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LIVESTOCK DISEASE FOREWARNING BULLETIN- April 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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Divakar Hemadri

S S Patil

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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 April 2017

i) District wise Livestock Disease forewarning:

District wise Livestock Disease forewarning for April 2017: Andaman and Nicobar

						Live	stock D	isease	es					No. of
Districts of Andaman and Nicobar	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	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 April 2017: Andhra Pradesh

Districts of						Live	stock D	isease	es					No. of
Andhra Pradesh	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Anantapur	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Chittoor	1	0	1	0	1	0	1	1	1	1	0	0	0	7
East Godavari	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Guntur	1	0	1	0	1	0	1	1	1	1	0	0	1	8
Krishna	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Kurnool	1	0	1	0	1	1	1	1	1	1	0	1	0	9
Prakasam	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Sri Potti Sriramalu Nellore	1	0	1	1	1	0	1	1	1	1	0	0	0	8
Srikakulam	0	0	1	0	1	0	1	0	1	0	0	0	1	5
Visakhapatnam	0	0	1	0	0	0	1	1	1	1	0	0	0	5
Vizianagaram	0	0	1	0	1	0	1	1	1	1	0	0	0	6
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	7	0	13	1	12	2	13	12	13	12	0	1	2	88

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Arunachal Pradesh

Districts of						Live	stock D	isease	es .					No. of
Arunachal Pradesh	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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 April 2017: Assam

						Live	stock D	isease	S					No. of
Districts of Assam	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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	0	1	1	0	0	0	0	0	3
Chirang	0	0	1	0	0	1	1	0	0	0	0	0	0	3
Darrang	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Dhemaji	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Dhubri	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Dibrugarh	0	0	1	0	0	1	0	0	0	0	0	0	0	2
Dima Hasao (North Cachar Hill)	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Goalpara	0	0	0	0	0	0	1	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
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	0	0	0	0	0	0	0	0	1	0	0	1
Lakhimpur	0	0	1	0	0	1	0	1	0	0	1	0	0	4
Nagaon	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Nalbari	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Sivasagar	0	0	1	0	0	0	1	1	1	0	1	0	0	5
Sonitpur	1	0	1	0	0	1	1	1	0	0	1	0	0	6
Tinsukia	0	0	1	0	0	0	0	0	0	0	0	0	0	1
No.of Disease Districts likely to report	1	0	15	0	0	6	10	9	1	0	7	0	0	49

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Bihar

	<i>D</i> 16	strict w	13C L	1103	UCK					ı Apı	11 20	17. DII	1a1	
						Live	stock D	isease	es					No. of
Districts of Bihar	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Araria	0	1	0	0	0	0	1	1	0	0	0	0	1	4
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	0	0	0	0	1	1	0	0	0	0	1	3
Begusarai	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Bhagalpur	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Bhojpur	0	1	0	0	0	0	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	0	0	0	0	0	1	1
Gaya	0	1	1	0	0	0	1	1	0	0	0	0	1	5
Gopalganj	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Jamui	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Kaimur (Bhabua)	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Katihar	0	1	0	0	0	0	1	0	0	0	0	1	1	4
Khagaria	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Kishanganj	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Lakhisarai	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Madhepura	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Madhubani	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Munger	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Muzaffarpur	0	0	0	0	0	0	0	0	0	0	0	0	1	1
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	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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	0	1	0	0	0	0	0	1	3
Patna	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Purba Champaran	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Purnia	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Rohtas	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Saharsa	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Samastipur	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Saran (chhapra)	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Sheikhpura	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Sheohar	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Sitamarhi	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Siwan	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Supaul	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Vaishali	0	0	0	0	0	0	0	0	0	0	0	0	1	1
No.of Disease Districts likely to report	0	14	1	0	0	0	9	7	0	0	0	4	37	72

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Chhattisgarh

						Live	stock D	isease	es					No. of
Districts of Chhattisgarh	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bastar	0	0	1	0	0	0	1	0	0	0	0	0	0	2
No.of Disease Districts likely to report	0	0	1	0	0	0	1	0	0	0	0	0	0	2

0 = Not predicted, 1 = Predicted

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

Districts of						Live	stock D	isease	S					No. of
Dadra and Nagar Haveli	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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 April 2017: Daman and Diu

								<u> </u>						
Districts of						Live	stock Di	isease	:S					No. of
Daman and Diu	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Daman	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	0	0	1	0	0	0	0	0	0	1

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Goa

						Live	stock D	isease	s					No. of
Districts of Goa	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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

If vaccination is alreadty been done please ignore the disease forecast, for that disease.

District wise Livestock Disease forewarning for April 2017:Gujarat

Districts of Gujarat						Live	stock D	isease	s					No. of Diseases likely to
	Anth rax	Babesi osis	BQ	BT	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	occur
Ahmedabad	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Amreli	0	0	1	0	0	0	1	1	0	0	0	0	0	3
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	1	1	0	0	0	0	0	2
Dohad	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Gandhinagar	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Jamnagar	1	0	0	0	0	0	1	0	0	0	0	0	0	2
Junagadh	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Kachchh	0	0	0	0	0	0	1	1	0	1	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
Narmada	0	0	0	0	0	0	1	0	0	0	0	0	0	1
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	0	0	0	0	0	0	1
Porbandar	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Rajkot	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Sabar Kantha	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Surat	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Surendranagar	0	0	1	0	0	0	1	1	0	0	0	0	0	3
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	25	19	0	2	0	0	1	55

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Haryana

						Live	stock D	isease	es					No. of
Districts of Haryana	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bhiwani	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Fatehabad	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Hisar	0	0	0	0	1	0	1	0	0	0	0	0	0	2
Kaithal	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Kurukshetra	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	4	1	0	0	0	0	0	6

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Himachal Pradesh

Districts of						Live	stock D	isease	es .					No. of
Himachal pradesh	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bilaspur(HP)	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Chamba	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hamirpur(HP)	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Kangra	0	0	0	0	0	0	1	1	1	0	0	0	0	3
Kullu	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Mandi	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Sirmaur	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Una	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	7	1	2	0	0	0	0	11

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Jammu and Kashmir

Districts of						Live	stock D	isease	s					No. of
Jammu and Kashmir	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases 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	1	0	0	0	2
Kargil	0	0	0	0	0	0	1	0	1	1	0	0	0	3
Kathua	0	0	1	0	0	0	1	1	1	1	0	0	0	5
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	1	0	0	0	2
Rajouri	0	0	1	0	0	0	1	1	1	1	0	0	0	5
Srinagar	0	0	0	0	0	0	1	0	0	1	0	0	0	2
Udhampur	0	0	1	0	0	0	1	0	0	1	0	0	0	3
No.of Disease Districts likely to report	0	0	9	0	0	0	14	2	3	13	0	0	0	41

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Jharkhand

Did i d 6						Live	stock D	isease	es					No. of
Districts of Jharkhand	Anth rax	Babesi osis	BQ	ВТ	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bokaro	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Chatra	0	1	0	0	0	0	0	0	0	0	0	0	1	2
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	0	0	0	0	0	0	0	1	2
Giridih	0	1	1	0	0	0	0	1	0	0	0	1	1	5
Godda	0	1	0	0	0	1	0	0	0	0	0	0	1	3
Gumla	0	1	0	0	0	1	1	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	0	1	2
Lohardaga	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Pakur	0	1	1	0	0	1	1	1	0	0	0	1	1	7
Palamu	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Pashchimi Singhbhum	0	1	0	0	0	1	1	0	0	0	0	1	1	5
Purbi Singhbhum	0	1	1	0	0	1	1	1	0	0	0	1	1	7
Ranchi	0	1	1	0	0	1	1	1	0	0	0	1	1	7
Sahibganj	0	1	0	0	0	1	0	0	0	0	0	1	1	4
Seraikela - Kharsawan	0	1	0	0	0	0	0	0	0	0	0	1	1	3
Simdega	0	1	0	0	0	1	1	0	0	0	0	1	1	5
No.of Disease Districts likely to report	0	21	6	0	0	10	7	7	0	0	0	15	22	88

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Karnataka

						Live	stock D	isease	es					No. of
Districts of Karnataka	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bagalkot	0	0	1	0	1	0	1	1	0	1	0	0	0	5
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	1	1	0	0	0	0	0	3
Bijapur	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Chamarajnagar	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Chikmagalur	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Chitradurga	1	0	1	0	1	0	1	1	1	1	0	0	0	7
Dakshina Kannada	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Davanagere	0	0	1	0	1	0	1	1	0	1	0	0	0	5
Dharwad	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Gadag	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Gulbarga	0	0	1	0	0	0	1	1	0	0	0	0	0	3

Continue

						Live	stock D	isease	S					No. of
Districts of Karnataka	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theihl eriosis	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	1	1	0	0	0	0	0	3
Kodagu	0	1	0	0	0	0	1	1	0	0	0	0	0	3
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	0	0	1	0	1	0	1	1	1	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	1	1	0	1	1	1	1	0	0	0	8
Udupi	0	1	1	0	0	0	1	1	0	0	0	0	0	4
Uttara Kannada	0	0	0	0	0	0	1	1	0	0	0	0	0	2
No.of Disease Districts likely to report	5	2	23	1	13	0	26	27	8	13	0	0	0	118

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewrning for April 2017: Kerala

						Live	stock D	isease	S					No. of
Districts of Kerala	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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	1	0	0	1	1	1	1	0	0	1	0	8
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	1	0	0	1	1	1	1	0	0	1	0	8
Kottayam	1	1	1	0	0	1	1	1	1	0	0	1	0	8
Kozhikode	1	1	1	0	0	1	1	0	0	0	0	1	0	6
Malappuram	1	1	1	0	0	1	1	0	0	0	0	1	0	6
Palakkad	0	1	1	0	0	0	1	1	0	0	0	1	0	5
Pathanamthitta	1	1	0	0	0	1	1	1	1	0	0	1	0	7
Thiruvananthap uram	1	1	1	0	0	1	1	1	1	0	0	1	0	8
Thrissur	1	1	1	0	0	1	1	1	1	0	0	1	0	8
Wayanad	1	1	1	0	0	1	1	0	0	0	0	1	0	6
No.of Disease Districts likely to report	11	13	12	0	0	11	13	10	7	0	0	13	0	90

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Lakshadweep

Districts of						Live	stock D	isease	S					No. of Diseases
Lakshadweep	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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 April 2017: Madhya Pradesh

Districts of						Live	stock D	isease	es					No. of
Madhya Pradesh	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Ashoknagar	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Balaghat	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Damoh	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Raisen	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Sagar	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Shajapur	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Vidisha	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	0	0	6	0	1	0	0	0	0	7

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Maharashtra

						Live	stock D	isease	S					No. of
Districts of Maharastra	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Ahmadnagar	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Aurangabad(M H)	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Bhandara	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Bid	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Buldana	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Dhule	0	0	1	0	0	0	1	1	0	0	0	0	0	3
Hingoli	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Jalgaon	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Jalna	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Kolhapur	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Latur	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Nanded	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Nandurbar	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Nasik	0	0	1	0	0	0	1	1	1	0	0	0	0	4
Osmanabad	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Parbhani	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Pune	0	0	1	0	0	0	1	1	1	1	0	0	0	5
Sangli	0	0	0	0	0	0	1	1	0	1	0	0	0	3
Satara	0	0	0	0	0	0	1	1	1	1	0	0	0	4
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	0	0	14	0	1	0	8	21	4	4	0	0	0	52

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Manipur

						Live	stock D	isease	S					No. of
Districts of Manipur	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Bishnupur	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Chandel	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Churachandpur	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Senapati	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Temenglong	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Thoubal	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ukhrul	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	7	0	0	7

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Meghalaya

						Live	stock D	isease	S					3.7
Districts of Meghalaya	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	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	0	0	0	1	0	0	3
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	0	0	0	6	0	0	12

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Mizoram

						Live	stock D	isease	S					No. of Diseases likely to occur
Districts of Mizoram	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	
Aizawl	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Champhai	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Kolasib	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Lawangtlai	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lunglei	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Mamit	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Saiha	0	0	1	0	0	1	0	0	0	0	1	0	0	3
Serchhip	0	0	0	0	0	1	0	0	0	0	1	0	0	2
No.of Disease Districts likely to report	0	0	1	0	0	4	0	0	0	0	8	0	0	13

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Nagaland

						Live	stock D	isease	es .					No. of
Districts of Nagaland	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
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	1	0	0	1

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Odisha

						Live	stock D	isease	es					No. of
Districts of Odisha	Anth rax	Babesi osis	BQ	вт	ЕТ	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Baleshwar	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Cuttack	0	1	1	0	0	0	0	1	0	0	0	0	0	3
Gajapati	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Ganjam	0	0	1	0	0	0	1	1	1	0	0	0	0	4
Jajapur	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Kandhamal	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Khordha	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Koraput	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Malkangiri	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Mayurbhanj	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Nayagarh	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Rayagada	0	1	0	0	0	0	0	0	0	0	0	0	0	1
No.of Disease Districts likely to report	0	8	8	0	0	0	3	3	1	0	0	0	0	23

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Puducherry

		Livestock Diseases													
Districts of Puducherry	Anth rax	Babesi osis	BQ	ВТ	ЕТ	Fasciol iasis	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 April 2017: Punjab

Districts of Punjab						Live	stock D	isease	es .					No. of Diseases likely to occur
	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	
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 April 2017: Rajasthan

Districts of Rajasthan						Live	stock D	isease	es .					No. of
	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
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	1	0	0	0	0	0	2
No.of Disease Districts likely to report	0	0	0	0	0	0	3	1	0	0	0	0	0	4

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Sikkim

						Live	stock D	isease	s					No. of
Districts of Sikkim	Anth rax	Babesi osis	BQ	ВТ	ET	Fasciol iasis	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 April 2017: Tamil Nadu

	Livestock Disease													No. of
Districts of Tamil Nadu	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Coimbatore	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Cuddalore	1	0	1	0	0	0	1	0	1	0	0	0	0	4
Dharmapuri	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Erode	1	0	1	0	0	0	1	0	0	1	0	0	0	4
Kancheepuram	1	0	1	0	0	0	1	0	1	0	1	0	0	5
Kanniyakumari	1	0	0	0	0	0	0	1	0	0	0	0	0	2
Karur	0	0	1	0	0	0	0	1	0	1	0	0	0	3
Namakkal	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Pudukkottai	1	0	1	0	0	0	0	0	1	0	0	0	0	3
Salem	1	0	1	0	0	0	0	0	1	0	0	0	0	3
Sivaganga	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Thanjavur	0	0	1	0	0	0	1	0	0	1	0	0	0	3
Thiruvallur	1	0	1	0	0	0	1	0	1	0	0	0	0	4
Tirunelveli	1	0	1	0	0	0	1	1	1	1	0	0	0	6
No.of Disease Districts likely to report	9	0	12	0	0	0	7	3	7	5	1	0	0	44

0 = Not predicted , 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Telangana

	Livestock Diseases												No. of	
Districts of Telangana	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
Adilabad	0	0	1	0	1	0	1	1	1	0	0	0	1	6
Hyderabad	0	0	1	0	1	0	0	0	0	0	0	0	0	2
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	1	1	0	1	1	1	1	0	0	0	8
Medak	0	0	1	0	1	0	1	1	1	1	0	0	0	6
Nalgonda	0	0	1	0	1	0	1	1	1	1	0	0	0	6
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	1	0	0	0	6
Warangal	0	0	1	0	1	0	1	1	1	1	0	0	0	6
No.of Disease Districts likely to report	1	0	10	1	10	0	8	9	9	8	0	0	1	57

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Tripura

D: 4 : 4 . 6						Live	estock D	iseas	e					No. of
Districts of Tripura	rax	Babesi osis	BQ	вт	ET	Fasciol iasis	FMD	HS	PPR	S&G Pox	SF	Theile riosis	Trypano somiasis	Diseases likely to occur
North Tripura	0	0	0	0	0	0	1	0	0	0	0	0	0	1
South Tripura	0	0	1	0	0	1	1	0	0	1	1	0	0	5
West Tripura	0	0	1	0	0	0	1	0	0	0	1	0	0	3
No.of Disease Districts likely to report	0	0	2	0	0	1	3	0	0	1	2	0	0	9

0 = Not predicted, 1 = Predicted

District wise Livestock Disease forewarning for April 2017: Uttar Pradesh

Districts of						Live	estock D	iseas	2					No. of
Uttar Pradesh	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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 April 2017: Uttarakhand

						Live	estock D	iseas)					No. of
	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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 April 2017: West Bengal

						Live	estock D	iseas	e					No. of
Districts of West Bengal	Anth rax	Babesi osis	BQ	вт	ET	Fasciol iasis	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	1	0	0	0	6
Barddhaman	1	0	1	0	0	0	1	1	1	1	0	0	0	6
Birbhum	1	0	1	0	0	0	1	1	1	1	0	0	0	6
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	1	0	1	0	0	0	1	0	1	0	0	0	0	4
Koch Bihar	1	0	1	0	0	0	1	0	1	0	0	0	0	4
Maldah	0	0	1	0	0	0	1	1	1	0	0	0	0	4
Murshidabad	0	0	1	0	0	0	1	1	1	0	0	0	0	4
Nadia	0	0	1	0	0	0	0	1	1	0	0	0	0	3
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	0	0	0	0	0	0	1	0	0	0	0	1
No.of Disease Districts likely to report	6	0	13	0	0	0	11	10	13	5	0	1	1	60

0 = Not predicted , 1 = Predicted

State wise Livestock Disease forewarning for April 2017

Sl.No	State Name	Anthrax	Babesiosis	BQ	ВТ	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	7	0	13	1	12	2	13	12	13	12	0	1	2	88
3	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Assam	1	0	15	0	0	6	10	9	1	0	7	0	0	49
5	Bihar	0	14	1	0	0	0	9	7	0	0	0	4	37	72
6	Chhattisgarh	0	0	1	0	0	0	1	0	0	0	0	0	0	2
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	0	0	0	0	1	0	0	0	0	0	0	1
9	Goa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Gujarat	1	0	7	0	0	0	25	19	0	2	0	0	1	55
11	Haryana	0	0	0	0	1	0	4	1	0	0	0	0	0	6
12	Himachal Pradesh	0	0	1	0	0	0	7	1	2	0	0	0	0	11
13	Jammu and Kashmir	0	0	9	0	0	0	14	2	3	13	0	0	0	41
14	Jharkhand	0	21	6	0	0	10	7	7	0	0	0	15	22	88
15	Karnataka	5	2	23	1	13	0	26	27	8	13	0	0	0	118
16	Kerala	11	13	12	0	0	11	13	10	7	0	0	13	0	90
17	Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Madhya Pradesh	0	0	0	0	0	0	6	0	1	0	0	0	0	7
19	Maharashtra	0	0	14	0	1	0	8	21	4	4	0	0	0	52
20	Manipur	0	0	0	0	0	0	0	0	0	0	7	0	0	7
21	Meghalaya	0	0	4	0	0	0	2	0	0	0	6	0	0	12
22	Mizoram	0	0	1	0	0	4	0	0	0	0	8	0	0	13
23	Nagaland	0	0	0	0	0	0	0	0	0	0	1	0	0	1
24	Orissa	0	8	8	0	0	0	3	3	1	0	0	0	0	23
25	Puducherry	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Punjab	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Rajasthan	0	0	0	0	0	0	3	1	0	0	0	0	0	4
28	sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Tamil Nadu	9	0	12	0	0	0	7	3	7	5	1	0	0	44
30	Telangana	1	0	10	1	10	0	8	9	9	8	0	0	1	57
31	Tripura	0	0	2	0	0	1	3	0	0	1	2	0	0	9
32	Uttar Pradesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Uttarakhand	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	West Bengal	6	0	13	0	0	0	11	10	13	5	0	1	1	60
Tota	l No districts likely to report	41	58	152	3	37	37	181	142	69	63	32	34	64	913

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 11 livestock diseases. i.e., Anthrax, Black Quarter, Blue tongue, Enterotoxaemia, Fascioliasis, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants, Sheep & Goat pox, Theileriosis and Trypanosomiasis in which Black Quarter, Foot and Mouth Disease and Peste des petits ruminants are predicted for 13 districts while Enterotoxaemia ,Haemorrhagic Septicaemia and Sheep & Goat pox are predicted in all the 12 districts. Anthrax is likely to occur in 7 districts while Trypanosomiasis is likely to occur in 2 districts. Kurnool is the only district prone to Theileriosis. Sri Potti Sriramalu Nellore is the only district prone to Blue tongue.

Assam

A total of 20 districts from Assam are likely to report 7 livestock diseases i.e., Anthrax, Babesiosis, Black Quarter, Fascioliasis, Foot and Mouth disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Swine Fever; in which Foot and Mouth disease is predicted in 10 districts and 15 districts are prone to Black Quarter. 9 districts are prone to Haemorrhagic Septicaemia.7 districts are prone to Swine Fever. 6 districts are likely to have Haemorrhagic Septicaemia. Sonitpur and Sivasagar is the only district prone to Anthrax and Peste des petits ruminants.

Bihar

A total of 37 districts in Bihar are likely to report 5 diseases i.e. Babesiosis, Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia, Theileriosis and Trypanosomiasis. Foot and Mouth disease is threat for 9 districts in Bihar.37 districts are prone to Trypanosomiasis.7 are prone to Haemorrhagic Septicaemia and 4 districts are prone to Theileriosis. Gaya is the only district prone to Black Quarter.

Chhattisgarh

Bastar is the only district prone to Foot and Mouth diseases and Black Quarter.

Daman and Diu

Daman is likely to report Foot and Mouth disease.

Gujarat

A total of 25 districts in Gujarat are likely to report 6 diseases i.e., Anthrax, Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia, Sheep & Goat pox and Trypanosomiasis. Foot and Mouth disease is likely to occur in 25 districts. Haemorrhagic Septicaemia is predicted in 19 districts. Sheep & Goat pox is predicted for 2 districts. Black Quarter is prone to 7 districts. Anthrax and Trypanosomiasis are likely to occur in Jamnagar and Gandhinagar district respectively.

Haryana

A total of 5 districts in Haryana are likely to report 3 diseases i.e., Enterotoxaemia, Foot & Mouth disease and Haemorrhagic Septicaemia. Enterotoxaemia is likely to occur only in Hisar district while Haemorrhagic Septicaemia is predicted for Kaithal.

Himachal Pradesh

A total of 8 districts in Himachal Pradesh are likely to report 4 diseases Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia and Peste des petits ruminants.7 districts are prone to Foot and Mouth disease while 2 districts are likely to have Peste des petits ruminants. Kullu and Kangra are two districts likely to have Black Quarter and Haemorrhagic Septicaemia respectively.

Jammu and Kashmir

A total of 14 districts in Jammu and Kashmir are likely to report 5 diseases i.e., Black Quarter, Foot and Mouth disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Sheep & Goat pox. Foot and Mouth disease is predicted in 14 districts. Sheep & Goat pox disease is predicted in 13 districts. Black Quarter is likely to occur only in 9 districts.3 distrits are prone to Peste des petits ruminants. Kathua and Rajouri 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 15 districts. Fascioliasis is predicted in 10 districts. Foot and Mouth disease and Haemorrhagic Septicaemia are predicted for 7 districts. Black Quarter is likely to occur in 6 districts.

Karnataka

A total of 27 districts in Karnataka are likely to report 9 diseases i.e., Anthrax, Babesiosis, Black Quarter, Bluetongue, Enterotoxaemia, Foot and Mouth disease, Haemorrhagic Septicaemia, Peste des petits ruminants and Sheep & Goat pox. 26 districts are prone to Foot and Mouth disease. 23 districts are prone to Black Quarter and 27 districts are prone to Haemorrhagic Septicaemia. Enterotoxaemia and Sheep & Goat pox is likely to occur in 13 districts. Anthrax is likely to occur in 5 districts. Peste des petits ruminants is threat for 8 districts. Kodagu and Udupi are prone to Babesiosis. Bluetongue is threat for Tumkur.

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, Black is threat to 12 districts. Anthrax and Fascioliasis likely to occur in 11 districts. Haemorrhagic Septicaemia is likely to occur in 10 districts. 7 districts are prone to Peste des petits ruminants.

Madhya Pradesh

A total of 7 districts in Madhya Pradesh likely to have 2 diseases i.e., Foot & Mouth disease and Peste des petits ruminants.6 districts are prone to Foot & Mouth disease and Sagar is the only district prone to Peste des petits ruminants.

Maharashtra

A total of 22 districts in Maharashtra are likely to report 6 diseases i.e., Black Quarter, Enterotoxaemia, 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 8 districts. Black Quarter is likely to occur in 14 districts while 4 districts are prone to Peste des petits ruminants and Sheep and Goat pox. Enterotoxaemia is likely to occur in Ahmadnagar district.

Manipur

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

Meghalaya

A total of 6 districts in Meghalaya are likely to report 3 diseases i.e., Black Quarter, Foot and Mouth disease 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.

Mizoram

A total of 8 districts in Mizoram are likely to report 3 diseases i.e., Black Quarter, Fascioliasis, and Swine Fever. Fascioliasis is predicted in 4 districts while Swine Fever is likely to occur in 8 districts. Saiha is the only district prone to Black Quarter.

Nagaland

Zunheboto district in Nagaland is prone to Swine Fever.

Odisha

A total of 12 districts in Orissa are likely to report 5 diseases i.e., Babesiosis, Black Quarter, Foot and Mouth Disease, Haemorrhagic Septicaemia and Peste des petits ruminants. Black Quarter and Babesiosis are threat for 8 districts. Foot and Mouth Disease and Haemorrhagic Septicaemia are likely to occur in 3 districts. Ganjam is the only district prone to Peste des petits ruminants.

Rajasthan

A total of 3 districts in Rajasthan are likely to report 2 diseases i.e., Foot and Mouth Disease predicted in Sikar, Nagaur and Udaipur districts. Haemorrhagic Septicaemia is threat in Udaipur district.

Tamil Nadu

A total of 14 districts in Tamil Nadu are likely to report 7 diseases i.e., Anthrax, Black Quarter, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants, Sheep and Goat pox and Swine Fever. Foot and Mouth Disease and Peste des petits ruminants is threat for 7 districts. Black Quarter is threat for 12 districts .9 districts are likely to have Anthrax. Kancheepuram is the only district likely to have Swine Fever.

Telangana

A total of 10 districts in Telangana are likely report the major 9 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 Haemorrhagic Septicaemia and Peste des petits ruminants are predicted in all the 9 districts. Black Quarter and Enterotoxaemia are likely to occur in 10 districts. 8 districts are prone to Sheep and Goat pox. Mahbubnagar district is prone to Anthrax and Bluetongue while Adilabad is likely to have Trypanosomiasis.

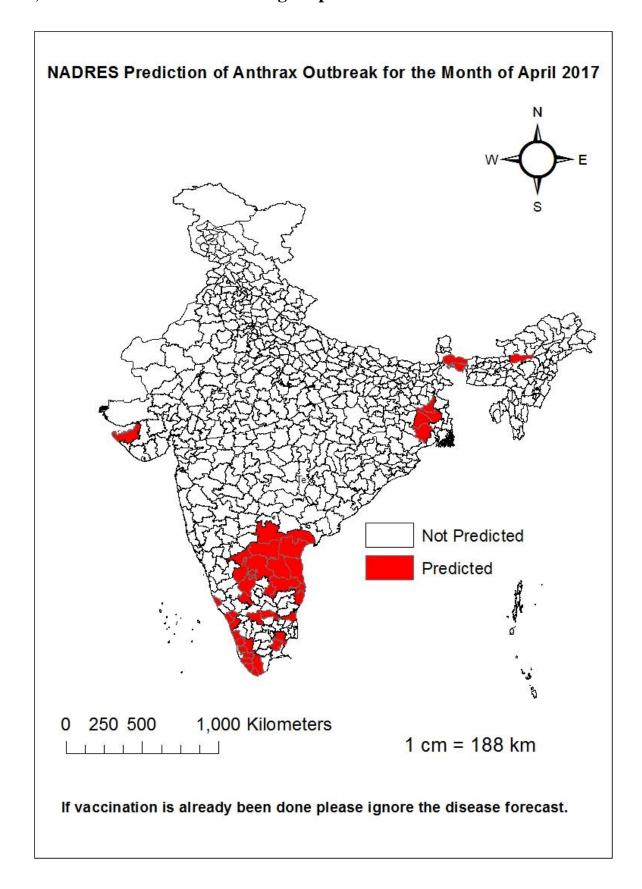
Tripura

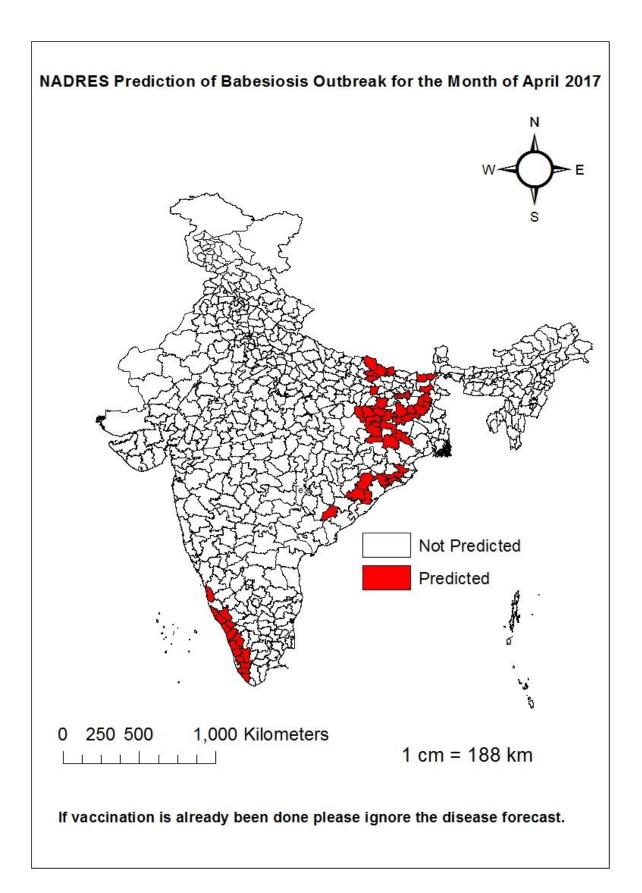
North Tripura, South Tripura and West Tripuraare likely to report 5 diseases i.e., Black Quarter, Fascioliasis, Foot and Mouth disease, Sheep & Goat pox and Swine Fever. Food and mouth disease is likely to occur in all 3 districts. Black Quarter and Swine Fever is likely to occur in 2 districts. South Tripura is prone to Fascioliasis and Sheep & Goat pox.

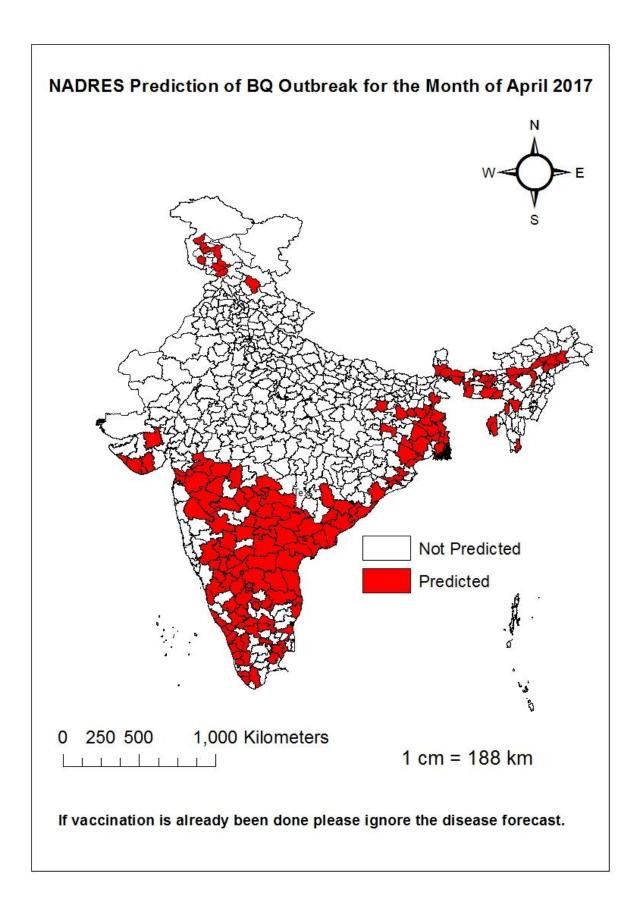
West Bengal

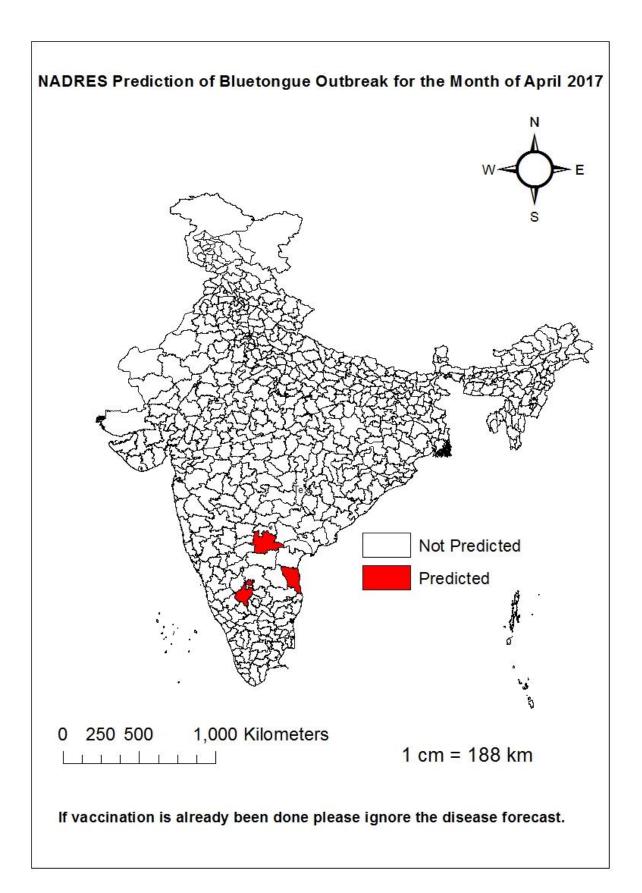
A total of 14 districts in West Bengal are likely to report 8 diseases i.e., Anthrax, Black Quarter, Foot and Mouth Disease, Haemorrhagic Septicaemia, Peste des petits ruminants, Sheep & Goat pox, Theileriosis and Trypanosomiasis. Peste des petits ruminant's disease and Black Quarter are predicted in 13 districts. Foot and Mouth Disease is likely to occur in 11 districts. Haemorrhagic Septicaemia is predicted in 10 districts. Anthrax is threat for 6 districts while Pashchim Medinipur is prone to Theileriosis and Trypanosomiasis.

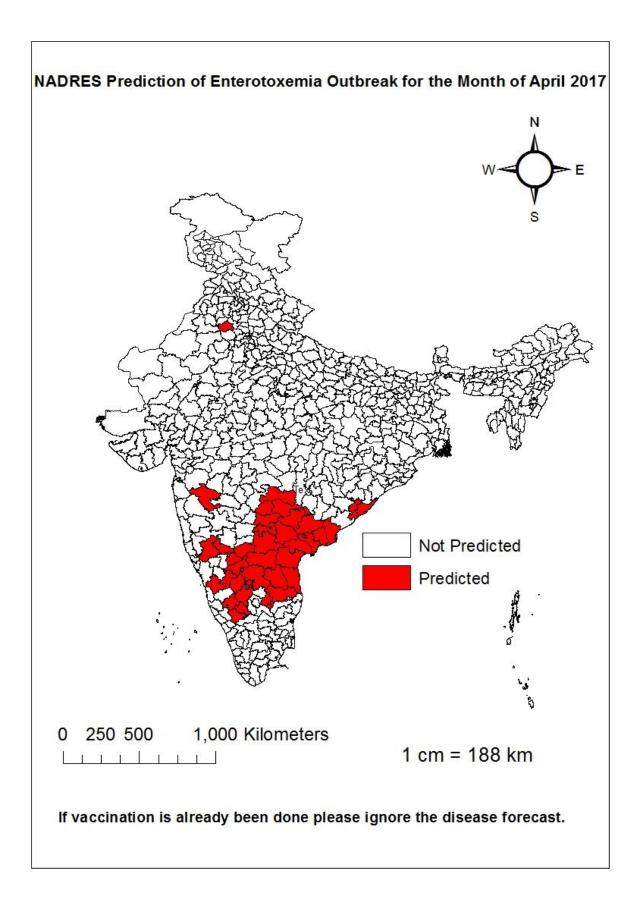
iii) Livestock disease forewarning Maps

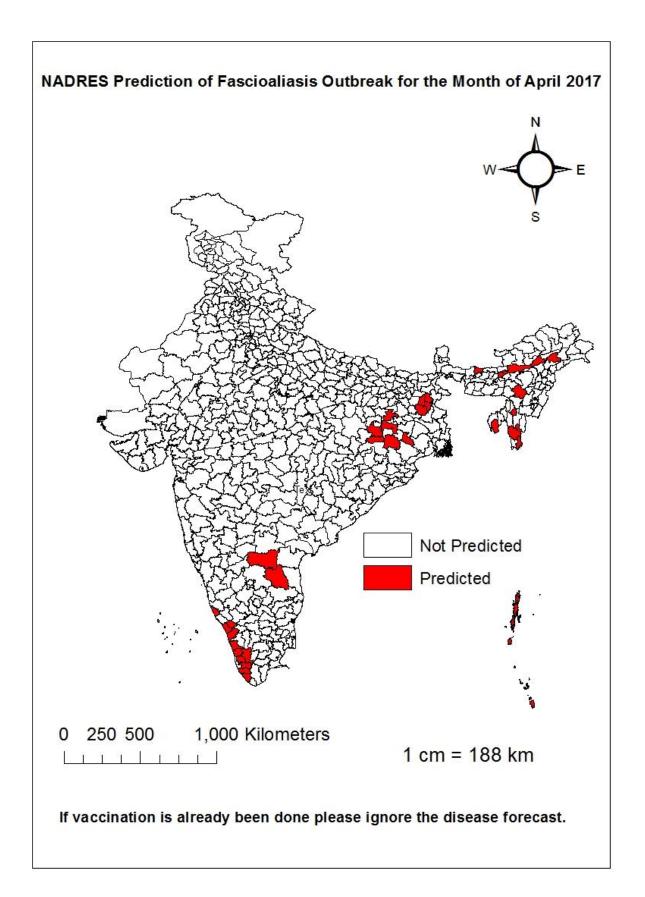


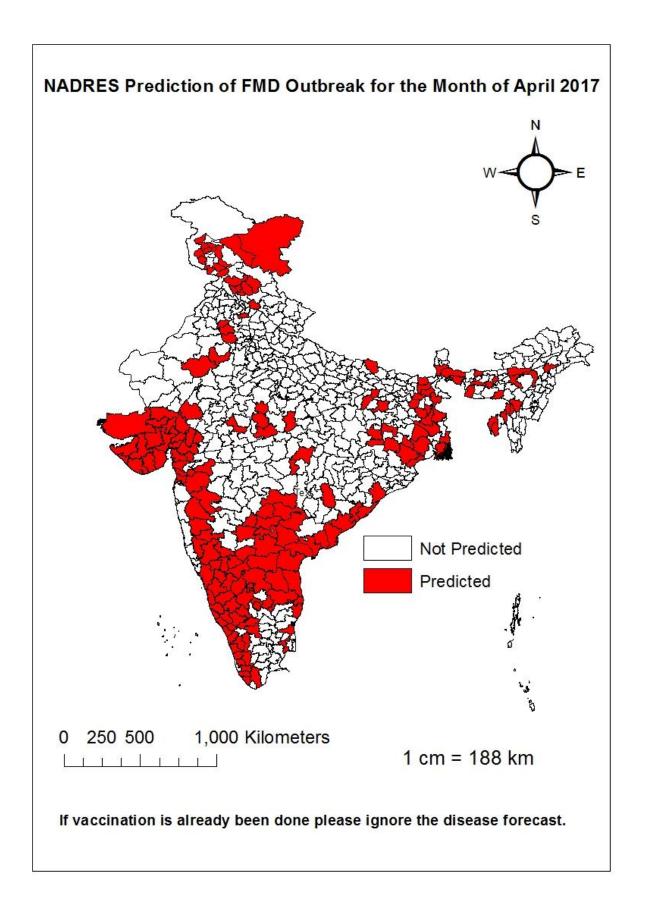


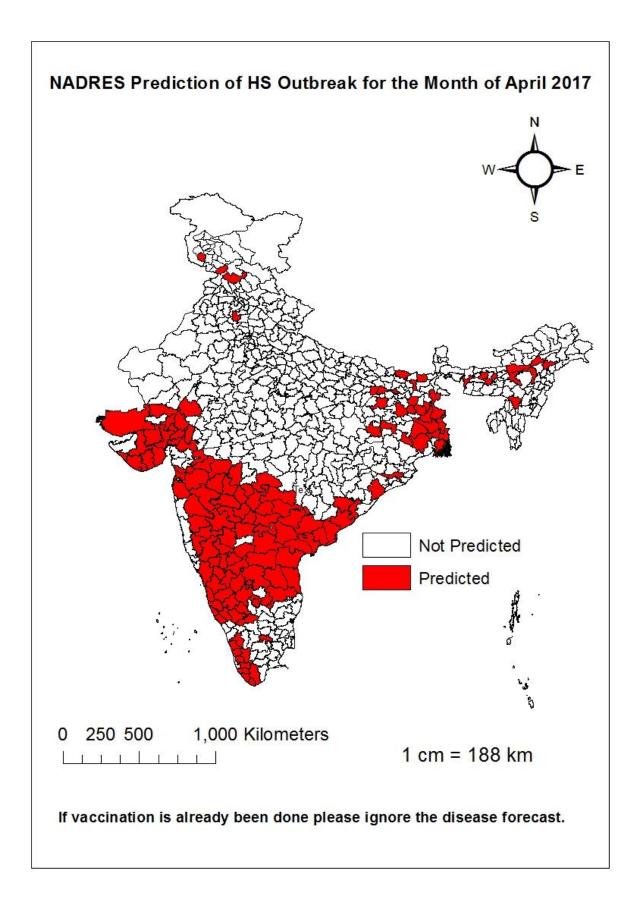


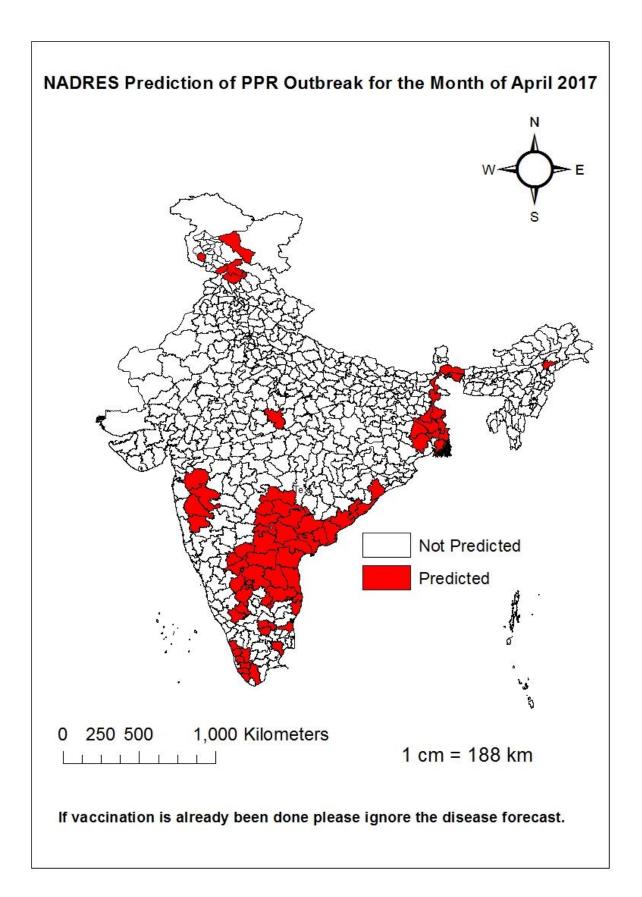


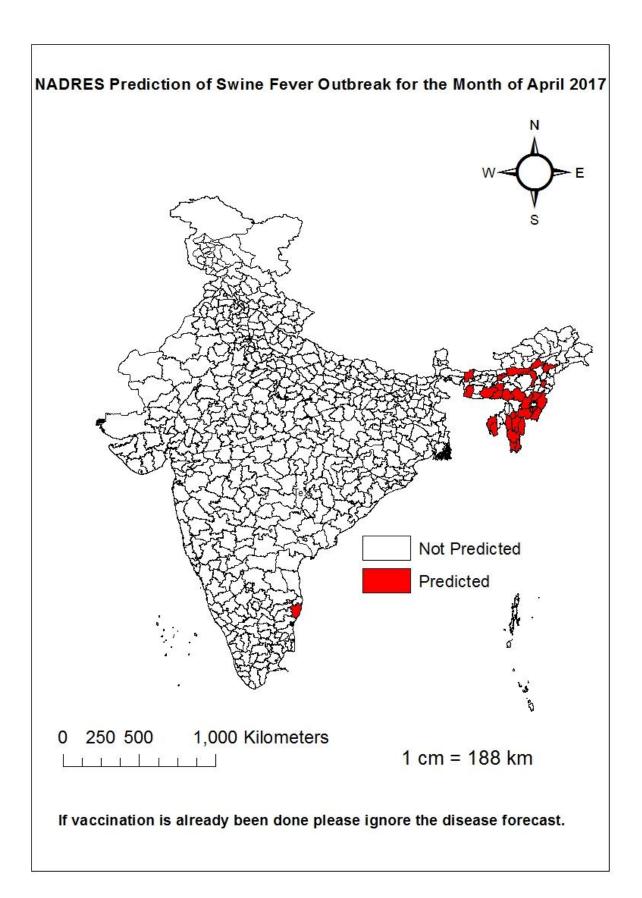


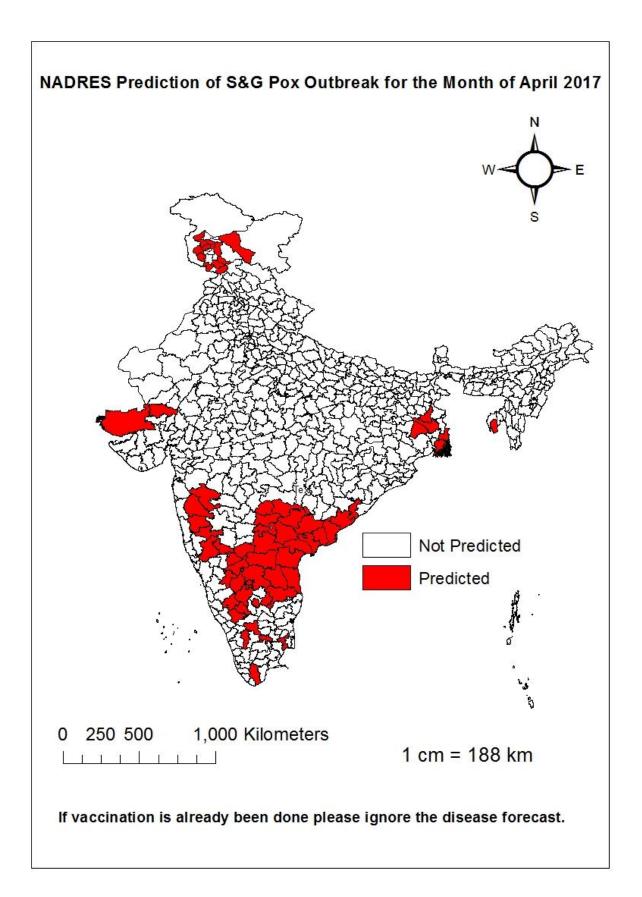


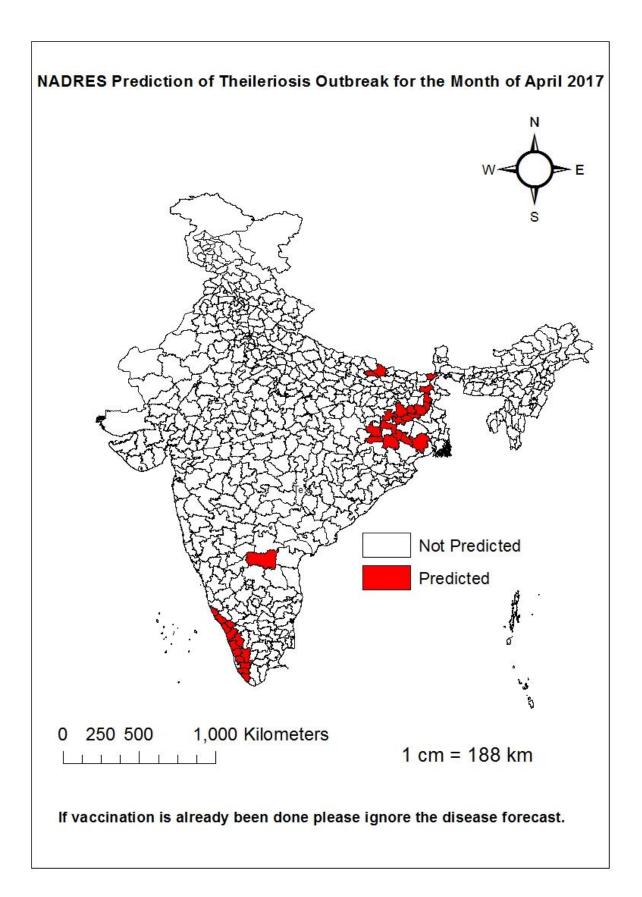


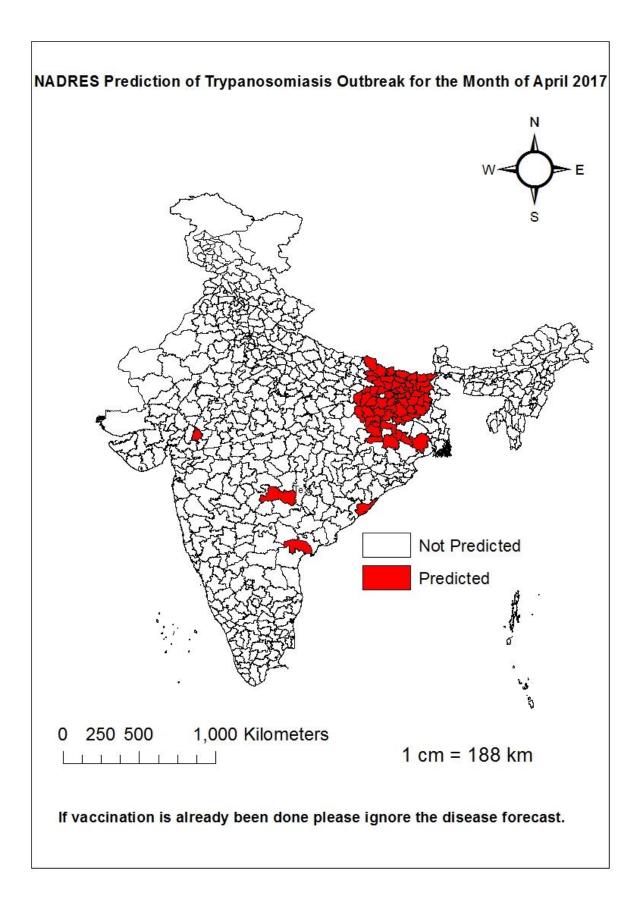












Appendix

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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