

Scientific Survey

Hidden Story of Diseased Milking Animals from Uruli Kanchan, Taluka Haveli, District Pune, Maharashtra State of India

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Survey Info

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Abstract

There are many diseases due to which the milking bovines lose their lives or show less productivity. The diseases disturb their usual body functions. The same condition is true for major part of the world in more or less quantity. However, its ground report is rarely reported. In the present scientific survey, we analyzed the information received from the villagers of Uruli Kanchan, Taluka Haveli, and District Pune and found that many farmers prefer home remedies to their diseased milking animals and others prefer the treatment by a doctor. They expect from Indian government to provide the medicines in a cost-effective way so that they could treat their animals easily.

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1. Background:

A survey was conducted in the locality of Uruli Kanchan, Tehsil Haveli, Dist Pune, Maharashtra (Latitude: 18° 29' 14.7336", Longitude: 74° 8' 0.1392) in order to know and document whether the milking bovines are suffering from diseases either currently or in previously in order to know their health status and suggest ways to improve them by the health department. The survey included all milking bovines [1]

like cows, buffaloes, and goats that are the majority of the selected locality. These types of bovines had an earlier history of suffering from various diseases like mastitis, ringworm, and anthrax, from which the majority have recovered and are healthy now. This survey includes a personal visit to the owners' premises, collecting related information directly, and recording the response. The questions asked during the interaction are also attached.

2. Questionnaire:

From which disease has your animal suffered?
 What were the symptoms?
 Which types of efforts did you take to treat your animals?
 Did you give them the treatment within time?
 What kinds of treatments did you give?
 What is their recovery rate?
 What are the expectations from the healthcare department?

3. Methods Used:

The method used was very simple. It was to visit everyone with milking cattle, including diseased ones, and ask those questions from the above questionnaire. This method is very time-consuming and tedious, but still, this method was followed because of the lack of internet access and only less technological use by those people to whom the interaction was made. Google forms could not be used in this case, so we used our traditional and tedious method of meeting everyone in person.

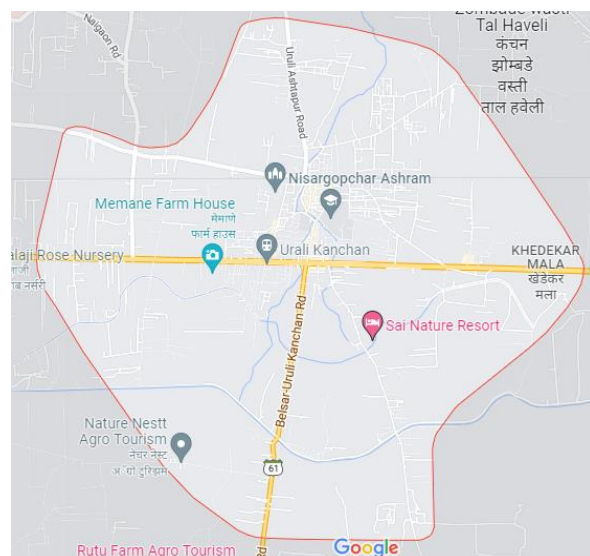


Figure 1: Uruli Kanchan area (Source: <https://www.google.com/maps/place/Uruli+Kanchan,+Maharashtra/@18.4871224,74.1207987,14z/data=!4m5!3m4!1s0x3bc2e0b558cbcdab:0xb5df15cd33c4a6dd!8m2!3d18.4874257!4d74.1333715>).

4. Results:

The results were very contrasting and were also very vast. The cattle owners identified a number of diseases. These are as follows:

4.1. Mastitis:

Mastitis [2] was the most common and prevailing disease in the locality of Uruli Kanchan. It accounts for almost 25% of all the diseases observed. This survey also reveals that mastitis prevailed majorly in cows and buffaloes, and no case of mastitis was observed in goats and sheep. Symptoms of mastitis cattle owners observed were inflammation of mammary glands, reduction in milk yield and mobility, high fever, and lack of appetite. The efforts taken by owners were washing mammary glands with cold water and call a doctor immediately. However, some treated their cattle on their own (information about how they treated animals on their own is not known. Treatment mainly includes the antibiotics like penicillin and some lotions for mammary glands. Overall, the recovery rate of cattle affected by mastitis was 80%.

4.2. Anthrax:

Anthrax [3] is also observed as one of the most common in the surveyed area. As this disease is highly contagious, its quick spread was observed, and its mortality rate is also very high. As identified by the cattle owners, symptoms were high fever, difficulty in breathing, loss of appetite, less activity, and staggering. Efforts taken by owners were immediately calling doctors and isolating infected cattle to avoid spreading the disease to healthy ones. When the owners were asked whether they received treatment within time or not, most of them replied "no," as this disease is highly fatal, cattle do not have much time to live in the diseased condition, and treatment is very much limited for this disease. Doctors gave treatments like antibiotics. Those who were healthy were given vaccines to avoid infection in the future. The doctors also advised burning the carcass of dead animals to avoid spreading infection again. The recovery rate in this disease was the lowest among other diseases the survey reported; it was only 60%. When the owners were asked about their expectations from the healthcare department, they said yearly regular vaccination camps should be conducted, and proper medicines should be provided to them since they cannot afford them.

4.3 Ringworm:

Ringworm [4] is caused by a fungus residing on animals' skin surfaces. This disease was observed in every type of cattle like cows, buffaloes, goats, and sheep. It is also the most common disease found among the cattle of Uruli Kanchan. This disease is very much common in humans as well. When the owners were asked about symptoms of this disease observed on their cattle, they said that the skin near the region of eyes and ears had turned greyish-black and hard, the skin was also very itchy, hair loss was also observed in those regions, and circular patch-like design was observed. The efforts taken by owners were immediate isolation and calling the doctor. The doctor gave antimicrobials and lotions for the skin to avoid scratching and killing lice. When owners were asked about the recovery rate, they said their cattle were recovered within a week. So, the recovery rate was 100%. When enquired about their expectations from the healthcare department, they said that they were satisfied with the services provided by the department.

4.4. Milk fever:

Another type of disease that was also common was milk fever [5]. Many cows and buffaloes were found to be infected by milk fever. When asked about the symptoms of milk fever, the owners said that the cattle were weak, they had lost their appetite for food, and there was less mobility and weight loss. When the owners were asked about the kind of treatment they received, they said that the doctor gave cattle some oral doses of calcium bolus. The recovery rate in this type of infection was recorded as 100%. When asked about their expectations from the healthcare department, they said that the healthcare department should provide cost-effective drugs.

4.5. Footrot:

Footrot [6] is a highly infectious and painful bacterial disease found in all types of cattle like cows, buffaloes, and goats. The symptoms observed by the owners in their cattle are swelling in hoof, lameness, decrease in milk yield and mobility, weight reduction, and a rise in body temperature. When the owners were enquired about the kinds of treatments given, they said that doctors gave cattle some antimicrobials and antibiotics,

and in some cases, they removed the infected skin and told to keep that foot dry. The recovery rate in this type of infection was 100%. When we asked what their expectations from the healthcare department are, they said that they are very much satisfied with the healthcare department, and some said they do not expect anything from the department.

4.6. Bloat

Bloat [7] was observed in cattle like cows and buffaloes. Bloat is also observed in cases like mastitis. When asked about the symptoms, they said that cows breathed heavily, there was frequent urination, and the main symptom recorded was a swollen abdomen. Efforts taken by the owners for the treatment of their cattle were immediately called the doctor. The doctor gave anti-bloat preparations and oils for flank application, and in some cases, a stomach tube was used to remove the gas from the stomach. Antifoaming agents were also given through a stomach tube. The recovery rate was 90%.

4.7. Foot and Mouth:

Both cows and buffaloes have been identified as foot and mouth disease [8] sufferers. When the owners were asked about the symptoms, they said a high fever, shivering, sore feet, and stringy saliva hanging from the mouth of cattle. When they were asked about their treatments, they said that the doctor gave cattle some antiseptics for ulcers and antimicrobials to keep bacteria away. In some cases, the dressing was also done for the lesions. The recovery rate in this type of disease was 90%. When we asked what they expect from the healthcare department, the majority said they do not expect anything from it.

5. Conclusion:

In the locality of Uruli Kanchan, various types of diseases were prevailing in the bovines. Some of which were highly contagious and harmful, like anthrax, and some were very common like ringworm and footrot. Overall, the recovery rate of bovines in Uruli Kanchan was 88%. The healthcare department tried its best to control these types of diseases. However, some cattle owners were still not satisfied with their efforts. Some owners, who were poor and had only one or two cows, could not afford to buy expensive medicines or

treatments, and as a result, their recovery rate is very low. These types of owners expect low-cost medicines and treatments from the healthcare department of India.

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