

DRD DANISH REFUGEE COUNCIL **DANISH DEMINING GROUP**



**ASSESSMENT OF AGROVETS AND PERCEPTION OF LIVESTOCK HERDERS
TOWARDS ANIMAL HEALTH INPUTS IN MANDERA COUNTY**



Assessment of agrovets and perceptions of livestock keepers towards animal health inputs in Mandera County

Danish Refugee Council (DRC)

Building Opportunities for Resilience in the Horn of Africa (BORESHA)

@ DRC, 2021

Acknowledgements

The consultancy team would like to thank BORESHA and the DRC for funding and supporting the team during the assessment. Owing to the support and cooperation of several individuals and institutions, the assessment was smooth and productive. We owe many thanks to a large number of informants and stakeholders met and interviewed, including the DRC BORESHA team, Mandera County Department of Veterinary Services, development agencies and private sector actors, including agrovets, private pharmacies, veterinarians and veterinary paraprofessionals, community animal health workers and other service providers in the County. Finally, the assessment was enriched by the technical support of Nicoletta Buono who provided critical insight that informed the recommendation of the assessment. Many thanks to the BORESHA team in Mandera under the leadership of Abdi Mohamed Abdi, Ali Isaack and Mohamed Adan who their guidance, and technical and administrative support during the assessment.

Finally, we must mention that the feedback and input received from the livestock keepers in the seven sub-counties of Mandera and market actors were most useful. As ultimately the project is meant for them, their views have been important in formulating this report.

Dr Mohamed Muhumed Yussuf

Kenbridge Consulting Limited, P.O Box 67906 00200 Nairobi

Kenbridgeconsulting.ltd@gmail.com

Disclaimer: The report was commissioned by the **Building Opportunities for Resilience in the Horn of Africa (BORESHA)** of the Danish Refugee Council. The analysis, conclusions and recommendations in this publication do not necessarily reflect the views of BORESHA, the DRC or its partners.

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
EXECUTIVE SUMMARY	iii
BACKGROUND AND CONTEXT	1
THE ASSESSMENT OF AGROVETS AND PERCEPTIONS OF LIVESTOCK HERDERS TOWARDS ANIMAL HEALTH SERVICES	1
<i>The objectives and scope of the assessment</i>	1
APPROACH AND METHODOLOGY FOR THE ASSESSMENT	2
<i>The geographical scope of the assessment</i>	2
<i>Field data collection</i>	2
<i>The assessment limitations and challenges</i>	3
SYNTHESIS AND FINDINGS OF THE ASSESSMENT	4
MANDERA COUNTY OVERVIEW.....	4
THE SUPPLY SIDE OF THE ANIMAL HEALTH INPUTS MARKET	4
<i>The profiles of animal health inputs providers</i>	5
<i>The animal health inputs stocked and pricing</i>	8
<i>The animal health input and services supply chain</i>	9
<i>Challenges for input suppliers in reaching pastoralists</i>	10
THE DEMAND SIDE OF THE ANIMAL HEALTH INPUTS AND SERVICES MARKET	11
<i>Buying behaviour and products demanded</i>	11
<i>Relationship between agrovets and suppliers and livestock keepers</i>	11
REGULATORY AND ENABLING ENVIRONMENT FOR ANIMAL HEALTH INPUTS	12
<i>Access to financial services and credit</i>	12
<i>Better inspection and regulation of inputs, and cross border trade in counterfeit products</i>	12
<i>Training needs of the different actors</i>	12
<i>Easing the cost of doing business – better infrastructure, information and reduction of taxation and fees</i>	13
ENTRY POINTS AND APPROACH TO ENHANCE PRIVATE SECTOR ENGAGEMENT IN THE COUNTY	13
CONCLUSION AND RECOMMENDATIONS	14
RECOMMENDATIONS	14
ANNEXES	16
ANNEX 1: LIST OF DOCUMENTS REVIEWED	16
ANNEX 2: ACRONYMS AND ABBREVIATIONS	16
ANNEX 3: TERMS OF REFERENCE	17

EXECUTIVE SUMMARY

Across Mandera County, livestock is a critical sector that contributes to 72% of the household incomes, employs a large proportion of the population. Although the population depends on livestock, the production and productivity of livestock are very low due to erratic rainfall, poor commercialization, and limited access and use of livestock inputs. The sector receives limited investments from both the private sector and the county government. As the Building Opportunities for Resilience in the Horn of Africa (BORESHA) project promotes economic development and greater resilience, particularly among vulnerable groups in the Mandera Triangle (area between Kenya, Somalia and Ethiopia), it sought to better understand the animal health input market in Mandera County to strengthen the inputs market systems in the Mandera County to bring about the desired sustainable economic development.

The assessment of agrovets and perceptions of livestock keepers towards animal health inputs was carried in the seven sub-counties of Mandera to find out the existing agrovets or private pharmacists existing in the project areas, identify the existing trained Extension Animal Health Workers and their training needs in Mandera County. The assessment covered a range of issues, including the supply side of the inputs market (identifying, mapping and assessing capacities of different actors), demand side of the market (livestock keepers' willingness and buying decision process for inputs), and the regulatory and enabling environment for animal health inputs in the market. During the assessment, a total of 23 actors were interviewed, 7 focus groups discussions held with a total of 32 livestock producers in the sub-counties, and visits to 12 agrovets across the county.

According to the assessment findings, though there has been growth in the supply of animal health inputs, the coverage of the network of suppliers is far from what is required to ensure all the livestock keepers in the County have access to sustainable and affordable animal health inputs. In each of the sub-counties, there were at least two private agrovets, except in Kutulo Sub-County where there were no agrovets and the public veterinary services were manned by only two professionals. The Department of Veterinary Services is involved in the provision of services and inputs classified as public good such as disease surveillance, control of transboundary diseases, livestock movement controls and vaccination. And, with support from development partners, they conduct vaccinations and livestock treatments (mostly in response to disease outbreaks and in droughts). But, the supply of animal health inputs is dominated by private market actors including agrovets, private pharmacies and rural mixed-goods shops who are mostly engaged in sales of veterinary drugs, and community animal health workers who have been provided with training to provide basic clinical services, advice to livestock keepers and disease reporting.

The public supply chain which mainly involves vaccines was simple – the vaccines were procured by the County Government and partners, delivered to the Department of Veterinary Services who conducted vaccination campaigns during which livestock keepers presented their animals. For the private input supply chain, there were two main sources of animal health inputs for the local input providers: suppliers and distributors in Nairobi, and informal cross border imports from Somalia (see Figure 4 - Input supply chain map for Mandera County). About 70% of the products were sourced from Nairobi, while the informal imports were said to account for about 30% of the products stocked by the agrovets. Livestock keepers and CAHWs purchased veterinary drugs directly from the agrovets (though some CAHWs had their small agrovets or mixed good shops where they also sold products directly to livestock keepers). Across all the agrovets, over the counter dispensing of veterinary drugs accounted for the largest proportion of sales, with incomes from equipment, vaccines and clinical consultations being low. Vaccines and equipment being stocked and sold by only two outlets.

As with other ASAL counties, Mandera has not been able to attract private services due to a variety of factors including poor infrastructure, low input-pastoral production that is mobile and in hard to reach areas, high delivery costs, and lack of appropriate support structure (such as credit and financial services), stressful climatic factors, and insecurity in some areas. The distribution networks for pharmaceuticals are weak and pastoralists have limited access to quality pharmaceutical supply since the linkages between national wholesalers, regional wholesalers and service providers are weak. It must be noted that due to the smallness of the market resulting from the dispersion of pastoralists in the vast areas with limited infrastructure, the economies of scale are small thereby limiting the returns on investments by the private sector. The market is not large enough, it is seasonal, with high overhead costs and risky to invest in fixed costs and provide services. Further, it was observed

that the relationship between the agrovets and livestock producers was just transactional with limited knowledge transfer, the producers had limited knowledge on how best to use the veterinary products.

It was clear from the assessment that the demand for inputs is limited more by the availability of services and inputs rather than the willingness and ability to pay. Livestock keepers were willing and do invest in animal health input, more so to manage the endemic diseases in the County. Their complaint was more regarding the availability of quality and affordable products. In the FGDs, livestock keepers noted that they had to travel long distances to get to the closest supplier, though they said in areas where CAHWs existed, they were closer and much more available. They also observed that quality drugs were generally much more expensive than those sourced from Somalia. As for whether they considered the agrovet dealers as knowledgeable, livestock keepers were aware of the capacities of local agrovets dealers – most of them cited them as the source of information of the products they purchased. It was good to note that livestock keepers not cited the private agrovets and CAHWs as having better information on the products and gave as a reason why they bought the products from them. They also positively rated the quality of the products they sold and their services. In the FGDs, livestock keepers rated the private agrovets positively – they were happy with the services offered by the agrovets and most of them said they would recommend the private agrovets, but complained about the pricing of the products.

In terms of the regulatory environment, the animal health input providers were asked about the challenges in the supporting functions, including access to financial services and credit and rules and regulations in the market, and what policy and institutional frameworks they would want to see implemented to enhance the environment for a sustainable expansion of their areas of coverage and the access of smallholder farmers to farm inputs. The most important areas where the input providers would want to see improvements are enhanced access to financial services and credit, better regulation of inputs market, training of the input service providers, and easing the cost of doing business by improving infrastructure, information and reducing taxation and informal fees. Most of the agrovets were managed and run by the owners, except Daa who employed an AHAs, and Nomadic Agrovet (Rhamu) that employed a CAHW. Also, most of the agrovets were not registered with the CCPP and KVB but were licensed by the local and municipal authorities. Transportation and rent costs (for supplies from Nairobi) were said to be the largest operational costs incurred by the agrovets. The situation is made worse by the distortion of the market by informal importance of low-quality products across the border, as well as the free distribution of inputs and services periodically by the County Government and NGOs that disincentivizes the market actors from fully taking up the functions of commercially availing the inputs.

From the findings of the assessment, it is important to facilitate and support the private input actors in the area of efficient and sustainable inputs market. Facilitating and strengthening better partnerships and linkages between input suppliers/distributors and local retailers, enhancing the management capacities of the agrovets, and enhancing access to a sustainable supply of inputs and financial services and credit as key supply-side interventions. To increase uptake of inputs, demand-side constraints such as improving distribution network, addressing information needs of livestock keepers in improving productivity and commercialization, and in quality inputs are necessary. Similarly, policy and institutional interventions in better-regulating inputs markets and informal cross border trade in low-quality products, addressing market distortion by free distribution of inputs by NGOs and County Government, and investments in improving the road infrastructure, access to electricity, and better access to financial services and credit as well as providing incentives to market actors such as reduced taxation in the livestock sector will stimulate the input supply sector.

BACKGROUND AND CONTEXT

There is huge untapped potential in the livestock sector in Northern Kenya, where livestock production is typically characterized by the low-input low-output system, variable quality and quantity of livestock and products, and poor market linkages. Northern Kenya although hosting over 60% of the national herd has lagged in the penetration of animal health products and services. Unsatisfactory and inadequate access to animal health products remains a key limitation that impacts the productivity of livestock. Improved access to animal health inputs and services can help livestock producers address the existing productivity challenges, as access to these products is essential for preventing losses in production that would otherwise jeopardize the financial viability of the farming enterprises. Furthermore, inputs are essential tools in the production of safe, quality products, and are vital for the protection of animal health and wellbeing. This opportunity has been understood by the Building Opportunities for Resilience in the Horn of Africa (BORESHA) a 3-year cross-border project funded by the European Union Trust Fund for Africa (EUTF) been implemented in Mandera county in Kenya, Dollow and Belet Hawa district in Somalia and Dollo Ado and Dollo Bay in Ethiopia since November 2017.

The overall objective of the BORESHA project is to promote economic development and greater resilience, particularly among vulnerable groups in the Mandera Triangle (area between Kenya, Somalia and Ethiopia). The project adopts a community-driven approach to address the shared nature of the risks and opportunities in this border area. It is part of the EU's programme for Collaboration in the Cross-Border areas of the Horn of Africa, providing over 60 million euros of investment to prevent and mitigate the impact of local conflict and to promote economic development and greater resilience in four different cross-border regions. The consortium is led by DRC in partnership with WYG, World Vision and CARE International. BORESHA anticipates accomplishing the following results:

- Communities in the Mandera Triangle are more resilient and better prepared for shocks, and response is more effective;
- Individuals and communities are more self-reliant through increased skills and opportunities for cross-border employment, diversified enterprise, and livelihoods;
- Cross-border rangeland and other shared natural resources are more equitably and sustainably managed.

The assessment of agrovets and perceptions of livestock herders towards animal health services

As part of the project activities, BORESHA works with pastoralists in the target area and have on several occasions responded to disease outbreaks while working closely with the Department of Agriculture and Livestock services. The programme supported vaccination to respond to outbreaks like Peste des Petit Ruminants (PPR) and contagious caprine pleuropneumonia (CCPP) among other challenges and also supported the treatment of the animals in the target area. The programme would however like to understand more the products available in the area as well as the vendors of these products so that the beneficiaries can be supported with appropriate information potentially guiding them in their decision making when it comes to accessing agrovets related products and services. The programme will also be interested in establishing the presence of animal health service providers to link them to the beneficiaries for support and guidance.

The objectives and scope of the assessment

The assessment focussed on finding out the existing agrovets or private pharmacists existing in the project areas, identify the existing trained Extension Animal Health Workers and their training needs in Mandera County. The assessment has three main components”

- Assessment of the agrovets and extension services – identifying, mapping and assessing the capacities of agrovets/pharmacists, extension service providers including government extension, private animal health technicians and community animal health workers, traders and other actors;
- Assessment of demand for animal health inputs and services - assessing the perspective of the livestock owners in the buying decision process for veterinary products, their willingness to procure veterinary inputs as well as the view of the pastoralists on the quality, availability and cost of the current products and services in the region.
- Assessment of the enabling environment for animal health input and services – key institutional, legal and policy environment that affects the different actors in the inputs markets.

Approach and methodology for the assessment

The assessment used **market mapping methodology**: a conceptual and practical tool that identified key service providers in the animal health inputs such as agrovets, community animal health workers, private and public animal health service providers, as well as policies and, institutional framework. Following secondary data review, the consultant started off the fieldwork by developing a catalogue of market actors and produce a master list of agrovets and private pharmacies and other dealers in animal health inputs in Mandera County through interviews and field visits to agrovets/pharmacies in the county. Following this, field visits were conducted and primary data collected from both public and private actors in the inputs market including District Veterinary Officers, agrovets/private pharmacies, input traders, animal health professionals, and other actors involved in the sector. Also, focus group discussions (FGDs) were held with livestock keepers in the seven sub-counties to understand their purchasing behaviour, willingness to pay for inputs as well as perceptions on the quality, availability and cost of the inputs in the market.

The geographical scope of the assessment

The assessment covered the seven sub-counties of Mandera, including Mandera East, Lafey, Mandera South, Banisa, Mandera West, Kutulo and Mandera North sub-counties. Also, the assessment considered the cross-border socio-economic dimension in the trade of inputs in the County.

Field data collection

Following the review of secondary documents (Annex 1 provides details of the documents reviewed), field visits to collect primary data in Mandera East, Mandera North, Lafey, Mandera South, Kutulo, Mandera West, and Banisa were conducted between 9th and 16th March 2021. During the primary data collection, the consultant 'followed the supply chain' and its network from Mandera to the sub-counties interviewing both the demand and supply-side actors. Alongside the input suppliers, we identified and mapped the different animal health service providers in each sub-county and their additional training needs. Also, common diseases and available drugs in the assessment area and the products most commonly sold/used, where they are sourced from and the prices of the most common products, as well as products and services needed but not currently available were collected. On the supply side, using a structured interview schedule, the agrovets, private pharmacies and rural shops etc. dealing in animal health products were interviewed on the following aspects:

1. The key products stocked – veterinary drugs, vaccines, tools and equipment, and animal feeds;
2. The dealers/agrovets density – the names of towns and villages where their stores are located and areas served;
3. Pricing and availability of the different products
4. The inputs supply chain – including the estimated number of smallholders they served, and how they deliver inputs to the farmers
5. Barriers and opportunities for reaching pastoralists, including how much social relationships matter in the inputs sector.

On the demand side, to provide depth and context, interviews with the agrovets/private pharmacies as well as service providers and FGDs with pastoralists was conducted targeting a selected sample of the population representing different geographic and stakeholder groups using an elaborated interview protocol and guides. In the FGDs, participatory tools and techniques (e.g. mapping, direct observation) were used to assess the perspective of the livestock owners in the buying decision process for veterinary products, their willingness to procure veterinary inputs as well as the view of the pastoralists on the quality, availability and cost of the current products and services in the region. The consultant liaised with existing agrovets and relevant stakeholders (livestock department), interview livestock owners (possibly using the existing BORESHA structures: LCIG, NRM, DRR, Private sector groups, VSLA). Key areas of enquiry will include:

1. The buying decision process for veterinary products among pastoralists
2. Willingness to procure veterinary inputs by the pastoralists
3. Products and services needed but not currently available
4. The view of the pastoralists on the quality, availability and cost of the current products and services in the region

Based on the inventory of policies and regulations affecting the inputs sector and in consultation with the market actors, we enquired into the nature and extent which to policies are a problem in the sector. A range of tools, including in-depth expert

interviews, and structured interviews, observation and product/price data collection from agrovet/private pharmacies and other service providers were used. A total of 24 actors were interviewed, 7 focus groups discussions held with a total of 32 livestock producers in the sub-counties, and visits to and interviews with 20 agrovet across the county. Table 1 provides a summary of the stakeholders consulted during the evaluation.

Table 1. Actors to be targeted in the assessment

Actors	Type of actors	Number
Key informant interviews	County administrators and livestock sector partners	3 persons
	Sub-county department heads – livestock	8 persons
	CAHWs/CDRs	5 persons
	Private animal health assistants	3 persons
	Businessmen in inputs trade	4 traders
Focus group discussions	Livestock producers	1 FGDs per sub-county - 7 FGDs with 32 participants.
Field visits and observations	Visits to agrovet and interviews with the attendants	20 agrovet

The assessment limitations and challenges

The assessment of agrovet and perceptions of livestock keepers towards animal health inputs in Mandera County was conducted largely in accordance with the assessment plan. However, some contextual challenges and limitations were encountered during the process which needs to be taken into account when reviewing the findings. Literature on animal health input markets in Northern Kenya, particularly the number of livestock keepers served by the different service providers¹, the market size for inputs, the value of products sold, and the profit margins is hard to find. Secondly, the supply chain for inputs extended to Nairobi and Mogadishu, it was difficult to get data on several actors who were involved in the cross-border trade and considering the security situation and time, no much data on the same was collected. Nevertheless, we interviewed a range of stakeholders, diverse beneficiaries, and triangulated the information from several sources to ensure the validity of the findings.

¹ The Department of Veterinary Services had data on the number of animals vaccinated during different campaigns supported by NGOs and county government, but had limited information on the market served by the private sector and even by public clinical services.

SYNTHESIS AND FINDINGS OF THE ASSESSMENT

The synthesis and findings of the assessment draw from four sources: 1) secondary data review; 2) key informant interviews with livestock experts from the Department of Veterinary Services and other actors in the sector; 3) interviews and field visits to public and private actors in inputs market including District Veterinary Officers, agrovets/private pharmacies, input traders, animal health professionals, and other actors involved in the sector; and 4) focus group discussions (FGDs) were held with livestock keepers in the seven sub-counties.

Mandera county overview

The county covers an area of 25,991.5 km has an approximate population of 1,025,756 people, with 125,497 households.² With livestock being the main economic activity and contributing to 72% of the household incomes, the population distribution by livelihood zones is as follows: pastoral economy zone in the east and the central corridor, agro-pastoral economy zone in the west and irrigated cropping zone in the north along the Daa River. Administratively, the county has seven sub-counties: Mandera East, Mandera West, Banisa, Mandera North, Lafey, Mandera South and Kutulo. Most of the land in these sub-counties is rangelands, which supports livestock production.

Livestock and agriculture alongside trade absorbing a large proportion of the population. The county is one of the livestock rich counties in the county and pastoralism is the major economic activity with camels, goats, sheep and cattle being the main type of livestock reared. Based on livestock census conducted in 2014, the county has 863,625 head of cattle, 1,016,970 camels, 3,415,484 goats, 1,164,238 sheep, 56,874 chickens, 23,388 beehives, 141 bee apiaries and 208,126 donkeys. Table 2 provides a summary of livestock population in the seven sub-counties based on the 2014 census.³ However, despite having a large population of livestock, the livestock industry has underperformed and rural pastoralists in the county remain poor with the least access to basic services in the country.

Table 2: Livestock populations in the sub-counties in Mandera

Sub-county	Cattle	Camels	Goats	Sheep	Chicken	Beehives	Donkey
Mandera East	96,789	47,023	339,260	124,236	6,868	43	31,984
Lafey	173,472	120,970	616,708	259,427	7,818	7	19,571
Mandera South	84,411	88,085	703,641	192,837	8,410	9	31,866
Mandera North	134,721	204,485	751,058	211,284	5,226	313	29,022
Mandera West	235,308	294,333	632,985	257,130	18,736	104	64,953
Banisa	138,924	261,895	371,832	119,324	9,816	22,912	30,730
Total	863,625	1,016,790	3,415,484	1,164,238	56,874	23,388	208,126

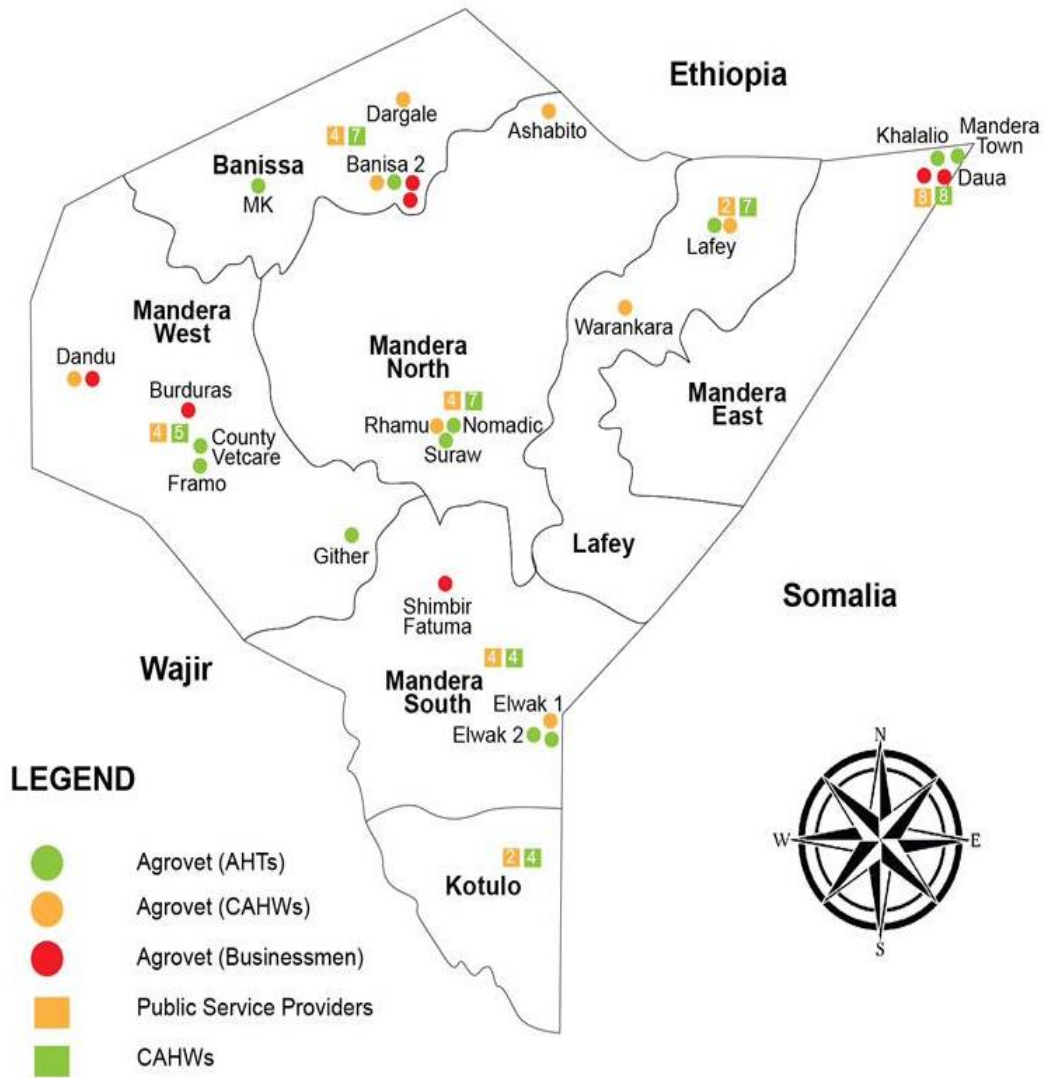
The supply side of the animal health inputs market

Animal health input dealers are important for livestock keepers' access to quality affordable inputs in their locality. The animal health inputs in the county are marketed and distributed through two distinct channels: the private and public channels. The public sector input provision follows an elaborate system of distribution of inputs (mainly free vaccines, and some veterinary drugs for emergencies) through the State Department of Veterinary Services (DVS) in the Ministry of Agriculture, Livestock and Fisheries Development (MoLFD). Some of the actors in the public services (veterinary paraprofessionals) also engaged in commercial input provision, running agrovets and providing clinical and advisory services to livestock keepers. The private channels involve several private businesses both formal (animal health professionals) and informal (businessmen and community animal health workers/community disease reporters – CAHWs/CDRs). Figure 1 maps the distribution of these input providers within the sub-counties Mandera.

² Mandera County Government (2018). *Mandera County Integrated Development Plan, 2018-2022*

³ Mandera County Government (2014). *Mandera Livestock Census*

Figure 1: Mapping of agrovets and animal health service providers in Mandera County

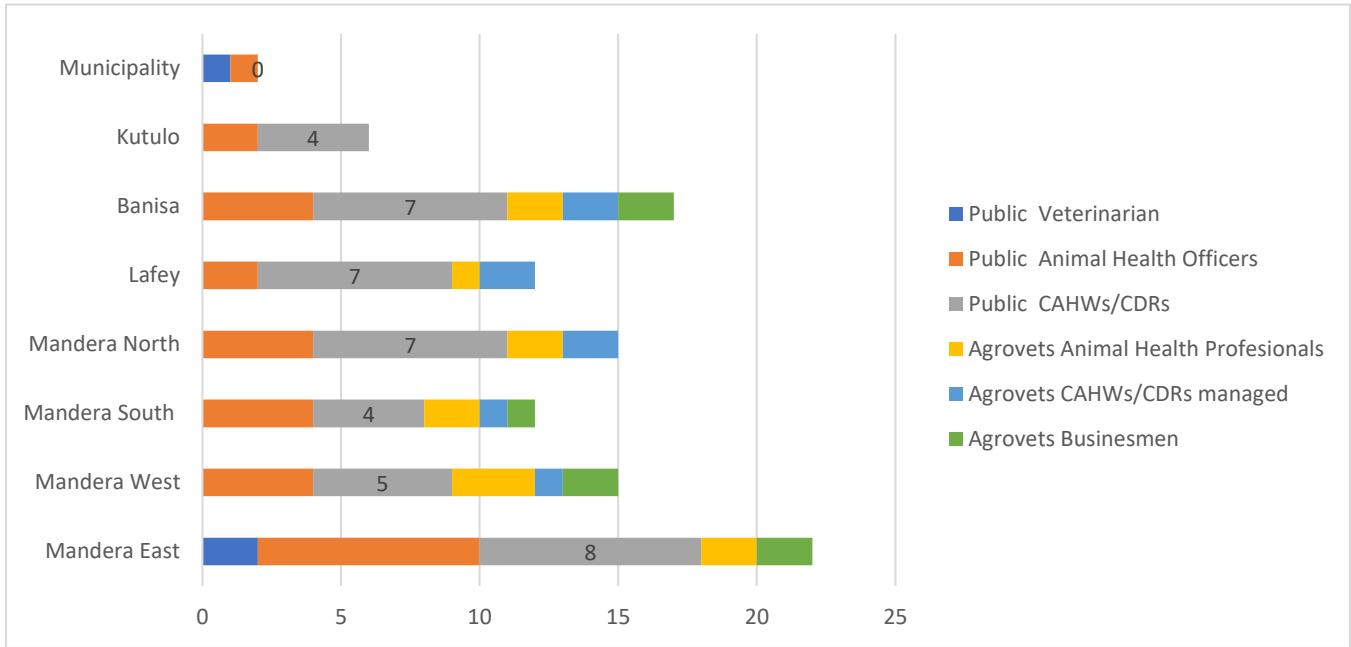


The profiles of animal health inputs providers

As indicated, the public and private, and formal and informal animal input providers exist side by side. While the public animal health services in Mandera consisted of 3 veterinarians, 29 veterinary paraprofessionals⁴ and 1 laboratory technologist, a total of 26 agrovets were identified and mapped in the county. Only one (1) of the agrovets was managed by a private veterinary paraprofessional, ten (10) were operated as private business by veterinary paraprofessionals working with the government, eight (8) by CAHWs/CDR, while seven (7) were managed by businessmen. Also, there are several informal outlets, mainly mixed goods rural retail shops that were selling some veterinary drugs alongside foodstuff and other essential commodities. Figure 2 provide a summary of the different public and private animal health service providers in the County.

⁴ Also referred to Animal Health Technicians, the veterinary paraprofessionals have qualification of either Diploma and Certificate in Animal Health and Production. As per the Veterinary Surgeons and Veterinary Paraprofessionals Act, 2011 they are allowed to practice and dispense veterinary drugs under the supervision of a veterinary surgeon.

Figure 2: The public and private animal service providers in Mandera County



The private animal health input providers

In this category of service providers are a private veterinarian and veterinary paraprofessionals who provide clinical services and who own agrovets that provide inputs., there are a total of 11 agrovets managed by veterinary paraprofessionals, with only two of them being by a private practitioner (not working for the government). It was also observed that except for the one located in Gither, all the other agrovets were located in the respective sub-county headquarters. In terms of services, while the majority of these outlets only sold veterinary drugs, the veterinary paraprofessionals and CAHWs also provided clinical services or rural outreach, while two of the outlets (Daua in Mandera and Framo in Takaba) were also providing vaccination services. Daua and Khalalio agrovets also provided poultry feeds and equipment, while Framo Agrovet had very strong outreach services where the animal health officer visited villages and conducted treatments and vaccination (Table 3). In terms of gender, all of these inputs were men and unfortunately, there was no female in public veterinary services or among the CAHWs.

Table 3: Distribution and inputs provided by the private animal health input providers

Sub-county	Agrovet	Products and services
Mandera East	Daua Agorvet – Mandera Town	Clinical services, sale of drugs, animal feeds, veterinary equipment and some vaccines
	Khalalio Agrovet – Mandera Town	Clinical services, sale of drugs, animal feeds and veterinary equipment
Lafey	Lafey Agrovet – Lafey	Clinical services, and sales of veterinary drugs
Mandera North	Suraw Agrovet – Rhamu	Clinical services, and sales of veterinary drugs
	Nomadic Vet – Rhamu	Clinical services, and sales of veterinary drugs
Mandera South	Elwak 1 – Elwak Town	Clinical services, and sales of veterinary drugs
	Elwak 2 – Elwak Town	Clinical services, and sales of veterinary drugs
Mandera West	Framo Agrovet – Takaba	Clinical services, vaccines, sales of veterinary drugs and strong outreach services
	County Vetcare – Takaba	Clinical services, and sales of veterinary drugs
	Gither Agrovet – Gither	Clinical services, and sales of veterinary drugs
Banisa	MK Agrovet – Banisa	Clinical services, and sale of veterinary drugs
	Banisa 2 – Banisa	Clinical services, and sale of veterinary drugs

The County animal health services

The Department is involved in the provision of services and inputs classified as public good such as disease surveillance, control of transboundary diseases, livestock movement controls and vaccination. The public services also play a role in the distribution of animal health inputs in two ways 1) the county government procuring veterinary drugs to undertake livestock treatments as disease preventive measures and drought response; 2) operated privately by veterinary paraprofessionals working for the government and providing clinical services at a fee. Though these actors are associated with better quality and authority in providing services and input, they are generally limited in coverage as they are based at County and Sub-County headquarters. For clinical services, they are considered rather more expensive compared to other service providers. As indicated in Table 3, the capacity of animal health services in the county is low, limited by staff numbers.

Table 3: Animal health professionals in public services in different sub-counties

Sub-county	Veterinarians	Animal Health Officers	Animal Health Assistants	Laboratory Technologist	Total
County Headquarters	2	-	-	1	3
Mandera East	-	7	1	-	8
Mandera South	-	3	1	-	4
Mandera West	-	3	1	-	4
Mandera North	-	3	1	-	4
Lafey	-	1	1	-	2
Banisa	-	3	1	-	4
Kutulo	-	1	1	-	2
Municipality	1	1	-	-	2
Total	3	22	7	1	33

Informal animal health input providers in the County

As shown in Table 4, in this category of input providers are the Community Animal Health Workers/Community Disease Reporters (CAHWs/CDRs) and businessmen who are engaged in the provision of inputs. While the CAHWs/CDRs engage in the provision of basic clinical services as well as sales of inputs, the businessmen only run retail outlets from which they sell inputs, mainly veterinary drugs. Table 4 identifies the main informal input providers and their locations. The risks associated with these input providers is the lack/limited capacity of input providers to give advisory services to livestock keepers, as well as the quality of the products they dispense.

Table 4: The locations of informal input providers in the county

Sub-county	CAHWs/CDRs	Locations	CAHWs/CDR Agrovets	Locations
Mandera East	8	Burabor, Khalalio, Aresa, Hareri, Arabia, Omar Jilao, Libahiya and Bulla Jamhuri	0	0
Mandera South	4	El Golicha, Shimbir Fatuma, Elwak and Wargadud	1	Elwajk Town
Mandera West	5	Wangai Dahan, Didkuro, Dandu, Gither and Takaba	1	Dandu
Mandera North	7	Rhamu (3), Matho, Ola, Ashabito and Shirshir	2	Rhamu and Ashabito
Lafey	7	Sala, Warankara, Damasa (2), Lafey (2), Fino	2	Lafey and Warankara
Kutulo	4	Kutulo, Borehole 11, Garsesala and Kutayu	0	0
Banisa	7	Hulo, Tarama, Kiloheri (2), Guba, Juruqo and Banisa	2	Banisa and Dargale
Total	42		8	

Alongside the CAHWs, there were several businessmen who were selling animal health inputs, including two (2) each in Mandera Town and Banisa, one each in Dandu and Burduras (Mandera West), and Shimbir Fatuma (Mandera South). Also, there were a large number of private veterinary paraprofessionals (total of 32 technicians) who were not employed or were not running agrovets, but participated in the vaccination campaigns conducted by the Department of Veterinary Services.

A large number of community animal health workers were trained in Northern Kenya, but few have enjoyed continuous support (technical support, kits and training) from the Department of Veterinary Services and have remained active. In

Mandera, there were a total of 42 CAHWs who have remained active and have participated in providing inputs and services to livestock keepers. They have better mobility compared to more senior professionals; thus, they have better coverage, and they can provide additional extension services and follow up services. They enjoy a close relationship with their clients as pastoralists believe that they have both the inputs and the skills to administer them. They further act as change agents in improving the utilization of inputs as they provide evidence for change – shows change resulting from using other inputs in their herds (anecdotal evidence to pastoralists). The main reasons why they are not working optimally are:

1. They are considered illegal practitioners as per the law,
2. Seasonality of their demand (returns in the dry season are too low),
3. Competition for NGO support that provides free services and rural shop, - the number of the CAHWs trained per location was more than the market could sustain and since they were also competing with more established rural shops that offer more services including credit to their clients, the CAHWs are no longer able to sustain themselves in the business
4. Inadequacy of skills – need for continued professional education and basic business skills – the existing guidelines for training CAHWs recommend regular refresher training for CAHWs and in the absence of NGO support and due to lack of training institutions CAHWs are not able to improve their skills over time.
5. Challenges in accessing sustainable input supply – since the private sector is not well developed in continuously supplying drugs and inputs, the CAHWs are dependent on the NGO for inputs and once this is withdrawn their business collapses.

The animal health inputs stocked and pricing

The animal input providers surveyed sold veterinary drugs mostly anthelmintic, mainly dewormers, as these were the most commonly demanded and used product in the County (Figure 3). This was followed by antimicrobials, trypanocidals and acaricides. This may be because of the high burden of endemic diseases such as worm and tick infestation, focus on curative treatment, and pastoralists practice of deworming animal just before the dry season and at the start of the rainy season.

Livestock keepers and CAHWs purchased veterinary drugs directly from the agrovets (though some CAHWs had their agrovets or mixed good shops where they also sold products directly to livestock keepers). Across all the agrovets, over the counter dispensing of veterinary drugs accounted for the largest proportion of sales, with incomes from equipment, vaccines and clinical consultations being low. Vaccines and equipment being stocked and sold by only two outlets. In the FGDs, livestock keepers highlighted the seasonal variations in the demand for the different products depending on the disease burden in the area. A closer look at the patterns showed that agrovets increased their stocks closer to the rainy in anticipation of increased demand as pastoralists purchasing power improved with improved livestock prices. Across all the FGDs, livestock keepers indicated that they preferred to deworm their animals just before the rainy season into them of parasites and help them gain weight faster. Livestock keepers interviewed highlighted the importance of price in deciding which products to purchase and were also aware that inferior products were low priced. However, they noted that based on the brands (colour and other features on the packaging), they were able to identify quality products. Agrovets across the sub-counties reported increased sales during livestock market days when producers animals to sell in the market.

Livestock keepers purchased the drugs, then administered them without the guidance of animal health personnel relying on their experience, though they have minimal knowledge of their use. This will probably lead to the risk of misuse of drugs, failure to observe withdrawal period, and under or overdosing of the animals with serious implications for antimicrobial resistance. As for pricing, there was a significant prices difference between Mandera Town and the agrovets in the sub-counties. This was because these agrovets too were placing their orders directly mostly from Nairobi and sourced few

Figure 3: Products in the Agrovets



products from informal cross border traders of inputs. Table 5 shows the most common brands and prices of different veterinary products available in the county.

Table 5: Common inputs, brands and retail prices in Mandera

Input category	Common brands	Retail prices	Average wholesale prices in Nairobi
Anti-parasitic – dewormers and acaricides	Dewormers: Abezole 2.5% and 10%, Albafas 2.5% and 10%, Albendazole 2.5% and 10%, Hook 2.5% and 10%, Hook 1gm, 2.5gm and 600gm bolus, Starzole 2.5 and Starzole Forte, Tramazole, Wormita, Levafas, Ivomec, Noromectin, Nilzan drench and bolus, Wormcid dewormer and bolus. Acaricides: Steladone, Bayticol, Cyperguard, Bovitraz, Mostraz, Triatix	Retail prices ranges from KES 1,000 – 1,250 for 10% albendazole and from KES 400 for other products depending on the concentration and the company	The retail prices though vary with trade mark and quality, the prices ranges from KES 400 – 800 per 1 litre of albendazole.
Anti-microbials – mostly antibiotics	Betamox, Alamycin 5%, 10% and 20%, Limoxin, Oxytetra, Oxykel, Phenoxy, Penstrep, Tylosin, Tenaline, Disseptoptim bolus, Opticlox eye ointment	Retail prices of KES 600 – 700 for 100ml Penstrep and from KES 500 for oxytetracycline	Oxytetracycline 20% 100ml at KES 220 – 280 and Penstrep at KES 400 – 450 per 100ml
Trypanocidals	Diminatryp, Ethidium, Novidoum, Triquin, Samorin, Veriben and Veridium	With Triquin being commonest retailing at KES 400	KES 180 – 200 per vial
Metabolic drugs – mostly multivitamins	Multivitamin 100ml	Retails at KES 400 – 450 per 100ml vial	KES 180 – 250 per 100ml
Antihistamine	Bimahistamine and Histakel	Retails at KES 400 – 450 per 100ml vial	KES 250 – 280
Vaccines	Sheep and Goat Vax, Blanthax, Contavax, Pestevax, Lumpivax, Riftvax	Mostly provided free during vaccination exercise.	

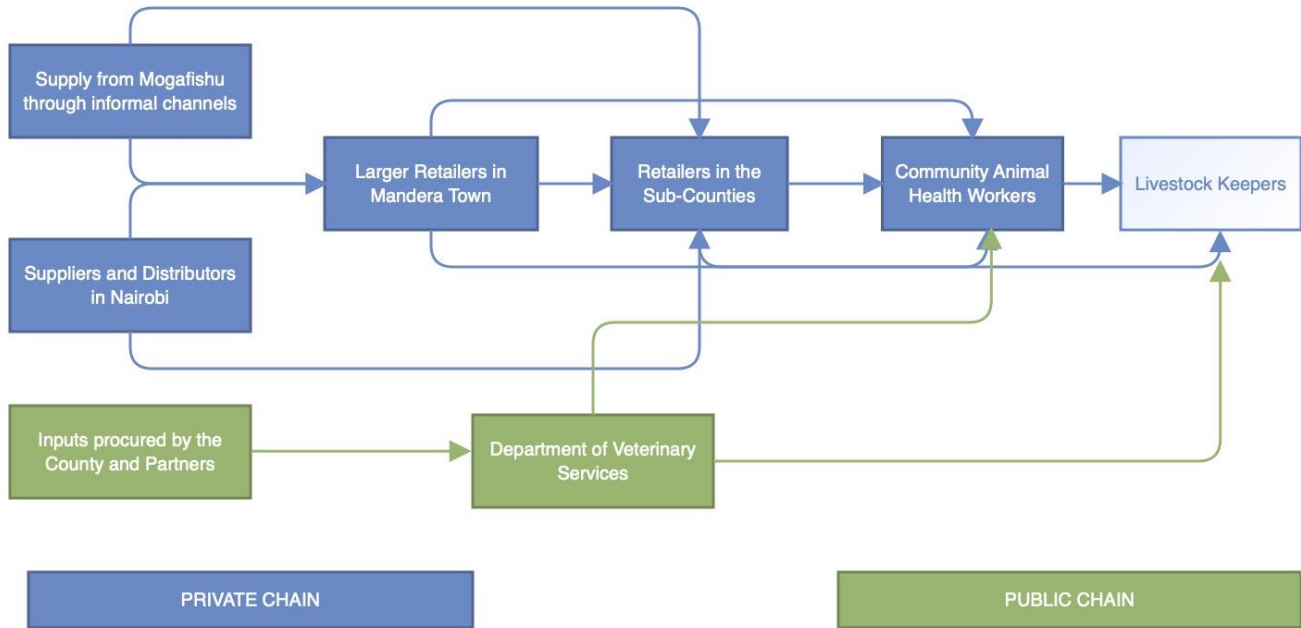
The animal health input and services supply chain

The public supply chain which mainly involves vaccines was simple – the vaccines were procured by the County Government and partners, delivered to the Department of Veterinary Services who conducted vaccination campaigns during which livestock keepers presented their animals. For the private input supply chain, there were two main sources of animal health inputs for the local input providers: suppliers and distributors in Nairobi, and informal cross border imports from Somalia (see Figure 4 - Input supply chain map for Mandera County). About 70% of the products were sourced from Nairobi, while the informal imports were said to account for about 30% of the products stocked by the agrovets. With Medina Chemical predominating the suppliers, the local agrovets placed their orders directly with the company or sent agents to the distributors and paid for the orders by Mpesa. The distributors and suppliers facilitated the transportation to parcel/bus companies in Eastleigh which then delivered the products to the respective agrovets. It was observed that the local agrovets has established very good relationships with the suppliers and distributors, and as a result, not many difficulties were reported with sourcing the products from Nairobi, other than the high transportation costs of products to Northern Kenya. Other than Medina Chemicals, other suppliers/distributors included Bimeda, Sidai, Norbrook, Cosmos Pharmaceuticals, Skylight Chemicals, Elgon Kenya, and Osho among others.

The domination of market penetration of Medina Chemicals was largely associated with its long history of operation and outreach in northern Kenya, its relationship with transportation companies, and better pricing of products compared to other companies in Nairobi. Overtime Medina Chemicals has gained the trust of local agrovets and livestock keepers who had developed some brand loyalty to the company products. As for the informal imports, while larger agrovets such as Daa and Muzammil has established contacts in Bakara markets in Mogadishu such as Sahan and Galax Pharmaceutical with whom

they have established relationships and who supplied them directly following payments by Hawala (Dahabshill accounts) or electronic mobile money transfer (EVC), the smaller agrovets were suppliers by informal traders.

Figure 4: Input supply chain map for Mandera County



Challenges for input suppliers in reaching pastoralists

Unfortunately, though the inputs market is fairly competitive, pastoral producers in Mandera County continue to face difficulty in accessing quality inputs at affordable prices. There is limited penetration of the dealer's network as with other ASAL counties, Mandera has not been able to attract private services due to a variety of factors including poor infrastructure, pastoralism, high delivery costs, and lack of appropriate support structure (such as credit and financial services), stressful climatic factors, and insecurity in some areas. The distribution networks for pharmaceuticals are weak and pastoralists have limited access to quality pharmaceutical supply since the linkages between national wholesalers, regional wholesalers and service providers are weak. It must be noted that because of the smallness of the market due to dispersion of pastoralists in the vast areas with limited infrastructure, the economies of scale are small thereby limiting the returns on investments by the private sector. The per capita cost of service delivery is higher compared to other parts of the country and incentive for private investors in the region is limited.⁵ The market is not large enough to invest in fixed costs⁶ and provide services. Further, it was observed that the relationship between the agrovets and livestock producers was just transactional with limited knowledge transfer, the producers had limited knowledge on how best to use the veterinary products.

The few existing input suppliers faced challenges, including high transportation costs, low and dispersed demand, low uptake of preventive services and products such as vaccines, limited cold chain and storage facilities, limited business skills, knowledge and business support. All these explain why the prices of inputs were generally high, not easily available in some rural areas and why livestock keepers use few purchased inputs. The gap in the formal private input provision was filled in by rural mixed good shops that sold all the essential commodities in the villages. As the family runs a business that sold a mix of products required by the pastoralists, they were all to reduce their operational costs, allowing them to outcompete the formal

⁵ Okwiri F.O et al; (2001). An Assessment of the Economic Viability of Private Animal Health Services in Pastoral Areas of Kenya, The Kenya Veterinarian Volume: 25 2002: pp.24-27

⁶ For example, the rent in Mandera market was up to KES 15,000 for shops, attendants were paid KES 15-20,000 and costs of electricity and other utilities were said to go up to KES 10,000 per month.

service providers who specialized in one product line and who required higher profit margins. Also, they provided credit to pastoralists during the dry seasons, thus built relationship and loyalty among their customers. However, as they were manned by people with limited skills in the input products they were selling, they could not advise the buyers on the products. Also, they stored the input in poor conditions in a hot environment, potentially reducing the quality. Further, as pricing was the key consideration when they were stocking the products, they availed low quality and counterfeit products sourced from Somalia.

The demand side of the animal health inputs and services market

Buying behaviour and products demanded

To understand the demand for animal health inputs, the assessment included questions regarding the buying behaviour and products in the interviews and FGDs. As indicated earlier, the livestock sector is characterised by low input and productivity and seasonal variation in the demand for products. However, it is clear from discussions during the FGDs that livestock keepers were willing and do invest in animal health input, more so to manage the endemic diseases in the County. Their complaint was more regarding the availability of quality and affordable products. This is similar to other studies conducted in Kenya such as that Heffernan and Misturelli, 2000 ⁷ that showed that the ability and willingness to pay for animal health services and inputs is not an inhibiting factor to animal health care seeking of the pastoralists.

Asked about their choice of input provider, livestock keeper noted that in most cases they bought animal health inputs from the mixed good shops where they bought food and other essential products, because of the greater convenience, relationship and because they got the inputs on credit from these shops. Nevertheless, they reported visiting agrovets because they stocked quality products. As to whether there were particular products that they demanded, but was not available, livestock keepers noted that most of the products demanded were available locally. Also, in the FGDs, livestock keepers noted that they had to travel long distances to get to the closest supplier, though they said in areas where CAHWs existed, they were closer and much more available. They also observed that quality drugs were generally much more expensive than those sourced from Somalia. It was also clear from the discussion, the importance of pricing, as a key factor in the decision of what type of inputs the producers bought. Nevertheless, the producers noted the quality of the products (based on the brand as identified by colour and depictions on the package) as well as the seasonal as other important factors they considered in their purchase decision. Unfortunately, some of the participants said they were willing to compromise on the quality, especially during the dry season which they had no money or when they were buying from a known seller who advised them on the product to purchase.

Relationship between agrovets and suppliers and livestock keepers

There were more regular contacts between agrovets and their suppliers through phone, with Bimeda having its sale representative present in Wajir. However, the interaction between agrovets and livestock keepers was limited to personal visits to purchase inputs, and business between them is transaction-oriented, rather than building relationships. As a result, livestock keepers were not too positive about private agrovets delivering inputs directly to livestock keepers in rural areas or being active in reaching out to customers. As indicated, except for Framo Agrovet (Takaba) that had a strong outreach service to neighbouring villages, none of the agrovets conducted promotional activities. As a result, pastoralists made management decisions based on limited information. Due to limitation in access, quality and frequency of interaction with government extension services, the major source of information for pastoralists remain local (neighbours, friends, markets, CAHWs and NGOs).

As for whether they considered the agrovet dealers as knowledgeable, livestock keepers were aware of the capacities of local agrovets dealers – most of them cited them as the source of information of the products they purchased. It was good to note that livestock keepers cited the private agrovets and CAHWs as having better information on the products compared to the rural mixed goods shop and gave as a reason why they bought the products from them. They also positively rated the quality of the products they sold and their services. In the FGDs, livestock keepers rated the private agrovets positively – they were happy with the services offered by the agrovets and most of them said they would recommend the private agrovets, but complained about the pricing of the products. Though the livestock producers complained that the input providers were

⁷ Heffernan and Misturelli (2000) The Delivery of Veterinary Services to the Poor: Preliminary Findings from Kenya, Veterinary Epidemiology and Economics Research Unit, Department of Agriculture, University of Reading, UK.

making “excessive profits” on the products, the high prices maybe because of the long distances to agrovets outlets and poor infrastructure that adds to transportation costs.

Regulatory and enabling environment for animal health inputs

The animal health input providers were asked about the challenges in the supporting functions, including access to financial services and credit and rules and regulations in the market, and what policy and institutional frameworks they would want to see implemented to enhance the environment for a sustainable expansion of their areas of coverage and the access of smallholder farmers to farm inputs. As detailed in the following section, the most important areas where the input providers would want to see improvements are enhanced access to financial services and credit, better regulation of inputs market, training of the input service providers, and easing the cost of doing business by improving infrastructure, information and reducing taxation and informal fees.

Access to financial services and credit

The cost was a key constraint for livestock keepers to invest in quality inputs and for private agrovets and other service providers in availing adequate quantities of stock to meet the local demand. It is therefore important for actors supporting the inputs market work with financial service providers in developing and availing financing instruments for both livestock keepers to purchase adequate inputs, and to input market actors to allow them to keep their shelves consistently stocked.

Better inspection and regulation of inputs, and cross border trade in counterfeit products

Generally, the Pharmacy and Poisons Board (PPB) and the Veterinary Medicines Directorate (VMD) are responsible for regulating the importation, manufacture, distribution and sale of both human and veterinary drugs in the country. The Kenya Veterinary Board (KVB), which regulates the practice of veterinary services in the country also regulates the services of agrovets and animal service providers. However, though these institutions conduct inspections of practices and agrovets with aim of ensuring that service providers in animal health are licensed and meet some standards in the provision of services, their reach is limited to Central, Rift Valley and Western Kenya which has the largest number of private practitioners. Nevertheless, the County Director of Veterinary Services is empowered by the Board to conduct vigilance of products sold within the County, but is challenged by inadequate human and financial resources. Alongside, the registration requirements by the PPB and KVB, agrovets in Mandera were licensed by the County Government, paying an annual registration fees of KES 11,000 per year.

Training needs of the different actors

The local agrovets were asked about their training needs, particularly about managing their business, creating more value for livestock keepers and future growth. Key areas of training identified included

- Business management, including good business practice, quality of services and professional ethics,
- Management of veterinary pharmaceuticals,
- Veterinary cold chain,
- Leveraging the use of information technology in business among others.

As for the animal health professionals, the Kenya Veterinary Boards requires that all veterinarian and veterinary paraprofessionals to undergo annual continuous professional development (CPDs) to be retained in the practising registers, because of COVID pandemic and insecurity the professional in the county have faced challenges in meeting these obligations. Organizing online training and facilitating CPDs training in collaboration with the County Director of Veterinary Services who designated as convenor of these trainings by the Kenya Veterinary Boards are some of the options for addressing these registration requirements. Asked about their training needs, they identified the following areas:

- Participatory disease surveillance and syndromic surveillance approaches;
- Cross border outbreak disease management;
- One health and zoonotic disease management;
- Laboratory techniques for common diseases.

Easing the cost of doing business – better infrastructure, information and reduction of taxation and fees

The assessment inquired into the costs associated with running the agrovets, including costs of registration, transportation, salaries for staff, licensing and other fees and sales and promotions. Most of the agrovets were managed and run by the owners, except Daua who employed an AHAs, and Nomadic Agrovet (Rhamu) that employed a CAHW. Also, most of the agrovets were not registered with the CBPP and KVB but were licensed by the local and municipal authorities. Transportation and rent costs (for supplies from Nairobi) were said to be the largest operational costs incurred by the agrovets -ranging from KES 25,000 – 35,000 per month depending on the volumes ordered. Few agrovets that conducted outreach to distant locations also incurred additional transportation costs (of up to KES 15,000-20,000), which was met from additional sales and services from the outreach customers. It was also observed that none of the agrovets incurred costs related to marketing, as they did not undertake any promotional activities.

Entry points and approach to enhance private sector engagement in the county

The livestock input supply and service provision are weak and has to be reoriented and re-focused to face the current challenges and open up opportunities for the development of a market-oriented livestock production system. To address challenges, developing actors have been piloting a market systems approach in recent years. Some of the approaches have included:

- Strengthening and improving the efficiency of distribution networks in the county e.g.
 - Facilitating input manufacturers and distributors to set up agreements with input retailers in the County in which company sale representative delivers products either directly or through courier services. For example, several distributors send products to stockists in the North by buses once payments for purchased stocks are done through MPESA.
 - Working with appointed distributors and stockists and supporting them with marketing and delivery of products. For example, Bimeda is working with 2 stockists in Wajir and linking them to customers during the field days and educational meeting organized by their sales team.
 - Establishment of franchisees in North – Sidai, a social enterprise has supported access to animal health products by opening up outlets in production and market areas.
 - Supporting linkages and establishment of smaller outlets in the North to avail inputs and ensure sustained supply of products in Isiolo.
- Working with input suppliers on ways for reducing transaction costs such as availing services on markets days, watering points, along pre-set migratory routes, and during subsidized mass vaccination exercises through the use of skilled (in animal health and husbandry) mobile salespersons (either veterinarian supervised AHAs or CAHWs).
- Addressing the regulatory challenges facing the input providers, including enhancing access to financial services and credit, better regulation of inputs market, training of the input service providers, and easing the cost of doing business by improving infrastructure, information and reducing taxation and informal fees.

CONCLUSION AND RECOMMENDATIONS

Despite the importance of animal health inputs for enhanced agricultural productivity, the inputs market system in Mandera County remains weak. While the County Department of Veterinary Services as well as partners play an important role in addressing the disease burden on livestock productivity, the availability and access of the public service providers are low in the rural areas. The private service providers including agrovets, private pharmacies, community animal health workers, and rural mixed shops have attempted to fill in the gaps in service provision, but they lack the competency to deliver quality affordable products to livestock keepers. Although the County has seen growth in the number and capacities in the provision of animal health inputs in recent years, the growth of these input providers is far from what is required to ensure all the livestock keepers in the County have access to sustainable and affordable animal health inputs. The increasing trends are driven by increasing pastoralists awareness of the value of the use of inputs and increasing impacts of shocks such as droughts and diseases. However, the coverage of input providers is still limited to major settlements and input providers lack a distribution network in the rural areas.

The input providers face several challenges, including high transportation costs, low and dispersed demand, low uptake of preventive services and products such as vaccines, limited cold chain and storage facilities, limited business skills, knowledge and business support that hamper the supply of inputs to livestock keepers. Most livestock keepers have travel long distances to purchase the products at high prices, some of which are low quality, counterfeit or fake. With limited access to extension service providers, they have to depend on their traditional knowledge on product use, leading to poor administration and dosaging, and poor health outcomes, resistance and drug residues. The problem of high prices is compounded by the fact that financial service and credit are not available for both input providers and livestock keepers who lack adequate capital to stock or purchase adequate quantities of inputs. The situation is made worse by the distortion of the market by informal low-quality products across the border, as well as the free distribution of inputs and services periodically by the County Government and NGOs that disincentivizes the market actors from fully taking up the functions of commercially availing the inputs.⁸ Therefore, while direct push actions are required to enable the input providers to engage more with the livestock producers, policy and institutional issues will need to be addressed to make it more conducive for the market actors to operate and thrive in the market.

Recommendations

It was clear from the assessment that the input business is a successful enterprise, but it still is not adequately meeting the demands of the livestock keepers. As detailed more below, the input providers will need to offer products and services that pastoralists find acceptable. Raising awareness of pastoralists and improving their efficiency in the use of inputs may stimulate input use, helping address the challenge in seasonality in demand. Also, they should consider offering resources to pastoralists beyond inputs. For example, by establishing service points at watering points, conducting learning session and demonstration, they can become more effective in generating the demand for their services. Other recommendations include:

- **Strengthening linkages between private agrovets and pharmacies, and community animal health workers.** As last-mile animal health service providers in the rural areas of the County, the CAHWs by working closely with the private agrovets and pharmacies can act as distribution agents easing access to quality and affordable drugs. This is a critical strategy considering the availability of sub-standard drugs within the County.
- **Enhancing management capacities of private agrovets and animal health service providers.** The study showed that the private agrovets and animal health service providers lacked business support and to strengthen the business viability of these input providers and enable them to be better partners of BORESHA, they will need their capacity enhanced in terms of the safe and effective use and handling of animal health inputs, business planning and management, and well as the cold chain for those dealing in vaccines.

⁸ REGAL – IR (2014) Time to Change: The impact of recent livestock emergency interventions on the future of sustainable service delivery in Northern Kenya. Report prepared by Wellspring Development Ltd with field research by Dr. Hussein Mahmoud and Dr. Mohamed Yussuf

- **Increasing demand for animal health inputs.** As indicated livestock system in the county is low input and is characterised by seasonal variability. To increase the demand for inputs, it is important to work with the agrovets and private pharmacies in
 - Addressing the information means for livestock keepers in improving productivity and commercialization;
 - To stimulate demand among livestock keepers and build trust between input suppliers and agrovets, facilitate animal health field days and demonstrate handling and use of quality inputs, and the ways of differentiating quality and counterfeit products available in the market;

- **Enhancing private agrovets and private pharmacies access to a sustainable supply of inputs and credit for the growth of their business.** It was clear from the study that there was a weak transactional based relationship between the input suppliers/distributors in Nairobi and Mogadishu and input retailers and outlets in Mandera. The fact that few of the suppliers (such as Bimeda) had sales representatives in the region was a clear indication of the lack of awareness of the existing demand for products in Northern Kenya. The relationship between the input retailers in Mandera and Mogadishu based suppliers was informal through some cross-border traders. It is therefore important to facilitate sustainable partnerships and linkages between private agrovets and pharmacies and input suppliers in both Nairobi and Mogadishu. Through facilitating business-to-business linkage meeting between them, they can develop sales/agent/distributorship agreements, sales agreements and terms, and organization joint marketing and field days. Also, provide an “innovation grant” to agrovets that are willing to establish sustainable networks in the rural areas through innovative models e.g. by partnering with the CAHWs or unemployed veterinary paraprofessionals.

- **Better regulation of inputs and cross border trade in low-quality inputs.** Considering that the Department of Veterinary Services lacks the resources to adequately regulate the cross-border trade in low-quality inputs, the main intervention areas are to strengthen the supply chain linkages so that quality inputs are available locally at affordable prices, and increasing awareness and capacity of livestock keepers to differentiate between quality and counterfeit products through the organization of farmer field days.

- **Addressing market distortion in animal health inputs.** Aid-in-kind distribution of animal health inputs by NGOs and County Government (such as the provision of veterinary drugs, equipment and services) has often been detrimental to the development of private-sector sector animal health inputs markets. Working with and advocacy these actors on taking a more market-based approach in working in the sector.

- **Institutional interventions by the County Government.** Investments to reduce the transport and operational costs, including improving the road infrastructure, access to electricity, and better access to financial services and credit as well as providing incentives to market actors such as reduced taxation in the livestock sector are critical to stimulating the input supply sector.

- **Leveraging ICT in the delivery of animal health inputs and services.** Currently, input providers in Mandera were using MPESA for mobile payments of suppliers and customers can also pay for inputs using the same. However, the use of ICT for livestock producers in areas such as communication, product promotion and extension are non-existent. Opportunities exists for inviting these input providers to propose ways for integrating ICT in their business strategies e.g. in working closely with CAHWs and livestock keepers to develop and expand into rural areas.

ANNEXES

ANNEX 1: LIST OF DOCUMENTS REVIEWED

1. Mandera County Government (2018). Mandera County Integrated Development Plan, 2018-2022
2. Mandera County Government (2014). Mandera Livestock Census
3. Heffernan and Misturelli (2000) The Delivery of Veterinary Services to the Poor: Preliminary Findings from Kenya, Veterinary Epidemiology and Economics Research Unit, Department of Agriculture, University of Reading, UK.
4. REGAL – IR (2014) Time to Change: The impact of recent livestock emergency interventions on the future of sustainable service delivery in Northern Kenya. Report prepared by Wellspring Development Ltd with field research by Dr. Hussein Mahmoud and Dr. Mohamed Yussuf
5. Okwiri F.O et al; (2001). An Assessment of the Economic Viability of Private Animal Health Services in Pastoral Areas of Kenya, The Kenya Veterinarian Volume: 25 2002: pp.24-27
6. Pest Control Products Board (2014) Pest Control Products Registered for Use in Kenya, 8th Edition: Published by: Pest Control Products Board, Nairobi.

ANNEX 2: ACRONYMS AND ABBREVIATIONS

BORESHA	Building Opportunities for Resilience in the Horn of Africa
CAHWs	Community animal health workers
CCPP	Contagious caprine pleuropneumonia
CDRs	Community Disease Reporters
DVS	Department of Veterinary Services
EUTF	The European Union Trust Fund for Africa
FGDs	Focus Group Discussions
KIIs	Key Informant Interviews
KVB	Kenya Veterinary Board
MoLFD	Ministry of Livestock and Fisheries Development
NGOs	Non-governmental organizations
PCPB	Pest Control Poisons Board
PPB	Pharmacy and Poisons Board
PPR	Peste des petits ruminants
VMD	Veterinary Medicines Directorate

ANNEX 3: TERMS OF REFERENCE

Background

Building Opportunities for Resilience in the Horn of Africa (BORESHA) is a 3-year cross-border project funded by the European Union Trust Fund for Africa (EUTF) whose overall objective is to promote economic development and greater resilience, particularly among vulnerable groups in the Mandera Triangle (area between Kenya, Somalia and Ethiopia). The project adopts a community-driven approach to address the shared nature of the risks and opportunities in this border area. It is part of the EU's programme for Collaboration in the Cross-Border areas of the Horn of Africa, providing over 60 million euros of investment to prevent and mitigate the impact of local conflict and to promote economic development and greater resilience in four different cross-border regions. The consortium is led by DRC in partnership with WYG, World Vision and CARE International. BORESHA anticipates accomplishing the following results:

- Communities in the Mandera Triangle are more resilient and better prepared for shocks, and response is more effective;
- Individuals and communities are more self-reliant through increased skills and opportunities for cross-border employment, diversified enterprise, and livelihoods;
- Cross-border rangeland and other shared natural resources are more equitably and sustainably managed.

The overall objective of BORESHA is to promote economic development and greater resilience, particularly among vulnerable groups, including youth, women, displaced persons, and persons living with disabilities.

Rationale

The BORESHA project has been implemented in the target areas (Mandera county in Kenya, Dollow and Belet Hawa district in Somalia and Dollo Ado and Dollo Bay in Ethiopia) since November 2017 and is planning to understand better the Agrovets environment in Mandera County to possibly link the project beneficiaries to them. As part of the project activities, BORESHA works with pastoralists in the target area and have on several occasions responded to disease outbreaks while working closely with the Department of Agriculture and Livestock services.

The programme supported vaccination to respond to outbreaks like PPR and CCPP among other challenges and also support the treatment of the animals in the target area. The programme would however like to understand more the products available in the area as well as the vendors of these products so that the beneficiaries can be supported with appropriate information potentially guiding them in their decision making when it comes to accessing agrovets related products and services. The programme will also be interested in establishing the presence of animal health service providers to link them to the beneficiaries for support and guidance.

Read more on BORESHA here <https://boreshahoa.org/about-boresha/>

The assignment

DRC is seeking to recruit a resourceful consultant/ reputable consultancy firm to conduct an assessment focusing on finding out the existing agrovets or private pharmacists existing in the project areas, identify the existing trained Extension Animal Health Workers and their training needs in Mandera County. The consultant/ consultancy will be expected to specifically develop assessment tools that will help to respond to the following questions:

- Existing agrovets per location
- Which are the products most commonly sold/used
- Where they source their products
- Prices of the most common products
- Equipment agrovets have – fridge, motorbike etc
- How many qualified technicians there are in the county per sub-county?
- Map out the veterinary drug supply chain in Mandera County
- The buying decision process for veterinary products among pastoralists
- Willingness to procure veterinary inputs by the pastoralists
- Products and services needed but not currently available

- The view of the pastoralists on the quality, availability and cost of the current products and services in the region

The consultant shall identify pharmacist/agrovets in the project sites as well as assess the capacity of the identified agrovets/ pharmacists the equipment agrovets have – fridge, motorbike etc and the qualified animal health technicians there are in the county per sub-county. The consultant will also be expected to Identify the already trained community animal health workers and assess if there are additional training needs. He /she will identify common diseases and available drugs in the assessment area and the products most commonly sold/used, where they are sourced from and the prices of the most common products. Products and services needed but not currently available also need to be identified.

The assignment also includes assessing the perspective of the livestock owners in the buying decision process for veterinary products, their willingness to procure veterinary inputs as well as the view of the pastoralists on the quality, availability and cost of the current products and services in the region. The consultant will liaise with existing agrovets and relevant stakeholders (livestock department), interview livestock owners (possibly using the existing BORESHA structures: LCIG, NRM, DRR, Private sector groups, VSLA). The consultant/ consultancy firm is expected to liaise with several stakeholders who have relevant know-how in the sector:

- Mandera County veterinary team:
 - DVO Lafey District;
 - DVO Mandera South District
 - DVO Mandera North District
 - DVO Mandera West District
- Livestock owners: when possible already engaged with BORESHA through community structures such as Livestock Common Interest Groups, Natural Resource Management committees, Disaster Risk Reduction committees, village saving and loan associations.
- Animal Health Private sector actors: agrovet, veterinary pharmacists, Animal Health technician, traders, etc

The consultant/consultancy firm will share a comprehensive assessment report at the end of the survey and provide any other technical inputs that may be required.

Assessment Coverage and Duration

The proposed assessment will be carried out in **all the seven** sub-counties of Mandera (Mandera North, Mandera South, Mandera East, Mandera West, Banisa and Lafey for 3 days each of the sub-county a total of 21 days of fieldwork.

Expected Deliverables

- Max 30 pages detailed report answering the 11 points listed under assignment in line with the assignment description.

CONTRACTUAL ARRANGEMENTS AND REPORTING /COORDINATION

- The consultant(s) will be hired under the DRC terms of the contract and will report directly to the Area Manager, Mandera. The consultant will periodically inform the client of the progress of the work and all reports and draft documents/resources will be submitted to the Head of PMU.
- DRC Mandera team under the leadership of the AM as Client shall provide the necessary support to the Consultant to execute the assignment during the duration of the consultancy. These shall include:
 - Relevant documents concerning the project and the main thematic areas to be highlighted, including implementation schedule;
 - Contacts of key Veterinary stakeholders

SUPERVISION AND QUALITY ASSURANCE

The Consultant will be supervised by the Head of PMU.

PERIOD OF CONSULTANCY

This consultancy will take a total of three (3) weeks from the date the contract is signed.

FORM AND EVALUATION OF PROPOSALS

Proposals will be evaluated in accordance with DRC procurement procedures and regulations, considering the following requirements and criteria;

1	The technical quality of the proposal,	30%
2	Area of Specialty about the advert (previous report, assessment, etc)	20%
3	An implementation plan that supports the proposal,	10%
4	References (past institutions worked with)	5%
5	The experience working in Mandera County	20
6	Proof of experience: consultancy contract	15%

ASSURANCE OF CONFIDENTIALITY

All deliberations relating to this consultancy, including all information collected from various interviews/meetings/documents shall be kept confidential and shall not be divulged to any third party either verbally or in writing or any other form.

EXPERIENCE AND COMPETENCIES

We are looking for a consultant based in Mandera or who can comfortably work in Mandera during the assessment period. Consultants for this assessment will be assessed on their ability to demonstrate the following qualifications and competencies:

- A postgraduate qualification in a relevant field – ideally with an animal health bias
- Extensive experience in the livestock and veterinary sector, ideally in a pastoralist context
- Experience carrying out livestock and veterinary service provision assessments in pastoral areas
- Demonstrable practical experience in qualitative and quantitative research methodology
- Strong analytical, facilitation and communication skills
- Excellent reporting and presentation skills
- Fluency in spoken and written in local language and English
- Ability to communicate in the vernacular languages in Mandera County
- Experience conducting assessments in the livestock sector in Mandera County
- Experience conducting data analysis

Desirable: A degree postgraduate qualification in veterinary medicine.

LOGISTICS AND PROCEDURES

The consultant will cover their transport, accommodation and COVID 19 test costs related to this assignment if required.

SUBMISSION REQUIREMENTS: Interested and qualified persons are requested to submit:

- A cover letter detailing how the consultant meets the required qualifications and competencies outlined in the TOR
- A full technical proposal detailing their interpretation of the TOR and how the consultant/ consultancy firm will approach the task including an implementation plan
- A separate financial proposal to conduct the assignment

CONTACTS FOR SUBMISSION AND DUE DATE

Submit the Expression of interest and supporting documents to tender.ken@drc.ngo by Wednesday, 1st Feb 2021.

Building Opportunities for Resilience in the Horn of Africa (BORESHA), Consortium

Danish Refugee Council Regional Office,
Lower Kabete Road (Ngecha Junction)
P.O. Box 14762 – 0800
Office: +254 709 867 000
Email: Boresha@drckenya.org