



## Session 3: *Progress towards VL elimination & the remaining challenges*



**DNDi**  
Drugs for Neglected Diseases initiative

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



BILL & MELINDA  
GATES foundation

# **KALA AZAR ELIMINATION**

## **CURRENT STATUS**



**DR. SANJAY KUMAR**  
STATE NODAL OFFICER- KA

NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME  
JHARKHAND

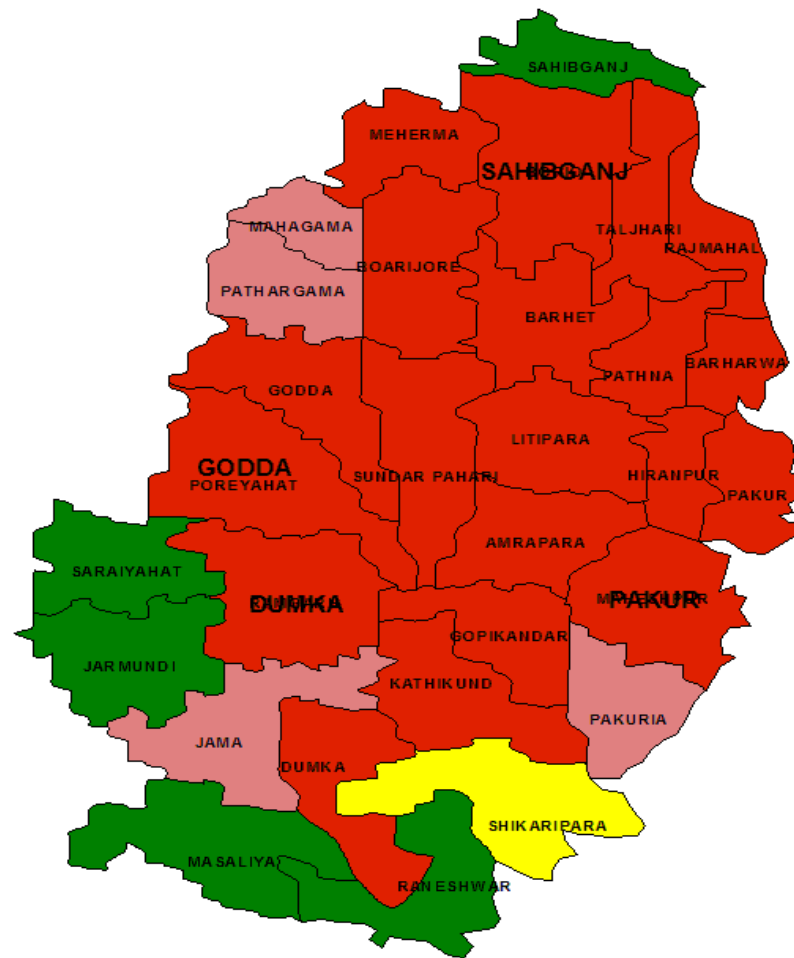
## Geographical Distribution

Distribution	2014	2015	2016	2017
Blocks >1:10,000	33	26	24	25
Affected HSCs	343	411	419	475
Affected villages	746	808	768	830
Cases per 10000 population	1.91	2.48	2.29	2.55

## KA affected villages in 2017

VL case	No. of affected villages				
	Pakur	Dumka	Godda	Sahibganj	Total
<b>01</b>	123	186	155	100	564
<b>02-04</b>	72	68	61	39	240
<b>05-09</b>	10	2	9	1	22
<b>≥10</b>	2	1	1	0	4
<b>Grand total</b>	<b>207</b>	<b>257</b>	<b>226</b>	<b>140</b>	<b>830</b>

# VL & PKDL MAPPING BASED ON ANNUAL INCIDENCE & CASES 2017

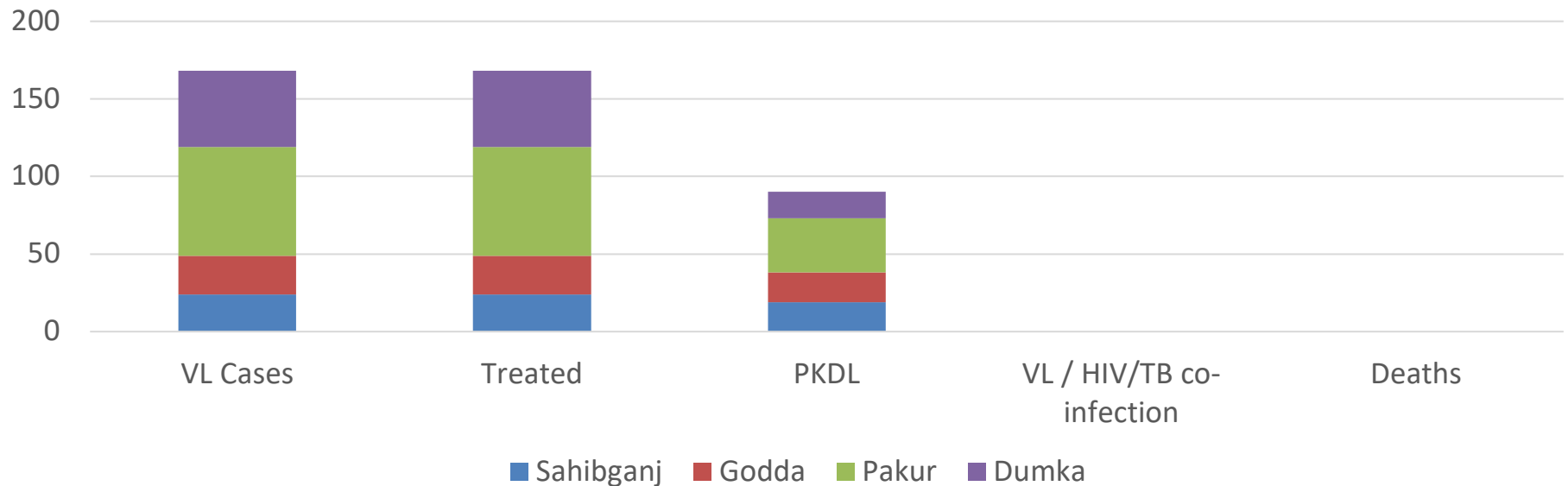


VL CASES 2017(1353)			
VL INCIDENCE CHC WISE MAP			
<1	1-2	2-5	>5..
8	8	12	5

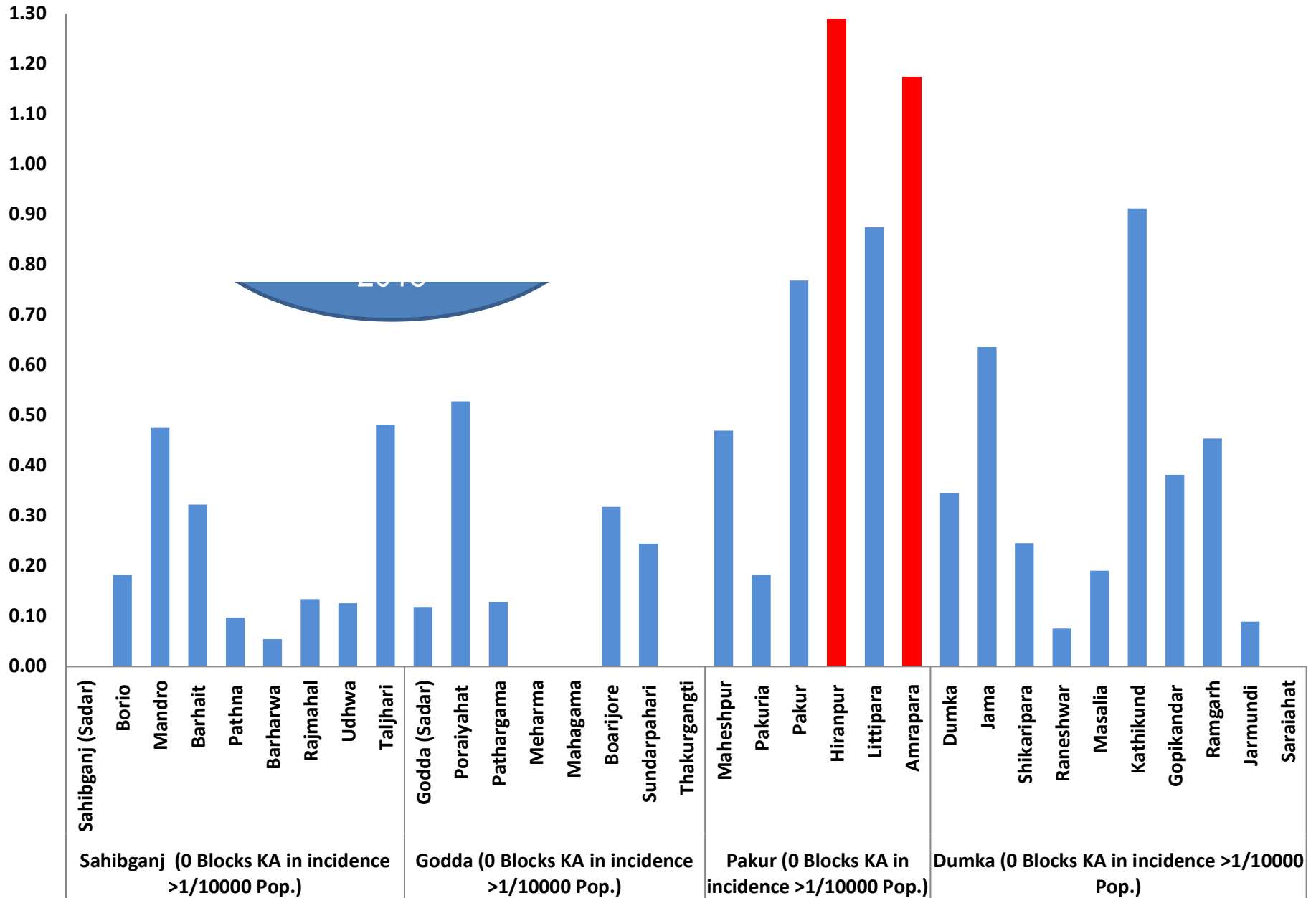
PKDL CASES 2017 (1210)			
PKDL CHC WISE MAP			
0-5	6-10	11-15	>15..
5	01	5	22

# District wise KA status (Jan - March 2018)

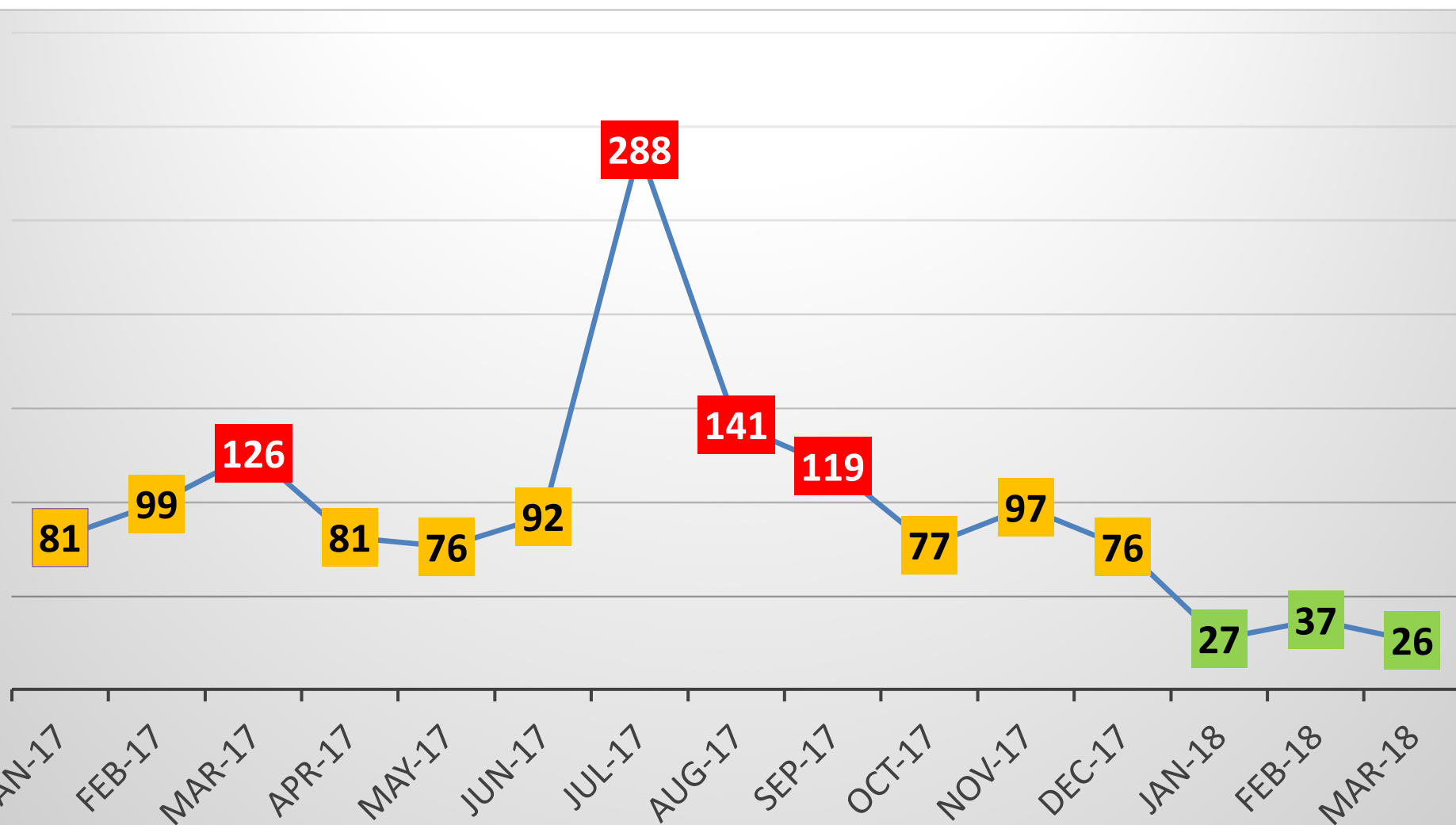
Sl. No.	Districts	VL Cases	Deaths	Treated	PKDL	VL / HIV/TB co-infection
1	Sahibganj	24	0	24	19	0
2	Godda	25	0	25	19	0
3	Pakur	70	0	70	35	0
4	Dumka	49	0	49	17	0
<b>Total</b>		<b>168</b>	<b>0</b>	<b>168</b>	<b>90</b>	<b>0</b>



# Block wise KA incidence up to March 2018



# Month wise VL case – Jan 2017 to March 2018



**VL is decreased by 70.05 % B/W Jan-March 2017-18**

# Drug status (14<sup>th</sup> April 2018)

S. N.	District	rK-39	Ambisome Inj.	Miltefosine 50mg.	Miltefosine 10mg.
1	Dumka	3413	610	2702	4368
2	Godda	5724	1093	3497	5804
3	Pakur	5600	725	830	7196
4	Sahibganj	3648	1650	322	4589
<b>District total</b>		<b>18385</b>	<b>4078</b>	<b>7351</b>	<b>21957</b>
5	State HQ	5150	3424	55	11760
<b>State Total</b>		<b>23535</b>	<b>7502</b>	<b>7406</b>	<b>33717</b>



# Year wise status of Indoor Residual Spray

Year	Round	Dumka			Godda			Pakur			Sahibganj		
		House covered (%)	Room covered (%)	Population covered (%)	House covered (%)	Room covered (%)	Population covered (%)	House covered (%)	Room covered (%)	Population covered (%)	House covered (%)	Room covered (%)	Population covered (%)
2015	1 <sup>st</sup>	90.38	72.16	90.73	82.24	96.10	93.29	93.99	79.62	98.63	78.32	61.30	89.99
	2 <sup>nd</sup>	95.77	75.27	92.33	86.72	84.44	95.11	91.74	75.75	97.94	80.15	61.19	88.08
2016	1 <sup>st</sup>	87.93	71.05	84.00	92.59	90.23	96.00	87.56	74.73	88.00	89.60	80.90	91.00
	2 <sup>nd</sup>	93.04	75.07	75.19	93.30	94.24	97.15	86.61	71.76	92.94	90.98	84.43	93.84
2017	1 <sup>st</sup>	92.58	77.38	81.66	93.24	92.02	94.21	81.71	66.96	84.25	89.78	92.99	93.99
	2 <sup>nd</sup>	91.02	89.02	92.45	91.62	84.69	96.94	93.23	91.73	93.35	93.50	87.53	93.45

# HR status (upto March 2018)

District	Medical officer		ANM		ASHA		MTS		KTS		MPW	
	Sanction	In Position	Sanction	In Position	Sanction	In Position	Sanction	In Position	Sanction	In Position	Sanction	In Position
Sahibganj	125	55	235	235	1638	1251	6	5	6	5	54	121
Godda	104	42	522	484	1868	1651	6	6	7	7	95	103
Pakur	85	36	297	219	1185	1185	4	4	4	3	57	89
Dumka	160	37	591	563	2813	2463	8	7	7	6	97	104
<b>Total</b>	<b>474</b>	<b>170</b>	<b>1645</b>	<b>1501</b>	<b>7504</b>	<b>6550</b>	<b>24</b>	<b>22</b>	<b>24</b>	<b>21</b>	<b>303</b>	<b>417*</b>

*\* 128 MPWs on deputation for KA work.*

# New Initiatives by State

- Kala-azar declared as **Notifiable** disease.
- State specific **New Incentive scheme**.
- Establishment of **4 Parasitological Lab** with the support of DNDi.
- Special deployment of extra **MPWs** (Godda10, Dumka15, Pakur41, Sahibganj62 = 128) for KA elimination activities.
- Continuous case search by MPWs.
- Lateral case search by Spray Squads during the IRS.
- **LPG connection** to KA patient under “Ujjwala Yojna”- Godda
- **Free Ambulance** facility to VL patients.
- Formation of **Medical board** at 4 District hospitals for doubtful cases.
- Regular **orientation & trainings** of Sahiyas, MPWs and ANMs at CHC level.
- Deploying **Female squad member** in Spray team –Under consideration.



# CURRENT ACTIVITIES

## A. Enhanced Surveillance:

1. Activity: Door to door case search

**Continuous Activity**

2. Activity: Sensitization of formal and informal private practitioner's network

**Activity started**

3. Activity: Active follow up of each case as per protocol

**Nearly 90 % of follow up has been completed.**

4. Activity: Strengthening of diagnostic capacity in KAE program

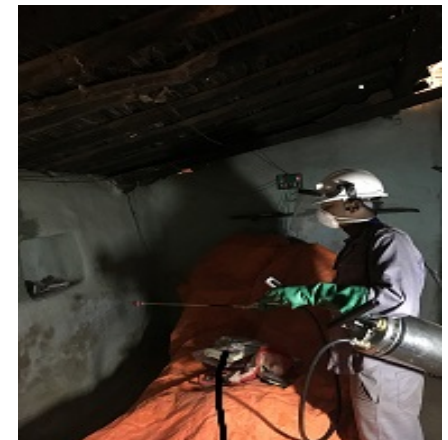
**Activity started**

5. Activity: Improvement in border surveillance

**Activity done**

6. Activity: Improvement in cross notification

**Activity started**



# CURRENT ACTIVITIES

## B. Vector management –

1. Activity: i) Focal spray in villages  
ii) IRS **Started from 26<sup>th</sup> March**

2. Activity: Strengthening of Entomological surveillance  
**HELP Required**



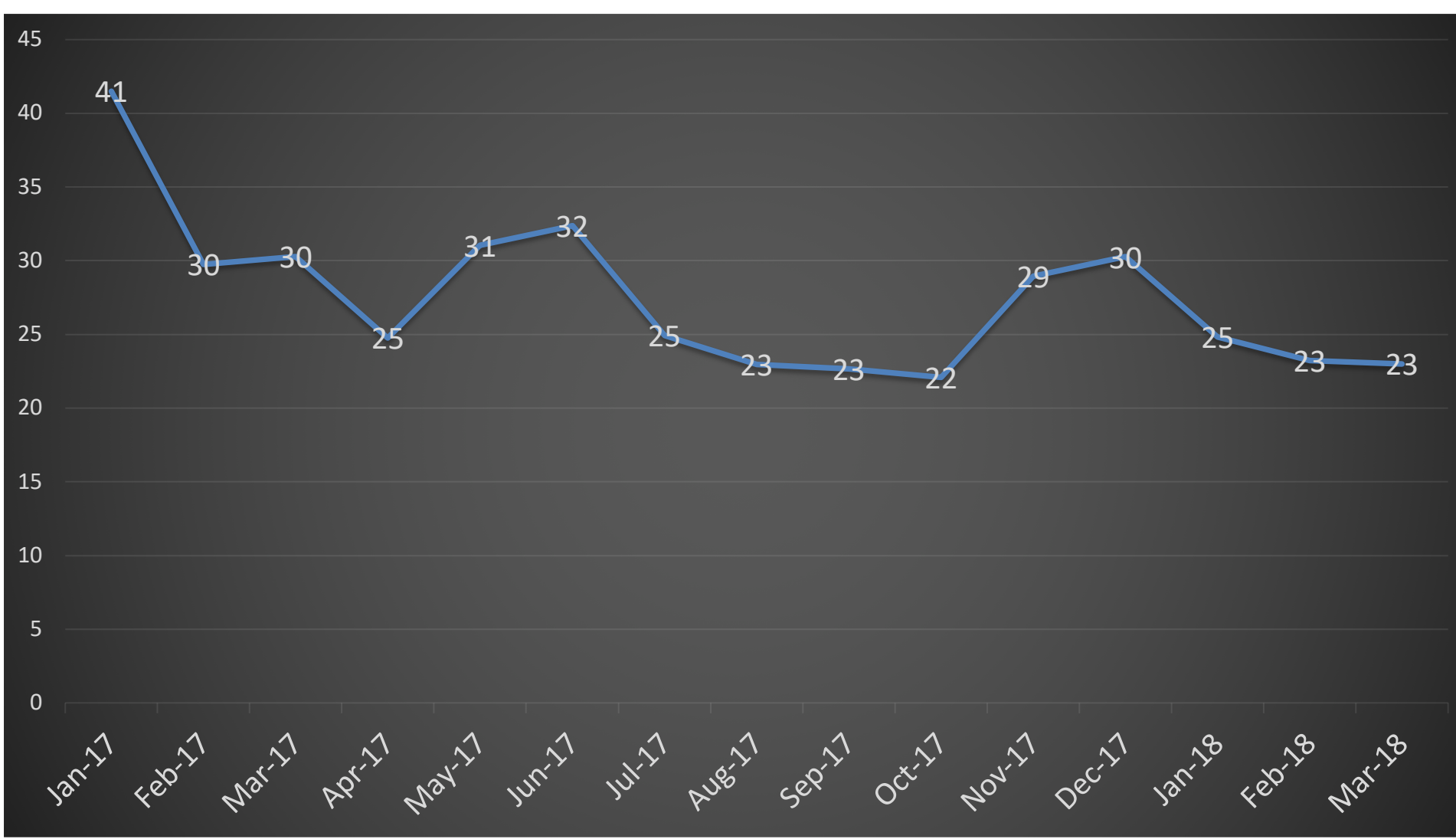
- C. Improved supervision and feedback mechanism  
**Actively done**

## D. IEC/ BCC

1. Activity: Pre information of IRS/ Focal spray to the con  
**Continuous Activities**



# Average Duration of fever before diagnosis for VL



Source: KAMIS

# Challenges

- **Shortage of Miltefosine Caps 50mg**
- **Quality of Insecticide**
- **Entomological capacity of State**
- **Support to state in Entomological Survey**
- **Hard to reach areas and Tribal population**
- **Few Partners to support in all activities**

*Thanks*

JHARKHAND TEAM



# QUESTIONS

- **Definition of Kala azar Death ?**
- **Treatment of Relapse cases ?  
DOSE?**
- **Carriers needs to be treated ? Yes or  
No**
- **Vector control ?**



# SPEAK India

Setting the Post-Elimination Agenda for Kala-azar in India



**DNDi**

Drugs for Neglected Diseases *initiative*

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



BILL & MELINDA  
GATES *foundation*

# KALA AZAR - 2018



## REVIEW & PLANNING

Dr V P Singh,  
Additional Director (Malaria &VBD),  
SPO & Nodal officer for Kala azar,  
Lucknow, Uttar Pradesh

# Kala Azar endemic districts- Uttar Pradesh

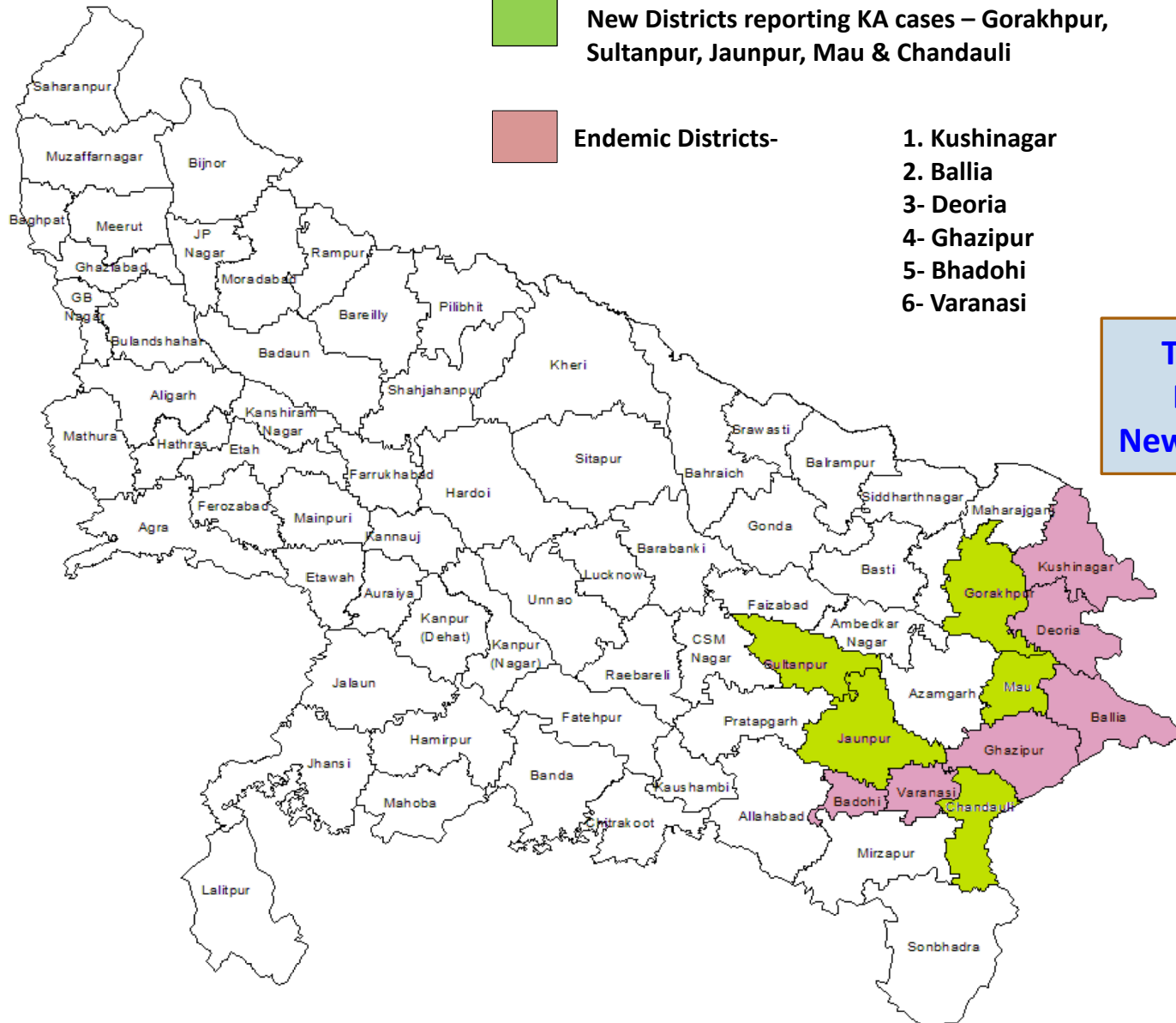


New Districts reporting KA cases – Gorakhpur, Sultanpur, Jaunpur, Mau & Chandauli



Endemic Districts-

1. Kushinagar
2. Ballia
- 3- Deoria
- 4- Ghazipur
- 5- Bhadohi
- 6- Varanasi



Total no. of districts- 75  
Endemic districts - 6  
New districts reporting KA - 5

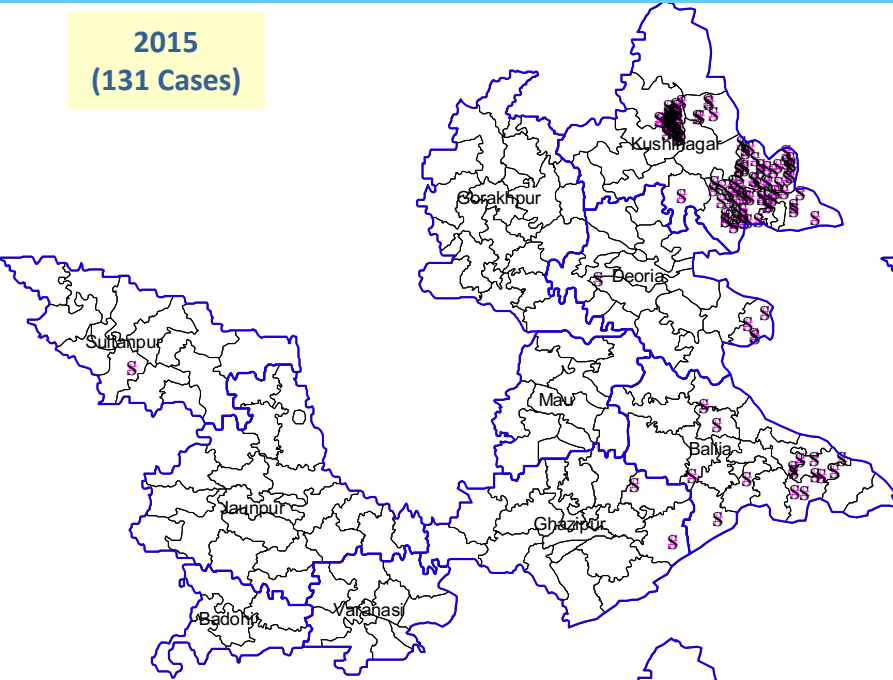


# Districts with reported Kala-azar Cases and Deaths 2001-17

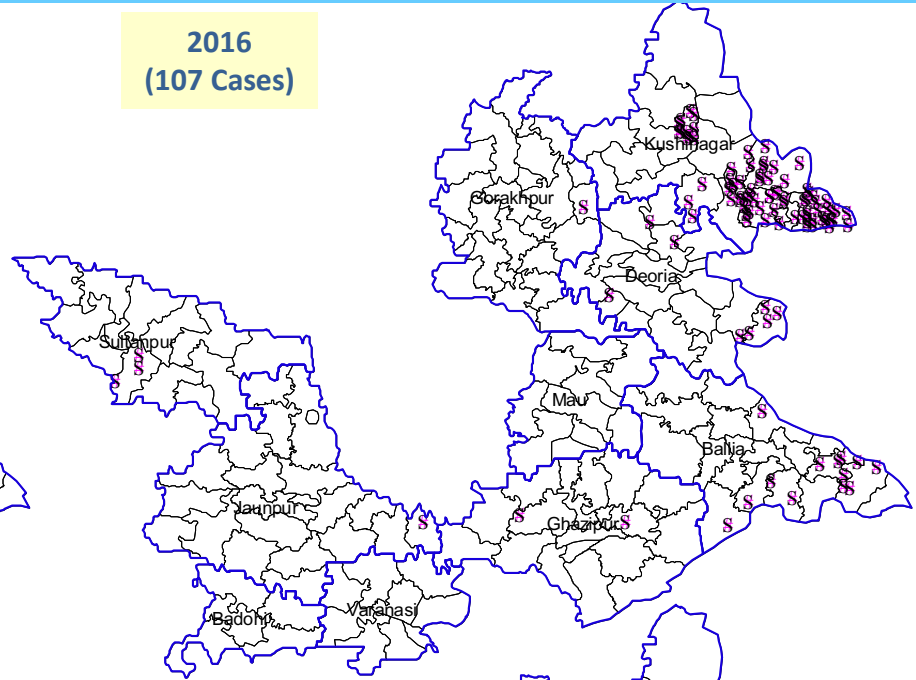
District	2007 Cases	2007 Deaths	2008 Cases	2008 Deaths	2009 Cases	2009 Deaths	2010 Cases	2010 Deaths	2011 Cases	2011 Deaths	2012 Cases	2012 Deaths	2013 Cases	2013 Deaths	2014 Cases	2014 Deaths	2015 Cases	2015 Deaths	2016 Cases	2016 Deaths	2017 Cases	2017 Deaths
Varanasi	22	1	9	0	5	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Ballia	15	0	5	0	6	1	3	0	2	1	0	0	0	0	0	0	15	0	13	0	22	0
Deoria	2	0	3	0	1	0	1	0	0	0	2	0	2	0	0	0	5	0	8	0	22	0
Gorakhpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Ghazipur	9	0	0	0	0	0	0	0	2	0	3	0	2	0	0	0	2	0	2	0	3	0
Kushinagar	18	0	9	0	5	0	4	0	0	0	0	0	7	1	11	0	108	0	79	0	57	0
Rampur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonda	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jaunpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
St. Ravidas Nagar / Bhdohi	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
Sultanpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0

# Kala Azar Cases

2015  
(131 Cases)

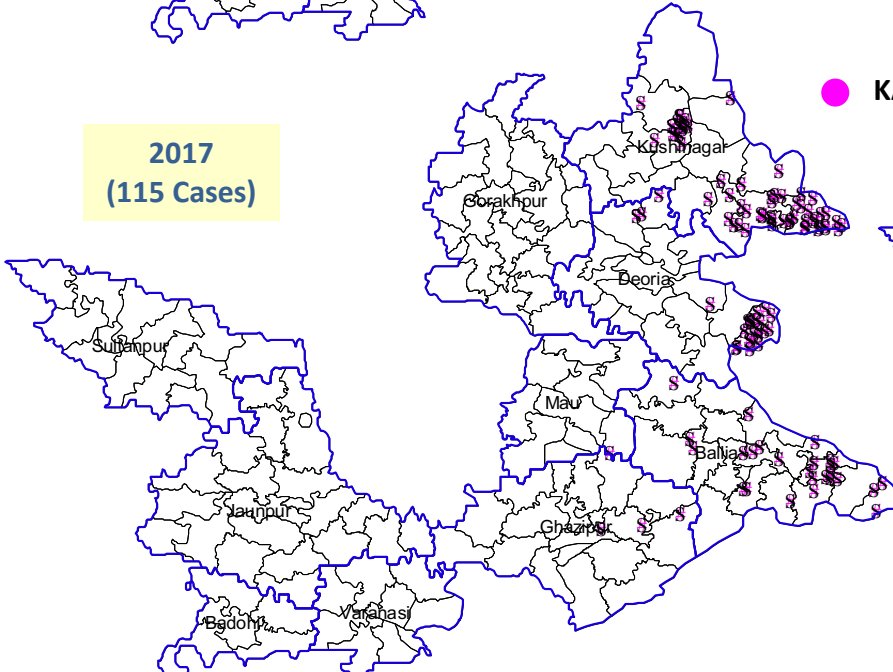


2016  
(107 Cases)

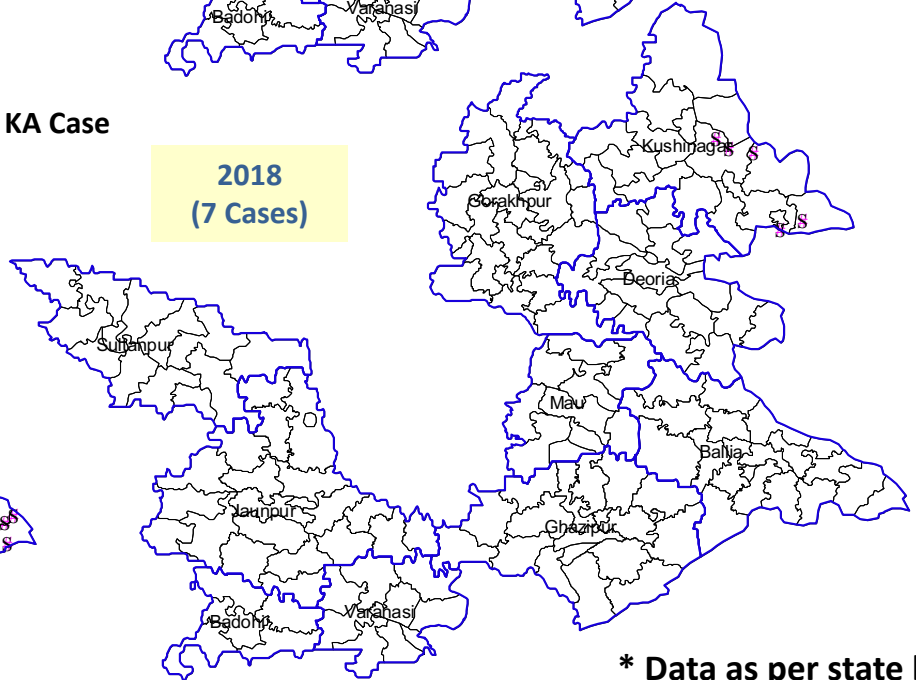


● KA Case

2017  
(115 Cases)



2018  
(7 Cases)



\* Data as per state line list

## CLASSIFICATION OF ENDEMIC AREA BLOCKS

KA endemic areas have been stratified into 4 categories based on annual incidence.

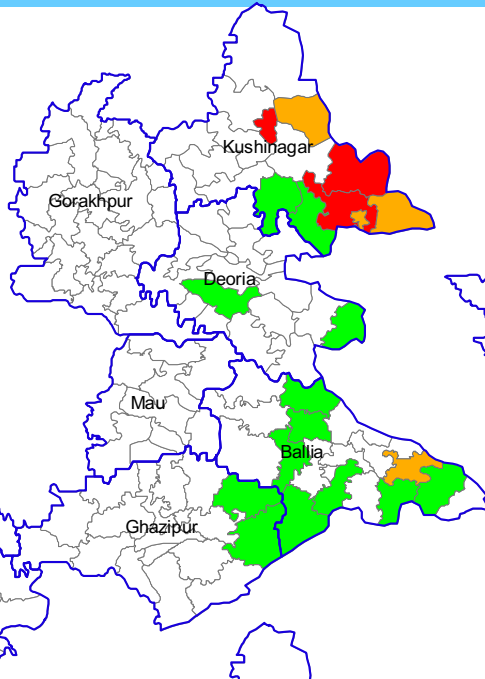
- Category 1: **Blocks above elimination threshold** (annual incidence of more than or equal to 1 case per ten thousand population).
- Category 2: Blocks with **borderline endemicity** (Annual KA incidence varying 0.8 to <1).
- Category 3: **Fluctuations**- increasing or decreasing trend of disease either year to year or in a gap of few years.
- Category 4: **Silent blocks**- areas reporting nil cases annually. Post-elimination sustenance (maintenance phase) These include areas of zero cases for at least two consecutive years.

Year	Total No. of Vlcases	No of Districts with blocks >1 case /10,000 Pop.	Category -1 Blocks >1 case /10,000 Pop	Category -2 Blocks 0.8-<1 case / 10,000 pop	Category -3 Fluctuating from year to year	Category—4 Silent Blocks- Nil status in last one year
2016	107	0	0	2 1-Tamkuhi (Kushinagar ) 2-Taryasujan ( Kushinagar )	20	19
2017	115	0	0	1 1-Bankata (Deoria), 2-Taryasujan (Kushinagar)	23	16

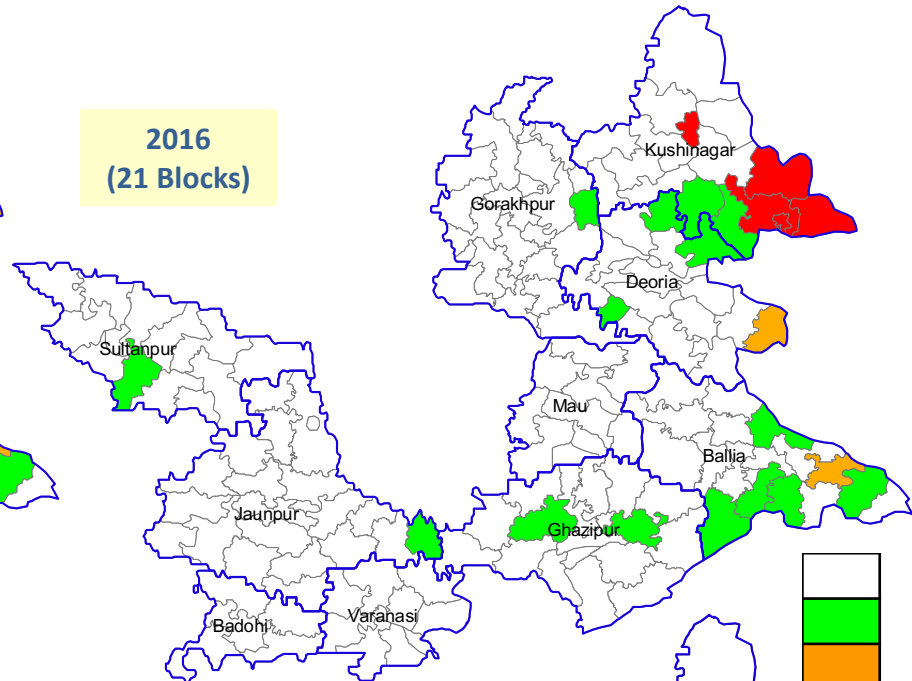


# Kala Azar endemic blocks

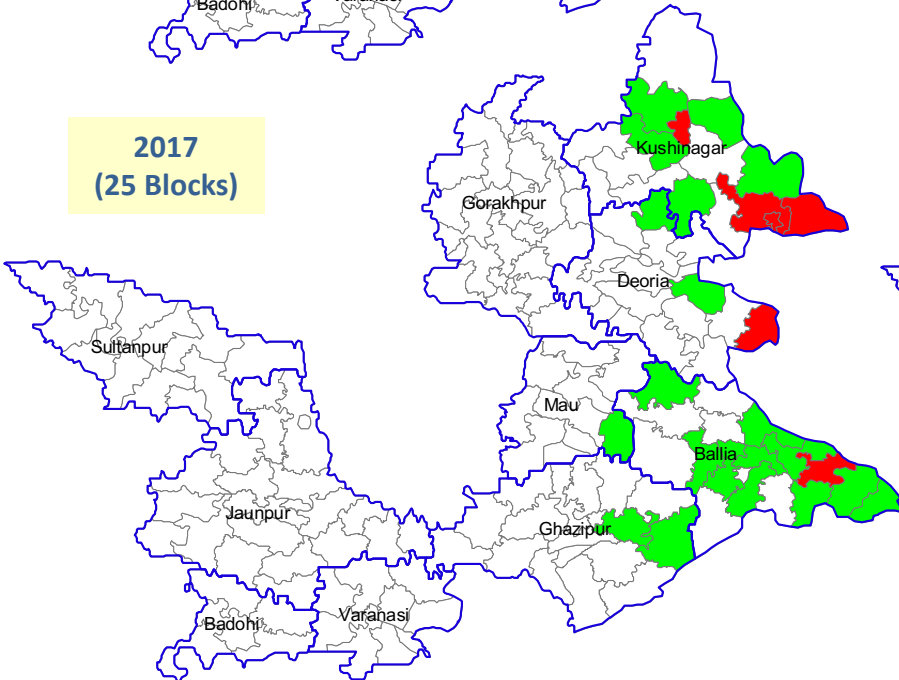
2015  
(20 Blocks)



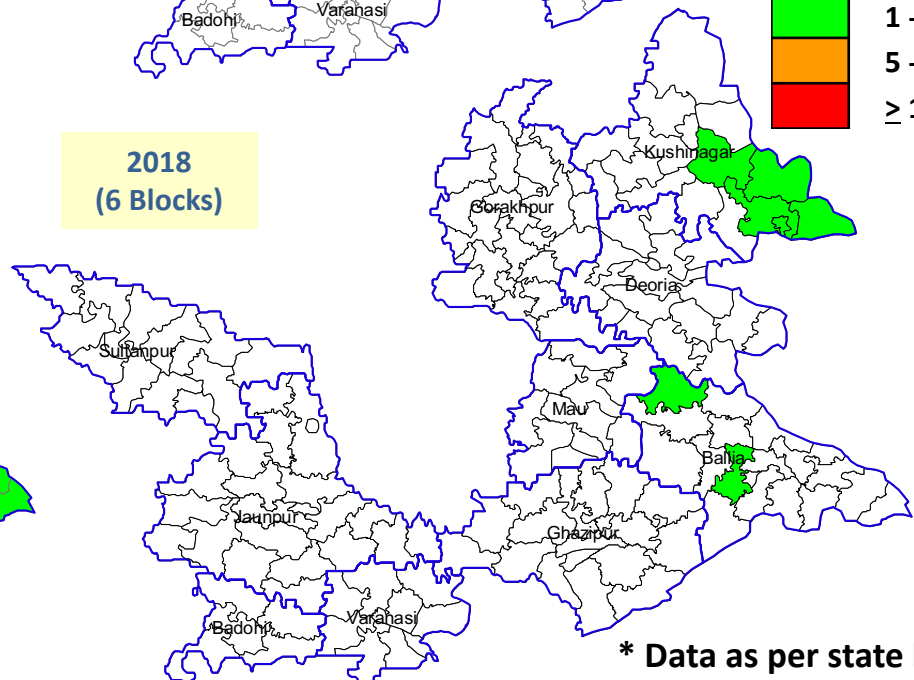
2016  
(21 Blocks)



2017  
(25 Blocks)



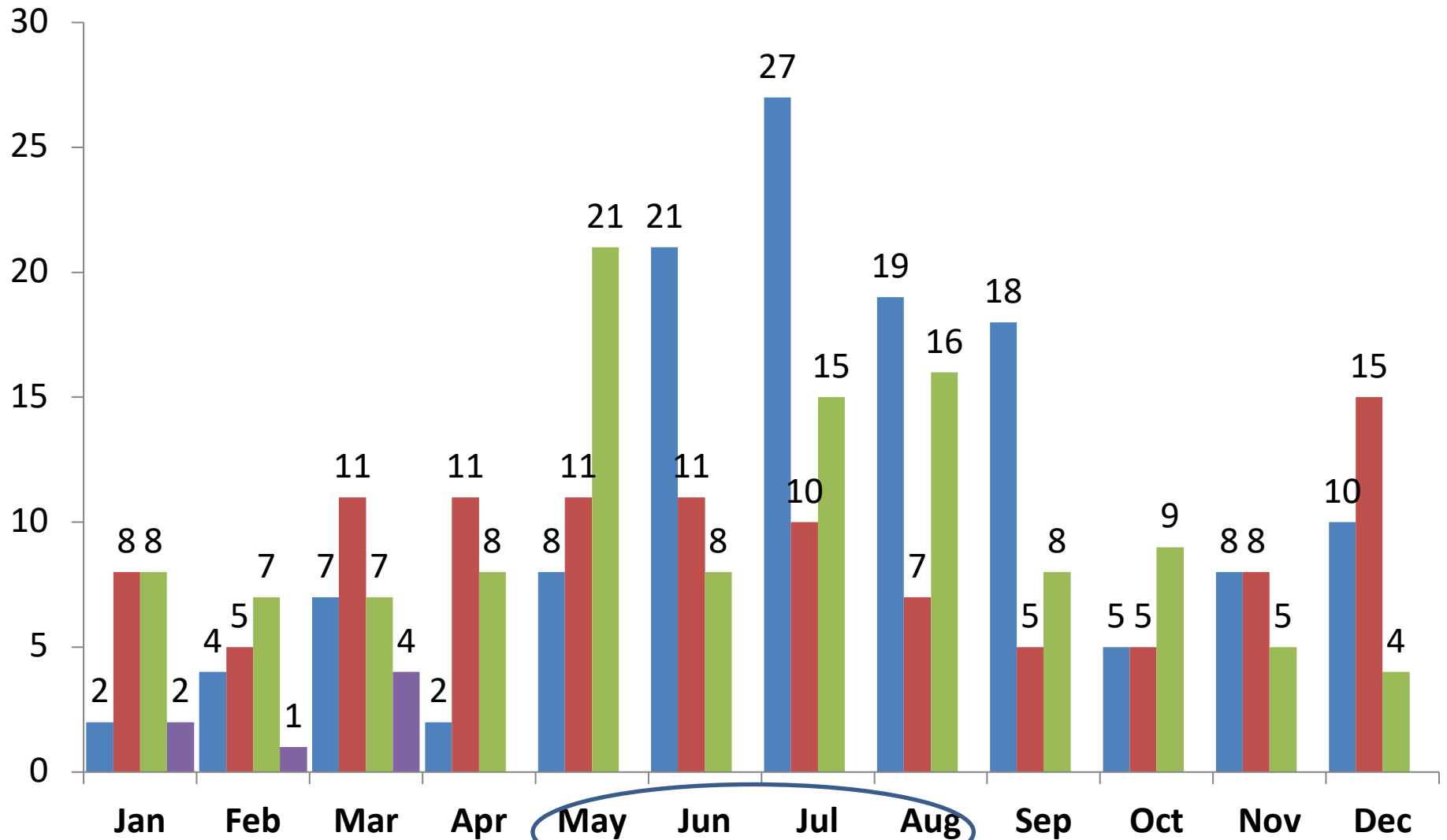
2018  
(6 Blocks)



\* Data as per state line list

# Month wise cases

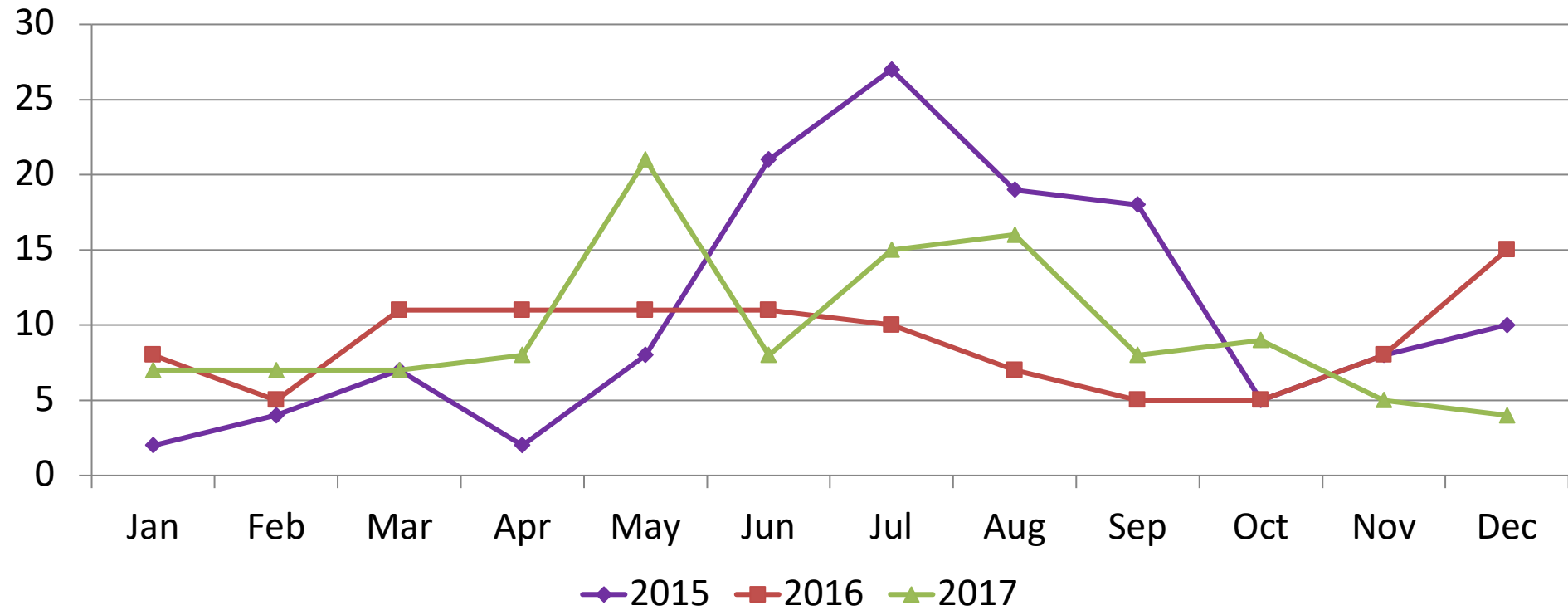
■ 2015 ■ 2016 ■ 2017 ■ 2018



# Month wise cases and incidence-2017

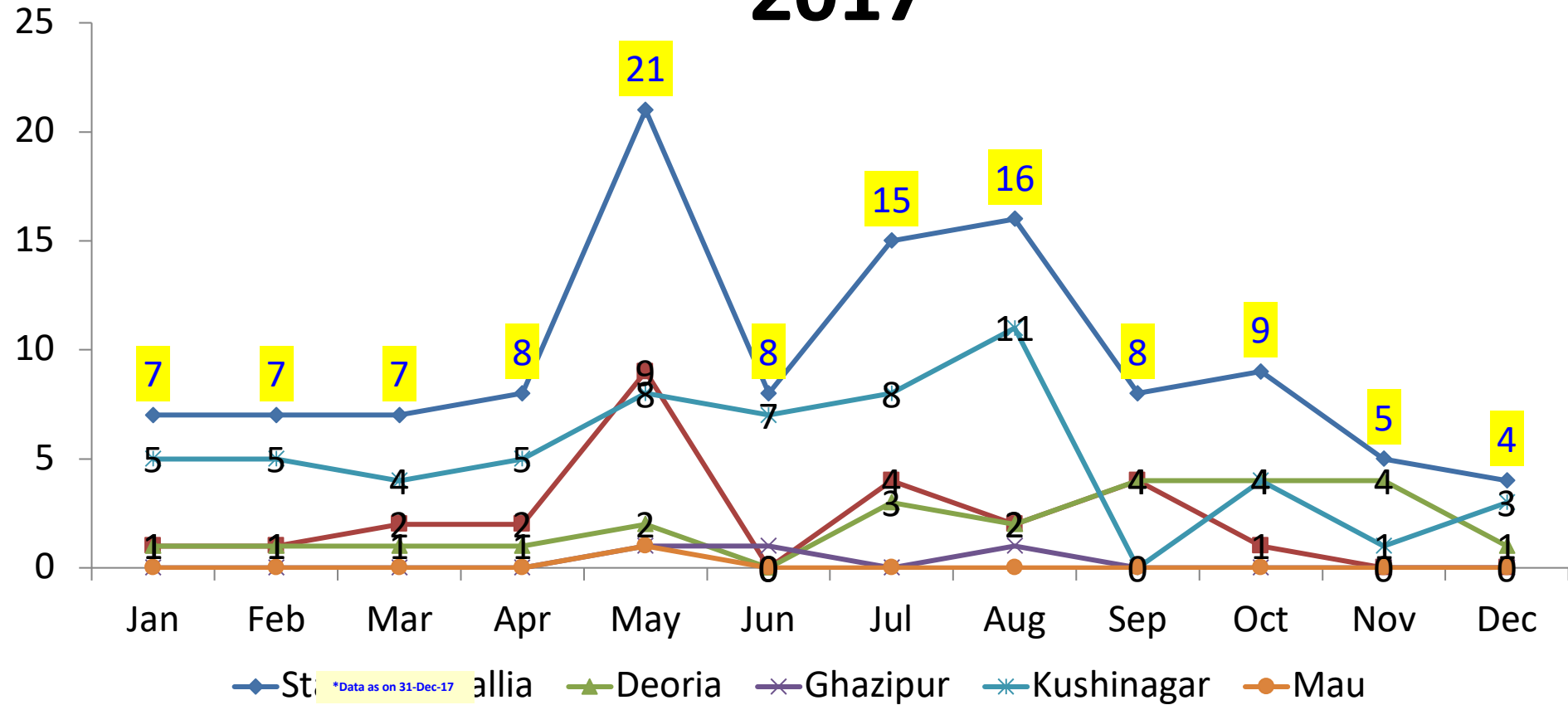
S. No.	Districts	Name of Block/ PHC	Block Population	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		TOTAL		Incidence
				Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	
1	Ballia	BAIRIA	194617																1								1	0	0.05	
		BANSDIH	178441								1				1												2	0	0.11	
		BELHARI	142842						1								1										2	0	0.14	
		BERUARWARI	138463								1				1				1								3	0	0.22	
		CHILKAHAR	200017												1	1											2	0	0.10	
		DUBHAR	203397					1		1																	2	0	0.10	
		GARWAR	186352	1																							1	0	0.05	
		MANIYAR	151877									1															1	0	0.07	
		MURLI CHHAPRA	160272																2								2	0	0.12	
		REWATI	169292			1		1				6				1						1					10	0	0.59	
		SIYAR	259748	1																							1	0	0.04	
		<b>Total</b>	<b>1985318</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>0.14</b>	
2	Deoria	<b>BANKATA</b>	201563	1								1				3		2		4		4		4		1		20	0	0.99
		BHATNI	182873									1															1	0	0.05	
		DESAHI DEORIA	142582			1		1		1																	3	0	0.21	
		<b>Total</b>	<b>527018</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0.46</b>
3	Ghazipur	GONDAUR	213167									1															1	0	0.05	
		MOHAMMADABAD	247065											1				1									2	0	0.08	
		<b>Total</b>	<b>460232</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0.07</b>	
4	Kushinagar	DUDHAI	338467					1										1				1					3	0	0.09	
		KASIA	211446			1																					1	0	0.05	
		NEBUA NAURANGIA	254826															1									1	0	0.04	
		RAMKOLA	273229									1															1	0	0.04	
		TAMKUHI	309365	2		1		3				2			1		2				1						12	0	0.39	
		TARYASUJAN	324507	2						4		2		4	5	5					2		1		3		28	0	0.86	
		URBAN PADRAUNA	440836	1		2				1		3		3	2	2											14	0	0.32	
		VISHNUPURA	287854			1																					1	0	0.03	
		<b>Total</b>	<b>2440530</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>61</b>	<b>0</b>	<b>0.25</b>
5	Mau	RATANPURA	211479									1															1	0	0.05	
		<b>Total</b>	<b>211479</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0.05</b>	
<b>Grand Total</b>			<b>5413098</b>	<b>8</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>116</b>	<b>0</b>	<b>0.21</b>

# Month wise trend of reported cases – UP 2015, 2016, 2017



\*Data as on 31-Dec-17

# Endemic Districts trend of reported cases – 2017





# Block wise Incidence of Kalaazar 2017

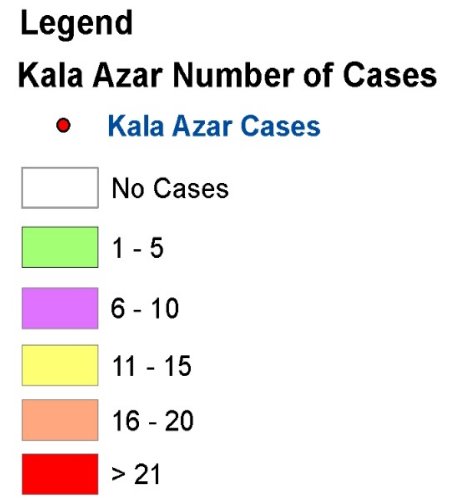
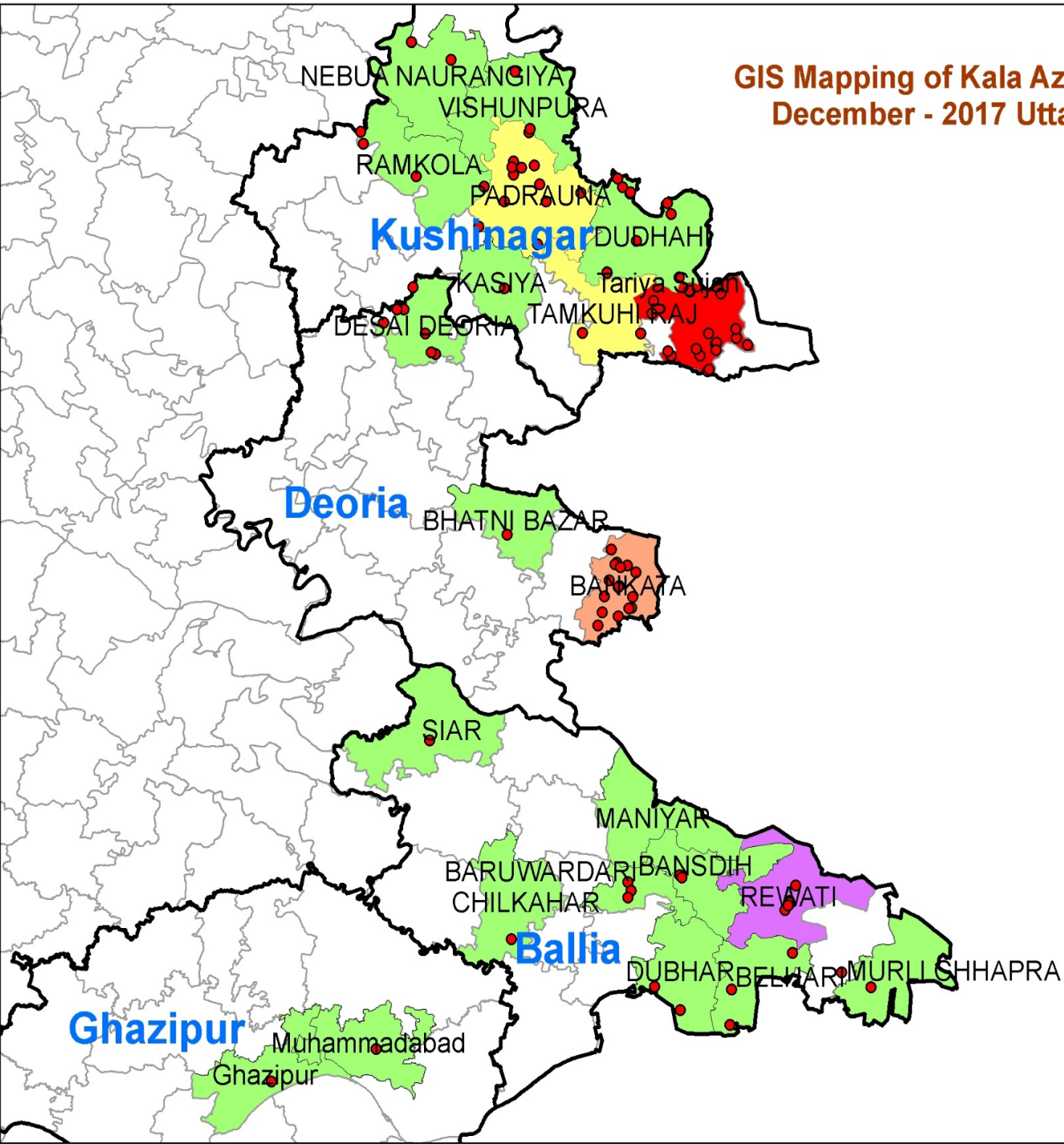
S.N.	District	Total Blocks	Affected Blocks 2011-2017	S.N.	Name of Block	2011	2012	2013	2014	2015	2016	2017	Census Population	Incidence 2017
1	Kushinagar	15	9	1	Dudhai	0	0	6	11	33	11	3	338467	0.09
				2	Fazilnagar	0	0	0	0	2	2	0		
				3	Kasia	2	0	0	0	1	3	1	211446	0.05
				4	Nebua Naurangia	0	0	0	0	0	0	1	254826	0.04
				5	Ramkola	0	0	0	0	0	0	1	273229	0.04
				6	Tamkuhi	0	0	1	0	25	23	12	309365	0.39
				7	Taryasujan	0	0	0	0	6	29	28	324507	0.86
				8	Urban Padrauna	0	0	0	0	35	11	14	440836	0.32
				9	Vishnupura	0	0	0	0	6	0	1	287854	0.03
					<b>Total</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>11</b>	<b>108</b>	<b>79</b>	<b>61</b>	<b>2440530</b>	<b>0.25</b>
2	Ballia	18	14	1	Bairia	0	0	0	0	1	3	1	194617	0.05
				2	Bansdih	0	0	0	0	0	0	2	178441	0.11
				3	Belhari	0	0	0	0	2	0	2	142842	0.14
				4	Beruarwari	0	0	0	0	0	0	3	138463	0.22
				5	Chilkahar	0	0	0	0	1	0	2	200017	0.10
				6	Dubhar	1	0	0	0	1	1	2	203397	0.10
				7	Hanumanganj	0	0	0	0	0	2	0		
				8	Maniyar	0	0	0	0	0	1	1	151877	0.07
				9	Murli Chhapra	1	0	0	0	0	0	2	160272	0.12
				10	Nawannagar	0	0	0	0	1	0	0		
				11	Pandah	0	0	0	0	1	0	0		
				12	Rewati	0	0	0	0	7	5	10	169292	0.59
				13	Siyar	0	0	0	0	0	0	1	259748	0.04
				14	Sohaon	0	0	0	0	1	1	0		
					<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>13</b>	<b>26</b>	<b>1798966</b>	<b>0.14</b>
3	Deoria	17	6	1	Bankata	1	2	2	0	4	5	20	201563	0.99
				2	Bhaluani	0	0	0	0	1	0	0		
				3	Bhatni	0	0	0	0	0	0	1	182873	0.05
				4	Desahi Deoria	0	0	0	0	0	1	3	142582	0.21
				5	Mahen	0	0	0	0	0	1	0		
				6	Pathar Deva	0	0	0	0	0	1	0		
					<b>Total</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>8</b>	<b>24</b>	<b>527018</b>	<b>0.46</b>

# Block wise Incidence of Kalaazar 2017

S.N.	District	Total Blocks	Affected Blocks 2011-2017	S.N.	Name of Block	2011	2012	2013	2014	2015	2016	2017	Census Population	Incidence 2017
4	Ghazipur	17	4	1	Barachawar	0	3	0	0	1	0	0		
				2	Gondaur	3	0	2	0	1	0	1	213167	0.05
				3	Manihari	0	0	0	0	0	1	0		
				4	Mohammadabad	0	0	0	0	0	1	2	247065	0.08
					<b>Total</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>460232</b>	<b>0.07</b>
5	Gorakhpur	20	1	1	Sardar Nagar	0	0	0	0	0	1	0		
					<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	
6	Jaunpur	22	1	1	Dobhi	0	0	0	0	0	1	0		
					<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	
7	Mau	10	1	1	Ratanpura	0	0	0	0	0	0	1	211479	0.05
					<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>211479</b>	<b>0.05</b>
8	Sant Ravidas Nagar	5	1	1	Bhadoi	1	0	0	0	0	0	0		
					<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
9	Sultanpur	13	1	1	Bhadaiyan	0	0	0	0	1	3	0		
					<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	
10	Varanasi	9	2	1	Cholapur	1	0	0	0	0	0	0		
				2	Harhua	1	0	0	0	0	0	0		
					<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
	<b>TOTAL</b>	<b>146</b>	<b>40</b>		<b>Total for State</b>	<b>11</b>	<b>5</b>	<b>11</b>	<b>11</b>	<b>131</b>	<b>107</b>	<b>115</b>	<b>5226746</b>	<b>0.22</b>



# GIS Mapping of Kala Azar Affected Blocks December - 2017 Uttar Pradesh, India



# Uttar Pradesh

Year 2011- 2017

40 Blocks have reported KA cases

Ballia	-	14 blocks
Kushinagar	-	9 blocks
Deoria	-	6 blocks
Ghazipur	-	4 blocks
Varanasi	-	2 blocks
Bhadohi	-	1 block
Gorakhpur	-	1 block
Jaunpur	-	1 block
Sultanpur	-	1 block
Mau	-	1 block

5 Blocks have reported PKDL cases

Ballia	-	2 blocks
Kushinagar	-	2 block
Deoria	-	1 block

All blocks with Incidence less than 1 per 10,000 population in 2017

# Block wise cases and incidence rate -2018

District	Block	2015		2016		2017		2018	
		# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate
KUSHINAGAR	DUDHAI	33	1.02	11	0.33	3	0.09	1	0.03
KUSHINAGAR	FAZILNAGAR	2	0.08	2	0.08	0	-	0	-
KUSHINAGAR	KASIA	1	0.05	3	0.14	1	0.05	0	-
KUSHINAGAR	KUBERNATH	0	-	0	-	0	-	2	0.05
KUSHINAGAR	NEBUA NAURANGIA	0	-	0	-	1	0.04	0	-
KUSHINAGAR	RAMKOLA	0	-	0	-	1	0.04	0	-
KUSHINAGAR	TAMKUHI	25	0.84	23	0.76	12	0.39	1	0.03
KUSHINAGAR	TARYASUJAN	6	0.19	29	0.91	28	0.86	1	0.03
KUSHINAGAR	URBAN PADRAUNA	35	0.83	11	0.25	14	0.32	0	-
KUSHINAGAR	VISHNUPURA	6	0.22	0	-	1	0.03	0	-
DEORIA	BANKATA	4	0.20	5	0.25	20	0.99	0	-
DEORIA	BHALUANI	1	0.05	0	-	0	-	0	-
DEORIA	BHATNI	0	-	0	-	1	0.05	0	-
DEORIA	DESAHI DEORIA	0	-	1	0.07	3	0.21	0	-
DEORIA	MAHEN	0	-	1	0.07	0	-	0	-
DEORIA	PATHAR DEWA	0	-	1	0.05	0	-	0	-
BALLIA	BAIRIA	1	0.05	3	0.16	1	0.05	0	-
BALLIA	BANSDIH	0	-	0	-	2	0.11	0	-
BALLIA	BELHARI	2	0.14	0	-	2	0.14	0	-
BALLIA	BERUARWARI	0	-	0	-	3	0.22	0	-
BALLIA	CHILKAHAR	1	0.05	0	-	2	0.10	0	-
BALLIA	DUBHAR	1	0.05	1	0.05	2	0.10	0	-
BALLIA	GARWAR	0	-	0	-	1	0.05	0	-
BALLIA	HANUMANGANJ	0	-	2	0.09	0	-	0	-
BALLIA	MANIYAR	0	-	1	0.07	1	0.07	0	-
BALLIA	MURLI CHHAPRA	0	-	0	-	2	0.12	0	-
BALLIA	NAWANNAGAR	1	0.06	0	-	0	-	0	-
BALLIA	PANDAH	1	0.06	0	-	0	-	0	-
BALLIA	REWATI	7	0.43	5	0.30	10	0.59	0	-
BALLIA	SIYAR	0	-	0	-	1	0.04	1	0.03
BALLIA	SOHAON	1	0.06	1	0.06	0	-	0	-
BALLIA	RATSAR	-	-	-	-	-	-	1	0.03

# Block wise cases and incidence rate

District	Block	2015		2016		2017		2018	
		# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate
GHAZIPUR	BARACHAWAR	1	<b>0.05</b>	0	-	0	-	0	-
GHAZIPUR	GONDAUR	1	<b>0.05</b>	0	-	1	<b>0.05</b>	0	-
GHAZIPUR	MANIHARI	0	-	1	<b>0.04</b>	0	-	0	-
GHAZIPUR	MOHAMMADABAD	0	-	1	<b>0.04</b>	2	<b>0.08</b>	0	-
SULTANPUR	BHADAIYAN	1	<b>0.06</b>	3	<b>0.18</b>	0	-	0	-
GORAKHPUR	SARDAR NAGAR	0	-	1	<b>0.05</b>	0	-	0	-
JAUNPUR	DOBHI	0	-	1	<b>0.06</b>	0	-	0	-

# Hot Spot villages having $\geq 3$ KA cases

## 2015

Sr No	District	Block	Village Name
1	Ballia	Rewati	Reoti (5)
2	Kushinagar	Dudhai	Ganeshpatti (3)
3	Kushinagar	Dudhai	Gauri Jagdish (5)
4	Kushinagar	Dudhai	Mathiya Mafi (3)
5	Kushinagar	Dudhai	Rakba Dulmapatti (3)
6	Kushinagar	Tamkuhi	Divani Banjarwa (17)
7	Kushinagar	Tamkuhi	Katahari Bag (5)
8	Kushinagar	Taryasujan	Daniyadi (3)
9	Kushinagar	Urban Padrauna	Jangal Piparasi (7)
10	Kushinagar	Urban Padrauna	Nahar Chhapra (24)

## 2017

Sr No	District	Block	Village Name
1	Kushinagar	Urban Padrauna	Nahar Chhapra (5)
2	Kushinagar	Tamkuhi	Dibani Ramnagar (4)
3	Kushinagar	Tamkuhi	Kathari Bagh (3)
4	Kushinagar	Taryasujan	Bendupar Khalwa Tola (3)
5	Ballia	Rewati	Ward No.8 (3)
6	Deoria	Bankata	Rajpur (3)

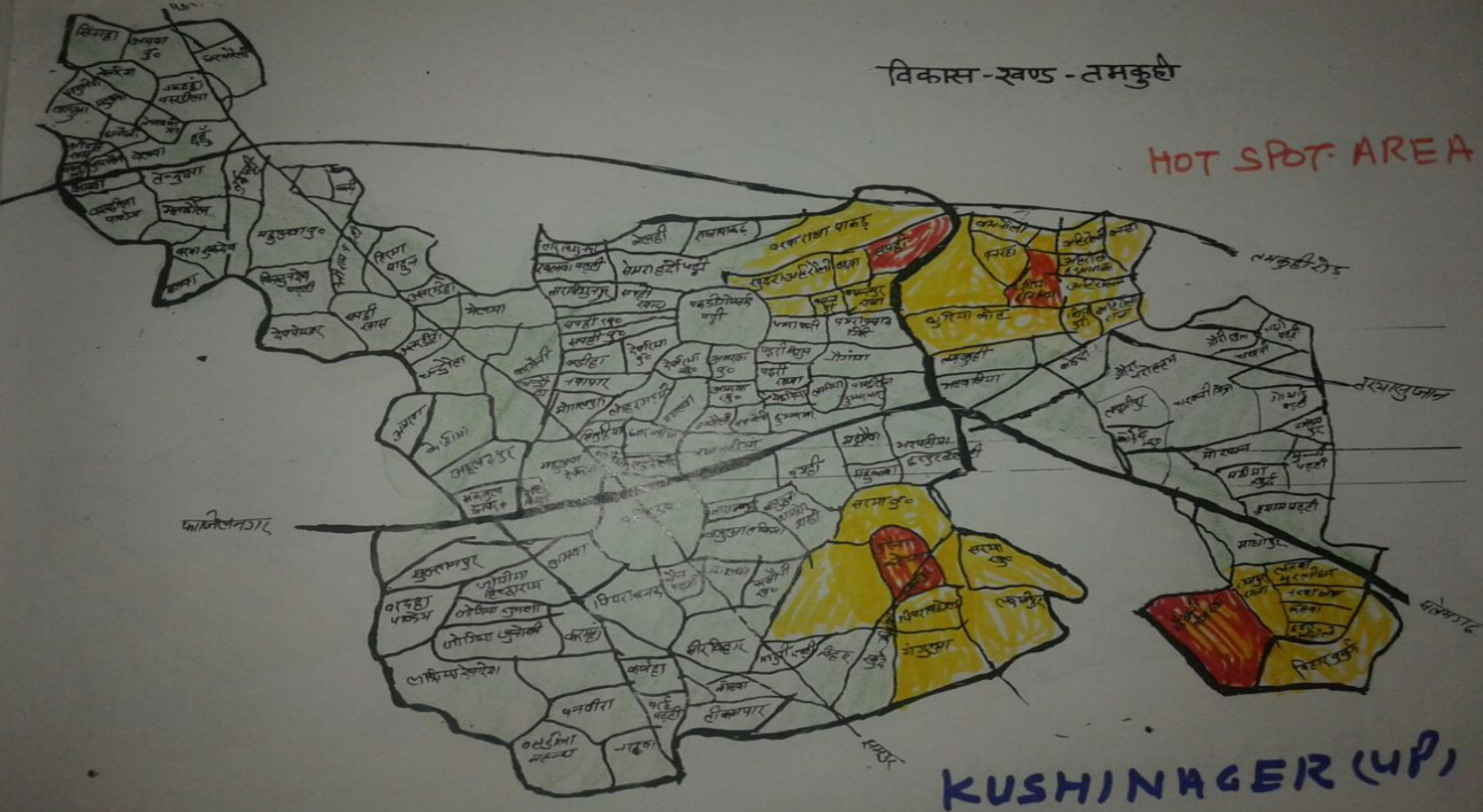
## 2016

Sr No	District	Block	Village Name
1	Kushinagar	Dudhai	Mathiya Mafi (3)
2	Kushinagar	Tamkuhi	Divani Banjarwa (12)
3	Kushinagar	Tamkuhi	Katahari Bag (4)
4	Kushinagar	Taryasujan	Kotawa (5)
5	Kushinagar	Taryasujan	Firojahan (3)
6	Kushinagar	Taryasujan	Mishrauli (4)
7	Kushinagar	Taryasujan	Sumahi Sangram (3)
8	Kushinagar	Urban Padrauna	Nahar Chapara (4)
9	Sultanpur	Bhadaiyan	Abhiyakala (3)



विकास-खण्ड - तमकुहे

HOT SPOT AREA



KUSHINAGER (UP)

# ACTIVE CASE SEARCHES - 2017

S.No.	Block /P.H.C	Active Case Search (ACS)							
		No. of Persons Examined	No. of Suspected of KA	No. of suspects tested RK16/39	No. of Positives	No. of tested HIV & T.B. (of KA positive cases)		No. of HIV & TB Positives	
						HIV	TB	HIV	TB
1	Ballia	443	443	443	16	1	1	0	0
2	Bhadohi	529	529	529	0	0	0	0	0
3	Deoria	828	828	828	0	0	0	0	0
4	Ghazipur	1284	1284	1284	0	0	0	0	0
5	Gorakhpur	338	338	338	0	0	0	0	0
6	Jaunpur	510	510	510	0	0	0	0	0
7	Kushinagar	997	997	997	78	7	7	0	0
8	Sultanpur	348	348	348	0	0	0	0	0
9	Varanasi	603	603	603	0	0	0	0	0
	<b>Total</b>	<b>5880</b>	<b>5880</b>	<b>5880</b>	<b>94</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



# Status of KA affected villages

State	2015				2016				2017				2018			
	Block	Villages	New villages added	Repeat villages	Block	Villages	New villages added	Repeat villages	Block	Villages	New villages added	Repeat villages	Block	Villages	New villages added	Repeat villages
Ballia	8	11	11	0	6	12	12	0	11	24	23	1	0	0	0	0
Deoria	2	5	5	0	4	8	8	0	3	16	13	3	0	0	0	0
Ghazipur	2	2	2	0	2	2	2	0	2	3	3	0	0	0	0	0
Gorakhpur	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Jaunpur	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Kushinagar	7	41	39	2	6	44	33	11	8	46	39	7	4	5	3	2
Mau	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
Sultanpur	1	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0
<b>Uttar Pradesh</b>	<b>20</b>	<b>60</b>	<b>58</b>	<b>2</b>	<b>21</b>	<b>69</b>	<b>57</b>	<b>12</b>	<b>25</b>	<b>90</b>	<b>79</b>	<b>11</b>	<b>6</b>	<b>7</b>	<b>4</b>	<b>3</b>

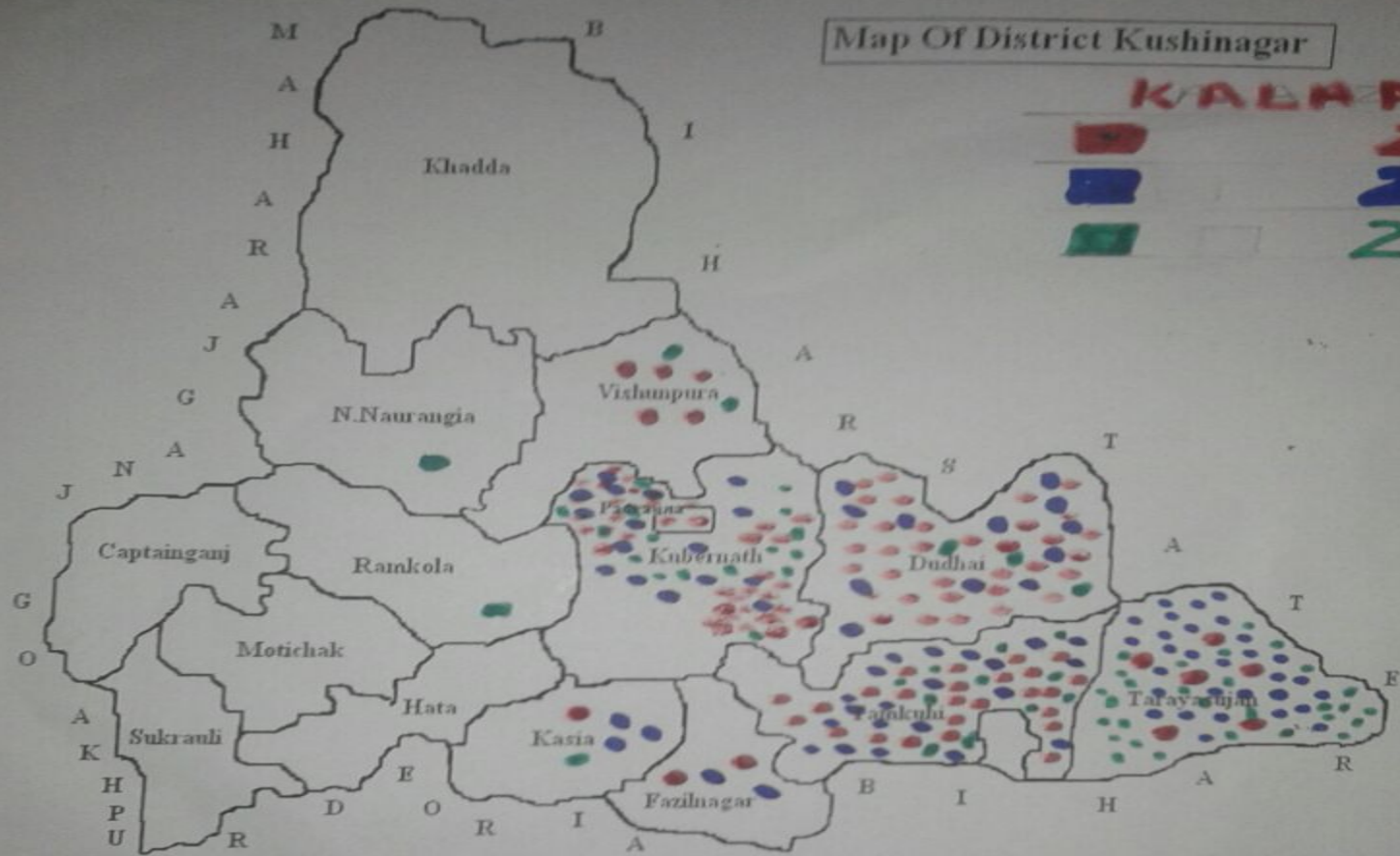
In the last 2 years 90% of the endemic villages were new villages

Need of holistic upscaling of all surveillance activities throughout the blocks/district

# SPOT MAPS OF CASES – 3 YRS

AN ATTEMPT TO STUDY THE PATTERN OF APPEARANCE OF  
CASES TO NEWER VILLAGES

Map Of District Kushinagar



**KALPAZAR**  
**2015**  
**2016**  
**2017**

**KUSHINAGER**  
**(UP)**



KALAAZAR

2015

2016

2017

विशुनपुरा

CHC



KUSHINAGER UP.

विकास-खण्ड-कसिया  
HRA-मानचित्र

CHC KASIA

N.H.28

कसिया तम.

RA :- ●

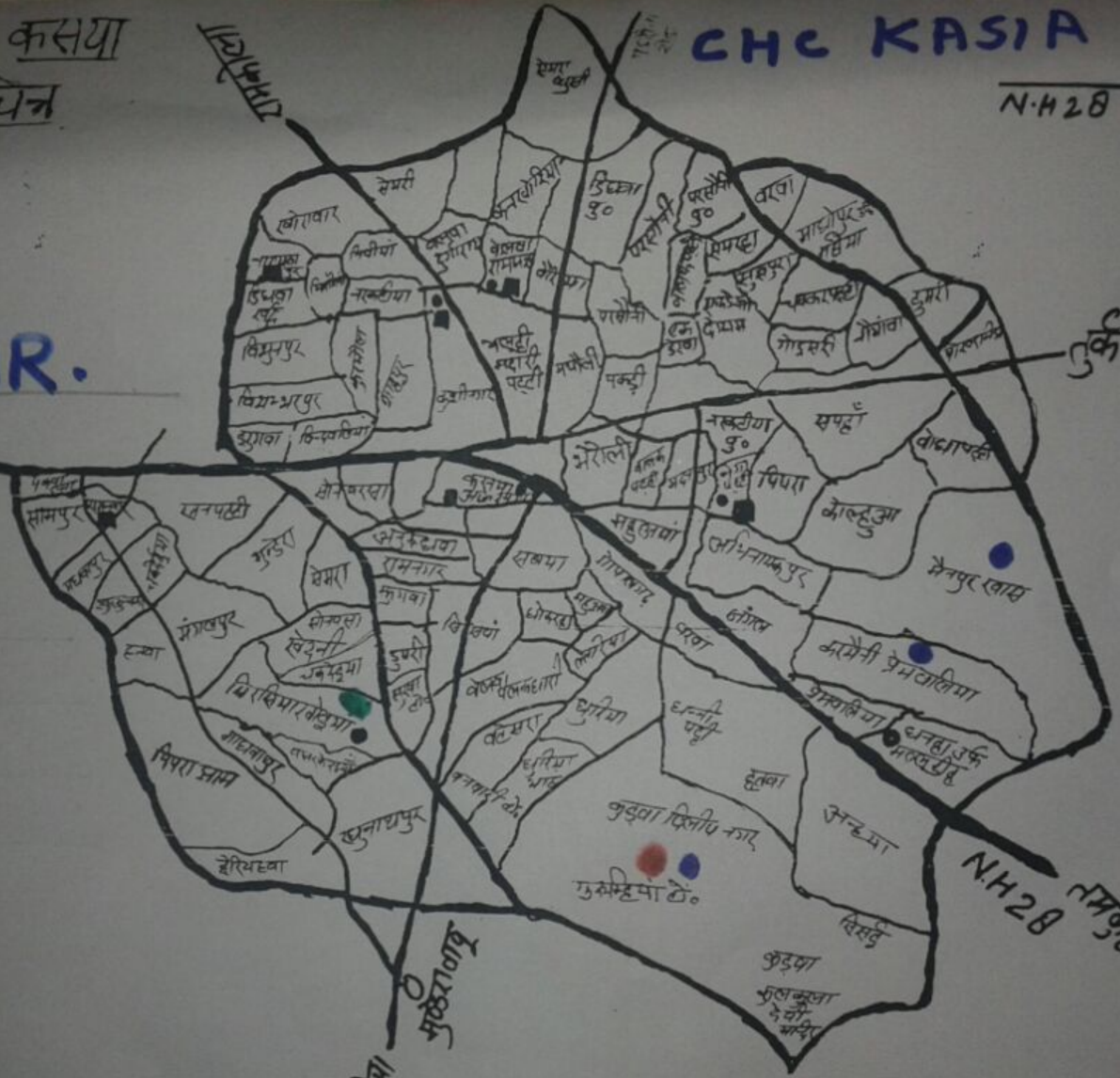
RD :- ■

**KALAAZAR.**

हाटा

N.H.

2015  
2016  
2017



कुड़वा

N.H.28 तमकुड़ी राज

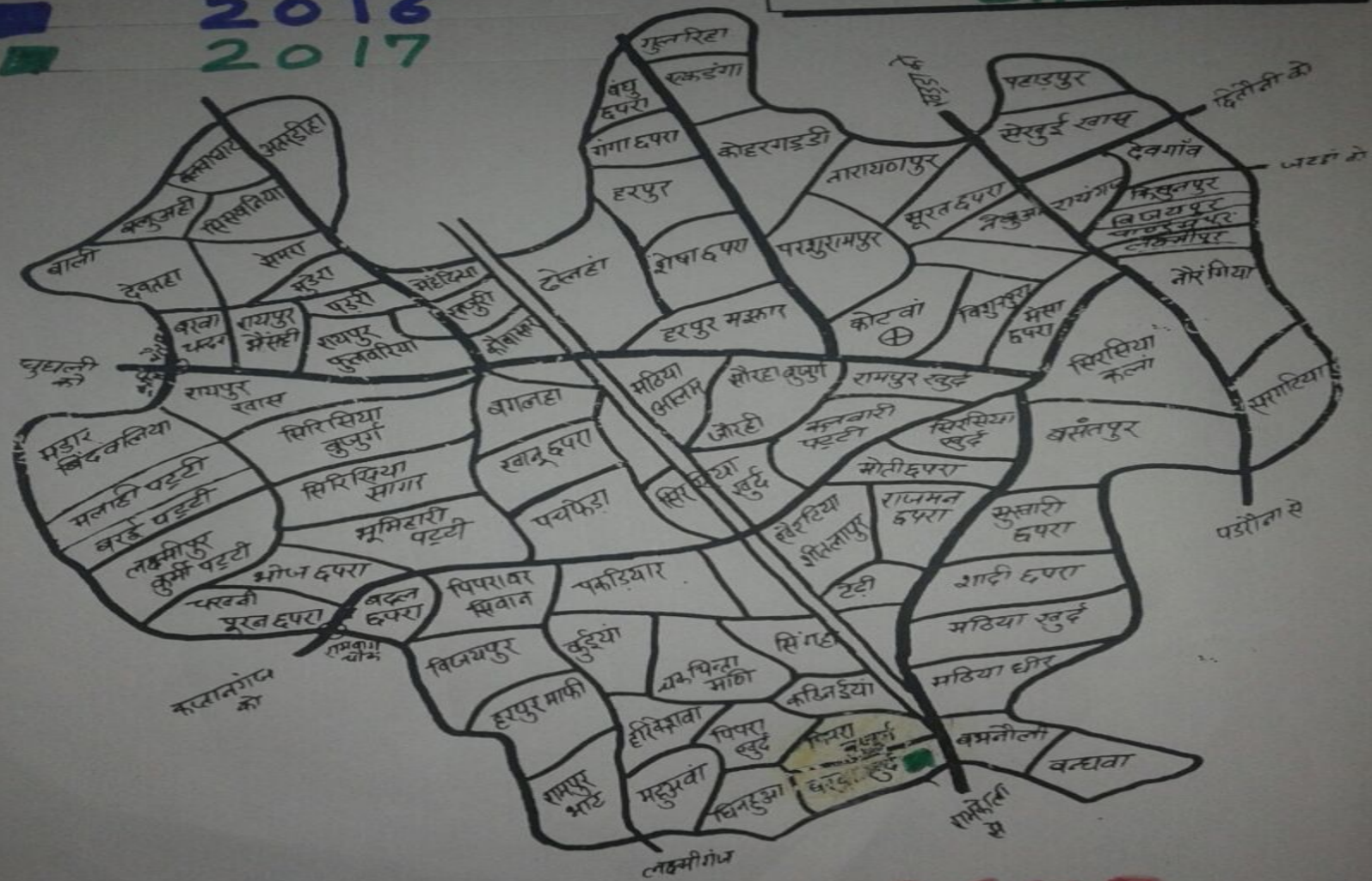
**KUSHINAGER UP**



# KALAAZAR.

■ 2015  
■ 2016  
■ 2017

नेबुआ नौरंगिया  
 CHC



# KUSHINAGER UP



# ACTIVE CASE DETECTION-01-05-18 To 15-05-18

## Active Case Detection

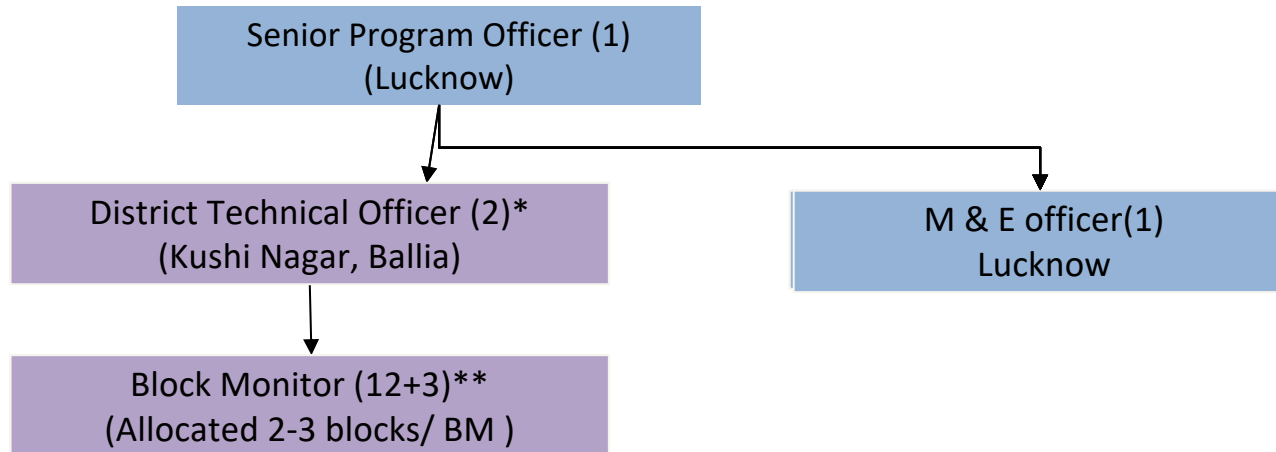
S.No	District	Blocks	Villages	District Level Training for Trainers and Coordinators	Block level Training for Trainers and Coordinators)	No.of Training Sessions at the PHC	No.of Coordinators	No.of MO (1 MO from each endemic Block)	No.of LT (1 LT from each endemic Block)	No.of ANM (1 ANM from each endemic Block)	No of Camps
1	Kushinagar	9	119	2	0	14	23	9	9	9	23
2	Balia	14	45	1	0	14	16	14	14	14	16
3	Deoria	6	29	1	0	7	9	6	6	6	9
4	Ghazipur	4	9	1	0	4	4	4	4	4	4
5	Gorakhpur	1	1	0	1	1	1	1	1	1	1
6	Jaunpur	1	1	0	1	1	1	1	1	1	1
7	Mau	1	1	0	1	1	1	1	1	1	1
8	Bhadohi	1	1	0	1	1	1	1	1	1	1
9	Sultanpur	1	1	0	1	1	1	1	1	1	1
10	Varanasi	2	2	0	2	2	2	2	2	2	2
	10	40	209	5	7	46	59	40	40	40	59

# CBRP/KA MITRA-Villages where >3 cases in Last 3 years

## Kalaazar Mitra/CBRP- Villages UP

<b>Sr No</b>	<b>District</b>	<b>Block</b>	<b>Village Name</b>
<b>1</b>	Ballia	Rewati	Reoti
<b>2</b>	Kushinagar	Dudhai	Ganeshpatti
<b>3</b>	Kushinagar	Dudhai	Gauri Jagdish
<b>4</b>	Kushinagar	Dudhai	Mathiya Mafi
<b>5</b>	Kushinagar	Dudhai	Rakba Dulmapatti
<b>6</b>	Kushinagar	Tamkuhi	Divani Banjarwa
<b>7</b>	Kushinagar	Tamkuhi	Katahari Bag
<b>8</b>	Kushinagar	Taryasujan	Daniyadi
<b>9</b>	Kushinagar	Urban Padrauna	Jangal Piparasi
<b>10</b>	Kushinagar	Urban Padrauna	Nahar Chhapra
<b>11</b>	Kushinagar	Taryasujan	Kotawa
<b>12</b>	Kushinagar	Taryasujan	Firojahan
<b>13</b>	Kushinagar	Taryasujan	Mishrauli
<b>14</b>	Kushinagar	Taryasujan	Sumahi Sangram
<b>15</b>	Sultanpur	Bhadaiyan	Abhiyakala
<b>16</b>	Kushinagar	Urban Padrauna	Nahar Chhapra
<b>17</b>	Kushinagar	Tamkuhi	Dibani Ramnagar
<b>18</b>	Kushinagar	Taryasujan	Bendupar Khalwa Tola
<b>19</b>	Deoria	Bankata	Rajpur

# Project organogram(PATH)



\*District Technical Officers will provide all technical support to the district malaria officer (DMO) and will monitor and supervise the work of the Block Monitor.

\*\*Block Monitors will coordinate with health supervisors in block and district hospitals and involve them in surveillance & control activities. They will also be involved in community awareness and capacity building of peripheral workers, including ASHAs, AWWs, ANMs, community leaders, and volunteers.

# Field staff allocation: Block Monitors

S. No.	District	Blocks	Block Monitor Allocation	Cases in 2017	Cases in 2016	Cases in 2015	Cases in 2014	Cases in 2013	Cases in 2012	Cases in 2011	Cases in 2010	Total cases (2010 to 2017)
1	Ballia	Dubhar	BM-1	2	1	1	0	0	0	1	3	8
2	Ballia	Kotwa	BM-2	0	3	1	0	0	0	0	0	4
3	Ballia	Belhari/Sonwani	BM-3	2	0	2	0	0	0	0	0	4
4	Deoria	Bankata	BM-4	19	5	4	0	2	2	1	1	34
5	Deoria	Deshi Deoria	BM-5	2	1	0	0	0	0	0	0	3
6	Ghazipur	Gournour	BM-6	1	0	1	0	1	0	3	0	6
7	Kushinagar	Dudahi	BM-7	4	12	32	11	5	0	0	0	64
8	Kushinagar	Tamkuhi	BM-8	12	22	25	0	2	0	0	0	61
9	Kushinagar	Padrouna	BM-9	14	11	36	0	0	0	0	1	62
10	Kushinagar	Sevrahi/Tarya	BM-10	25	28	6	0	0	0	0	0	59
11	Sultnpur	Bhadiya	BM-11	0	3	1	0	0	0	0	0	4
12	Jaunpur	Dobhi	Add- BM-11	0	1	0	0	0	0	0	0	1
13	Varanasi	Chiraigaon	BM-12	0	0	0	0	0	0	1	2	3
14	Bhadohi	Piprahi	Add- BM-12	0	0	0	0	0	0	1	0	1
15	Kushinagar	Kasya	BM-13	1	3	1	0	0	0	2	4	11
16	Gorakhpur	Sardar nagar	Add BM- 13	0	1	0	0	0	0	0	0	1

# Villages going for 1<sup>st</sup> round of IRS in 2018

District	Affected blocks since 2015 to 2018	No. of blocks with single village	No. of blocks with more than one village	Affected villages since 2015 to 2018
Ballia	15	4	11	47
Deoria	7	3	4	27
Ghazipur	4	2	2	7
Gorakhpur	1	1	0	1
Jaunpur	1	1	0	1
Mau	1	1	0	1
Sultanpur	1	1	0	1
Kushinagar	10	2	8	115
<b>Total</b>	<b>40</b>	<b>15</b>	<b>25</b>	<b>200</b>

NO MORE SWOLLEN ABDOMEN AND LOSS OF LIFE DUE TO KA



MOVING AHEAD TOWARDS GOAL OF  
**KALA AZAR ELIMINATION**



# SPEAK India

Setting the Post-Elimination Agenda for Kala-azar in India



**DNDi**

Drugs for Neglected Diseases *initiative*

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



BILL & MELINDA  
GATES *foundation*

# **The Current Status of VL Elimination in West Bengal and the Programmatic Challenges**

**Dr Dilip Kumar Mandal**  
**SPO, NVBDCP & DDHS (Malaria)**  
**West Bengal**



# West Bengal



## Demographical Profile

Area (Sq. Km)	88,752
Census Population (2011)	9,12,76,115
Percentage of Rural Population	68.13
Percentage of Urban Population	31.87
Percentage of SC Population	23.51
Percentage of ST Population	5.80

## Administrative Profile

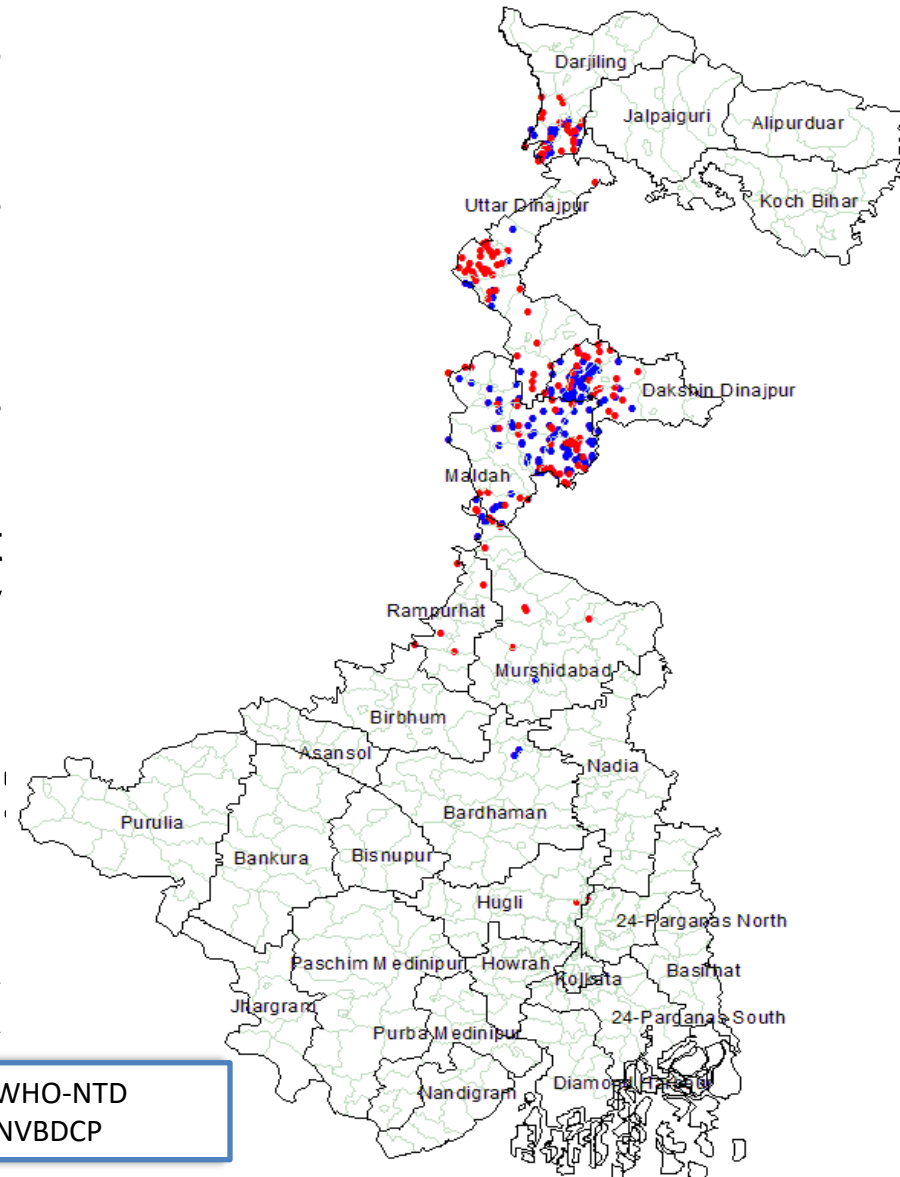
District	23
Health District	5
Sub Division	69
C D Block	342
Municipal Corporation	7
Municipality	118
Zila Parishad	21
Gram Panchayet	3342

## Health Facility Profile

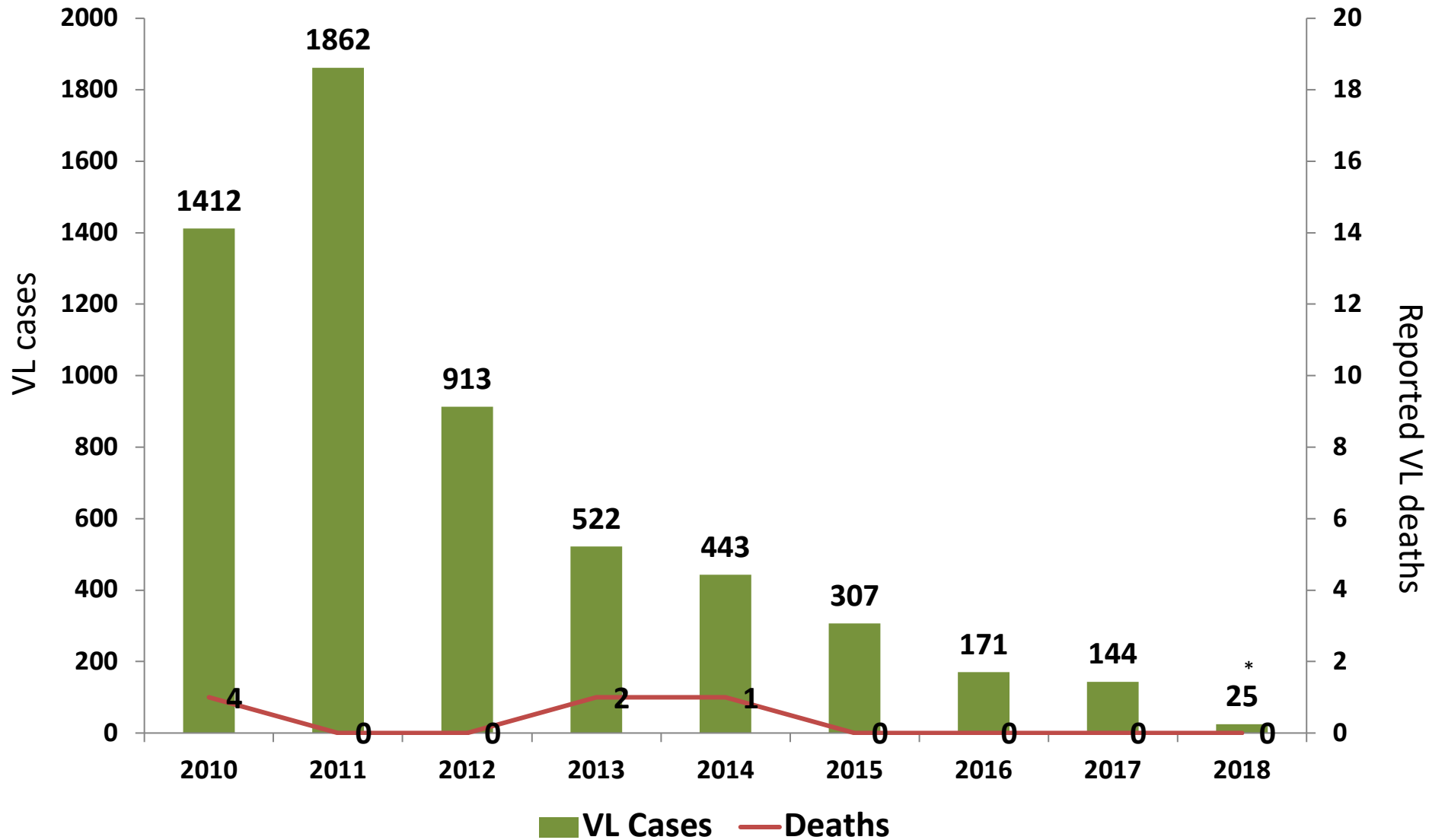
Medical College & Hospital	13
Super Speciality Hospital	39
District Hospital	20
Sub-divisional Hospital	37
State General Hospital	29
Rural Hospital	68
Block Primary Health Center	76
Primary Health Center	914
Sub-Center	10,369

# West Bengal

- In West Bengal, 11 districts are 'Kala-azar districts'.
- 120 of 214 blocks in these districts are endemic. 39 blocks reported cases in 2017.
- **144 VL** cases & **164 PKDL** cases reported in 2017.
- Maximum VL cases reported last year from Malda (38) followed by Uttar Dinajpur (37) and maximum PKDL cases reported from Malda (75) & Dakshin Dinajpur (50).
- IR of all the blocks are below 1.
- IR of Goalpokher-II (0.79), Habibpur (0.79), Phansidewa (0.69).

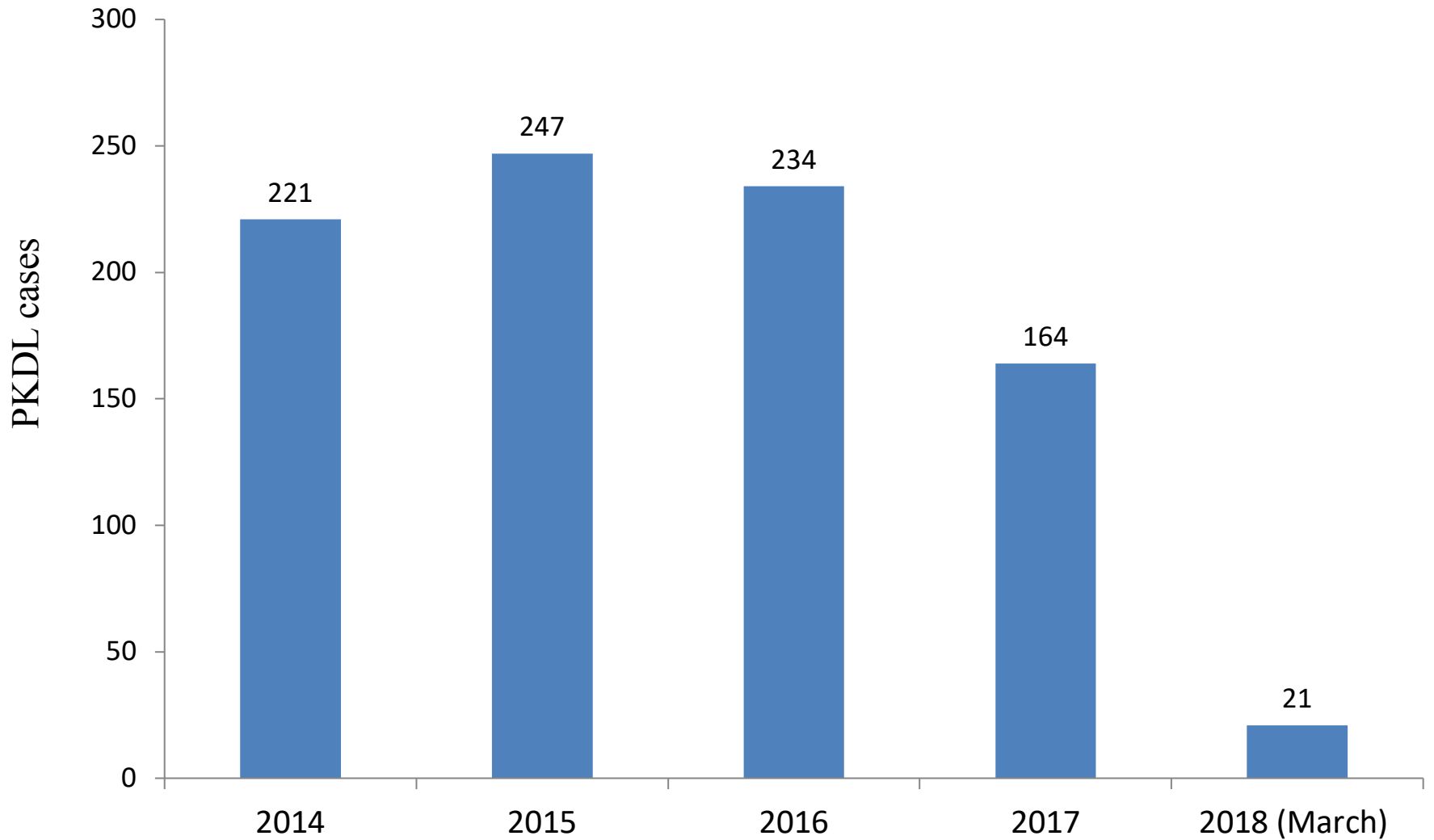


# Year Wise Status of VL Cases and reported VL deaths: WB



\*Data as on 31 March 2018

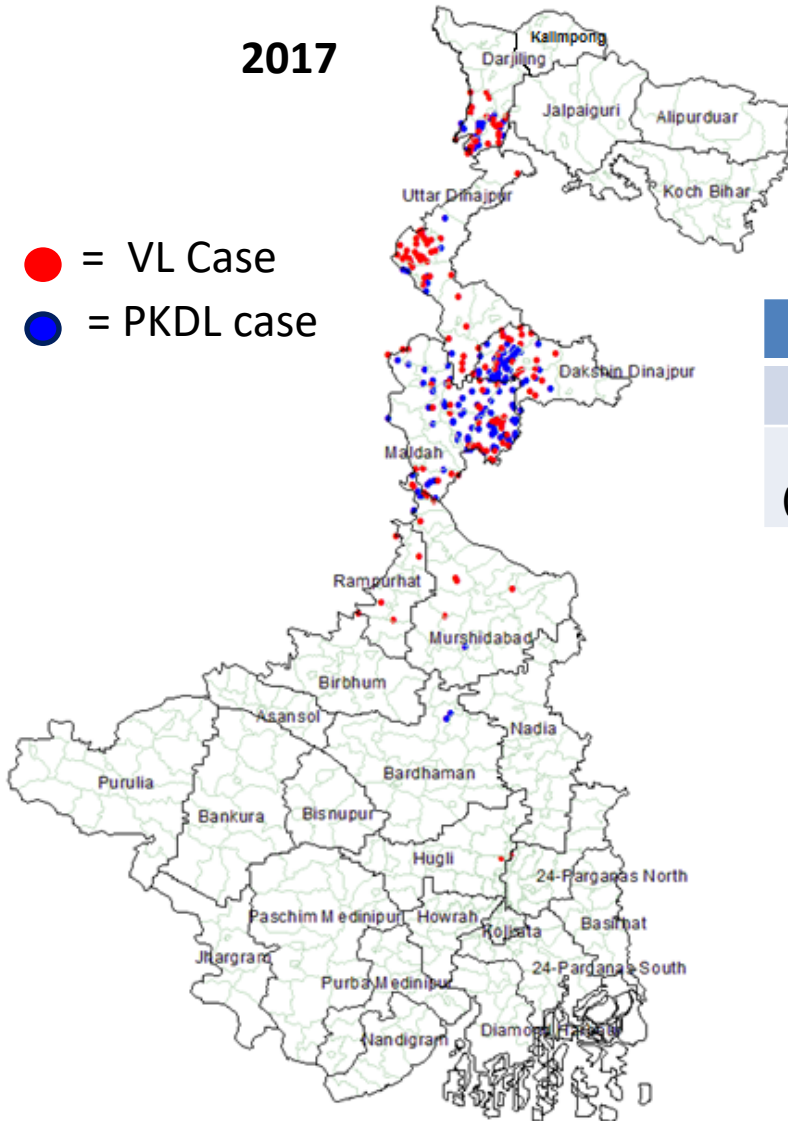
# Year Wise Status of PKDL Cases : WB



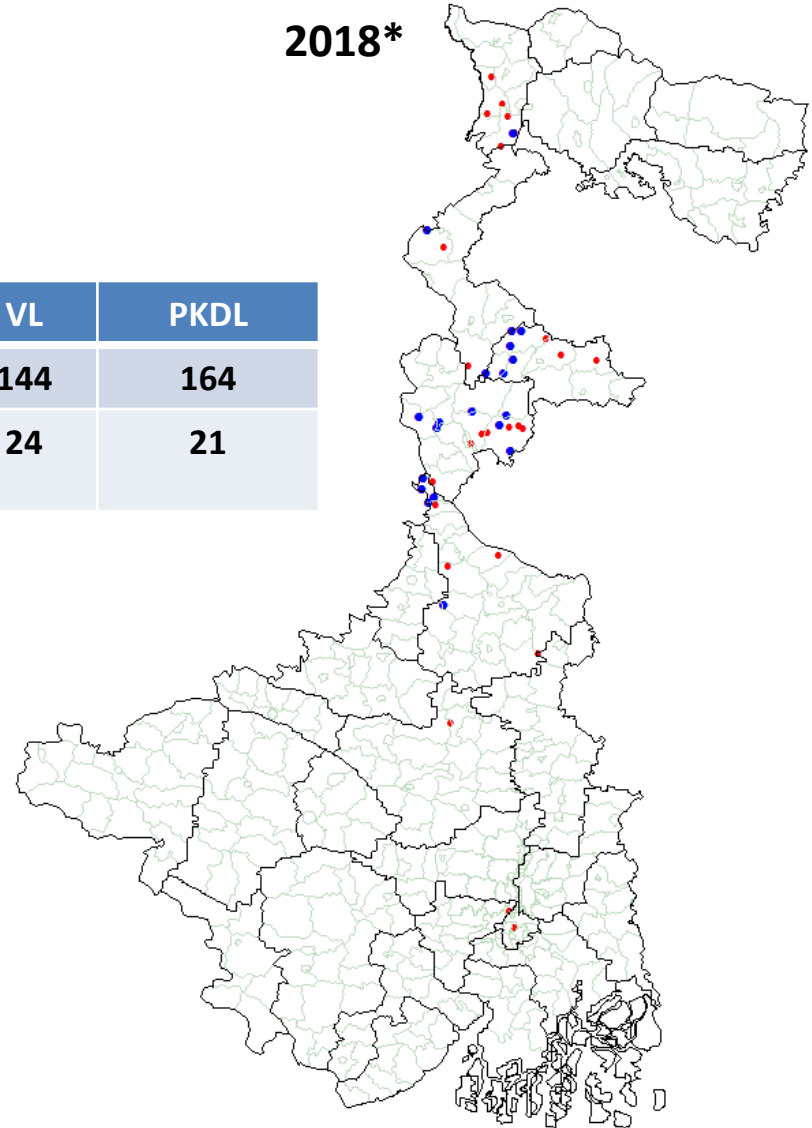
# Kala-Azar situation in West Bengal

**2017**

- = VL Case
- = PKDL case

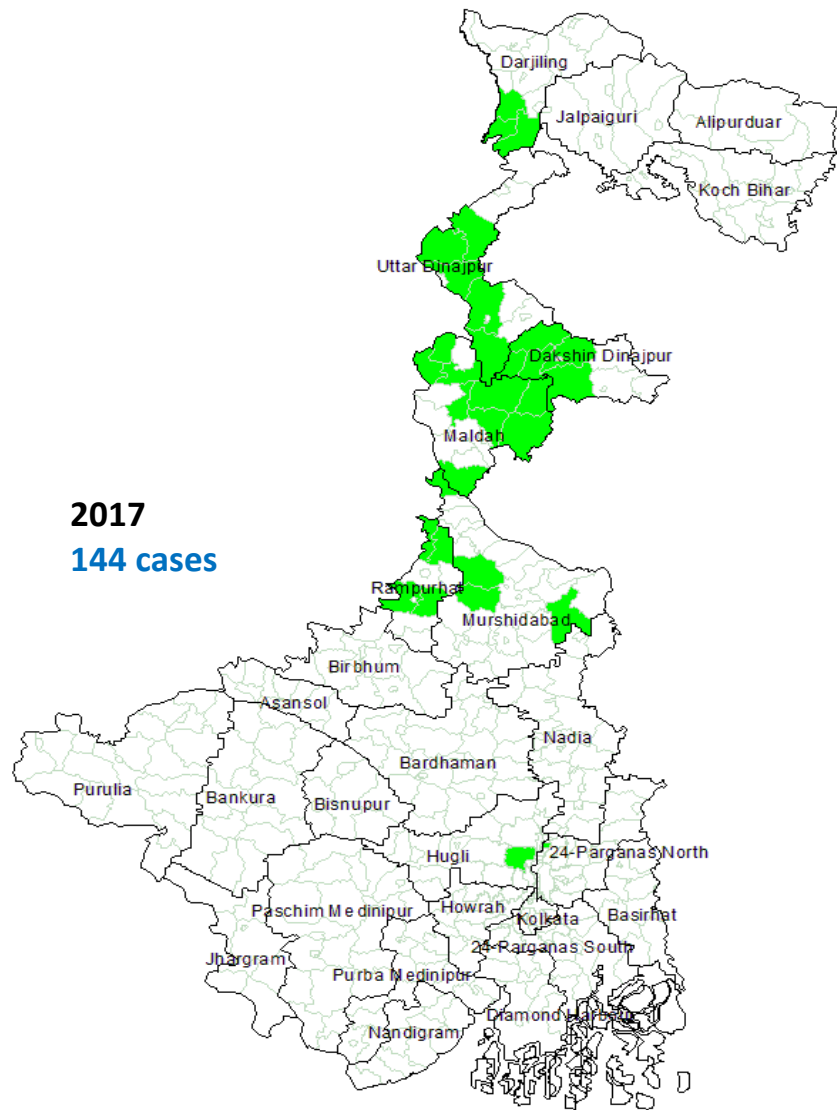


**2018\***

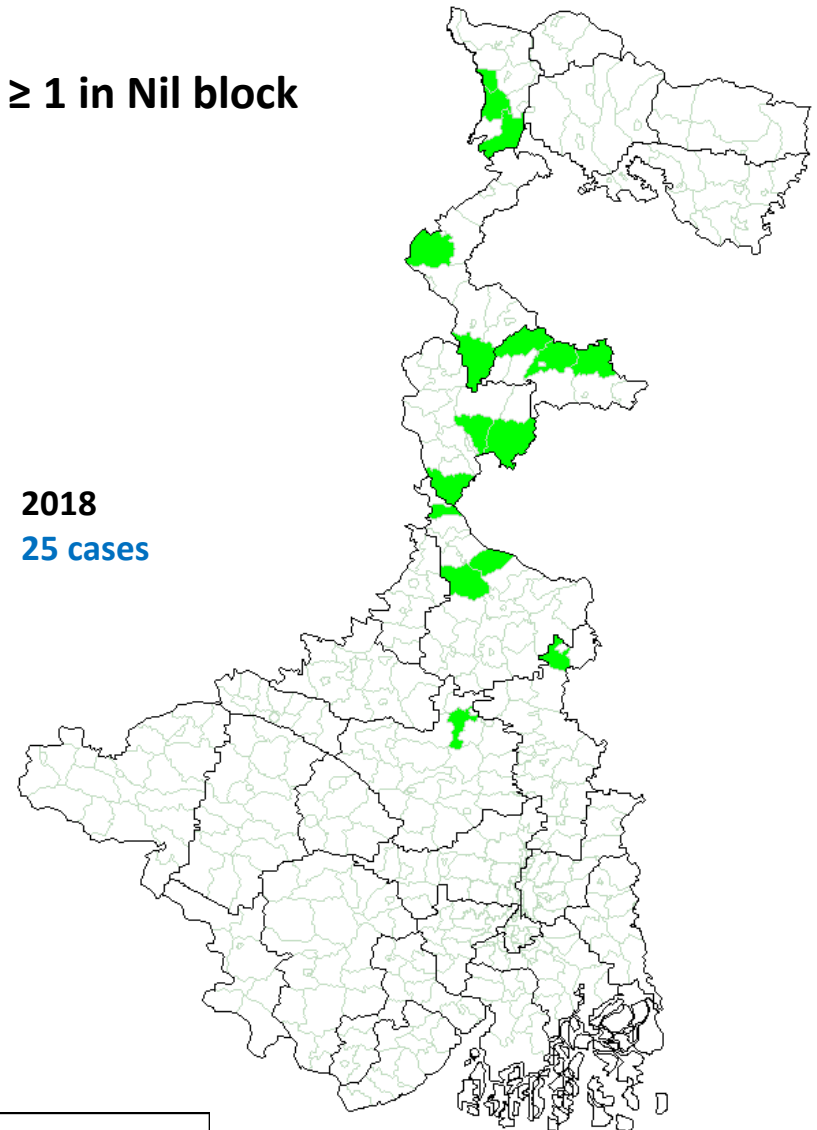


Year	VL	PKDL
2017	144	164
2018 (March)	24	21

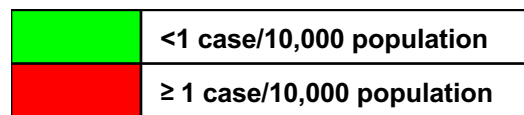
# Incidence of VL cases: 2017 & 2018\*



IR  $\geq 1$  in Nil block

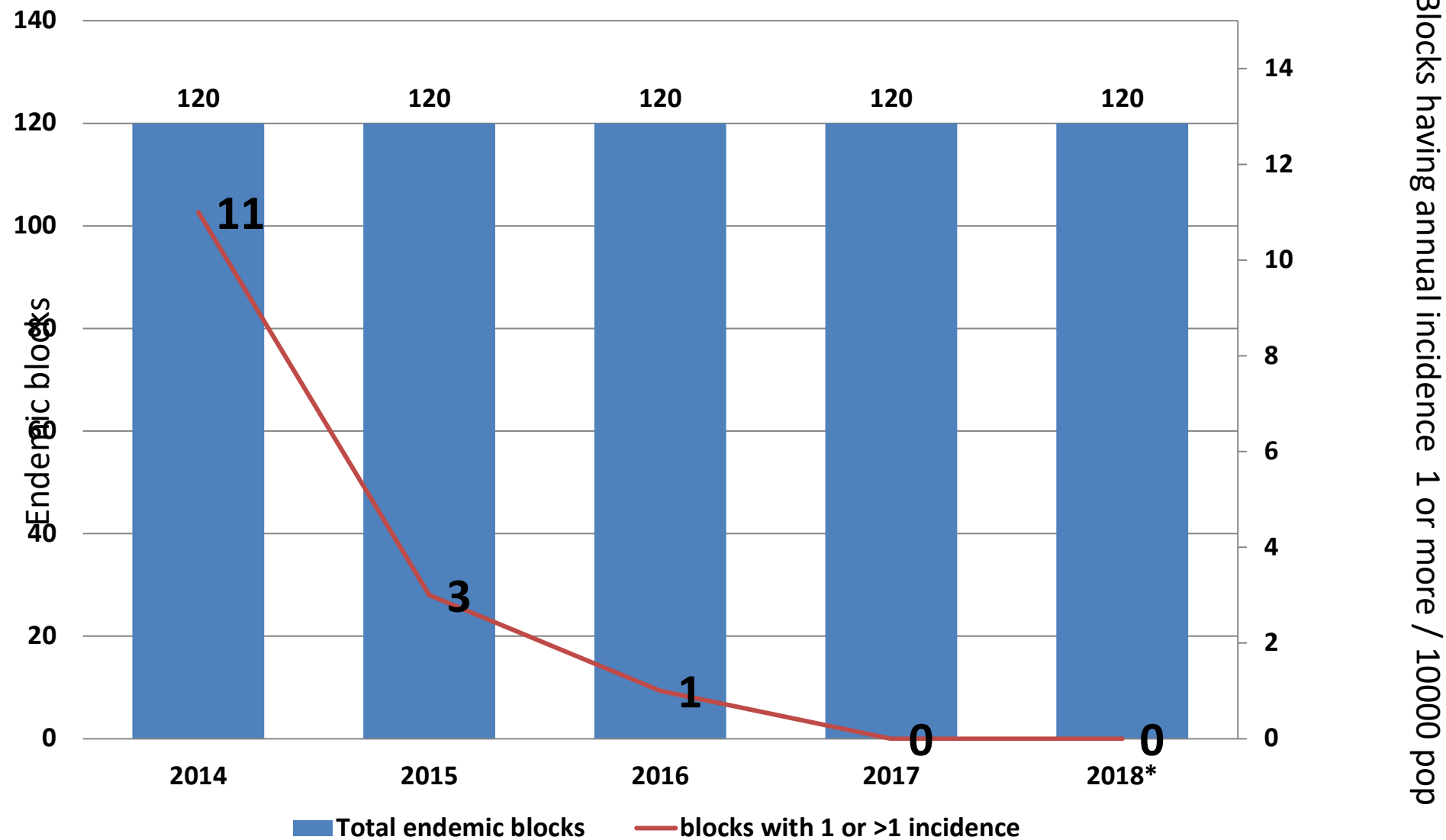


Map@ WHO-NTD  
Data@ NVBDCP



As on 31 March 2018

# Kala-Azar Endemic blocks having Incidence 1 or >1/10000



Data as on 31 March 2018

**For the first time in 2017,  
the State has reached the elimination  
target of < 1 Annual Incidence  
in all endemic block**

**The challenge is now  
in sustenance of  
the gains already achieved**



# Factors contributing the success

Availability of RDT-KA in field;  
Uninterrupted supply of Liposomal  
Amphotericin B

High Political & Administrative  
commitment

All endemic blocks  
< 1 AI

Reviews, monitoring, training and  
innovation undertaken by State  
and District level Programme  
Officers;  
Involvement of BPHNs/ ANMs/ KTS

Support of WHO NTD team  
&  
other partners

# Challenges foreseen in sustenance of Elimination status

## Surveillance

- Availability of RDTs in large number
- A set of indicators to quantify / objectively justify surveillance is optimal

## Vector control

- IRS to continue----?? Where & what frequency
- Entomological monitoring--- indicators to record

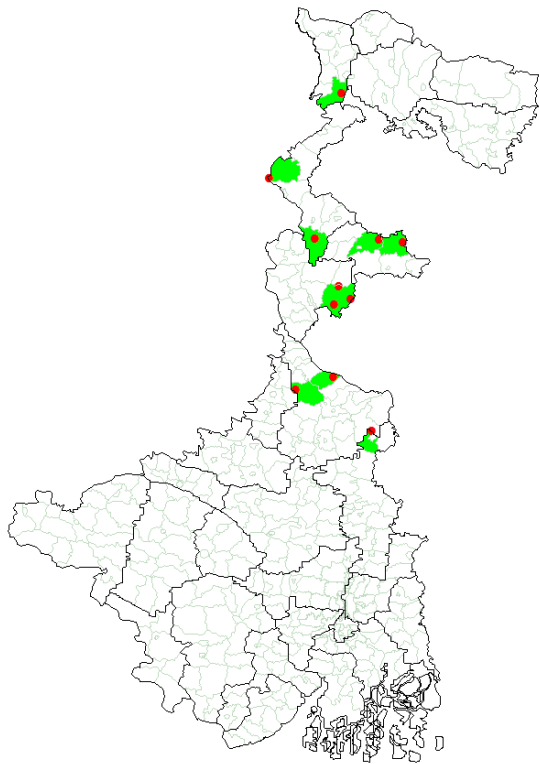
## Health system strengthening

Training and re-sensitization; Fund allocation; support of partners  
Finding PKDL, Follow up of patient beyond 6 months; late relapse

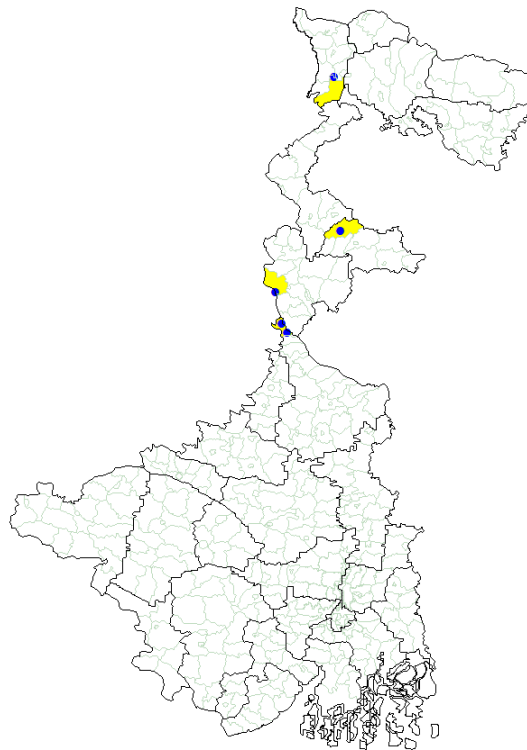
## Shifting pattern of reported cases from different villages

- Where to focus; Predict new focus- how?
- How to be sure that there is no active transmission going on

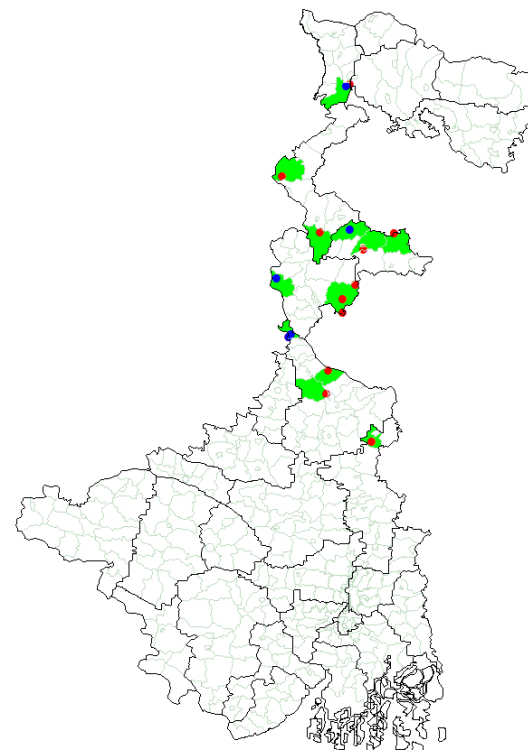
# NEW FOCI VILLAGE: 2018\*



FOCI Village with VL Cases

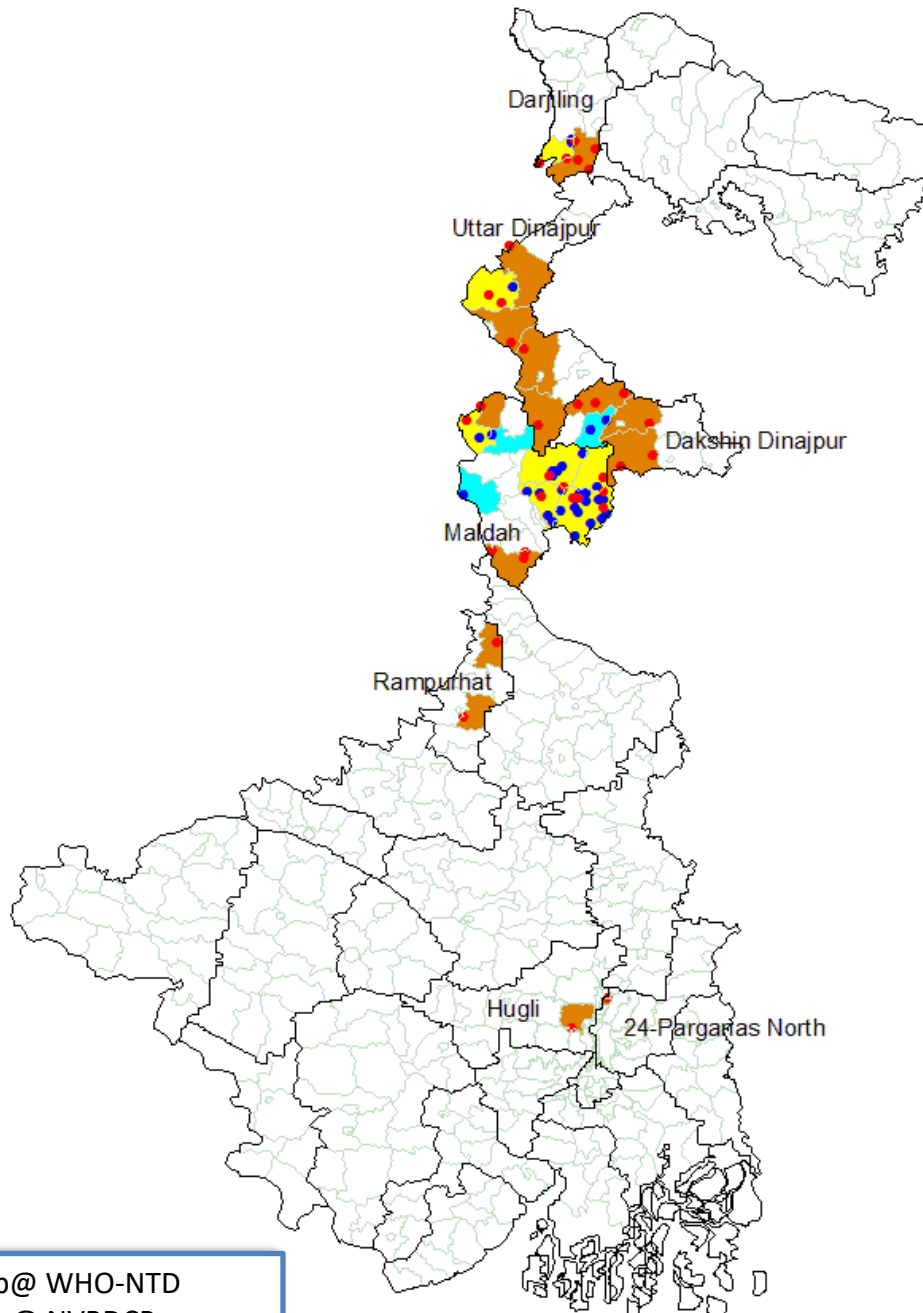


FOCI Village with PKDL Cases



FOCI Village All KA Cases

# NEW FOCI VILLAGES : WEST BENGAL 2017\*



District	# of Block		# of Vill.	
	VL	PKDL	VL	PKDL
Darjeeling	2	1	6	2
Uttar Dinajpur	5	1	6	1
Dakshin Dinajpur	3	1	6	2
Maldah	7	7	13	26
Rampurhat	2	---	2	---
North 24 Parganas	1	---	1	---
Hooghly	1	---	1	---
<b>Total (7 District)</b>	<b>21</b>	<b>10</b>	<b>35</b>	<b>31</b>
<b>Overall</b>	<b>25</b>		<b>65</b>	

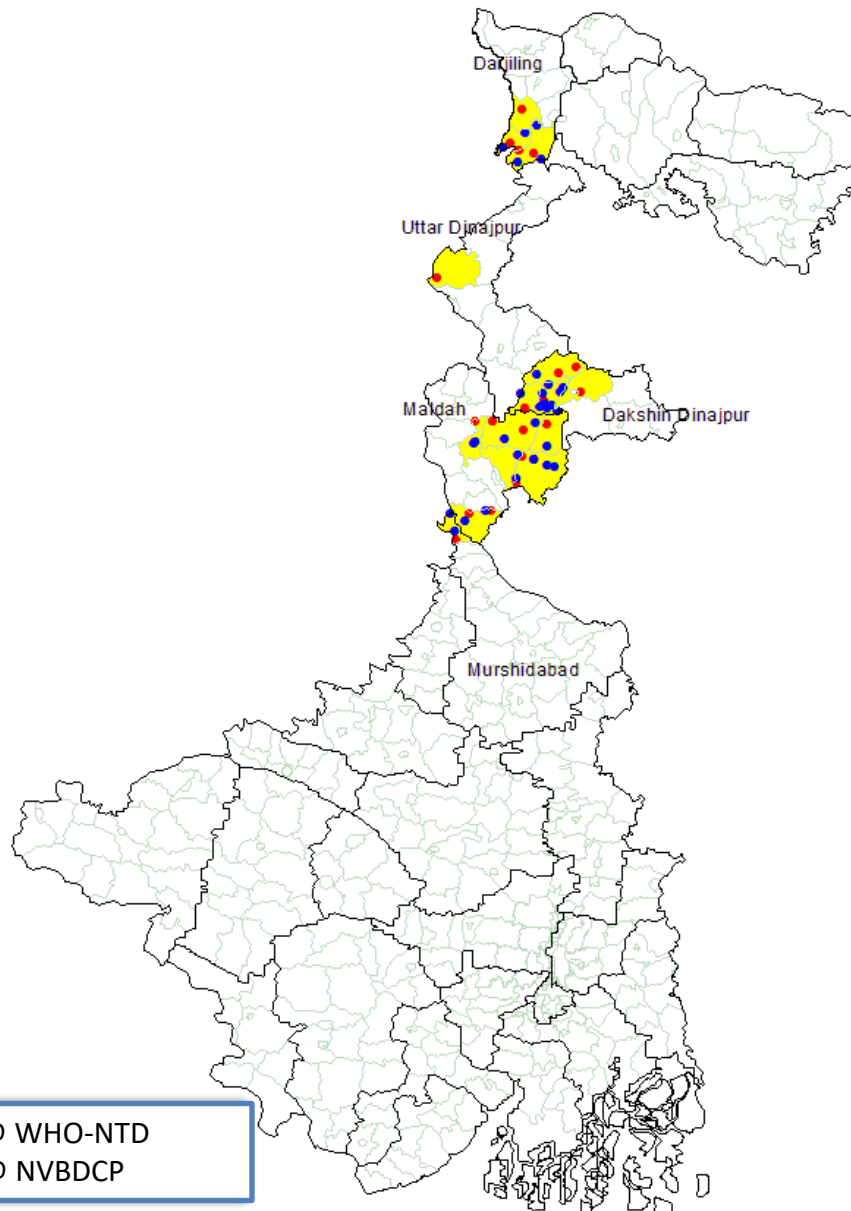
<span style="color: red;">●</span> VL Cases	<span style="color: blue;">●</span> PKDL Cases
---	--

Block with New FOCI Village - VL Cases only

Block with New FOCI Village - PKDL Cases only

Block with New FOCI Village - Mixed (VL+PKDL) Cases

# New Hotspot (2 or more VL/PKDL cases): West Bengal 2017



- No. of Villages having VL Cases (20)
- No. of Villages having PKDL Cases (31)

District	# of Block	# of Vill.
<b>DARJEELING</b>	<b>3</b>	<b>7</b>
<b>UTTAR DINAJPUR</b>	<b>1</b>	<b>1</b>
<b>DAKSHIN DINAJPUR</b>	<b>4</b>	<b>14</b>
<b>MALDAH</b>	<b>6</b>	<b>16</b>
<b>MURSHIDABAD</b>	<b>1</b>	<b>2</b>
<b>5 DISTRICT</b>	<b>15</b>	<b>40</b>

# Challenges foreseen in sustenance of Elimination status



## Surveillance

- Availability of RDTs in large number
- A set of indicators to quantify / objectively justify surveillance is optimal

## Vector control

- IRS to continue----?? Where & what frequency
- Entomological monitoring--- indicators to record

## Health system strengthening

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Finding PKDL, Follow up of patient beyond 6 months; late relapse

## Shifting pattern of reported cases from different villages

- Where to focus; Predict new focus- how?
- How to be sure that there is no active transmission going on

# Thank You

If you want to go far, GO TOGETHER





# SPEAK India

Setting the Post-Elimination Agenda for Kala-azar in India



**DNDi**

Drugs for Neglected Diseases *initiative*

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



BILL & MELINDA  
GATES *foundation*