

## The Impacts of Covid-19 Pandemic on Pastoral Community of Somali Region in Ethiopia

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### ABSTRACT

The Somali Regional State of Ethiopia has suffered the highest number of COVID-19 cases, and infections are rapidly rising. The impact of the crisis on lives and livelihoods of pastoral community is expected to be particularly severe. Coronavirus diseases 2019, had health impacts practically on every community in the world generally and particularly most of the pastoral communities inhabiting the remotest areas of the region have limited access to information on the pandemic and have poor health systems with limited reach to the most vulnerable.

Pastoral communities are at a high risk of interacting with zoonotic infectious diseases, owing to their livestock management practices, which include herd mixing and transhumance and the locations they occupy especially their contact with wildlife - as well as the consumption of bush meat among some pastoral communities.

In this quick Review we focused on pastoral public health initiatives to safeguard health access and mobility while addressing the direct health effects of COVID-19. In order to effectively respond to the COVID-19 pandemic and safeguard pastoral livelihoods and Health security, it is necessary to take a contextualized one health approach, taking into account how the pandemic will interact with current shocks and vulnerabilities in pastoral areas of the Somali region.

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### Introduction

Coronavirus diseases 2019 (COVID-19), which is caused by severe acute respiratory syndrome corona virus 2 (SARSA-CoV-2), had health impacts practically on every community in the world generally and particularly most of the communities inhabiting the remotest areas of the region have limited access to information on the pandemic and have poor health systems with limited reach to the most vulnerable [1]. Pastoral community were already facing many challenges like shortage of water, access to grazing land, and other resources before the covid-19 pandemic and with covid-19 deteriorated the pastoral community live situation further [2]. Pastoral communities are at a high risk of interacting with zoonotic infectious diseases, owing to their livestock management practices, which include herd mixing and transhumance and the locations they occupy – especially their contact with wildlife - as well as the consumption of bush meat among some pastoral communities [3]. Next to Addis Ababa, the Somali Regional State of Ethiopia has suffered the highest number of COVID-19 cases, and infections are rapidly rising. The impact of the crisis on lives and livelihoods of pastoral community is expected to be particularly severe. The

Somali region is a livestock-based economy, and the health of that sector influences the economic reality of the region at large and Shocks affecting that sector negatively are likely to directly affect the health status of family members particularly and generally that of pastoral community [4].

The first case of COVID-19 was reported in Ethiopia on March 13th 2020 and the first case in the Somali Regional State of Ethiopia on April 26th. The Government of Ethiopia was extremely swift in responding to the threat of the virus, through measures such as school closures, limitations on gatherings of more than four people, and declaring a State of Emergency on 10th April [4].

The Somali Region had its first positive case reported on 26 April, and the number now stands at 759 cases and 18 deaths as of August 06. Returnees from Djibouti, Somaliland, and Somalia who were quarantined at Jigjiga University, Dawanle and other centers remained to be the main sources of infection initially. However, starting from mid-July, community cases reported have increased and fewer than 28 returnee cases are currently at quarantine centers [11].

In this review paper, we stress the issue of the impact of COVID-19 diseases on the Somali region pastoral community and point out the need for a coordinated effort to collaboratively respond to the challenges it poses. We particularly propose that the One Health initiative offers an umbrella for coordinated action towards addressing an emerging infectious disease like novel coronavirus 2019.

Pastoralist life in the Somali region means moving from place to place, searching for water and pasture to feed livestock. With hardly any access to reliable water, every aspect of life depends on the main seasonal rains, usually expected in April [9].

### Pastoralists as COVID-19 High Risky Group for Infection

As COVID-19 cases are peaking in many parts of Africa, the impact on pastoralists is also increasing. Its effects on the livestock sector are still largely unquantified and yet to be fully felt [10].

Pastoralists by their way of life requiring close proximity with livestock are presented with high exposure risks to zoonotic diseases. Pastoral communities and herds have a high prevalence of zoonotic infectious diseases and constitute a major part of the infectious disease burden in low-income countries [5]. Pastoralists depend on moving for their livelihood, which may be hindered by the movement restrictions put in place throughout the country; they are unlikely to have access to safe water supply and struggle to follow COVID-19 preventative hygiene measures [6].

The current outbreak of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) responsible for causing coronavirus disease-2019 (COVID-19) is reinvigorating the discourse on the disruptiveness of zoonotic infectious diseases globally. There are several coronaviruses of importance; some are zoonotic in nature while others are not. They are known as coronaviruses (CoV) because they belong to the ribonucleic acid (RNA) family of viruses that often have a characteristic crown (corona) of protein spikes around its lipid envelope [7]. Most of the affected persons during outbreaks of these zoonotic infectious diseases in Africa have been pastoralists of resource-poor communities, isolated and with very marginal public health care services [8].

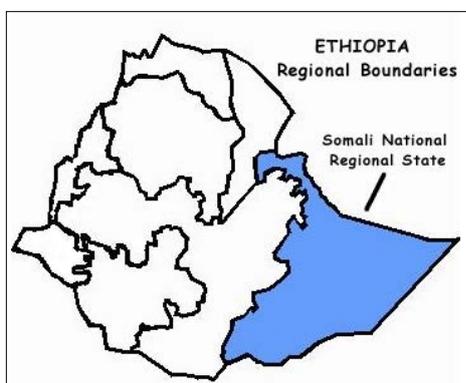


Figure 1: Map of Somali region

COVID-19 in Ethiopia is not as fatal as it has been in the countries with the highest rate of the infection, the Somali regional government has imposed less restrictive measures to contain, and/or to prevent the spread of the virus [11].



Somali camel.

### Lack of Access to Health Care and Health Information

In the remote and isolated places of the Somali region, even under normal circumstances, it is near impossible to get timely emergency care. The existing healthcare system does not cater to pastoralists, who are continuously on the move. Distances to health care are overwhelming and can be life-threatening [9]. Despite this, there are some NGOs and health partners like MSF which provides flexible mobile primary healthcare services in 17 mobile clinics, like the one in Ton-Habalan village. The mobile set up permits the teams to move locations quickly, following the pastoral communities to places where no health posts exist. Since the beginning of 2019, the number of patients has consistently increased. A good indication that we reach the right sites and communities [9].

Pastoralists' cattle, sheep or camel farmers whose livelihoods depend on animals move from place to place seeking water and pasture. They are often far from city services and lack access to health care and sanitation services. Many come from remote villages to take their animals and milk products to customers living mostly in urban areas [10].



Figure 2: Somali pastoral life styles

### Prevention and Control

In distant pastoral areas, **community health workers and community-based animal health workers** can help to overcome these restrictions because they are locally accessible, affordable service providers [12].

Public health diseases prevention measures must be put into place in relation to these customs and cultural behaviors such as hand washing to lower the risk of person-to-person fomite sharing and the provision of cloth face coverings to lower the danger of airborne transmission at gathering places.

This is a workable strategy if water and soap are readily available at pastoralist markets, but governments and its other disease preparedness and response partners should concentrate investments in public health measures and other supportive measurements.

High transmission risk behaviors include greetings, living together, and eating food in public. Public health initiatives like use personal protective equipment, hand washing, and social seclusion can also aid in reducing the likelihood of these behaviors.

Teams from Community One Health can carry out public health initiatives by engaging in health promotion activities. Additionally, public health initiatives tailored to the local context can be developed and put into action through participatory community dialogue.

### Conclusion

Any outbreak of the virus amongst pastoral community will be hit hardtop contain and will cause grave consequences to pastoral community. Pastoral communities across Somali region live in close proximity to livestock, depend heavily on their livestock and livestock products and are one way or the other attuned to wildlife as either domestic souvenirs or consumed as food.

These actions are key predisposing agents and factors that increase their susceptibility to emerging zoonotic infectious diseases like COVID-19 and many others. Pastoralists may likely become spatial and temporal transmitters of emerging and re-emerging infectious diseases, owing to their supply of livestock and livestock products, especially meat, and their transhumant livestock management style.

Key messages on COVID-19 and livestock-related issues should be articulated, agreed upon and widely disseminated at the local level to counter misinformation. Urgent support is needed from national as well as regional governments and stake holders to change pastoral community life styles. In addition local authorities, elders and pastoral community themselves should participate in planning and community awareness activities before and during pandemic. Advocacy will be crucial at higher levels, to encourage governments and local authorities to control spread of infectious diseases.

Somali Regional government and Covid-19 response committees should carry out a rapid multi-sectoral assessment to see the multi-faceted repercussions of the pandemic on the vulnerable pastoralists and lead an appropriate response thereafter.

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