 million children; a toll greater than that of AIDS, malaria, and measles combined. The statistics are more alarming among communities that lack access to clean water and proper sanitation such as those living in Chakama. For many years, there have been recurrent outbreaks of such diarrhoeal diseases including cholera. CHEPs, being the main NGO in Chakama, is therefore constantly on surveillance for diarrhoea outbreaks and quickly responds by educating communities, and distributing water purification chemicals and Oral Rehydration Salts (ORS) to prevent and urgently treat dehydration in the unfortunate event of outbreaks so as to prevent mortality.

This quarter an increase in number of diarrhoea cases were reported in 11 villages of Chakama and CHEPs swiftly responded as usual. The cases were contained and full-blown outbreaks prevented.



CHEPs CEO Dr. Muhsin Sheriff educating the public and distributing water purification chemicals and ORS



HUMANITARIAN RESPONSE

INTRODUCTION

Kenya is suffering its worst drought in 40 years. It is reported that Over 4 million Kenyans are currently at risk of starvation and 3.3 facing extreme thirst. Not only have crops and water sources dried-up and livestock died, but prices of basic commodities have exponentially risen with the depletion of food reserves and rising inflation. As the economy continues to stumble millions have sunk deeper into poverty and lost their livelihoods. Malnutrition especially among children has increased significantly with consequent increased risk of diseases and death. The crisis has been an extension of food insecurity experienced last year which has only worsened with time. The year 2020 began with the country suffering the worst locust infestation ever witnessed in 70 years, which caused widespread destruction of farms. Following that was COVID-19 pandemic which led to economic shutdown. Within the year, floods were also witnessed in many parts that caused massive destruction, and towards the end of the year, expected rains and hence harvests failed leading communities dependent on subsistence farming to fall further in poverty and go hungry. The year 2021 saw very little erratic rainfall as the drought intensified and extended throughout the year 2022. This has led to very little food production and exhaustion of food reserves over the 3 years, leading to a humanitarian crisis.

CHAKAMA LOCATION

Chakama, located in remote Kilifi County, is semi-arid and one of such locations where communities are facing starvation. It comprises of 46 villages with close to 5000 households and over 30,000 men, women and children. An estimated 914 women are pregnant or breastfeeding, and 6,369 are children (boys and girls) under five years of age. For many years the villages in Chakama have been neglected therefore having poor accessibility due to lack of basic infrastructure such as roads. Trade is therefore minimal. Having neither electricity nor piped water, and alarmingly low literacy, most households are living in extreme poverty. They mostly rely on subsistence farming but are unable to grow any food with the protracted drought. Human-wildlife conflicts has also increased leading to destruction of crops and water pans as the struggle for survival soars up. Surveys conducted by our team in various parts reveal a desperate situation. Extreme hunger and thirst, increased disease outbreaks, dilapidated environment is witnessed across the villages. People are seen begging for food, and increased migration and petty crimes recorded as desperation soars up. Cases of families breaking, suicide threats have even been recorded by CHEPs volunteers.



Chakama is very dry with the biting drought



Animal carcasses are a common sight

NUTRITION ASSESSMENT OF CHILDREN UNDER FIVE YEARS

In September 2022, CHEPs together with Chakama Dispensary staff set out on a mission to assess the nutritional status of children living in the remote villages. We visited 11 villages where we measured anthropometric parameters of young children. We screened 870 children aged below 5 years and were alarmed to find that 17% (5.7% - 28%) of them were malnourished. This demonstrates the extreme hunger among the communities as by the time the children in a community are malnourished, the remaining community members are suffering from extreme hunger. These children were immediately started on nutritional supplements. All of them received Vitamin A, 99 of the worst affected were given ready to use therapeutic food (RUTF) and they were referred to the nearest health facilities for follow up. In addition, iron supplements were given to 21 mothers who were found to be anaemic.



EMERGENCY FOOD DISTRIBUTION

In order to avert potential loss of lives, through support from Care Aid Africa, CHEPs distributed 8 tons of food to 327 disabled and elderly people in August. Food was also given to all the community volunteer teachers who are working in the 25 schools of Chakama without formal employment, so as to encourage them not to abandon their workstation in search of food during the ongoing drought. The food packets included 10kg of rice, 10kg of beans, 150ml of drinking water purification chemicals and 2 packets of oral rehydration solution. Distribution was done door to door using motorcycles to access the most vulnerable elderly and disabled.





Additionally, in September 2022, through support from Supa Loaf Bakery, CHEPs distributed 880kg of food to villagers in Benzaro and Bofu villages.





CLOTHES DISTRIBUTION

Clothing is one of the basic needs of life. However, communities in many rural areas including Chakama lack access to decent clothing, and tattered clothes are a common sight. This adversely touches not only to their comfort, but dignity and health as well. This quarter CHEPs conducted a clothes distribution drive to provide decent clothes to destitute people living in the villages of Chakama. This quarter, CHEPs distributed clothes to 32 men, 19 women and 69 children living in Kalongoni and Kathama villages , putting smiles on their faces.





AGRICULTURE

FARMERS' TRAINING

Currently more than 3 million Kenyans are at risk of starvation due to the ongoing protracted drought, which is reportedly the worst ever experienced in over 40 years. CHEPs has distributed hundreds of tons of relief food to families in Chakama over the last 2 years in order to avert potential loss of lives. This is however not sustainable and a long-term solution in food productivity is necessary. As we seek to implement the 2nd United Nations Sustainable Development Goal, and eradicate hunger, CHEPs runs programmes aimed at enhancing food security. Since 2011, CHEPs has been working to build young people's interest in agricultural enterprises. This helps generate income, create resilience and empower young people. We have created, strengthened and supported young farmers and institutions to establish and manage their farms.

This quarter, two women farmers groups were provided training by the CHEPs agriculture officer Kelvin. They were provided knowledge and skills on various techniques in modern farming. Their questions were answered and challenges addressed with advice on how to overcome them. Main challenges faced by the farmers, in addition to lack of knowledge and skills on modern farming techniques, were lack of water, tools, fertilisers and pesticides. CHEPs aims to address these challenges once appropriate resources are secured.



CHEPs Agricultural officer Kelvin (in white) training farmers at the CHEPs model farm

SUSTAINABLE SELF IRRIGATING GARDEN SYSTEM

With the ongoing drought that is affecting many parts of the country, communities in Chakama, a remote location in Kenya's Kilifi county is facing perennial starvation. Due to lack of rain and drying up of water bodies, very little food production is ongoing in a population that relies mainly of subsistence farming. They now rely mainly on relief food from organizations such as CHEPs. Such relief food is however not sustainable hence the need to develop innovative solutions for food production with minimal water requirement. One such cheap innovation, the sustainable self-irrigating garden system (SSIGS) is being spearheaded by CHEPs volunteer Joseph Oloo where a simple 10 litres plastic water bottle is converted to a farming gadget that focusses minimal water onto crops through capillary effect with negligible waste and evaporation. So far this has been introduced in four villages and more are being planned.





RESEARCH & ADVOCACY

SCIENTIFIC PUBLICATION

CHEPs are actively involved in regular community based surveys and research in order to inform policy with the aim of encouraging innovative practices to combat public health challenges. This quarter CHEPs CEO Dr. Muhsin Sheriff authored a peer reviewed publication in the African Journal of Primary Health Care and Family Medicine which highlights various environmental as well as demographic findings documented in Chakama, a rural location of Kenya's Kilifi County.

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AOSIS

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Climate change and primary health care in Chakama, Kilifi County, Kenya



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Chakama is an area of 46 small villages in Kilifi County, Kenya. Climate change has led to more frequent and longer periods of drought in this semi-arid region as well as locust invasions. This has led to a lack of water, with many rivers drying up and poor water quality as a result of pollution of the remaining river water. The lack of water and locust invasion have led to a failure of the crops and loss of livestock. Many pastoralists and farmers have lost their livelihood. Wild animals from local nature reserves have also come into conflict with the community over water scarcity. Many families have migrated in search of water and income. The health effects are seen in the rising number of people suffering from malnutrition and gastroenteritis as well as in terms of mental health problems. Primary health care services are not always available, and the quality of such services is poor. Facilities and healthcare workers also struggle to be resilient in the face of the same environmental challenges. Local nongovernment organisations are attempting to assist through health and social services, community engagement and multisectoral action.

Keywords: climate change; global warming; primary care; primary health care; drought; malnutrition; food insecurity.

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