



National Center for Vector Borne Diseases Control  
Directorate General of Health Services  
Ministry of Health & Family Welfare, Government of India



# MONTHLY MALARIA SITUATION NATIONAL LEVEL



Monitoring and Evaluation Division

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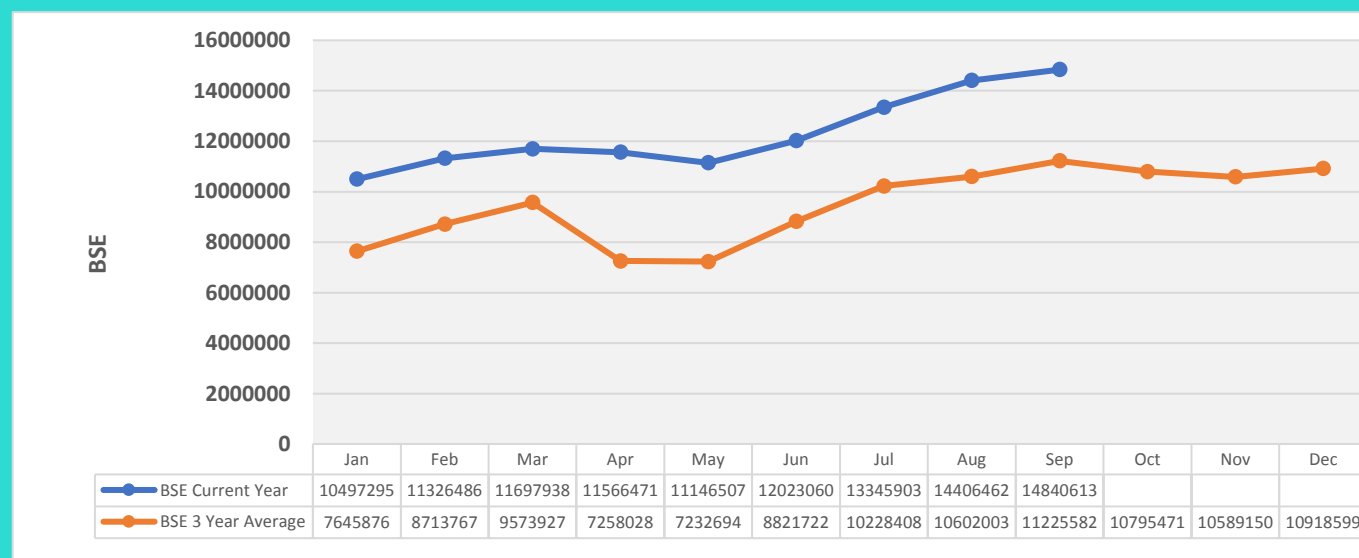
*State categorization as per API 2021 status.*

# INTRODUCTION AND SUMMARY SHEET FOR COUNTRY

The surveillance information of Malaria of October, 2023 in India is enclosed in this Monthly Malaria Situation Information Report. The various indicators analyzed in this report are \*BSE, \*TPC, \*TPR & \*PF.

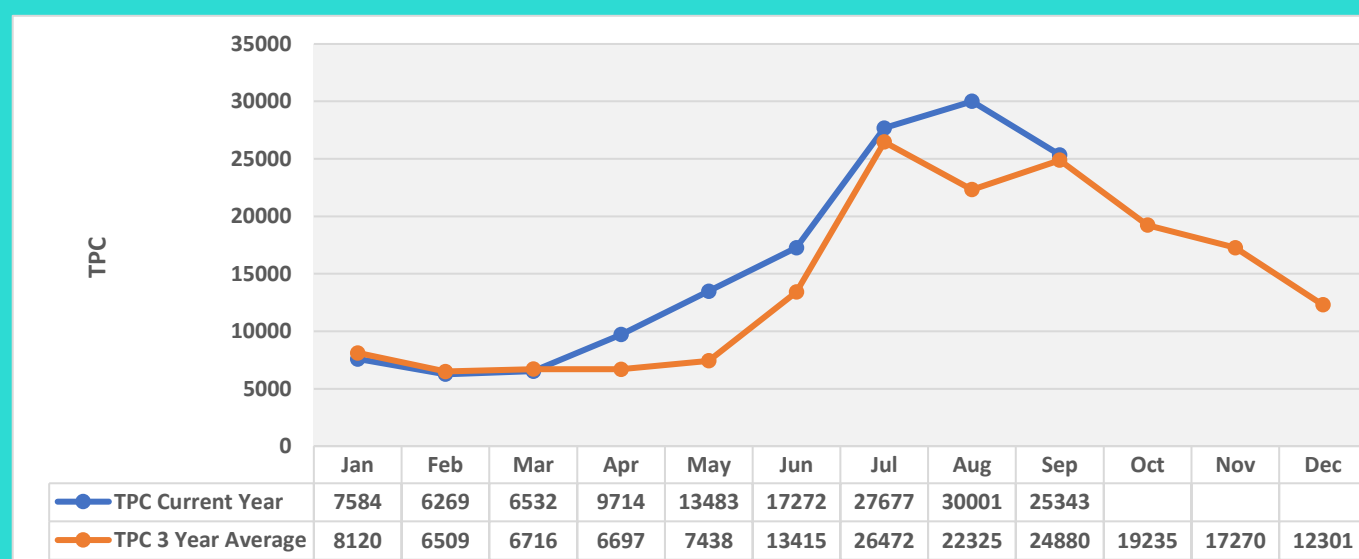
\*BSE (Blood Slide Examination), TPC (Total Positive Cases), PF (Plasmodium falciparum) and TPR (Total Positivity Rate).

**GRAPH 1: MONTH WISE TREND OF BSE IN COUNTRY**



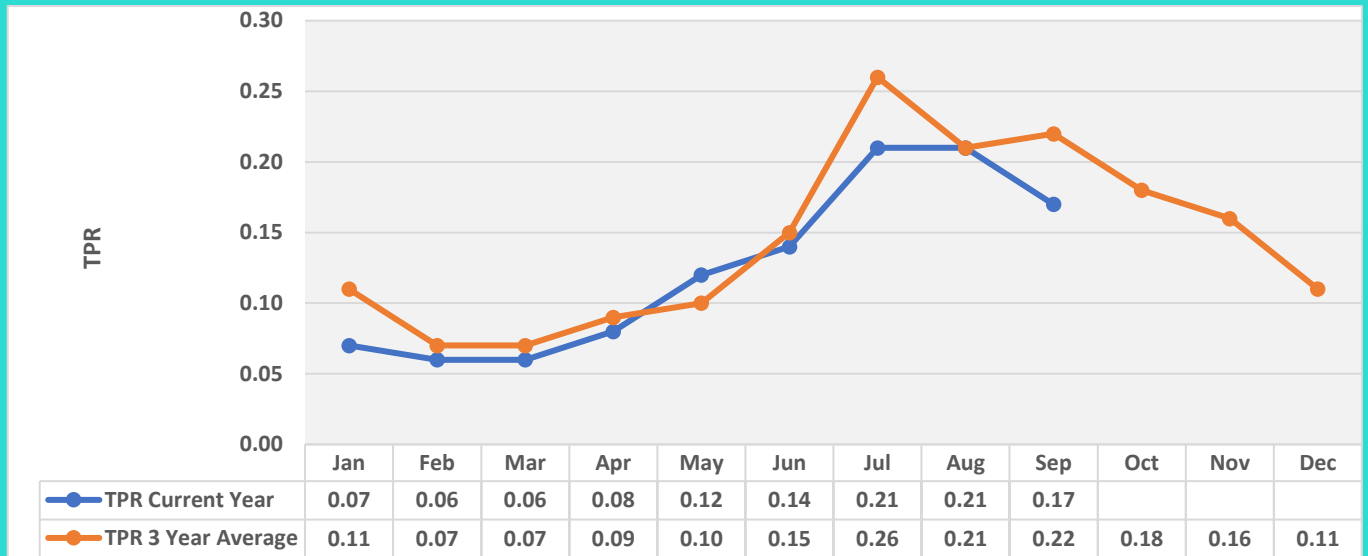
There is an increase of BSE by 36.08% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 9.7% up to October, 2023 vis-à-vis up to October, 2022.

**GRAPH 2: MONTH WISE TREND OF TPC IN COUNTRY**



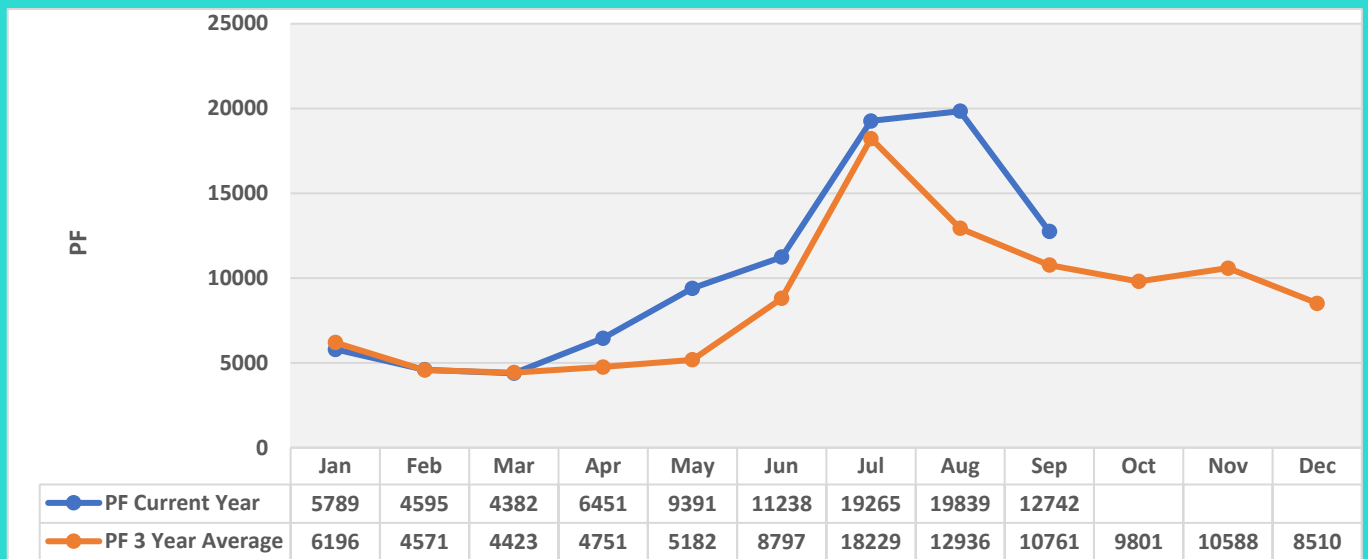
There is an increase of TPC by 13.05% up to October, 2023 as compared to last three years average cumulative and also an increase of TPC by 9.23% up to October, 2023 vis-à-vis up to October, 2022.

### GRAPH 3: MONTH WISE TREND OF TPR IN COUNTRY



The TPR was 0.13 up to October, 2023 as compared to 0.16 last three years average and 0.13 up to October, 2022

### GRAPH 4: MONTH WISE TREND OF PF IN COUNTRY



There is an increase of PF by 19.85% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 24.1% up to October, 2023 vis-à-vis up to October, 2022.

## List of Districts showing a decrease in Surveillance in Country States/UTs

SN	States/UTs	Districts/Units showing decrease in Surveillance
1	Andhra Pradesh	Y.S.R., West Godavari, Vizianagaram, Visakhapatnam, SPSR Nellore, Prakasam, Kurnool, Krishna, Guntur, East Godavari, Chittoor, Anantapur
2	Arunachal Pradesh	Dibang Valley
3	Assam	Udalguri, Marigaon, Hailakandi, Goalpara, Biswanath
4	Bihar	Siwan, Sitamarhi, Saharsa, Purnia, Patna, Pashchim Champaran, Lakhisarai, Khagaria, Katihar, Araria
5	Chhattisgarh	Sukma, RajnandGaon, Raigarh, Korea, Janjgir-Champa
6	Haryana	Sirsa, Nuh, Gurugram, Faridabad
7	Himachal Pradesh	Sirmaur, Kullu, Chamba
8	Jammu And Kashmir	Reasi, Rajouri, Doda
9	Jharkhand	Jamtara, Deoghar
10	Karnataka	Bengaluru Urban, Ballari, A.M.U. Kembhavi#
11	Madhya Pradesh	Umaria, Singrauli, Sagar, Morena, Chhindwara, Burhanpur, Alirajpur
12	Maharashtra	Raigad, Latur
13	Meghalaya	West Khasi Hills
14	Mizoram	Serchhip, Aizawl
15	Punjab	Tarn taran, Shahid Bhagat Singh Nagar, Moga, Mansa, Jalandhar, Fazilka, Barnala
16	Rajasthan	Sirohi, Rajsamand, Jaipur, Dungarpur
17	Tamil Nadu	Villupuram, Tirunelveli, Kanchipuram, Coimbatore, Cheyyar#, Chennai, Attur#
18	Telangana	Yadadri Bhuvanagiri, Wanaparthy, Suryapet, Peddapalli, Nirmal, Narayanpet, Nagarkurnool, Medak, Mahabubabad, Jogulamba Gadwal, Jayashankar Bhupalapally, Hyderabad, Hanumakonda, Adilabad
19	Uttar Pradesh	Shahjahanpur, Rampur, Pratapgarh , Mirzapur, Lalitpur, Jalaun, Fatehpur, Etawah, Chitrakoot, Amethi
20	Uttarakhand	Uttar Kashi, Tehri Garhwal, Rudra Prayag, Pithoragarh, Pauri Garhwal, Haridwar, Champawat, Chamoli, Bageshwar
21	West Bengal	Jalpaiguri, Alipurduar

**Current month data is compared with same month previous year data.**

## Objectives of the Country

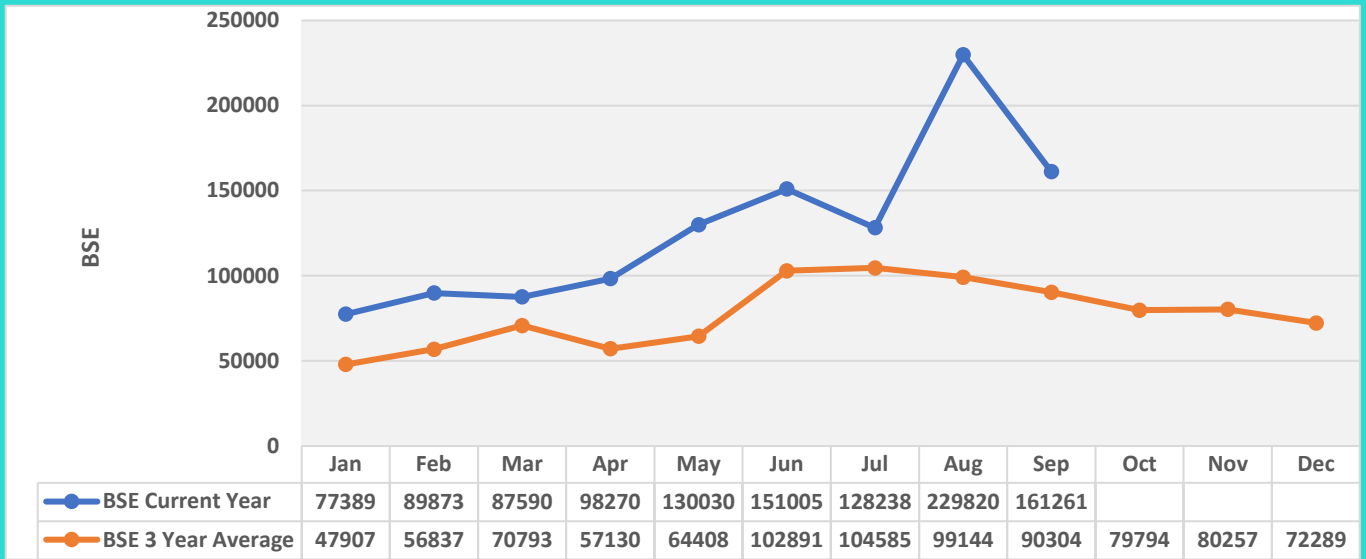
- Interrupt transmission of malaria.
- Immediately notify each detected case.
- Detect any possible continuation of malaria transmission.
- Determine the underlying causes of residual transmission.
- Forecast and prevent any unusual situations related to malaria; ensure epidemic preparedness and respond in a timely and efficient manner to outbreak situations.
- Prevent re – establishment of local transmission of malaria.
- Establish an efficient malaria preventive and curative system to reduce ongoing transmission of malaria.
- Contain and prevent possible outbreaks of malaria, particularly among non-immune high-risk mobile and migrant population groups.
- Achieve universal coverage with services.
- Emphasize reducing malaria morbidity and mortality in high transmission pockets such as tribal, hilly, forested and conflict affected areas.

## Key Interventions of the Country

- All efforts will be directed at interrupting local transmission in all active foci of malaria.
- Mandatory notification of each case of malaria from the private sector, other organized government sectors or any other health facility.
- Adequate case - based surveillance and complete case management established and fully functional across the entire country to handle each case of malaria.
- Investigation and classification of all foci of malaria.
- A strict total coverage of all active foci by effective vector control measures.
- Early detection and treatment of all cases of malaria by means of ACD and / or PCD to prevent onward transmission.
- State and National level malaria elimination database established and made operational.
- Implementation of interventions for effective screening, management and prevention of malaria among mobile and migrant populations.
- Establishment of an effective epidemic forecasting and response system.
- Ensuring rigorous quality assurance of all medicines and diagnostics.
- Setting up a national – level reference laboratory to serve following two functions:-
  - All positive and a fixed percentage of negative slides will be referred to this laboratory for confirmation of diagnosis and cross – checking. After elimination has been achieved in each State / UT, 100% of cases will be notified to this laboratory for confirmation of diagnosis. The laboratory will be notified immediately on all positive cases of malaria by each State / UT through either SMS, e-mail or telephone with information on name, gender, address (village and district), date and type of testing and type of parasite for each positive case of malaria so that a national level database can be maintained.
  - Training of master trainers and accreditation / certification of microscopists as per Indian Public Health Standards shall also be undertaken at this laboratory.
- During investigation of foci, all suspected cases of malaria are to be screened for malaria. These could include household members, neighbours, school children, workplace colleagues and relatives.
- Surveillance of special groups, migrant populations or populations residing in the vicinity of industrial areas are also to be covered under surveillance operations.
- Screening of all fever cases suspected for malaria.
- Classification of areas as per local malaria epidemiology and grading of areas as per risk of malaria transmission followed by implementation of tailored interventions.
- Strengthening of inter-sectoral collaboration.
- Maintenance of an optimum level of surveillance using appropriate diagnostic measures.
- Massive scaling up of existing disease management and preventive approaches and tools, aimed at a significant reduction in the prevalence and incidence of malaria as well as associated deaths.
- Special interventions for high-risk groups such as tribal populations and populations residing in conflict affected or hard-to-reach areas.
- One-stop centres or mobile clinics on fixed days in tribal or conflict affected areas to provide malaria diagnosis and treatment, and increasing community awareness with the involvement of other agencies and service providers as required.
- Timely referral and treatment of severe malaria cases to reduce malaria-related mortality.
- Strengthening all district and sub-district hospitals in malaria endemic areas as per Indian Public Health Standards with facilities for management of severe malaria cases.
- Establishment of a robust supply chain management system
- Equipping all health institutions (primary health care level and above), especially in high-risk areas, with microscopy facilities and RDTs for emergency use and injectable artemisinin derivatives for treatment of severe malaria.

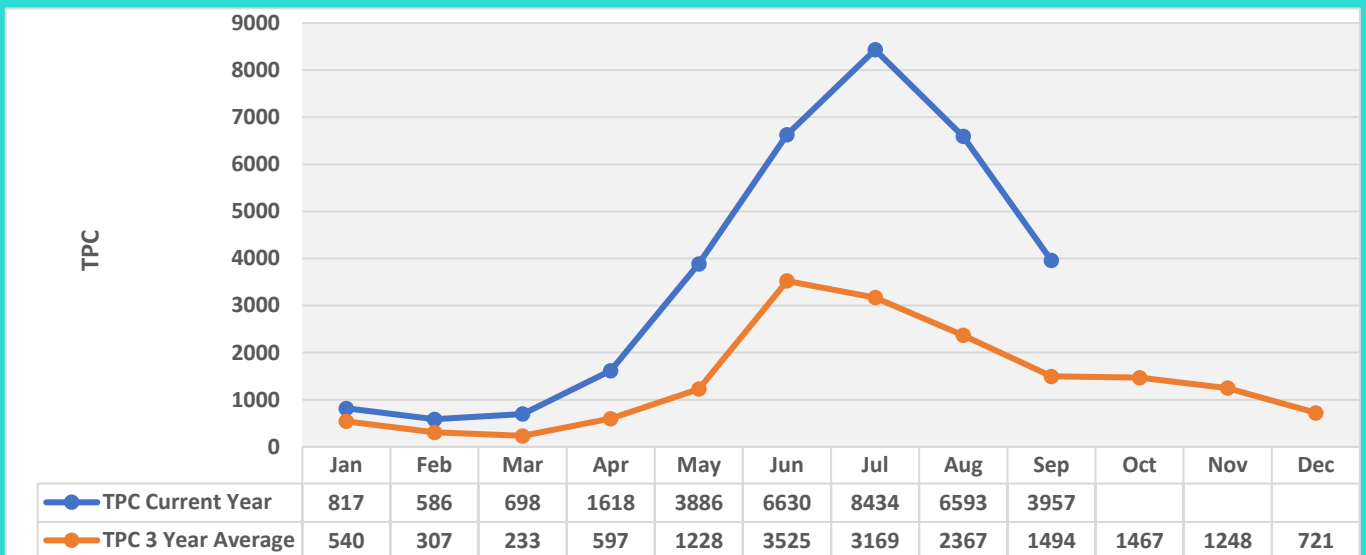
## CATEGORY III

**GRAPH 1: MONTH WISE TREND OF BSE IN CATEGORY III STATES/UTs**



There is an increase of BSE by 65.39% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 27.6% up to October, 2023 vis-à-vis up to October, 2022.

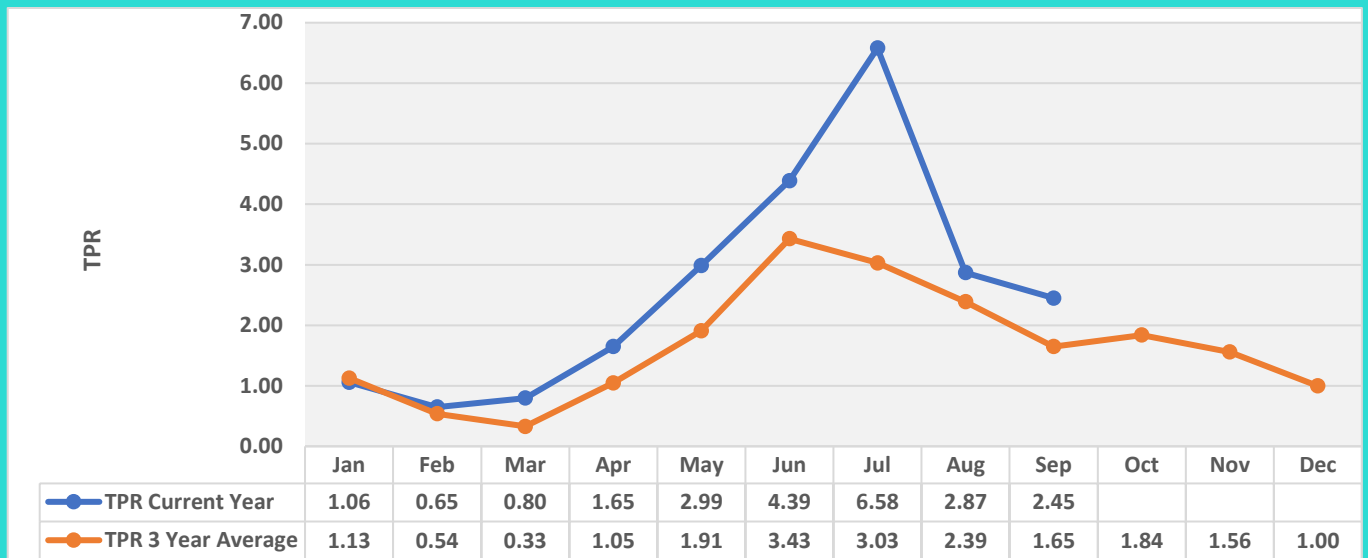
**GRAPH 2: MONTH WISE TREND OF TPC IN CATEGORY III STATES/UTs**



There is a major increase of TPC up to October, 2023 as compared to last three years average cumulative and an increase of TPC by 73.43% up to October, 2023 vis-à-vis up to October, 2022.

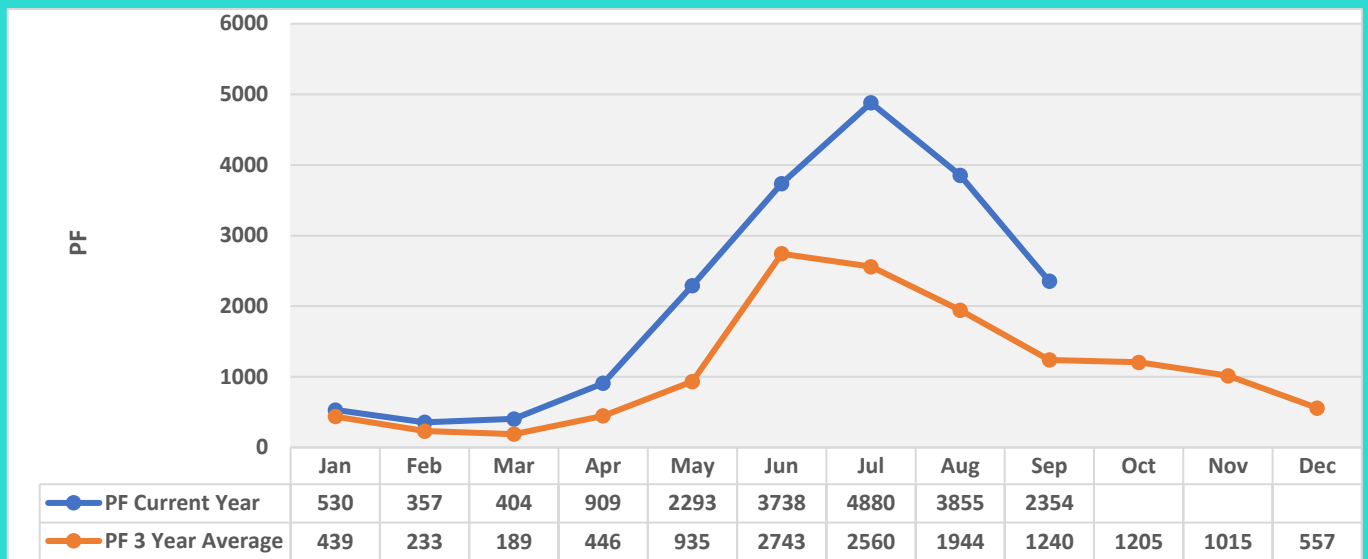


**GRAPH 3: MONTH WISE TREND OF TPR IN CATEGORY III STATES/UTs**



The TPR was 2.81 up to October, 2023 as compared to 1.91 last three years average and 2.07 up to October, 2022

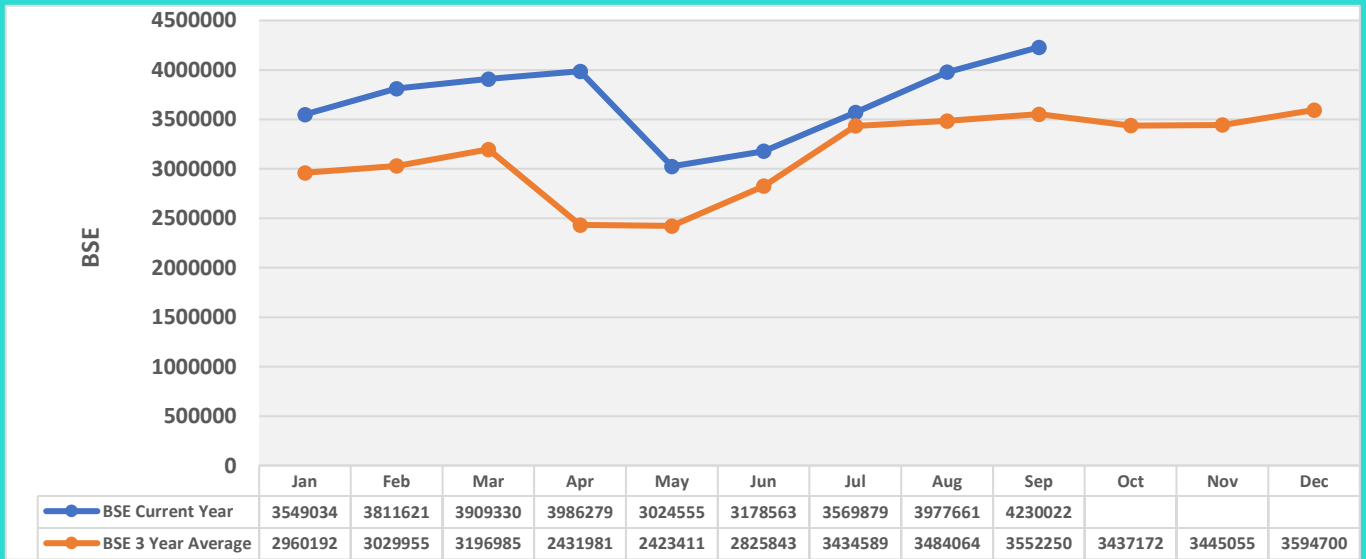
**GRAPH 4: MONTH WISE TREND OF PF IN CATEGORY III STATES/UTs**



There is an increase of PF by 76.89% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 38.4% up to October, 2023 vis-à-vis up to October, 2022.

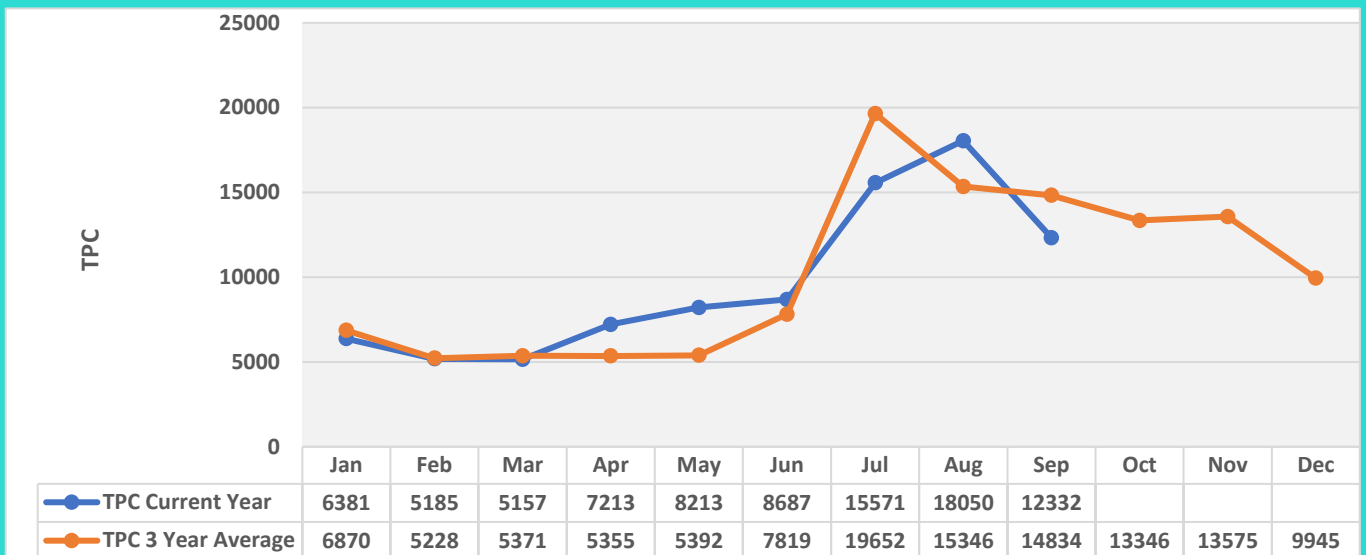
## CATEGORY II

**GRAPH 1: MONTH WISE TREND OF BSE IN CATEGORY II STATES/UTs**



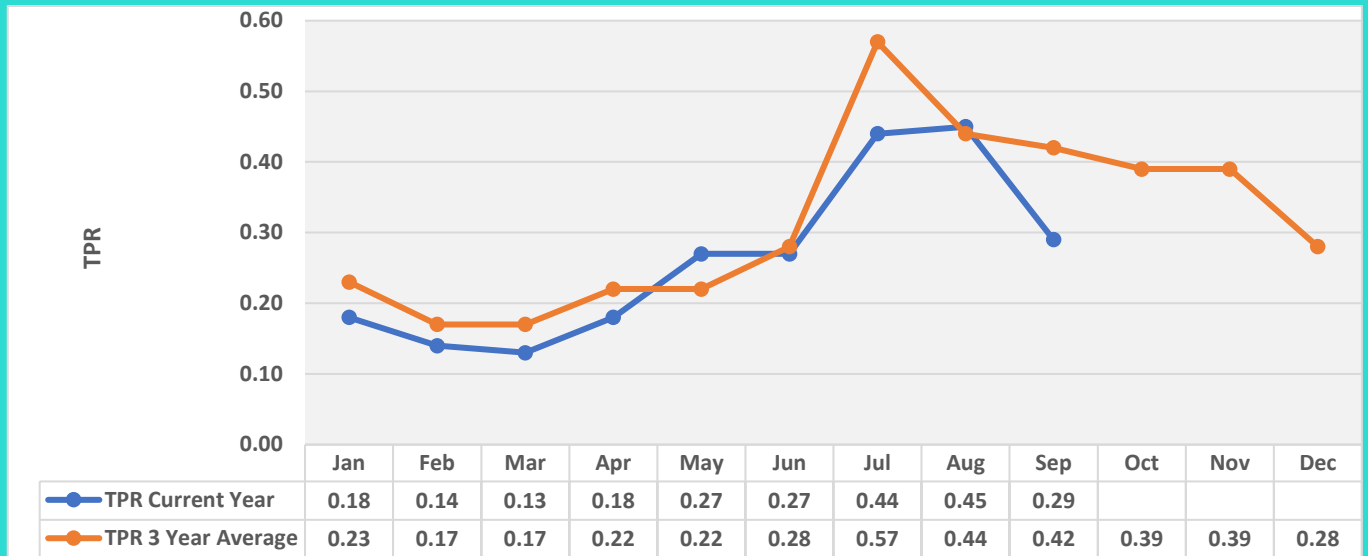
There is an increase of BSE by 20.99% up to October, 2023 as compared to last three years average cumulative but a decrease of BSE by 1.93% up to October, 2023 vis-à-vis up to October, 2022.

**GRAPH 2: MONTH WISE TREND OF TPC IN CATEGORY II STATES/UTs**



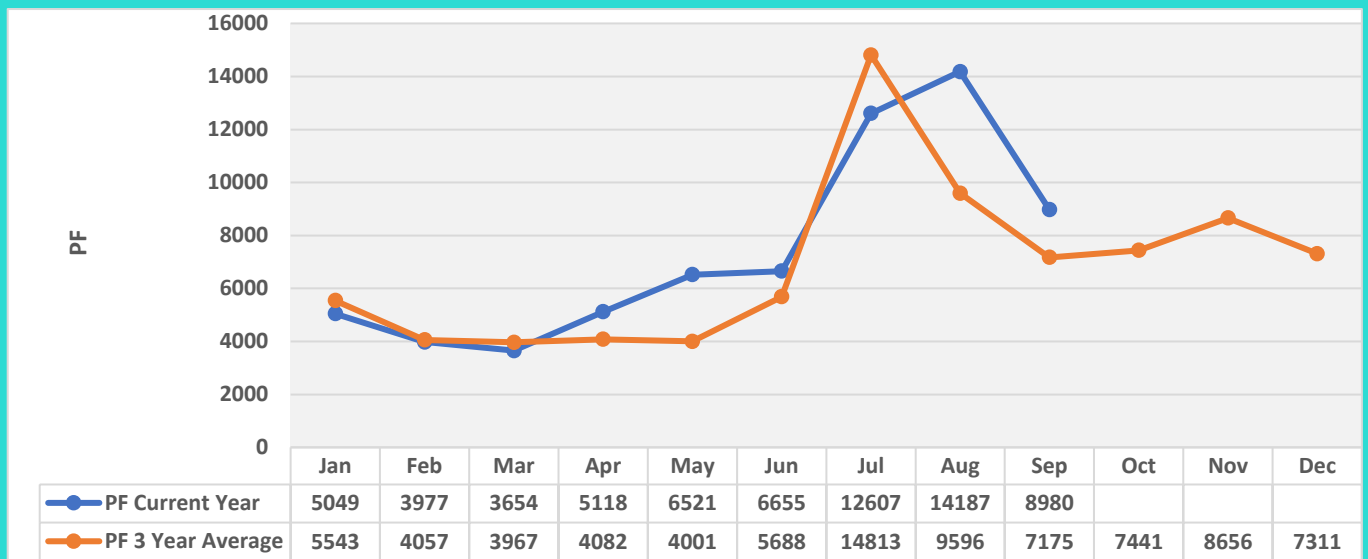
There is a decrease of TPC by 4.12% up to October, 2023 as compared to last three years average cumulative and also a decrease of TPC by 11.9% up to October, 2023 vis-à-vis up to October, 2022.

**GRAPH 3: MONTH WISE TREND OF TPR IN CATEGORY II STATES/UTs**



The TPR was 0.26 up to October, 2023 as compared to 0.33 last three years average and 0.28 up to October, 2022

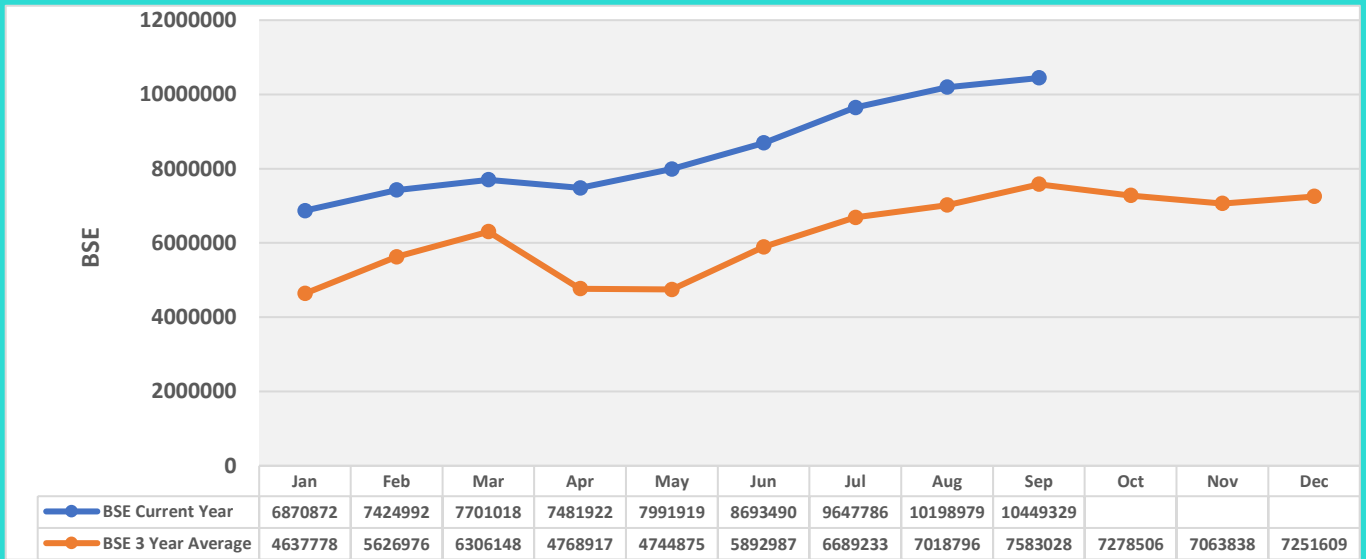
**GRAPH 4: MONTH WISE TREND OF PF IN CATEGORY II STATES/UTs**



There is an increase of PF by 9.15% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 15.85% up to October, 2023 vis-à-vis up to October, 2022.

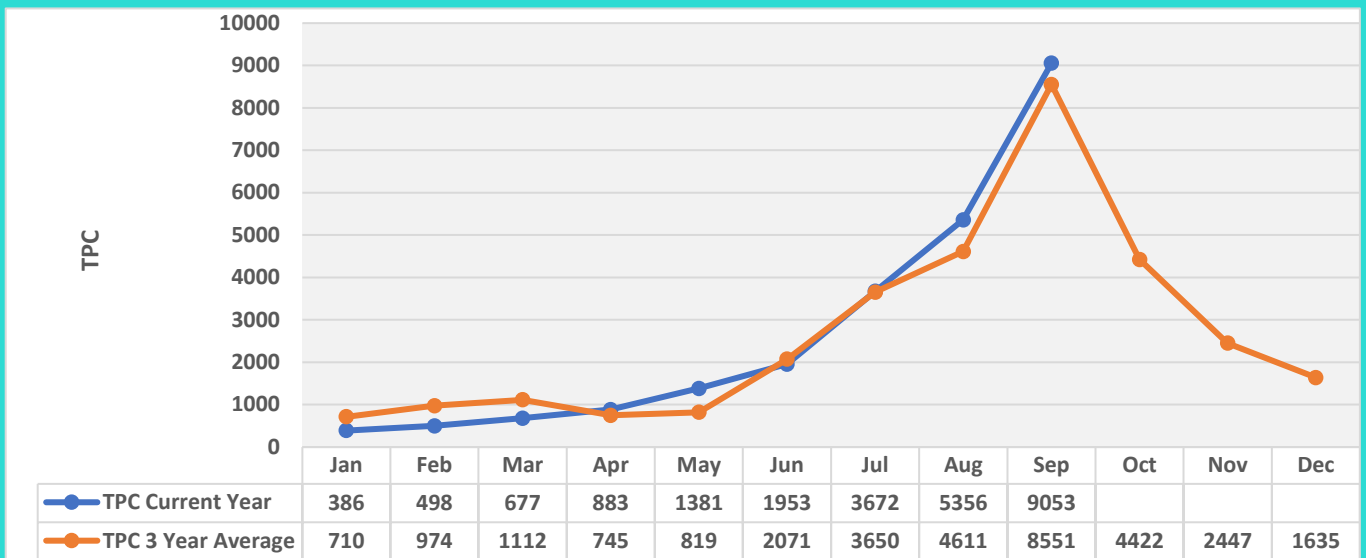
# CATEGORY I

**GRAPH 1: MONTH WISE TREND OF BSE IN CATEGORY I STATES/UTs**



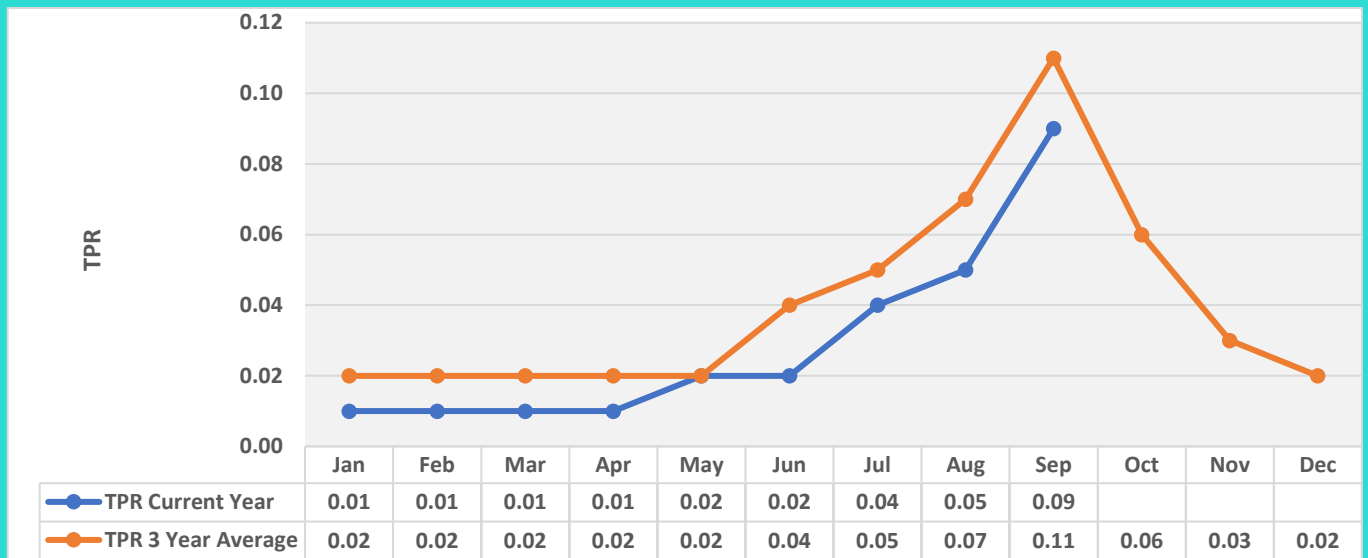
There is an increase of BSE by 43.37% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 15.32% up to October, 2023 vis-à-vis up to October, 2022.

**GRAPH 2: MONTH WISE TREND OF TPC IN CATEGORY I STATES/UTs**



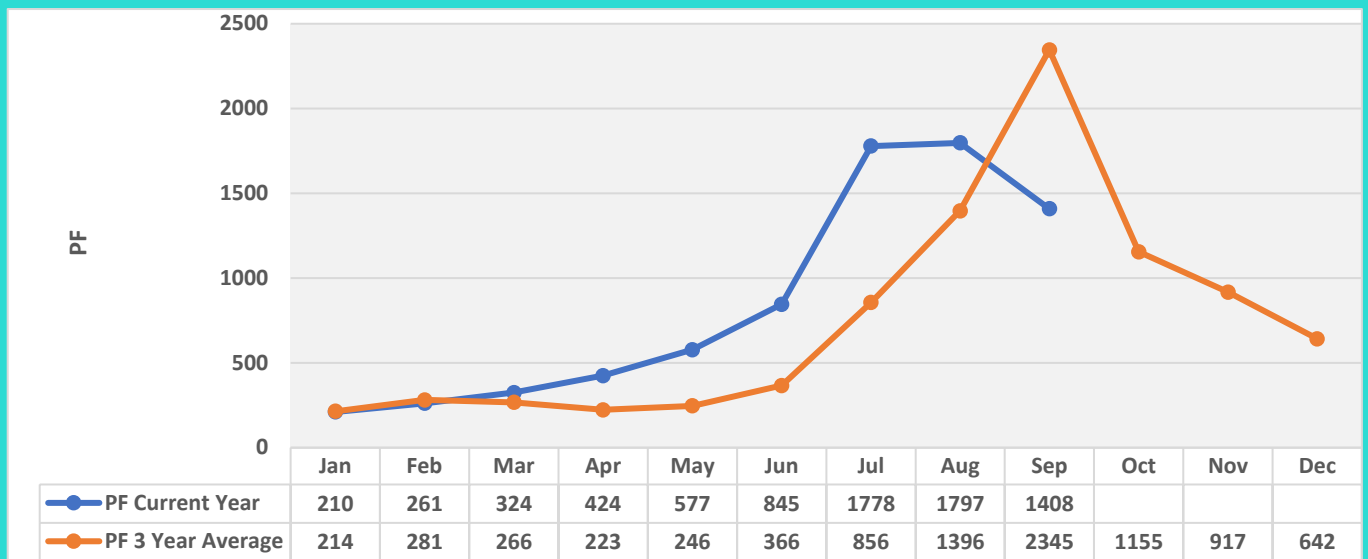
There is an increase of TPC by 5.71% up to October, 2023 as compared to last three years average cumulative and also an increase of TPC by 61.84% up to October, 2023 vis-à-vis up to October, 2022.

**GRAPH 3: MONTH WISE TREND OF TPR IN CATEGORY I STATES/UTs**



The TPR was 0.03 up to October, 2023 as compared to 0.05 last three years average and 0.02 up to October, 2022

**GRAPH 4: MONTH WISE TREND OF PF IN CATEGORY I STATES/UTs**



There is an increase of PF by 23.79% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 84.5% up to October, 2023 vis-à-vis up to October, 2022.

S. N	Area	Indicator
1	Surveillance/ case finding	No of Fever cases, No of Malaria cases, No of Pf cases
2	Surveillance/ case finding	Annual Blood Smear Examination Rate (ABER) should be more than 1%of population
3	Surveillance/ case finding	Annual Blood Smear Examination Rate (ABER) should be more than 10%of population
4	Disease burden & impact	Annual Parasite Incidence (API)
5	Disease burden & impact	Annual Falciparum Incidence (AFI)
6	Disease burden & impact	Slide Positivity Rate (SPR): Is independent of surveillance activity, therefore a better indicator for impact assessment
7	Disease burden & impact	Slide Falciparum Rate (SFR): It is independent of surveillance and indicates Pf preponderance
8	Disease burden & impact	Pf percentage (Pf%): Indicates trends in proportion of cases due to Pf out of total cases
	<b>Input</b>	<b>% of Additional Staff in Place (MTS, LT, DVBD Consultant)</b>
9	Input	No of RDTs & ACTs planned versus received & used.
10	Input	% of spray equipment in working condition
11	Input	% of spray workers trained
	<b>Process</b>	<b>BCC Activities</b>
12	Process	% of facilities (SC and PHC) / village level functionaries (ASHA, AWW) reporting stock-out of antimalarials lasting more than 15 days during the quarter
13	Process	% of MPH/ASHA/other volunteers trained for use of RDT / ACT
14	Process	% of diagnostic facilities functional with microscopy/RDT in the last reporting period
15	Output	Nets treated once/twice in a year
16	Output	% of eligible villages covered by ITN,Should be 80% or more
17	Output	Insecticide use
18	Outcome	IRS coverage – Population (%) should be 80% or more
19	Outcome	IRS coverage – Rooms %
20	Outcome	% of fever cases who were tested for malaria by microscopy/ RDT with a positive test result for RDT and were started on treatment no later than the next day with ACT
21	Outcome	% of households in which beneficiaries reported having slept under ITNs/ LLINs previous night
22	Outcome	% of PHC sampled in which utilization of ITNs/ LLINs was more than 80%