





URMUL I CENTRE FOR PASTORALISM I REVITALISING RAINFED AGRICULTURE NETWORK

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Camel: A resilient species of arid regions Nutritional value of camel milk and towards alternative livelihoods Threatened Existence The ship of the desert and declining numbers Constraint Identification Inception of the Camel Partnership Proposed system and value chain TCP Verticals Communities Enterprises **Policies** Collaborative and timeline Programme Location and status Programme Activities Support Required Knowledge Management

CAMEL - A RESILIENT SPECIES OF ARID REGIONS

- The image of camel, a symbol of human survival in the desert, is tied to the history of the major nomadic civilizations of the hot dry areas of the northern hemisphere.¹
- With its unique bio-physiological characteristics, the camel has become an icon of adaptation to challenging ways of living in arid and semi-arid regions.¹
- Camels have for millenia played an important role in preserving agro-ecology of the arid regions by holding back desertification, enriching soil and preventing erosion.¹
- The camel is used for transportation as well as for providing milk. It is popularly known as "the ship of the desert".²
- In arid zones the camel is a better provider of food than the cow, which is severely affected by the heat, scarcity of water and feed. (Sweet, 1965)
- Their mobility prevents overgrazing, allowing natural vegetation to grow back. Their skills and practices are those of protectors.
- The distant and scanty Common Property Resources are grazed by camels producing milk and offsprings thereby enabling immense wealth creation for rural India.³
- The bones of camels are used to produce crafts such as combs, spoons, vases, etc.; camel milk and value addition products such as cheese, milk powder, chocolates, soaps etc.; camel fibre is used for preparing rugs, ropes, coats or jackets, etc.³

THERAPEUTIC VALUE OF CAMEL MILK

- Camel milk has three times the vitamin C that cow milk is an excellent source of iron, protein, vitamin B3 and good probiotics and lower in lactose. It is thereby beneficial for people suffering from milk allergies.¹
- It is also high in immunoglobulins which is the key to boosting immunity thus protecting against pathogens.
- ullet Children suffering from autism have shown considerable improvement with use of camel milk therapy for the treatment. 1
- People suffering from diabetes (Type 1) have shown improvement after consuming camel's milk.¹

MARKET POTENTIAL OF CAMEL MILK

- Somalia, Kenya, Mali, Ethiopia, Saudi Arabia, and Niger are the major camel milk-producing countries in the world dominating 60% of the world camel milk market.²
- Even after a drastic decline of camel population in 2012 and 2019 in India, the improvement of nearly 30% in the number of female camels shows the potential of camel milk market.¹
- The Food Safety and Standards Authority of India allows sale of camel milk in India and Amul has initiated its regular sales.
- Other key camel milk products manufacturers (both Indian and Global) include Camelicious; Desert Farms Inc.; The Camel Milk Co.; Vital Camel Milk Ltd; Camel Dairy Farm Smits; Al Ain Farms; Tiviski Pvt Ltd.; UK Camel Milk Ltd.; Aadvik Foods; and QCamel.²

THREATENED EXISTENCE

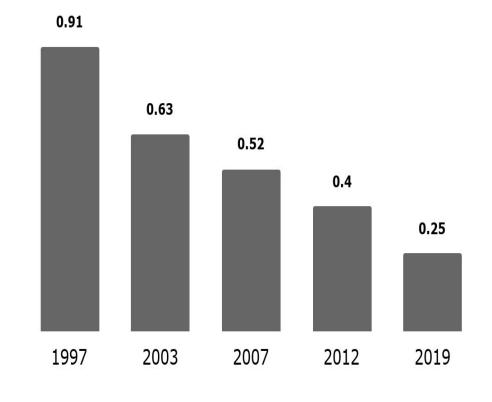
Due to loss of traditional revenue stream, shrinkage of CPRs, higher feed & health costs and poor reach of existing support services the camel herding ecosystem is being threatened. It can be attributed to these reasons:¹

- Traditional camel products no longer have a local market or demand in the community due to availability of factory made cheaper alternatives, fast fashion and lack of value chains.
- State-wide ban on trade of camels deprived camel herders of a source of steady livelihood.
- Missing links in the veterinary healthcare system has affected health of camels.
- Poor management of community managed pasture lands (Gochar/Oran) has resulted in deprivation of nutritional forage for camels.
- There is an absence of community managed water sources for the camels in the villages.



35 %	Estimated contribution to income of small and marginal farmers from dairy and animal husbandry in Rajasthan*
50 %	Estimated contribution to income of small and marginal farmers from dairy and animal husbandry in arid areas of Rajasthan. However, the contribution of camel milk market is significantly low.
0.25 Million	Camel population reported across the country reported in 20th Livestock Census Report in 2019
37.05%	Decline in camel population across the country compared to the last Livestock Census in 2012
0.21 Million	Camel population reported for the state of Rajasthan in 20th Livestock Census Report in 2019
85%	Total nationwide camel population concentrated in the state of Rajasthan reported in 20th Livestock Census Report in 2019
34.7%	Decline in Camel Population in state of Rajasthan compared to the 19th Livestock Census Report in 2012

Camel Population across the country reported in Livestock Census (in Millions)



CONSTRAINTS IDENTIFICATION

METHODOLOGY

- A constraint identification study was carried out to understand the concerns of the camel herders and where they need urgent support.
- Information around the health, water, and forage support for the camels were gathered in a questionnaire. Additionally, status of existing livelihoods around camel based products were assessed.
- The sample size covered 1,064 camel herders from 145 villages in three districts of Bikaner, Jaisalmer and Jodhpur through purposive and snowball sampling.
- The findings were further validated through focused group discussions.

KEY THEMES

The survey captures details under the following key themes:

- Assessing the health status of the camels
- Current management of CPRs and feed availability
- Current and potential camel milk yield
- Medical insurance coverage of the animal
- Access to government services and support
- Areas where urgent support could be provided

KEY SURVEY FINDINGS

POKARAN CLUSTER

- 98% of respondents resort to self-diagnosis of diseases for their camels
- All the respondents reported that they do not earn any income from sale of camel milk or other derived milk products.

CHIMANA CLUSTER

- Only a mere 0.2% of the respondents relied on the services of a veterinarian.
- All the respondents took their animals to community managed pasture lands for grazing. However, they all expressed that these pasture lands were barren with sparse plantations.

BAJJU CLUSTER

- 16% of respondents do not get their camels yearly vaccinated.
- ❖ The average veterinary care expense of a camel herding household among the respondents is INR 2200.

VISION

Thriving ecosystems for camel based social enterprises

MISSION

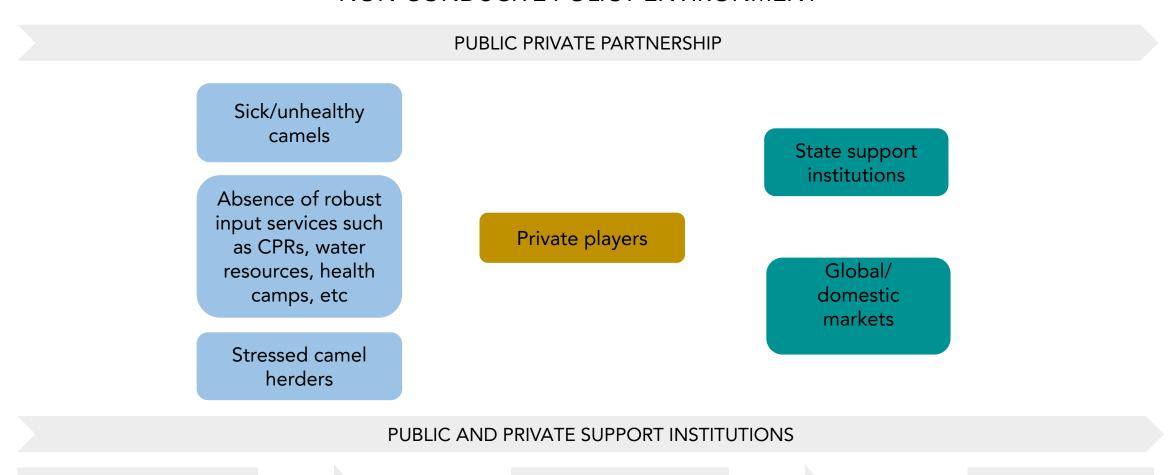
A full industry creation exercise, The Camel Partnership aims to mobilize the camel herding community, knowledge & potential. We aspire facilitating herders to take charge of their livelihood and drive an inclusive, accountable, collaborative, and, sustainable enterprise ecosystem.

This partnership with resource, technology and knowledge support from multiple stakeholders and by forging diverse market linkages would develop a resilient camel derivatives value chain and ecosystem in deserts.

DISARRAYED VALUE CHAIN: LOCAL VALUE CHAIN

A localised value chain built around camel milk, camel hair, leather, and animal waste - providing for substantial livelihoods to herders. Over the decades it has collapsed and what we have now is:

NON-CONDUCIVE POLICY ENVIRONMENT



COMMUNITIES

ENTERPRISES

MARKETS- LOCAL AND REMOTE

We are targeting appreciative cooperation from local community and commitments for long term partnerships to reach to over 6,000 households in three districts of western Rajasthan

CONDUCIVE POLICY ENVIRONMENT

PUBLIC PRIVATE PARTNERSHIP Presence of robust input services such **BACKWARD LINKAGES FORWARD LINKAGES** as CPRs, water resources, health camps, etc State support Camel institutions State derived Healthy camels support products institutions enterprise Private Players Camel herders with revived livelihood around camel products PUBLIC AND PRIVATE SUPPORT INSTITUTIONS

COMMUNITIES ENTERPRISES MARKETS

A full industry creation exercise, The Camel Partnership aims to mobilize the camel herding community, knowledge and potential.

TCP aims at working in three core verticals - community, enterprises and policies - engaging with 6,000 households in the first phase. Spread across Rajasthan, this multi-year, multi-stakeholder partnership shall facilitate value chain creation and consolidation, enhancing livelihoods of community and demonstrating a model for policy advocacy towards scaling up.



Animal health, nutrition, herders institution building, CPR mapping and improvement through community engagement, NRM interventions, youth cadre for micro entrepreneurship, facilitating health insurance coverage through government schemes



Value chain alignment exercises including - infrastructure development, business trainings of select herders, identification of milksheds, logistics mapping, technology partnerships, engagement with entrepreneurs for business partnerships, mentoring of community level micro-entrepreneurs, collaboration with social investment funds and enterprise



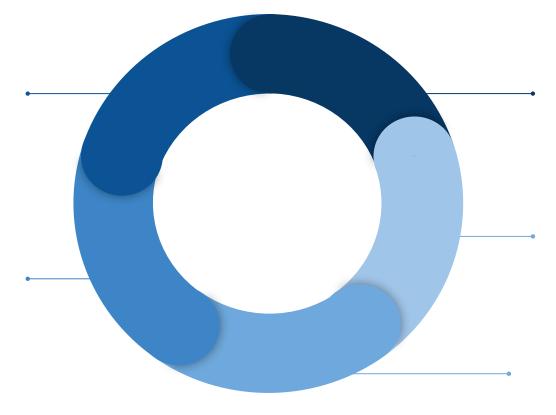
Stakeholder engagement at village, block, district and state level engagement with several touch-points including state government, public enterprises, private sector, social sector

SUCCESS TO US WOULD MEAN

Through a comprehensive set of interventions spread over three key verticals – Communities, Enterprises, Policies – the Camel Partnership plans to set-up a resilient ecosystem to support camel herders and enable camel enterprises to take on the ecosystem management and development work

Achieve a fair, inclusive, accountable, auditable enterprise to scale the business opportunities

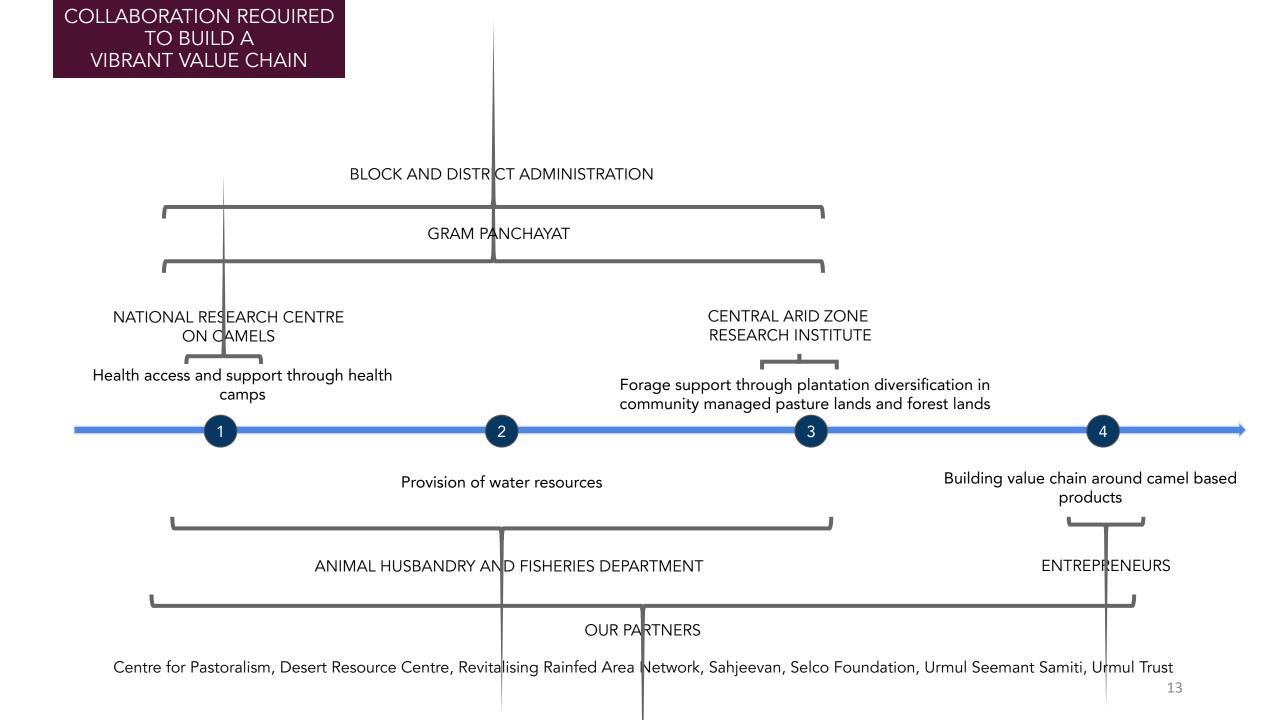
Achieve community owned and professionally managed value chain for camel products



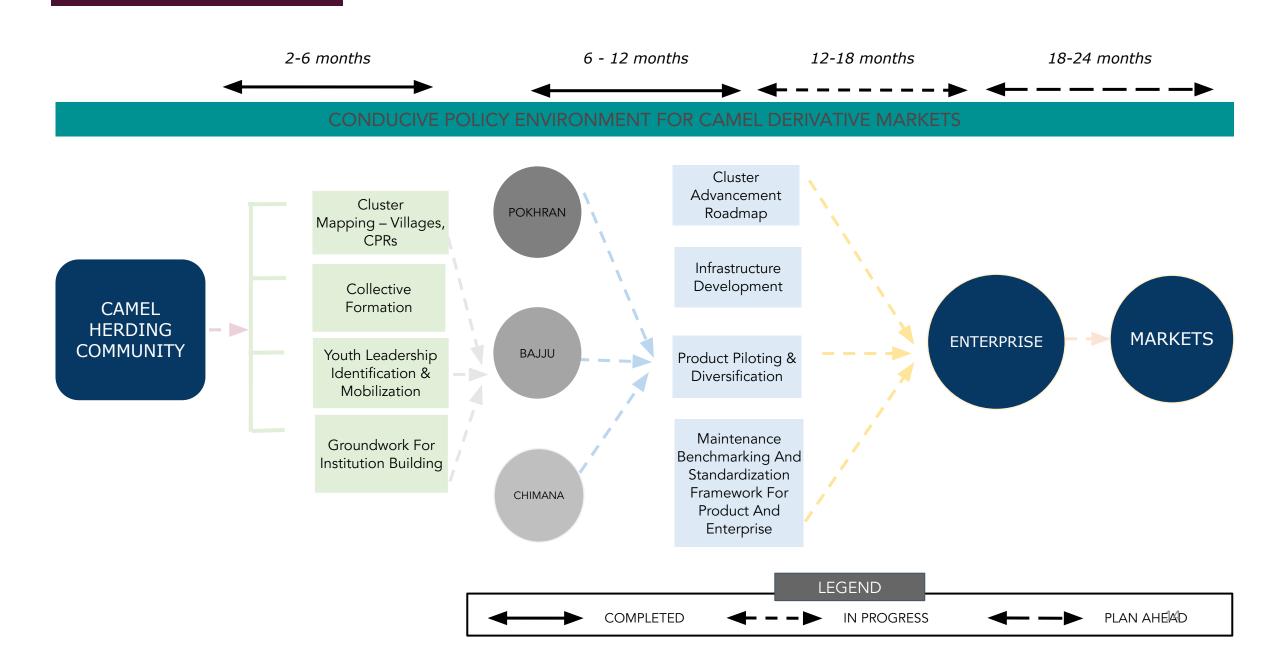
Facilitate policy action for improved access to health and nutrition services and CPRs

Achieve a cadre of enterprising changemakers across the value chain

Enable community led action in three clusters in western Rajasthan reaching out to 6000 households



THE CAMEL PARTNERSHIP TIMELINE



The Camel Partnership

Clusters identified for focus interventions



BAJJU CAMEL MILK CLUSTER 69 VILLAGES

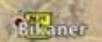
Bajju Cluster











CLUSTER STATUS LEGEND

Legend

Bajju Cluster

Cheemana cluster

Pokhran cluster







Business Training Conducted



BMC Setup Initiated



Stakeholder engagement ongoing



POKARAN CAMEL MILK CLUSTER 20 VILLAGES

Pokhran Cluster





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CHIMANA CAMEL MILK CLUSTER 63 VILLAGES









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PROGRESS OF ACTIVITIES

COMMUNITIES	ENTERPRISES	POLICIES
 Identification and mapping of camel milk clusters Community mobilisation & skill enhancement on various aspects - health, nutrition, animal management Health service inputs and facilitation Documentation of ethnoveterinary practices used to tend to diseased camels Documentation of abundantly available local vegetations that are nutritious for the camels Youth changemakers identified and cadre formed – currently leading efforts on ground ecosystem building and village-level PRI advocacy 	 Institutionalization of community groups through forming cluster-level Federations Focused trainings and skilling of youth changemakers with support from NRCC on various functions of milk value chain like: Improvement in milking practices Improved awareness on animal nutrition, health and hygiene towards improved quality of milk Milk collection equipment and better practices Basics of computer and accounting Infrastructure improvement towards encouraging businesses for the camel milk procurement Technical, infrastructure and strategic partnerships for building efficient and technically advanced value chain Social investments mobilisation through ecosystem partners 	 Policy and industry dialogues Regular meetings taking place at State and District levels. Focused policy dialogues with NRCC, NRAA, DAHD and FAO for partnership with TCP. Knowledge management support from RRAN and CfP to address the opportunity and ecosystem development activity. Through Situation Assessment Narrative Reports/ frequent Op-eds developed to apprise stakeholders of ecosystem challenges.

SNIPPETS FROM THE PROGRAMME



(above) Bulk Milk Chiller of 1,000 litres capacity has been installed in a community centre in Ganga Ram ki Dhani village,

Pokaran camel milk cluster



(above) TCP Chimana camel milk cluster interacting with camel herders in Jodhpur district



(above) Honourable Minister Sh. Saleh Mohammad in discussions with TCP Pokaran camel milk cluster team in Jaisalmer district

COVID-19 VOICES FROM THE GROUND

"In our approach of mobilising community, setting up enterprise and the policy advocacy efforts, the camel herding community is the primary stakeholder. It was important to not leave them in the lurch during the COVID-19 lockdown. Only a community that believed in us would help us in take the vision of TCP forward."

- Dipak Gode, from TCP team coordinating relief activities in the Bajju cluster

" In these difficult times, I still remember, in Paithro ki dhani village, Bikaner district there was Alsi Ram who did not even once requested any ration support for his family. He did not have a lot of resources but kept insisting that there were others in his community that needed more support."

Rajendra Prasad from TCP team leading relief efforts in Bikaner and Jodhpur districts



"We contacted the Urmul team back in March and since then we have remained connected. It was heartening to see that when we had no idea about the government relief measures, there was TCP team to ensure that our camels do not remain sick and our families receive some ration support."

 Sadasukh Bishnoi, a youth changemaker from Fattuwala village, Bikaner district "I am grateful to serve my community members in hours of need. We delivered and administered vaccines for our diseases camels. I am fortunate to be saving the lives of our livestock."

- Achala Ram Raika, a camel herder from Charanwala village, Bikaner district

COMING TOGETHER

The Camel Partnership team through garnering resources has been actively working to

- Mobilize resources for ration packages for vulnerable 600 camel herding households for 2 months
- Vaccines distributed to treat 2,700 diseased camels
- Liaise with Animal Husbandry Department, Government of Rajasthan to organize health camps for the diseased camels
- Identify vulnerable households with the aid of our Youth Changemakers to distribute vaccines and supported in distributing ration packages
- Organized regular community awareness and mobilization telephonic meetings

TCP team through our expanse of youth changemakers has been able to achieve on-ground structural support

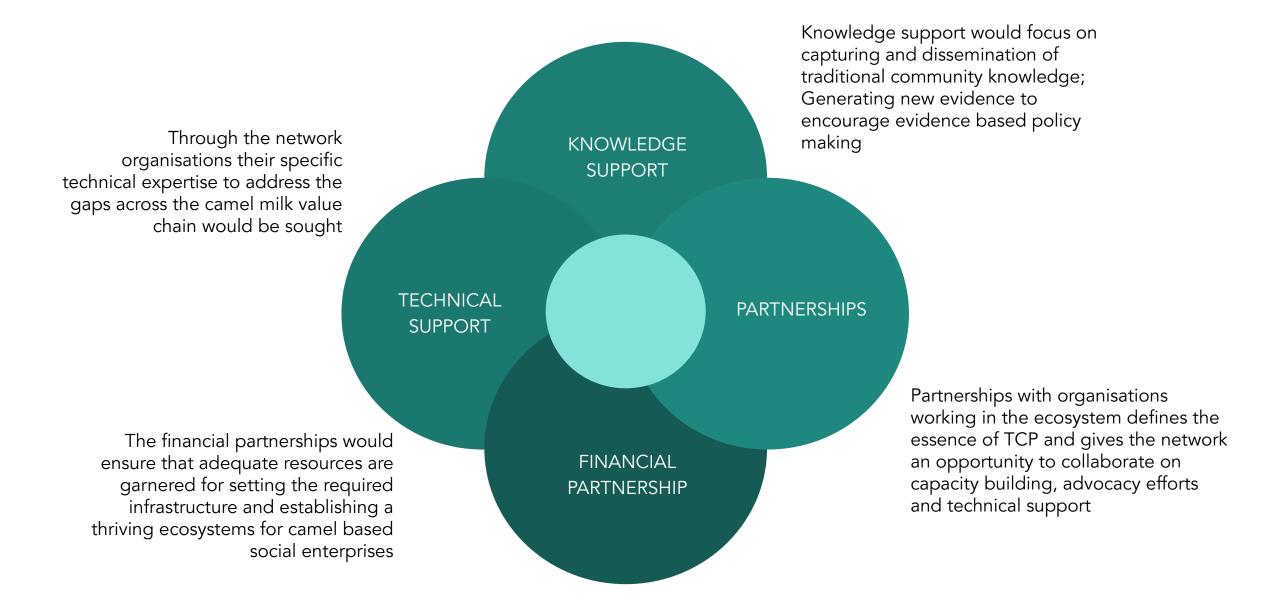
(right) During
the COVID-19
nationwide
lockdown,
distribution of
vaccines by TCP
team to the
youth
changemakers
in Bajju camel
milk cluster,
Bikaner district





(left) Ration
package
distribution efforts
were led by
Udaram, a youth
changemaker
in Mandli village,
Jodhpur district

The Camel Partnership envisions to leverage the support of network organisations to build a thriving ecosystem for camel based enterprises





With the aim in the first phase to establish procurement pilot at one location in Rajasthan, collating information and knowledge management becomes very important for The Camel Partnership

PROGRAMME MATERIALS (REPORTS/ MINUTES/ STRATEGY DOCUMENTS)	Documentation of the overall vision and constraints of the ecosystem to ensure seamless programme implementation. Consistent documentation efforts are being undertaken to manage materials and are continuously being shared with stakeholders.	
CLUSTER ADVANCEMENT ROADMAP MARCH 2020	This document was developed as a primer on the ecosystem of camel herders. Sections on understanding issues that plague the camel herders' ecosystem-healthcare, forage, water availability and unfavourable state policy; addressing some of the gaps; nutrition mapping & management for herders; details on future infrastructure and enterprise development interventions are laid out.	
COVID-19 STATUS NARRATIVE REPORT APRIL 2020	The camel herding community was no exception to the challenges posed by the COVID-19 lockdown. They were worried about the sustenance of both their families and their herds. The herders are worried about arranging forage, water, and veterinary support services. The restrictions on movements have further made it difficult for them to avail of the necessary support. As the summer peaked, the lockdown tested every step they walk along with their livestock. The report laid out the immediate and long-term challenges faced by community.	
MEDIA FELLOWSHIP MAY - SEPTEMBER 2020	Media professionals are developing materials that would enable the Partnership to reach out to the policy makers, researchers, consumers, and entrepreneurs. The professionals would benefit from covering the creation of a robust full-scale camel milk value chain.	
ETHNO-VETERINARY AND NUTRITION PRACTICES FOLLOWED BY CAMEL HERDING COMMUNITY ELDERS MARCH 2020	Insights from interviews conducted with the community elders on ethnoveterinary practices adopted by them to keep their camels healthy are highlighted. This was to ensure this knowledge does not get lost for the young generation of camel herders. In addition, it would be interesting for alternative medicine practitioners and ethnic studies enthusiasts.	

REFERENCES

Links to the programme documents to learn more: (Kindly click on the document to access it on google drive)

- TCP: Vision Roadmap
- Constraint identification study of the camel herding ecosystem
- GIS Images of CPRs mapped
- Cluster Advancement Roadmap
- Repository of publications developed by The Camel Partnership Media Fellows and the DRC Knowledge Team
- Situation Assessment Narrative Reports on the impact of COVID-19 lockdown





For questions/concerns please connect with

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