National Drought Management Authority

KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING BULLETIN DECEMBER 2021

A Vision 2030 Flagship Project

DECEMBER EW PHASE

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ The County vegetation condition is moderate and in worsening trend.
- ✓ Water in the County is inadequate after poor rains. Open water sources were less than 50 percent recharged.

Production Indicators

- ✓ Most livestock are thin due to lack of forage. Their prices and milk production is below the short term average
- ✓ Yields for rain fed crop production was likely to be poor

Access indicators

- ✓ The terms of trade have improved but still below the short-term average.
- ✓ Milk consumption was also below the long-term average due to low production.
- ✓ The return distances trekked by livestock and people to get water are longer than normal for this time of the year.

Utilization Indicators

- ✓ Nearly half of the households were feeding poorly in terms of consumed food items and frequency of consumption.
- ✓ The proportion of children at risk of malnutrition was 5.9 % while the coping strategy was now at 6.8.

Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL SOUTH	ALERT	STABLE
PASTORAL WEST	ALERT	WORSENING
PASTORAL CENTRAL	ALERT	WORSENING
AGRO-PASTORAL	ALERT	STABLE
MIXED FARMING	ALERT	STABLE
COUNTY	ALERT	WORSENING

Biophysical Indicators		Observed	Normal /LTA
3-monthly VCI		34.79	35 - 50
State of water		Inadequate	Adequate
Forage condition		Poor	Good
Production Indicators		**Observed**	**Normal**
Livestock body condition		Poor	Good
Milk production		2.1 lt	>=4.2 lt
Livestock Migration		Internal migration	No migration
Access Indicators		**Observed**	**LTA**
ToT (Kg of maize/goat)		76	82
Milk consumption		1.4 lt	2.5 lt
Distance to water sources	Livestock	7.4 km	5.6 km
	Household	6.2 km	4.6 km
Utilization indicators		**Value**	**Normal**
MUAC (% <135 mm)		5.9	94.1
CSI		6.8	<10
FCS		Poor = 2.1%, Borderline = 45.5%, Acceptable = 52.4%	

▪ Short rains harvest ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH food stock			▪ Long rains ▪ Planting/weeding ▪ High calving rate ▪ Milk yields increase			▪ Long rains harvest ▪ A long dry spell ▪ Land preparation ▪ Increased HH food stocks			▪ Short rains ▪ Planting ▪ weeding		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Seasonal Calendar

1.0 CLIMATIC CONDITIONS

1.1 Rainfall Performance

- This year, the short rains ended in December, which is normal for the short rains seasons (Figure 1).
- The 2021 short rains performed poorly; characterized by unclear onset, below normal amounts of rains and poor temporal as well as spatial distribution.
- Kajiado west was the most hit sub-County; the sub-County received the least amount of rains that were poorly distributed.

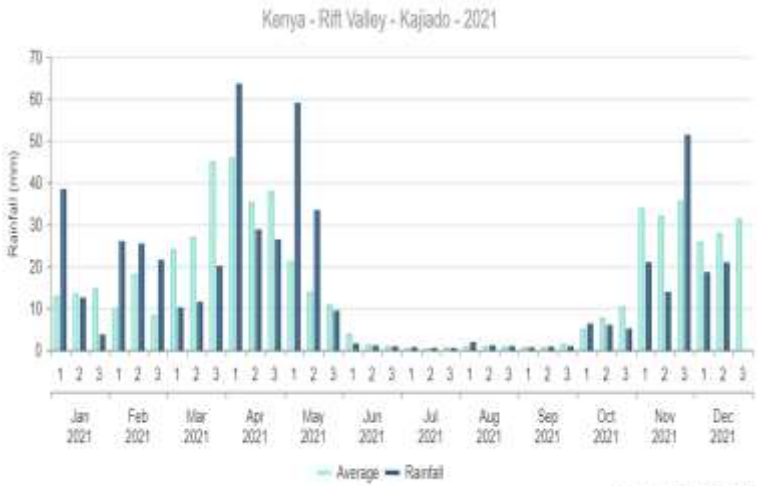

Figure 1: Rainfall performance; Kajiado 2001-2021

2.0 VEGETATION AND WATER CONDITION

2.1 Vegetation Condition

- The vegetation greenness in December this year was moderate compared to historical greenness for similar months (Figure 2).
- The County vegetation condition index was 44.79 in November and 34.79 in December this year. This an indication of worsening drought situation in the County.

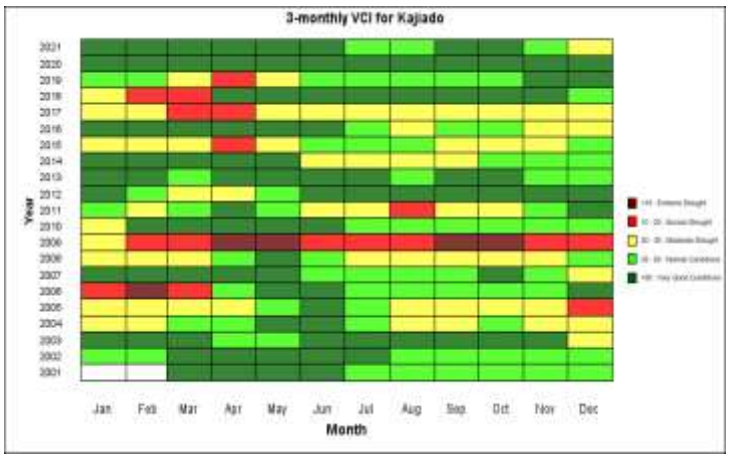

Figure 2: 3-monthly VCI matrix; Kajiado 2001-2021

2.2 Pasture and Browse Condition

- Pasture in pastoral west and central is poor while in pastoral south and agro-pastoral east it is fair. Browse was slightly fair across the County.
- The available pasture would last for one month while browse would last for two months.
- In a normal year, the forage by the end of the short rains season would be good and pretty to last until the long rains. On contrary, this year, the short rains season performed poorly.

2.3 Sources of Water

- In December, most of the villages got water from pans and from boreholes. Boreholes were the main source of water for domestic use while pans were the main source of water for livestock.
- In a normal year, most households draw water for domestic use mainly from traditional river wells. This is not the case this year as seasonal rivers hardly retained water.

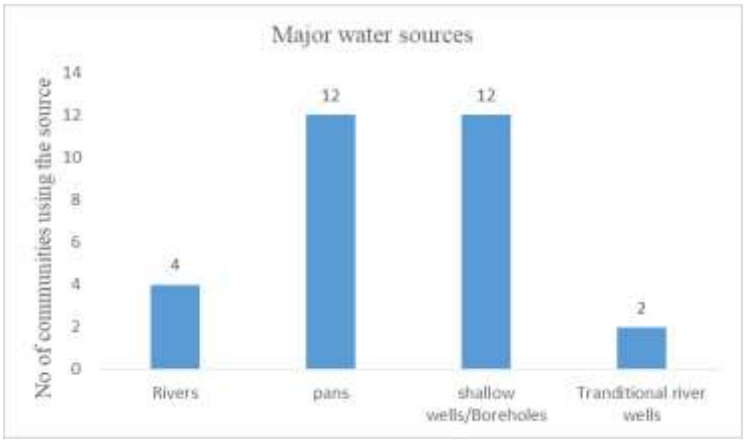

Figure 3: Main water sources; Kajiado, December 2021

2.4 Households Water Access and Utilization

- The return distance that people travelled to get water for domestic use reduced from 8.8 kilometres in November to 6.2 kilometres in December (Figure 4). The County received more rains in December compared to November.
- The long-term average distance that people travelled to get water for domestic use is 4.6 kilometres.
- Pastoral west households covered a

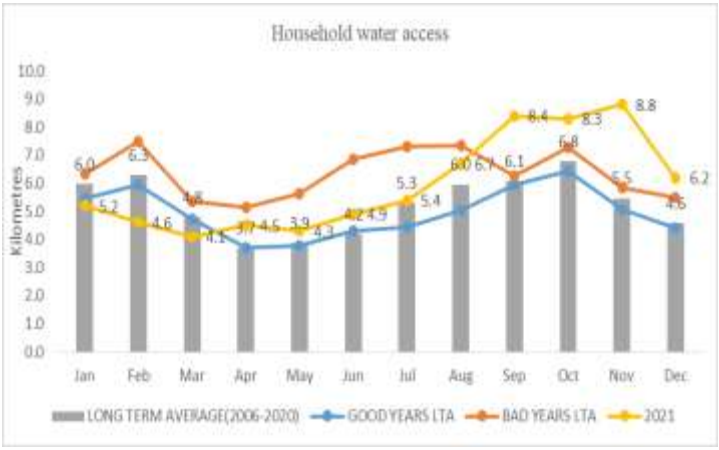

Figure 4: Average return distance from homesteads to water sources; Kajiado, 2009 - 2021

return distance of over 8 kilometres to water sources.

- The average household water consumption was near normal with pastoral households consuming 50 litres a day and agro-pastoral households consuming 65 litres a day.
- Treatment of water for drinking was still lower with more than three-quarter of the household taking untreated water.
- The cost of water especially in urban settlements was Ksh. 5 for a 20-litre Jerrican at the source and Ksh 20 when delivered by a vendor.

2.5 Livestock Access to Water

- The main source of water for livestock in December was pans. On average livestock travelled a return distance of 7.4 kilometres from the grazing fields to watering points. The average long-term distance for December is 5.6 kilometres (Figure 5).
- In pastoral west livestock trekked a return distance of 9.2 kilometres from grazing fields to watering points.

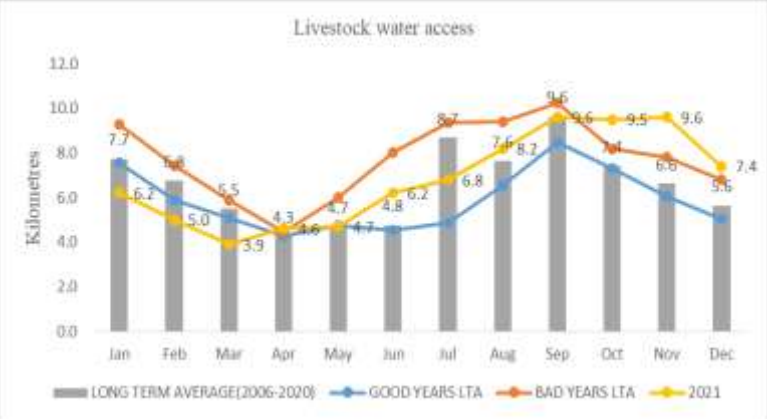

Figure 5: Average return distance from grazing fields to water sources; Kajiado, 2009-2021

3.0 LIVESTOCK AND CROP PRODUCTION

3.1 Livestock Body Condition

- Livestock all species are still thin due to lack of enough pasture and browse. There was possibility of livestock body condition not being able to improve much. The forage condition was generally poor now and the next three months are just but dry months.

3.2 Livestock Diseases

- Cases of Peste des petits ruminants (PPR), Contagious Bovine Plueropneumonia (CBPP), Contagious Caprine Pleuropneumonia (CCPP), Foot and Mouth Disease and worms continued to be reported since July.

3.3 Livestock Migration

- Forage was fair in pastoral south (Mbirikani, Kimana, Kuku, Rombo) and in the agro-pastoral east (Kaputiei north).
- In the pastoral south, livestock have migrated back to their normal grazing field.
- On the other hand, livestock from pastoral central (Ildamat, Matapato) and west (Ewuaso, Loondokilani) have moved to agro-pastoral east (Umma, Kisanju) in search of pasture.

3.4 Livestock Mortalities

- No incidences of drought related livestock deaths were reported in December. In November, several cases of sheep dying of abortion due to drought were reported.

3.5 Milk Production

- The daily household milk production improved slightly from 1.6 litres in November to 2.1 litres in December (Figure 6). This was still low comapred to historical average production.
- Low milk production during the two months was as a result of poor livestock body condition due to drought.

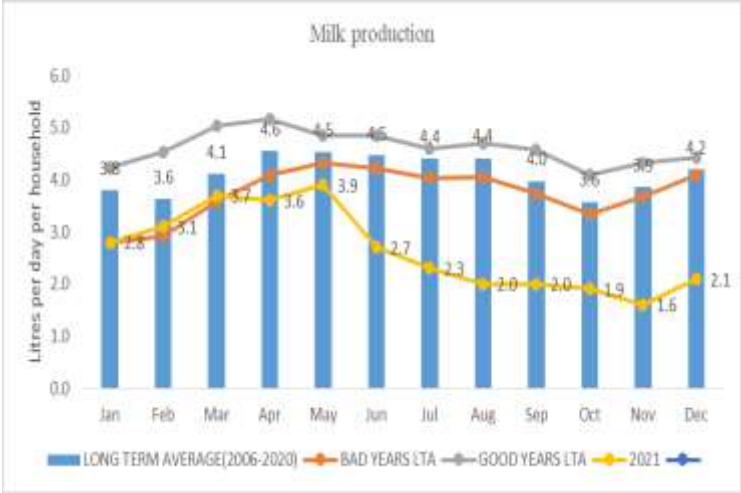

Figure 6: Average milk production; Kajiado, 2006-2021

- The average long-term milk production in December is 4.2 litres a day per household.

3.5 Rain fed Crop Production

- The rain fed crops were suffering from moisture stress and their development was behind the normal schedule. In a normal season, maize would be tussling by end of December while beans would be ripening.
- By the end of December this year, maize was two to three feet high while beans were podding.

4.0 MARKET PERFORMANCE

- Markets in the County have been operating normally after lifting containment measures last year that were imposed to curb COVID-19 upsurge in 2020.
- The major livestock markets include Rombo, Shompole, Ilbisil, Kimana and Kiserian.

4.1 Prices of Cattle

- The average price of cattle increased from Ksh. 25,200 in November to Ksh. 30,500 in December (Figure 7).
- The increase in cattle prices was motivated by anticipated improvement of livestock body condition after some parts of the County received some fair rains.
- The short-term average price of cattle for December is Ksh. 30,800.

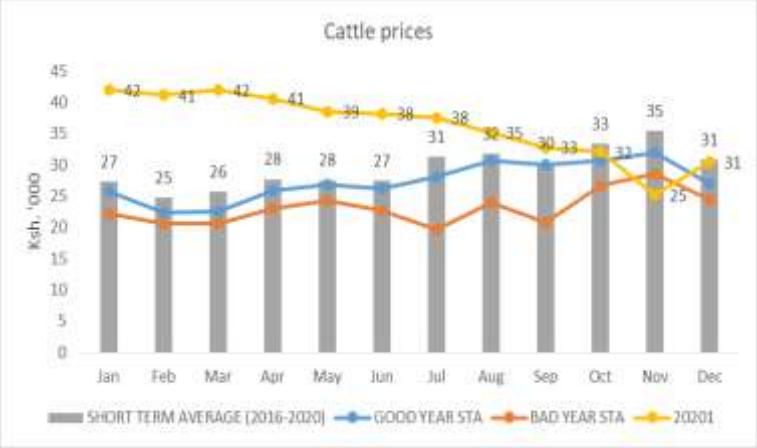

Figure 7: Average cattle prices; Kajiado 2016-2021

- The lowest price of cattle was in Ewuaso Kedong' (pastoral west) at Ksh Ksh. 25,700. Pastoral west has received very little rains and nearly 75% of livestock from the areas have migrated to other parts of the County.

4.2 Prices of Goats

- The average price of goats increased from Ksh. 3,500 in November to Ksh. 4,100 in December (Figure 8).
- Increase in goats' prices was due to anticipated improvement of their body condition as some parts of thr County recievd fair rains.
- Ewuaso Kedong' (pastoral west)

Figure 8: Average goats' prices; Kajiado 2016-2021

recorded relatively low prices of goats where a medium size goat was selling at Ksh. 3,800.

- For the past five years, the average price of a medium size goat in December is Ksh. 4,600.

4.3 Prices Maize

- The prices of maize reduced from Ksh. 56 per kilogram in November to Ksh. 54 per kilogram in December (Figure 9).
- The reduction of prices of maize was probably due to more importation of maize from Tanzania.
- The short term average price of maize in December is Ksh. 58 per kilogram.
- Rombo (pastoral south) recorded the least price of maize at Ksh. 40 per kilogram while Ewuaso (pastoral west) recorded the highest price of Ksh 67 per kilogram. Pastoral west is usually remote with poor transport and communication networks.

Figure 9: Average price of maize; Kajiado 2016-2021

4.4 Prices of Beans

- Prices of beans increased from Ksh. 107 in November to Ks. 114 in December (Figure 10). The increase would probably be due to low supply of the commodity in the market.
- There was no significant livelihood variation in prices of beans in the month of December
- For the past five years, the average prices of beans is Ksh 99 per kilogram

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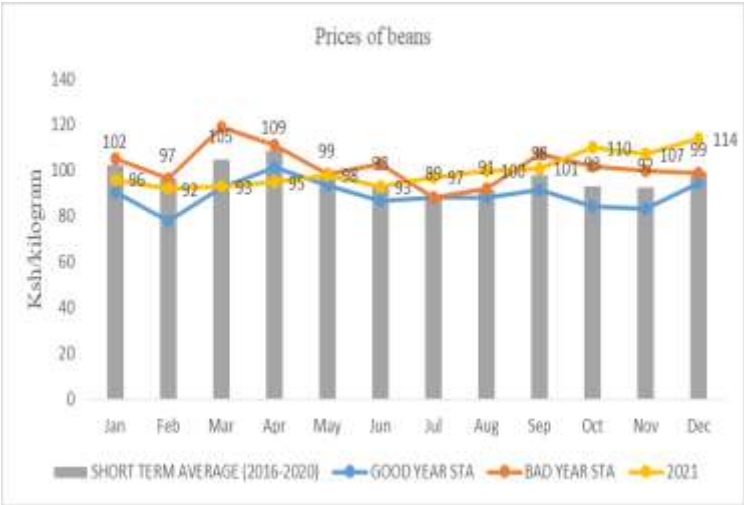

Figure 10: Average beans prices; Kajiado, 2016-2021

4.5 Milk Prices

- Due to low milk production, the prices of milk remains high. In December, a litre of milk was selling at Ksh. 50. In a good year, a litre of milk would be selling at Ksh. 30 at this time of the year.

4.6 Terms of Trade

- The terms of trade rose from 63 kilograms of maize for a medium size goat in November to 76 kilograms of maize for a medium size goat (Figure 11).
- The average terms of trade for the last five years is 82 kilograms of maize for a medium size goat.
- There was no remarkable livelihood variations in terms of trade for the month of December this year.

Figure 11: Average terms of trade; Kajiado, 2016-2021

5.0 FOOD CONSUMPTION, DISEASE OUTBREAK AND NUTRITIONAL STATUS

5.1 Milk Consumption

- Milk consumption was low but stable at 1.4 litres a day per household for November-December period (Figure 12). Milk production remained low at this time of the year.
- In a typical year, the daily household milk consumption averages about 3 litres.
- The long-term milk consumption for the month of December is 2.5 litres per day per household.
- There were no significant variation for milk consumed by households among livelihoods in December.

Figure 12: Milk consumption; Kajiado, 2006-2021

5.2 Food Consumption Score

- Figure 13 shows the percentages of households under each of the three-food consumption band. The general trend is that there is a reduction of households under acceptable food consumption band during the last two months of the year. This means reduction in the number of households consuming staples and vegetable on daily basis complemented by oils and pulse for four days a week.

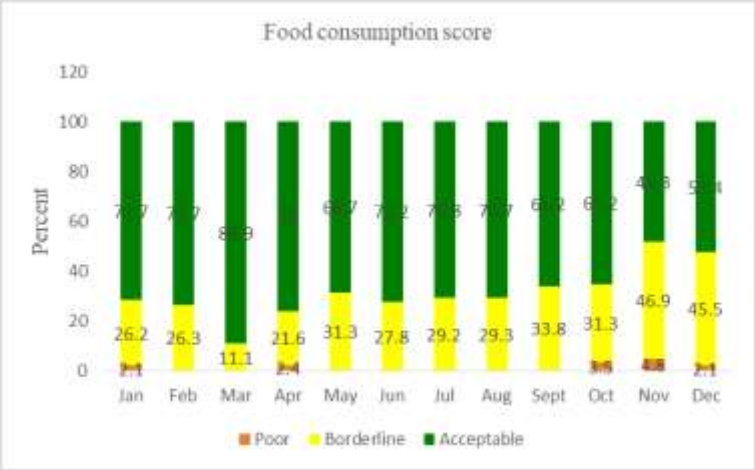

Figure 13: *Food consumption score; Kajiado, 2021*

- Equivalently, the number of households with limited dietary diversity (those that are in poor and borderline category) continually increased since August.

5.3 Disease Outbreak

- There were no reports of human disease outbreak in the month of December.

5.4 Nutrition Status of Children aged 6-59 Months

- There was a slight decrease in the proportion of children aged 6 – 59 months who are at risk of malnutrition from 9.3 % in November to 5.9 % in December (Figure 14).
- Areas in need of close monitoring for risks of malnutrition include Kajiado central and Kajiado west.

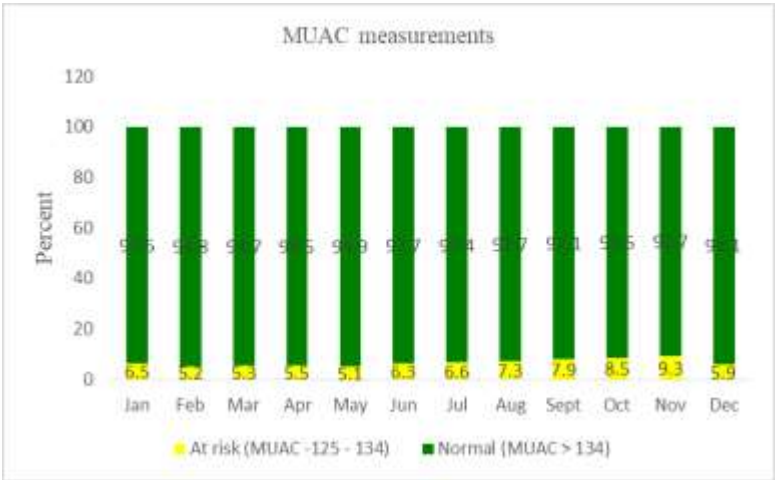

Figure 14: *MUAC measurements for under-fives; Kajiado, 2021*

5.4 Coping Strategies

- The mean coping strategy indices (CSI) for the County reduced from 8.7 in November to 6.7 in December. This means reduction in the level of stress as households strain to get food or money to buy food.
- Some of the mechanisms that households used to deal with lack of food were skipping meals and reducing the portion of food consumed by adults.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

The 2021 short rains performed poorly; it was marked with unclear onset, below normal amounts, and poor temporal and spatial distributions. With the assumption of no off-season rains during January-February period, then;

- ✓ Water in pans and other open sources would last for one month. Usually these water sources last up the long rains season.
- ✓ Forage condition was likely to worsen in a month time. This would probably mean that livestock productivity would worsen continually in the next three month. Out-migration of livestock was likely to start in January.
- ✓ Rain fed crop yields were likely to be far below the long-term yields for the season.
- ✓ Prices for foodstuffs were likely to remain relatively stable due to importation from other counties.
- ✓ Terms of trade was likely to deteriorate if livestock productivity worsen making food access even more difficult. Malnutrition among under-five children, lactating and pregnant women was likely to go up.
- ✓ Livestock disease outbreaks was likely as livestock move rampantly (to areas said to have received rains) within the County in search for pasture.

6.2 Current Interventions

- ✓ Livestock disease surveillance: *by County government*
- ✓ Crop diseases surveillance especial the Fall Army Worm*: by County government*

6.3 Recommendations for Action

- ✓ Continued livestock surveillance, vaccination and treatment
- ✓ Livestock feeds supplementation
- ✓ Support fodder production, conservation, and rangelands reseeding
- ✓ Rehabilitation of water infrastructures such as desilting and repair of strategic boreholes
- ✓ Crop diseases surveillance especial the Fall Army Worm and Maize Lithal Nicrotic disease
- ✓ Provision of assorted certified seeds to farmers
- ✓ Targeted mass screening among under-fives, expectant and lactating mothers
- ✓ Timely provision of school meals
- ✓ Installation of hand washing facilities and provision of water to critic facilities including schools, health facilities and markets