

# Impact of the COVID -19 lockdown on pastoralists of Karnataka

CfP Report 2021





Published by Centre for Pastoralism - 2021 © Centre for Pastoralism - 2021

**Study design:** Dr. Anita Sharma, Dr. Ashwini Kulkarni, Dr. Ovee Thorat, and Dr. Vasant Saberwal

Authors: Iravatee Majgaonkar and Sushma Sharma

Data entry, calculations and graphs: Ashish Gutthe

Compiled by: Dr. Radhika Chatterjee

Designed by: Shruti Jain

Copy edited by: Chhani Bungsut

## Supported by -

## · Bharat Rural Livelihoods Foundation

An independent society set up by the Government of India to upscale civil society action in partnership with the Government.

• Axis Bank Foundation CSR unit of Axis Bank Ltd

and

· Ford Foundation

Centre for Pastoralism
155 Shah Pur Jat Village
3rd Floor
New Delhi 110049
www.centreforpastoralism.org



All rights reserved.

Permission to reproduce material from this book is not mandatory.

## Contents —

Introduction	6
Survey Method	10
Findings	11
Conclusion	19
Annexure I	22
Annexure II	24

# Impact of the lockdown on pastoralists of Karnataka –

## Iravatee Majgaonkar 1 and Sushma Sharma 2

## Background

Pastoralism is beneficial in semi-arid and arid regions of the world because it helps people survive in extreme and variable environments through livestock keeping and movement (Galvin et al 2008). Pastoralism in India is poorly documented when compared to other regions of the world like East Africa, South America, and Central Asia. Within India, the Deccan plateau is an extensive biogeographic zone, known for semiarid savanna grasslands supporting pastoralists and unique biodiversity (Ratnam et al 2016, Vanak et al 2017). There is very little consolidated information on pastoralism in the Deccan region (Sharma et al 2003, Siripurapa et al 2020) with only livestock census figures available every 10 years and scant data (sometimes entirely undocumented as well) on households practising pastoralism of any type. Scholarship on Deccan pastoralism reveals a spectrum of livestock keeping practices from transhumant to settled pastoralism (Sharma et al 2003). Karnataka spans a large part of the peninsula region with forested hilly landscapes flanking its left and southern boundaries, with the rest of the state represented by semi-arid landscapes with scrub/savanna vegetation.

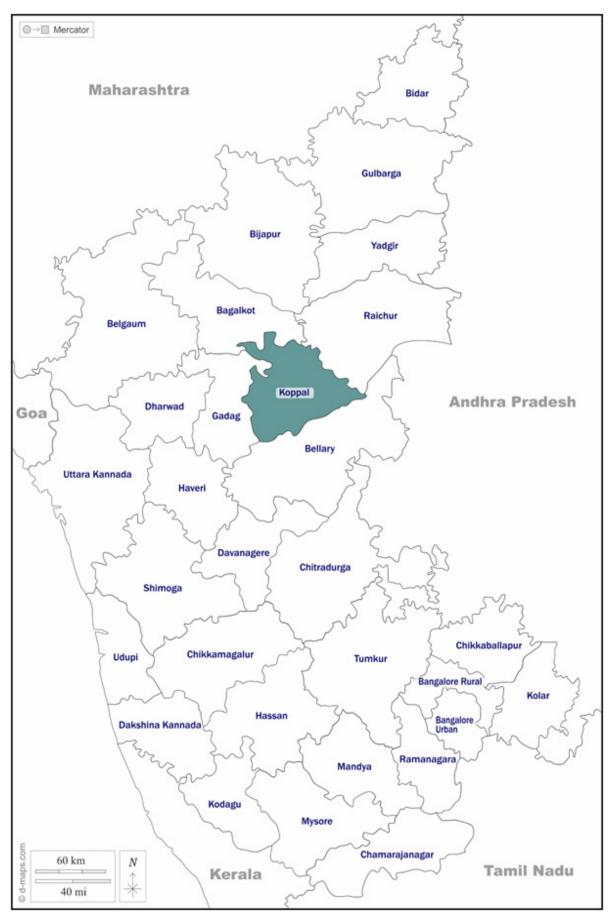
The western and southern parts of the state receive high rainfall in the monsoon (1,800-10,000 mm recorded) while the drier areas towards the east receive low rainfall (100 to 1,800 mm) (Ramachandrappa and Thimmegowda 2016). Pastoralist communities from the peninsular region of Karnataka have a richly textured deity culture, which has been captured through oral narratives (Murty and Sontheimer 1980). Currently, the peninsula region of the state (from Belgaum in the west to Bidar in the east and Bijpaur in the north to Chitradurga in the south) supports a number of traditionally pastoralist groups, including the Kuruba, Golla, Lambada, and Dhangar (ibid. 1980) as well as other groups who have more recently taken to some form of pastoralism. Kurubas as a caste are said to be the largest pastoral group accounting for 7% of the state population (Karnataka state caste census 2018) but demographic data for caste-wise (or other ethnic groups) numbers of practising pastoralists is not available. Pastoralist groups in peninsular Karnataka own cattle varieties like Nallamala-pasa (ibid. 2020) and livestock like goats and sheep. Sheep are more common and some known varieties are the Deccani, Kenguri, Bellary, Nellore and Mandya (Acharya 1982). While pastoralism is practised by both landed and landless households in Karnataka, scales of migration differ depending on herd size, labour, rainfall, access to grazing pastures, and social networks (ibid. 2008).

<sup>1.</sup> PhD Scholar, ATREE Email: iravatee.m@atree.org

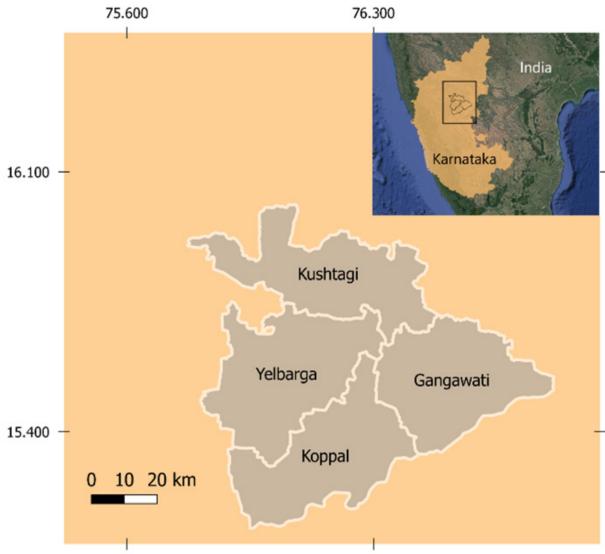
<sup>2.</sup> Independent Researcher

<sup>3.</sup> Also see: https://www.news18.com/news/politics/dalits-muslims-outnumber-lingayats-and-vokkaligas-in-karnataka-caste-census-stumps-siddaramaiahgovt-1689531.html.

Pastoralism in the Deccan relies on movement in semi-arid landscapes where fodder and water availability varies seasonally. Herders decide to move based on the ecological and socio-political constraints of the landscape (ibid. 2020). For example, water availability can be of immediate short term concern for livestock well-being and pastoralists may require moving towards irrigated regions during dry seasons. However, access to water is confounded by multiple factors like whether the herder can tap into social networks in the landscape, general cropping patterns in the irrigated regions which will decide whether farmers want to invite herders to their lands, ethnicity of the herder which can determine their rights, and governance of common lands that may have year round water sources. In 2020, the COVID-19 pandemic restricted movement of people across the world and was expected to impact pastoralist households in the Deccan. We conducted a regional assessment through a survey of pastoralist households in the Koppal district of north interior Karnataka (Map 1) in June 2020. Koppal is one of the least urbanised districts in Karnataka and has two major habitat types: (i) rocky outcrops in red soil plains, locally called 'masaari bhoomi' (Image 1 and 2) and (ii) black cotton soil plains, locally called 'yeri bhoomi' (Image 3). The aim of the survey was to use telephone interviews to understand whether and how the COVID-19 lockdown has affected individual herders from the district. The survey was a part of a larger assessment done across multiple states in India where similar interviews were conducted with local pastoralist groups.



Map 1: District map of Karnataka. The highlighted district indicates the study area. Map prepared using D-Maps.com, accessed via https://d-maps.com/carte.php?num\_car=8763&lang=en



Map 2: Tehsils of Koppal district in Karnataka. (Inset: Location of the district within the state.)



Image 1: Rocky outcrops in Koppal district or 'masaari bhoomi'



Image 2: A shepherd in masaari bhoomi



Image 3: Black cotton soil fields in Koppal district or 'yeri bhoomi

## Survey Method

The questionnaire to understand the impact of the lockdown on pastoralists was designed by a multi-institutional group of people involved in research and livelihood based projects on pastoralism. Based on past surveys and networks in Koppal district, we contacted herders telephonically and conducted interviews according to the questionnaire. In the case of this district, conference calls were held between the herder and two interviewers, one of whom was a native language speaker. The interviews were conducted with those herd owners who were actively involved in herding during the COVID-19 pandemic lockdown. Caste and community identities were not asked directly due to the sensitivity of the question and the potential for miscommunication in a telephonic conversation. Instead, we took help from key informants who were well known to us and knew the respondents personally to confirm identities. Besides personal information of respondents (to understand ethnicity and connectedness to state/non-state institutions), other questions were designed around the following themes pertaining to impact of the lockdown on: (i) movement (ii) access to markets (iii) expenses and incomes (iv) labour for herding (v) veterinary care (vi) ration availability (vii) social stigma and (viii) perceptions about COVID-19's impact on livelihoods (See Annexure II for questionnaire).

## **Findings**

## Nature of interviews

We conducted 21 interviews in June 2020 across Yelburga, Gangavathi and Koppal tehsils in Koppal district (Map 2). All respondents were men as women generally do not tend to herds by themselves. Women's involvement is either with smaller herds along with family members or when men aren't available to herd. Table 1 depicts the profile of respondents with respect to (i) Presence of Aadhar card and bank account (ii) Herd sizes and type of livestock owned (iii) scale of migration during non-COVID-19 times.

Table 1: Profile of respondents

Community / Group	Aadhar card holders	Bank account holders	Herd size	Presence of sheep and goat	Travel beyond 10 Km from their native village in summers
Kuruba	11/12	12/12	30-200*	12/12	6/12
Golla	3/3	2/3	200,200,500	3/3	3/3
Valmiki	3/4	3/4	70,127,250	3/4	0/4
Unknown sect (Muslim)	1/1	0/1	200	1/1	1/1
Unknown sect - Hindu (General category)	1/1	1/1	100	0/1	0/1

<sup>\*</sup>Refer to Figure1. For the distribution of herd sizes among Kuruba respondents

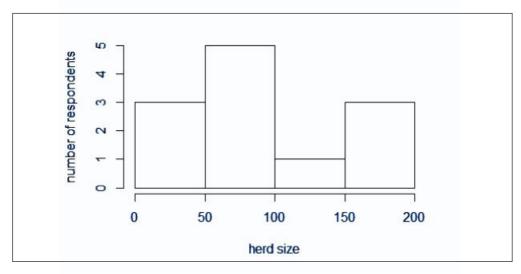


Figure 1: Distribution of herd sizes for the Kuruba respondents alone.

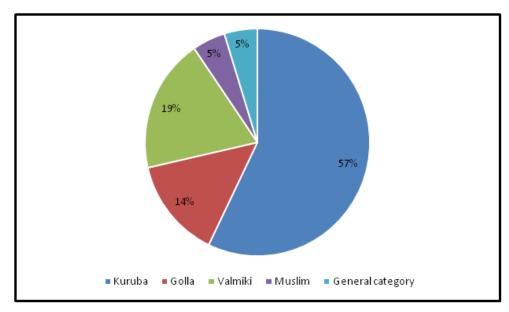
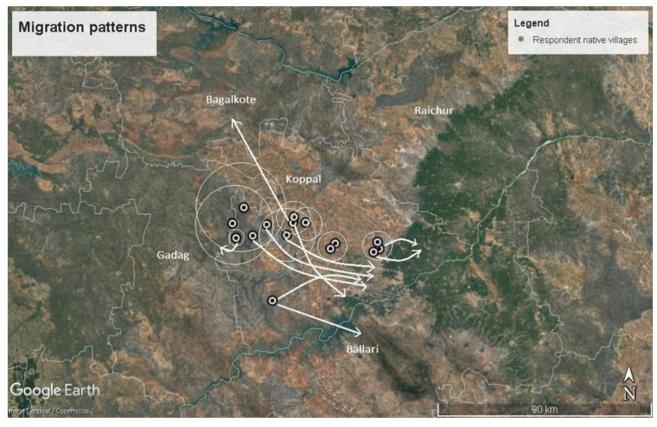


Figure 2: Community wise break up of survey respondents

## Usual migration patterns

Herders in the Koppal district largely depend on fallow fields to set up livestock camps. They exchange livestock dung (as farm fertiliser) either for cash or for ration from farmers in whose fields they set up camp. Their movement across the landscape is heavily based on their social network which allows them to access fodder and water. Migration patterns for five of the 21 respondents include crossing into neighbouring districts; the rest remain within Koppal district over the entire year. Herders who



Map 3: Indicates migration patterns among respondents during summer season in Koppal. The white circles indicate movement in a smaller radius around their villages while the arrows indicate a longer distance travel or change of district.

travelled across boundaries go to the neighbouring districts of Bagalkote, Gadag, and Ballari. Such longer distance migrations are not undertaken when herders are able to secure fodder and water closer to their village. Amongst the other respondents, the ones who had large herds reported moving towards the Tungabhadra river during dry seasons (this region grows rice using irrigation technology and is locally called Maagaane) and are dispersed around their own villages during other parts of the year. Small herd owners generally stay around their own villages throughout the year within a 1-10 km radius. Map 2 indicates the spatial migration pattern as reported by the 21 respondents in Koppal district.

## Movement during the lockdown

Out of the 21 herders, 15 reported that even during the lockdown, they continued having access to open fields to set their camps where they did not have to come in close contact with people. This is a common practice in the Koppal region. Two respondents, both of whom were landed, reported they could set up camp in their own fields and also utilise harvest leftovers (fodder) from their fields instead of buying the same from other farmers. Pastoralists often purchase fodder from farmers, a common practice in this region that seemed to form a buffer for 14 respondents. The common fodder sources are pulses, groundnut, jowar, and legume fields. Two respondents reported difficulty in transporting purchased fodder because they could not hire a vehicle in the lockdown and one reported borrowing vehicles from others to transport camp supplies.

As one of the herders said "We usually buy fodder like legume plants for Rs. 5,000-10,000 at a time but this has proved difficult during the lockdown. It has been a big problem." One of the herders who generally travels towards Maagaane (the irrigated rice growing region) in summer could not do so and had to graze livestock in fields surrounding his village. Six herders had to stay close to their village and felt their movement was restricted because other village residents were generally wary of herders coming close to their villages due to the fear that they might be carriers of COVID-19. Two respondents encountered police officials who were not allowing people to move freely.

One of them had to pay the police Rs. 200-300 so that he could enter the town to get supplies. Overall, no one reported an absolute restriction in movement during the lockdown but some were forced to find alternatives including the purchase of fodder and moving within a smaller area than usual. (See Figure 3.)

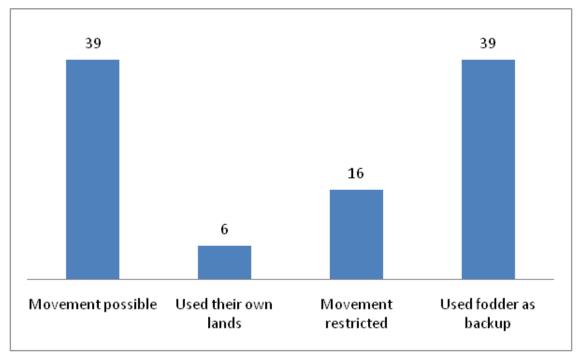


Figure 3: Herder responses w.r.t how the lockdown affected their movement (percentage wise)

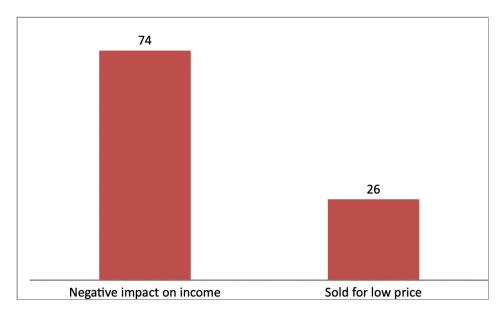
#### Livestock market structure

In Koppal, the Kenguri breed of sheep (locally called 'kemp kuri' or red sheep) is the most commonly reared and the herd composition consists of one or two males per 20 females. The breed is known for its meat production and does not produce commercially viable quantities of wool or milk. Meat sale is the most common objective of livestock rearing in this region. Markets are held regularly in various villages or towns where herders and traders interact, negotiate prices, and herders sell both male (generally priced higher than female) and female sheep and goats. Some livestock markets are large scale (attracting herders and buyers from other states) and are held less frequently than smaller ones. However, sale of animals also happens outside these markets where traders or buyers approach the herder directly. For Kenguri sheep in Koppal, young ones are sold for Rs. 4,000-6,000 while adult females are sold for Rs. 8,000-10,000. Adult males, depending on their health condition can be sold for almost double the price as adult females. Milk and wool sale on a market scale is almost absent in Koppal. Milk is sometimes used for household purposes or sold to known people in case of need. While some pastoralists rear 'kare kuri' or black sheep (Deccani breed) which yields wool, this is uncommon.

## Livestock markets during the lockdown

All respondents reported being negatively impacted by the lockdown with respect to livestock sale. No small or large markets were organised between March to June 2020 which cut immediate cash flow that herders strongly rely on. Eight respondents reported that buyers approached them directly and they were forced to sell animals at lower than normal prices. The lowering of prices was between Rs. 500 to Rs. 4,000 which is between 6 to 50% of the average known price of Rs. 8,000

for a healthy sub-adult animal. Herders sold weaker or older animals from their herd in such cases. This money was sometimes used to buy fodder for the rest of the herd. Only one herder reported that he sells milk and prices increased during the lockdown. (See Figure 4.) As one of respondents reported, "Markets were not open and we could not sell anything. People come from Mangalore and Bangalore to buy livestock from these markets. Our livelihoods depend on this. Livestock sales give us the money we need to buy clothes and food. We generally do not own property. Some individuals came to us directly and bought livestock but we had to sell at lower prices which were less by Rs. 500-1,000 per sheep. It is only the old and sick animals that are sold at such low prices."



**Figure 4:** Herder responses w.r.t how the shutting of livestock markets affected them (percentage wise)

## Expenses and income during the lockdown

We received mixed responses regarding changes in expenses during the lockdown. While six respondents reported no additional expenses during the lockdown, eight reported higher expenses for veterinary medication, travelling longer distances to buy livestock camp supplies and fodder or higher ration prices. Two herders reported resorting to alternatives like loans from a relative, two said they could use their own fields as a buffer to obtain fodder, two others reported sharing camp supplies with others and buying ration from shops instead of depending on farmers who were not able to give ration. Higher ration prices were reported for oil (by Rs. 10-20), tobacco and areca nut. Contrary to these responses, two herders reported buying more livestock and two bought tractors (for Rs. 18,000 and Rs. 23,000) during the lockdown. Income was negatively impacted due to a lack of livestock sale or low rates of sale, as reported by eight herders. Respondents also reported that they were able to use stored ration and livestock camp supplies or share and borrow during the lockdown. (See Figure 5).

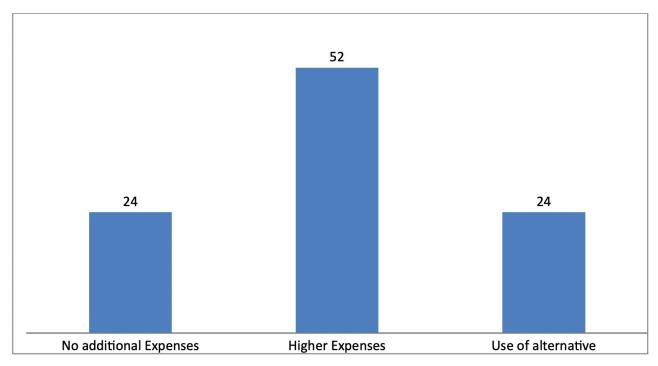


Figure 5: Herder responses w.r.t how the lockdown affected their expenses (percentage wise)

## Labour in herding practices

In Koppal, the hiring of labour fluctuates depending on migration, family ownership of the herd, and availability of labour. Hence, while some people with large herds but fewer family members involved in herding have to hire labour throughout the year, some hire intermittently and some do not. Other men from their own or other villages are hired in exchange for money or a promise of a few animals and other supplies at the end of a fixed period. Most large herders in Koppal move to the irrigated regions of Maagaane in summers and during this time, their need for helping hands increases.

## Labour hire during the lockdown

From among the thirteen respondents who hire labour, one reported that the hired person quit work during the lockdown to return to his village while one other could not find anyone to hire. Overall, no serious problems were reported by respondents with respect to hiring of labour, although the period of higher labour needs and the lockdown overlapped. This is probably because herding livelihoods do not come in close contact with people and this was favourable for social distancing during the pandemic.

## Veterinary care practices

Pastoralists in Koppal regularly depend on both state and non-state medical services for livestock healthcare. Most of them consult doctors for vaccinations and disease or illness related treatment after which they either choose to (i) buy and administer medicines themselves at the camp (ii) invite the doctor at the camp and pay the charges for

administering or (iii) travel with livestock to the doctor's clinic which is based in towns or villages. Most of the herders have doctors' contacts with them and some even report having close connections because they feel free to call the doctor when they are in need. Almost all herders depend on local towns to procure medicines.

## Veterinary care during the lockdown

Respondents reported a mix of impacts regarding veterinary services during the lockdown. There were two instances where livestock was lost to diseases due to unavailability of medication. One respondent lost sheep worth Rs. 8,000-10,000 while the other lost sheep worth Rs. 20,000-30,000. At least 10 respondents reported that medicine shops were closed in towns and they had to wait for a few days for them to open. Six herders had to travel farther than usual, sometimes even to towns in neighbouring tehsils, to procure medication due to shortages. Out of these, two respondents had sheep which were diseased during the lockdown and could not be cured. Both of them reported the same disease, locally called 'Mayliben'. Eight herders reported that doctors were either not available or could not visit while another seven could access doctor's help through their network. Amongst two respondents who reported being stopped by the police while on their way to buy medicine, one could buy medication after he explained to the police while the other could not. (See Figure 6.)

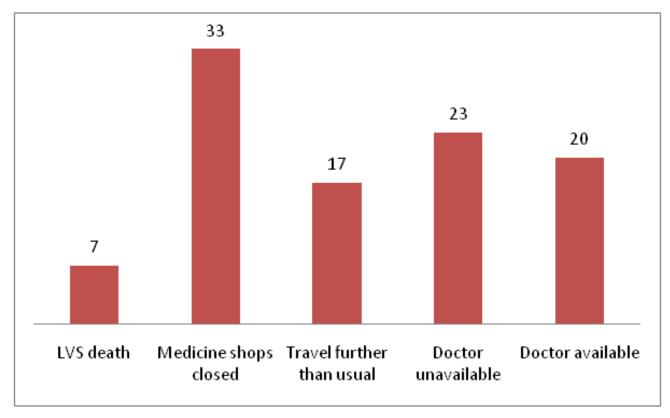


Figure 6: Herder responses w.r.t how the lockdown affected veterinary care (percentage wise)

## Ration provisioning during the lockdown

Except two, no respondent received or knew about any service being provided by the state with respect to ration or distribution of essential commodities. Everyone either continued to purchase from kirana stores, farmers or from harvests from their own farms. Most people accessed ration using their ration cards or Aadhar cards. Only one person received state-sponsored ration while the others could not access because the distributors ran out of stock. Four herders reported they faced an issue accessing ration shops since they were functioning for fewer hours. These respondents could not get to the shops in time because they had set their camps in the interiors of agricultural lands.

## State help for COVID-19 testing or movement

No herders were required to carry official permission or Covid-19 free certificates for moving in the landscape. Only one respondent got himself tested voluntarily. One of the respondents was an ex-leader of a 'kuri-sangha' or 'sheep-organisation' and he reported to have confirmed through his social network that there was no such permission required from the government. One respondent noted that government officials themselves came to their village to ask for people with symptoms.

## Social stigma during the lockdown

None but two reported experiencing severe stigma from non-pastoralists. All respondents cited the reason for that to be their way of life which involved living in open fields and away from people. One respondent mentioned that because they have contacts with farmers over years, camping locations are mostly fixed and hence, they did not experience any stigma. Three herders were reportedly questioned by farmers when they were around their farms but no conflict escalations or stigma was reported. Two respondents reported that they were careful to not go close to villages which had known COVID-19 patients. Just one respondent reported being sent back from a village because there was a COVID-19 patient there.

## Views about threats to livelihoods and futures

Eight respondents believed that herders were at a higher risk than people practicing other forms of livelihood because livestock markets were shut, movement was restricted, and there was a lack of access to village facilities because of the need to move. Others reported that shopkeepers or farmers were more affected because sale of harvest and shop timings was severely affected during the lockdown. Few respondents mentioned that herders are more resilient than others because they are always on the move and this reduces the fear of infection. A major worry reported by most respondents was regarding the opening up of livestock markets again and not being able to attend any public events owing to fear of infection. They hoped that livestock markets would open up so that their incomes don't continue to be impacted.

## Conclusion

The interviews provided an overview of the situation of pastoralists in Koppal district in light of the COVID-19 pandemic lockdown. Overall, the most commonly reported negative impacts were due to shutting of livestock markets, difficult access to veterinary health and increased prices of essentials. Although the lockdown did induce some financial stress when it came to income opportunities, some herders reported finding ways around it, especially in the form of sharing or using stored supplies. Because livestock markets were shut, herders got reduced prices for their animals when it came to individual buyers. For some herders, private and government veterinary care was inaccessible due to medication or doctor's unavailability. Herders in this region rely on veterinary care advice regularly because diseases are prevalent. Since herder incomes were impacted during the lockdown, increased prices of other commodities affected them more severely. State sponsored ration distribution did not reach most herders in Koppal. This is probably due to lack of distribution or because herders could not access these facilities as they are based in towns or villages. It can also be attributed to how state sponsored relief is managed in India, which is favourable for sedentarised livelihoods than pastoralists.

Other patterns observed were that herders and farmers in the Koppal landscape are dependent on each other. Farmers rely on pastoralists' livestock for fertilising their farms while pastoralists rely on farmers for space and ration while on migration. This form of pastoralism has been recorded throughout the Deccan peninsula in case of Dhangars in Maharashtra, Gollas and Lambadas in Telangana and Andhra Pradesh, Kurubas in Karnataka, and Konar herders in Tamil Nadu. Their interactions are of course not devoid of conflicts, but there are other forms of interactions in the Deccan where farmers are also benefiting from herders moving in the landscape. Vice versa, herders also depend on land owners for ration, money and space in return for the ecosystem services provided by their livestock. Factors which affect agriculture with respect to climate policies and water harnessing are also then likely to affect pastoralists in Koppal. For instance, irrigated agriculture with year round standing crops might not be able to support pastoralists as often as those farming practices which take multiple

Factors which This survey brought to the forefront the importance of social networks within pastoralist livelihood. In the time of COVID-19 and otherwise, herders depend extensively on their social networks and contacts to procure essentials, access space for setting camps, ration, and veterinary care.

shorter duration varieties of crops. All said, the mobility of pastoralists is beneficial to both herders and farmers.

This survey brought to the forefront the importance of social networks within pastoralist livelihood. In the time of COVID-19 and otherwise, herders depend extensively on their social networks and contacts to procure essentials, access space for setting camps, ration, and veterinary care. For herders, it might be essential to form and maintain as wide a social safety net to cope with unpredictable rainfall and summer patterns in these semi-arid landscapes.

Since our respondents did not practice long-distance migrations generally, they likely do not travel too far from their social networks. This might be the reason they did not experience as many severe negative impacts as pastoral groups that migrate long distances spanning multiple states.

## References

Acharya, R.M. 1985. Sheep and goat breeds of India. Food and Agricultural Organization. Rome. Available at http://www.fao.org/3/x6532e/X6532E00. htm . Last accessed on 2nd June 2021.

Galvin, K. A., Reid, R. S., Behnke, R. H., & Hobbs, N. T. 2008. Fragmentation in semi-arid and arid landscapes. Consequences for Human and Natural Systems. Dordrecht, The Neth.: Springer.

Murty M. L. K., Sontheimer, Günther D., 1980.Prehistoric Background to Pastoralism in the Southern Deccan in the Light of Oral Traditions and Cults of Some Pastoral Communities. Anthropos, pp. 163-184 (22 pages)

Ramachandrappa B.K., Thimmegowda, M. N., 2016. Soil Conservation, Crop water planning and its Use efficiency in Rainfed Agriculture. Conference paper https://www.researchgate.net/publication/312037659\_Soil\_Conservation\_Crop\_Water\_Planning\_and\_its\_Use\_Efficiency\_in\_Rainfed\_Agriculture

Ratnam, J., Tomlinson, K. W., Rasquinha, D. N., & Sankaran, M. 2016. Savannahs of Asia: antiquity, biogeography, and an uncertain future. Philosophical Transactions of the Royal Society B: Biological Sciences, 371(1703), 20150305.

Sharma V.P., Kohler-Rollerfson I., Morton J., 2003. Pastoralism in India. A Scoping Study. DFID, New Delhi. Accessed online: https://assets.publishing.service.gov.uk/media/57a08ce2e5274a31e00014fa/ ZC0181b.pdf Siripurapu Kanna K., Iyengar Sushma, Saberwal Vasant, Das Sabyasachi, 2020. An Overview of Mobile Pastoralism in Andhra Pradesh and

Telangana States of the Deccan Plateau Region of India. Published by Watershed Support Services and Activities Network (WASSAN) and Revitalizing Rainfed Agriculture Network (RRAN), Centre for Pastoralism. Accessed online: https://www.researchgate.net/profile/ Kanna\_Siripurapu/publication/341741189\_An\_Overview\_of\_Mobile\_ Pastoralism\_in\_Andhra\_Pradesh\_and\_Telangana\_States\_of\_the\_ Deccan\_Plateau\_Region\_of\_India/links/5f116d9292851c1eff18428f/ An-Overview-of-Mobile-Pastoralism-in-Andhra-Pradesh-and-Telangana-States-of-the-Deccan-Plateau-Region-of-India.pdf

Vanak, A.T., A. Kulkarni, A. Gode, C. Sheth, E. DiMinin, K.K. Karanth, O. Thorat, and J. Krishnaswamy. 2017. Conservation and Sustainable Use of the Dry Grassland Ecosystem in Peninsular India: a Quantitative Framework for Conservation Landscape Planning. Final Technical Report of the National Environmental Sciences Program. Submitted to the Ministry of Environment, Forests and Climate Change, Government of India. Pp. 127. ATREE, Bangalore, India.

## Annexure I

# Summary of findings from a telephonic survey undertaken by CfP in April 2020

#### 1. Restrictions on movement

Pastoralist migrations were halted by state governments either temporarily or for the entire year, on the assumption that all movements held the potential for transmission of the virus, and hence represented a threat to communities that pastoralists interacted with. In some instances, pastoral communities were able to convince governments to permit them to continue with their migrations. Others, such as the Van Gujjars of Uttarakhand were banned from moving to their summer pastures for the entire year, and were forced to either stall feed their buffaloes or find alternative grazing arrangements within the lower altitudes. Either option resulted in higher costs but also significantly reduced animal productivity. The Himachal government was particularly proactive in supporting pastoralist movement, because for the most part herders travel alone and tend to spend time in relative isolation, reducing the likelihood of viral transmission.

## b). Accessing markets:

Pastoralist communities across states spoke of the difficulties of accessing milk, meat and feed markets, all closed due to the national lockdown. Some surplus milk was being converted into ghee and buttermilk, but as the weather warmed, even these products needed to be disposed of to avoid spoilage. The closure of meat markets had implications for immediate cash flows but did not represent the loss of a crop, such as may have been experienced by milk-selling pastoralists or by farmers with perishable, fresh produce.

## c) Shortage of Labour:

In some instances, herders had returned home in February to attend to family functions or to help with cultivation. Post the imposition of restrictions, these herders were unable to move to where their herds were, resulting in a significant shortage of labour in managing the herds. Many herders also reported instances of hired labour choosing to return to home, owing to the limited information available on the pandemic and the associated desire to be close to home during this period of uncertainty

## d) Shearing sheep:

Sheep need to be sheared just before the onset of summer, and this is generally undertaken by shearers not necessarily part of the herding community. When sheep are not shorn, ahead of the summer heat,

there are heightened levels of sickness within the herd. Owing to the lockdown, shearers were simply unable to travel to where the sheep were located. While the Himachal government was ultimately able to facilitate shearer travel to the herds, in most States shearing operations were badly impacted. Many herders spoke of the likely impact of the lockdown and its aftermath on the import of wool and on the export of woollen carpets and durries.

#### e) Obtaining ration

Pastoralists on the move normally obtain ration from village kirana shops or from shops in small towns. Pastoralists across the country spoke of the fact that villagers, normally welcoming, were wary of potential transmission of COVID and were often unwilling to have transient pastoralists enter the village. In instances where the state was providing ration, pastoralists tended to miss out since they were on the outskirts of villages or were grazing their animals at some distance from human habitation.

## f) Social Stigma:

Pastoralists from various parts of the country reported that they experienced a great deal of social stigma on account of their religion or their nomadic lifestyle. Gujjars in Chamba, Himachal Pradesh and from the Rishikesh/Haridwar areas in Uttarakhand faced ostracism as minorities and had difficulty in selling milk and in embarking on their annual migrations. In both instances, there were rumours to the effect that their milk carried the coronavirus and so customers should not buy their milk. Pastoralist mobility in itself has been causing social stigma for many decades and reports from across the country indicate this was accentuated throughout the lockdown.

## g) Pastoralism, Resilience and COVID-19:

Several pastoralists mentioned that they may have experienced fewer negatives resulting from the lockdown than many other with rural livelihoods. This is likely linked to the fact that pastoral communities have historically needed to adapt to climatic, political and other changes. Pastoralist adaptability may have played a role in mitigating to some degree the various issues listed above.

## Annexure II —

# Questionnaire to understand how pastoralists have fared under COVID-19

Code (State letters, followed by 1st three letters of Community name, followed by serial number of interview, in two digits – e.g. GUJRAB01)

Interviewers name Date

a. Name

c. Community

Home Location
 Aadhaar Card Y/N

5. Migratory Y/N

7. Are you with the herd Y/N

9. Herd size

b. M/F

d. Phone #

2. Current Location

4. Bank account Y/N

6. Owner/helper?

8. What animals do you manage?

10. Were you on migration during

LckDn Y/N

On each of the following please describe your normal practice and how this is affected because of the COVID epidemic:

## A. Obtaining forage/water

- 1. What is your normal pattern of migration at this time? Do you cross district or state boundaries?
- 2. Has your movement been interrupted this year? Positively/Negatively?
- 3. Where have you obtained forage and water this year (village commons, Forest Department land, Protected Area, cultivated land, purchased, others?)
- 4. Do you normally purchase fodder? Were you able to do so this year?

## B. Revenues/Expenditures

- 1. During lockdown have you had difficulty in the following:
  - a) Sale of milk and milk products
  - b) Sale of animals
  - c) Sale of wool
    - i) Difficulties with shearing?
    - ii) Getting wool to markets?
  - d) Penning
- 2. Has COVID/lockdown caused a fluctuation in the rates you receive for produce?

- 3. Where have these expenses changed (medicines, food, water, transport, alcohol, labour)?
- 4. Has COVID had an impact on your earnings? A bit, Medium, A lot

#### C. Labour

- 1. What is the normal labour requirement? How much of this is hired labour?
- 2. What is the situation during lockdown? (could not come, had to leave, stranded?)

### D. Veterinary care

- 1. What are the normal veterinary services that you access? Health camps, doctors, medicines, vaccinations?
- 2 Are these services available during lockdown?

## E. General Questions (Rations, health care, places to stay, social stigma)

- 1. Where do you normally get your rations while on migration?
- 2. What difficulties have you encountered because of the lockdown?
- 3. What state or other support has been available to ensure you have adequate ration?
- 4. Were you required to carry a Coronavirus free certificate? Where were you required to show such a certificate? Did you need permission to
- 5. Have you experienced difficulties in finding places to camp during the lockdown?
- 6. Have you experienced social stigma? Please elaborate?

## F. Open-ended

- 1. During COVID have you been better off or worse off than other rural communities (agriculture, settled livestock keepers)... Can you compare your situation with others from your community who have moved out of herding?
- 2. What are your hopes and fears with regard to the next 6-12 months?
- 3. Do you have anything to add?

#### G. Additional Comments by interviewer

