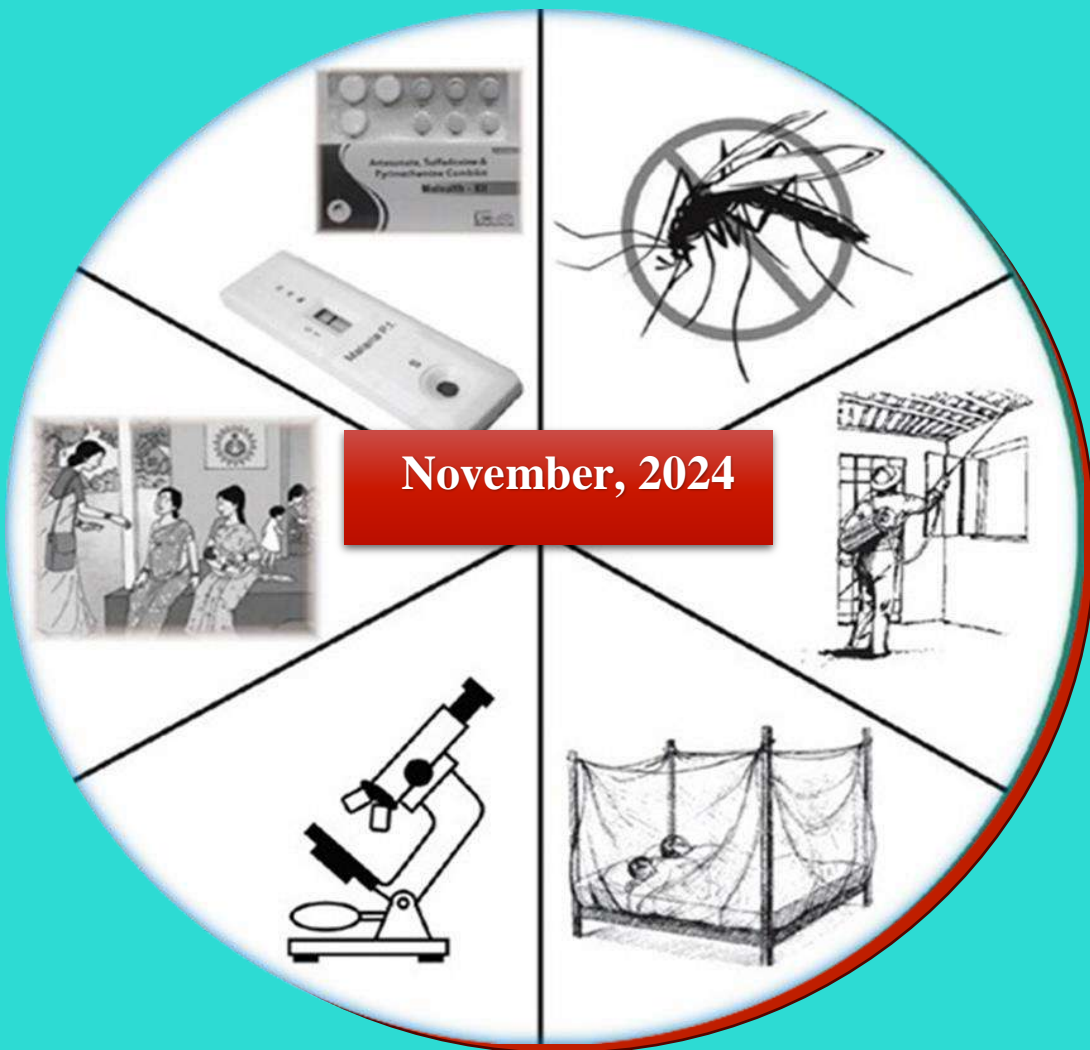**National Center for Vector Borne Diseases Control**

Directorate General of Health Services

Ministry of Health & Family Welfare, Government of India

सत्यमेव जयते

राष्ट्रीय वैक्टर जनित रोग नियंत्रण कार्यक्रम
N V B D C P

MONTHLY MALARIA SITUATION
NATIONAL LEVEL

November, 2024

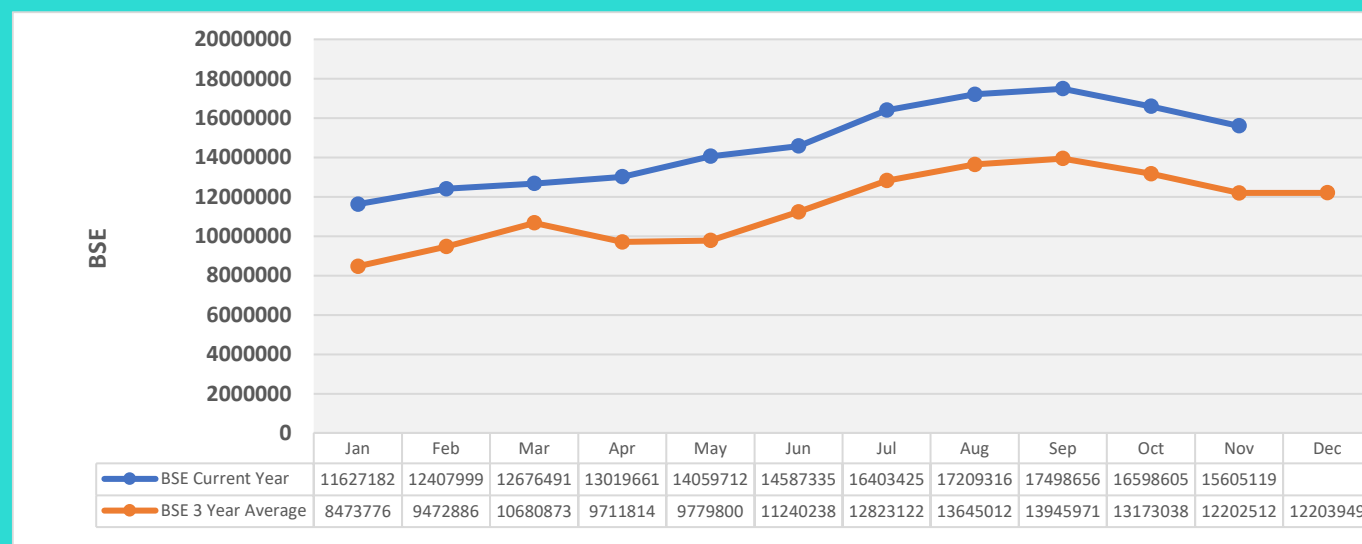## Monitoring and Evaluation Division

INDEX

State categorization as per API 2023 status.

I

INTRODUCTION AND SUMMARY SHEET FOR COUNTRY

The surveillance information of Malaria of November, 2024 in India is enclosed in this Monthly Malaria Situation Information Report. The various indicators analyzed in this report are *BSE, *TPC, *TPR & *PF.
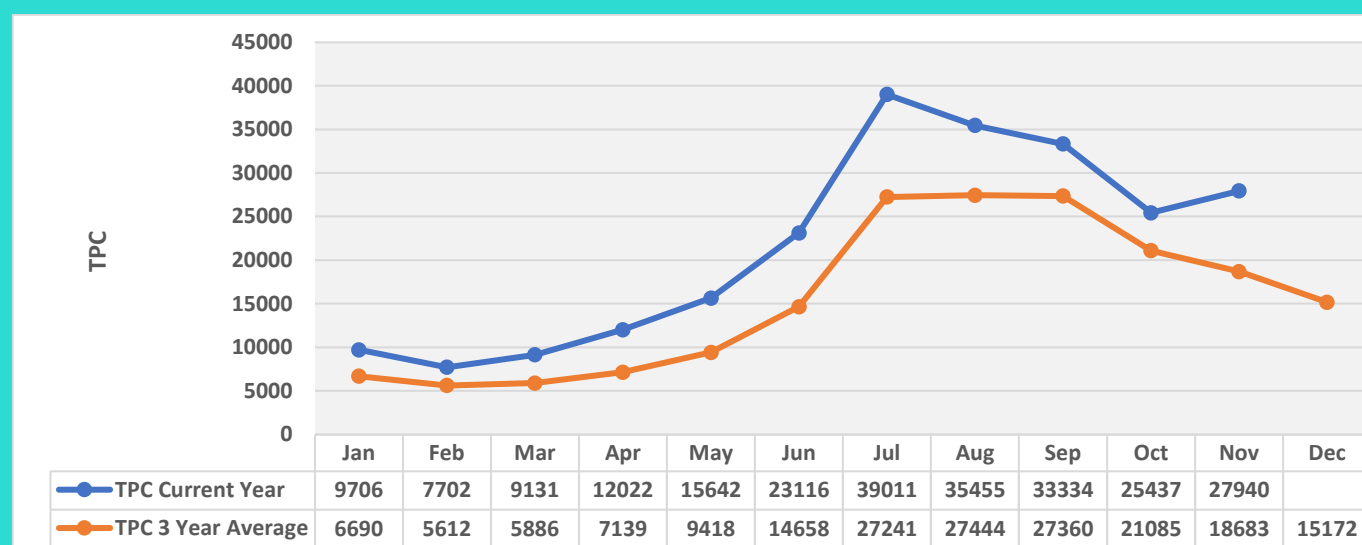
*BSE (Blood Slide Examination), TPC (Total Positive Cases), PF (Plasmodium falciparum) and TPR (Total Positivity Rate).

GRAPH 1: MONTH WISE TREND OF BSE IN COUNTRY

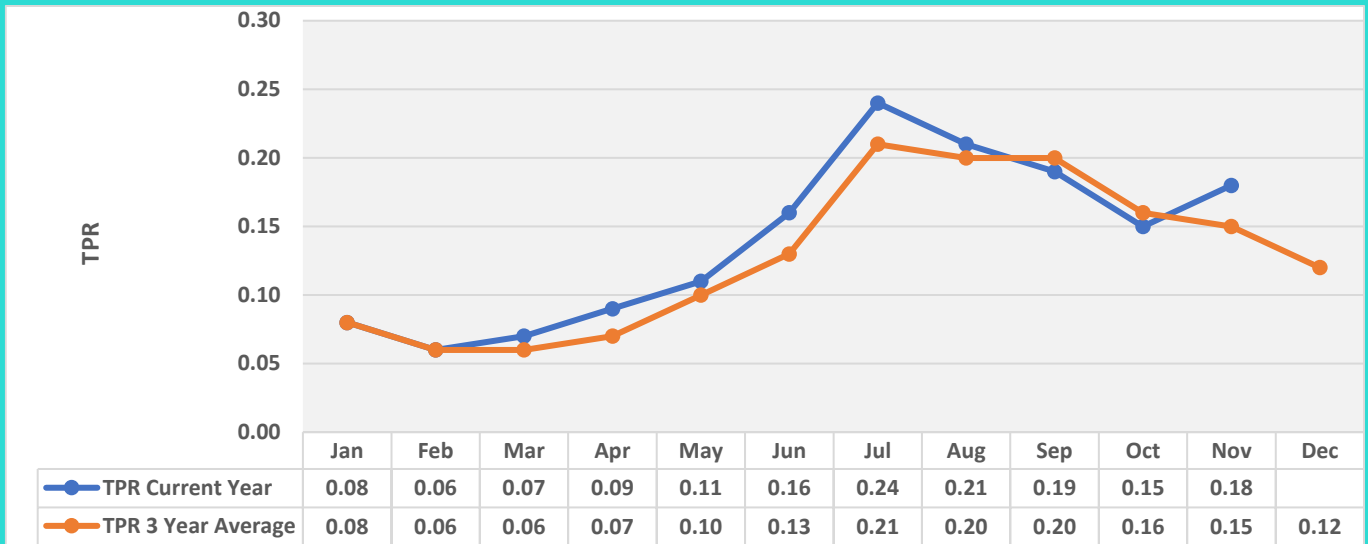|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	11627182	12407999	12676491	13019661	14059712	14587335	16403425	17209316	17498656	16598605	15605119	
BSE 3 Year Average	8473776	9472886	10680873	9711814	9779800	11240238	12823122	13645012	13945971	13173038	12202512	12203949

There is an increase of BSE by 29.2% up to November, 2024 as compared to last three years average cumulative and also an increase of BSE by 8.85% up to November, 2024 vis-à- vis up to November, 2023.

GRAPH 2: MONTH WISE TREND OF TPC IN COUNTRY

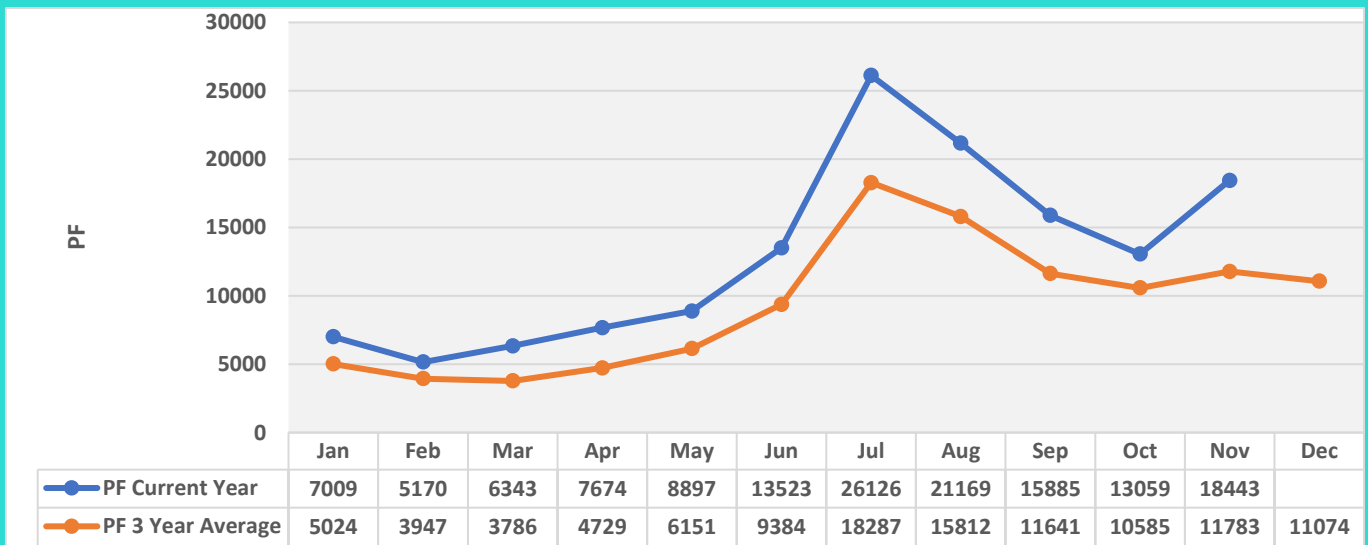|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	9706	7702	9131	12022	15642	23116	39011	35455	33334	25437	27940	
TPC 3 Year Average	6690	5612	5886	7139	9418	14658	27241	27444	27360	21085	18683	15172

There is an increase of TPC by 39.3% up to November, 2024 as compared to last three years average cumulative and also an increase of TPC by 16.07% up to November, 2024 vis-à- vis up to November, 2023.

GRAPH 3: MONTH WISE TREND OF TPR IN COUNTRY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.08	0.06	0.07	0.09	0.11	0.16	0.24	0.21	0.19	0.15	0.18	
TPR 3 Year Average	0.08	0.06	0.06	0.07	0.10	0.13	0.21	0.20	0.20	0.16	0.15	0.12

The TPR was 0.15 up to November, 2024 as compared to 0.14 last three years average and 0.14 up to November, 2023

GRAPH 4: MONTH WISE TREND OF PF IN COUNTRY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	7009	5170	6343	7674	8897	13523	26126	21169	15885	13059	18443	
PF 3 Year Average	5024	3947	3786	4729	6151	9384	18287	15812	11641	10585	11783	11074

There is an increase of PF by 41.7% up to November, 2024 as compared to last three years average cumulative and also an increase of PF by 18.2% up to November, 2024 vis-à- vis up to November, 2023.

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, Visakhapatanam, 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.

· etermine 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.
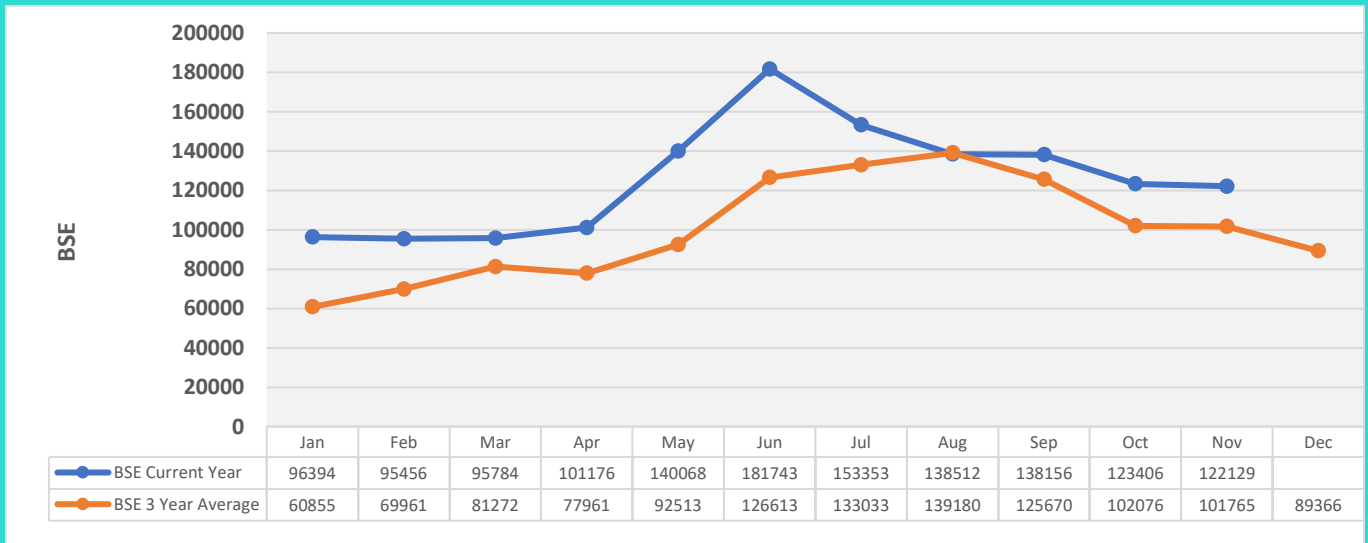
Key Interventions of the Country

· 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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	96394	95456	95784	101176	140068	181743	153353	138512	138156	123406	122129	
BSE 3 Year Average	60855	69961	81272	77961	92513	126613	133033	139180	125670	102076	101765	89366

There is an increase of BSE by 24.78% up to November, 2024 as compared to last three years average cumulative but a decrease of BSE by 1.4% up to November, 2024 vis-à- vis up to November, 2023.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	1456	1095	1070	2364	4266	6426	3991	2144	1281	1156	1018	
TPC 3 Year Average	595	372	383	964	2187	4981	5197	4086	2561	2129	1742	1253
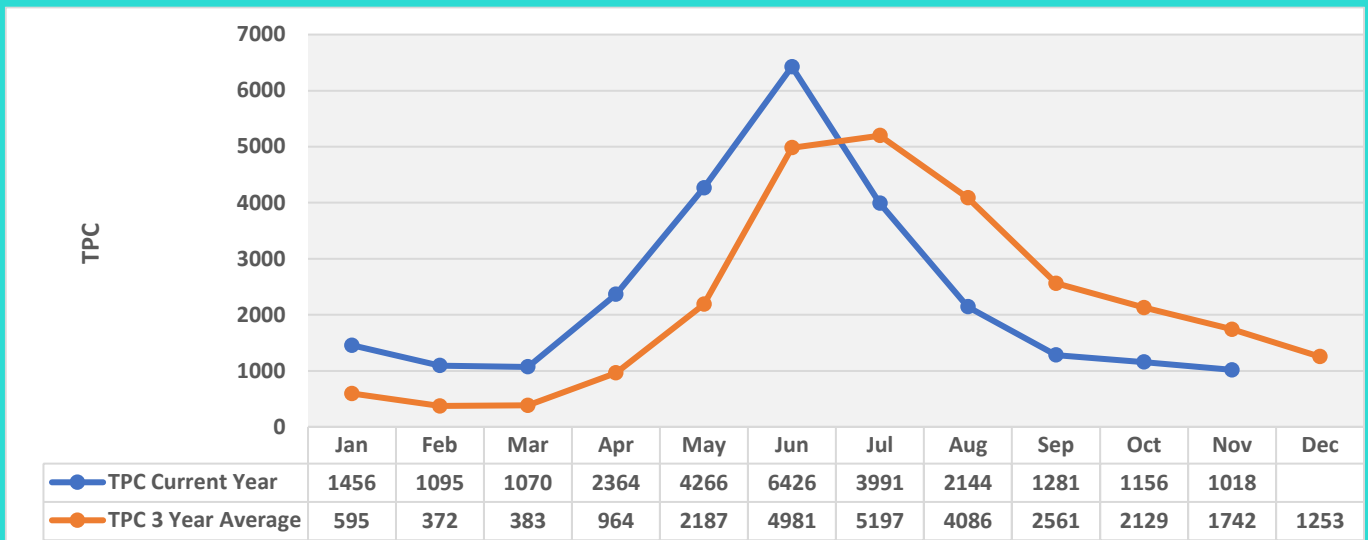
There is an increase of TPC by 4.25% up to November, 2024 as compared to last three years average cumulative but a decrease of TPC by 31.67% up to November, 2024 vis-à- vis up to November, 2023.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	1.51	1.15	1.12	2.34	3.05	3.54	2.60	1.55	0.93	0.94	0.83	
TPR 3 Year Average	0.98	0.53	0.47	1.24	2.36	3.93	3.91	2.94	2.04	2.09	1.71	1.40

The TPR was 1.89 up to November, 2024 as compared to 2.19 last three years average and 2.73 up to November, 2023

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	876	574	510	1069	2101	3482	2185	1135	596	553	535	
PF 3 Year Average	436	253	252	605	1438	3349	3490	2823	1818	1589	1275	875

There is a decrease of PF by 21.42% up to November, 2024 as compared to last three years average cumulative and also a decrease of PF by 40.08% up to November, 2024 vis-à- vis up to November, 2023.
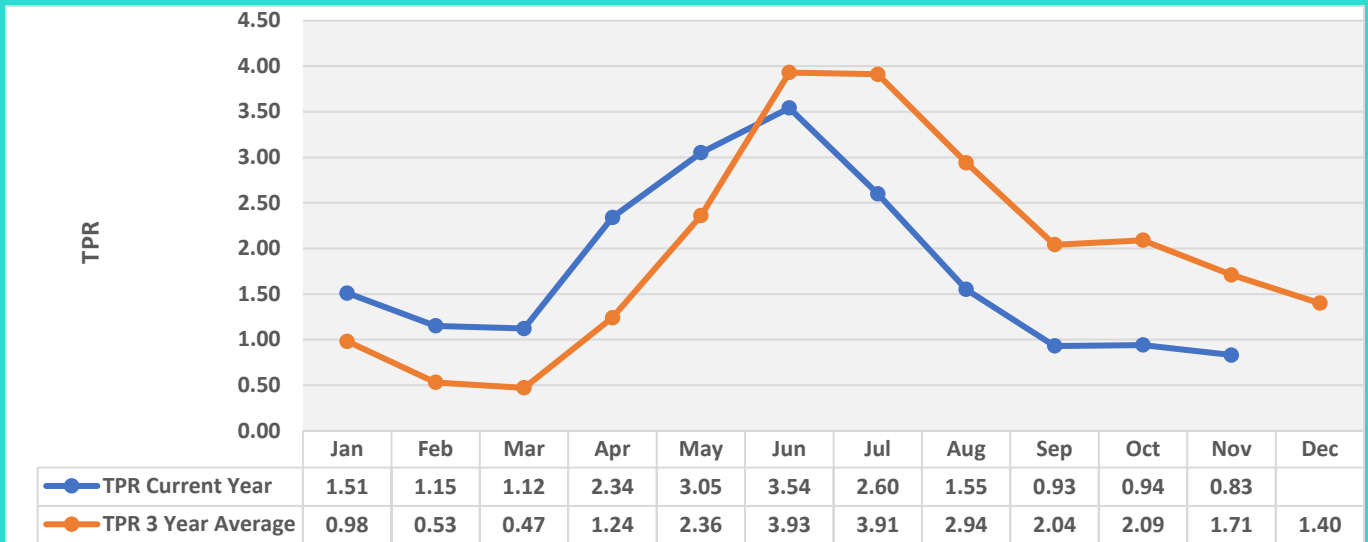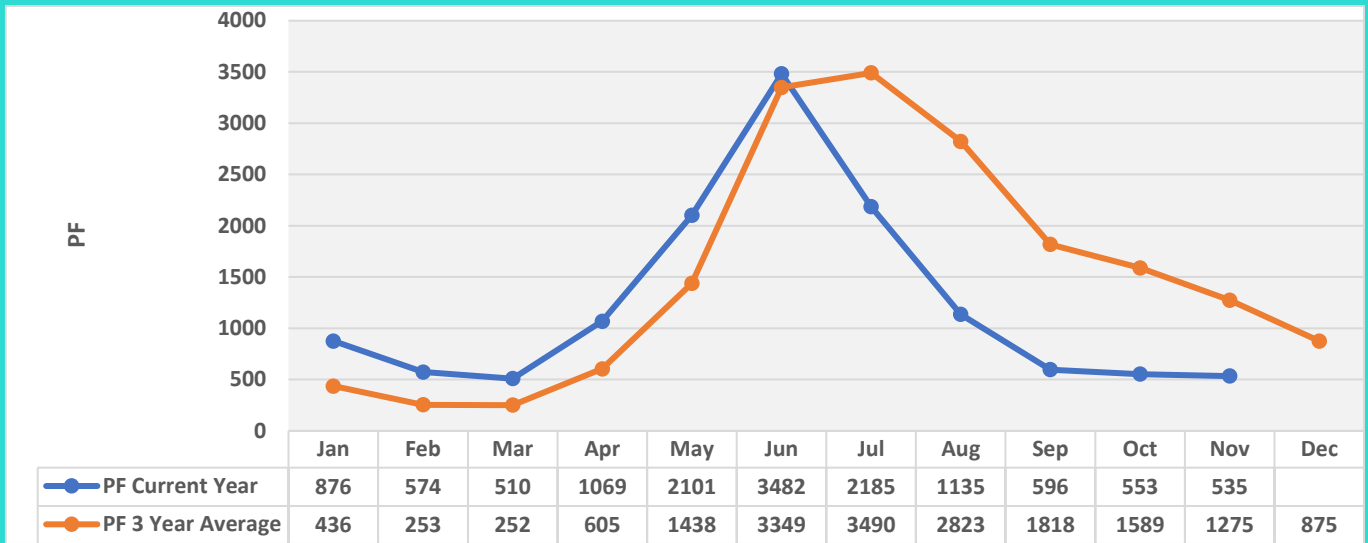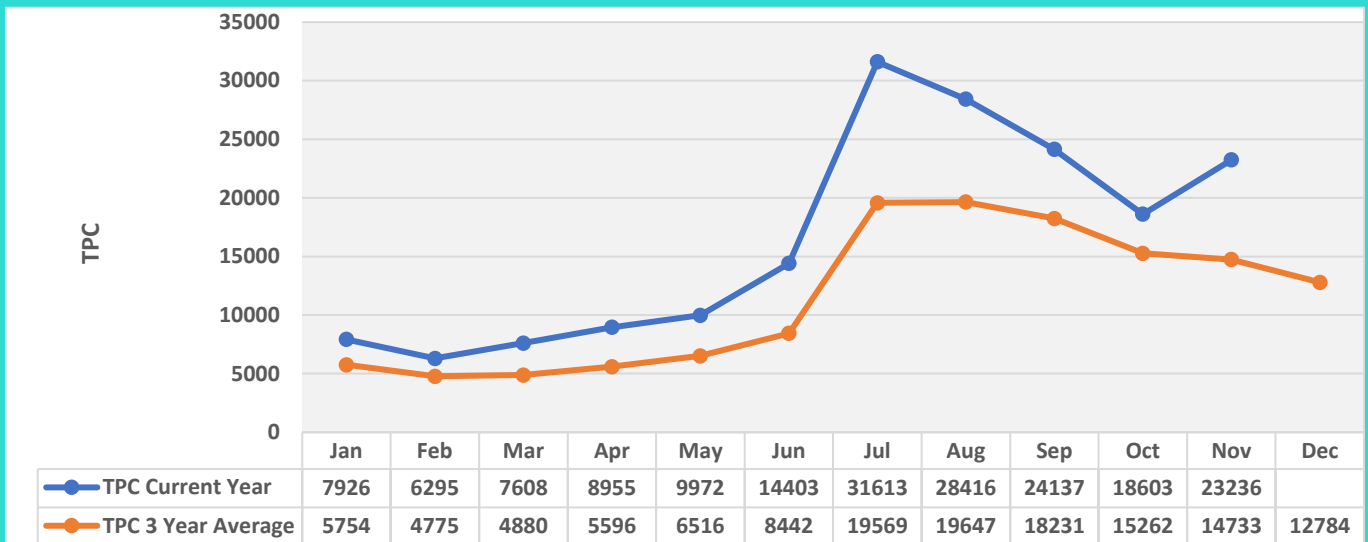
CATEGORY II

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

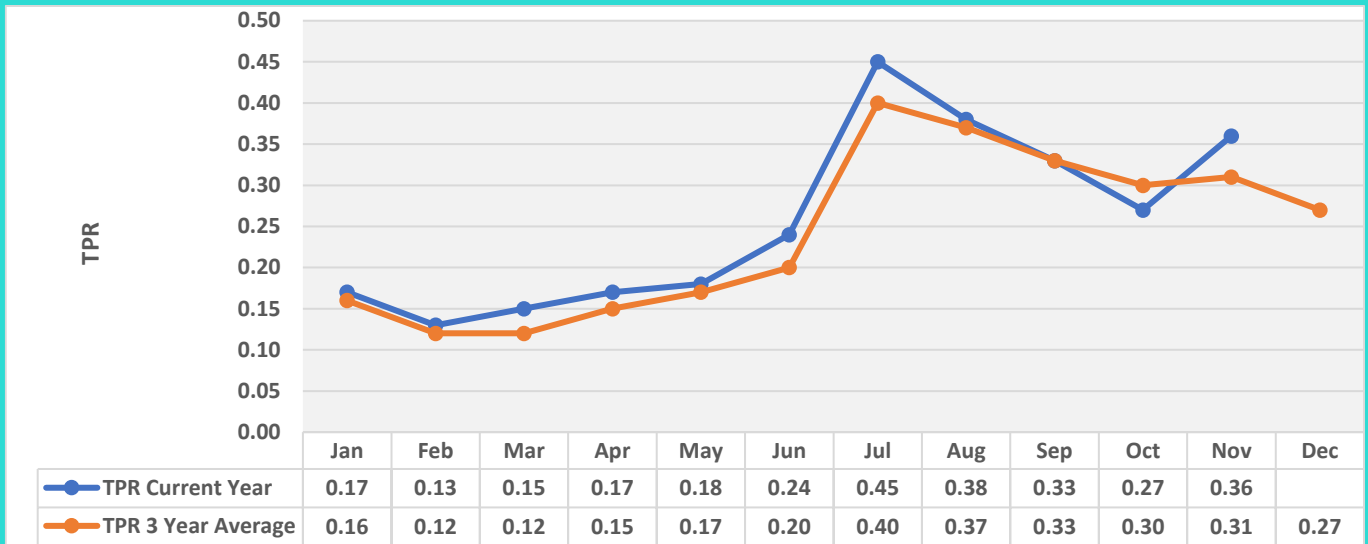|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	4757223	4981568	5076776	5128005	5468488	5899913	6971636	7565739	7339622	6869856	6475076	
BSE 3 Year Average	3684530	3835935	4083905	3828111	3774952	4200092	4924175	5248191	5467345	5167907	4793574	4811676
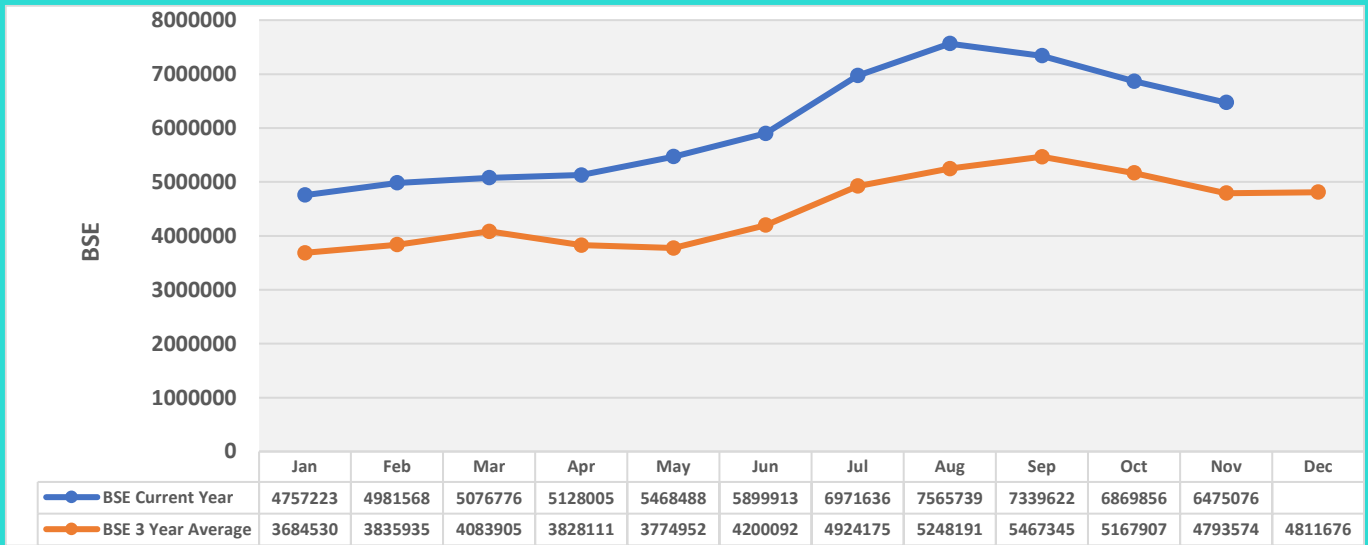
There is an increase of BSE by 35.76% up to November, 2024 as compared to last three years average cumulative and also an increase of BSE by 11.15% up to November, 2024 vis-à-vis up to November, 2023.

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

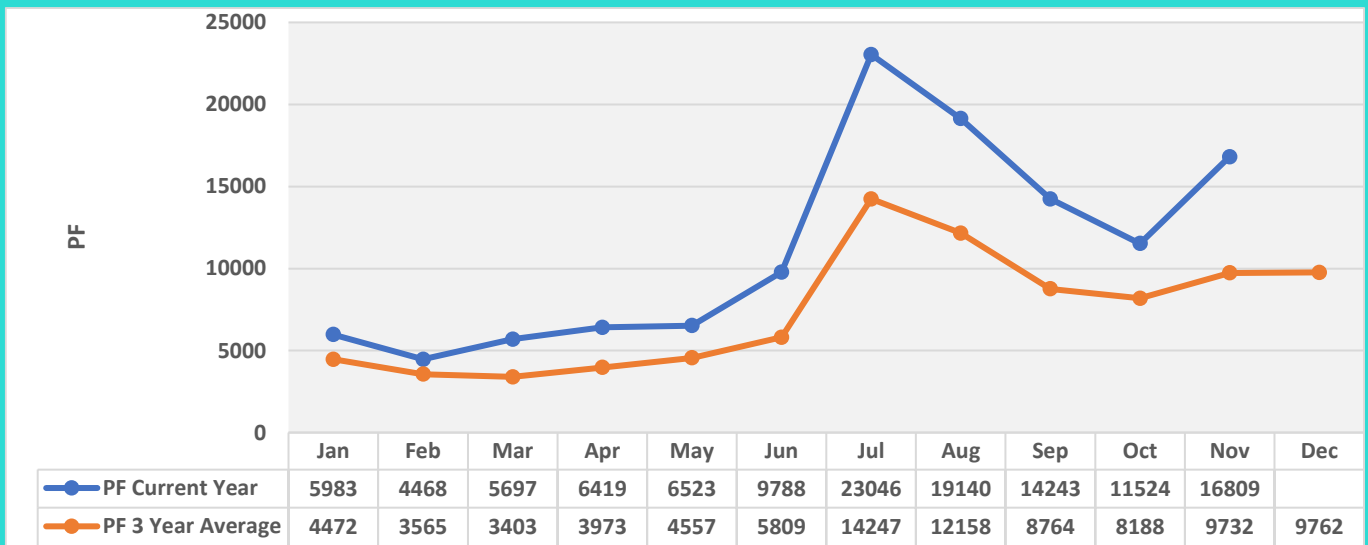|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	7926	6295	7608	8955	9972	14403	31613	28416	24137	18603	23236	
TPC 3 Year Average	5754	4775	4880	5596	6516	8442	19569	19647	18231	15262	14733	12784

There is an increase of TPC by 46.81% up to November, 2024 as compared to last three years average cumulative and also an increase of TPC by 29.27% up to November, 2024 vis-à-vis up to November, 2023.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.17	0.13	0.15	0.17	0.18	0.24	0.45	0.38	0.33	0.27	0.36	
TPR 3 Year Average	0.16	0.12	0.12	0.15	0.17	0.20	0.40	0.37	0.33	0.30	0.31	0.27

The TPR was 0.27 up to November, 2024 as compared to 0.26 last three years average and 0.23 up to November, 2023

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	5983	4468	5697	6419	6523	9788	23046	19140	14243	11524	16809	
PF 3 Year Average	4472	3565	3403	3973	4557	5809	14247	12158	8764	8188	9732	9762

There is an increase of PF by 56.77% up to November, 2024 as compared to last three years average cumulative and also an increase of PF by 33.51% up to November, 2024 vis-à- vis up to November, 2023.

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CATEGORY I

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	6773452	7330857	7503867	7790434	8451075	8505567	9278316	9504874	10020746	9605184	9007739	
BSE 3 Year Average	4728336	5566908	6515606	5805656	5912263	6913450	7765867	8257576	8352900	7902976	7307104	7302832
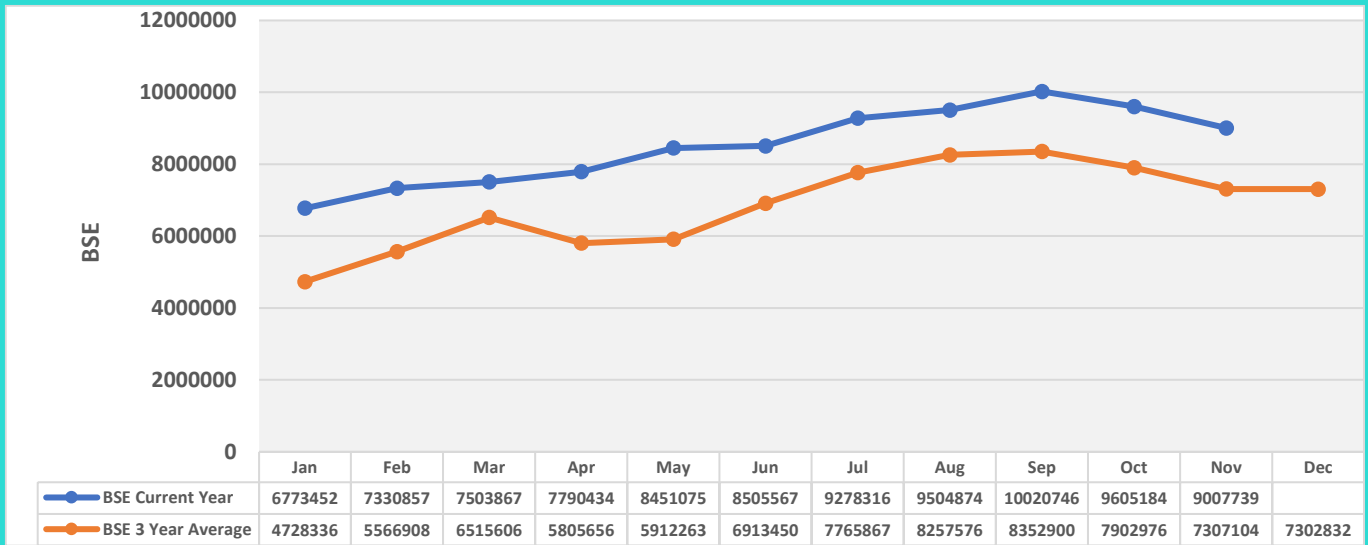
There is an increase of BSE by 24.98% up to November, 2024 as compared to last three years average cumulative and also an increase of BSE by 7.44% up to November, 2024 vis-à- vis up to November, 2023.
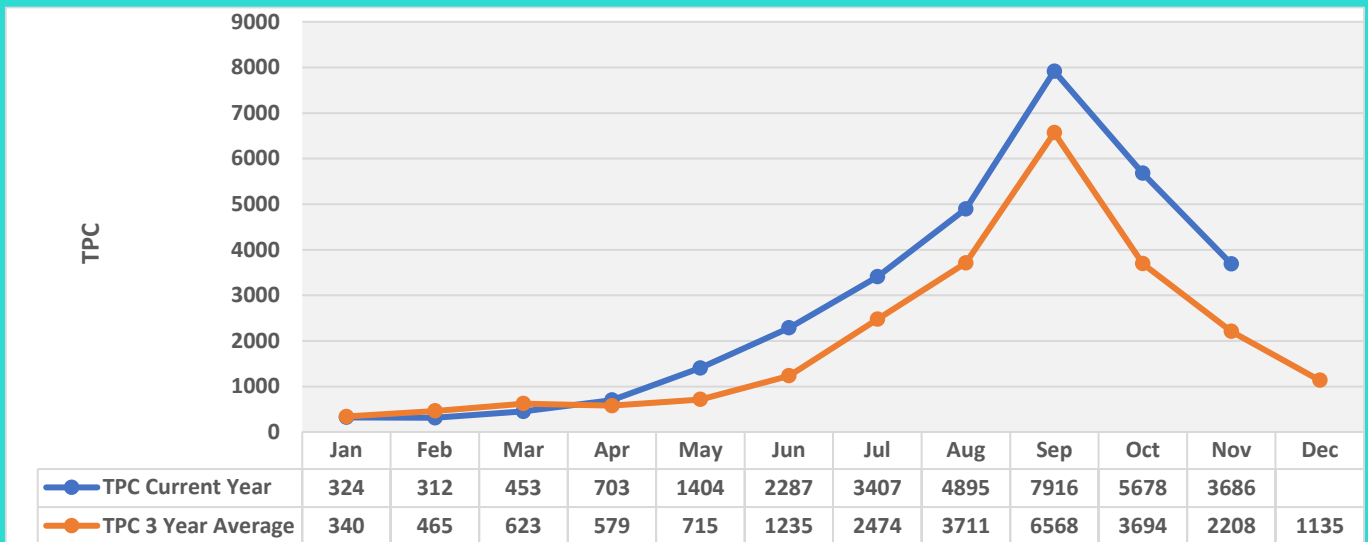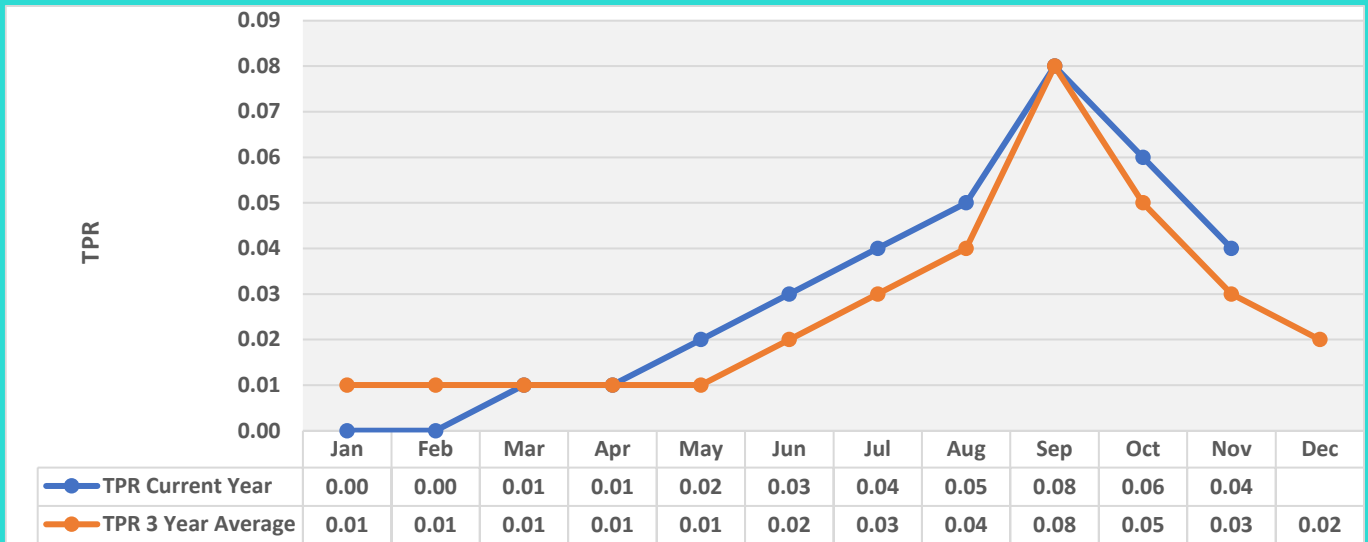
GRAPH 2: MONTH WISE TREND OF TPC IN CATEGORY I STATES/UTs

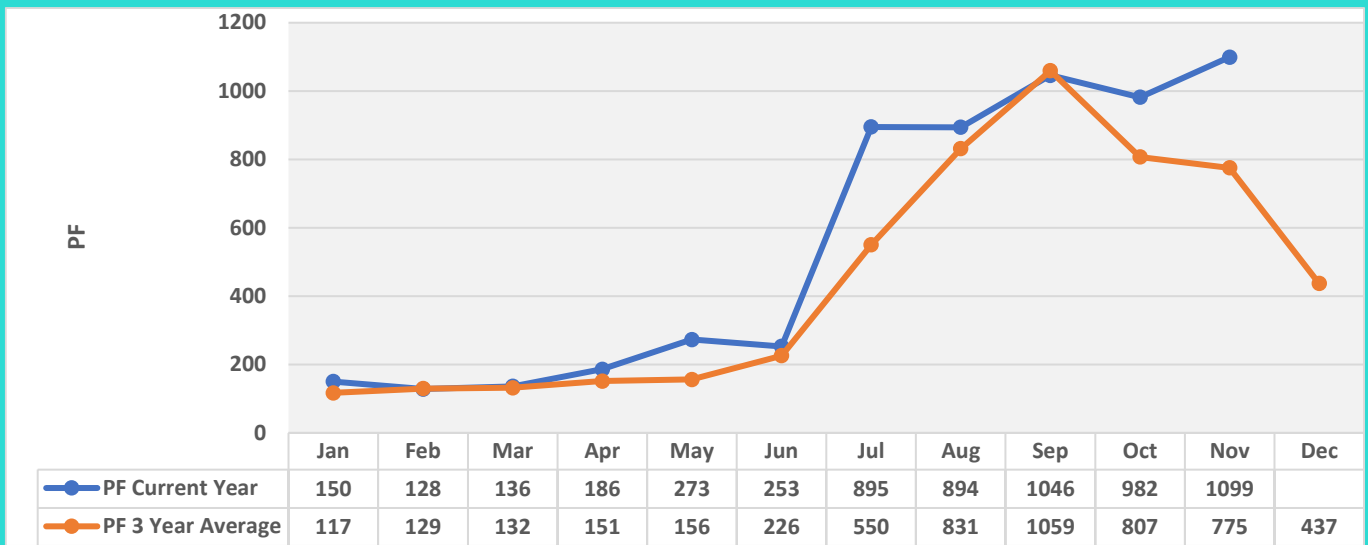|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	324	312	453	703	1404	2287	3407	4895	7916	5678	3686	
TPC 3 Year Average	340	465	623	579	715	1235	2474	3711	6568	3694	2208	1135

There is an increase of TPC by 37.38% up to November, 2024 as compared to last three years average cumulative and also an increase of TPC by 15.5% up to November, 2024 vis-à- vis up to November, 2023.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.00	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.08	0.06	0.04	
TPR 3 Year Average	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.08	0.05	0.03	0.02

The TPR was 0.03 up to November, 2024 as compared to 0.03 last three years average and 0.03 up to November, 2023

GRAPH 4: MONTH WISE TREND OF PF IN CATEGORY I STATES/UTs
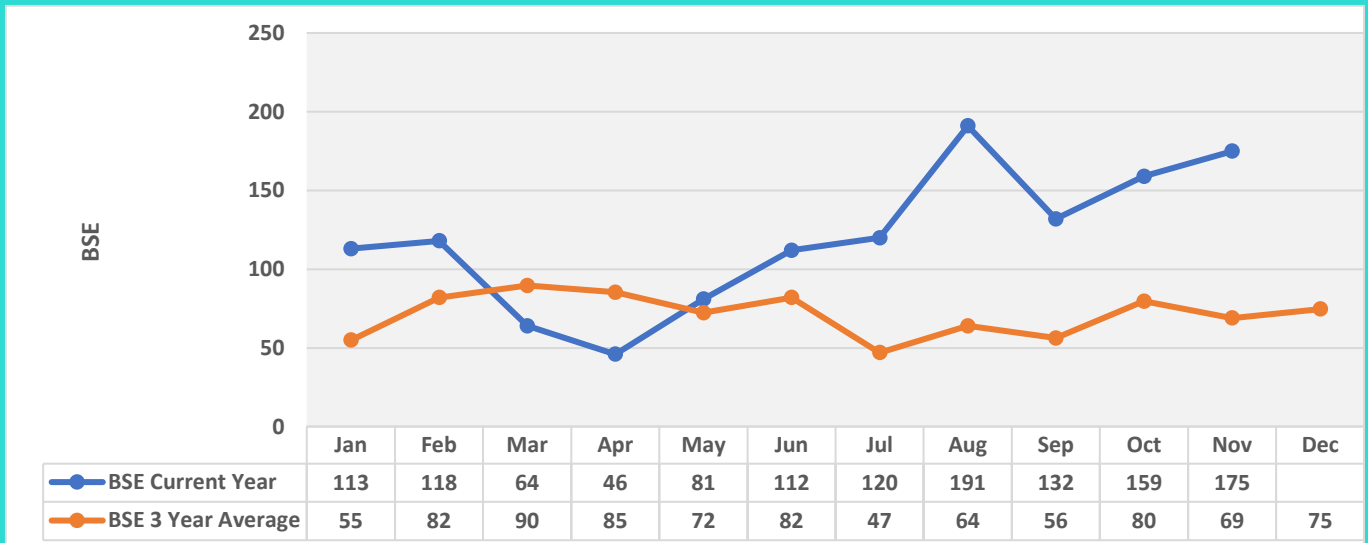
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	150	128	136	186	273	253	895	894	1046	982	1099	
PF 3 Year Average	117	129	132	151	156	226	550	831	1059	807	775	437

There is an increase of PF by 22.45% up to November, 2024 as compared to last three years average cumulative and also an increase of PF by 2.35% up to November, 2024 vis-à- vis up to November, 2023.

CATEGORY O

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	113	118	64	46	81	112	120	191	132	159	175	
BSE 3 Year Average	55	82	90	85	72	82	47	64	56	80	69	75

There is an increase of BSE by 67.58% up to November, 2024 as compared to last three years average cumulative and also an increase of BSE by 1.16% up to November, 2024 vis-à- vis up to November, 2023.
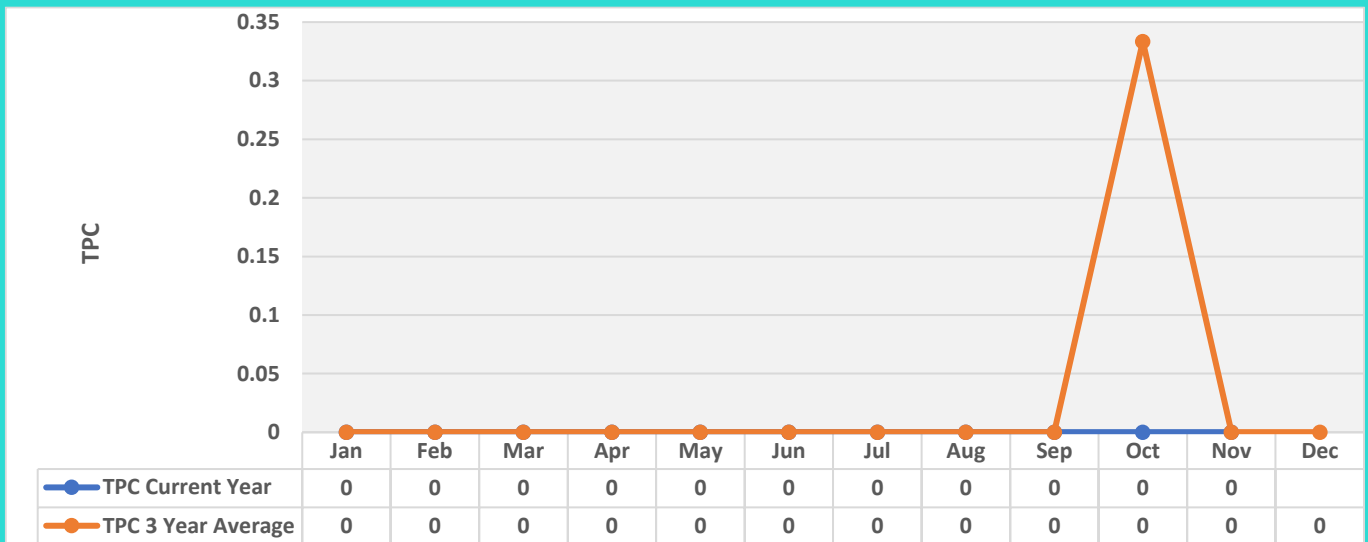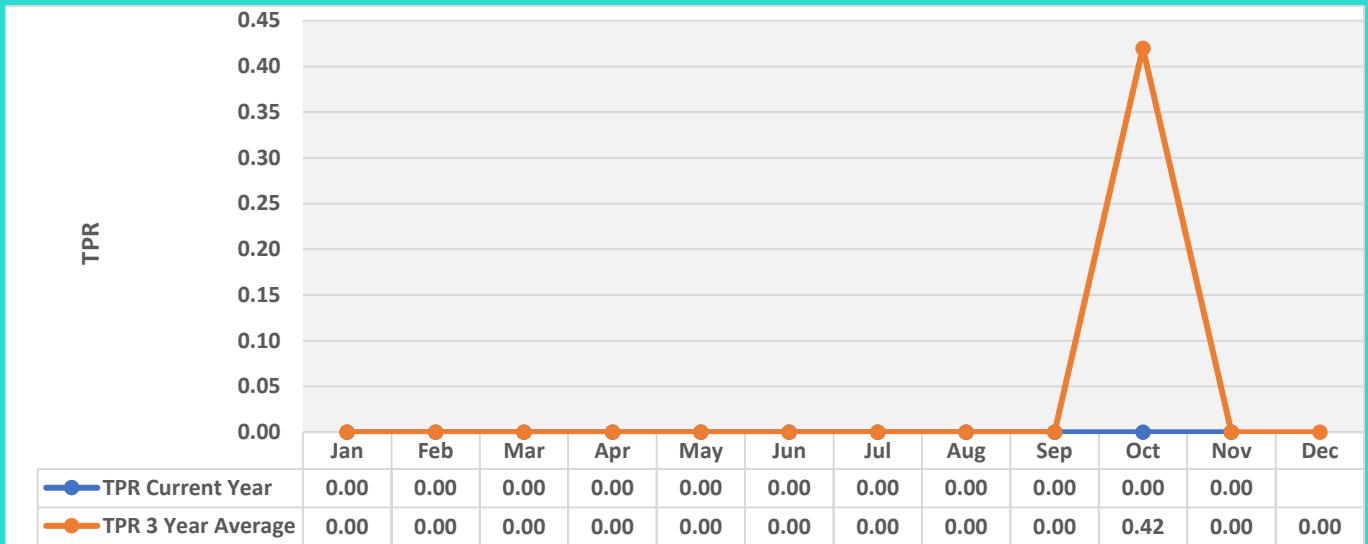
GRAPH 2: MONTH WISE TREND OF TPC IN CATEGORY O STATES/UTs

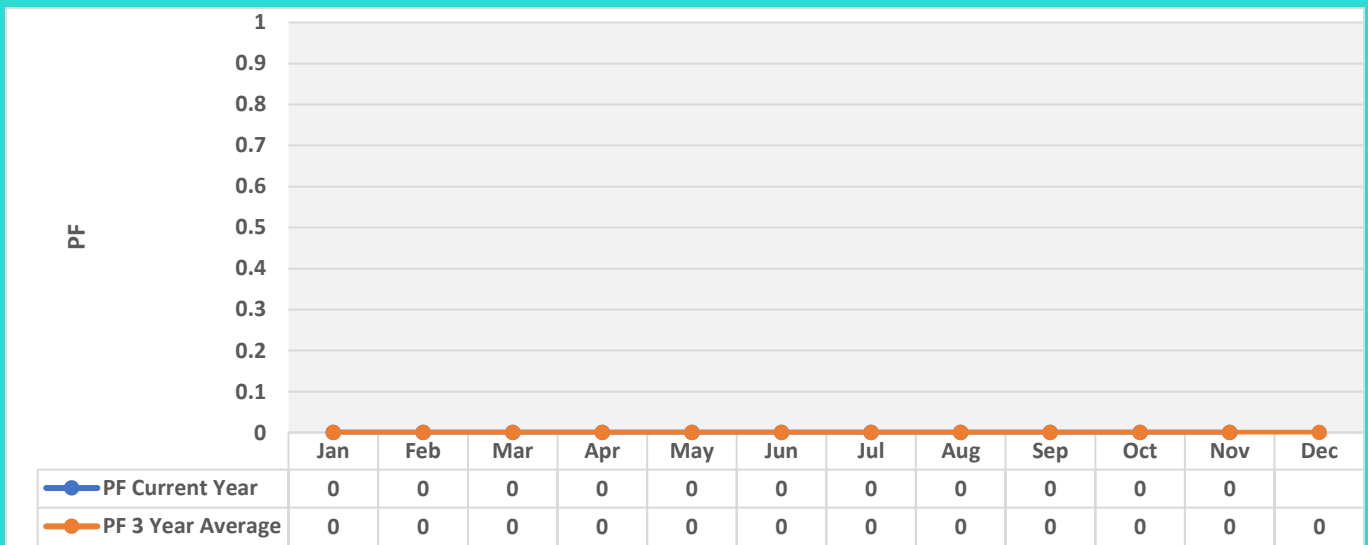|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	0	0	0	0	0	0	0	0	0	0	0	
TPC 3 Year Average	0	0	0	0	0	0	0	0	0	0	0	0

There is a decrease of TPC by 66.67% up to November, 2024 as compared to last three years average cumulative but a major increase of TPC up to November, 2024 vis-à- vis up to November, 2023.

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TPR 3 Year Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00

The TPR was 0.01 up to November, 2024 as compared to 0.08 last three years average and nil up to November, 2023

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	0	0	0	0	0	0	0	0	0	0	0	
PF 3 Year Average	0	0	0	0	0	0	0	0	0	0	0	0

There is no %change in PF up to November, 2024 from last year as well as last three years average cumulative.

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
	Input	**% of Additional Staff in Place (MTS, LT, DVBD Consultant)**
9	Input	No of RDTs & ACTs planned versus received & used.
10	Input	% of spray equipment in working condition
11	Input	% of spray workers trained
	Process	**BCC Activities**
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 MPHW/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%