VETERINARY CLINICAL CASE PROFILE OF BHUTAN 2016 – 2021





NCAH. (2022). Veterinary Clinical Case Profile of Bhutan, 2016 – 2021. National Centre for Animal Health, Department of Livestock, Ministry of Agriculture and Forests, Royal Government of Bhutan This report, Veterinary Clinical Case Profile of Bhutan, 2016 – 2021, compiled by the Disease Prevention and Control Unit (DPCU) of the National Centre for Animal Health (NCAH), provides an overview of veterinary clinical cases recorded in various animal health centres across the country since 2016, till 2021.

The report specifically presents a visual description of clinical cases recorded in various veterinary hospitals at National, Thromde and Dzongkhag levels; animal health extension centres spread across 205 gewogs; and government farms. This document provides a good retrospection of the seasonality of clinical case load in respective dzongkhags and regions, and it can be used as a tool to forecast and prepare for response.

The main purpose of this report is to provide an update and information sharing regarding the veterinary clinical case situations in the country to all relevant stakeholders, including the policymakers.

Firstly, I would like to thank the Director and the Chief Veterinary Officer, Department of Livestock for their support and guidance. I would also like to thank all the Regional Directors, Program Directors, Dzongkhag Livestock Officers and Farm Managers for their coordination and support for the delivery of veterinary clinical services under their respective jurisdictions.

My sincere acknowledgement also goes to all the Veterinarians and Veterinary paraprofessionals in the field for efficient delivery of various veterinary clinical services to the public and proper data management. Information in this document were extracted from the Veterinary Information System (VIS). Therefore, I urge all our field Veterinarians and Veterinary paraprofessionals to make utmost use of the database system to enhance the accuracy of veterinary clinical case records in our country.

Lastly, I would like to thank the Disease Prevention and Control Unit (DPCU), NCAH for taking the lead in compiling and producing this report.

The information contained in this report could also be used for developing preparedness and response plans by the concerned agencies responsible for veterinary clinical case management, prevention and control, and it can be used as baseline data for strategic animal health plan development, policy interventions and other related programs.

FOREWORD

Dr RB Gurung **Program Director** National Centre for Animal Health

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INTRODUCTION

This report presents a visual description of veterinary clinical cases attended and recorded in veterinary hospitals, government farms and gewog extension centres spread across 20 dzongkhags (district) and 205 gewogs (sub-district). It describes the spatial and temporal distribution of clinical cases; top ten clinical conditions; and species-specific distribution of cases recorded between July 2016 and December 2021. The data used for analyses and visualization were retrieved from the Veterinary Information System (VIS), the online animal health database management system of Bhutan to record data concerning various animal health services delivered: clinical cases, deworming, vaccination and sterilization.

Data extraction, analyses and visualization were based on the geographical jurisdictions; it is presented as the national and dzongkhag-specific status of clinical cases recorded in the respective jurisdictions.

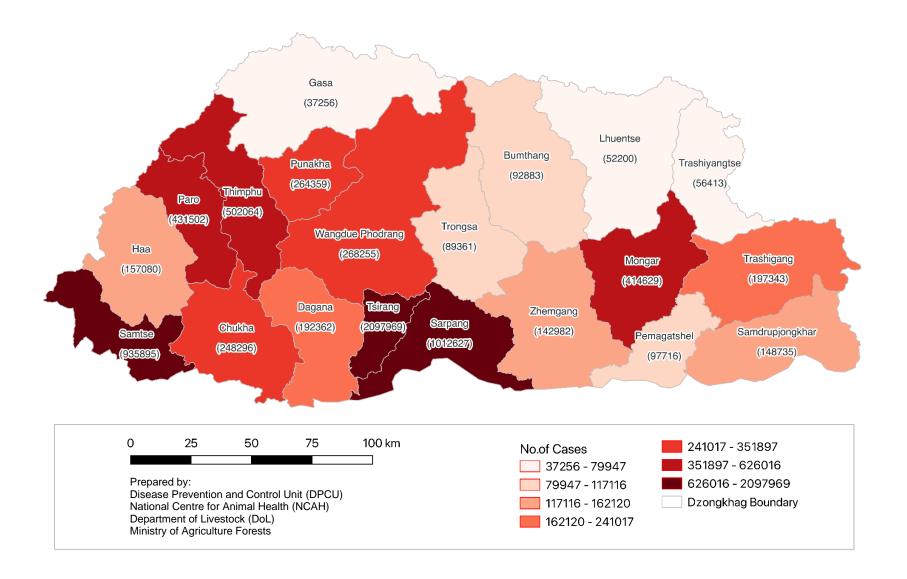
For this report, different animal types were grouped; thus, categorized into six animal types: large ruminant, small ruminant, pet animal, horse, pig and poultry. Large ruminants comprise cattle, yak and buffalo, small ruminants comprise sheep and goat; pet animals comprise dog and cat, and poultry comprises chicken and turkey.

The summary of the report in terms of geographical jurisdiction, data source and timeframe, and visualization tools is as follows:

- Total number of dzongkhags: 20
- Total number of gewogs: 205
- Data source: Veterinary Information System (VIS)
- Data timeframe: July 2016 to December 2021
- Map production software: Quantum Geographic Information System (QGIS)
- Visualization tool: Microsoft Power Business Intelligence (BI)

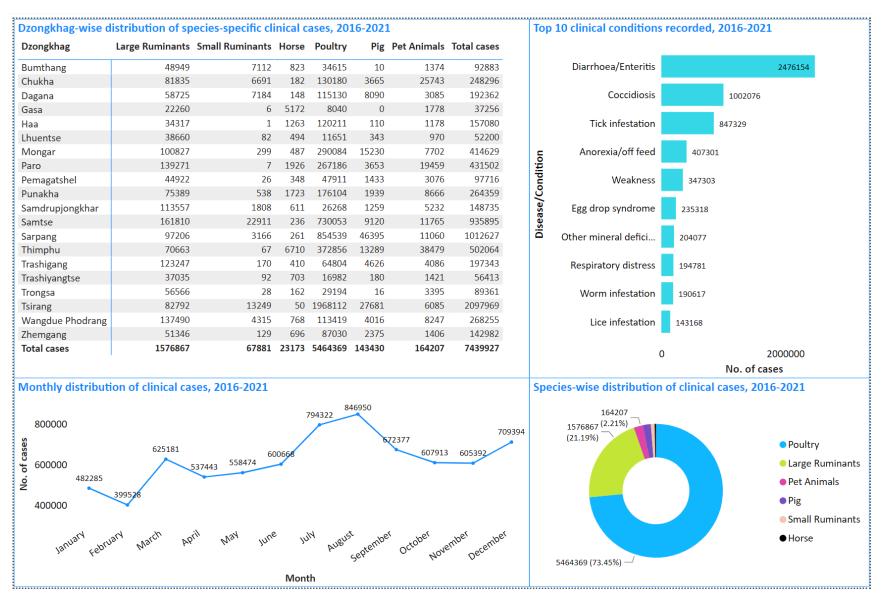
COUNTRY STATUS

Spatial (dzongkhag-wise) distribution of veterinary clinical cases recorded in Bhutan, July 2016 – December 2021.



COUNTRY STATUS

Dzongkhag, month and species-specific distribution and the commonly recorded veterinary clinical cases in Bhutan, July 2016 – December 2021.

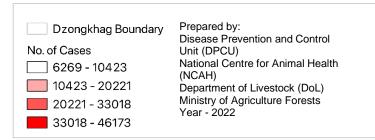


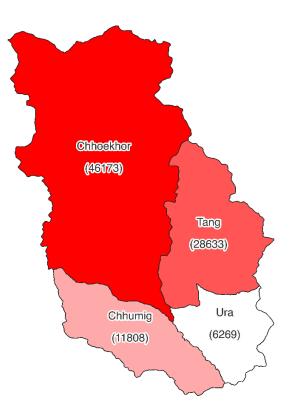
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BUMTHANG DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.

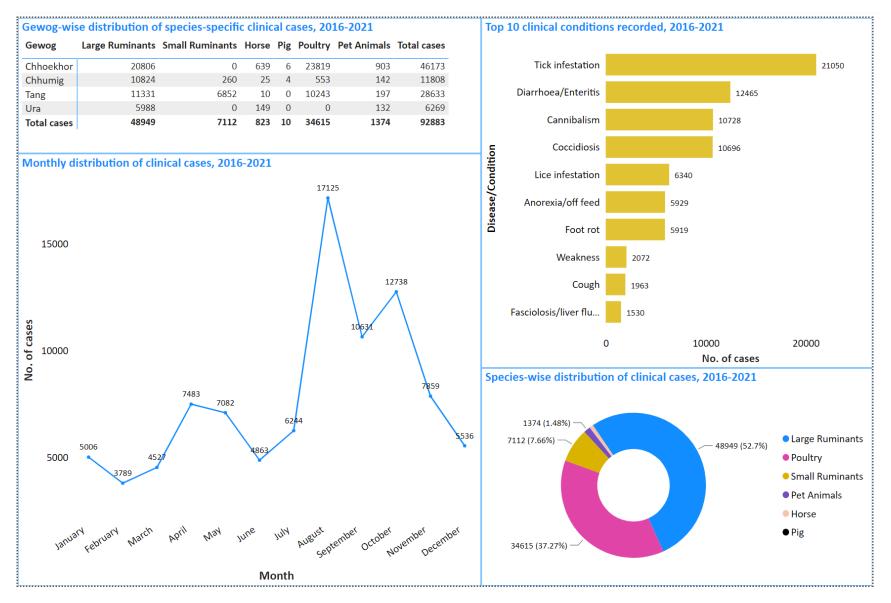






BUMTHANG DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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CHHUKHA DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



Prepared by:

Unit (DPCU)

Year - 2022

Health (NCAH)

Disease Prevention and Control

Department of Livestock (DoL)

Ministry of Agriculture Forests

National Centre for Animal

Dzongkhag Boundary

3649 - 7467

9531 - 31694

31694 - 90567

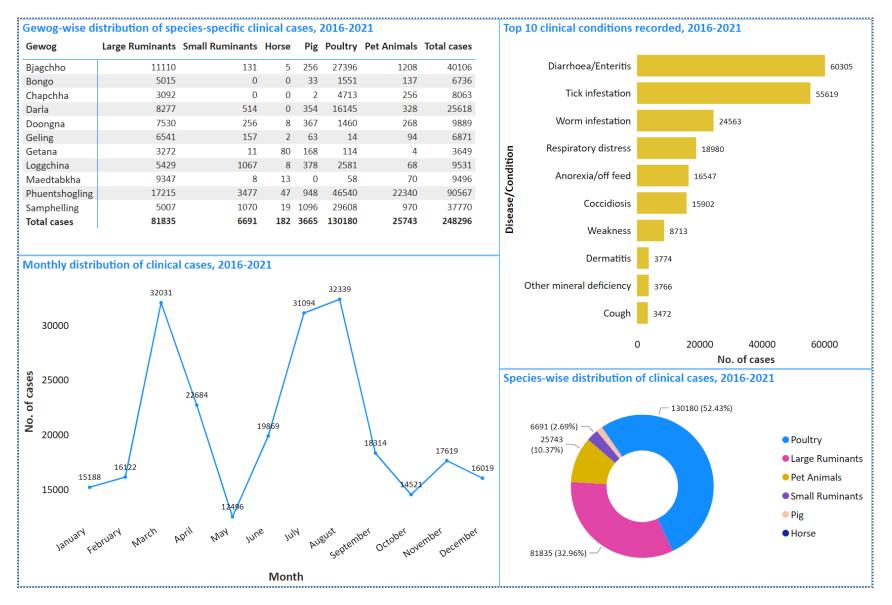
7467 - 9531

No.of Cases



CHHUKHA DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



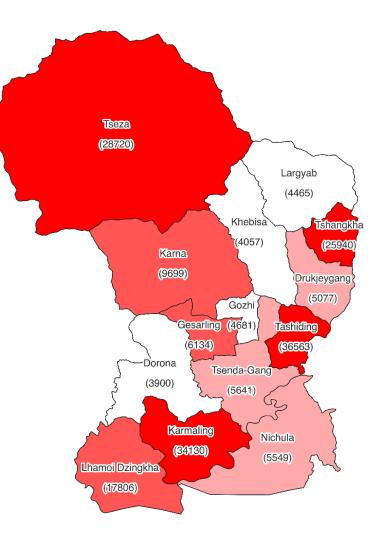
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DAGANA DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



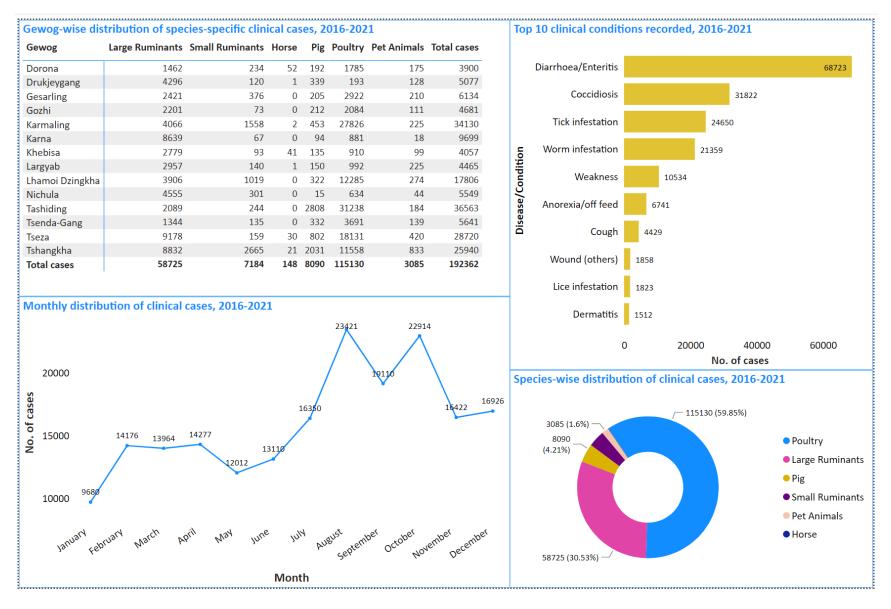
Dzongkhag Boundary	Prepared by: Disease Prevention and Control
No.of Cases	Unit (DPCU) National Centre for Animal Health (NCAH) Department of Livestock (DoL) Ministry of Agriculture Forests Year - 2022
3900 - 4780	
4780 - 5888	
5888 - 23907	
23907 - 36563	



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DAGANA DZONGKHAG

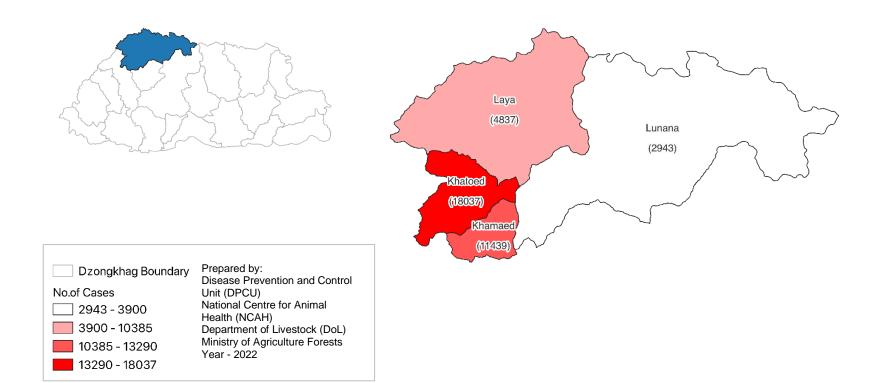
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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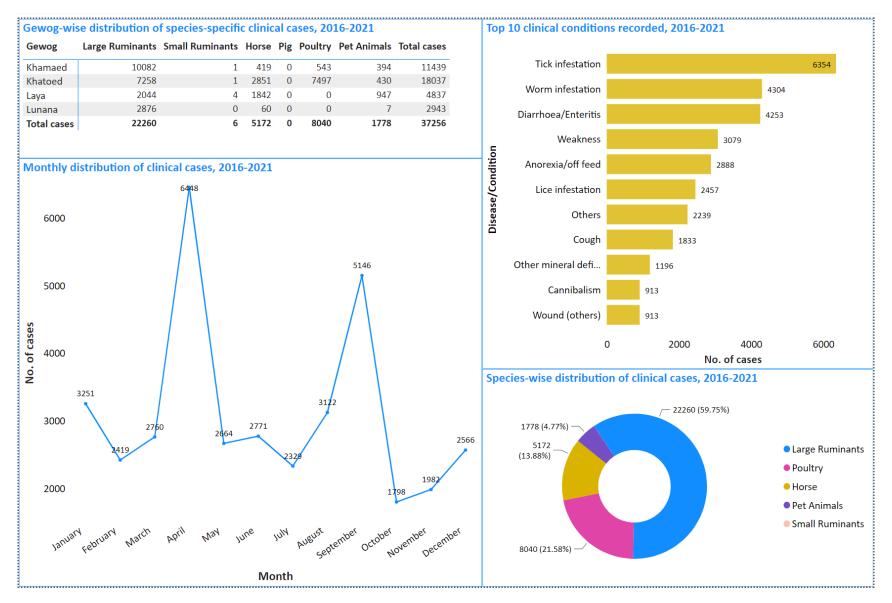
GASA DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



GASA DZONGKHAG

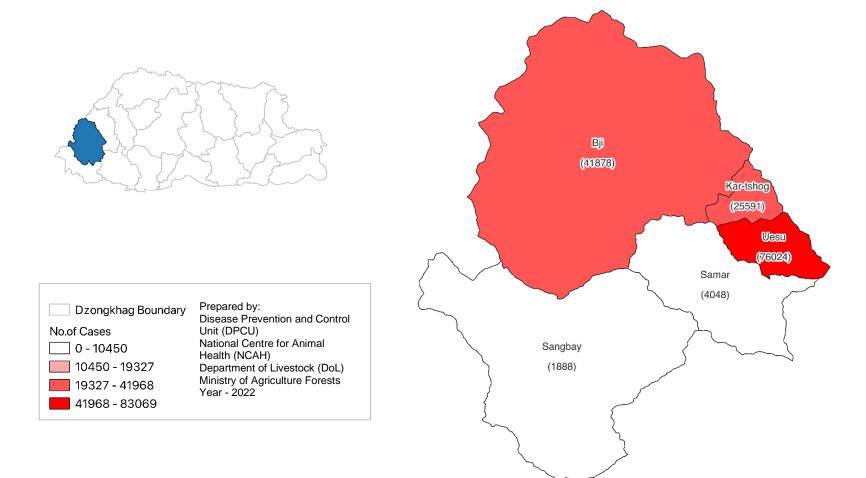
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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HAA DZONGKHAG

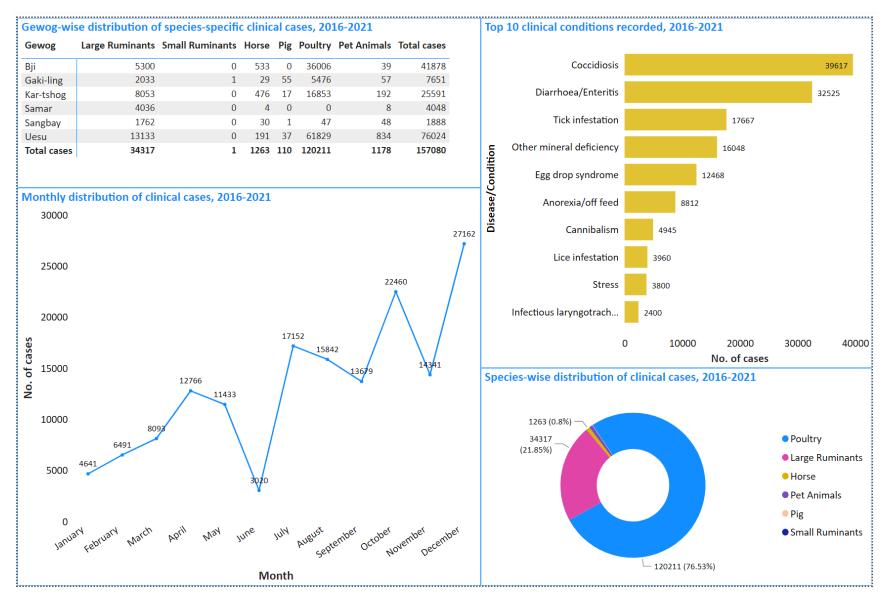
Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



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HAA DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



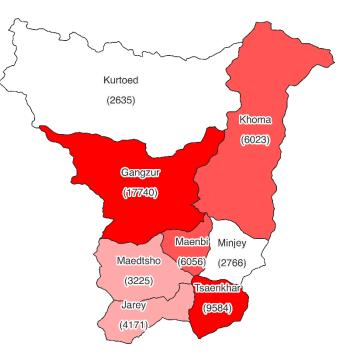
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LHUENTSE DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



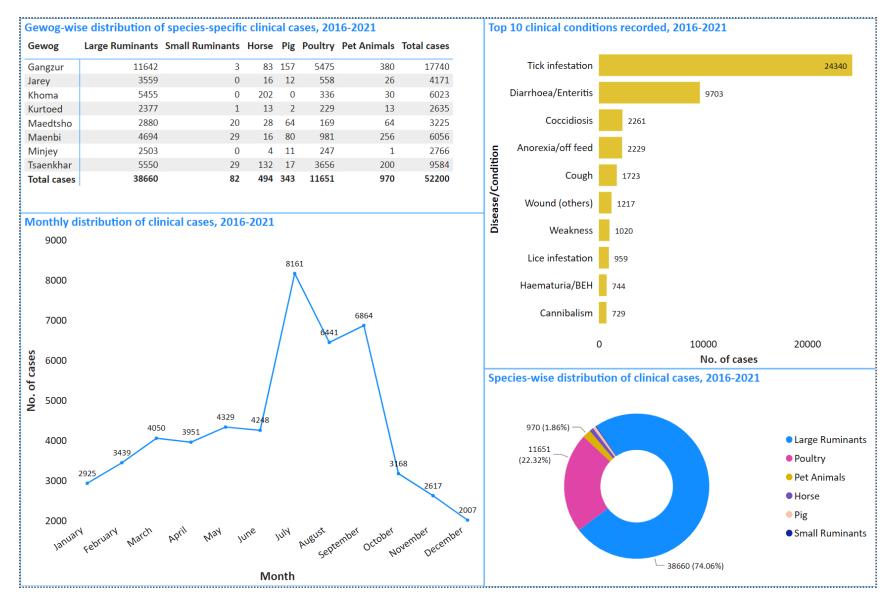
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LHUENTSE DZONGKHAG

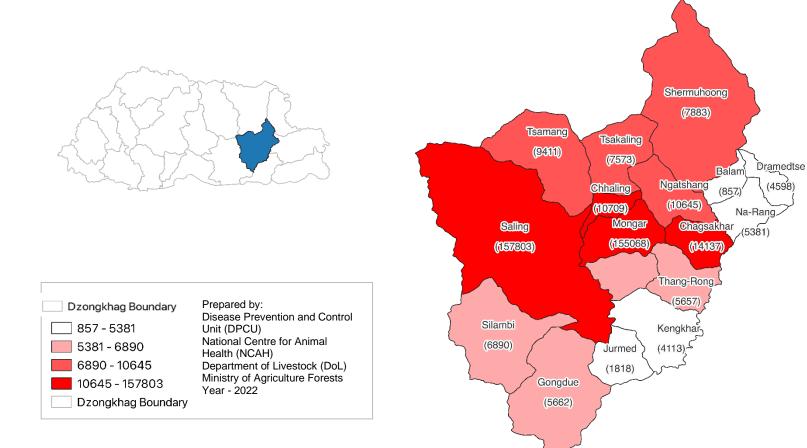
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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MONGAR DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.

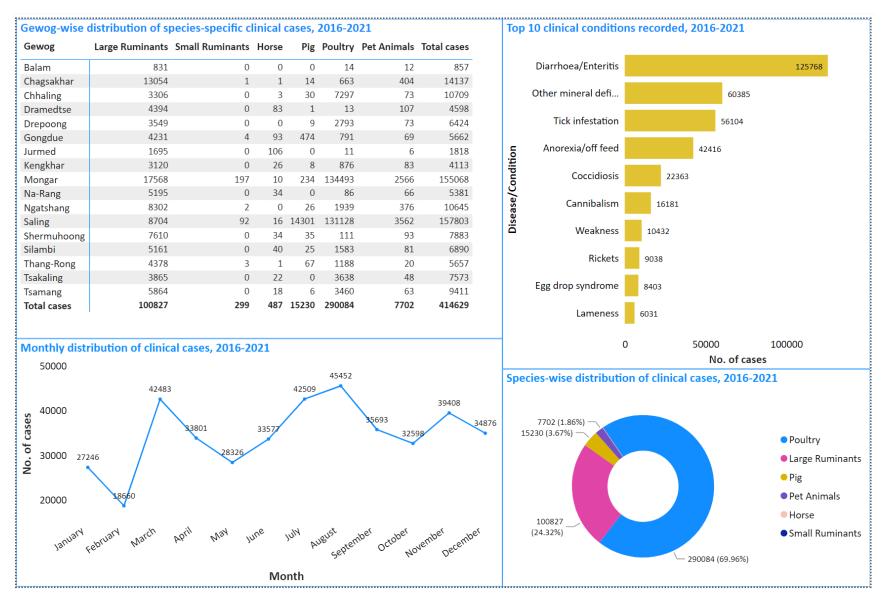


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MONGAR DZONGKHAG

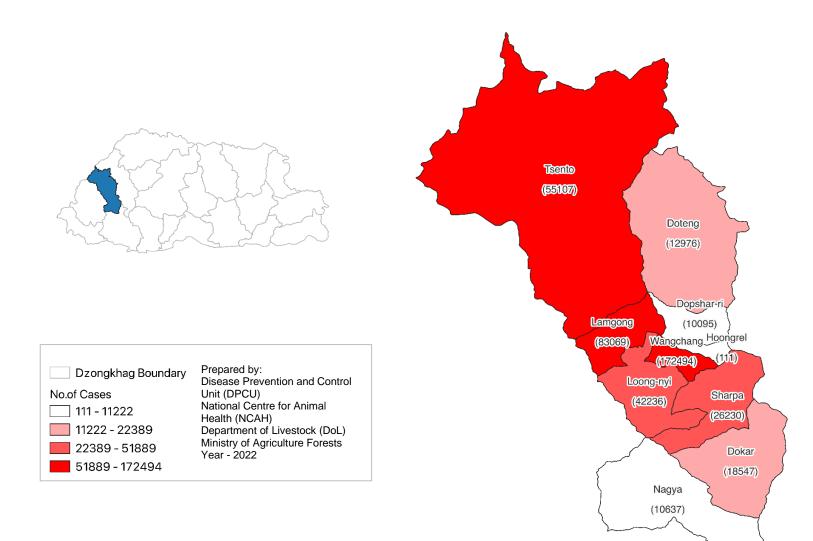
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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PARO DZONGKHAG

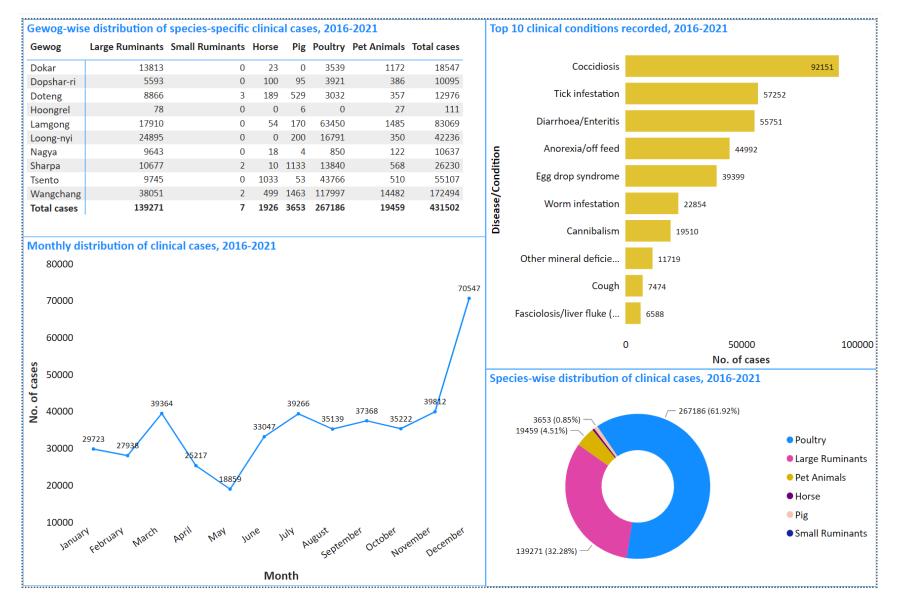
Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



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PARO DZONGKHAG

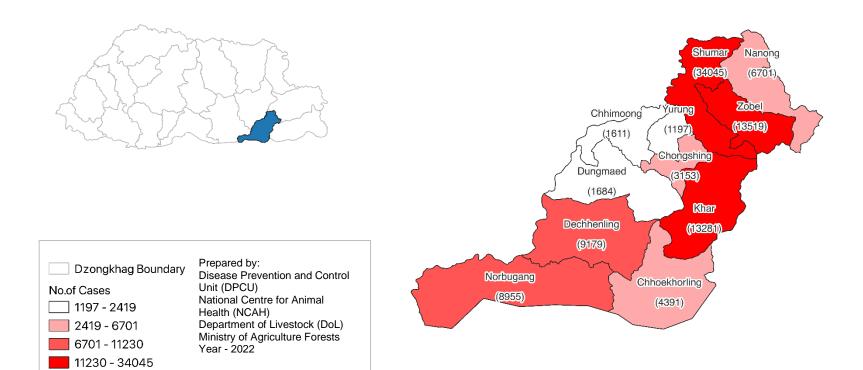
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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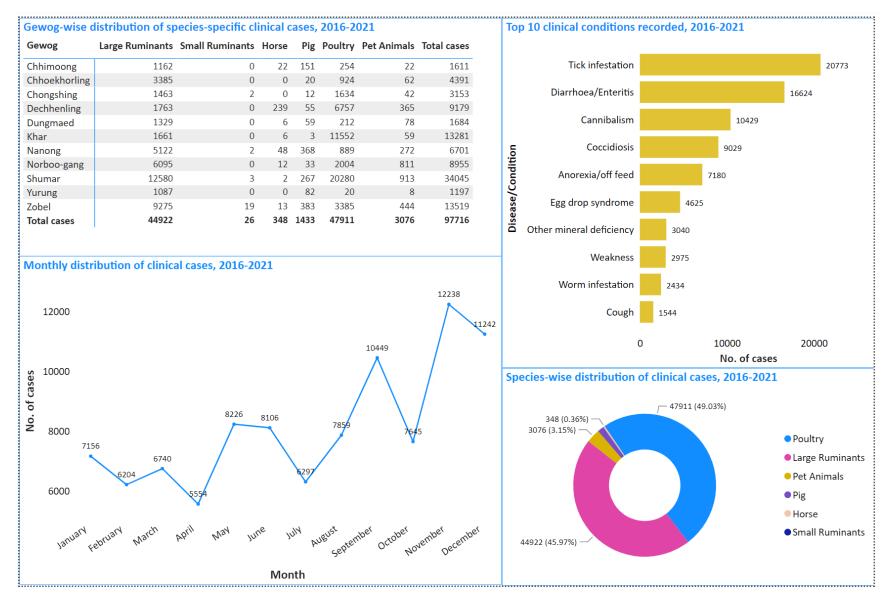
PEMA GATSHEL DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



PEMA GATSHEL DZONGKHAG

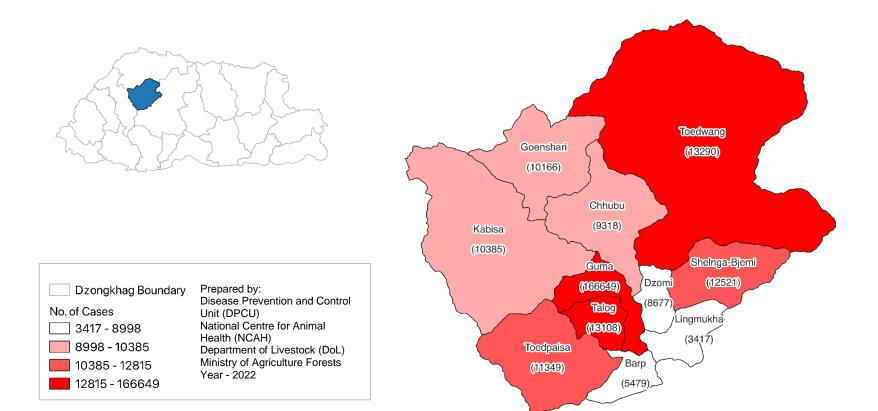
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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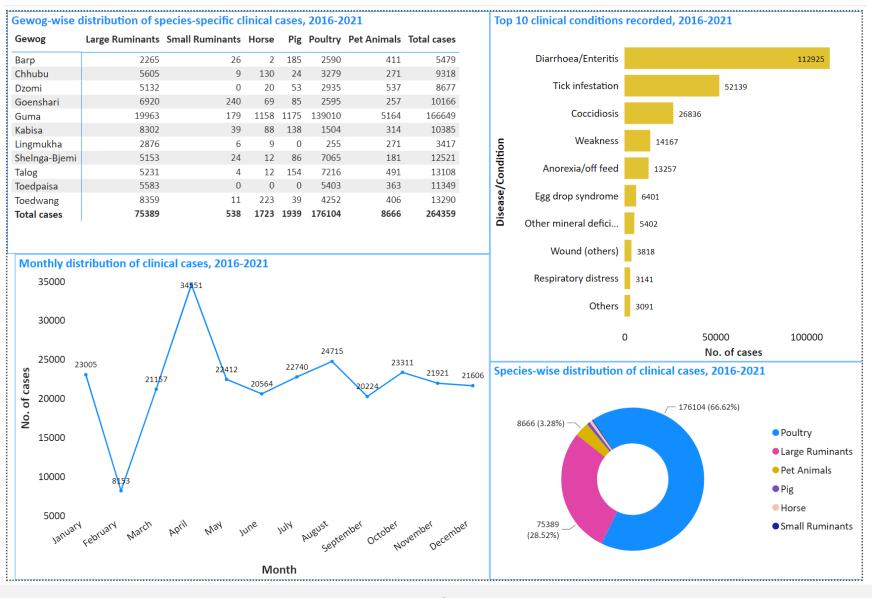
PUNAKHA DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



PUNAKHA DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.

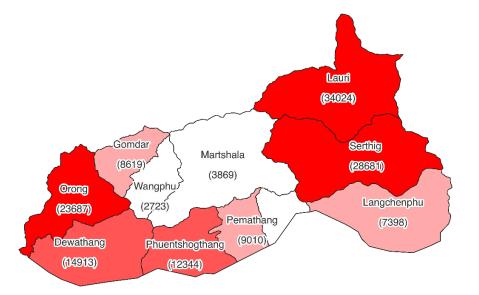


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SAMDRUP JONGKHAR DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



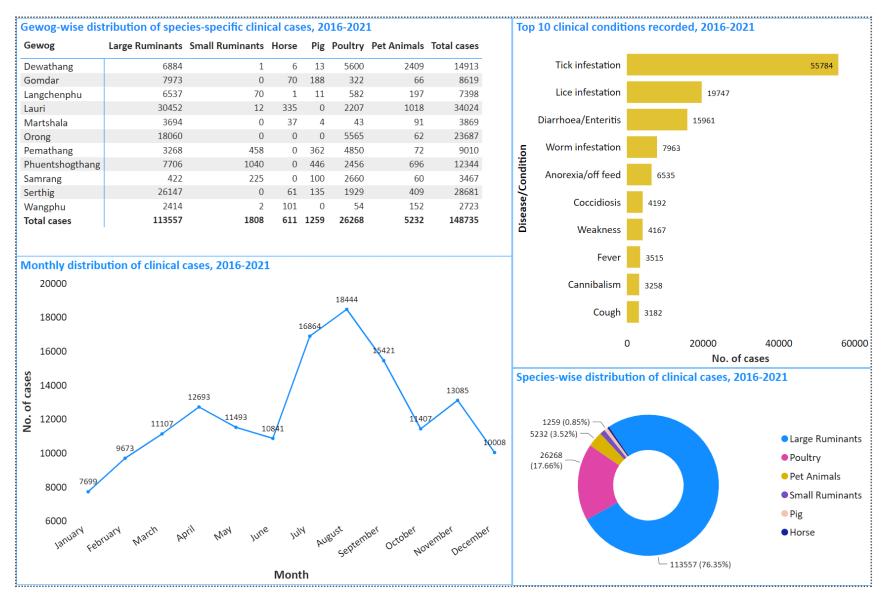


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SAMDRUP JONGKHAR DZONGKHAG

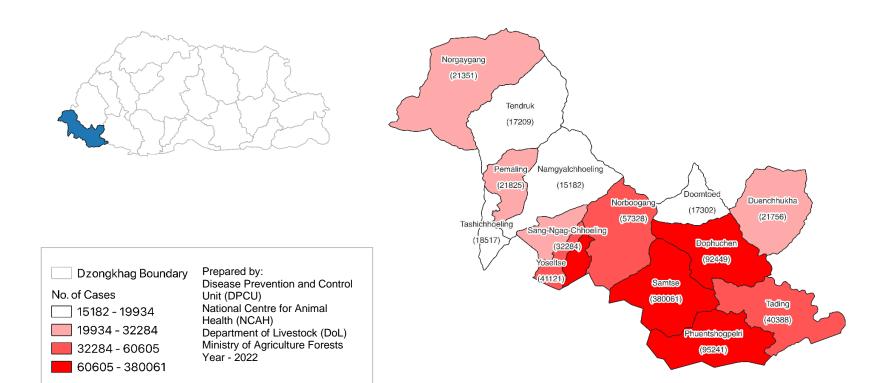
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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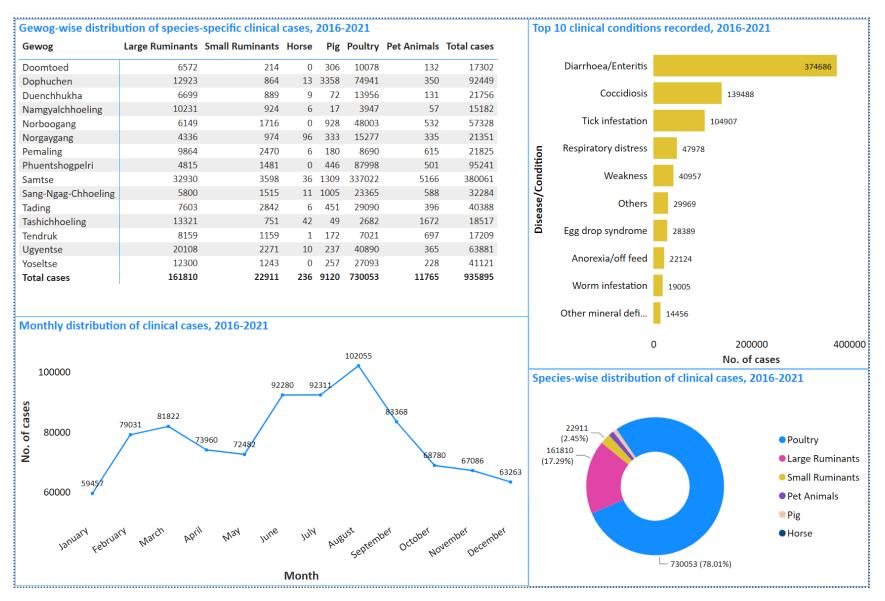
SAMTSE DZONGKHAG

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SAMTSE DZONGKHAG

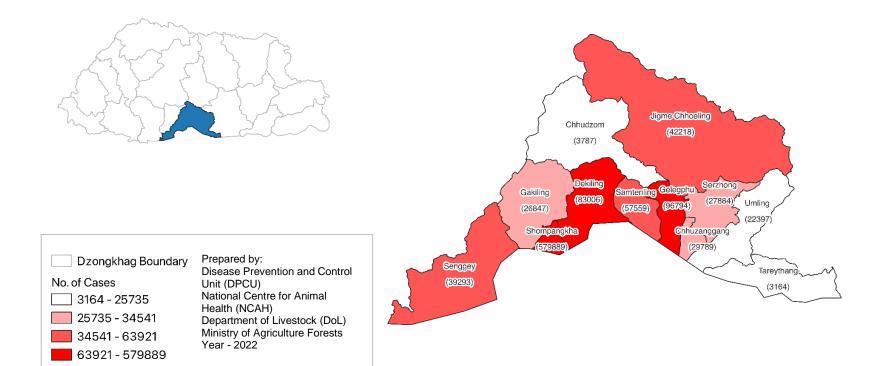
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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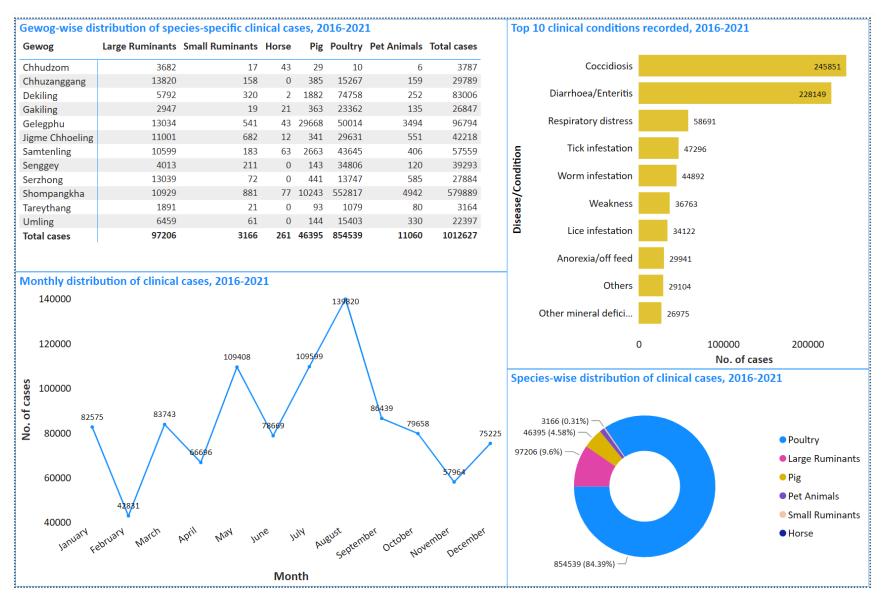
SARPANG DZONGKHAG

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SARPANG DZONGKHAG

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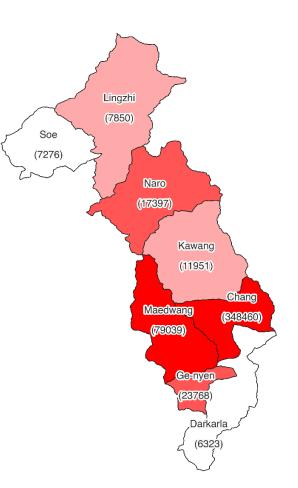
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THIMPHU DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



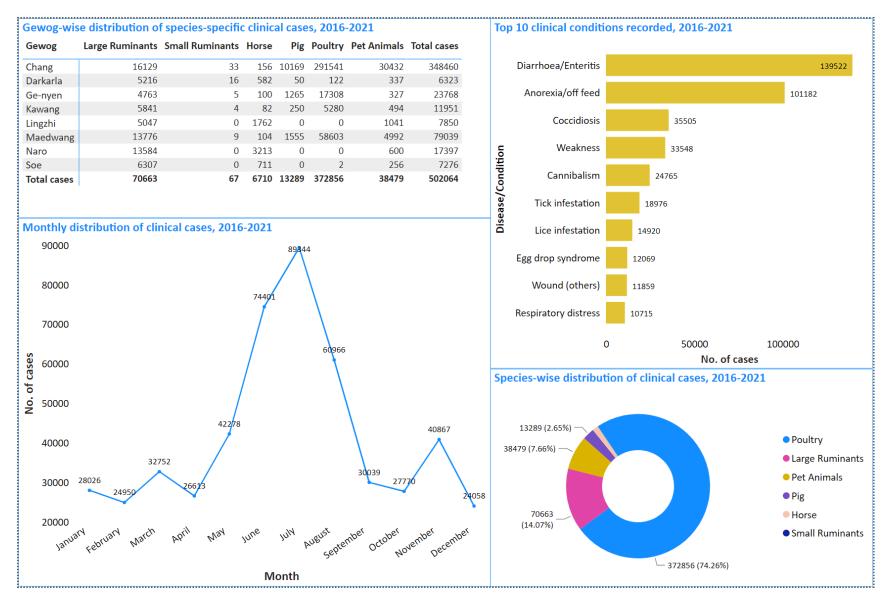
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THIMPHU DZONGKHAG

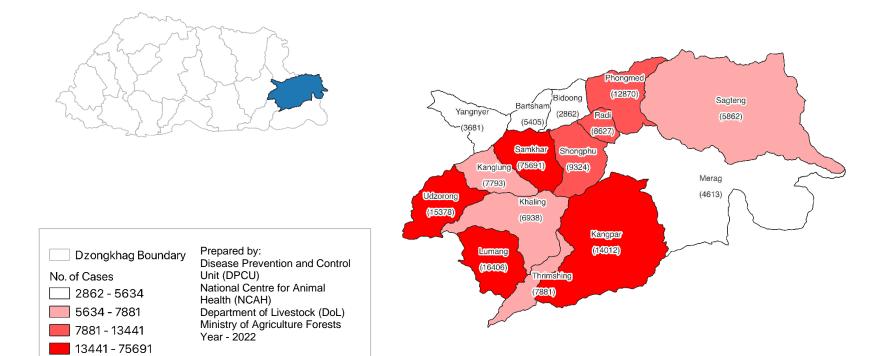
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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TRASHIGANG DZONGKHAG

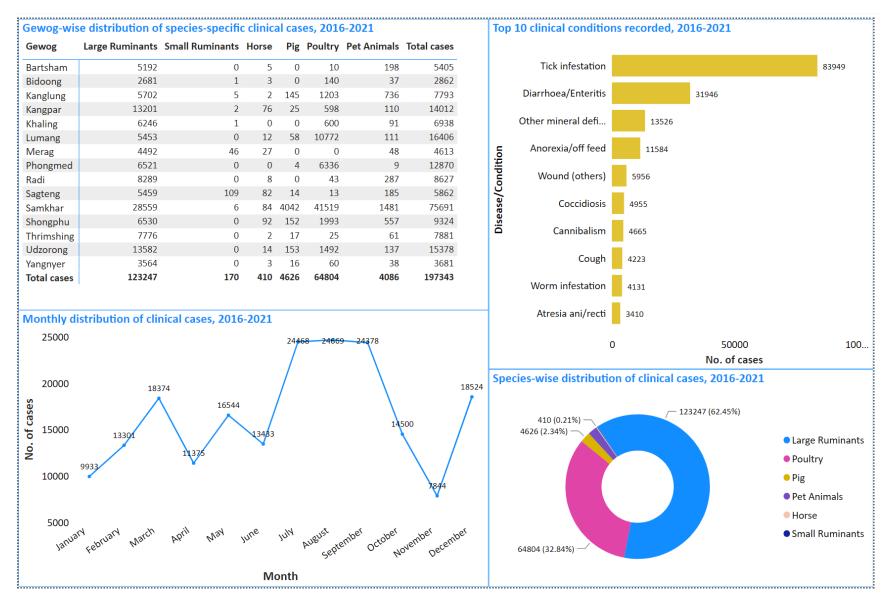
Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



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TRASHIGANG DZONGKHAG

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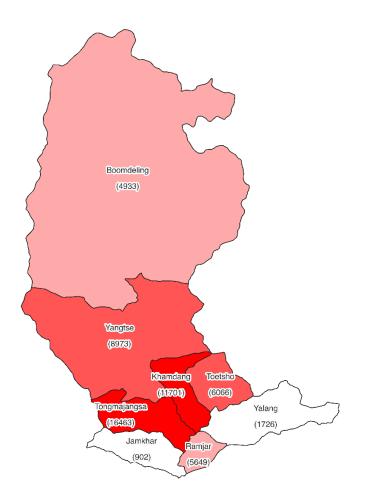
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TRASHI YANGTSE DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



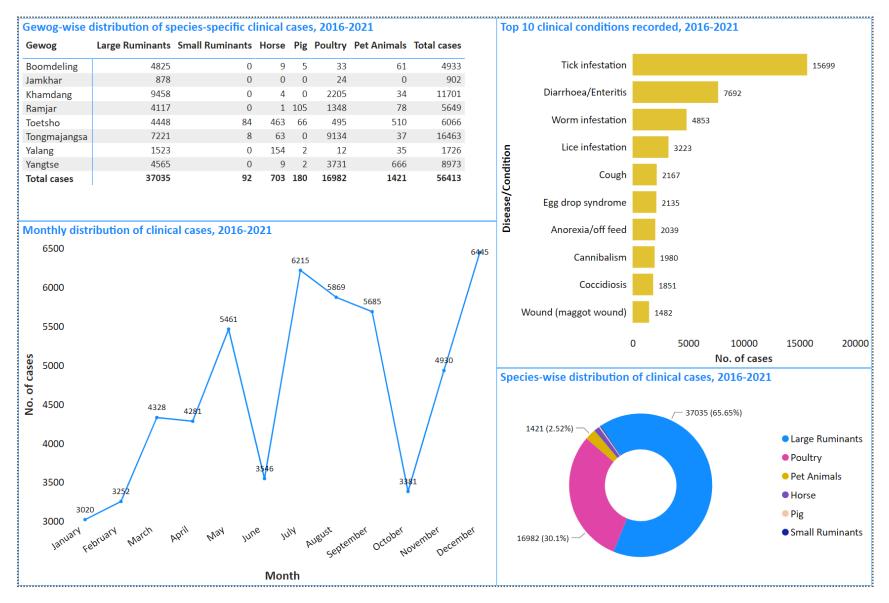
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9655 - 16463	
	No. of Cases 902 - 4131 4131 - 5858 5858 - 9655



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TRASHI YANGTSE DZONGKHAG

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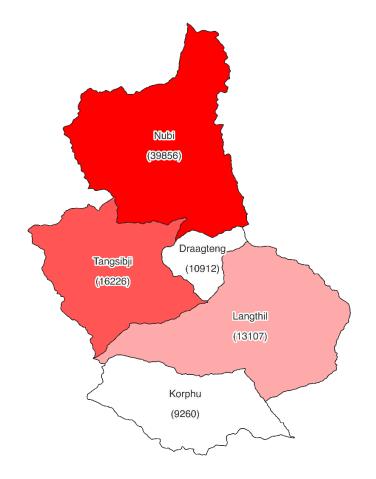


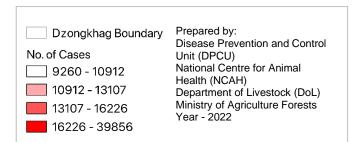
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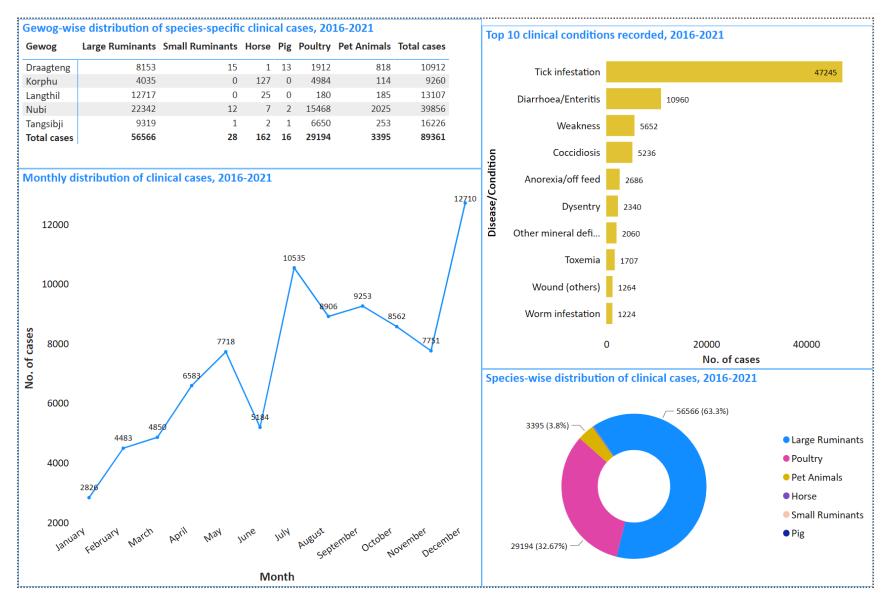




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TRONGSA DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



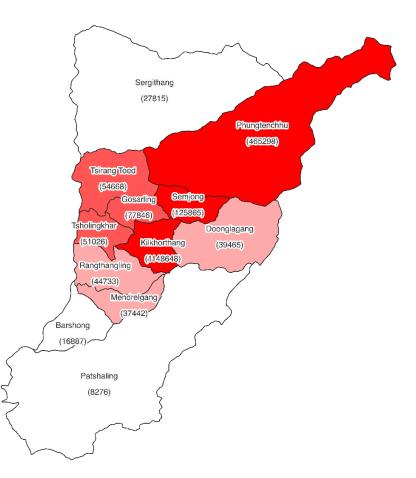
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TSIRANG DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



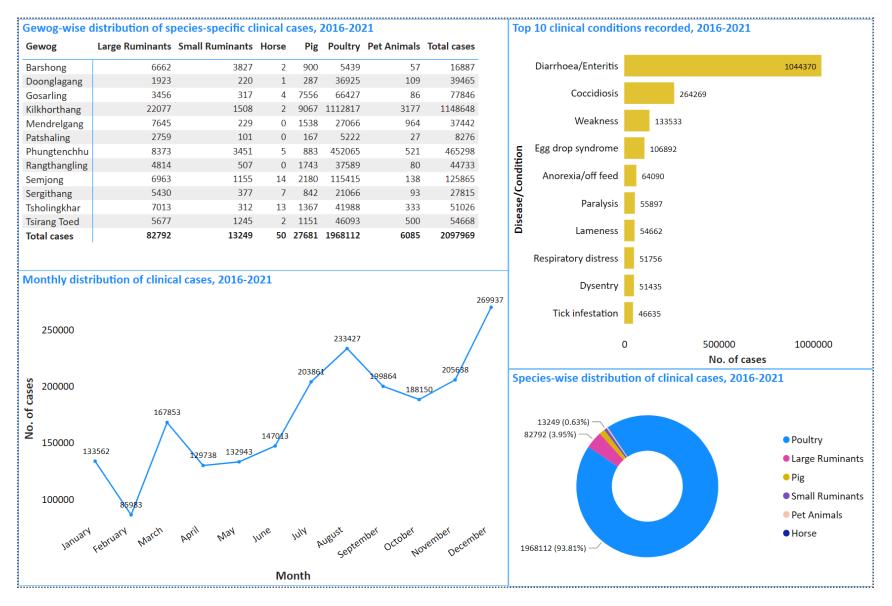
 Dzongkhag Boundary No. of Cases 8276 - 35035 35035 - 47880 47880 - 89851 89851 - 1148648 	Prepared by: Disease Prevention and Control Unit (DPCU) National Centre for Animal Health (NCAH) Department of Livestock (DoL) Ministry of Agriculture Forests Year - 2022
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TSIRANG DZONGKHAG

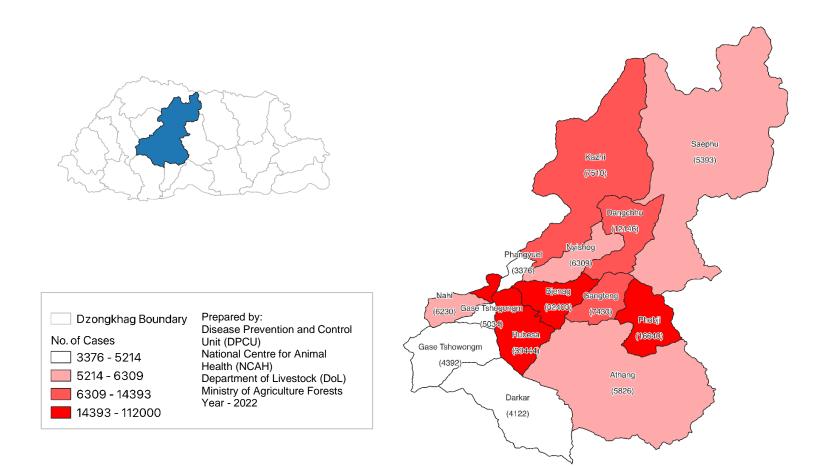
Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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WANGDUE PHODRANG DZONGKHAG

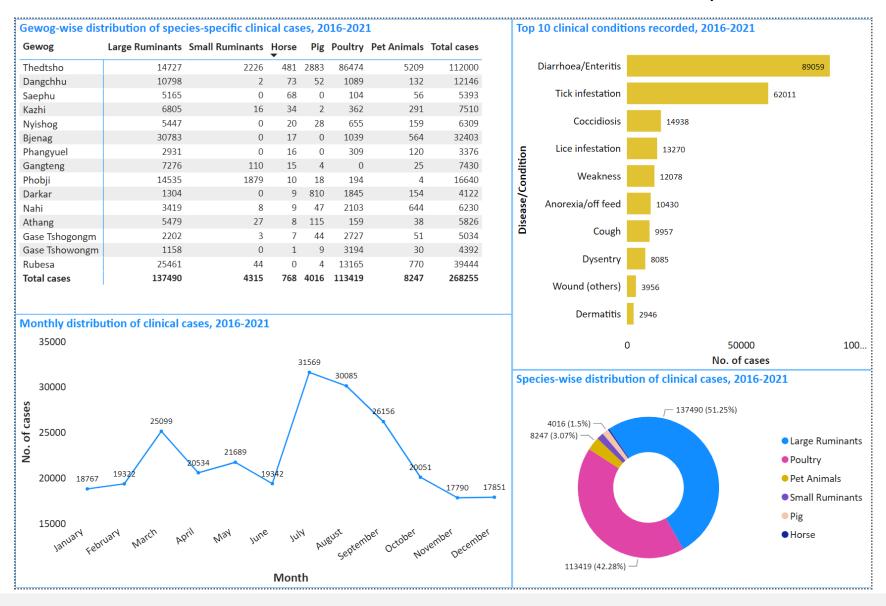
Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.



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WANGDUE PHODRANG DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.

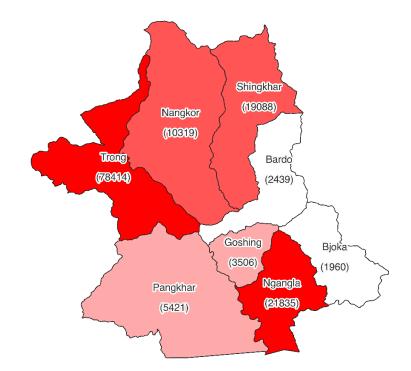


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ZHEMGANG DZONGKHAG

Spatial (gewog-wise) distribution of veterinary clinical cases recorded in the dzongkhag, July 2016 – December 2021.

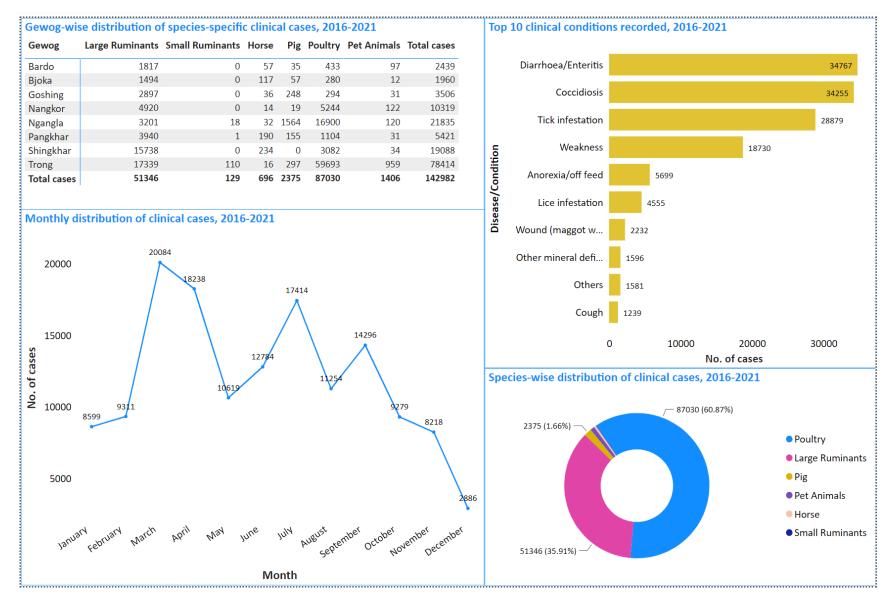




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ZHEMGANG DZONGKHAG

Gewog, month and species-specific distribution and the commonly recorded veterinary clinical cases in the dzongkhag, July 2016 – December 2021.



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স্ত্রনার্থন আঁর্রনার্থনের্থনা দেবল্টা দা ROYAL GOVERNMENT OF BHUTAN Ministry of Agriculture and Forests Department of Livestock National Centre for Animal Health

NATIONAL VETERINARY DRUG FORMULARY





2016 THIRD EDITION Compiled by

Drugs Vaccine & Equipment Unit National Centre for Animal Health Serbithang, Thimphu ROYAL GOVERNMENT OF BHUTAN Ministry of Agriculture and Forests Department of Livestock

NATIONAL ANIMAL HOSPITAL THIMPHU: BHUTAN

Standard Treatment Guide



FAN SUS

Antibiotic Guidelines for Livestock in Bhutan

Towards preserving the efficacy of antibiotics

Guiding documents for veterinary clinical services in Bhutan