

**UNIVERSITY OF NAIROBI
COLLEGE OF AGRICULTURE AND VETERINARY SCIENCES
FACULTY OF VETERINARY MEDICINE
DEPARTMENT OF CLINICAL STUDIES**

**REPORT ON DISASTER MANAGEMENT AND KIBWEZI COMMUNITY
OUTREACH ACTIVITY (FEBRUARY 26TH – MARCH 1ST 2015)**

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Team Members:

UoN Instructors: Profs. Charles Mulei, Henry Mutembei, Victor Tsuma, Daniel Gakuya and Drs. Ambrose Kipyegon and Wilkister Nakami (Msc Student)

Three partners: Cooper K ltd, Bimeda and Ultravetis veterinarians

Students: All 5th Veterinary Students and five 2nd Year veterinary students

**DISASTER MANAGEMENT EVENT: DAMAGE AND NEEDS ASSESSMENT
(DANA) EXERCISE IN KIBWEZI CONSTITUENCY, MAKUENI COUNTY,
KENYA**

BACKGROUND

Makueni County is in the southern part of the former Eastern Province. It borders Machakos county on the southern side and Taita Taveta county on the northern side. It also borders Kitui and Kajiado counties. The area is 8008.2 km² with a human population of 884,527 with 51% being female and 49% being men; this is 2.29% of the national population according to the National Census exercise done in 2009. Population density is noted to be 110.4 persons per km².

The climate is semi arid to arid, annual rainfall is at 150- 650 mm per year with long rains being in October to December and short rains in August. But there are variations currently due to the effects of climate change and global warming.

Kibwezi constituency is among the 5 constituencies in Makueni County, it lies 2°25'S, 37°58'E.



Map of Kibwezi

The altitude is between 300-1100 meters above sea level. The soils are sandy, very humus but with poor water holding capacity. Kibwezi has a population of 180,603 with about 5% being urban and the rest rural. The area is semi-arid to arid with low erratic rainfall.

Livelihood of people includes:

- Mixed farming; arable farming (maize, sorghum, beans, fruits, hard wood etc), livestock keeping (cattle, sheep, goats, donkey, rabbits and poultry).
- Bee keeping, brick making, wholesale and retail shops at shopping centers and the town.
- Tourism; Kyulu hills, the historic AIC church, irrigation at Kibwezi.

Major economic activities are agricultural based (crops and livestock). Produce are consumed locally and surplus transported to nearby towns and cities of Nairobi and Mombasa.

The main livelihoods are livestock keeping with livestock numbers being at one million and arable farming. These are dependent on rainfall. This region is prone to drought and as such there is consistent lack of water, pastures and food to animals and man.

Damage and needs assessment report

Damage and needs assessment was carried out in accordance to the global LEGS 1st edition hand book chapter 2 and World Animal Protection guidelines on Standard operating procedures. Twenty five VERU final year students and three instructors were involved in the exercise.



The DANA Group during briefing

Preliminary briefing was done in Kabete and in Kibwezi prior to the exercise. The methods involved in collecting data were participatory tools that included targeted interviews, focus group discussions, observations and group presentations.



DANA Group conducting targeted interview on Key informant

Kibwezi was experiencing a type of disaster that was a slow onset drought at the alert phase. Through observation, there were few areas with patches of long dry pastures and some farmers have stored some pasture. However the majority of the areas were with completely depleted pasture and the amount of pasture stored will only cater for a short period. Body condition of animals currently were good but declining.



Photo of some area of Kibwezi showing depleted pasture



Photo of some area of Kibwezi showing patched of long dry pasture

Livestock was a key livelihoods to the people of Kibwezi. The role of livestock was noted to include;

- Source of food
- Draught power for Ploughing,
- Source of income,

- Payment of dowry,
- Used for community functions such as rituals.

IMPACT OF THE DISASTER ON THE COMMUNITY

- With the current drought the community spends more time searching for water to an extent of walking a distance of about 50km, this resulted to suspension of other livelihood activities such as farming.
- Lack of good pastures heavily affected the body condition of the livestock secondarily affecting their value in monetary terms.
- The people were being forced to use money to purchase foodstuffs which they originally could get from their livestock and farms.
- Vulnerability to diseases due to poor feeding greatly affected the livestock numbers and condition.
- Drought had effects on the social life of the people in this community since people were busy looking for food, feed and water thereby endangering family unity.
- Spread of diseases was occurring at shared watering points and trekking, both zoonotic and non-zoonotic types.
- Lack of draught power
- Loss of animals through death from hunger
- Conflicts arising when people fight for pastures or someone's animals go to the neighbors' land. This was already evident where people were fencing their lands to prevent their animals from straying into the neighbors' land.

POPULATION OF PEOPLE AND ANIMALS AFFECTED

It was reported that 5% of the animals were either dead or too weak. The young stock were the most affected, especially of cattle.

GENDER AND DIVISION OF LABOUR

Women are overwhelmed with responsibilities in this community, they fetch for food and water at the same time try to protect the livelihoods by watering the animals and farming and going to sell any produce. Not forgetting their roles in marriage.

CROSS CUTTING ISSUES

Environment:

- There were evidence of loose soils due to the drought; the soil will be easily be eroded when little rains come.
- People were engaging in activities that do not depend on rain such as charcoal burning, firewood selling, brick making leading to deforestation.
- Land degradation as they do brick making; erosions that pose danger to transport and animals
- Pollution from brick making, dust which is a means of disease transmission such as pink eye which was already affecting animals and was difficult to eliminate.

Security and protection:

- Fights reported for water and pastures,
- Conflicts predisposing sexual violence, prostitution and exploitation.
- Risks to HIV/AIDS

POSSIBLE INTERVENTIONS

The community copes with drought by destocking animals to half the population, most of the time they do so when the drought has reached an alarm phase, meaning they get less value for their animals as such some prefer not to sell. The community has also a coping strategy of cutting and storing pasture for the livestock and also buying hay. At the current status the following interventions can be made:

- Destocking using accelerated the off take; to involve giving support to traders and exporters to buy up the livestock before body condition decline too much. At this phase animals are still in relatively good body condition (BCS 3) and can yield better returns when sold for short term needs such as food, also for reinvestment into the remaining herds.
- Provision of water trucking in order to protect the livelihood asset of livestock. Water trucking to be done as a short term solution. The rehabilitation of watering points and establishment of new water points to be done as a long term solution.
- Provision of veterinary services as a means of rapid assistance in order to treat the diseases and boost the immunity of the affected animals.
- Restock after the drought.

PARTICIPATORY RESPONSE IDENTIFICATION MATRIX (PRIM)

TECHNICAL INTERVENTION	LIVELIHOOD OBJECTIVES			EMERGENCY PHASE		
	RAPID ASSISTANCE	PROTECT ASSETS	REBUILD ASSETS	IMMEDIATE AFTERMARTH	EARLY RECOVERY	RECOVERY
Veterinary Services	X	XXXX		→		
Destocking	XXXX	X	X	→		
Water provision	XXX	XXXXX	XXXXX	→		
Restock			XXXXX	→		

VETERINARY INTERVENTION

As part of the University of Nairobi outreach activity and corporate social responsibility, the veterinary intervention was implemented in Kibwezi. Over the years UoN has provided the Kibwezi community with an opportunity to interact with staff and students of the faculty of veterinary medicine in a community outreach activity. This activity provides the students an opportunity to have experiential learning for field experience in in dry land veterinary practice. The activity also enables the farmers to be exposed to the University of Nairobi and its Veterinary programs.

This particular exercise was carried in 2 days; on the 27th February the students attended to clinical cases and dewormed the university's animals (Cattle, Sheep and Goats). And on the 28th February they attended to the community's animals in two stations (Kisayani and Kathiaka). During the exercise the students, under the supervision of lecturers attended to community animals.



Activity team in Kisayani

Some of the activities the students carried out included the following;

- Clinical examination, diagnosis and treatment of livestock diseases
- Farmers advice on disease prevention, vaccination protocols and helminth control
- Vaccine handling, storage, preparation and dispensation
- Treatment and drug administration



Activity Teams at work

ANIMALS ATTENDED

Below is the breakdown of the animals that the students managed to handle

	Dewormed	Vaccinated	Dewormed and Treated	Total
Cattle	601	0	10	611
Shoats	1361	0	22	1383
Dogs	20	56	5	81
Total	1982	56	37	2075

CHALLENGES

The trip was did not have any challenges and met the desired goals. However the stations did not have sufficient animal handling facilities and where these facilities were available they were weak and got easily damaged.



Weak Crush

ACKNOWLEDGEMENTS

The support from the Department of Clinical Studies, the Faculty of Veterinary Medicine and the College of Agriculture and Veterinary Sciences, and the University Management is appreciated. This enabled the activity to be fully implemented and with a lot of success

The University partners and event sponsors who donated drugs and vaccines are highly appreciated. Special appreciation goes Coopers Kenya LTD, Bimeda, Lesukut, Ultravetis, Norbrook and the VERU project for their donations.



Some of the event partners and sponsors

Kibwezi field station staff members are appreciated for their tireless support before and during the field exercise, especially for community mobilization exercise.