

**DISTRICT PROFILE ON  
VECTOR BORNE  
DISEASES, EAST SIANG  
PASIGHAT(2017-18)**

## **INTRODUCTION**

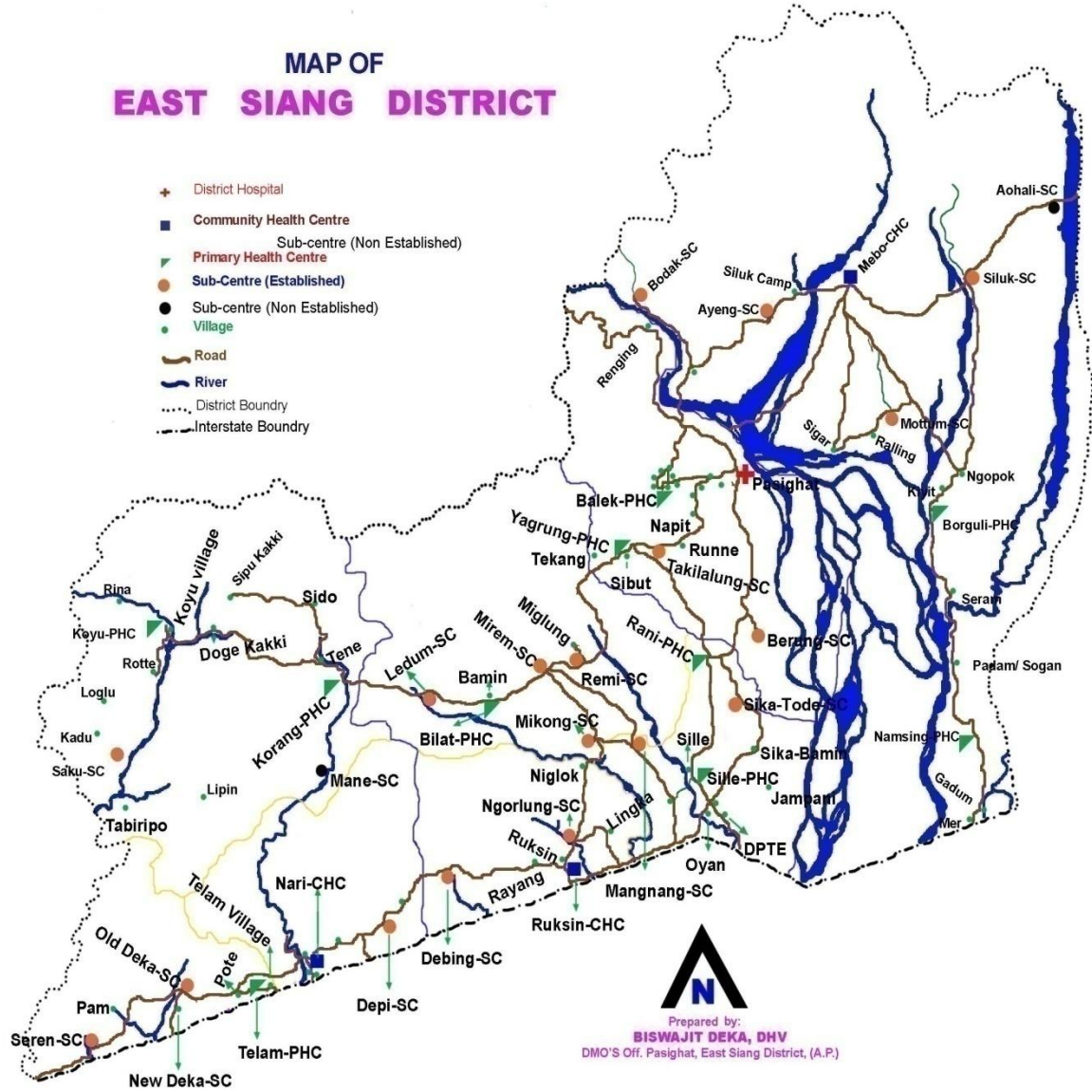
East Siang District is one of the endemic District for Malaria and other vector Borne diseases in the State. When we look back the Epidemiological record of last five to ten years, there were large number of Malaria, Dengue, Chikungunya and JE (Japanese Encephalities) cases and malaria is still prevail in some areas/ villages and outbreak like situation occurred in some CHCs/PHCs/SCs like Borguli village under Borguli PHC during the year 2015, Ngorlung village under Ruksin CHC and Ledum village and Keti Kuti area under Bilat PHC during the year 2016 and again in Rombo Keti Kuti area at Ngorlung under Ruksin CHC this year (2017). And massive Outbreak of Dengue occurred during the year 2015 and it reduced during the year 2016 and 2017 simultaneously. Most of the malaria cases were reported from outsiders who were hired for irrigation and other purpose but the disease burden seems to be reduced year by year though certain foci are still there in certain areas. The mortality due to malaria is zero in the District for the last five years which we believed to be due to constant source reduction, IEC/BCC imparted to the Public, EDPT provided by health workers/ health facilities and other control and preventive measures taken as per the latest policy of NVBDCP, increased in health seeking behavior of the public and by the use of LLIN in proper way by public. MO Ics, Health workers, ASHAs, are being sensitized and motivated towards the NVBDCP activities and they are also delivering their best efforts to bring down the cases of malaria and other vector Borne Diseases in their concern areas/villages. Logistic supply being done as per the requirement and availability in the District to meet all the needs as control and preventive measures. Ensures all the positives cases of malaria with radical treatment.

However, a numbers of challenges are there in controlling and prevention of malaria and other Vector Borne Diseases in the District as a whole. As East Siang District is located in foot hill and low land areas and most of the villages are surrounded by WRD (irrigation) field, irrigation channel and abundant of rainfall makes water collection bodies which are suitable for breeding of mosquitoes of different species. Urbanization and movement of population is one of the major challenges to fight against malaria.

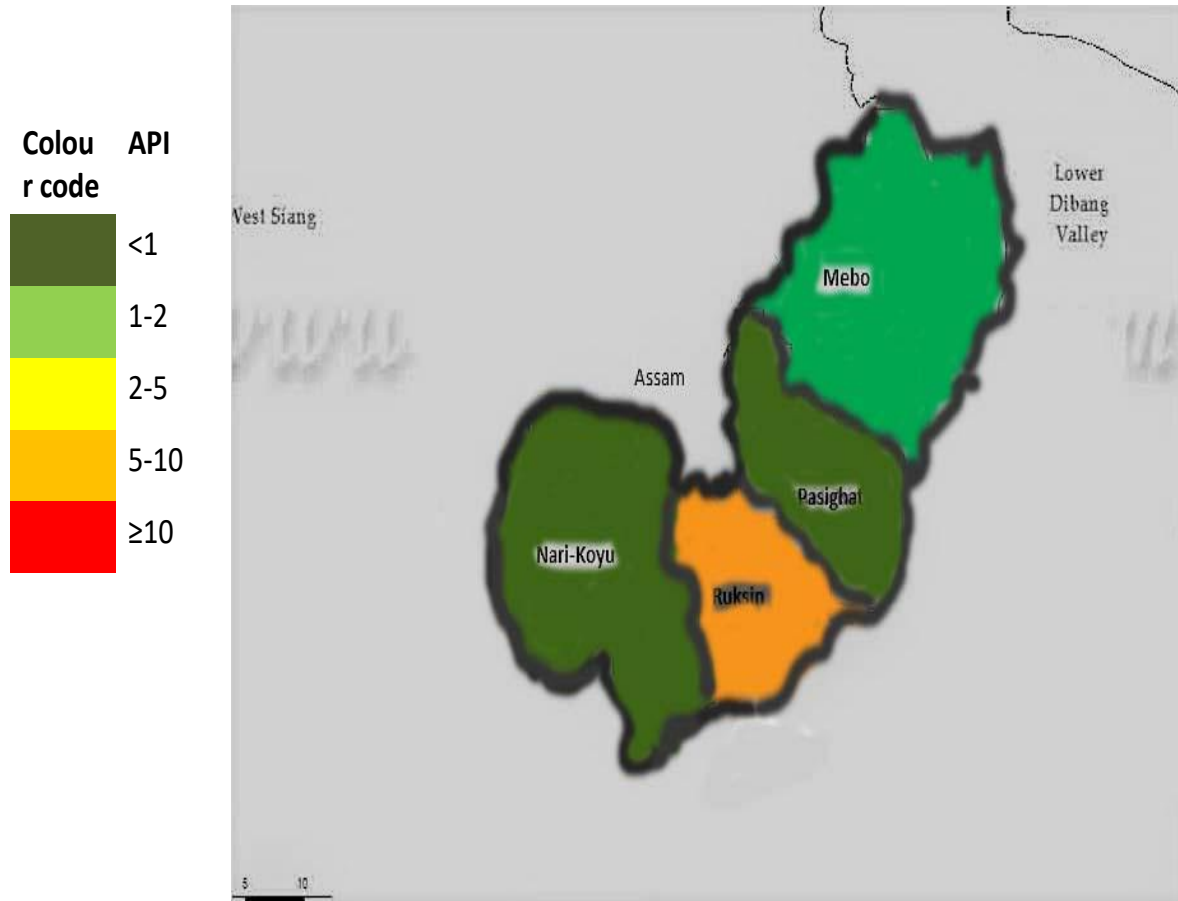
But with the launching of plan for Elimination of Malaria in the Nation wide, it will be more effective to work and we the East Siang District unit will definitely work on it under the guidance of State and Central and as per the Frame work for Elimination of Malaria in India.

# POLITICAL MAP OF EAST SIANG DISTRICT:: PASIGHAT

## MAP OF EAST SIANG DISTRICT



## API based block map of the East Siang District (based on 2017 API and population)



**N.B:- By this Year (2018), Nari- Koyu Block has goes into Lower Siang District. Thus, Nari-Koyu block will not be taken into account by the year 2018 in epidemiological calculation.**

## **HUMAN RESOURCES UNDER NVBDCP IN EAST SIANG DISTRICT**

### **Regular Staffs**

<b>Category</b>	<b>Sanctioned</b>	<b>In position</b>	<b>Vacant</b>	<b>Requirement</b>
District Malaria officer/DVBDCPO	1	1	0	0
Assistant Malaria Officer	2	1	1	1
Community Health Officer	1	1	0	0
Senior Malaria Inspector	2	2	0	0
Malaria Inspector	2	2	0	0
Domiciliary Health Visitors(DHV)	16	16	0	0
Multi Purpose worker(MPW)	18	18	0	0
Lab. Technician	2	2	0	0
SFW	13	13	0	0
RFW	12	12	0	0
<b>Contractual Staffs</b>				
District Vector Borne Disease Consultant(DVBDC)	1	1	0	0
Malaria Technical Supervisor(MTS)	4	4	0	0
Data Entry Operator Cum Account Assistant	1	1	0	0
Lab.Tecnician	7	7	0	0
MPW	0	0	0	0

**API Stratification 2017 (Table: 1.1)**

Sl. No.	API Stratification 2017 (Table: 1.1)												
	Name of			Population	BSC	BSP	Pv	Pf	ABER	API	SPR	SFR	Pf %
	CHC / PHC	SC	Village										
1	Mebo CHC	Mottum-SC	Mottum	803	43	1	1	0	5.35	1.25	2.33	0.00	0
2			Sigar	479	31	0	0	0	6.47	0.00	0.00	0.00	0
3			Ralling	552	11	0	0	0	1.99	0.00	0.00	0.00	0
4		Siluk-SC	Silluk	832	13	0	0	0	1.56	0.00	0.00	0.00	0
5			Aohali	674	7	0	0	0	1.04	0.00	0.00	0.00	0
6		Ayeng-SC	Ayeng	918	40	0	0	0	4.36	0.00	0.00	0.00	0
7			Siku	235	6	0	0	0	2.55	0.00	0.00	0.00	0
8		HQ	Mebo Village	3929	765	5	3	2	19.47	1.27	0.65	0.26	40
9		Bodak-SC	Bodak	187	2	0	0	0	1.07	0.00	0.00	0.00	0
			<b>Total</b>	<b>8609</b>	<b>918</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>10.66</b>	<b>0.70</b>	<b>0.65</b>	<b>0.22</b>	<b>33.3</b>
10	Borguli PHC	HQ	Ngopok	2090	108	5	5	0	5.17	2.39	4.63	0.00	0
11			Kiyit	1486	207	7	7	0	13.93	4.71	3.38	0.00	0
12			Seram	1185	48	2	2	0	4.05	1.69	4.17	0.00	0
13			Borguli	1482	112	2	1	1	7.56	1.35	1.79	0.89	50
				<b>6243</b>	<b>475</b>	<b>16</b>	<b>15</b>	<b>1</b>	<b>7.61</b>	<b>2.56</b>	<b>3.37</b>	<b>0.21</b>	<b>6.26</b>
14	Namsing PHC	HQ	Gadum	498	0	0	0	0	0.00	0.00	0.00	0.00	0
15			Mer	1068	0	0	0	0	0.00	0.00	0.00	0.00	0
16			Kongkul	1475	0	0	0	0	0.00	0.00	0.00	0.00	0
17			Padam / Sogan	612	11	0	0	0	1.80	0.00	0.00	0.00	0
18			Namsing	1375	181	0	0	0	13.16	0.00	0.00	0.00	0
				<b>5028</b>	<b>192</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3.82</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>
19	Ruksin CHC	HQ	Lingka	259	59	1	0	1	22.78	3.86	1.69	1.69	100
20			Rayang	1011	178	1	0	1	17.61	0.99	0.56	0.56	100

21			Ruksin Town	493	1491	35	9	26	302.43	70.99	2.35	1.74	74.28
22			Ruksin Village	823	142	13	2	11	17.25	15.80	9.15	7.75	84.61
23		Mikong-SC	Mikong	803	349	27	2	25	43.46	33.62	7.74	7.16	92.59
24		Debing-SC	Debing	814	141	0	0	0	17.32	0.00	0.00	0.00	0
25		Ngorlung-SC	Ngorlung	1544	340	52	3	49	22.02	33.68	15.29	14.41	94.23
26			Niglok	348	220	5	1	4	63.22	14.37	2.27	1.82	80
				6095	2920	134	17	117	47.91	21.99	4.59	4.01	87.31
27	Sille PHC	HQ	12th Mile	504	81	0	0	0	16.07	0.00	0.00	0.00	0
28			Oyan	782	85	0	0	0	10.87	0.00	0.00	0.00	0
29			Sille HQ	1131	675	7	5	2	59.68	6.19	1.04	0.30	28.57
30			Sille Vill.(13th mile)	321	295	2	0	2	91.90	6.23	0.68	0.68	100
31			16th Gulai / GREF camp	416	0	0	0	0	0.00	0.00	0.00	0.00	0
32			DPTE / Jampani	796	87	1	1	0	10.93	1.26	1.15	0.00	0
33		Sika Tode-SC	Sika Tode	939	89	0	0	0	9.48	0.00	0.00	0.00	0
34			Sika Bamin	870	50	0	0	0	5.75	0.00	0.00	0.00	0
35		Mangnang-SC	Mangnang	728	76	5	1	4	10.44	6.87	6.58	5.26	80
					6487	1438	15	7	8	22.17	2.31	1.04	0.56
36	Rani PHC	Berung-SC	Berung	531	12	0	0	0	2.26	0.00	0.00	0.00	0
37		HQ	Rani village	2764	348	1	1	0	12.59	0.36	0.29	0.00	0
38			5 mile	541	0	0	0	0	0.00	0.00	0.00	0.00	0
39			Tode Charali	224	0	0	0	0	0.00	0.00	0.00	0.00	0
40			Rani(Kamlek)	138	92	2	2	0	66.66	14.49	1.04	0.00	0
				4198	552	3	3	0	13.15	0.71	0.54	0.00	0
41	Bilat PHC	Ledum-SC	Ledum	910	1	1	1	0	0.10	1.09	100.00	0.00	0
42		Mirem-SC	Mirem-I	942	38	0	0	0	4.03	0.00	0.00	0.00	0
43			Mirem-II(Moli)	962	6	0	0	0	0.62	0.00	0.00	0.00	0

44		HQ	Bamin(Bilat-II)	1201	0	0	0	0	0.00	0.00	0.00	0.00	0
45			Bilat I	529	273	37	18	19	51.60	69.94	13.55	6.95	51.35
46		Remi-SC	Moli(Miglung)	356	0	0	0	0	0.00	0.00	0.00	0.00	0
47			Remi (Miglung)	621	66	0	0	0	10.63	0.00	0.00	0.00	0
				5356	844	38	19	19	15.76	7.09	4.50	2.25	50
73	Korang PHC	HQ	Sido + Tene	231	4	0	0	0	1.73	0.00	0.00	0.00	0
74			Mane	293	35	0	0	0	11.95	0.00	0.00	0.00	0
75			Rama Camp	367	0	0	0	0	0.00	0.00	0.00	0.00	0
76			Lipin	95	2	0	0	0	2.11	0.00	0.00	0.00	0
77			Korang Vill.	327	48	3	3	0	14.68	9.17	6.25	0.00	0
				1313	89	3	3	0	6.78	2.28	3.37	0.00	0
78	General Hospital	HQ	Pasighat	28776	5774	3	3	0	20.07	0.10	0.05	0.00	0
79			Tigra Mirbuk						0.00	0.00	0.00	0.00	
80			Kelek Mirbuk						0.00	0.00	0.00	0.00	
81			Pekung Mirbuk						0.00	0.00	0.00	0.00	
82			Diking						0.00	0.00	0.00	0.00	
83			Mirku						0.00	0.00	0.00	0.00	
84			Mirku Dapi						0.00	0.00	0.00	0.00	
85			Mirsam						0.00	0.00	0.00	0.00	
86			Napit						0.00	0.00	0.00	0.00	
87			P.I. Line						0.00	0.00	0.00	0.00	
88			Jarku - Muri line						0.00	0.00	0.00	0.00	
89			Balbadi(police line) & solung Ground						0.00	0.00	0.00	0.00	
90	Indira Nagar(Saw Mill area)						0.00	0.00	0.00	0.00			

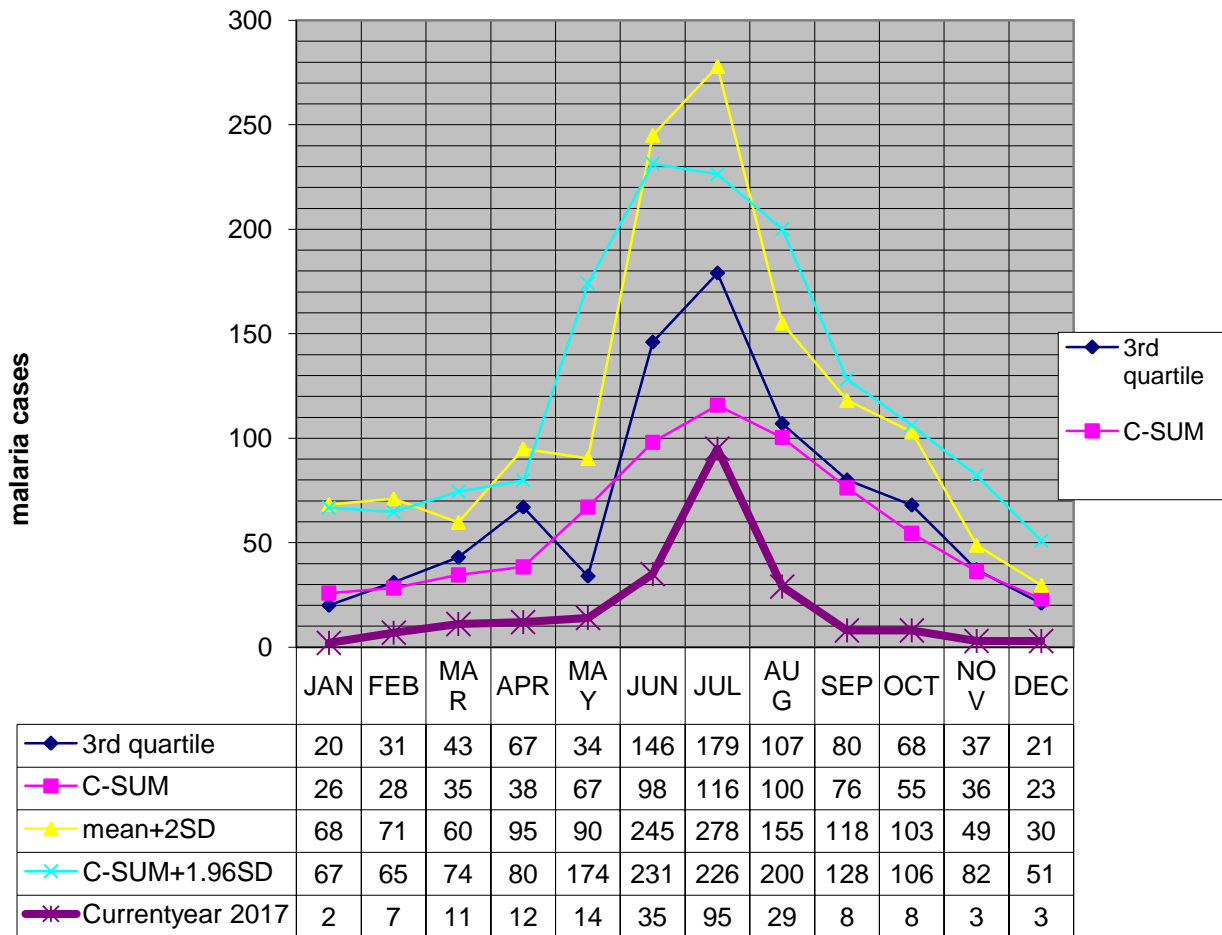


91			SS mission& Banskata						0.00	0.00	0.00	0.00	
				28776	5774	3	3	0	20.07	0.10	0.05	0.00	0
92	Yagrung-PHC	HQ	Yagrung village	579	118	0	0	0	20.38	0.00	0.00	0.00	0
93			Sibut	431	134	0	0	0	31.09	0.00	0.00	0.00	0
94			Tekang	579	146	0	0	0	25.22	0.00	0.00	0.00	0
95		Takilalung-SC	Runne	685	45	0	0	0	6.57	0.00	0.00	0.00	0
96			Takilalung	1219	14	0	0	0	1.15	0.00	0.00	0.00	0
					3493	457	0	0	0	13.08	0.00	0.00	0.00
97	Balek H/D	HQ	Kelek	419	0	0	0	0	0.00	0.00	0.00	0.00	0
98			Rasam	104	1	0	0	0	0.96	0.00	0.00	0.00	0
99			Gunne	136	4	0	0	0	2.94	0.00	0.00	0.00	0
100			Balek	125	1	0	0	0	0.80	0.00	0.00	0.00	0
101			Boying	204	13	0	0	0	6.37	0.00	0.00	0.00	0
102			Yapgo	261	2	0	0	0	0.77	0.00	0.00	0.00	0
103			Tigra	363	4	0	0	0	1.10	0.00	0.00	0.00	0
104			Mongku	292	6	0	0	0	2.05	0.00	0.00	0.00	0
105			Sibo	304	6	0	0	0	1.97	0.00	0.00	0.00	0
106			Renging	809	0	0	0	0	0.00	0.00	0.00	0.00	0
107			Roing	601	1	0	0	0	0.17	0.00	0.00	0.00	0
				3618	38	0	0	0	1.05	0.00	0.00	0.00	0
	Total			88526	15065	224	76	148	17.01%	2.53	1.48%	0.98%	66.07%

## SWOT ANALYSIS

SWOT	Current Features	Solution/Action to be taken
<b>Strength</b>	<ol style="list-style-type: none"> <li>1. District has set up as a good team to work together in any circumstances to fight against the vector Borne diseases.</li> <li>2. Intersectoral coordination and PPP (Public private partnership) has improved more.</li> <li>3. Special attention and support is getting from Administration from all levels (District to Circle).</li> <li>4. Good coordination with Pasighat Municipal council.</li> <li>5. MO Ics, health workers, ASHAs are active in concern health facilities/villages.</li> </ol>	<ul style="list-style-type: none"> <li>- Ready to execute as a good team work in any condition with having dedicated work culture.</li> <li>-Emphasized will be given more in intersectoral coordination and PPP.</li> <li>- Administration from each level may be taken into confidential that there will be constant flow of support and cooperation. There will be certain orders/ byelaws/ legislation which will be made by concern Administration for success of NVBDCP in the District.</li> <li>- Since the Municipal council exists in the Pasighat, tremendous work is combinely doing by DVBDc Society and PMC in prevention and control of VBDS and in near future also it will be carried out.</li> <li>- Sensitization and motivation of ASHAs may be given time to time, coordination meeting, supervision and monitoring with MO Ics, health workers may improved more.</li> </ul>
<b>Weakness</b>	<ol style="list-style-type: none"> <li>1. Difficult to carry source reduction activity as public/ households are reluctant to perform the activity as Medical staffs cannot go every time for source reduction.</li> <li>2. During the moonson season, there are some villages which could not able to visit due to road blockage, flood etc whereas in that period there is peak time for malaria transmission and other vector Borne Diseases.</li> </ol>	<ul style="list-style-type: none"> <li>-Certain bye laws/ local legislative/ circular from District administration may frame and circulate to the public for implementation of source reduction and clean drive of own surrounding.</li> <li>- MO Ic, MTS, health workers and ASHA of concern villages may be provided adequate logistics with a instruction to make constant vigil to all the villages which are difficult to cover up from District HQ during rainy/monsoon period when there is road blockage/flood etc.</li> </ul>
<b>Opportunity</b>	<ol style="list-style-type: none"> <li>1. Supervision and monitoring activities are conducting</li> </ol>	<ul style="list-style-type: none"> <li>-In spite of having trained LT in all the CHCs/PHCs, few microscopes of some</li> </ul>

	<p>regularly by DVBDPCPO, DVBDC and MTSs so that no activities should remain backlog.</p> <ol style="list-style-type: none"> <li>2. All the CHCs/PHCs have trained LTs.</li> <li>3. All the ASHAs are trained in NVBDCP activities and performing their role as per the resources and time available with them.</li> </ol>	<p>health facilities are not working properly due to lack of regular supply of electricity, lack of stabilizer etc</p> <p>-Motivation and sensitization of ASHAs towards the NVBDCP activities are given more stress. Logistic supply, incentive payments are made in regular basis.</p>
<p><b>Threat</b></p>	<ol style="list-style-type: none"> <li>1. Movement of population from other state as hired labour for irrigation work, tea estate and other work purpose. Eg, during the month of July 2017, 90% of the positive cases were from outsiders who were dwelling in Keti Kuti area and same cases were at Borguli and Bilat PHC during the year 2015 and 2016.</li> <li>2. As District has no separate entomological team, thus, it is difficult to conduct entomological survey during the outbreak like situation to identify the species of mosquitoes.</li> </ol>	<p>-Every owner/stalk holder may bring the hired labour to get their (labour) blood tested for malaria irrespective of fever and non fever at the time of arrival at concern health facilities before engaging them to work so as to detect symptomatic and asymptomatic malaria. This issue has been raised at Bilat, Borguli and Ruksin during advocacy meeting and comments to be initiated by next coming season under the guidance and supervision of concern MO lcs and it is to be ensured by HGB, GB, village PRI members and ASHA.</p> <p>- Entomological survey may conduct time to time from Zonal as well as from Regional to identify the vectors responsible for certain diseases.</p>



**EPIDEMIC THRESHOLD CHART (MALARIA)**

## Programme Indicators 2010 -17

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Population (In Lakhs)		104033	104133	104233	104333	104433	86615	88526
ABER		25.58%	22.32%	17.59%	15.06%	17.40%	16.45%	17.02%
API		20.29	9.43	9.06	6.80	5.51	4.57	2.53
SPR		7.93%	4.22%	5.15%	4.10%	3.85%	3.89%	0.51%
TPR								1.49%
SfR		4.07%	1.88%	2.82%	1.90%	1.33%	1.29%	0.98%
Malaria Deaths		Nil	Nil	Nil	Nil	Nil	Nil	Nil

**Comments:**

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## Programme Indicators (Malaria- 2017)

Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>MBER*</b>	<b>0.20</b>	<b>0.76</b>	<b>0.83</b>	<b>0.91</b>	<b>1.33</b>	<b>1.67</b>	<b>3.13</b>	<b>2.07</b>	<b>1.56</b>	<b>1.33</b>	<b>1.00</b>	<b>1.60</b>
<b>Total malaria cases</b>	<b>2</b>	<b>7</b>	<b>12</b>	<b>12</b>	<b>14</b>	<b>35</b>	<b>95</b>	<b>29</b>	<b>8</b>	<b>8</b>	<b>3</b>	<b>3</b>
<b>Malaria Cases /1 lakh popltn</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Pf cases</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>19</b>	<b>75</b>	<b>20</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>2</b>
<b>Pf cases treated with ACT AL</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>19</b>	<b>75</b>	<b>20</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>2</b>
<b>SPR (%)</b>	0%	0.74%	0.40%	0.24%	0%	0.87%	1.26%	0.70 %	0.14 %	0.25 %	0%	0%
<b>TPR (%)</b>	1.10%	1.03%	1.63%	1.47%	1.18%	2.35%	3.42%	1.58 %	0.57 %	0.67 %	0.33 %	0.21 %

\*MBER= Total no. of patients tested for malaria (by BS or RDT) in the given monthx100/Total population

## Comparative Status of Other VBDs in 2016 & 2017

Other VBDs	Cases				Deaths		CFR (%) Deaths	
	2016		2017					
	Clinical	Confirmed	Clinical	Confirmed	2016	2017	2016	2017
Dengue	1042	11	819	7	0	0	0	0
Chikungunya	289	13	133	0	0	0	0	0
JE	11	1	2	0	0	0	0	0
AES	0	0	0	0	0	0	0	0
Kala-Azar	0	0	0	0	0	0	0	0
Lymphatic Filariasis	0	0	0	0	0	0	0	0

### PROBABLE REASONS FOR DECREASE IN VECTOR BORNE DISEASES IN THE DISTRICT (EAST SIANG)

When we look back into the previous years, the cases of Vector Borne Diseases are decreasing year by year, its due to the constant efforts made by District health society, involvement of District administration, increased in awareness by public.

The District health society has conducted source reduction along with IEC/BCC activities in terms of IPC in all the affected/hotspot areas/ villages/wards along with fogging and additional round of IRS(DDT) in outbreak areas which resultant in remarkable reduce in vector borne diseases.

### SURVEILLANCE

Surveillance has been carried out in different levels- CHCs/PHCs/SCs and villages in the form of active and passive surveillance by involving all the field staffs and concern village ASHAs (passive surveillance) under the direct supervision of MO ICs.

- Passive case detection in private clinic has also been ensured to use microscope either antigen based bivalent RDT and will directed to submit the monthly report to the nearest health facility with proper entry in the reporting formats.

-If a fever cases is found to be positive for malaria, radical treatment to be given within 24 hours of detection and will ensured for complete treatment in all levels.

## INTEGRATED VECTOR MANAGEMENT (IVM)

**The vector control and personal protection measures include:-**

-Adult mosquito control-Indoor residual spray (IRS) and bed net use (LLINs/ITNs)

-Personal protection – bed net, wear full sleeve cloth, coil, repellents etc

-Larval control- source management/reduction, biological (larvivorous fish), chemical (larvicides) and environment measures.

All these methods are being applied except biological control method as till today there is no establishment of such activities , however, initiation will be taken up to introduce biological method as per the demand and wherever it seems to be applied.