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

CATEGORY – II
STATES/UTs

October, 2023
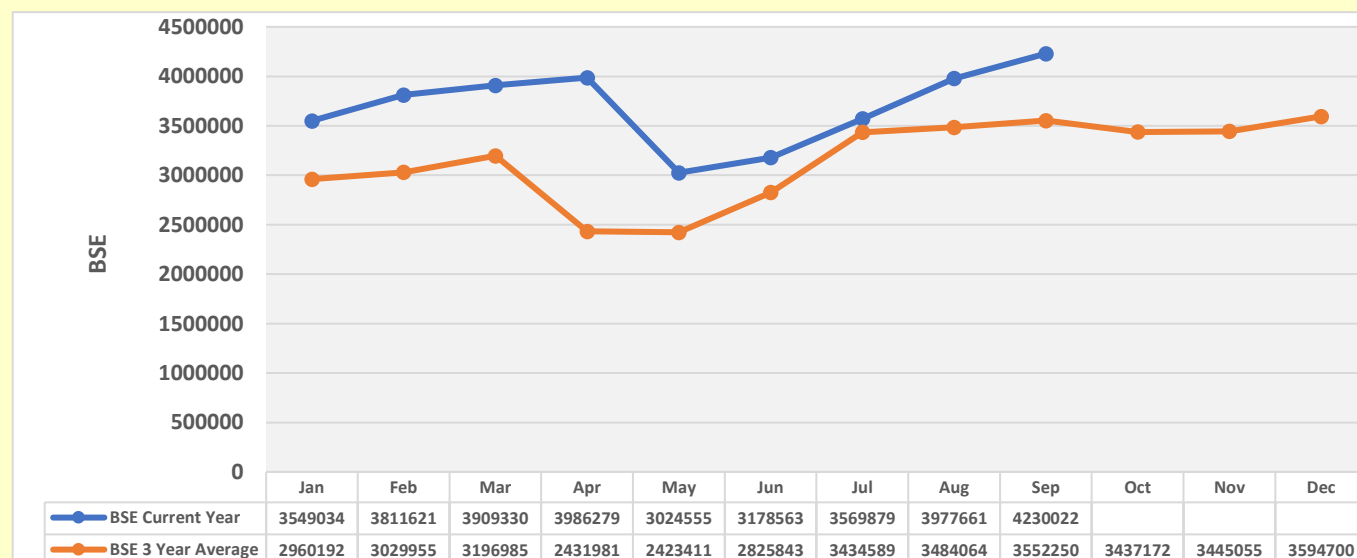
Monitoring and Evaluation Division

INDEX

State categorization as per API 2021 status.

INTRODUCTION AND SUMMARY SHEET FOR CATEGORY II

The surveillance information of Malaria of October, 2023 in Category II States/UTs is enclosed in this Monthly Malaria Situation Information Report. The various indicators analyzed in this report are *BSE, *TPC, *TPR & *PF.
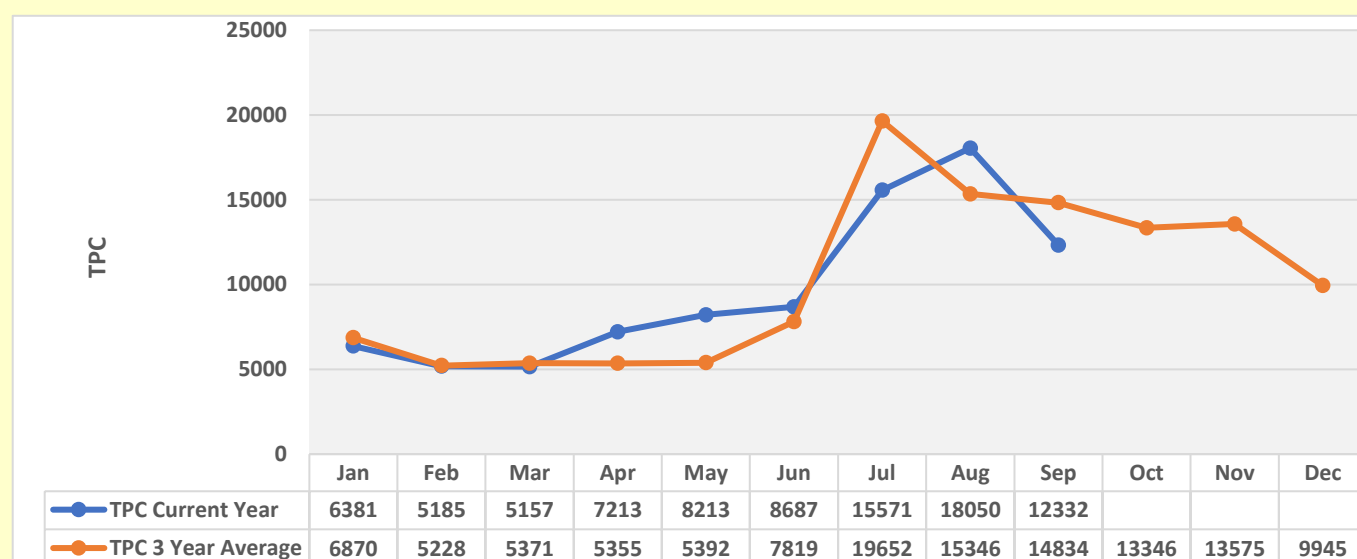
*BSE (Blood Slide Examination), TPC (Total Positive Cases), PF (Plasmodium falciparum) and TPR (Total Positivity Rate).

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

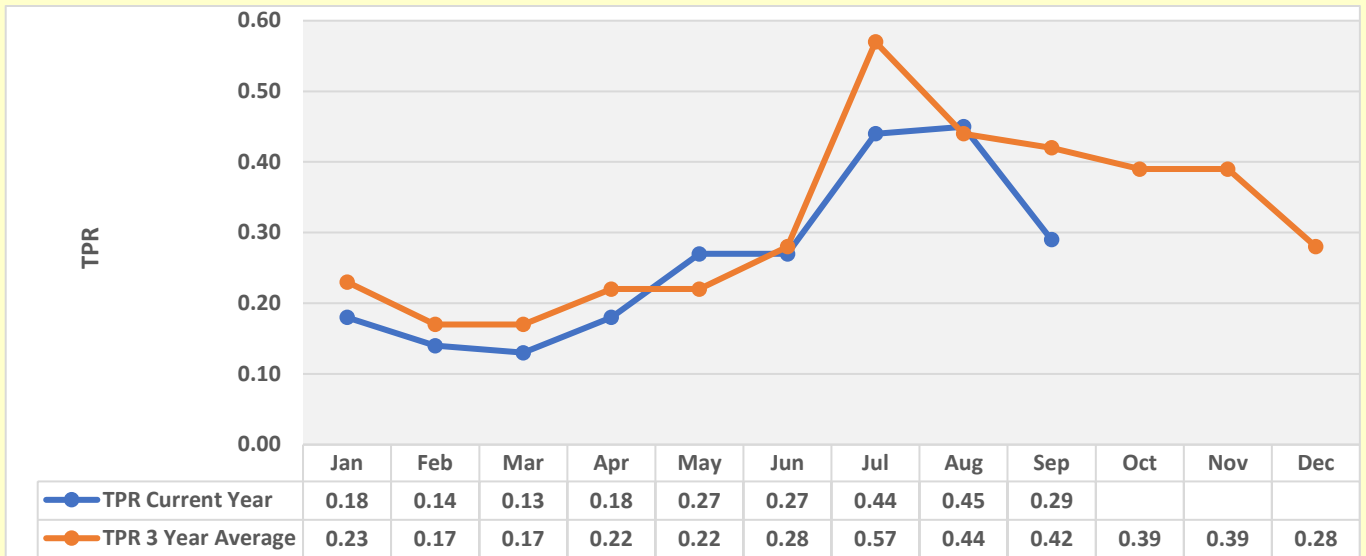|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	3549034	3811621	3909330	3986279	3024555	3178563	3569879	3977661	4230022			
BSE 3 Year Average	2960192	3029955	3196985	2431981	2423411	2825843	3434589	3484064	3552250	3437172	3445055	3594700

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

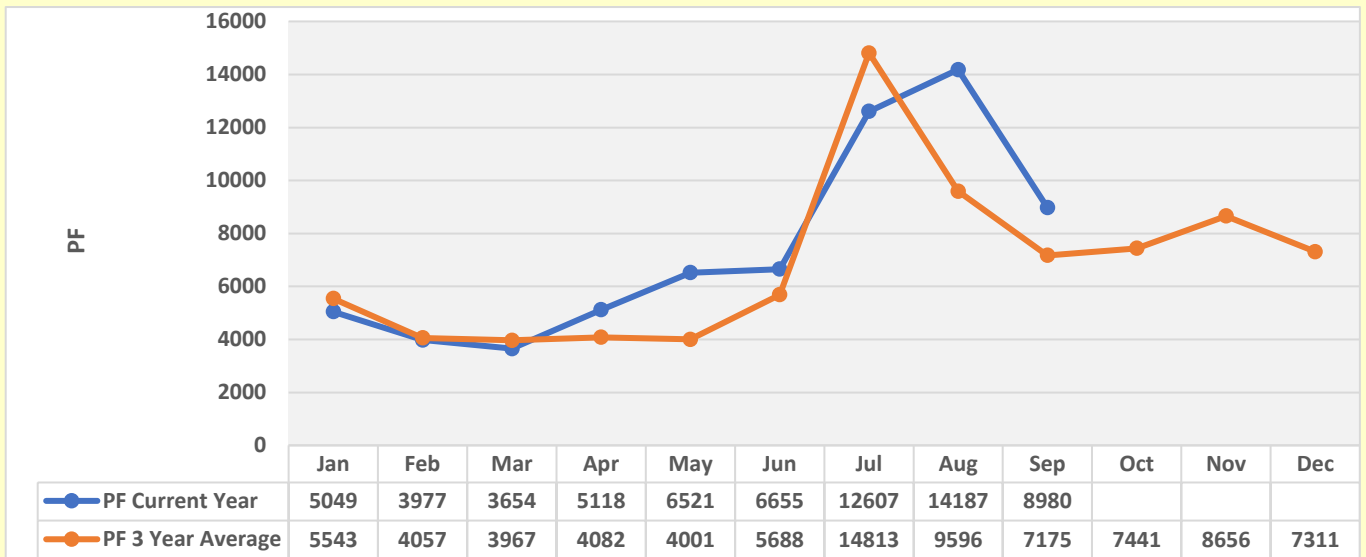|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	6381	5185	5157	7213	8213	8687	15571	18050	12332			
TPC 3 Year Average	6870	5228	5371	5355	5392	7819	19652	15346	14834	13346	13575	9945

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.18	0.14	0.13	0.18	0.27	0.27	0.44	0.45	0.29			
TPR 3 Year Average	0.23	0.17	0.17	0.22	0.22	0.28	0.57	0.44	0.42	0.39	0.39	0.28

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	5049	3977	3654	5118	6521	6655	12607	14187	8980			
PF 3 Year Average	5543	4057	3967	4082	4001	5688	14813	9596	7175	7441	8656	7311

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.

List of Districts showing a decrease in Surveillance in Category II States/UTs

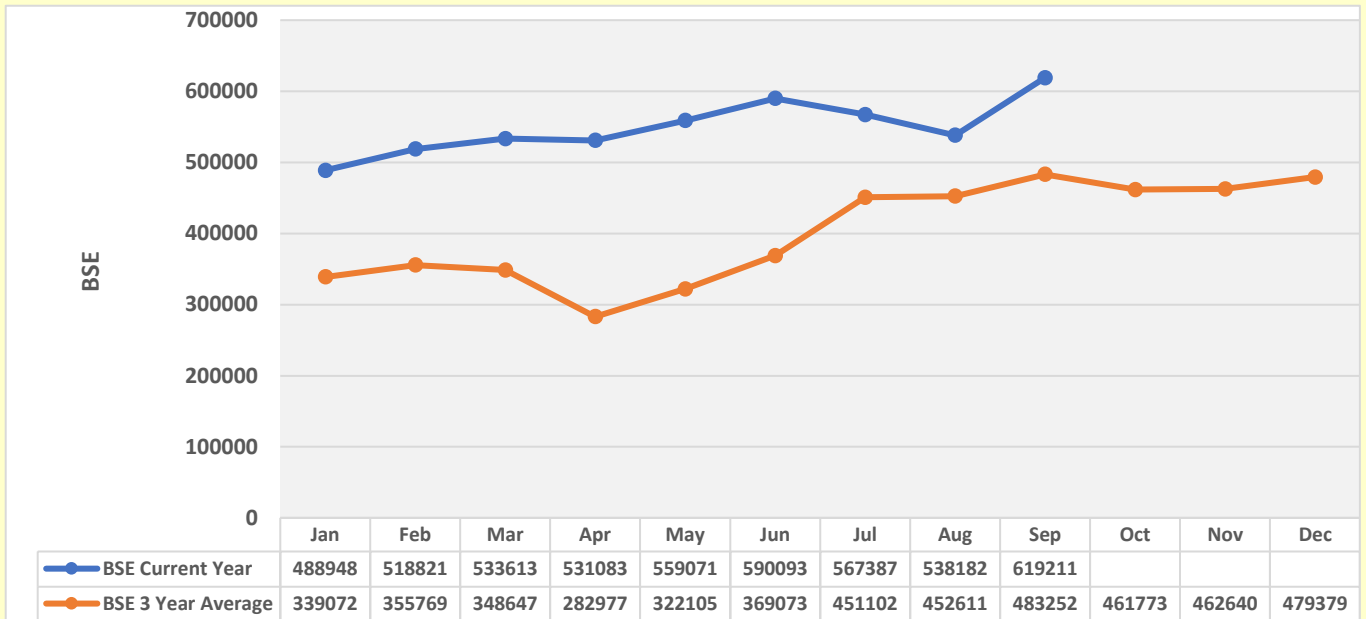| SN	States/UTs	Districts/Units showing decrease in Surveillance
1	Chhattisgarh	Sukma, RajnandGaon, Raigarh, Korea, Janjgir-Champa
2	Jharkhand	Jamtara, Deoghar
3	Maharashtra	Raigad, Latur
4	Meghalaya	West Khasi Hills
5	West Bengal	Jalpaiguri, Alipurduar

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

Action points for all Category II States/UTs:

• States /UTs need to share the detailed case reports regarding any COVID19- Malaria co-infections reported in the state.

• States/UTs need to focus on improving Malaria surveillance along with COVID19 activities.

• States/UTs need to perform data analysis at sub district level to identify hotspots and implement focal strategies.

• States/UTs need to focus on surveillance of migratory workers.

• States/UTs need to conduct regular meetings of district and state task force for Malaria Elimination.

• States/UTs need preparedness and response for any Malaria outbreak.

• States/UTs need to intensify monitoring and supervision activities.

• States/UTs need to ensure >80% usage of LLIN by community.

• States/UTs neet to intensify vector control measures by identifying potential vector breeding sites, environmental management, biological control and focus based adult vector control measures.
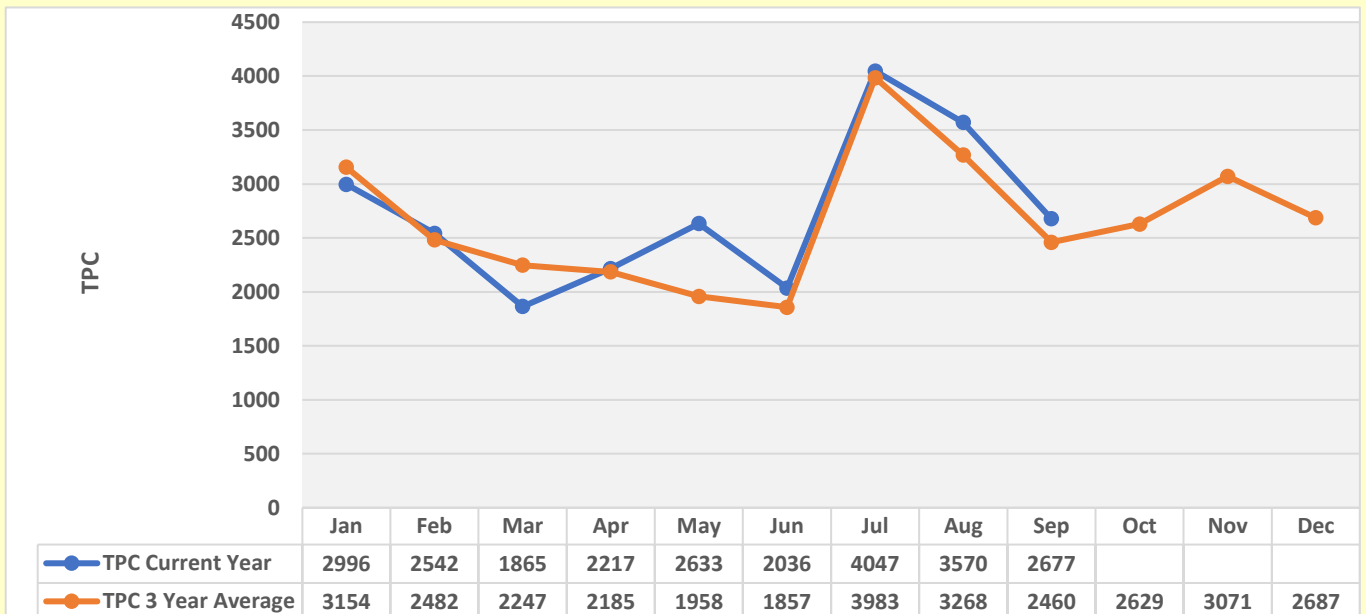
CHHATTISGARH

GRAPH 1: MONTH WISE TREND OF BSE IN CHHATTISGARH

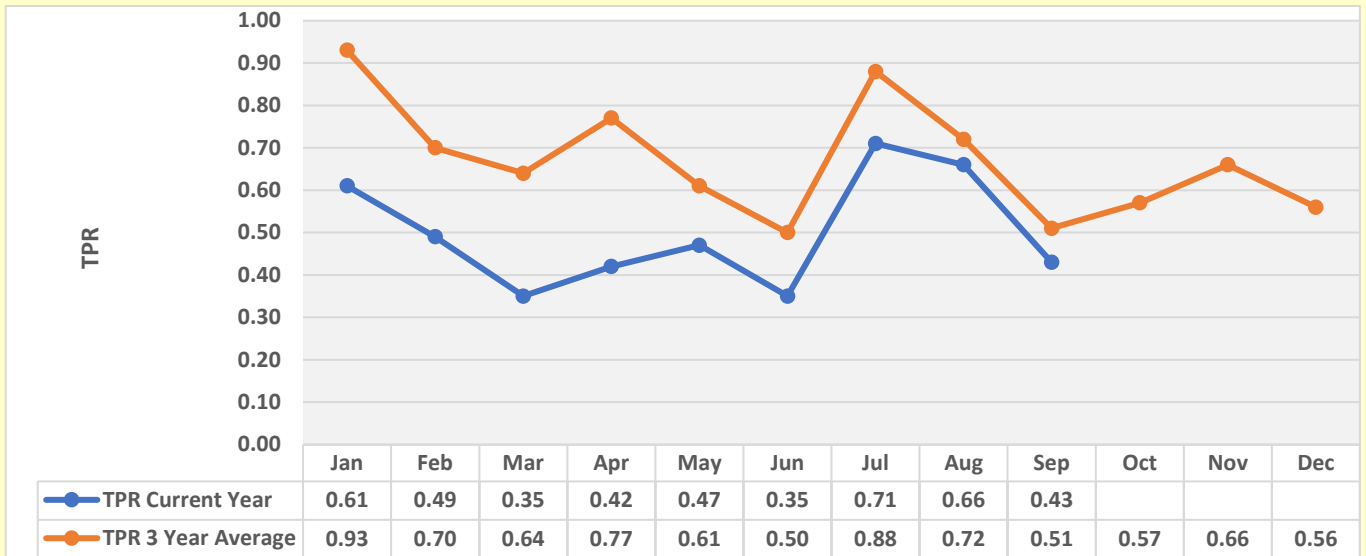|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	488948	518821	533613	531083	559071	590093	567387	538182	619211			
BSE 3 Year Average	339072	355769	348647	282977	322105	369073	451102	452611	483252	461773	462640	479379

There is an increase of BSE by 46.77% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 23.67% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 2: MONTH WISE TREND OF TPC IN CHHATTISGARH

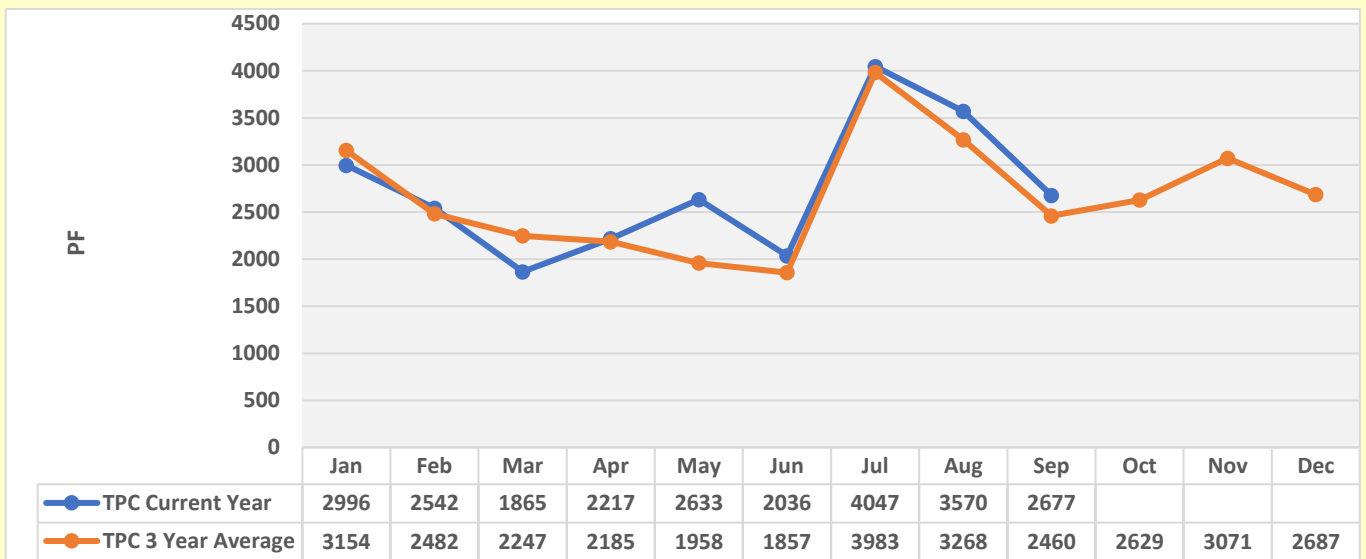|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	2996	2542	1865	2217	2633	2036	4047	3570	2677			
TPC 3 Year Average	3154	2482	2247	2185	1958	1857	3983	3268	2460	2629	3071	2687

There is an increase of TPC by 2.88% up to October, 2023 as compared to last three years average cumulative and also an increase of TPC by 11.84% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 3: MONTH WISE TREND OF TPR IN CHHATTISGARH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.61	0.49	0.35	0.42	0.47	0.35	0.71	0.66	0.43			
TPR 3 Year Average	0.93	0.70	0.64	0.77	0.61	0.50	0.88	0.72	0.51	0.57	0.66	0.56

The TPR was 0.48 up to October, 2023 as compared to 0.7 last three years average and 0.53 up to October, 2022

GRAPH 4: MONTH WISE TREND OF PF IN CHHATTISGARH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	2996	2542	1865	2217	2633	2036	4047	3570	2677			
TPC 3 Year Average	3154	2482	2247	2185	1958	1857	3983	3268	2460	2629	3071	2687

There is an increase of PF by 5.22% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 15.33% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 1: MONTH WISE TREND OF BSE IN JHARKHAND

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	266478	251217	354510	485737	399036	413195	496657	487180	535842			
BSE 3 Year Average	240128	233809	233795	162099	150086	202113	261993	218825	279968	297461	331249	347385
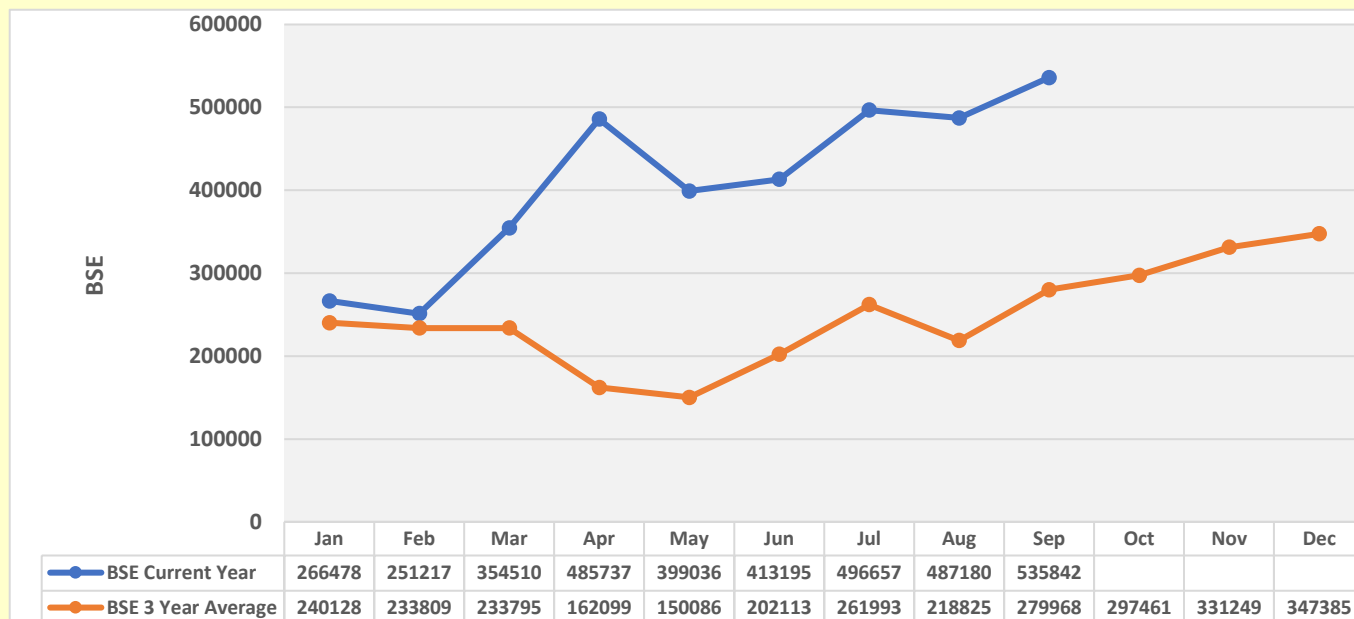
There is an increase of BSE by 81.75% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 33.06% up to October, 2023 vis-à- vis up to October, 2022.
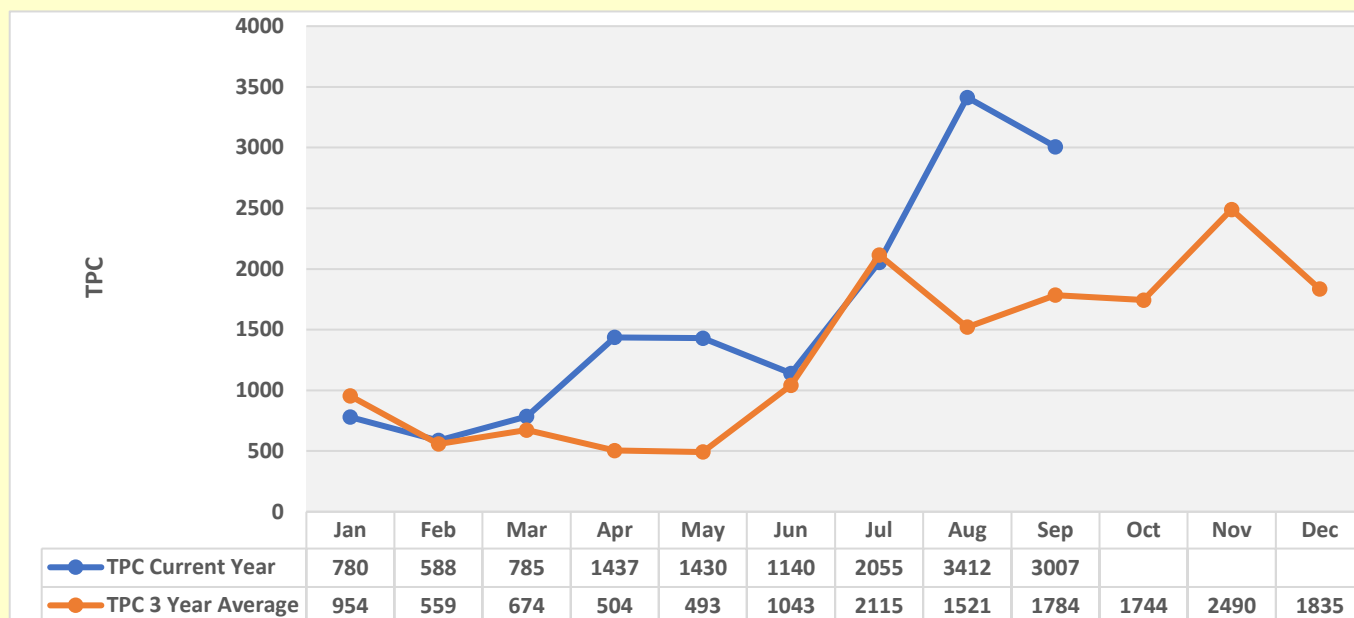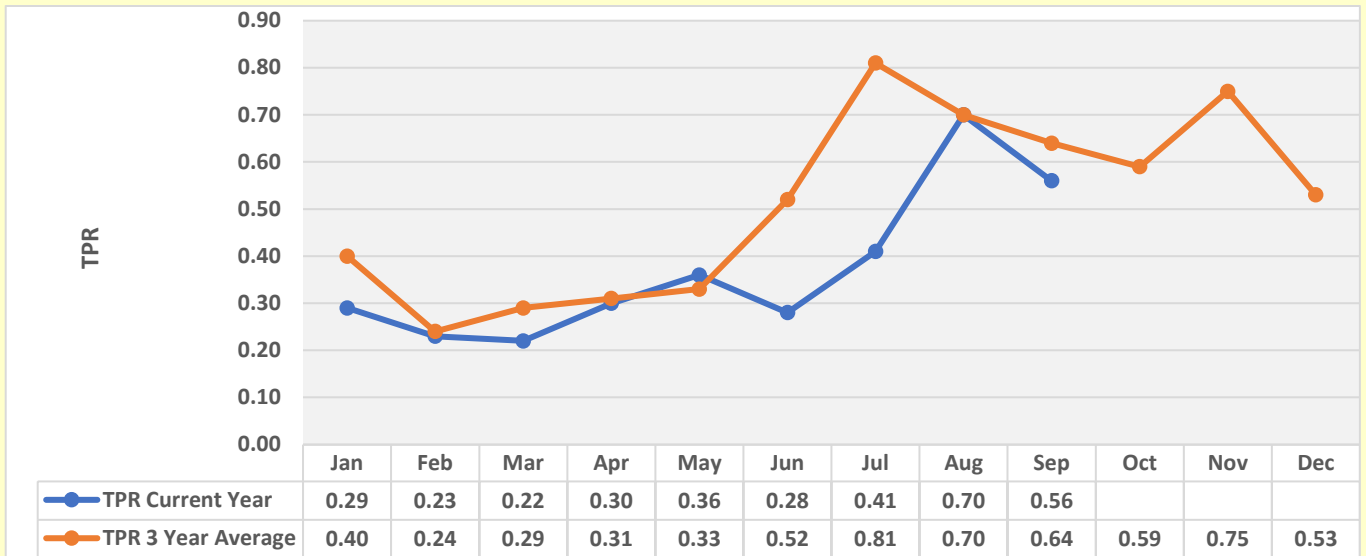
GRAPH 2: MONTH WISE TREND OF TPC IN JHARKHAND

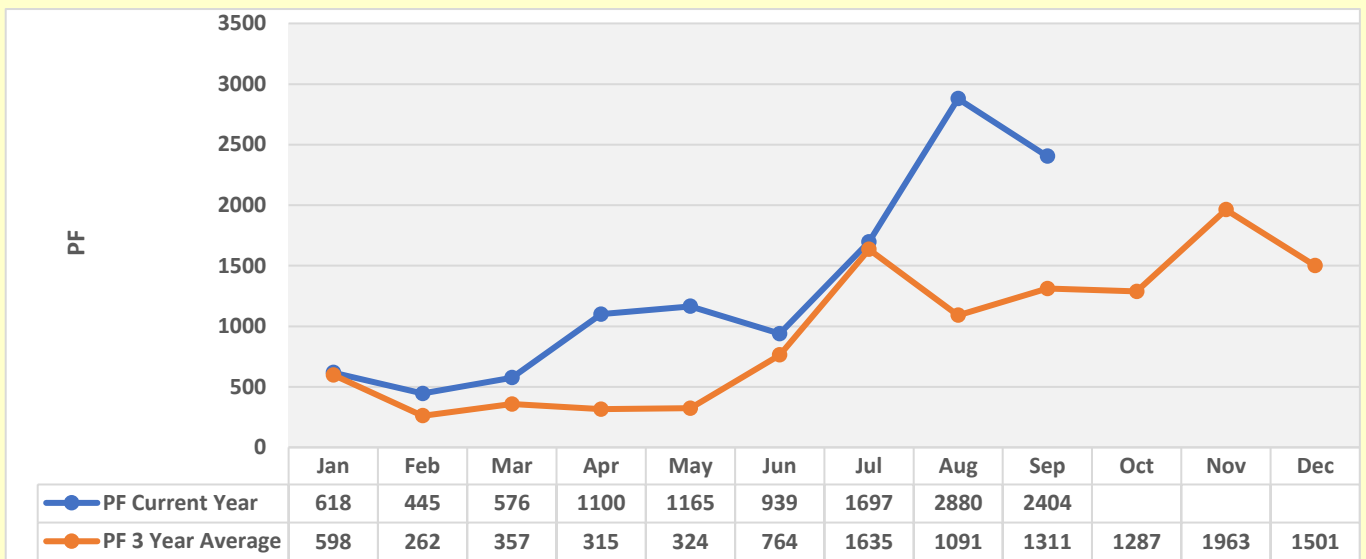|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	780	588	785	1437	1430	1140	2055	3412	3007			
TPC 3 Year Average	954	559	674	504	493	1043	2115	1521	1784	1744	2490	1835

There is an increase of TPC by 36.35% up to October, 2023 as compared to last three years average cumulative and also an increase of TPC by 4.73% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 3: MONTH WISE TREND OF TPR IN JHARKHAND

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.29	0.23	0.22	0.30	0.36	0.28	0.41	0.70	0.56			
TPR 3 Year Average	0.40	0.24	0.29	0.31	0.33	0.52	0.81	0.70	0.64	0.59	0.75	0.53

The TPR was 0.37 up to October, 2023 as compared to 0.51 last three years average and 0.48 up to October, 2022

GRAPH 4: MONTH WISE TREND OF PF IN JHARKHAND
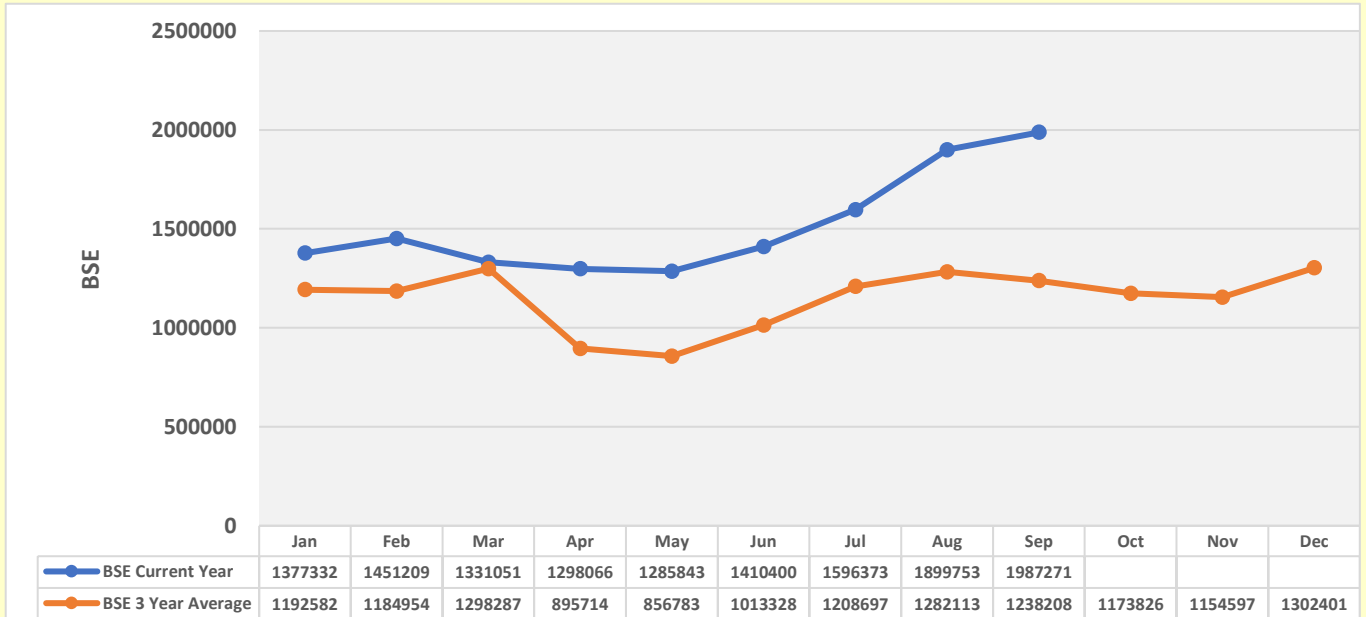

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	618	445	576	1100	1165	939	1697	2880	2404			
PF 3 Year Average	598	262	357	315	324	764	1635	1091	1311	1287	1963	1501

There is an increase of PF by 55.2% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 9.63% up to October, 2023 vis-à- vis up to October, 2022.

MAHARASHTRA

GRAPH 1: MONTH WISE TREND OF BSE IN MAHARASHTRA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	1377332	1451209	1331051	1298066	1285843	1410400	1596373	1899753	1987271			
BSE 3 Year Average	1192582	1184954	1298287	895714	856783	1013328	1208697	1282113	1238208	1173826	1154597	1302401

There is an increase of BSE by 36.29% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 14.3% up to October, 2023 vis-à- vis up to October, 2022.
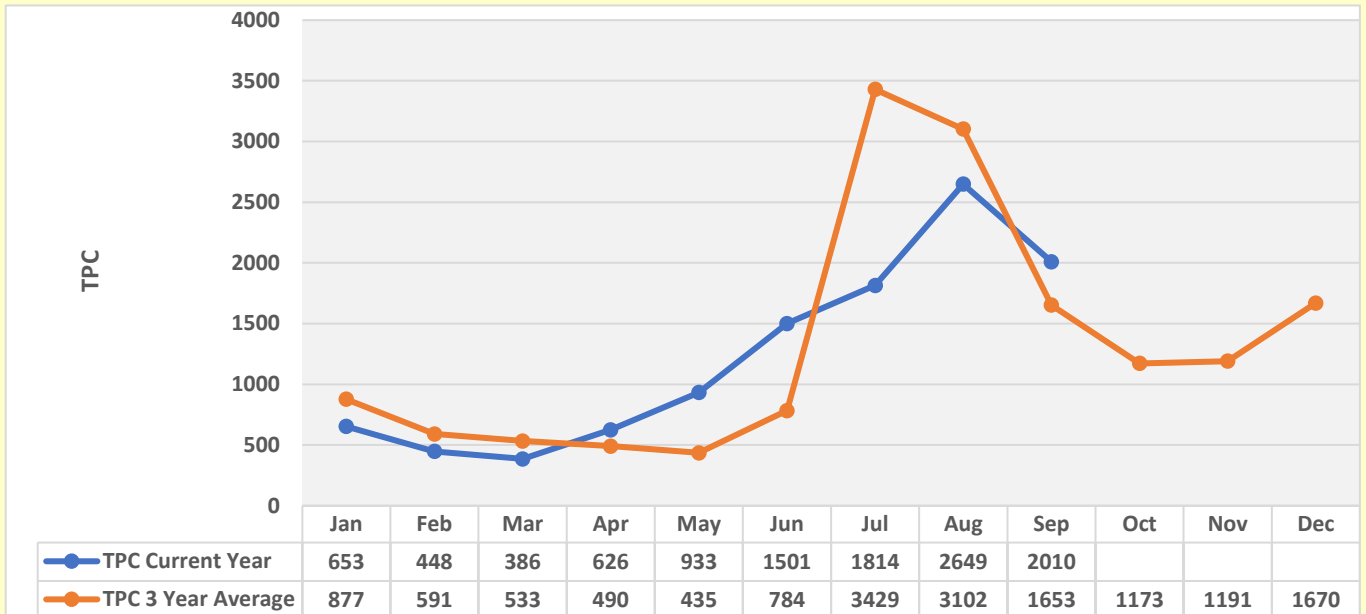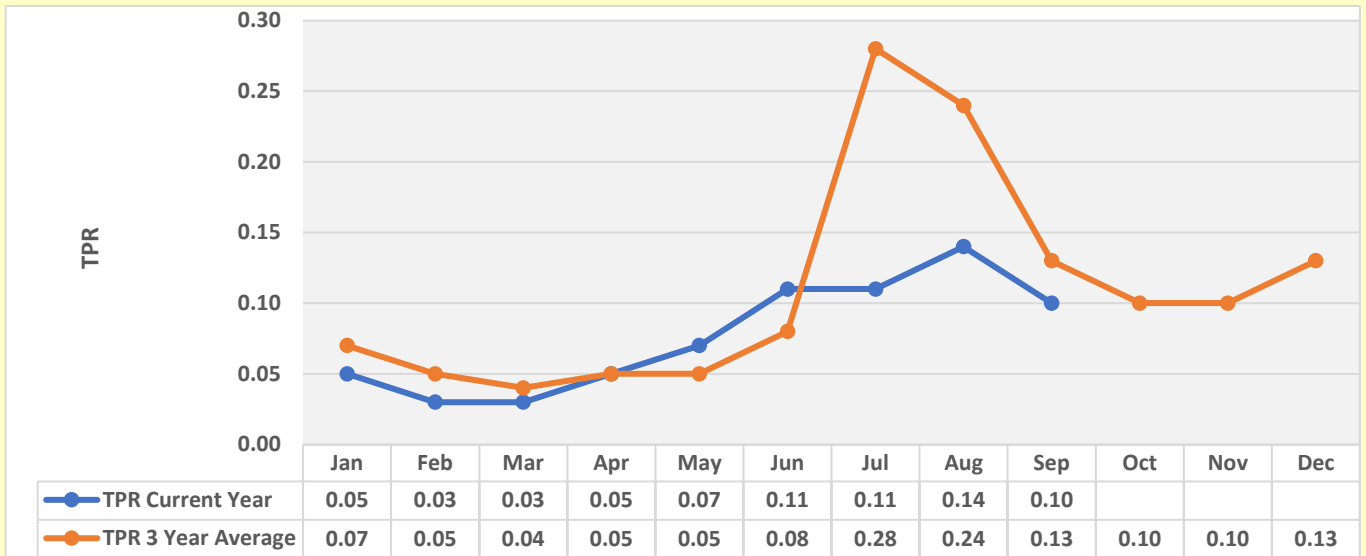
GRAPH 2: MONTH WISE TREND OF TPC IN MAHARASHTRA

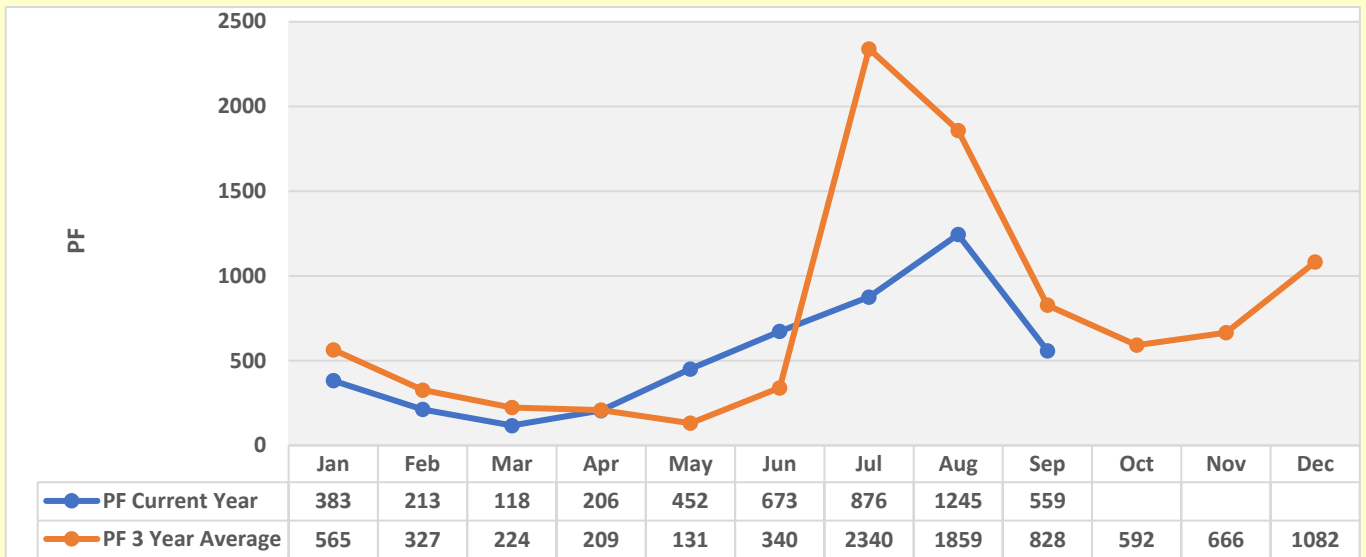|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	653	448	386	626	933	1501	1814	2649	2010			
TPC 3 Year Average	877	591	533	490	435	784	3429	3102	1653	1173	1191	1670

There is a decrease of TPC by 1.81% up to October, 2023 as compared to last three years average cumulative and also a decrease of TPC by 3.64% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 3: MONTH WISE TREND OF TPR IN MAHARASHTRA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.05	0.03	0.03	0.05	0.07	0.11	0.11	0.14	0.10			
TPR 3 Year Average	0.07	0.05	0.04	0.05	0.05	0.08	0.28	0.24	0.13	0.10	0.10	0.13

The TPR was 0.08 up to October, 2023 as compared to 0.12 last three years average and 0.1 up to October, 2022

GRAPH 4: MONTH WISE TREND OF PF IN MAHARASHTRA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	383	213	118	206	452	673	876	1245	559			
PF 3 Year Average	565	327	224	209	131	340	2340	1859	828	592	666	1082

There is a decrease of PF by 30.58% up to October, 2023 as compared to last three years average cumulative and also a decrease of PF by 34.14% up to October, 2023 vis-à- vis up to October, 2022.
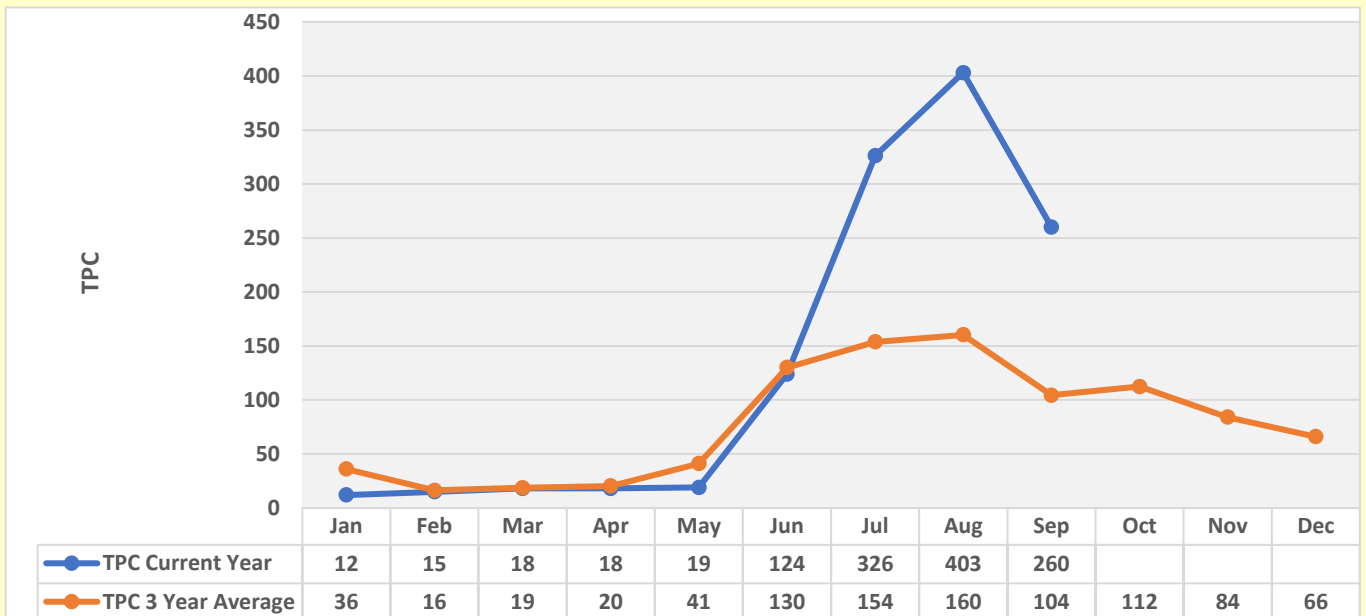
MEGHALAYA

GRAPH 1: MONTH WISE TREND OF BSE IN MEGHALAYA

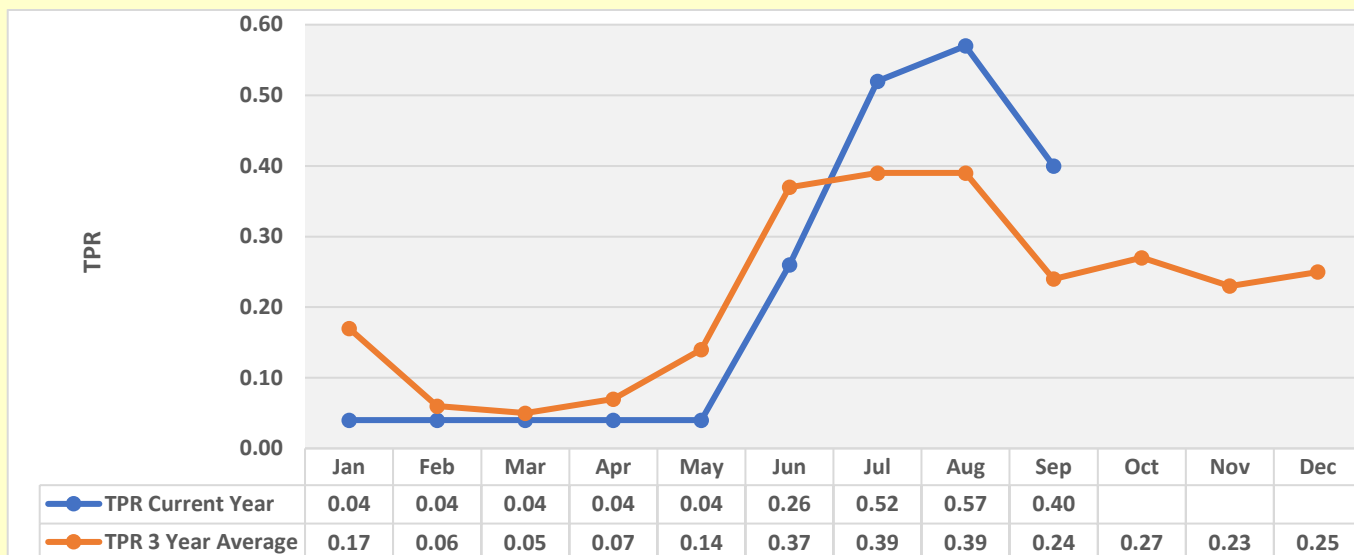|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	30804	35768	47096	50821	54110	47992	62911	70552	65239			
BSE 3 Year Average	21628	27020	35729	28846	29888	35070	39183	41562	44029	41533	36487	26048
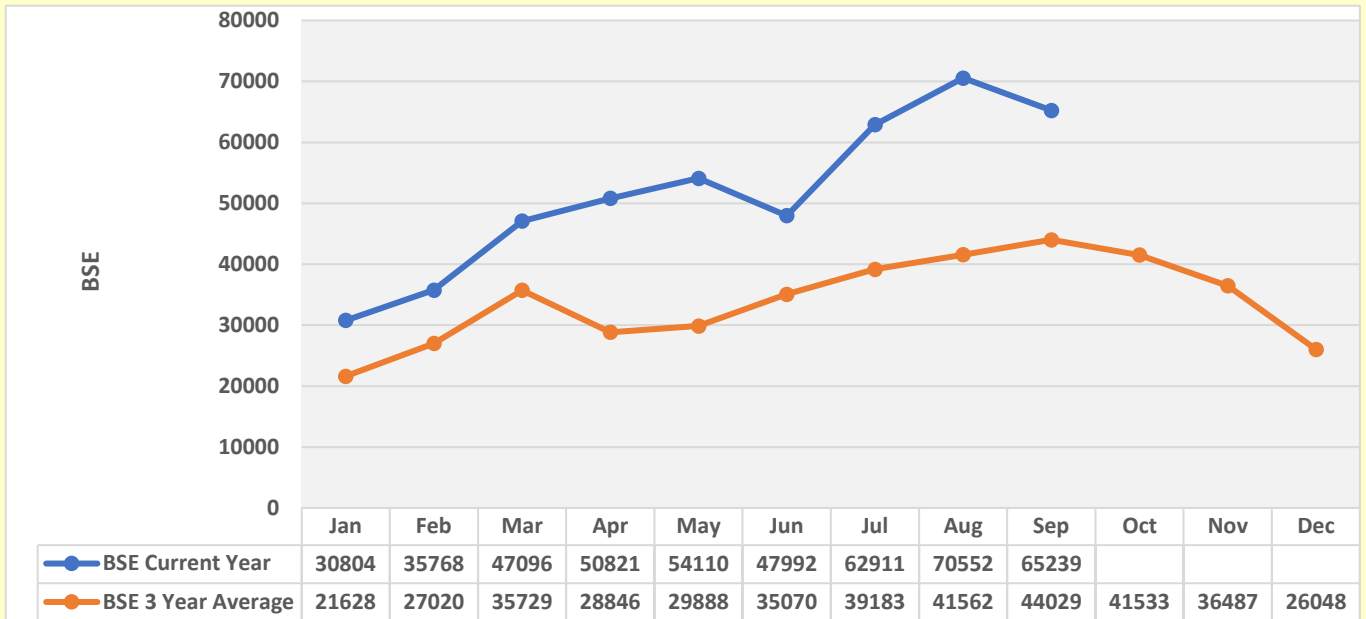
There is an increase of BSE by 52.82% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 20.87% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 2: MONTH WISE TREND OF TPC IN MEGHALAYA

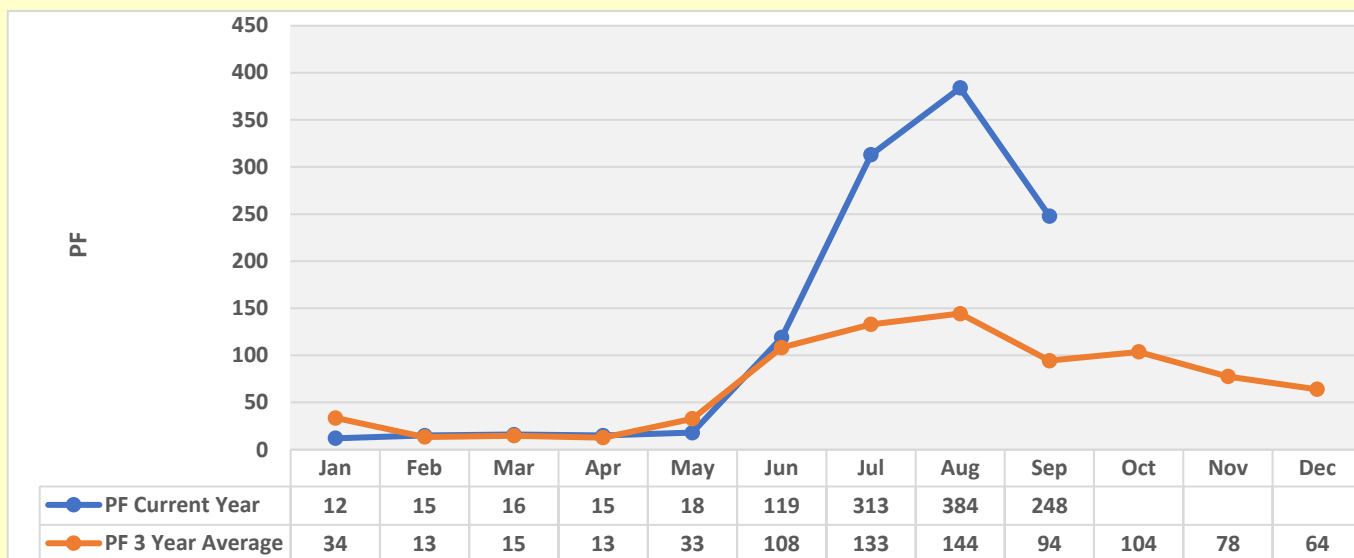|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	12	15	18	18	19	124	326	403	260			
TPC 3 Year Average	36	16	19	20	41	130	154	160	104	112	84	66

There is an increase of TPC by 81.08% up to October, 2023 as compared to last three years average cumulative and a major increase of TPC up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 3: MONTH WISE TREND OF TPR IN MEGHALAYA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.04	0.04	0.04	0.04	0.04	0.26	0.52	0.57	0.40			
TPR 3 Year Average	0.17	0.06	0.05	0.07	0.14	0.37	0.39	0.39	0.24	0.27	0.23	0.25

The TPR was 0.27 up to October, 2023 as compared to 0.27 last three years average and 0.06 up to October, 2022

GRAPH 4: MONTH WISE TREND OF PF IN MEGHALAYA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	12	15	16	15	18	119	313	384	248			
PF 3 Year Average	34	13	15	13	33	108	133	144	94	104	78	64

There is an increase of PF by 98.94% up to October, 2023 as compared to last three years average cumulative and a major increase of PF up to October, 2023 vis-à- vis up to October, 2022.
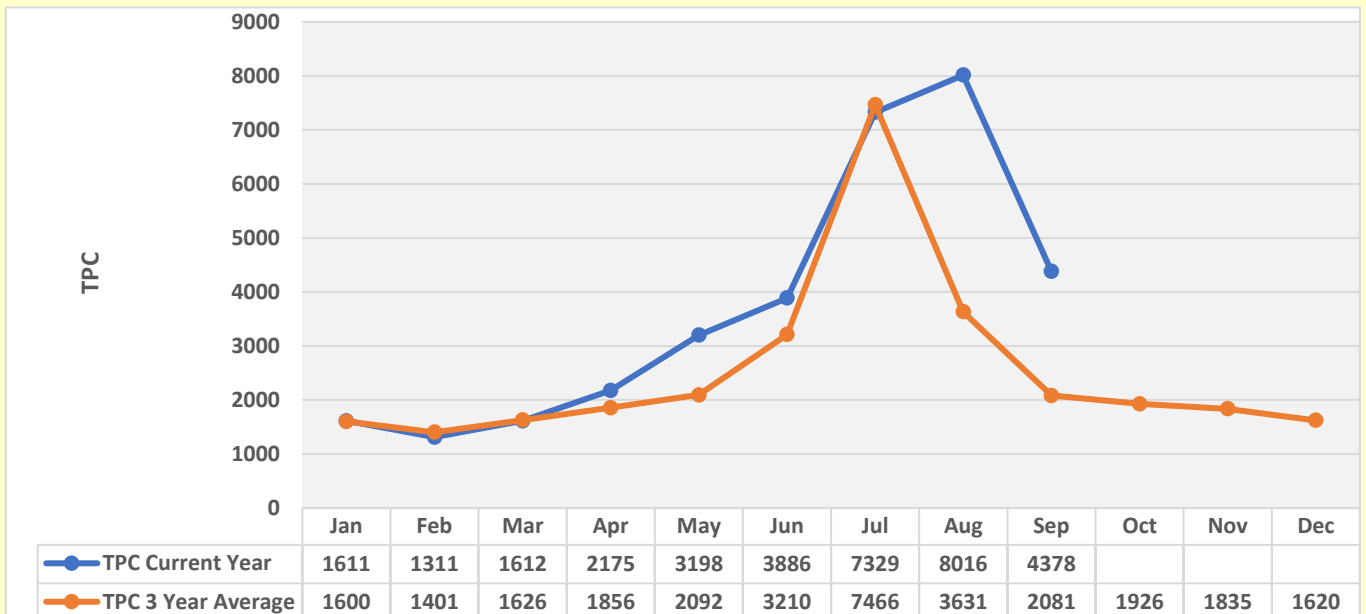
ODISHA

GRAPH 1: MONTH WISE TREND OF BSE IN ODISHA

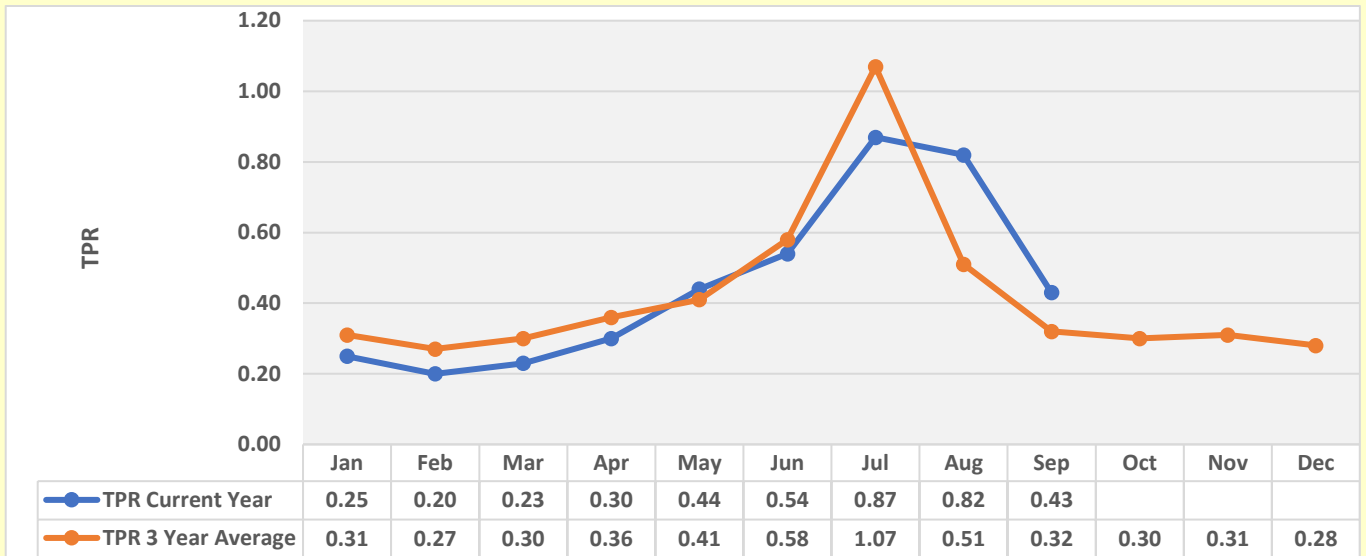|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	656798	670267	699656	733171	726495	716883	846551	981994	1022459			
BSE 3 Year Average	517332	515852	544878	512174	507836	550138	698217	706653	649238	639572	599417	570019
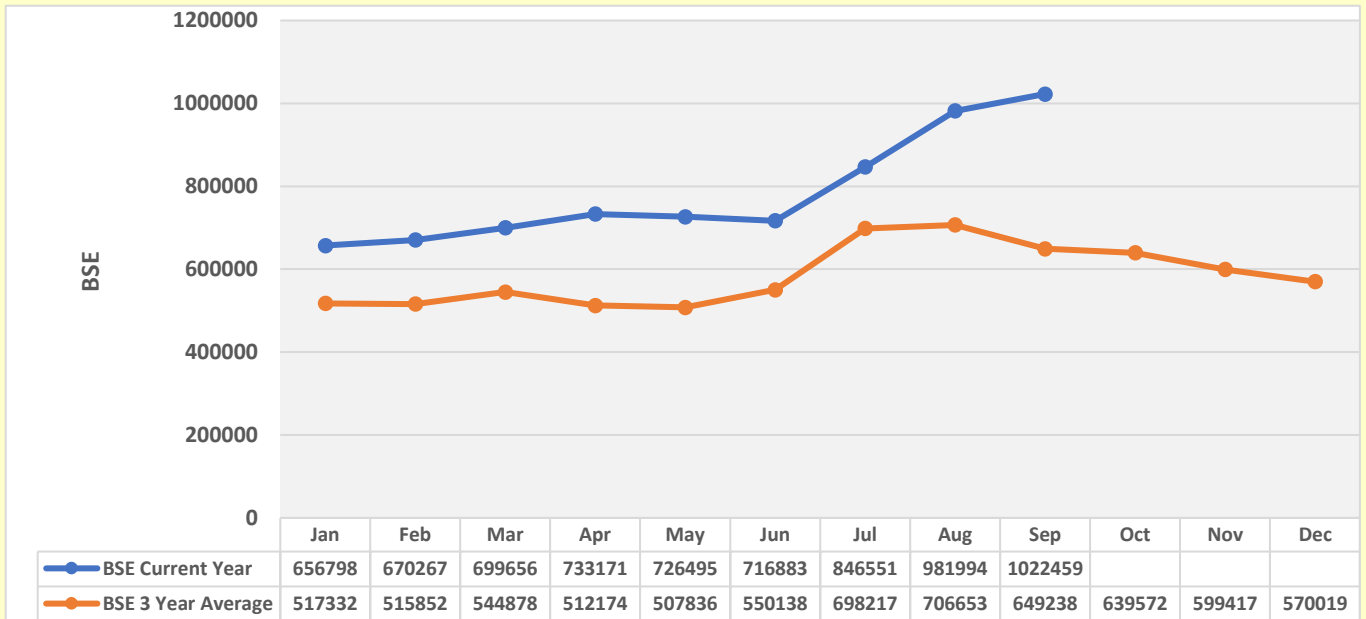
There is an increase of BSE by 36.71% up to October, 2023 as compared to last three years average cumulative and also an increase of BSE by 16.88% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 2: MONTH WISE TREND OF TPC IN ODISHA

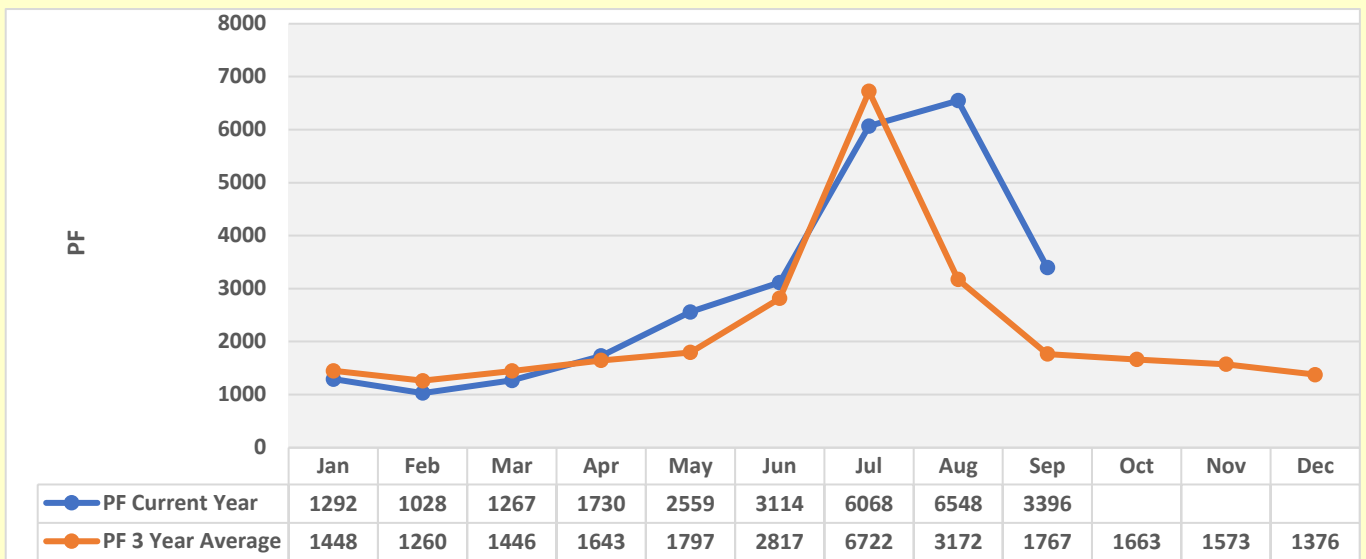|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	1611	1311	1612	2175	3198	3886	7329	8016	4378			
TPC 3 Year Average	1600	1401	1626	1856	2092	3210	7466	3631	2081	1926	1835	1620

There is an increase of TPC by 35.78% up to October, 2023 as compared to last three years average cumulative and also an increase of TPC by 76.27% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 3: MONTH WISE TREND OF TPR IN ODISHA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.25	0.20	0.23	0.30	0.44	0.54	0.87	0.82	0.43			
TPR 3 Year Average	0.31	0.27	0.30	0.36	0.41	0.58	1.07	0.51	0.32	0.30	0.31	0.28

The TPR was 0.46 up to October, 2023 as compared to 0.48 last three years average and 0.3 up to October, 2022

GRAPH 4: MONTH WISE TREND OF PF IN ODISHA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	1292	1028	1267	1730	2559	3114	6068	6548	3396			
PF 3 Year Average	1448	1260	1446	1643	1797	2817	6722	3172	1767	1663	1573	1376

There is an increase of PF by 23.65% up to October, 2023 as compared to last three years average cumulative and also an increase of PF by 73.61% up to October, 2023 vis-à- vis up to October, 2022.
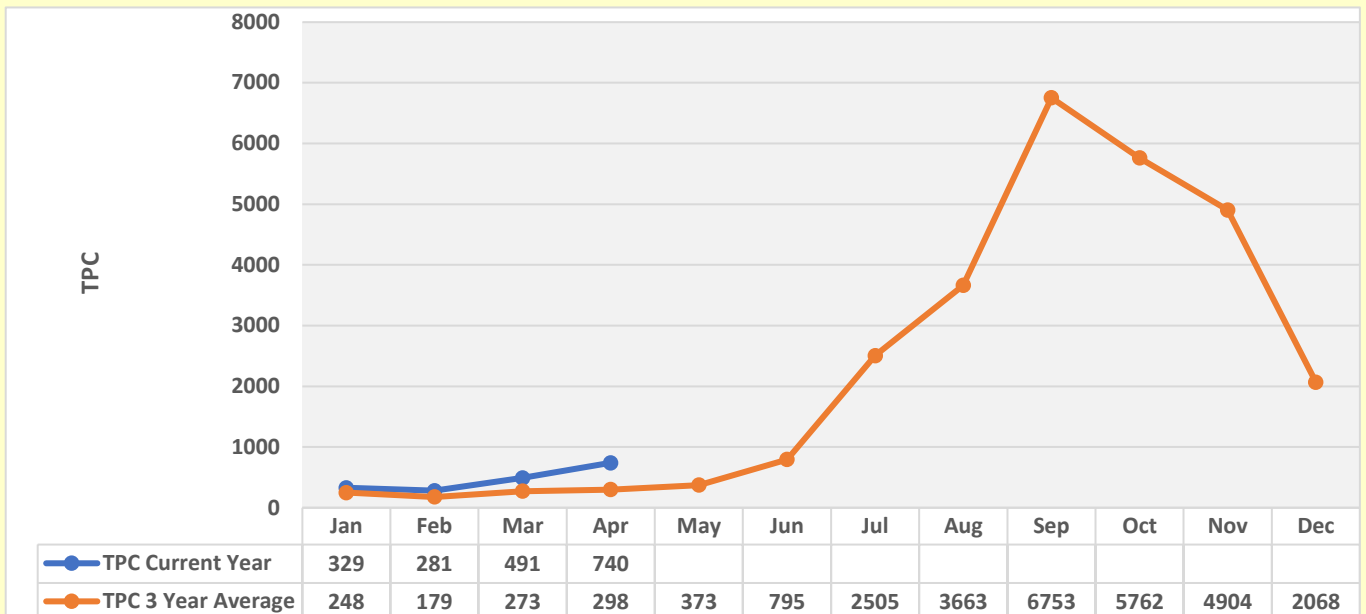
WEST BENGAL

GRAPH 1: MONTH WISE TREND OF BSE IN WEST BENGAL

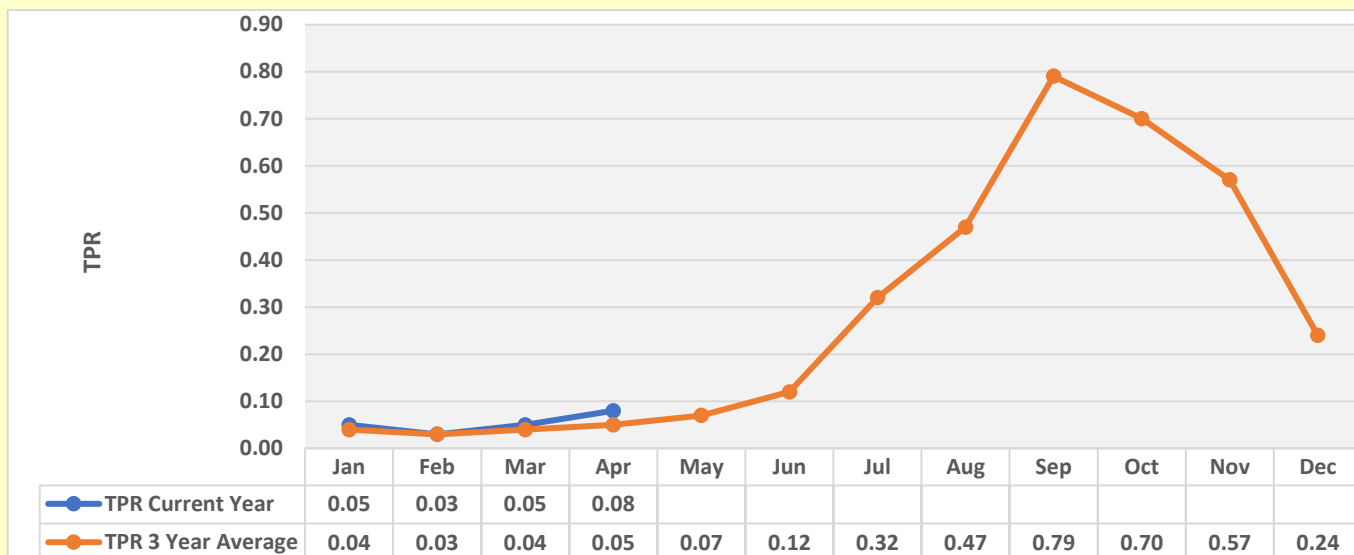|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BSE Current Year	728674	884339	943404	887401								
BSE 3 Year Average	649449	712550	735649	550172	556713	656121	775397	782300	857555	823008	860664	869468
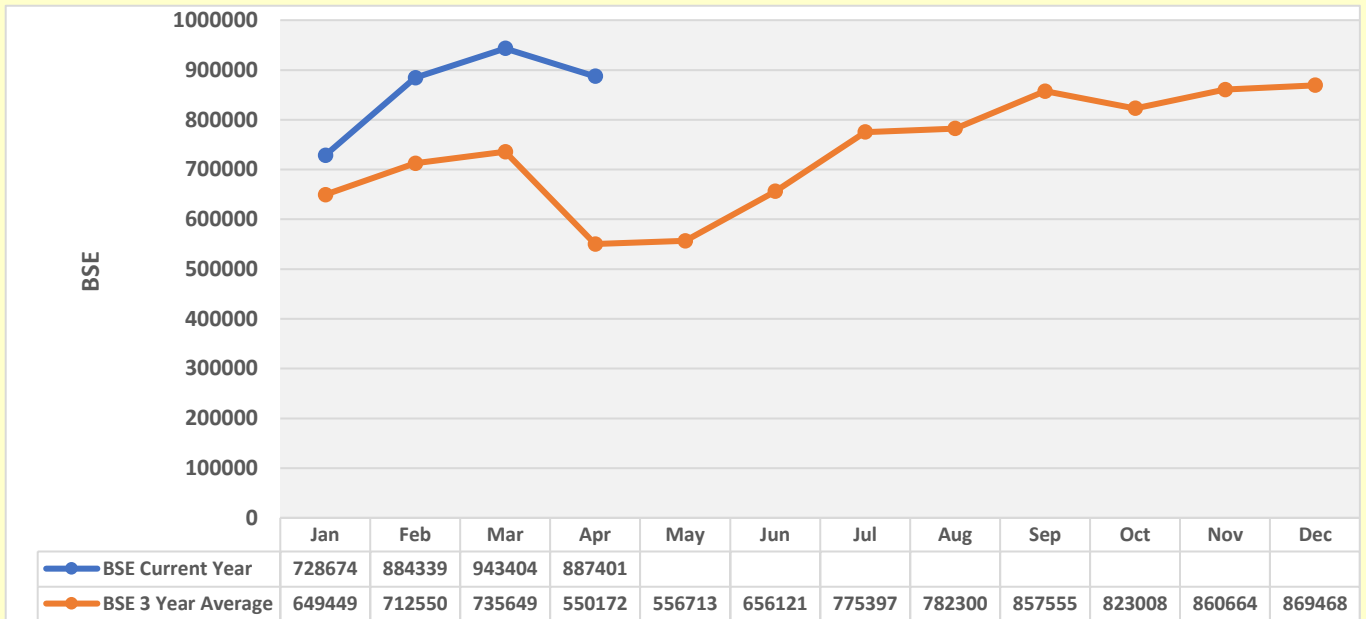
There is a decrease of BSE by 51.49% up to October, 2023 as compared to last three years average cumulative and also a decrease of BSE by 63.64% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 2: MONTH WISE TREND OF TPC IN WEST BENGAL

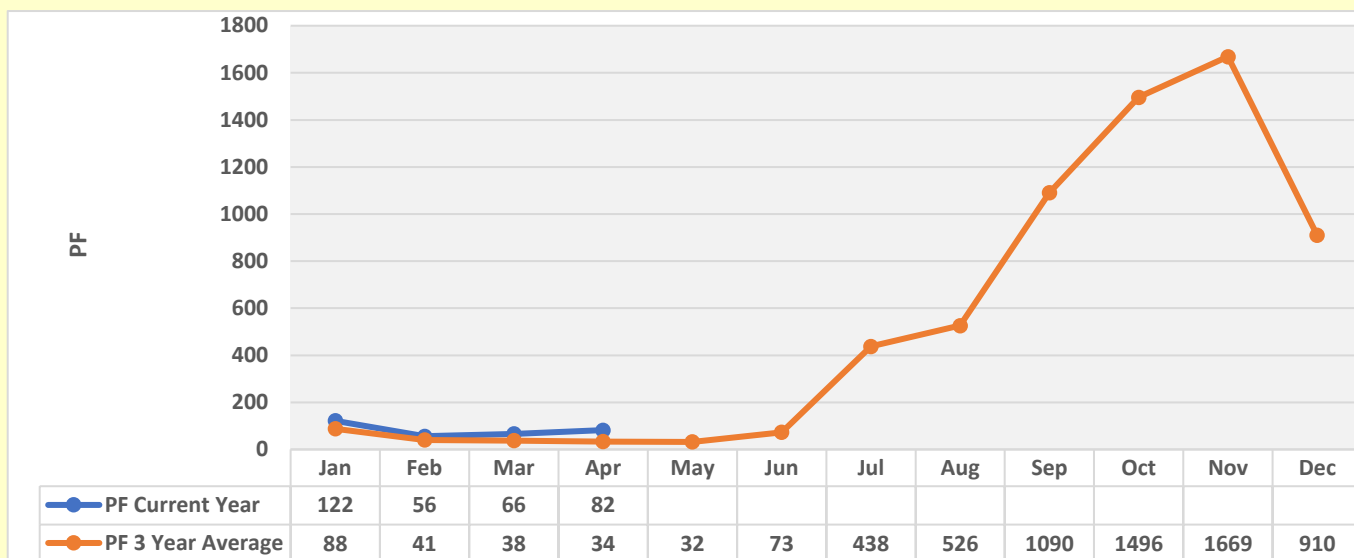|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPC Current Year	329	281	491	740								
TPC 3 Year Average	248	179	273	298	373	795	2505	3663	6753	5762	4904	2068

There is a decrease of TPC by 91.17% up to October, 2023 as compared to last three years average cumulative and also a decrease of TPC by 94.7% up to October, 2023 vis-à- vis up to October, 2022.

GRAPH 3: MONTH WISE TREND OF TPR IN WEST BENGAL

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TPR Current Year	0.05	0.03	0.05	0.08								
TPR 3 Year Average	0.04	0.03	0.04	0.05	0.07	0.12	0.32	0.47	0.79	0.70	0.57	0.24

The TPR was 0.05 up to October, 2023 as compared to 0.27 last three years average and 0.37 up to October, 2022

GRAPH 4: MONTH WISE TREND OF PF IN WEST BENGAL

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PF Current Year	122	56	66	82								
PF 3 Year Average	88	41	38	34	32	73	438	526	1090	1496	1669	910

There is a decrease of PF by 91.54% up to October, 2023 as compared to last three years average cumulative and also a decrease of PF by 94.17% 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
	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%