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**LIVESTOCK DISEASE FOREWARNING BULLETIN- May 2017** 

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## Disclaimer

The forewarnings are based on the retrospective disease data available in the NADRES database. Hence, for those states wherein data is limited/less, the forewarning may not be realistic. Further the forewarning will not take into consideration the control measures that are *in situ*.

#### Acknowledgement

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We place on record our sincere thanks to our Director for his support and encouragement.

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Divakar Hemadri

S S Patil

# **Contents**

1. Introduction	1
2. NADRES Forewarning Procedure	2
3. Forewarning of livestock disease for the month of March2017	3
i) District wise Livestock Disease Forewarning	3
ii) State wise Livestock Disease Forewarning	40
iii) Livestock Disease Forewarning Maps	46
5. Appendix	60
A. SAS Code	60
B. Abbreviations	61

#### 1. Introduction

The National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) is a dedicated institute for veterinary epidemiology and disease informatics. The institute has played vital role in eradication and containment of various livestock diseases in India. With changing national and international scenarios the animal health is a priority for nation's economy and human health.

Livestock sector also plays a critical role in the welfare of India's rural population. This enterprise provides a flow of essential food products, draught power, manure, employment, income and export earnings as it is an important component in poverty alleviation programmes. Livestock development programmes cannot succeed unless a well-organized animal health service is built up and protection of livestock against diseases and pests particularly against the deadly infections is assured. India has achieved eradication of rinderpest (RP), CBPP, AHS and Dourine. However, there are several other infectious and non-infectious diseases prevailing in the country causing huge economic loss annually. Prevention, control and eradication of the animal diseases need a thorough understanding of the epidemiology as well their economic impact. ICAR-NIVEDI has identified priority diseases based on previous 10 year incidence patterns and has built a strong database of these priority diseases starting from 1987.

The said database is the backbone of National Animal Disease Referral Expert System (NADRES), the interactive, dynamic, online animal health and disease forewarning system.

#### 2. NADRES Forewarning Procedure

The Livestock Disease outbreak data of the previous month has to be retrieved from the NADRES website to generate the status of the outbreak by updating the existing NADRES data consisting of the Agro-economic and Metrological information using SAS. (Appendix A)

For predicting the disease outbreak Logistic Regression Analysis was done using the SAS software. The predicted data was depicted in a tabular format and is exported to an excel sheet.

#### 3. Forewarning of livestock disease for the month of May 2017

#### i) District wise Livestock Disease forewarning:

#### District wise Livestock Disease forewarning for May 2017: Andaman and Nicobar

						Live	stock D	isease	es					No. of
Districts of Andaman and Nicobar	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Nicobar	0	0	0	0	0	1	0	0	0	0	0	0	0	1
North and Middle Andaman	0	0	0	0	0	1	0	0	0	0	0	0	0	1
South Andaman	0	0	0	0	0	1	0	0	0	0	0	0	0	1
No.of Disease Districts likely to report	0	0	0	0	0	3	0	0	0	0	0	0	0	3

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Andhra Pradesh

Districts of						Live	stock D		es					No. of
Andhra Pradesh	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Anantapur	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Chittoor	1	0	1	0	1	0	1	1	1	1	0	0	0	7
East Godavari	0	0	1	0	1	0	0	1	1	1	0	0	0	5
Guntur	0	0	0	0	0	0	1	1	1	1	0	0	0	4
Krishna	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Kurnool	1	0	1	0	1	1	0	1	1	1	0	0	0	7
Prakasam	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Sri Potti Sriramalu Nellore	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Srikakulam	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Visakhapatnam	0	0	1	0	0	0	0	1	1	0	0	0	0	3
Vizianagaram	0	0	1	0	1	0	0	1	1	0	0	0	0	4
West Godavari	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Y.s.r.	1	0	1	0	1	1	1	1	1	1	0	0	0	8
No.of Disease Districts likely to report	6	0	12	0	11	2	9	13	13	11	0	0	0	77

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Arunachal Pradesh

Districts of						Live	stock D	isease	es					No. of
Arunachal Pradesh	Anthr ax	Babes iosis	BQ	ВТ	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Assam

						Live	stock D					· · · · · · · · · · · · · · · · · · ·		No. of
Districts of Assam	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Barpeta	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Cachar	0	0	1	0	0	1	1	1	0	0	0	0	0	4
Chirang	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Darrang	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Dhemaji	0	0	1	0	0	1	1	0	0	0	1	0	0	4
Dhubri	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Dibrugarh	0	0	1	0	0	1	1	0	0	0	1	0	0	4
Dima Hasao (North Cachar Hill)	0	0	1	0	0	0	1	0	0	0	1	0	0	3
Goalpara	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Golaghat	0	0	1	0	0	0	1	1	0	0	1	0	0	4
Hailakandi	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Jorhat	0	0	1	0	0	1	1	1	0	0	1	0	0	5
Kamrup(Dispur)	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Karimganj	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Kokrajhar	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Lakhimpur	0	0	1	0	0	0	0	1	0	0	1	0	0	3
Nagaon	1	0	1	0	0	0	1	1	0	0	0	0	0	4
Nalbari	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Sivasagar	1	0	1	0	0	1	1	1	0	0	1	0	0	6
Sonitpur	1	0	1	0	0	1	1	1	0	0	1	0	0	6
Tinsukia	0	0	1	0	0	1	1	0	0	0	0	0	0	3
No.of Disease Districts likely to report	3	0	20	0	0	7	16	12	0	0	8	0	0	66

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Bihar

		TICE WI		.,	oci i					i iviay	201	7. Dilla		
D:-4:-46		ı	ı	ı	ı	Live	stock D	isease	S	ı		I	T	No. of
Districts of Bihar	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Araria	0	1	1	0	0	1	0	1	0	0	0	1	1	6
Arwal	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Aurangabad	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Banka	0	0	1	0	0	0	0	1	0	0	0	1	1	4
Begusarai	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Bhagalpur	0	0	1	0	0	0	0	1	0	0	0	1	1	4
Bhojpur	0	0	0	0	0	1	1	1	0	0	0	0	1	4
Buxar	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Darbhanga	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Gaya	0	0	1	0	0	1	1	1	0	0	0	0	1	5
Gopalganj	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Jamui	0	0	1	0	0	0	0	1	0	0	0	1	1	4
Kaimur (Bhabua)	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Katihar	0	1	1	0	0	0	0	1	0	0	0	1	1	5
Khagaria	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Kishanganj	0	1	0	0	0	0	0	1	0	0	0	1	1	4
Lakhisarai	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Madhepura	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Madhubani	0	0	1	0	0	0	0	1	0	0	0	1	1	4
Munger	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Muzaffarpur	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Nalanda	0	0	0	0	0	0	0	0	0	0	0	0	1	1

#### Continue

						Live	stock D	isease	es .					No. of
Districts of Bihar	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Nawada	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Pashchim Champaran	0	1	0	0	0	1	0	1	0	0	0	1	1	5
Patna	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Purba Champaran	0	1	0	0	0	1	0	1	0	0	0	1	1	5
Purnia	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Rohtas	0	0	0	0	0	1	0	0	0	0	0	0	1	2
Saharsa	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Samastipur	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Saran (chhapra)	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Sheikhpura	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Sheohar	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Sitamarhi	0	1	0	0	0	0	0	1	0	0	0	1	1	4
Siwan	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Supaul	0	0	0	0	0	0	0	1	0	0	0	1	1	3
Vaishali	0	0	0	0	0	0	0	0	0	0	0	1	1	2
No.of Disease Districts likely to report	0	9	7	0	0	6	2	22	0	0	0	25	37	108

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Chhattisgarh

						Live	stock D	isease	S					No. of
Districts of Chhattisgarh	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bastar	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Durg	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Raipur	0	0	1	0	0	0	0	1	0	0	0	0	0	2
No.of Disease Districts likely to report	0	0	3	0	0	0	0	2	0	0	0	0	0	5

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Dadra and Nagar Haveli

Districts of						Live	stock D	isease	s					No. of
Dadra and Nagar Haveli	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Daman and Diu

Districts of						Live	stock D	isease	es					No. of
Daman and Diu	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Daman	0	0	1	0	0	0	1	1	0	0	0	0	0	3
No.of Disease Districts likely to report	0	0	1	0	0	0	1	1	0	0	0	0	0	3

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Goa

						Live	stock D	isease	S					No. of
Districts of Goa	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017:Gujarat

Districts of Gujarat						Live	stock D	isease	es					No. of Diseases likely to
	Anthr ax	Babes iosis	BQ	ВТ	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	occur
Ahmedabad	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Amreli	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Anand	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Banas Kantha	0	0	0	0	0	0	1	1	0	1	0	0	0	3
Bharuch	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Bhavnagar	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Dohad	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Gandhinagar	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Jamnagar	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Junagadh	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Kachchh	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Kheda	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Mehsana	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Navsari	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Panch Mahals	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Patan	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Porbandar	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Rajkot	1	0	0	0	0	0	1	1	0	0	0	0	0	3
Sabar Kantha	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Surendranagar	0	0	0	0	0	0	1	1	0	0	0	0	0	2
The Dangs	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Vadodara	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Valsad	0	0	1	0	0	0	1	1	0	0	0	0	0	3
No.of Disease Districts likely to report	1	0	7	0	0	0	16	21	0	1	0	0	0	46

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Haryana

						Live	stock D	isease	S					No. of
Districts of Haryana	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Hisar	0	0	0	0	1	0	1	0	0	0	0	0	0	2
Jind	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Kaithal	0	0	0	0	0	0	1	0	0	0	0	0	0	1
No.of Disease Districts likely to report	0	0	0	0	1	0	3	0	0	0	0	0	0	4

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Himachal Pradesh

Districts of						Live	stock D	isease	es					No. of
Himachal pradesh	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Chamba	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Kangra	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Kullu	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Lahul and Spiti	0	0	0	0	0	0	1	0	0	0	0	0	0	1
No.of Disease Districts likely to report	0	0	1	0	0	0	3	0	1	0	0	0	0	5

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Jammu and Kashmir

	1100 1112												IXASIIIIII	
Districts of						Live	stock D	isease	es					No. of Diseases
Jammu and Kashmir	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	likely to occur
Anantnag (Kashmir South)	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Badgam	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Baramula	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Doda	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Jammu	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Kargil	0	0	0	0	0	0	1	0	0	1	0	0	0	2
Kathua	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Kupwara	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Leh (ladakh)	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Pulwama	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Punch	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Rajouri	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Srinagar	0	0	0	0	0	0	1	0	0	1	0	0	0	2
Udhampur	0	0	1	0	0	0	1	1	0	1	0	0	0	4
No.of Disease Districts likely to report	0	0	9	0	0	0	14	1	0	11	0	0	0	35

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Jharkhand

						Live	stock D					91141 1112		No. of
Districts of Jharkhand	Anthr ax	Babes iosis	BQ	ВТ	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bokaro	0	1	0	0	0	1	0	1	0	0	0	1	1	5
Chatra	0	1	0	0	0	1	0	0	0	0	0	1	1	4
Deoghar	0	1	1	0	0	0	0	1	0	0	0	1	1	5
Dhanbad	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Dumka	0	1	1	0	0	1	1	1	0	0	0	1	1	7
Garhwa	0	1	0	0	0	1	0	0	0	0	0	1	1	4
Giridih	0	1	1	0	0	0	0	1	0	0	0	1	1	5
Godda	0	1	1	0	0	1	0	0	0	0	0	1	1	5
Gumla	0	1	1	0	0	1	0	1	0	0	0	1	1	6
Hazaribagh	0	1	0	0	0	1	0	0	0	0	0	1	1	4
Jamtara	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Koderma	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Latehar	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Lohardaga	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Pakur	0	1	1	0	0	1	0	1	0	0	0	1	1	6
Palamu	0	1	1	0	0	0	0	0	0	0	0	1	1	4
Pashchimi Singhbhum	0	1	1	0	0	1	0	1	0	0	0	1	1	6
Purbi Singhbhum	0	1	1	0	0	1	0	1	0	0	0	1	1	6
Ranchi	0	1	1	0	0	1	0	1	0	0	0	1	1	6
Sahibganj	0	1	1	0	0	1	0	0	0	0	0	1	1	5
Seraikela - Kharsawan	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Simdega	0	1	0	0	0	1	0	0	0	0	0	1	1	4
No.of Disease Districts likely to report	0	20	11	0	0	13	1	9	0	0	0	21	22	97

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Karnataka

						Live	stock D	isease	e <b>S</b>					No. of
Districts of Karnataka	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bagalkot	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Bangalore	0	0	1	0	0	0	1	1	0	1	0	0	0	4
Bangalore Rural	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Belgaum	0	0	1	0	1	0	1	1	0	1	0	0	0	5
Bellary	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Bidar	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Bijapur	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Chamarajnagar	0	0	1	0	1	0	1	1	0	0	0	0	0	4
Chikmagalur	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Chitradurga	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Dakshina Kannada	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Davanagere	1	0	1	0	1	0	1	1	0	1	0	0	0	6
Dharwad	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Gadag	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Gulbarga	0	0	1	0	0	0	1	1	0	0	0	0	0	3

#### Continue

						Live	stock D	isease	es					No. of
Districts of Karnataka	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Hassan	0	0	1	0	1	0	1	1	0	1	0	0	0	5
Haveri	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Kodagu	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Kolar	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Koppal	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Mandya	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Mysore	1	0	1	0	1	0	1	1	0	1	0	0	0	6
Raichur	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Shimoga	0	0	1	0	1	0	1	1	0	0	0	0	0	4
Tumkur	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Udupi	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Uttara Kannada	0	0	1	0	0	0	0	1	0	0	0	0	0	2
No.of Disease Districts likely to report	7	0	26	0	14	0	19	27	8	13	0	0	0	114

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewrning for May 2017: Kerala

						Live	stock D	isease	es					No. of
Districts of Kerala	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Ernakulam	1	1	1	0	0	1	1	1	1	0	0	1	0	8
ldukki	1	1	0	0	0	1	1	1	1	0	0	1	0	7
Kannur	0	1	1	0	0	0	1	1	0	0	0	1	0	5
Kasaragod	1	1	1	0	0	1	1	1	0	0	0	1	0	7
Kollam	1	1	0	0	0	1	1	1	1	0	0	1	0	7
Kottayam	1	1	0	0	0	1	1	1	1	0	0	1	0	7
Kozhikode	1	1	0	0	0	1	1	1	0	0	0	1	0	6
Malappuram	1	1	0	0	0	1	1	0	0	0	0	1	0	5
Palakkad	1	1	1	0	0	0	1	1	0	0	0	1	0	6
Pathanamthitta	1	1	0	0	0	1	1	1	1	0	0	1	0	7
Thiruvananthap uram	1	1	0	0	0	1	1	1	1	0	0	1	0	7
Thrissur	1	1	1	0	0	1	1	1	1	0	0	1	0	8
Wayanad	1	1	0	0	0	1	1	0	0	0	0	1	0	5
No.of Disease Districts likely to report	12	13	5	0	0	11	13	11	7	0	0	13	0	85

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Lakshadweep

Districts of						Live	stock D	isease	es					No. of Diseases
Lakshadweep	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted , 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Madhya Pradesh

Districts of						Live	stock D	isease	es					No. of
Madhya Pradesh	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Balaghat	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Betul	0	0	1	0	0	0	1	0	1	0	0	0	0	3
Chhindwara	0	0	1	0	0	0	1	0	1	0	0	0	0	3
No.of Disease Districts likely to report	0	0	3	0	0	0	3	0	2	0	0	0	0	8

0 = Not predicted , 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Maharashtra

						Live	stock D	isease	es					No. of
Districts of Maharastra	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Ahmadnagar	1	0	1	0	0	0	1	1	1	1	0	0	0	6
Aurangabad(MH )	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Bhandara	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Bid	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Buldana	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Dhule	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Gondiya	0	0	1	0	0	0	1	0	1	0	0	0	0	3
Hingoli	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Jalgaon	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Jalna	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Kolhapur	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Latur	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Nagpur	0	0	1	0	0	0	1	0	1	0	0	0	0	3
Nanded	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Nandurbar	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Nasik	0	0	1	0	0	0	1	1	1	0	0	0	0	4
Osmanabad	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Parbhani	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Pune	1	0	1	0	0	0	0	1	0	1	0	0	0	4
Sangli	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Satara	0	0	1	0	0	0	0	1	0	1	0	0	0	3
Solapur	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Thane	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Yavatmal	0	0	1	0	0	0	0	1	0	0	0	0	0	2
No.of Disease Districts likely to report	2	0	20	0	0	0	9	21	5	3	0	0	0	60

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Manipur

						Live	stock D	isease	es					No. of
Districts of Manipur	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bishnupur	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Chandel	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Churachandpur	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Senapati	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Temenglong	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Thoubal	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Ukhrul	0	0	1	0	0	0	0	0	0	0	1	0	0	2
No.of Disease Districts likely to report	0	0	6	0	0	0	0	0	0	0	7	0	0	13

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Meghalaya

						Live	stock D	isease	es					
Districts of Meghalaya	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	No. of Diseases likely to occur
East Jaintia Hills	0	0	1	0	0	0	0	0	0	0	1	0	0	2
East khasi hills	0	0	1	0	0	0	1	0	0	0	1	0	0	3
Jaintia hills	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ri bhoi	0	0	0	0	0	0	0	0	0	0	1	0	0	1
West garo hills	0	0	1	0	0	0	1	1	0	0	1	0	0	4
West khasi hills	0	0	1	0	0	0	0	0	0	0	1	0	0	2
No.of Disease Districts likely to report	0	0	4	0	0	0	2	1	0	0	6	0	0	13

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Mizoram

						Live	stock D	isease	es .					No. of
Districts of Mizoram	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Aizawl	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Kolasib	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Lunglei	0	0	0	0	0	1	1	0	0	0	1	0	0	3
Mamit	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Saiha	0	0	0	0	0	1	1	0	0	0	1	0	0	3
Serchhip	0	0	0	0	0	1	1	0	0	0	1	0	0	3
No.of Disease Districts likely to report	0	0	3	0	0	3	3	0	0	0	6	0	0	15

0 = Not predicted, 1 = Predicted

#### District wise Livestock Disease forewarning for May 2017: Nagaland

Districts of Nagaland						Live	stock D	isease	es .					No. of
	Anthr ax	Babes iosis	BQ	ВТ	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Wokha	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Zunheboto	0	0	0	0	0	0	0	0	0	0	1	0	0	1
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	2	0	0	2

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: NCT OF DELHI

Districts of Nagaland		Livestock Diseases													
	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	likely to occur	
South West	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
West	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	2	0	0	2	

0 = Not predicted , 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Odisha

						Live	stock D	isease	es					No. of Diseases likely to occur
Districts of Odisha	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	
Baleshwar	0	1	1	0	0	0	1	0	0	0	0	0	0	3
Bhadrak	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Cuttack	0	1	1	0	0	0	0	1	0	0	0	1	0	4
Gajapati	0	1	1	0	0	0	0	0	0	0	0	1	0	3
Ganjam	0	0	1	0	0	0	1	1	1	0	0	0	0	4
Jagatsinghpur	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Jajapur	0	1	1	0	0	0	0	0	0	0	0	1	0	3
Kandhamal	0	1	1	0	0	0	0	0	0	0	0	0	1	3
Kendrapara	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Khordha	0	1	1	0	0	0	0	0	0	0	0	1	0	3
Koraput	1	0	1	0	0	0	0	1	1	0	0	0	0	4
Malkangiri	0	1	1	0	0	0	0	0	0	0	0	0	1	3
Mayurbhanj	0	0	1	0	0	0	0	0	1	0	0	0	0	2
Nayagarh	0	1	1	0	0	0	0	0	0	0	0	1	0	3
Puri	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Rayagada	0	1	1	0	0	0	0	0	0	0	0	0	0	2
No.of Disease Districts likely to report	1	11	15	0	0	0	2	3	3	0	0	5	2	42

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Puducherry

Districts of Puducherry		Livestock Diseases													
	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	No. of Diseases likely to occur	
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

0 = Not predicted, 1 = Predicted

## District wise Livestock Disease forewarning for May 2017: Punjab

Districts of Punjab		Livestock Diseases													
	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	No. of Diseases likely to occur	
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Rajasthan

20.1.1.0						Live	stock D	isease	es .					No. of
Districts of Rajasthan	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bikaner	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Jaisalmer	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Nagaur	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Sikar	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Udaipur	0	0	0	0	0	0	1	0	0	0	0	0	0	1
No.of Disease Districts likely to report	1	0	0	0	0	0	4	0	0	0	0	0	0	5

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Sikkim

						Live	stock D	isease	s					No. of
Districts of Sikkim	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Tamil Nadu

						Live	estock D	isease	e	-				No. of
Districts of Tamil Nadu	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Cuddalore	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Dharmapuri	1	0	0	0	0	0	0	0	1	0	0	0	0	2
Erode	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Kancheepuram	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Kanniyakumari	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Karur	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Pudukkottai	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Salem	1	0	0	0	0	0	0	0	1	0	0	0	0	2
Thanjavur	0	0	0	0	0	0	1	0	0	0	0	0	0	1
The Nilgiris	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Thiruvallur	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Tirunelveli	1	0	1	0	0	0	1	1	1	0	0	0	0	5
No.of Disease Districts likely to report	7	0	5	0	0	1	2	1	4	1	0	0	0	21

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Telangana

						Live	stock D	isease	es					No. of
Districts of Telangana	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Adilabad	0	0	1	0	1	0	0	1	0	1	0	0	1	5
Hyderabad	0	0	1	0	1	0	0	1	0	0	0	0	0	3
Karimnagar	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Khammam	0	0	1	0	1	0	0	1	1	1	0	0	0	5
Mahbubnagar	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Medak	0	0	1	0	1	0	0	1	1	1	0	0	0	5
Nalgonda	0	0	1	0	1	0	0	1	1	1	0	0	0	5
Nizamabad	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Rangareddy	0	0	1	0	1	0	1	1	1	0	0	0	0	5
Warangal	0	0	1	0	1	0	0	1	1	1	0	0	0	5
No.of Disease Districts likely to report	1	0	10	0	10	0	4	10	8	8	0	0	1	52

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Tripura

D: 4 : 4 . 6						Live	estock D	iseas	e					No. of
Districts of Tripura	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
South Tripura	0	1	0	0	0	1	1	0	0	0	1	0	0	4
West Tripura	0	0	1	0	0	0	1	1	0	0	1	0	0	4
No.of Disease Districts likely to report	0	1	1	0	0	1	2	1	0	0	2	0	0	8

0 = Not predicted , 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Uttar Pradesh

Districts of						Live	estock D	iseas	e					No. of
Uttar Pradesh	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: Uttarakhand

						Live	estock D	isease	)					No. of
Districts of Uttaranchal	Anthr ax	Babes iosis	BQ	вт	ET	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
No.of Disease Districts likely to report	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = Not predicted, 1 = Predicted

# District wise Livestock Disease forewarning for May 2017: West Bengal

						Live	estock D	isease	2					No. of
Districts of West Bengal	Anthr ax	Babes iosis	BQ	вт	ЕТ	Fascio liasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bankura	1	0	1	0	0	0	1	1	1	0	0	0	0	5
Barddhaman	1	0	1	0	0	0	1	1	1	1	1	0	0	7
Birbhum	1	0	1	0	0	0	1	1	1	0	0	0	0	5
Darjiling	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Hugli	0	0	1	0	0	0	0	1	1	0	0	0	0	3
Jalpaiguri	0	0	1	0	0	0	1	0	1	0	0	0	0	3
Koch Bihar	1	0	1	0	0	0	1	0	1	1	0	0	0	5
Maldah	0	0	1	0	0	0	0	1	1	0	0	0	0	3
Murshidabad	1	0	1	0	0	0	1	1	1	0	0	0	0	5
Nadia	1	0	1	0	0	0	0	1	1	0	0	0	0	4
North 24 Parganas	0	0	1	0	0	0	1	1	1	1	0	0	0	5
Pashchim Medinipur	1	0	1	0	0	0	1	1	1	0	0	1	1	7
South 24 Parganas	0	0	1	0	0	0	1	1	1	1	0	0	0	5
Uttar Dinajpur	0	0	1	0	0	0	0	0	1	0	0	0	0	2
No.of Disease Districts likely to report	7	0	14	0	0	0	10	10	13	4	1	1	1	61

0 = Not predicted , 1 = Predicted

## State wise Livestock Disease forewarning for May 2017

Sl.No	State Name	Anthrax	Babesiosis	BQ	BT	ET	Fascioliasis	FMD	HS	PPR	S&G Pox	SF	Theileriosis	Trypanosomiasis	Total no.of Diseases events likely to occur
1	Andaman and Nicobar	0	0	0	0	0	3	0	0	0	0	0	0	0	3
2	Andhra Pradesh	6	0	12	0	11	2	9	13	13	11	0	0	0	77
3	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Assam	3	0	20	0	0	7	16	12	0	0	8	0	0	66
5	Bihar	0	9	7	0	0	6	2	22	0	0	0	25	37	108
6	Chhattisgarh	0	0	3	0	0	0	0	2	0	0	0	0	0	5
7	Dadra and Nagar Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Daman and Diu	0	0	1	0	0	0	1	1	0	0	0	0	0	3
9	Goa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Gujarat	1	0	7	0	0	0	16	21	0	1	0	0	0	46
11	Haryana	0	0	0	0	1	0	3	0	0	0	0	0	0	4
12	Himachal Pradesh	0	0	1	0	0	0	3	0	1	0	0	0	0	5
13	Jammu and Kashmir	0	0	9	0	0	0	14	1	0	11	0	0	0	35
14	Jharkhand	0	20	11	0	0	13	1	9	0	0	0	21	22	97
15	Karnataka	7	0	26	0	14	0	19	27	8	13	0	0	0	114
16	Kerala	12	13	5	0	0	11	13	11	7	0	0	13	0	85
17	Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Madhya Pradesh	0	0	3	0	0	0	3	0	2	0	0	0	0	8
19	Maharashtra	2	0	20	0	0	0	9	21	5	3	0	0	0	60
20	Manipur	0	0	6	0	0	0	0	0	0	0	7	0	0	13
21	Meghalaya	0	0	4	0	0	0	2	1	0	0	6	0	0	13
22	Mizoram	0	0	3	0	0	3	3	0	0	0	6	0	0	15
23	Nagaland	0	0	0	0	0	0	0	0	0	0	2	0	0	2
24	Nct of Delhi	0	0	0	0	0	0	0	0	0	0	2	0	0	2
25	Orissa	1	11	15	0	0	0	2	3	3	0	0	5	2	42
26	Puducherry	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Punjab	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Rajasthan	1	0	0	0	0	0	4	0	0	0	0	0	0	5
29	sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Tamil Nadu	7	0	5	0	0	1	2	1	4	1	0	0	0	21
31	Telangana	1	0	10	0	10	0	4	10	8	8	0	0	1	52
32	Tripura	0	1	1	0	0	1	2	1	0	0	2	0	0	8
33	Uttar Pradesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	Uttarakhand	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	West Bengal	7	0	14	0	0	0	10	10	13	4	1	1	1	61
Tota	al No districts likely to report	48	54	183	0	36	47	138	166	64	52	34	65	63	950

#### **Andaman and Nicobar**

All the districts in the state are likely to report Fascioliasis diseases.

#### **Andhra Pradesh**

A total of 13 districts in Andhra Pradesh are likely report the major 8 livestock diseases. i.e., Anthrax, Black Quarter, Enterotoxaemia, Fascioliasis, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Sheep & Goat pox in which Haemorrhagic Septicaemia and Peste des petits ruminants are predicted for 13 districts while Enterotoxaemia and Sheep & Goat pox are predicted in all the 11 districts. Black Quarter is predicted for 12 districts. Foot and Mouth Disease is likely to occur in 9 districts while Anthrax is likely to occur in 6 district.

#### Assam

A total of 21 districts from Assam are likely to report 6 livestock diseases i.e., Anthrax, Black Quarter, Fascioliasis, Foot and Mouth disease, Haemorrhagic Septicaemia and Swine Fever; in which Foot and Mouth disease is predicted in 16 districts and 20 districts are prone to Black Quarter. 12 districts are prone to Haemorrhagic Septicaemia.7 districts are prone to Fascioliasis. 8 districts are likely to have Swine Fever. 3 districts are prone to Anthrax.

#### Bihar

A total of 37 districts in Bihar are likely to report 7 diseases i.e. Babesiosis, Black Quarter, Foot and Mouth disease, Fascioliasis, Haemorrhagic Septicaemia, Theileriosis and Trypanosomiasis. Foot and Mouth disease is threat for 2 districts in Bihar.37 districts are prone to Trypanosomiasis.22 are prone to Haemorrhagic Septicaemia and 25 districts are prone to Theileriosis. Gaya is the only district prone to Black Quarter.

### Chhattisgarh

Bastar, Durg and Raipur are districts prone to Black Quarter while Bastar and Raipur are prone to Haemorrhagic Septicaemia.

#### Daman and Diu

Daman is likely to report Black Quarter, Foot and Mouth disease and Haemorrhagic Septicaemia.

## Gujarat

A total of 23 districts in Gujarat are likely to report 5 diseases i.e., Anthrax, Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia and Sheep & Goat pox. Foot and Mouth disease is likely to occur in 16 districts. Haemorrhagic Septicaemia is predicted in 21 districts. Sheep & Goat pox is predicted in Banas Kantha districts. Black Quarter is prone to 7 districts. Anthrax is likely to occur in Rajkot district.

### Haryana

A total of 3 districts in Haryana are likely to report 3 diseases i.e., Enterotoxaemia and Foot & Mouth disease. Enterotoxaemia is likely to occur only in Hisar district while Foot & Mouth disease is predicted for all districts.

#### **Himachal Pradesh**

A total of 4 districts in Himachal Pradesh are likely to report 3 diseases Black Quarter, Foot and Mouth disease and Peste des petits ruminants.3 districts are prone to Foot and Mouth disease while 2 districts are likely to have Peste des petits ruminants. Kullu is districts likely to have Black Quarter and Chamba is the districts prone to Foot & Mouth disease.

### Jammu and Kashmir

A total of 14 districts in Jammu and Kashmir are likely to report 4 diseases i.e., Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia and Sheep & Goat pox. Foot and Mouth disease is predicted in 14 districts. Sheep & Goat pox disease is predicted in 11 districts. Black Quarter is likely to occur only in 9 districts. Udhampur is the district likely to have Haemorrhagic Septicaemia.

#### Jharkhand

A total of 22 districts in Jharkhand are likely to report 7 diseases i.e., Babesiosis, Black Quarter, Fascioliasis, Foot and Mouth disease, Haemorrhagic Septicaemia, Theileriosis and Trypanosomiasis. Trypanosomiasis is likely to report in 22 districts.Babesiosis is likely to occur in 21 districts while Theileriosis disease is likely to occur in 21 districts. Fascioliasis is predicted in 13 districts. Foot and Mouth disease is likely to occur in Dumka and Haemorrhagic Septicaemia are predicted for 9 districts. Black Quarter is likely to occur in 11 districts.

### Karnataka

A total of 27 districts in Karnataka are likely to report 7 diseases i.e., Anthrax, Black Quarter, Enterotoxaemia, Foot and Mouth disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Sheep & Goat pox. 26 districts are prone to Foot and Mouth disease. 26 districts are prone to Black Quarter and 27 districts are prone to Haemorrhagic Septicaemia. Enterotoxaemia and Sheep & Goat pox is likely to occur in 14 and 13 districts respectively. Anthrax is likely to occur in 7 districts. Peste des petits ruminants is threat for 8 districts.

### Kerala

A total of 13 districts in Kerala are likely to report 8 diseases i.e., Anthrax, Babesiosis, Black Quarter, Fascioliasis, Foot & Mouth disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Theileriosis. 14 districts are prone to Theileriosis. All the 13 districts are prone to Babesiosis, Foot & Mouth disease and Theileriosis. Anthrax and Black Quarter are threat to 12 and 5 districts respectively. Fascioliasis and Haemorrhagic Septicaemia likely to occur in 11 districts.7 districts are prone to Peste des petits ruminants.

## Madhya Pradesh

A total of 3 districts in Madhya Pradesh likely to have 3 diseases i.e., Black Quarter, Foot & Mouth disease and Peste des petits ruminants.3 districts are prone to Black Quarter and Foot & Mouth disease. Betul and Chhindwara are the only districts prone to Peste des petits ruminants.

#### Maharashtra

A total of 24 districts in Maharashtra are likely to report 6 diseases i.e., Anthrax, Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Sheep and Goat pox. Haemorrhagic Septicaemia disease is threat to 21 districts. Foot and Mouth disease is likely to occur in 9 districts. Black Quarter is likely to occur in 20 districts while 5 and 3 districts are prone to Peste des petits ruminants and Sheep and Goat pox respectively. Anthrax is likely to occur in Ahmadnagar and Pune districts.

### Manipur

A total of 7 districts in Manipur are likely to report Black Quarter and Swine fever.

## Meghalaya

A total of 6 districts in Meghalaya are likely to report 4 diseases i.e., Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia and Swine Fever. Black Quarter is predicted in 4 districts while Swine Fever is likely to occur in 6 districts. East khasi hills and West garo hills are prone to Foot and Mouth disease and West garo hills is prone to Haemorrhagic Septicaemia

#### Mizoram

A total of 6 districts in Mizoram are likely to report 4 diseases i.e., Black Quarter, Fascioliasis, Foot and Mouth disease and Swine Fever. Black Quarter, Fascioliasis and Foot and Mouth disease are predicted in 3 districts while Swine Fever is likely to occur in 6 districts.

### **Nagaland**

Wokha and Zunheboto districts in Nagaland are prone to Swine Fever.

### **NCT OF DELHI**

South West and west districts in NCT OF DELHI are prone to Swine Fever.

#### **Odisha**

A total of 16 districts in Orissa are likely to report 8 diseases i.e., Anthrax, Babesiosis, Black Quarter, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants, Theileriosis and Trypanosomiasis. Black Quarter and Babesiosis are threat for 15 and 11 districts respectively. Theileriosis is likely to occur in 5 districts. Foot and Mouth Disease and Trypanosomiasis are likely to occur in 2 districts. Koraput is the only district prone to Anthrax.

## Rajasthan

A total of 5 districts in Rajasthan are likely to report 2 diseases i.e., Foot and Mouth Disease predicted in Jaisalmar, Sikar, Nagaur and Udaipur districts. Anthrax is threat in Bikaner district.

### Tamil Nadu

A total of 12 districts in Tamil Nadu are likely to report 7 diseases i.e., Anthrax, Black Quarter, Fascioliasis, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Sheep and Goat pox. Anthrax is predicted for 7 districts. Black Quarter is predicted in 5 districts. Peste des petits ruminants is threat for 4 districts. Foot and Mouth Disease is threat for 2 districts. The Nilgiris is the district prone to Fascioliasis, Tirunelveli is prone to Haemorrhagic Septicaemia and Erode is the district prone to Sheep and Goat pox.

## **Telangana**

A total of 10 districts in Telangana are likely report the major 8 livestock disease. i.e., Anthrax, Black Quarter, Bluetongue, Enterotoxaemia, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants, Sheep and Goat pox and Trypanosomiasis; in which Peste des petits ruminants and Sheep and Goat pox are predicted in all the 8 districts. Black Quarter, Enterotoxaemia and Haemorrhagic Septicaemia are likely to occur in 10 districts. 4 districts are prone to Foot and Mouth Disease. Mahbubnagar district is prone to Anthrax and Bluetongue while Adilabad is likely to have Trypanosomiasis.

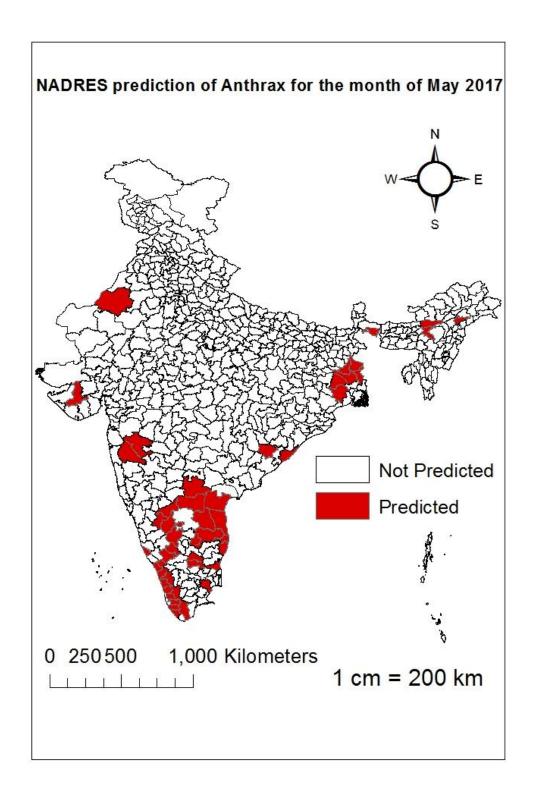
### Tripura

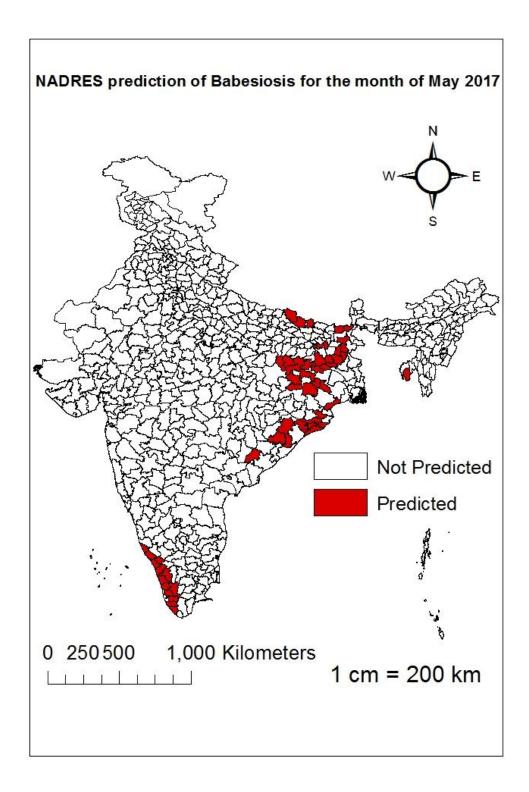
South Tripura and West Tripura are likely to report 6 diseases i.e., Babesiosis, Black Quarter, Fascioliasis, Foot and Mouth disease, Haemorrhagic Septicaemia and Swine Fever. Food and mouth disease and Swine Fever is likely to occur in all 2 districts. South Tripura is prone to Fascioliasis and Babesiosis. West Tripura is prone to Black Quarter and Haemorrhagic Septicaemia.

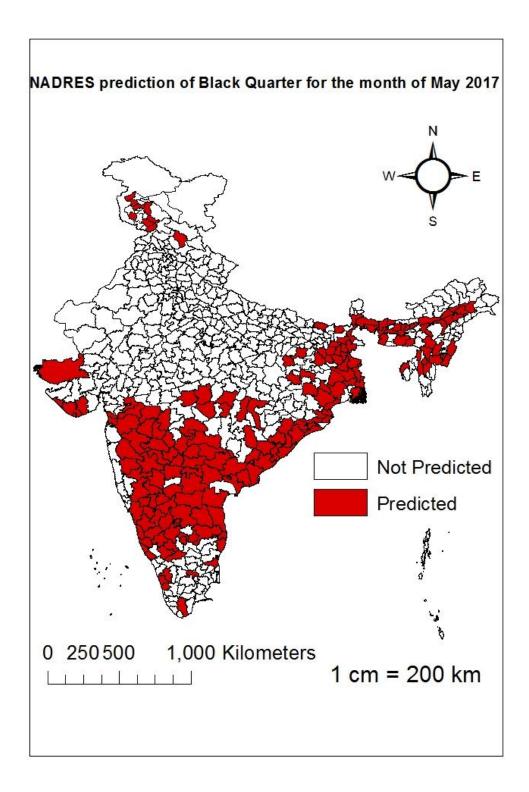
## **West Bengal**

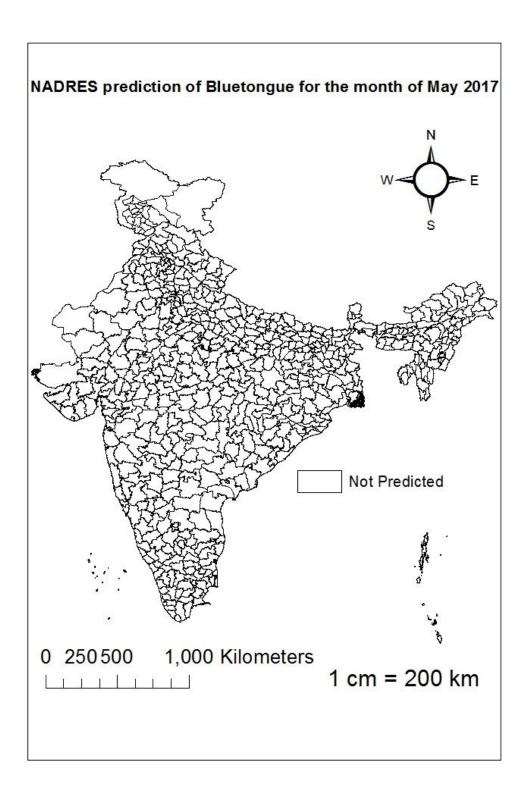
A total of 14 districts in West Bengal are likely to report 9 diseases i.e., Anthrax, Black Quarter, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants, Sheep & Goat pox, Swine Fever, Theileriosis and Trypanosomiasis. Black Quarter is likely to occur in 14 districts. Peste des petits ruminant's disease is predicted in 13 districts. Foot and Mouth Disease and Haemorrhagic Septicaemia are predicted in 10 districts. Anthrax is threat for 7 districts while Pashchim Medinipur is prone to Theileriosis and Trypanosomiasis. Anthrax is likely occur in Barddhaman district.

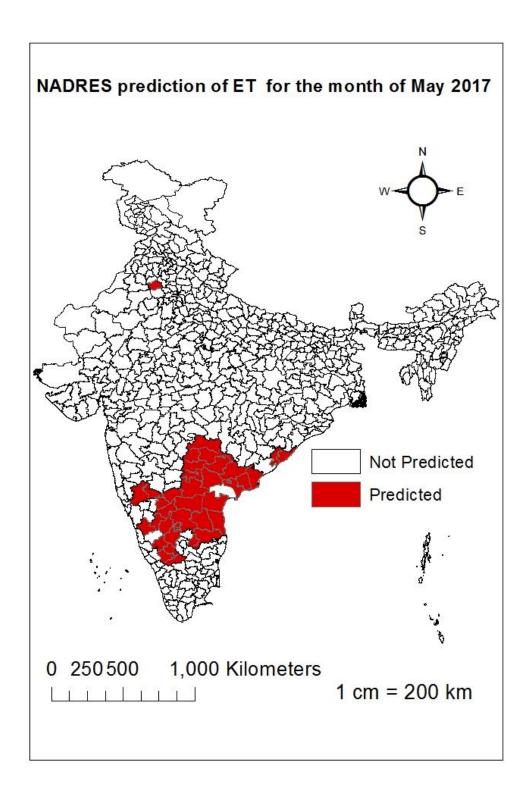
# iii) Livestock disease forewarning Maps

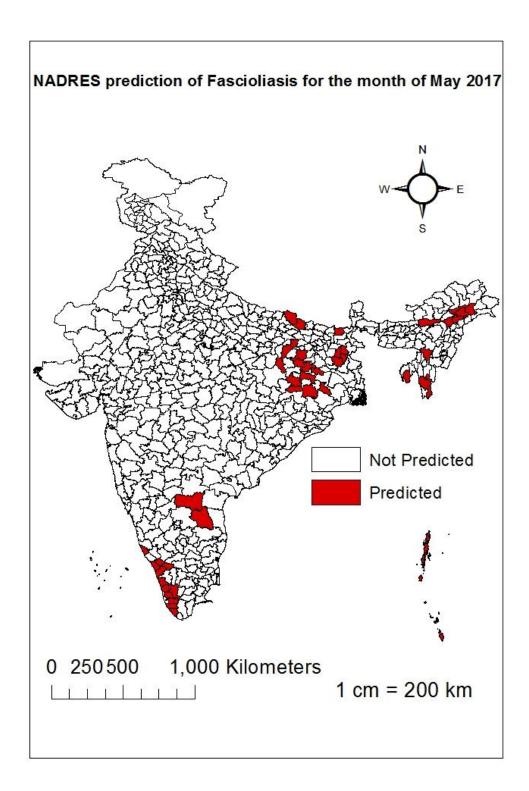


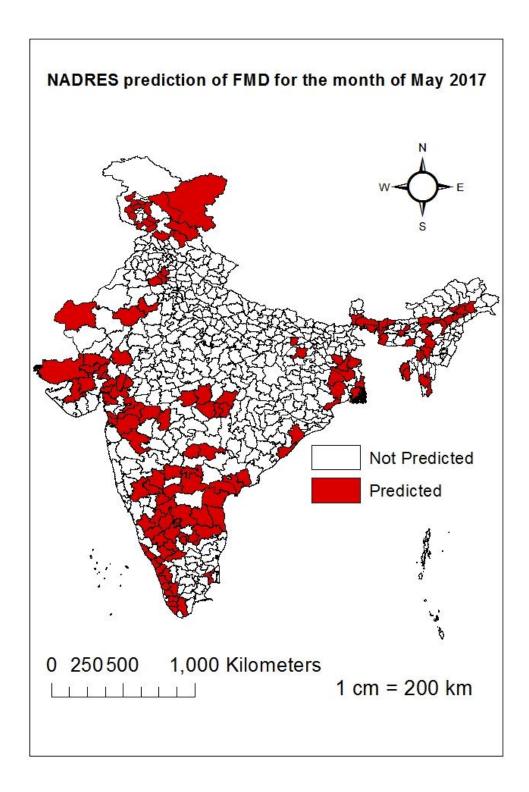


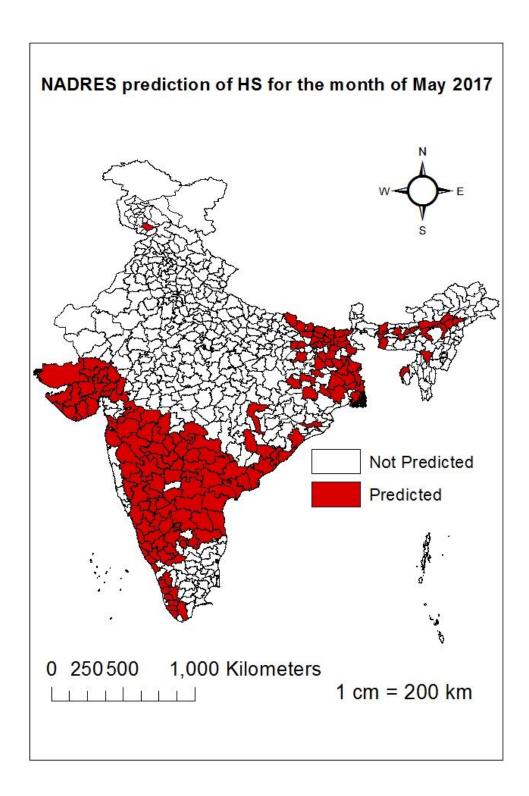


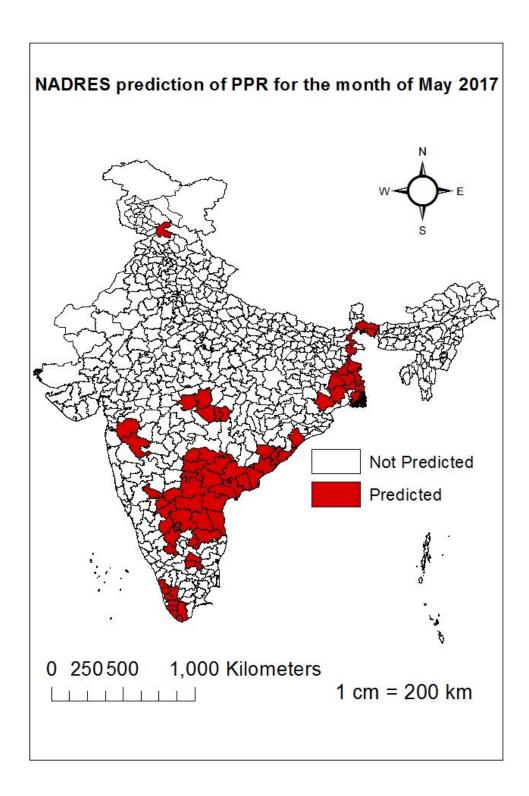


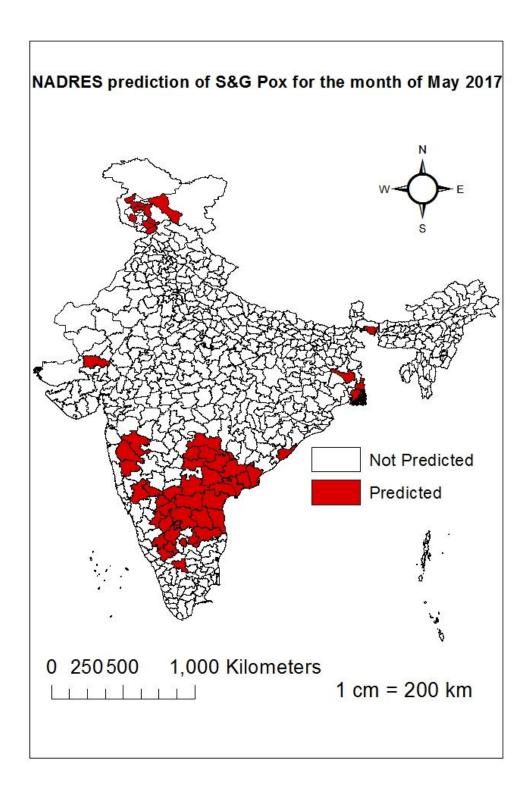


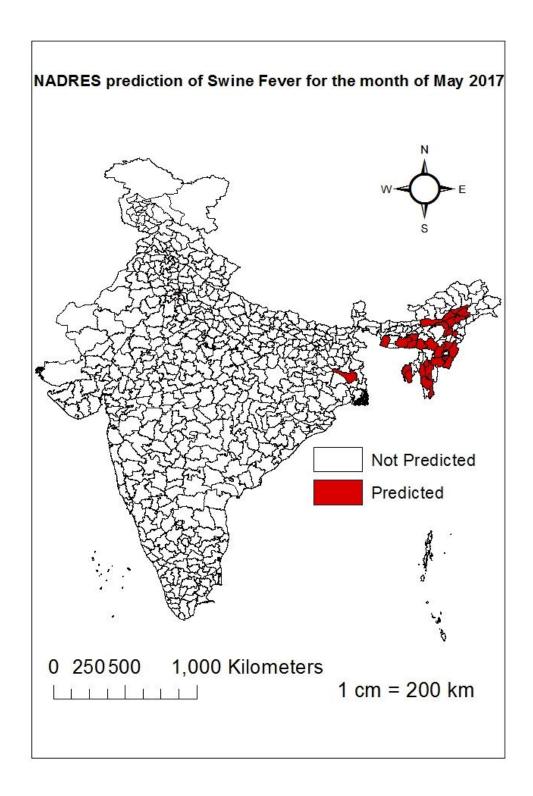


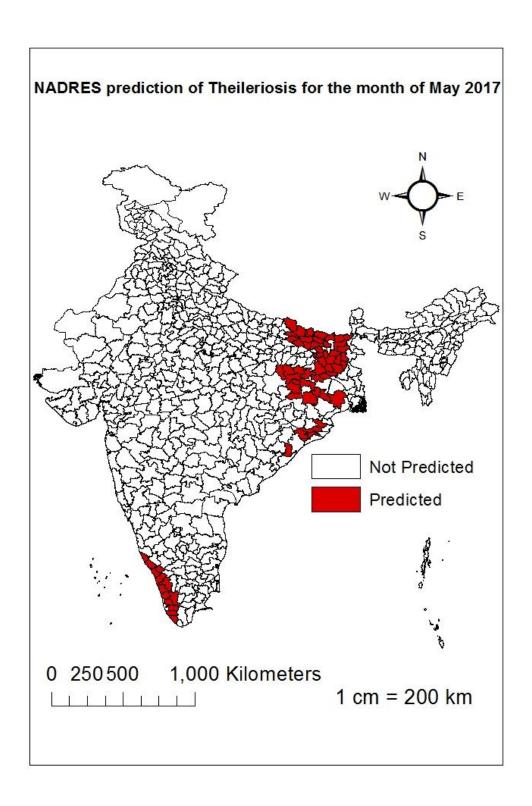


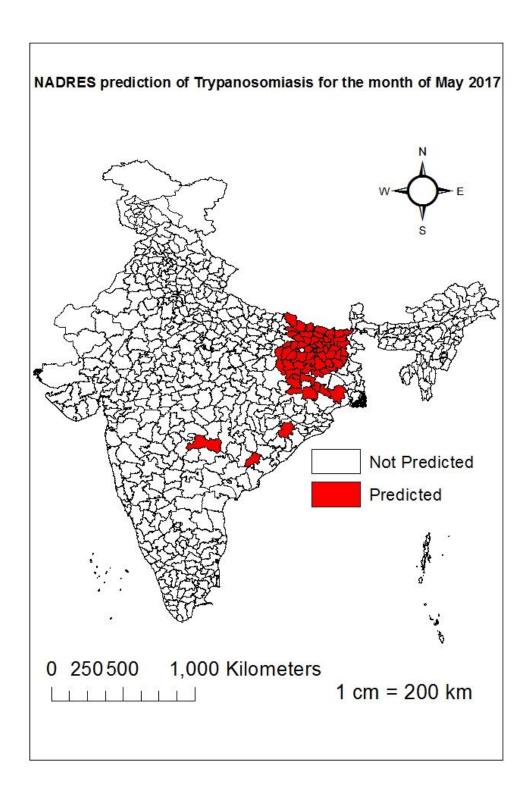












# **Appendix**

## A. SAS Code

```
libname July"C:\Users\admin\Desktop\nadres\July";
*\import the final data and outbreak data*/
procsort data= July.finalnadres;
by state_name district_name disease_name month;
run;
procsort data= July.mayoutbreak;
by state_name district_name disease_name month;
run;
dataJuly.temp;
merge July.finalnadres July.mayoutbreak;
by state_name district_name disease_name month;
run;
procsql;
update July.temp
set number_of_outbreaks=0
where number_of_outbreaks=.;
run;
dataJuly.finalJuly;
set July.temp;
outbrk1=outbreaks+number_of_outbreaks;
run:
dataJuly.July_final;
set July.finalJuly;
if outbrk1>=1 then outbrk=1;
else
outbrk=0;
run;
procexport data=July.July_final outfile="C:\Users\admin\Desktop\nadres\July\July1.xlsx";
run;
```

## **B.** Abbreviations

NADRES : National Animal Disease Referral Expert System

SAS : Statistical Analysis System

SPSS : Statistical Product and Service Solutions (or Statistical Package for the

Social Sciences)

BQ : Black Quarter

BT :Blue tongue

ET : Enterotoxaemia

FMD : Foot and Mouth disease

HS : Haemorrhagic Septicaemia

PPR : Peste des petits ruminants

S&G POX : Sheep and Goat pox

SF : Swine Fewer





Agrisearch with a Buman touch.

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