Taveta WASH Market assessment report

Picture above: KII with private water vendors in Taveta

Taveta, Taita Taveta, Drought May 2023

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PROJECT BACKGROUND

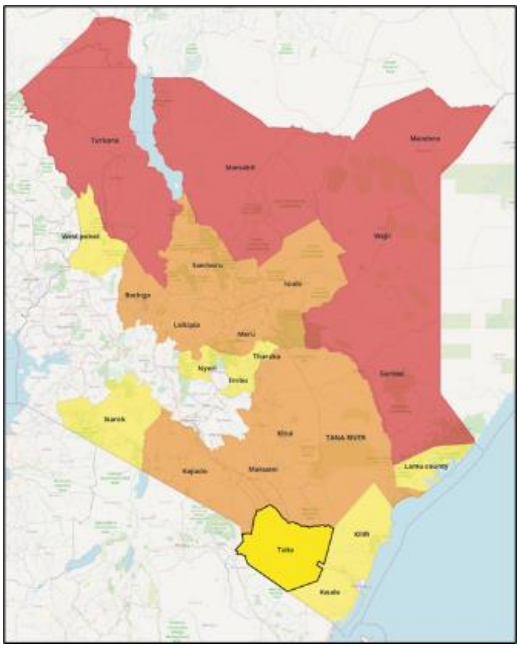
Livelihoods are understood as the collective or set of capabilities, assets, and activities that are required to make a living, dependent on access to natural, human, physical, financial, social, and cultural capital (assets). Multiple stressors that occur simultaneously and in sequence will often result in grossly undermined livelihoods which impact on the affected populace in distinct ways due to inequalities and differential vulnerabilities. These multifaceted stresses and shocks end up contributing significantly to livelihood trajectories and poverty dynamics of the affected households either directly or indirectly. Noteworthy, agriculture plays a significant role in Kenya's economy, yet in recent years the country has faced severe food insecurity problems that are attributed to several factors. The changing nature and frequency of extreme weather events induced by the climate crisis; drought, is shifting in Kenya, with the majority of Kenya's income poor engaged in the agriculture sector as a source of livelihood, such stagnation of agricultural outputs continues to have a ripple effect.

The Integrated Food Security and Livelihoods (IFSL) program is aligned with the British Red Cross (BRC) and Kenya Red Cross Society (KRCS) strategic plan, aiming to reduce worsening food insecurity and social- economic challenges due to the prevailing climate crisis in the country. The IFSL project covers the following thematic areas;

1. Livelihood
2. Water Sanitation and Hygiene
3. Environmental Conservation
4. Cross Cutting thematic areas

The proposed interventions under water sanitation and hygiene in the case of drought are water trucking, distribution of water disinfection tablets, and support with hygiene promotion. Which will duly influence and drive the desired change for the community members. IFSL project advocates for an integrated approach to reach food security and nutrition outcomes and will therefore focus on cascading the unintended positive outcomes shown by the communities from the current two areas of focus (health and WASH).

OVERVIEW OF TAITA TAVETA COUNTY



Taita Taveta County is located in the southeast of the country and within the Coastal Marginal Agricultural livelihood cluster. The county borders Makueni and Kitui counties to the north, Kajiado County to the northwest, the Republic of Tanzania to the west, Kwale County to the south, Kilifi County to the east and Tana River County to the northeast. The county covers an approximate area of 17,128 square kilometres (Km2) with a population of 340,671 people (KNBS, 2019). Administratively, the county is divided into four (4) Sub Counties namely: Taita, Voi, Mwatate and Taveta. Whereas, the project is in operation in Taveta sub-county. The county has three main livelihood zones namely: Mixed farming: Food Crop and livestock; Mixed farming: Horticulture and Dairy; Mixed Farming: Irrigated Cropping.

Integrated Phase Classification (IPC)

The latest drought early warning bulletin for January 2023 by the National Drought Management Authority (NDMA) classified Taita Taveta at IPC phase 2 (alert). The county recorded off-season rains in the first part of January and the rains were realised in both the highlands and lowlands of the county. The highlands recorded five wet days that were light to moderate, while the lowlands reported light rains for three to four wet days in most parts of the county. Higher rainfall amounts were also reported in the mixed farming: horticulture/dairy livelihood zone of the county located on the highlands of the county.

Water Resource

The main sources of water currently in use by both human beings and livestock are piped water systems, springs, rivers, boreholes, shallow wells, rock catchments, and pans/dams. Compared to the previous month, several open water sources like pans, dams, seasonal streams and rock catchments had successfully recharged to at least 30-40% of their capacity, providing alternative water sources, especially for domestic purposes. Roof water harvesting also helped to ease the pressure on the main water sources like piped systems, boreholes and springs.

Household Access and Utilization of Water[1]

The average return distance from households to the main water source has been recorded to be 4.2 km, the same as the previous month (December 2022) and above the short-term average (STA) by 66 per cent. The relatively high but stable distance was as a result of the recharge of open water sources like pans, dams, rivers, rock catchments and domestic roof water harvesting in homesteads respectively. The county average water consumption per person per day (pppd) was recorded at 15 liters; in accordance with the minimum basic survival, water needs that may vary within the population[2].

Needs	Quantity (litres/person/day)	Adapt to context based on
Survival: water intake (drinking and food)	2.5–3	Climate and individual physiology
Hygiene practices	2–6	Social and cultural norms
Basic cooking	3–6	Food type and social and cultural norms
Total basic water	7.5–15	

Households in mixed farming: irrigated cropping/ livestock livelihood zone and mixed farming: horticulture/ dairy livelihood zone reported 21 liters and 18 liters pppd respectively compared to 13 liters pppd in mixed farming: food crops/ livestock livelihood zone. Water retailed at 5-10 shillings per 20 litre jerry-can at source and approximately 40 per cent of the households purchased water compared to 43 per cent in the previous month. The price per jerry can at private water points ranged from Kshs 20-30; due to poverty levels and increases in costs, this has affected the purchasing power. Overall, 17 per cent of the households treated drinking water at home, compared to 18 per cent in the previous month. This was mainly in the mixed farming; irrigated cropping/livestock livelihood zone and water treatment chemicals like water guard were used. In this area, water is usually contaminated due to occasional flooding and agricultural activities. From the households that treated drinking water, 86 per cent used chemicals, 11 per cent practiced boiling and three per cent did filtration respectively. Water used by households in the horticulture/dairy and food crop/livestock livelihood zones is piped and normally treated at the source.

SCOPE OF ASSESSMENT

KRCS conducted the WASH Market Assessment in Taita Taveta County as part of the WASH market Assessment practical training, to understand the impact of drought on community access to water commodities and services (jerry cans, aquatabs and water supply), and hygiene commodities (soap) (i.e. availability and accessibility of commodities and services that are needed by the population living in the drought-affected areas in Taita Taveta). The results of the WASH Market Assessment will help the Kenya Red Cross to design future WASH interventions in drought-affected areas. This will result in the development of evidence-based program design and implementation that supports preparedness and response operations.

Scope:

The training was conducted within Taveta, including field activities in selected markets and communities as deemed most ideal to meet the training needs. The KRCS County Coordinator- Taita Taveta supported in the identification of the most ideal locations/markets and conduct prior stakeholders' engagement and necessary preparations ahead of the training.

[1] Short Rains Assessment (Taita Taveta)
[2] Sphere standards

SECTION 1: SHOCK AND NEEDS ANALYSIS SUMMARY

Type(s) of shock:	Drought
Date(s) of shock(s):	October 2022 to March 2023
Date of RAM assessment:	10th of May 2023
Affected areas assessed:	Kasokoni, Kitondoni, Malkiroliti, Cessi
The total population in the affected area: *(Number of households and people)*	100,527 people 24,115 households
The affected population within the affected area: *(Number of households and people)*	
Average Household size: *(Source of information)*	6 (Kenya National Population Census 2019)
Location of affected population: *(IDP/ stationary in homes etc.....)*	Local native communities in the affected areas
Markets assessed:	Tavevo Water and Sewerage Company, Chala, Kasokoni, Taveta, Taveta-Modern Market. Private Water Vendors (i.e. water kiosks, motorbike water vendors, small water vendors) Local traders (Wholesalers and retailers) selling soap and water treatment commodities)
The number of traders (wholesalers and retailers) and market representatives included In assessment:	Tavevo Zonal Manager-1 County Water Officer -1 Private Borehole owners-1 Motorbike-1 Water Kiosk manager-1 Eight water committee and consumer members. Wholesalers – 3 (one in Cessi market and 2 in Taveta market centres); 4 Retailers – 4 at Cessi market centre, Market representative (key informant) - 1 Community members (focus group discussion) - 1.
Commodity type(s), volume(s) and duration requested by shock-affected population *(quantity, frequency and duration and any quality specifications if necessary)*	Water commodities and (jerry cans, WaterGuard, Pur) Water services Hygiene items (multi-purpose soap) - Commonly used soap brands are "*panga"* and *"jamaa"* bar soaps which is produced in white, brown and yellow colours with standard measurement of 50mm x 50mm x 370mm and weight of 800g.

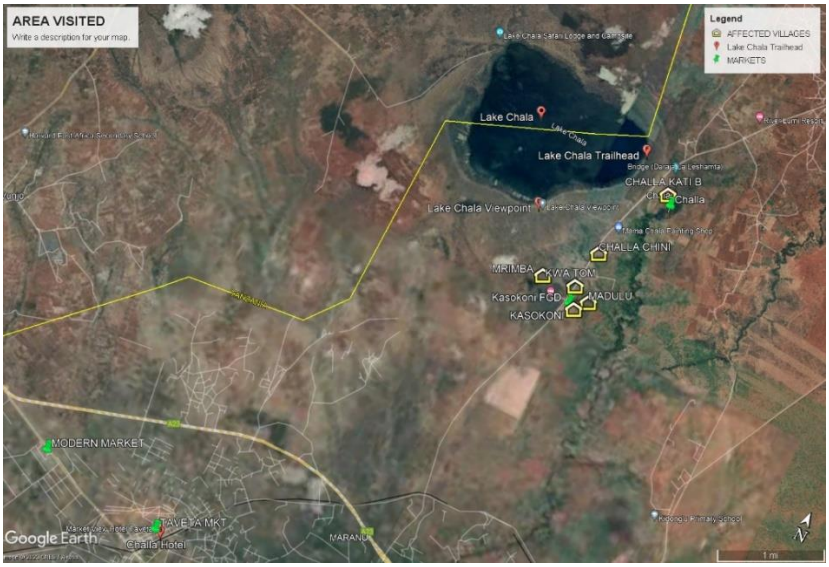
SECTION 2: MARKET MAPPING

2.1 Market maps, geographical location of markets to shock-affected population

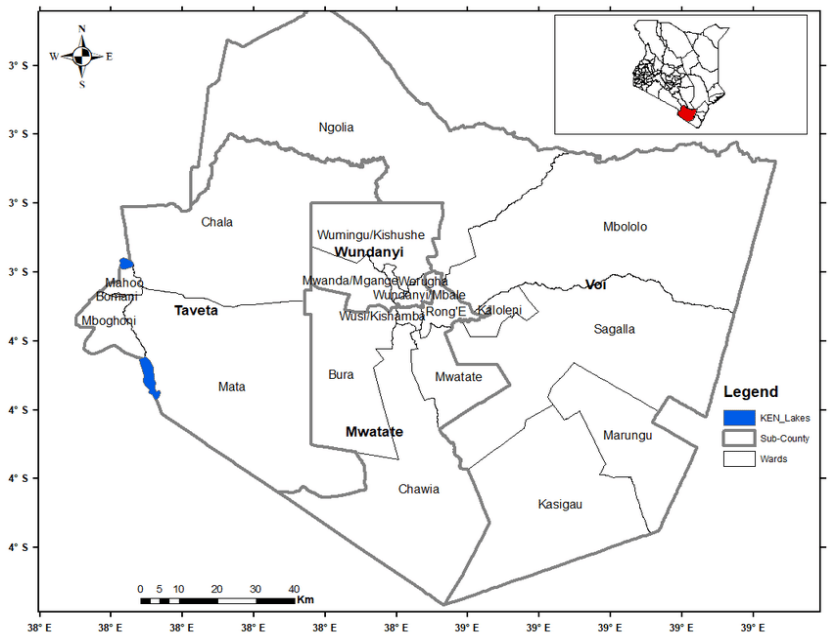
The diagrams below illustrates the location of local and influential markets within and close to the affected area and their geographic proximity to the drought-affected population**.**

- *Insert a basic map that illustrates the GEOGRAPHICAL location of the markets. See Tool 4 for guidance on mapping.*

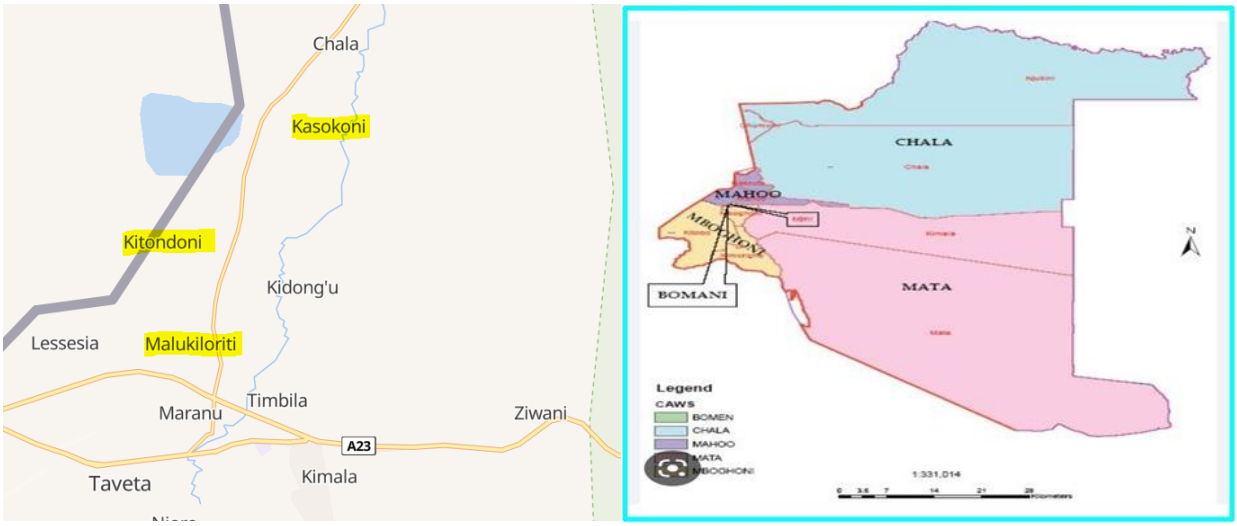
Water commodities and (Aquatabs, WaterGuard, Pur)



Water supply services



- *Highlight the locations of the shock-affected population and markets visited and include a key so that the user can easily identify the key markets, roads, location of the affected populations etc..…. Make sure to include information on the impact of the shock on the markets using the symbols suggested in Tool 4.*



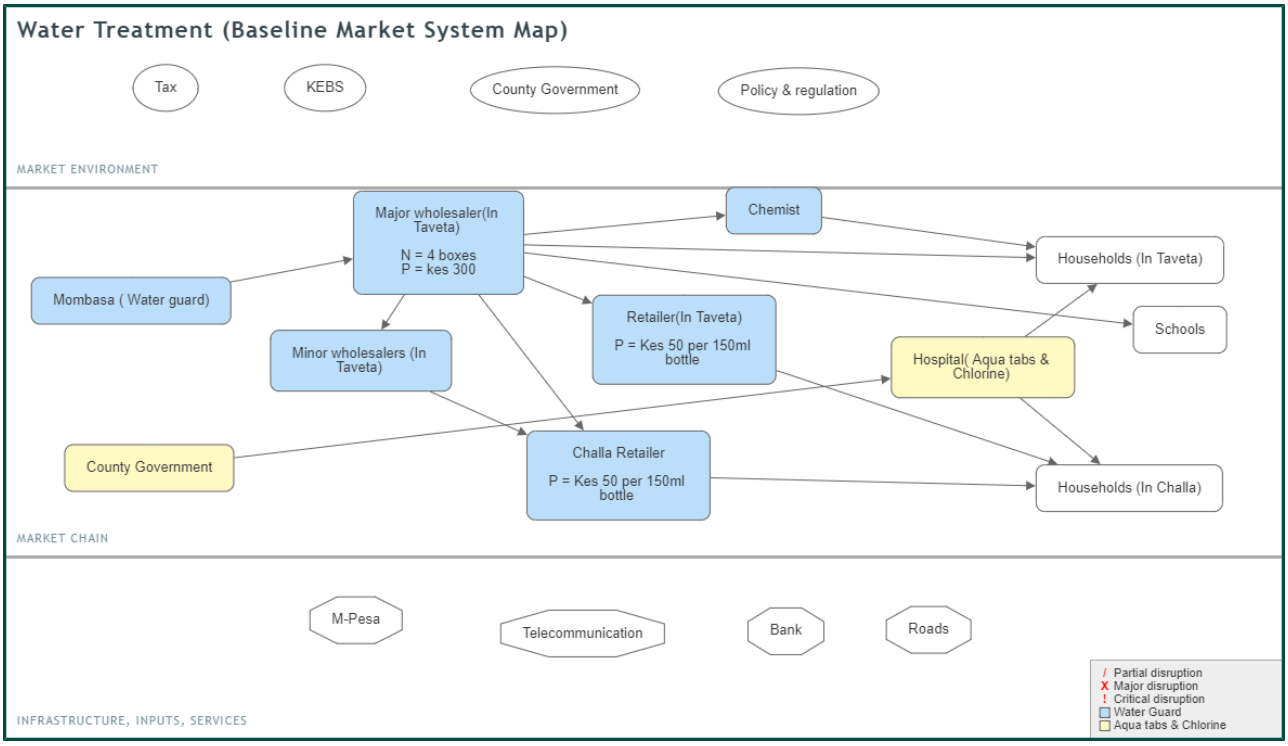
Locations of the affected areas visited: Kasokoni, Kitondoni, Malkiroliti.

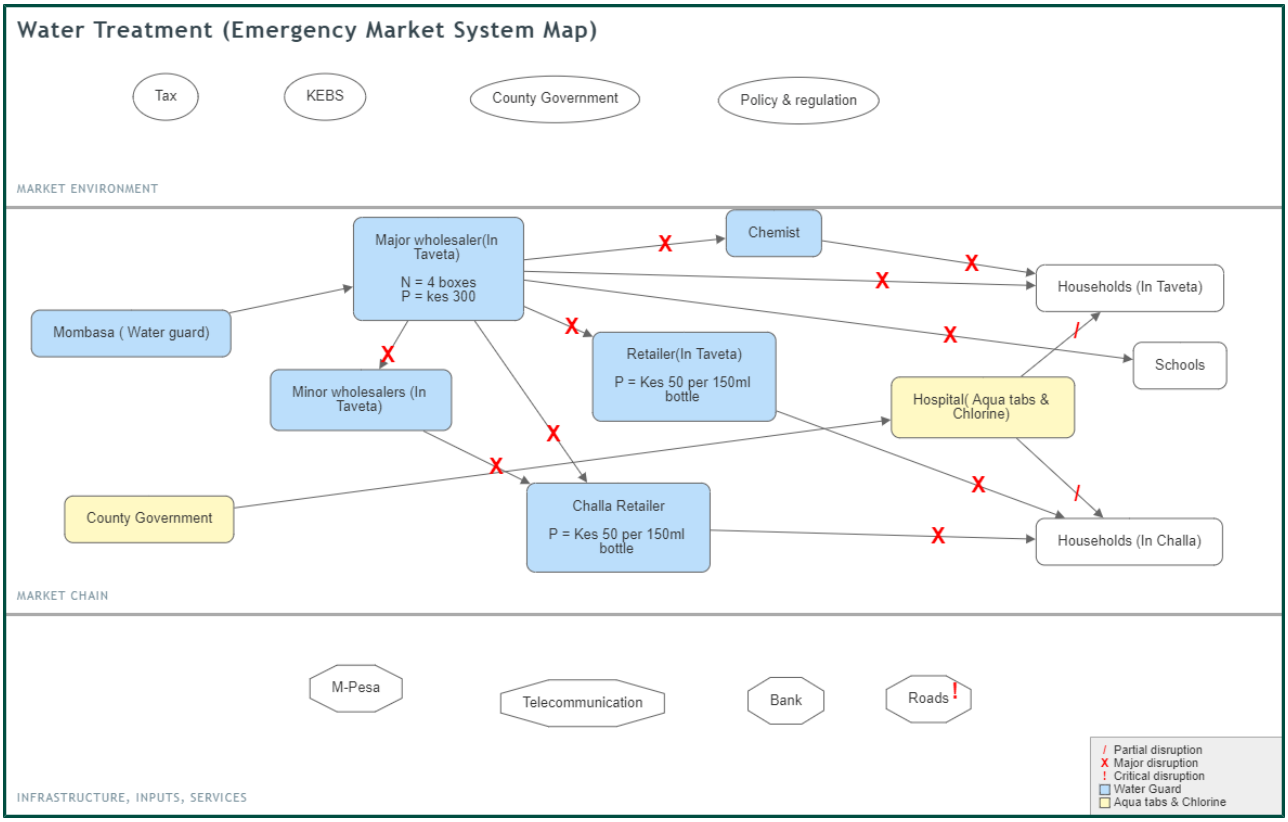
Hygiene items (multipurpose soap)

2.2 Market maps: water commodities (Aquatabs, WaterGuard, Pur), water supply services, Hygiene items (multipurpose soap)

Water commodities (Aquatabs, WaterGuard, Pur)

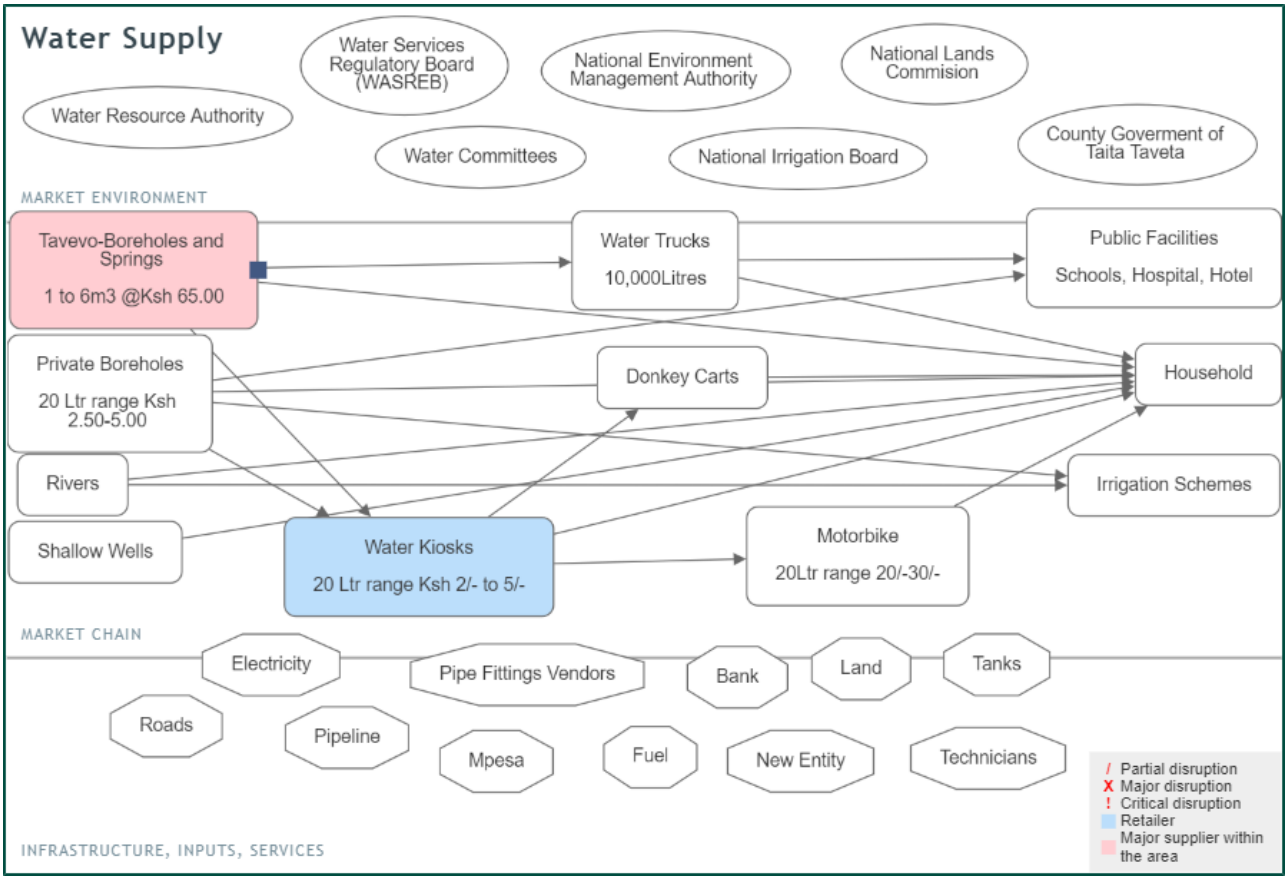
The map below indicates the movement of water treatment chemicals highlighting those supplied by the Ministry of Health and those got from the market.



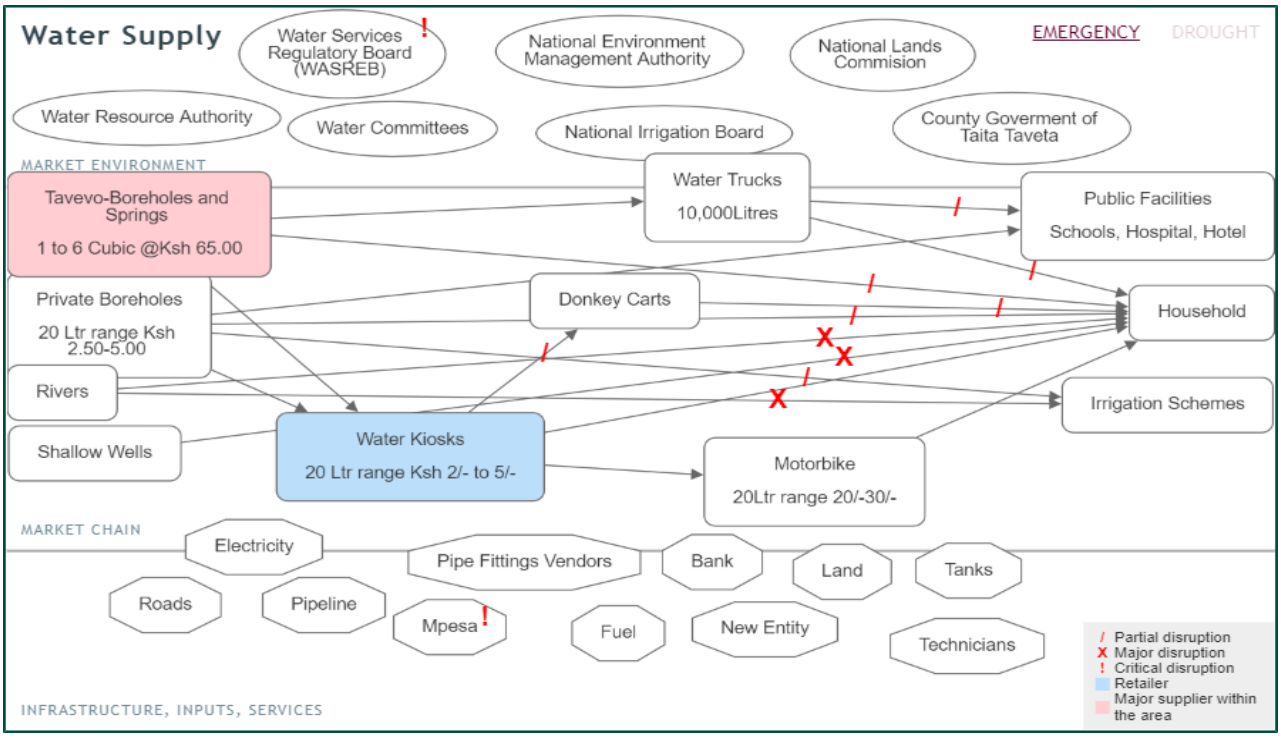


Water supply services

The Water Supply market maps below illustrate the movements of key water supply services to the markets near the affected populations – from wholesalers to traders, small vendors and finally to consumers. The second Water Supply market show as well major and partial disruption that have occurred to the market during the drought period.



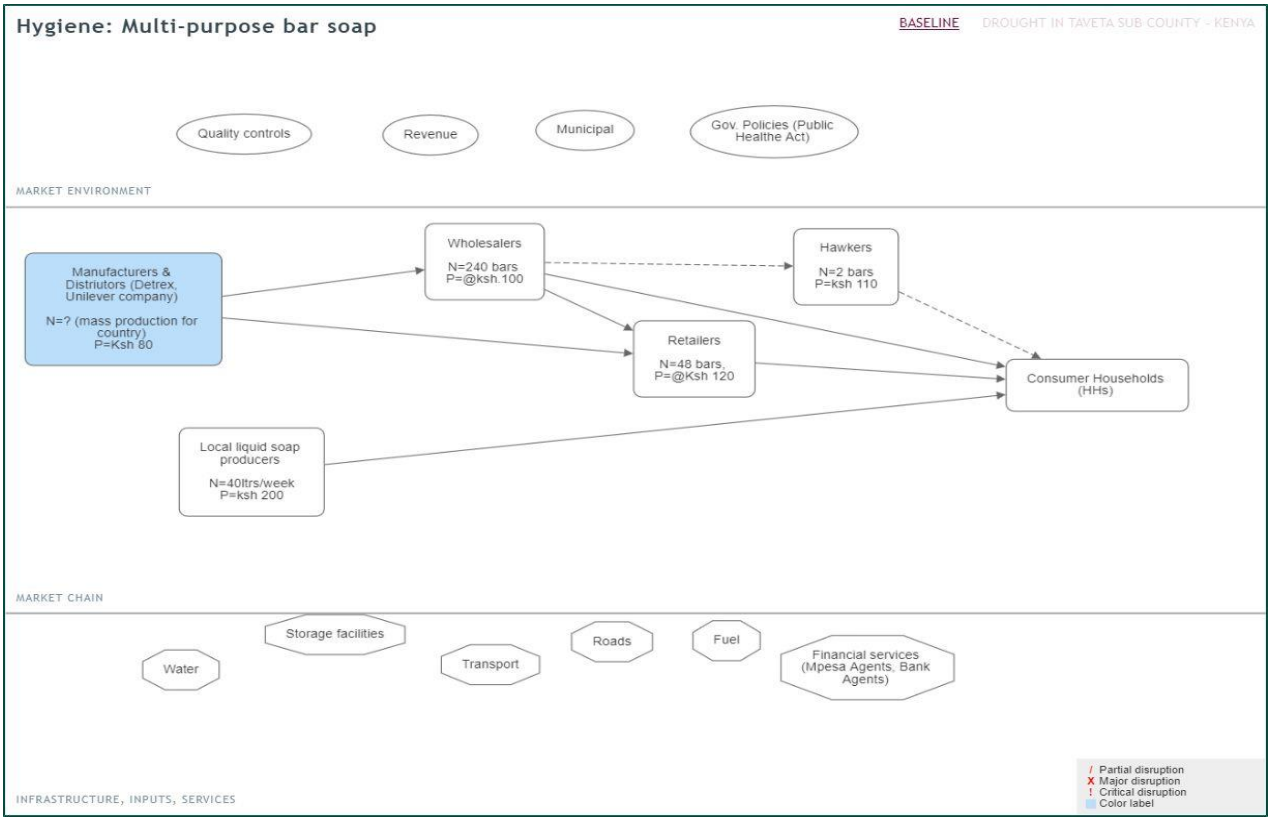
Insert the maps that illustrate the market chain. Advice on how to do this is available in the Tool 4. If you have one map that represents all the commodities, make sure this is clearly stated.

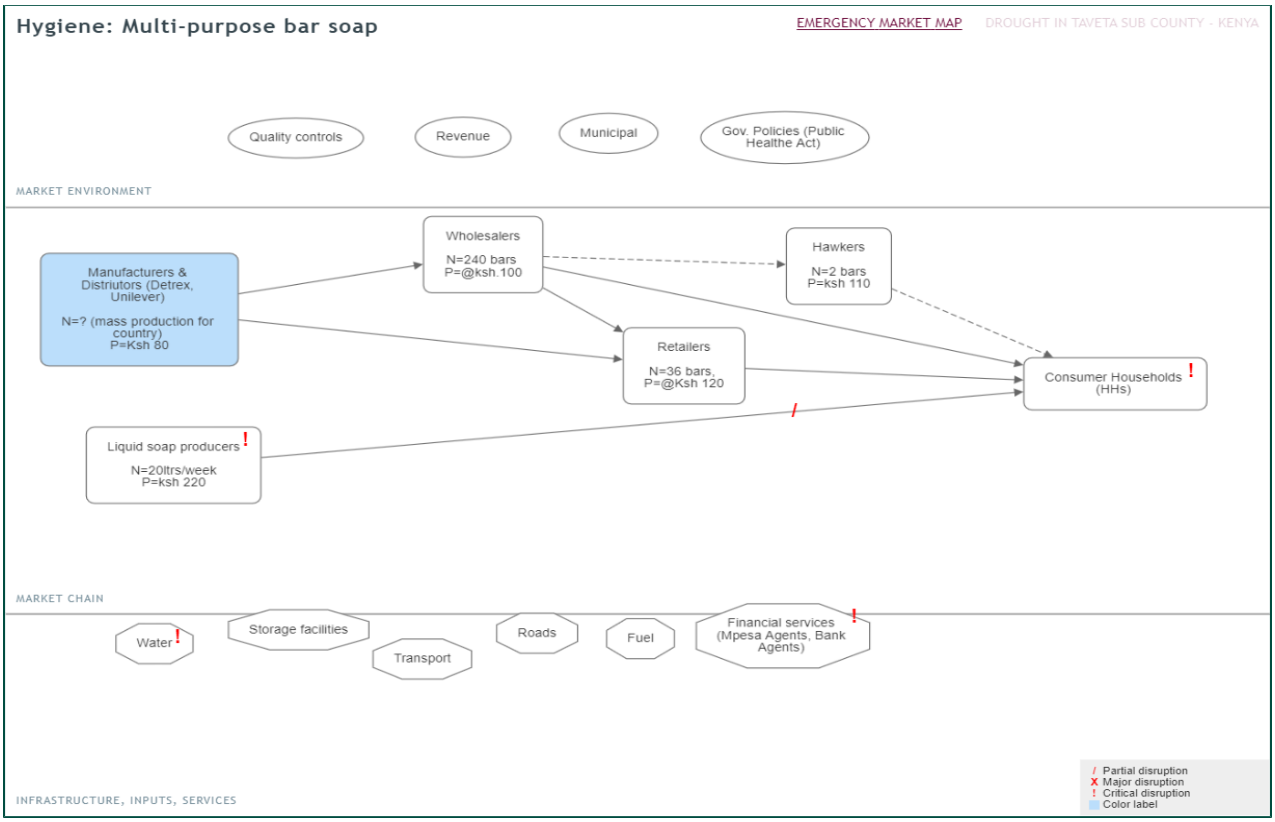


- *If you can illustrate data on prices, volumes and number of traders, please illustrate this on the market maps or in a table.*
- *Include a key so that the user can easily identify the types of traders/ actors in the supply chain. Make sure to include information on the impact of the shock on the markets using the symbols suggested in Tool 4.*

Hygiene items (multipurpose soap)

The market maps below illustrate the movements of bar soap commodity from the manufacturers to wholesalers and to traders and finally to consumers in the drought-affected areas of Taita Taveta County before and during drought seasons.





SECTION 3: MARKET MAPS AND TRADER ANALYSIS

After reviewing the maps (above) and information collected using the RAM tools, the following conclusions can be made:

1. **The drought's impact on the affected population's physical access to their markets**.
(Outline the impact of the shock on market access – what has changed in consumer and trader behaviour? Are such changes long-term?)

Water commodities and (Aquatabs, WaterGuard, Pur)

The effects of drought critically affect access to markets in the Taveta sub-county; as the community mostly access the markets on foot, however, the supply of water treatment chemicals (Aquatabs) to the market is highly affected by the state of poor road network affecting motorized vehicles that provide transportation services of the commodities from the wholesalers in Taveta main market to a market such as Challa.

Water supply services

During the drought, some water sources (seasonal rivers) dry up, causing overreliance on the few remaining water sources. This brings about the long queues/ long waiting times at water points by the community members.

This also increases the return trip to water points, with some community members walking for about one to one and a half hours to access water from the springs.

Households' members require water also for their livestock, for example one goat consumes an average of 5 liters per day, with each household estimated to have 10-20 goats. During drought, water kiosk owners sell on average 100 jerry cans of 20 Liters daily due to the high-water demand.

Farmers with tree nurseries require more water, buying water at the cost of between Kes 300 and Kes 500 for tree watering. Water kiosk owners receive a low water supply from the boreholes due to the high-water demand. The changes are only observed during the drought season.

Hygiene items (multipurpose soap)

The physical access to the markets was not affected by the drought situation; communities could access the markets by trekking/walking or using motorbikes to reach major markets. Traders maintained their supply capacity for soap since drought had no direct influence on their sources of supply.

2. **Affected household purchasing power/ demand and changes in consumer behaviour**.
(Does the shock-affected population have the financial means to purchase the water they need? If so, what percentage/ proportion of their needs can they meet? Relate to information collected in Step 1 of the RAM)

Water commodities and (Aquatabs, WaterGuard, Pur)

Water treatment chemicals uptake is at the lowest in the sub-county; a majority of the community members indicated high levels of an assumption that tap and borehole water that is supplied is fit for human consumption; as a result, this consumer behavior has affected the purchase of water treatment chemicals resulting to the commodities not being considered as priority items.

However, the Ministry of Health through the sub-county hospital and the support of the community health volunteers have subsequently on a regular conducted Aquatabs and Chlorine distribution based on community need basis.

There was an indication of low water treatment chemicals consumer demands during drought situations and high demand during flooding events; this was so as a result of standard latrine overflow due to surface runoff.

Water supply services

With reduced sources of water, most households spend a significant portion of their income on buying water from private vendors, with 50% of households purchasing water directly from water kiosks, 30% of households from springs (no payment required), 10% using donkey carts and motorbikes to access water from the kiosks and 10% source directly from the borehole through water pipes.

This, in turn, reduces the household purchasing power. With reduced purchasing power, some households resort to non-sustainable coping strategies to meet the household water demands, with 30% of households purchasing water on credit terms.

On average, each household requires firewood, charcoal, food, water, cooking oil, and kerosene fuel to meet their daily demands; hence income is channeled to these expenses.

Between Kes 600-Kes 800 is required to meet these daily household demands, but only 30% of the households can afford this, with 70% of the households surviving on one meal per day during the drought season.

Most households derive their income from quarry mining, firewood cutting for women to sell and casual laborer in the irrigation schemes.

Hygiene items (multipurpose soap)

The main source of income for this community is mixed small-scale farming (keeping livestock and crop farming). The drought had major negative impact on their source of livelihood resulting into hardship and limited household purchasing power. The communities therefore resorted to coping strategies such as giving priority to basic needs like food and less consideration to soap or sometimes missing completely from the household shopping basket.

Despite the hardship, the households recognize the importance of soap and would purchase soap in small quantities, cut from the bar into smaller pieces that are cheaper, and these would be shared and used for all purposes in the household. This practice of using same bar of soap for washing utensils at the same time washing hands was unhygienic. 100% of the households would not make soap a priority from the little household earnings and soap would only be considered after meeting the basic needs.

Majority of households developed likeness for cheap locally produced liquid soap by women groups in the community however, due to hardship the use of the liquid soap dropped as it got finished quickly compared to bar soap.

3. **The impact of the drought on the supply chain of commodities required by the affected population**.
(Using data from Steps 1 and 2 of the RAM, outline in what way the supply chain has been affected by the shock. Outline any changes in consumer or trader behaviour as a consequence?)

Water commodities and (Aquatabs, WaterGuard, Pur)

The community members in the area are mainly farmers and also work in quarries, during drought the community income is very low therefore they are forced to prioritize their basic needs; water treatment chemicals hence result not being on the list of priorities for them. This intern affects the consumption of water treatment chemicals. Retailers in turn end up having the water treatment chemical as deadstock.

Some of the retailers mostly find themselves utilizing the commodity as a result of the low customer demand.

It was identified that there is the presence of only one main supplier water treatment chemicals in the sub-county that sources the commodity from Mombasa County on a quarterly basis. This poses a risk in case there are disruptions that affect the supply chain.

Water supply services

The shock results in a reduced water supply for the population affected by the drought, an increase in return trips and a surge in water services prices. This situation triggers support systems that involve humanitarian actors supplying water services using trucks to households and other water consumers.

During the drought, markets receive unsafe water from unprotected sources, which may cause health complications for water consumers. With the increased cost of water, households and other water consumers concentrate on accessing drinking water with less focus on the water quality.

Hygiene items (multipurpose soap)

Drought did not have impact on the supply chain for bar soap and suppliers continued to make available bars of soap however due to reduced demand as a result of low purchasing power of the communities, the traders slightly reduced their stock of soap to avoid locking their money for sales on slow moving commodity.

The supply of locally produced liquid soap was affected by lack of adequate water to produce more and the diminishing demand for the liquid soap.

4. **The capacity of retailers and wholesalers to increase their supply to meet increased demand for water and related price implications (if any).**
(Reflecting on Step 2 of the RAM and the key commodities requested by the shock-affected population, reflect on whether or not traders in markets will be in a position to respond to a demand. If there are any implications for price changes, please outline what they are and what the consequences would be of such changes. Be mindful of wholesaler capacity, transport, warehousing and credit issues that may need addressing to enable this)

Water commodities and (Aquatabs, WaterGuard, Pur)

The number of retailers dealing with water chemicals in the area are few and those with the commodity have them in reduced quantities a majority of the retailers indicated that due to increased consumer demand during floods, they would stock up with about three to four cartons of 150ml WaterGuard though during drought they would stock up with one or at most two cartons, and as a result of the low demand they are only kept at the shelves. Retailers and wholesalers have the capacity to purchase but there is low consumer demand. Sometimes the retailers would opt to increase stock of other commodities that are in demand leaving out on water treatment chemicals.

Water supply services

Some areas will experience a shortage of water supply services because of the increased geographical areas to be served. The water suppliers will be forced to introduce rationing schedules for different supply areas.

This situation contributes to a balanced supply for the limited water supply to a larger geographical area (balancing between the areas with dried sources and those with existing sources).

Water kiosk owners are limited to supplying water throughout the day only, operating during certain hours on an average of 5 hours per day due to high demand from other water kiosks from the borehole.

The private vendors increase their storage capacities and tap stands to serve the large queues.

Hygiene items (multipurpose soap)

Retailers and wholesalers maintained the capacity to increase supply with ease to meet increased demand for soap for any period of time. The commonly used soap brands are “*panga*” and “*jamaa*” bar soaps which is produced in white,

brown and yellow colours with standard measurement of 50mm x 50mm x 370mm and weight of 800g retailing at ksh. 120. Hawkers have also tried to bridge the gap between wholesalers and retailers selling soap at slightly lower prices than traders however their brands of bar soap are seen to be of low quality and their sources of supply are not clear.

5. **Changes in the types (quality) and quantities of the commodities demanded by traders and households** *(if any). (If the shock has affected household and trader preference for certain commodities – in terms of quality, volume and frequency, outline this here).*

Water commodities and (Aquatabs, WaterGuard, Pur)

Having been affected by the shock, the community has resorted to alternative water treatment methods like boiling and the use of ash to improve on water clarity and some use of decanting methods as a way of treating water this practice is considered to be less costly. The community also believes that hot charcoal has to be added to rainwater before drinking failure to which it would cause a sore throat.

Water supply services

Due to limited water resources, some private water vendors tend to supply untreated water directly from the springs, and those households with low capacity to buy water resort to fetching from unsafe water sources.

The households' members prioritize water usage relative to the source and quality. For instance, a household may use river/ salty borehole water for washing and bathing while preserving spring water and water from the kiosk for drinking and cooking.

As a result of the scarcity of water, the community has set a regulation among themselves to only farm on 25% of the land to limit the amount of water used in crop farming. With most households preferring water for domestic use rather than irrigation during drought season.

Hygiene items (multipurpose soap)

Due to hardship and reduced household income, many households prefer bar soap since it can be put to multiple uses, and it does not get used up so fast like powdered soap and the locally made liquid soap. The bar soap can also be cut and sold in even much reduced sizes for lower cost that suits the low financial capability of the local community.

6. **The impact of the shock on the prices of the water commodities and services and hygiene commodities.** *(Reviewing price data (secondary and primary), outline the impact of the shock on prices and the consequences of such changes)*

Water commodities and (Aquatabs, WaterGuard, Pur)

Water guard prices rose in prices from January 2023 from 280 shillings to 370 per dozen making it difficult for the wholesalers to buy from the supplier. However, the increase in price was not influenced by any crisis but because of inflation cost within the country.

Water supply services

A 20-litre water jerry can range between 2.50 and 5 shillings at the water kiosks, while a donkey cart charges Kes 15 for each jerrycan, and a motorbike can charge between Kes 20-Kes 30.

There were no changes in the cost of water supply from the kiosks, boreholes and TAVEVO supply lines. However, there are notable changes in the water supplied by donkey carts, motorbikes and unregistered vendors.

The unregistered vendors include people who receive the water from a water line but sell to the neighbors who are not connected to the main water supply. The prices by these unregistered water vendors are arbitrarily set by the traders. The main reason for the price fluctuation is the fuel cost and the distances covered to supply the water with motorbike for example.

Hygiene items (multipurpose soap)

The price of soap remained constant despite the shock and this attributed to the fact that the supply chain for bar soap is not affected and the traders are able to adapt the sizes of soap sold to the communities by further cutting the soap into smaller pieces and selling at reduced prices that the communities can afford.

7. **Opportunities for <u>market-based interventions</u> to support market rehabilitation and demand side**.
(Reflecting on the market mapping exercises and interviews with traders, what interventions could support trader capacity to increase supply, when they would be required and for how long?)

<u>Water commodities and (Aquatabs, WaterGuard, Pur)</u>

- Using the existing CHVs structure for the sensitization of the community on the importance of using water treatment chemicals. This will increase the demand of water treatment chemicals within the community.
- Support in supplying water treatment chemicals as a result of the availability of only one main supplier in the sub-county.

<u>Water supply services</u>

- The private boreholes requested to be supported to connect the water supply to solar powered system to reduce the redundancies induced by power outages. This will also reduce the cost of production, for example one of the interviewed borehole owners said he spends KES 1,000 per day on electricity bills.
- Extending the number of water kiosks is necessary to reach more people at a shorter distance, this is likely also to reduce the cost of water by cutting down the travel distances.
- The Zone Manager at TAVEVO suggested replacing the service pumps with submersible pumps. Submersible pumps are durable and use a small motor rating, reducing the cost of electric power.
- Support to household members on construction of rainwater harvesting structure and training on rainwater harvesting techniques.
- Enhance preservation and protection of springs from destruction and vandalism.
- Improvement of unprotected wells for sustainability and to ensure the safety and availability of drinking water.
- Water voucher assistance may help to strengthen markets while enabling the most vulnerable households to access water for their daily needs.
- Some of the respondents in the FGD estimated that they need between KES 600 to KES 800 daily for subsistence, yet they only get between KES 300 and 600 daily from their daily engagements.

<u>Hygiene items (multipurpose soap)</u>

- Multipurpose cash transfers may help the communities to meet basic needs including soap
- Vouchers for soap to households redeemable at local traders' shops
- Group cash transfers to the local women groups to continue production of liquid soap
- Legislation and training for the women groups to produce quality and effective liquid soap that meets the required standards.

8. **Market-related considerations that <u>urgently require attention</u> or further analysis** (using the MAG or the RAM Monitoring Tool 13, 14 and 15) should any programming/advocacy take place.
(This can include concerns regarding trader or beneficiary security, diversion, government policy, high levels of the beneficiary or trader debt, and wholesaler monopoly etc.....)

<u>Water commodities and (Aquatabs, WaterGuard, Pur)</u>

Currently, there is one supplier that supplies water treatment chemicals on a quarterly basis. With increased demand, there will be a depletion of this commodity in the market and this might result in a price hike. There is a need to also interrogate more on the capacity of the supplier to meet increased demand and also find out other suppliers who can supply the commodity because as of now there is a monopoly of one supplier.

<u>Water supply services</u>

The assessment established weaknesses in the enforcement of water regulations. The water quality testing mechanisms were weak from the source to the end user. This increases the public health risk for the end user, who may often be unable to treat water at the end-use level.

There were also several unlicensed water traders, some of whom source their water from unknown sources, yet they do not treat the commodity.

The WASREB - Water Service Regulatory Board (a government agency regulating pricing) offers licensing and service contracts for water actors. They also make the standard operating procedures for water resource use; they do not have physical offices at the county and sub-county levels. This is a structural gap that weakens the enforcement of the regulatory tools.

There were noted knowledge gaps among the vendors on the various water regulatory documents. Hence, we recommend that WASREB establishes its presence at the lower levels of devolution.

Hygiene items (multipurpose soap)

Further analysis of the sources of bar soap, raw materials used and their sources to understand a complete supply chain for soap and factors that might affect it. The wholesalers could not tell where their suppliers get the commodity.

Analysis of the source of raw materials and quality of liquid soap produced by the local women groups

Further analysis of credit services available for traders from suppliers

These markets are close to the border with the neighbouring country and since these borders are never fools proof, it would be useful to determine if any of the soap commodities enter the local markets through black market from neighboring country.

9. **Assumptions, difficulties and challenges faced in the assessment that users of RAM Report must be aware of.**
(This can include assumptions made in the data collection and analysis and reflections on data reliability)

Water commodities and (jerry cans, WaterGuard, Pur)

It was rare to find water treatment chemicals as very few retailers were retailing the commodity

Water supply services

The assessment assumes that the responses, especially from the water vendors, were truthful.

This is because there are no means of verification since the data is derived from individual vendors' personal experiences and practices. However, the information has been triangulated with data from other sources to establish consistency.

*Hygiene items (*multipurpose soap)

The quality and measurements of the different brands of bar soaps in the market are the same. The questionnaire generalized bar soaps without making reference to any brand.

10. **Implementation experience in the area, lessons learned, and activities planned or implemented by other agencies.**
(Applying lessons learned from past emergency programmes can benefit future interventions and influence decisions. If any information is available from secondary data reviews etc., this should be included here. Knowing what other agencies are planning on doing can also influence decision-makers, especially when there cash programmes or market support interventions are designed)

Water commodities and (Aquatabs, WaterGuard, Pur)

Water supply services

Clean and Safe water for drinking has been a considerable challenge in Challa and Mahoo Wards as the areas are characterized by prolonged dry spells and drought, contributing to acute water shortages/distress.

Over the years, KRCS has set up projects to support communities' members to build resilience to drought emergencies. The top five diseases in the area have been diarrhoea, skin conditions, eye problems, upper respiratory infections and dysentery, and the contributing cause is the consumption of unsafe drinking water.

Kenya Red Cross has set up one extensive scale water supply system at the Nakruto location with two complementary supply systems covering Kidong and Kitondoni Villages. The water system is designed to reduce the return distance and time household members and individuals take to fetch water.

The water system has a borehole (12 inches in diameter, yielding 80,000 liters of water per hour (80m^3/h); submersible pump (40,000 liters per hour ((40m^3/h); Water Tanks (200,000 liters (200m^3); pipeline of various diameters covering a total of 28 km and supplying water to 20 water kiosks.

KRCS has learnt that with the increased water supply for drinking and domestic use, there have been corresponding improved hygiene and sanitation conditions (7 villages have been declared ODF - Open Defecation Free in Challa and Mahoo), improved school enrollment and fewer cross-border conflict cases related to water usage. Community confidence in KRCS programming is also high due to sustainable water projects that support communities throughout the year.

*Hygiene items (*multipurpose soap*)*

When analyzing different market commodities that might be stocked by one trader, where each commodity is analyzed by a different team, plan to hold a joint interview or combine/merge the questionnaires from the two commodities into one to avoid different teams interviewing same trader separately.

Make trader questionnaire as easy to administer as possible and short without missing key information needed to avoid being rejected by traders/wholesalers. Most of them will respond to your questions as they serve their customers, therefore enumerators should learn to adapt and fit into their schedules with disrupted sessions.

Market authorities (in this case the council workers locally known in Kenya from a corrupted Swahili word "*Kanjo"*) have tense relationship with traders because they enforce market laws and government policies on trade. In this tense relationship, they are skeptical of any team conduct assessment and they refused to be interviewed.

SECTION 4: CONCLUSION

Table 1 (below) summarizes the markets analyzed and the potential response options for consideration during response analysis.

Table 1: Summarises all the markets analyzed (by the RAM team and wider community of practice) and provides comments for use during response analysis

Water commodities and (Aquatabs, WaterGuard, Pur)

Due to the low community awareness of water treatment chemicals, there is a great need for consideration of awareness creation programmes. In addition, support with supply services to the community.

Water supply services

During the drought, the traders are likely to access the water services independently, although the transportation costs will increase. The prices of water services in the affected markets may fluctuate based on the season that the shock strikes. Generally, water service prices will rise during the shock because the demand will be high, and the supply will be low. All major markets will be accessible; however, traders will want to take advantage of the high demand for water services.

Because of this, the following approach is recommended:

- Cash Transfer is recommended as a mode of intervention for affected households and those anticipated to be affected in the Mahoo, Bomeni and Chala wards.
- Grant Support is recommended to water vendors to install a solar-powered pump, establish more water kiosks, and rehabilitate and drill boreholes.
- A voucher is recommended for the community to buy water during crises.
- Cash for Assets is recommended to the community for the protection of spring, installation of RWHS, and RWHT (Rainwater Harvesting Systems).

*Hygiene items (*multipurpose soap*)*

Since the supply of bar soap remained unaffected by drought but demand was reduced due to low purchasing power of the community, the conclusion is that the market functioning remained strong to support a cash or voucher modality aimed at improving purchasing power of the affected community.

But because drought and its impacts persist, MPC would be best modality for rights-based approach as a way of meeting the basic needs of the community to allow empower them to meet other sector needs such as hygiene.

If other interventions already exist to meet their basic needs, then vouchers for soap to households redeemable at local traders' shops would be the best form of restriction to achieve hygiene outcomes.

Cash-plus inform of awareness and hygiene promotion campaigns would complement realization objectives of the cash transfers or vouchers distributed.

Group cash transfers to the local women groups to continue production of liquid soap coupled with training to improve their skill and produce quality soap in quantity.

Support required by the shock-affected population on Supply and Demand	Markets with the potential for an increase in supply for each commodity, including where additional trader support is required				Market capacity to respond to increased demand	Potential response options for further discussion and analysis
	Insert market name	*Insert market name*	*Insert market name*	*Insert market name*	• *Market supply unlikely to respond* • *The supply chain may not respond* • *The supply chain may respond with support* • *The supply chain may respond*	• *No/Very limited immediate potential for cash-based responses* • *Very Limited CTP potential* • *Potential for Market-based support interventions and CTP* • *CTP Potential + monitor* • *CTP potential BUT with more analysis*
Rainwater harvesting systems	Taveta Main Market	Voi Main Market			The market supply is likely to respond with support.	CASH FOR ASSETS.
Protection of Spring	Taveta Main Market				Market supply likely to respond	CASH FOR ASSETS/CASH FOR WORK/CAPACITY BUILDING
Additional storage capacity and electricity connectivity	Taveta Main Market				Market Supply likely to respond	CASH FOR WASH
Capacity strengthening on RWHT	MOW	CGTT	NDMA		Trainers likely to around with external support	CASH FOR TRAINING
Water	TAVEVO	PRIVATE COMPANIES			Market supply likely to respond	CVA
Grant Support	Taveta Main Market				Market supply likely to respond	CTP

Rehabilitation and drilling of new boreholes	Taveta Main Market				Market supply likely to respond	CFA
Support with Solar Panel	Taveta Main Market				Market supply likely to respond	UCT
Replacement of service pumps and submissive pumps.	Taveta Main market				Market supply likely to respond	UCT
Improvement of unprotected well	Taveta Main Market				Market supply likely to respond	Cash for Assets
Cash grants to households	Cessi	Timbila	Taveta		Market supply chain strong and may respond	MPC/ Value/Commodity vouchers
Women groups producing local liquid soap	Cessi				Market demand likely to respond	Group cash transfers