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## Causes of Decreasing Camel Population in Pithana Village of Taranagar Tehsil in Churu District, Rajasthan.

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### ABSTARCT:

The paper present causes of decreasing camel population in rural areas. The study was conducted in Pithana village in Taranagar Tehsil of Churu district in Desert Region of Rajasthan. Camel belongs to class mammalian in chordate phylum. The camel is an important animal component of the fragile Desert ecosystem. It is having more economic importance. In a farmer life camel play an importation role from sowing the crops till bringing the grains home. In this six year the numbers of camels are going decline year by year.

### KEYWORDS:

Camel, Desert, Pithana, Population, Farmer, Tractor, Field, Number and Water etc.

### INTRODUCTION:

Around the world different type organism are habituated in different type of habitat such as aquatic, areal and terrestrial. Environment condition of any habitat is affecting the life of an organism. Any organism which lived in its habitat is adapted for its environment condition. Environment condition of a particular region can affect the population of an organism which is lived in this region. And a well adapted organism is found in a particular type of region for which it adapted. In desert region many organism live in their habitat with its adaptation such as desert fox, desert mouse, camel, hedgehog etc<sup>1</sup>. The populations of these animals are may be affected due to changing environment condition of desert. "Temperature may range from very hot in hot desert"<sup>2</sup>. Here animal are adapted for this type habitat. "Many adaptations are found for water conservation among desert animals"<sup>3</sup>. Besides, the environment conditions the population may be decrease by other factor. For example the population of camel in Thar Desert of Rajasthan is affected by less uses of its in agriculture. Camel is a domesticated animal for human uses. In a

farmer life camel play an importation role from sowing the seeds till bringing the grains home. “Camels provide transport, flesh, hide and wool”<sup>4</sup>. People use it for drawing water from wells, plowing and leveling land.

Camel belongs to class mammalian in chordate phylum. “Camel is a quadrupedal and xerocole animal”<sup>5</sup>. It is so well adapted for desert life that they are known as the ‘ships of the desert’<sup>6</sup>. In camel hoofs are absent and two pair strong long foot are present. Slender snout bears a cleft upper lip. Long eyelashes and muscular nostrils can be closed for protection from blown sand. “Camel can go without food and water as long as 10 days at a stretch”<sup>7</sup>. They chew cud and have a complex 4-chambered stomach to carry a reserve water supply. “Camel excretes highly concentrated urine”<sup>8</sup> so that they can minimum water loss during urine excretion. “Camel is ungulates animal and in these animals Diffuse placenta are found”<sup>9</sup>. “On histological basis Syndesmo-chorial placenta is found in camel”<sup>10</sup>. Camel characterize by presence of one or two fatty hump on the back. Only one hump camel is found in Rajasthan’s desert region. Fatty hump on back are used as a source of reserve food when they are forced to fast during scarcity of food. Two species of camels are known. “The one humped Arabian camel or dromedary, *Camelus dromedaries* of North Africa and South West Asia”<sup>11</sup> is somewhat taller, lighter and faster and used for racing or riding and domesticated for agriculture purpose of farmer in rural areas.

Camels have been an important part of our culture. The camel is a symbol of the culture of the area and at work to maintain ancestral traditions. Through this events, such as these fights, the pride or also the races, which are held in the country, camels owners demonstrate the value of these animals and give them the respect and recognition of society. “Water cells are found in camel’s rumen”<sup>12</sup>, these cells store water for future that why camels were also a part of army during war. Camels are also used for royal ride. The Border Security Force Band is the mounted band of BSF of India. “Body temperature of camel is labile, dropping to 33.8degree C overnight and raising to 40.6degree C by day”<sup>13</sup>. An event held in January on camels is Bikaner Camel Festival at Bikaner city.

## STUDY AREA:

Rajasthan is a largest state of India. It situated in north-west of India. Rajasthan geographical location is 23.3 to 30.12 North latitude and 69.30 to 78.17 East longitudes. This state covers 3,42,239 sq.km. area of India’s total geographical area. West boarder of Rajasthan is along with Pakistan. “In Rajasthan the highest temperature exceeds 50degree C”. Most of the region (60%) of Rajasthan is consist of Desert. The Desert is known as Great Indian Thar Desert. In Rajasthan there are 33 districts among one of them Churu is also present in Thar Desert. It believes that it was a village of Jats known as Khalera ka Bas. A part of 13,858 square km is covered by Churu District. A blackbuck sanctuary known as Tal chhappar sanctuary are situated here. In Churu district there are 8 tehsils in present time. . This district is characterized by small and large sand dunes. Taranagar is one of them and it is earlier known as Reni named for the lady Rankali.

Taranagar is surrounded by 124 small or large villages. These villages are populated by Farmers. Two crops Rabi and Kharip are grow here by local farmers. There are Panchayats to govern at the village level such as Lunas, Sarayan, Redi, etc. Redi Panchayat governs upon five small villages such as Bhurawas, Redi, Pithana, Kilipura and Biliya. The area which is selected for the study is Pithana village. The distance of this region is 55km away from Head coater of Churu. The study area is under considered in an arid region of Thar Desert where around 120 houses live. Most of families are dependent on farming for food and income. The agricultural production in the Pithana village is good due to which the people are prosperous. The cultivated area received water from IGNP canal for agriculture purpose. Since few years farmer grow peanut in Kharip crop.

### **OBJECTIVES:**

1. To know the current status of camel population in this region.
2. Find out the correct reasons that affect the camel population.
3. To provides information to people about economic importance of camel.
4. To collecting information for scientific knowledge, public awareness about decreasing camel population.
5. To highlight the decreasing camel population so that some efforts can be makes for their conservation.
6. To find out such measures so that the camel population can be given as a gift to the coming generation.

### **MATERIALS AND METHOD:**

The study was carried out at Desert region of Pithana village in Taranagar block of Churu district in Rajasthan state. The data for this paper are collected by talk, by direct observation, by photography and by survey of region etc.

By talk or interactions with the villagers author finds the uses of camel in agriculture work and daily routine of a farmer.

Author notice the uses of new innovation in farmers daily life and on agricultural field by direct observation method.

By photography method author collect photographs of camels with their holder, new electric innovation on their using sites, tractors and thresher during working on agriculture field etc.

By survey author collects the data of tractors purchased and numbers of camels in past few years in village and field.

Author has done comparative study of purchased tractor and decreased numbers of camel population in same year by plotted graphs.

## RESULT AND DISCUSSION:

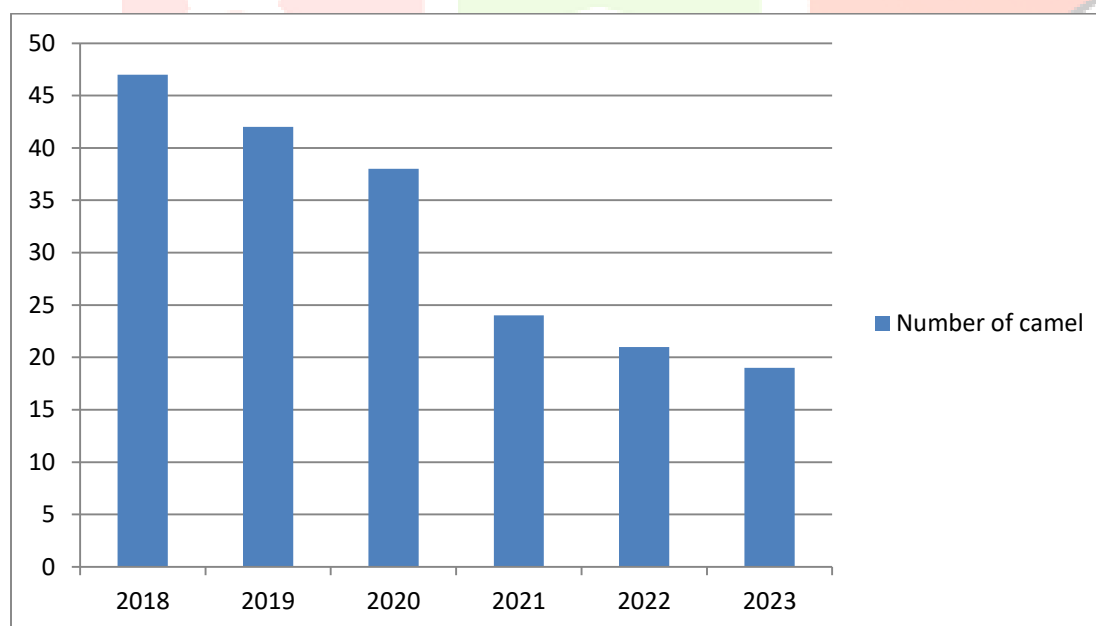
The present study was done in Pithana village of Taranagar Tehsil of Churu district. The author collects data for this study from few past years and present time. It is considered in paper that the decrease in camel population can be due to many reasons like disease, less attention of government, failure of government schemes, effect of urbanization, poverty and entry of tractors in village etc. but the over uses of tractors in daily life of farmers is main reason one of them. Collected data of decreased population of camel per year and increased number of tractors in village are plotted in graph.

**Table: 1. Collected data put in table-**

	2018	2019	2020	2021	2022	2023
Numbers of camels	47	42	38	24	21	19
Numbers of tractors	07	10	15	23	32	37

According to data after putting in table the graphs are plotted for numbers of camel and numbers of tractors in this region.

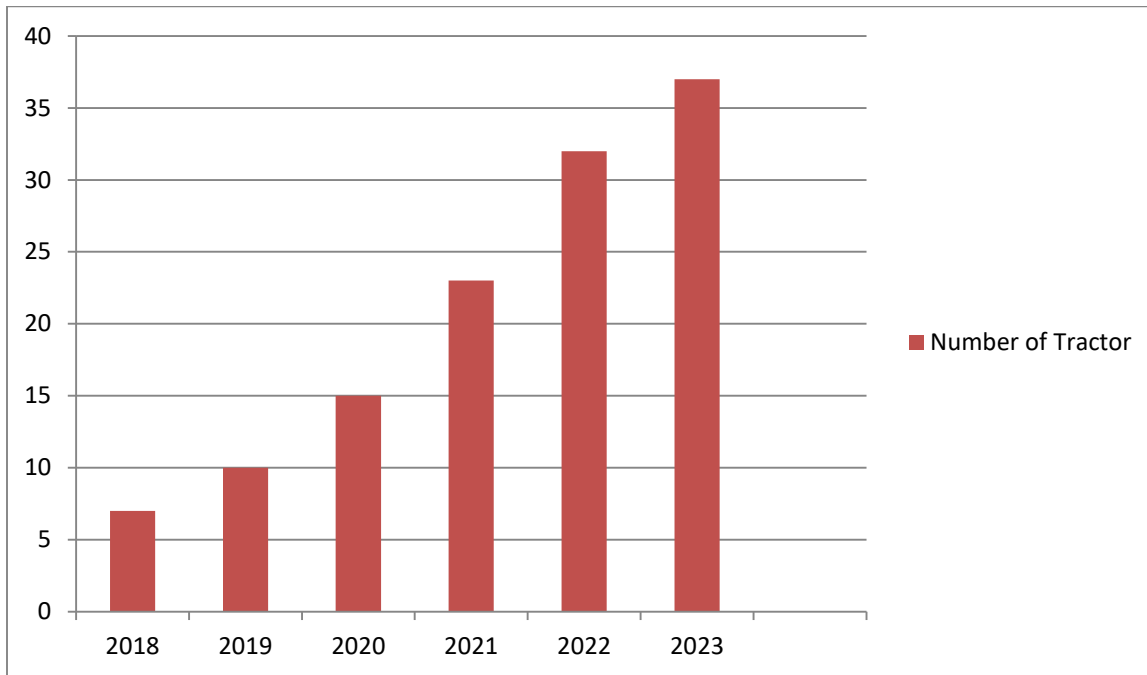
**Graph: 1. Numbers of Camels**



In this graph the numbers of camels are plotted which are considered since last six years' population of camel in Pithana village. As shown in graph that the highest number of camel are found in 2018 among these six years. 37 camels are present in village at that time. And the lowest numbers are recorded in 2023. In early 2023 the recorded lowest number of camel in this village is 20.

In this six year the numbers of camels are going decline year by year. But sharp decline occurs in 2021-22. The camel population is continuously going decreased since last few years. There are many causes that play a major role to decreasing camel population. In this area people do not include camel under tourism because people are less aware about it. Otherwise it can be a better idea to maintain camel population in hand of new generation. Tractors are main reason one of them which are consider next in paper.

### Graph: 2. Numbers of Tractors

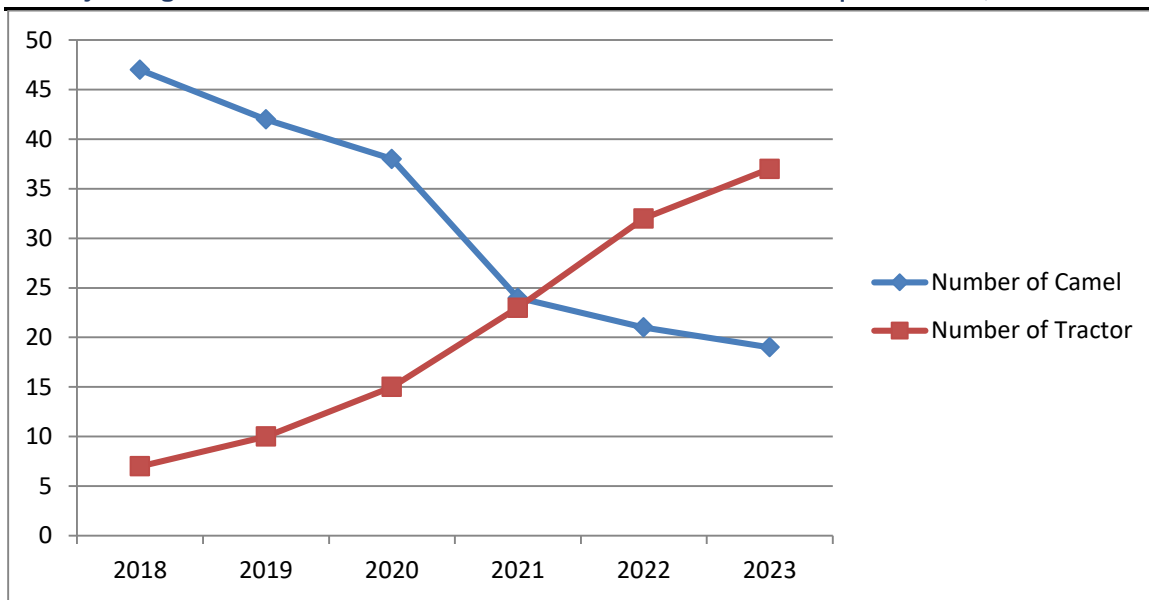


Since last six years the presented numbers of tractors in Pithana village are consider in this graph. The numbers of tractor are increased continuously year by year. There are not years in which the number of tractor are less than its last year.

Maximum tractors are purchud by farmers in last four year. And same year the maximum camel are sold out by framers in Pithana village. In present at early 2023 there are 37 tractors are recorded.

### Graph: 3. Comparative data of increased number of Tractors and decreased number of Camels.

In this graph both data merge and plotted. Since 2018 the numbers of tractors are increase year by year and due to this same time the camel population continuously going decrease. Graph show that in year 2021 the tractors number gets over to camels in Pithana village. While the camel population continuously going decrease. As author considers that there are many reasons due to this camel population going decline.



Directly or indirectly tractors are main reason to replacing the camel from agricultural use. By interaction and talk with old framers it is found that the camels are used by villagers for full fill many purpose of rural life style beside cultivate to field. Such as-to draw water from the well, to travelling, to carry goods from cities, to carry the marriage procession in marriage, to extract grain, etc. With the new innovation in agriculture field like Tractor, thresher, etc. the interest of new generation farmers in camel is almost reduced.

Use of camel in draw water from well is totally replaced by electric motors. In desert region of Rajasthan the annual precipitation is almost 7-9mm and water supply was very poor. So in old time the villagers do struggle and use camel with some accessory like- thick rope, large rubber or lather made pot to draw water from deep wells. Now the water supply good comprises to before and new innovations are present in market. This area received water from IGNP canal. So since few years to avoid extra struggle people use electric motors.



**Figure: 1&2 showing a well with its electricity generation cess. And IGNP canal in Pithana village.**

Tractors with its accessory implements like – Duck foot plough, chisel plough, Disc plough, Drill, seed cum fertilizer drill, trolley, Harrow, thresher, Punni multi crop thresher etc. replaced the camels from agricultural field because of tractor's working efficiency is excellent and take less time comparison to camel.



**Figure: 3&4 show a working of thresher with tractor on agricultural field.**

Where a single camel take 2-3 days to extract grain here a thresher can it in 1hour. To plot a field of 2-3 hectare a camel takes 2-3 days where tractor with drill implement can do it in 1-2 hours. To showing seed in field tractor is take very less time with its comparison to camel. But in present time few young and old farmers continuously doing hard work with their pets (camel).



**Figure: 5 showing a young farmer plough own field by young camel with its accessories like Hal.**

To manage their time and save money few farmers use their camels for plough fields, carry the burden from one place to another and ride on them.



**Figure: 6 show a young man use camel with its vehicle to carry dry wooden.**

In present time the camels are rarely used to carry burden like wooden, fodder, victual and transport.

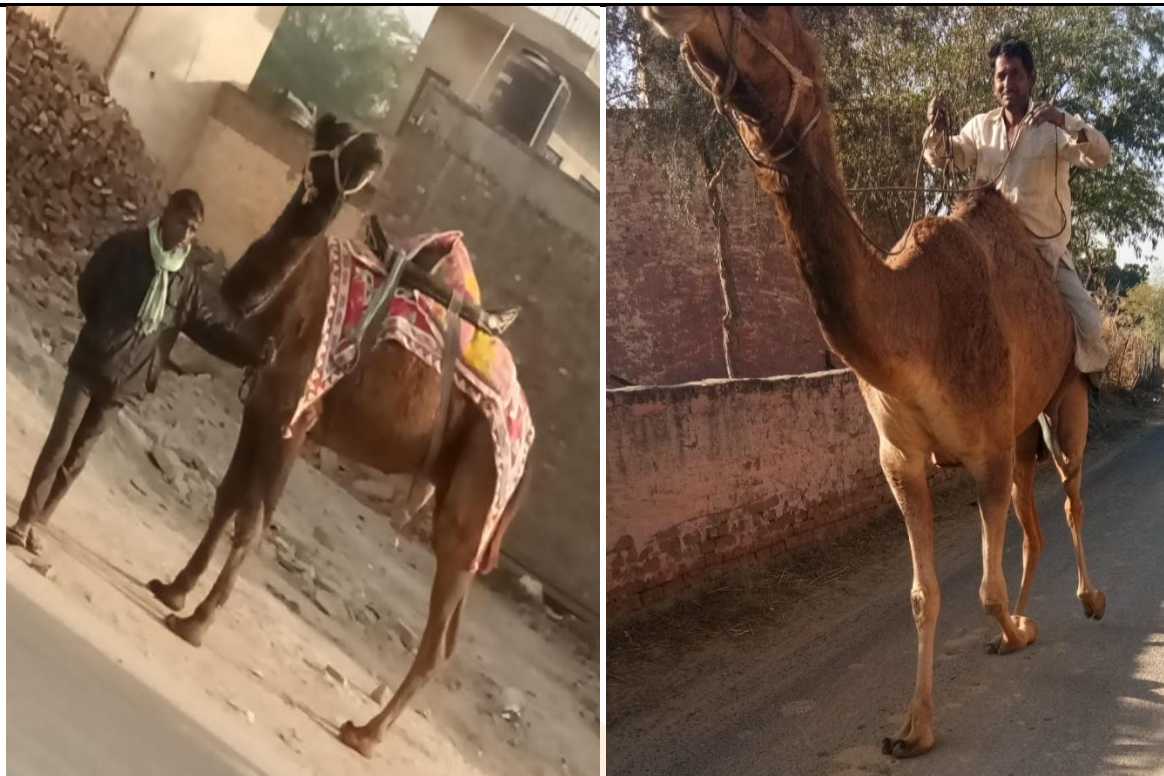
Because of the Tractors with their trolleys are using to bring cereals and fodder from the fields. The uses of camels with its implements are decreasing.



**Figure: 7, 8 Agricultural implements which are operated by Tractor in village.**

On the other hand the use of camel for travelling is almost disappearing in this village because the farmers here have now become more prosperous than before. So now they used to use means like motorcycle, car, jeep and bolero etc for travelling. Due to the development of roads camel faces problems to walk on it. Prosperous farmers save maximum time and avoid much labor use tractor and its implements.





**Figure: 9&10 an owner with its camel and a farmer riding on camel to going own field.**

There have been problems with the treatment of camels since time immemorial. No special facilities for treatment of camels in rural areas are being attempted by the government. Due to lack of treatment, there was also a decrease in the number of camels. First camel hospital is situated in Bikaner which is 200 kilometers away from here. ICAR-National Research Center on Camel is a premier Research Center located in the Jorbeer area of Bikaner city which is about 8KM from Bikaner main city.

One another reason of decreased camel population and less use in agricultural field is that the young generation here has no attention in this regard. At present, the effect of urbanization is seen on the new generation and rural areas.

## **CONCLUSION:**

The author has found in this study that there are many reasons which are responsible for decreased camel population in Pithana village. Since last few years the impact of tractors are very high on villagers, interest in working with camel is none or very less in younger farmers. In the year 2021 tractors get over in number upon the camel population in Pithana village. One of the most reasons is excessive use of tractors and agricultural tool in field. It is notice that Hospital facilities are very poor for camel in this region and government has no plan for improve camel population status. The camel is an economically important animal in desert region. The people have should have been keep little use of camel in agricultural fields so that they can carry without any burden. Camel's use on agriculture field can maintain by farmers to use as ride for field. Camel is a boon for poor farmers to do farming work. Where consumption of more money is seen

in works that can be done with tractors, if work is done with camels, less money consumption comes to the fore.

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