

MONTHLY AAQM DATA ALONG WITH AQI FOR 17 NAMP STATION

JUNE 2024

About National Air Quality Index

1. Air Quality Index is a tool for effective communication of air quality status to people in terms, which are easy to understand. It transforms complex air quality data of various pollutants into a single number (index value), nomenclature and color.
2. There are six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe. Each of these categories is decided based on ambient concentration values of air pollutants and their likely health impacts (known as health breakpoints). AQ sub-index and health breakpoints are evolved for eight pollutants (PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃, and Pb) for which short-term (up to 24-hours) National Ambient Air Quality Standards are prescribed.
3. Based on the measured ambient concentrations of a pollutant, sub-index is calculated, which is a linear function of concentration (e.g. the sub-index for PM_{2.5} will be 51 at concentration 31 µg/m³, 100 at concentration 60 µg/m³, and 75 at concentration of 45 µg/m³). The worst sub-index determines the overall AQI. AQI categories and health breakpoints for the eight pollutants are as follow:

Table 1 : AQI Category, Pollutants and Health Breakpoints								
AQI Category (Range)	PM ₁₀ 24-hr	PM _{2.5} 24-hr	NO ₂ 24-hr	O ₃ 8-hr	CO 8-hr (mg/m ³)	SO ₂ 24-hr	NH ₃ 24-hr	Pb 24-hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5 –1.0
Moderate (101-200)	101-250	61-90	81-180	101-168	2.1- 10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very poor (301-400)	351-430	121-250	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5
Severe (401-500)	430 +	250+	400+	748+*	34+	1600+	1800+	3.5+

Table 2: AQI : Associated Health Impacts	
AQI	Associated Health Impacts
Severe (401-500)	SEVERE : May cause respiratory effects even on healthy people and serious health effect on people with lung/heart diseases
Very Poor (301–400)	VERY-POOR: May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Poor (201–300)	POOR : May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
Moderate (101–200)	MODERATE : May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease Children and older adults
Satisfactory (51–100)	SATISFACTORY : May cause minor breathing discomfort to sensitive people
Good (0–50)	GOOD : Minimal impact

Station: Near Old GSPCB office						City :Panaji	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	62	12	2	12	62	Satisfactory
2	04-06-2024	31	10	2	9	31	Good
3	06-06-2024	35	10	2	5	35	Good
4	07-06-2024	23	4	4	5	23	Good
5	10-06-2024	29	12	2	9	29	Good
6	13-06-2024	25	7	2	5	25	Good
7	17-06-2024	30	13	2	5	30	Good
8	24-06-2024	27	4	2	5	27	Good
9	27-06-2024	31	5	2	5	31	Good

Station: Within the premises of Municipality building							City: Mapusa
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	112	25	2	12	108	Moderate
2	04-06-2024	56	17	2	9	56	Satisfactory
3	06-06-2024	59	14	2	10	59	Satisfactory
4	07-06-2024	44	10	4	5	44	Good
5	10-06-2024	56	12	2	9	56	Satisfactory
5	13-06-2024	31	12	2	5	31	Good
6	18-06-2024	40	10	2	5	40	Good
6	24-06-2024	57	17	2	5	57	Satisfactory
7	27-06-2024	31	10	2	5	31	Good

Station: MPT Quarters							City: Baina	
Duration:- June-2024								
Sr.No		Time Weighted Average (TWA)					AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3						
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	NH ₃		
1	03-06-2024	128	19	2	5	10	119	Moderate
2	04-06-2024	56	16	2	5	10	56	Satisfactory
3	06-06-2024	94	18	2	5	10	94	Satisfactory
4	07-06-2024	28	9	2	12	10	28	Good
5	19-06-2024	337	22	16	10	10	287	Poor
6	21-06-2024	252	25	2	5	10	202	Poor
7	26-06-2024	152	27	2	5	10	135	Moderate
8	28-06-2024	83	41	2	5	10	83	Satisfactory

Station: Fuse Call Office							City: Vasco	
Duration:- June-2024								
Sr.No		Time Weighted Average (TWA)					AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3						
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	NH ₃		
1	03-06-2024	79	17	2	5	10	79	Satisfactory
2	04-06-2024	28	15	2	5	10	28	Good
3	06-06-2024	70	13	2	10	10	70	Satisfactory
4	07-06-2024	16	8	2	16	10	20	Good
5	19-06-2024	35	MB	2	5	10	35	Good
6	21-06-2024	137	MB	2	12	10	125	Moderate
7	26-06-2024	39	MB	2	5	10	39	Good
8	28-06-2024	56	MB	2	5	10	56	Satisfactory

Station: Roof top of Municipal market						City: Ponda	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	45	17	2	9	45	Good
2	04-06-2024	35	5	2	5	35	Good
3	06-06-2024	28	9	2	5	28	Good
4	07-06-2024	31	5	5	9	31	Good
5	10-06-2024	26	8	4	5	26	Good
6	13-06-2024	33	4	2	5	33	Good
7	17-06-2024	35	5	2	5	35	Good
8	24-06-2024	35	10	2	5	35	Good
9	27-06-2024	35	14	2	5	35	Good

Station:- Rooftop of Ravindra Bhavan Building					City:-Margao		
Duration:- June -2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTy
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	42	10	2	5	42	Good
2	04-06-2024	36	5	2	5	36	Good
3	06-06-2024	39	9	2	5	39	Good
4	07-06-2024	35	5	2	5	35	Good
5	10-06-2024	40	8	2	9	40	Good
6	13-06-2024	37	8	2	5	37	Good
7	17-06-2024	34	8	2	5	34	Good
8	24-06-2024	50	9	2	5	50	Satisfactory
9	27-06-2024	40	9	2	5	40	Good

Station: Residence of Mr. Rama Naik, Assanora Junction							City: Assanora
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	74	8	2	9	74	Satisfactory
2	04-06-2024	48	16	2	5	48	Good
3	06-06-2024	53	15	2	11	53	Satisfactory
4	07-06-2024	43	10	5	11	43	Good
5	10-06-2024	72	18	2	10	72	Satisfactory
6	13-06-2024	35	10	2	5	35	Good
7	18-06-2024	38	10	2	5	38	Good
8	24-06-2024	34	4	2	5	34	Good
9	27-06-2024	31	7	2	5	31	Good

Station: Residence of Mr. Sagun Ramkrishna Fadte						City: Amona	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTy
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	59	13	2	10	59	Satisfactory
2	04-06-2024	53	16	2	11	53	Satisfactory
3	06-06-2024	57	10	2	9	57	Satisfactory
4	07-06-2024	44	14	4	11	44	Good
5	10-06-2024	40	10	2	5	40	Good
6	13-06-2024	50	14	2	9	50	Satisfactory
7	17-06-2024	39	8	2	5	39	Good
8	24-06-2024	37	8	2	5	37	Good
9	27-06-2024	29	6	2	5	29	Good

Station: Municipality Building						City: Bicholim	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	53	16	2	9	53	Satisfactory
2	04-06-2024	45	10	2	11	45	Good
3	06-06-2024	32	9	2	5	32	Good
4	07-06-2024	29	4	4	5	29	Good
5	10-06-2024	42	11	2	10	42	Good
6	13-06-2024	26	7	2	5	26	Good
7	18-06-2024	34	9	2	5	34	Good
8	24-06-2024	33	5	2	5	33	Good
9	27-06-2024	27	5	2	5	27	Good

Station: Near Ajoba temple, Honda junction						City: Honda	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	50	11	2	9	50	Satisfactory
2	04-06-2024	44	13	4	9	44	Good
3	06-06-2024	40	9	4	5	40	Good
4	07-06-2024	37	6	2	5	37	Good
5	10-06-2024	37	10	2	5	37	Good
6	13-06-2024	41	9	2	5	41	Good
7	17-06-2024	32	8	2	5	32	Good
8	24-06-2024	39	8	2	5	39	Good
9	27-06-2024	28	8	2	5	28	Good

Station:- Usgao Junction						City:-Usgao	
Duration:-June -2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	54	16	4	11	54	Satisfactory
2	04-06-2024	37	6	2	10	37	Good
3	06-06-2024	37	9	2	5	37	Good
4	07-06-2024	25	4	2	5	25	Good
5	10-06-2024	45	11	4	5	45	Good
6	13-06-2024	44	10	2	5	44	Good
7	17-06-2024	40	7	2	5	40	Good
8	24-06-2024	50	12	2	5	50	Satisfactory
9	27-06-2024	37	9	2	5	37	Good

Station:- Premises of Somnath English High School						City:-Codli	
Duration:-June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	38	8	2	5	38	Good
2	04-06-2024	38	11	2	9	38	Good
3	06-06-2024	25	6	2	5	25	Good
4	07-06-2024	30	4	2	5	30	Good
5	10-06-2024	32	13	2	9	32	Good
6	13-06-2024	24	6	2	5	24	Good
7	17-06-2024	36	9	2	5	36	Good
8	24-06-2024	37	6	2	5	37	Good
9	27-06-2024	33	6	2	5	33	Good

Station:- Rooftop of Sanguem Municipality Building						City:-Sanguem	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	37	9	2	5	37	Good
2	04-06-2024	31	7	2	5	31	Good
3	06-06-2024	40	10	2	5	40	Good
4	07-06-2024	28	4	2	5	28	Good
5	10-06-2024	24	11	2	10	24	Good
6	13-06-2024	26	7	2	5	26	Good
7	17-06-2024	33	4	2	5	33	Good
8	24-06-2024	29	4	2	5	29	Good
9	27-06-2024	53	9	2	5	53	Satisfactory

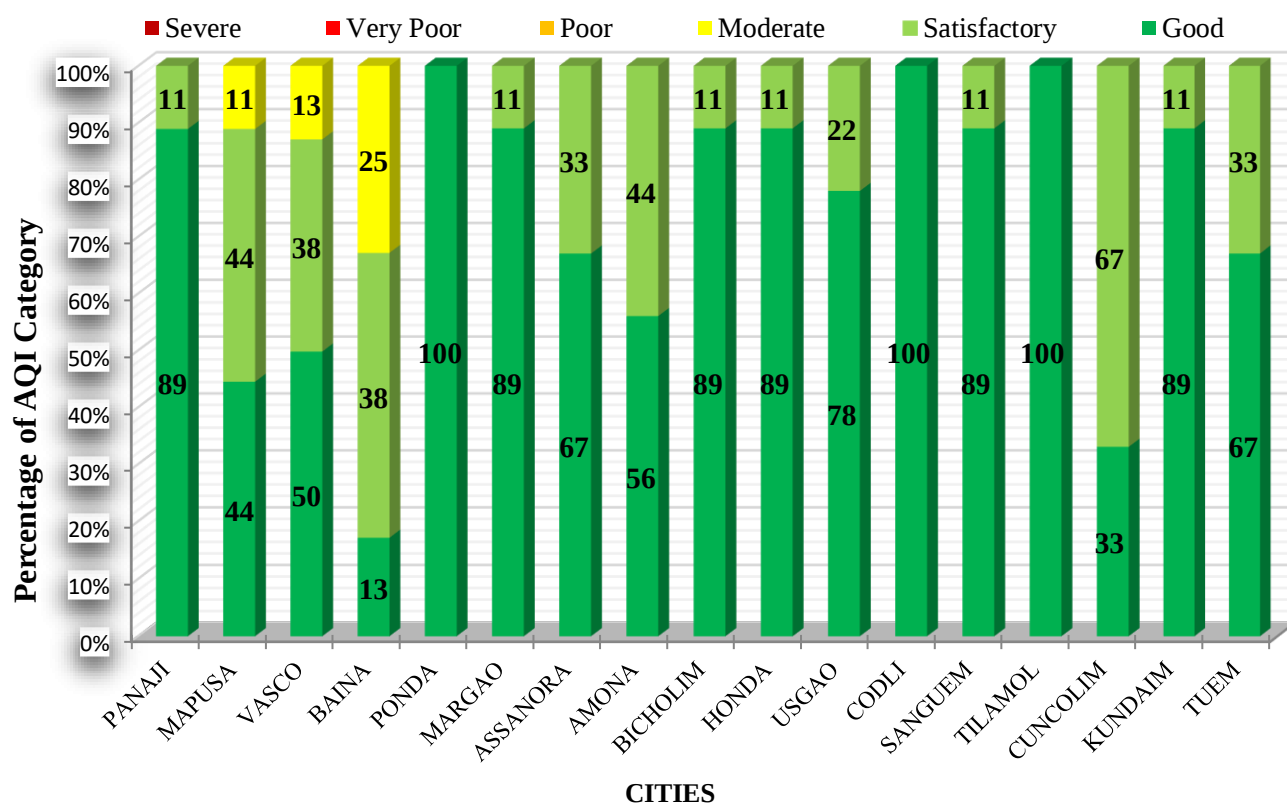
Station:- Tilamol Junction					City:-Tilamol		
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	45	13	2	9	45	Good
2	04-06-2024	42	8	2	5	42	Good
3	06-06-2024	26	7	2	5	26	Good
4	07-06-2024	33	8	5	10	33	Good
5	10-06-2024	31	10	4	9	31	Good
6	13-06-2024	29	6	2	5	29	Good
7	17-06-2024	36	9	2	5	36	Good
8	24-06-2024	28	4	2	5	28	Good
9	27-06-2024	21	5	2	5	21	Good

Station:- Rooftop of Power Station, Cuncolim Ind Estate City:-Cuncolim							
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	79	26	2	20	79	Satisfactory
2	04-06-2024	58	18	2	5	58	Satisfactory
3	06-06-2024	67	20	2	15	67	Satisfactory
4	07-06-2024	49	16	2	11	49	Good
5	10-06-2024	57	19	2	5	57	Satisfactory
6	13-06-2024	49	12	2	10	49	Good
7	17-06-2024	48	13	2	5	48	Good
8	24-06-2024	74	20	2	5	74	Satisfactory
9	27-06-2024	82	12	2	5	82	Satisfactory

Station: Near IDC Office						City: Kundaim	
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	76	22	2	16	76	Satisfactory
2	04-06-2024	46	13	2	5	46	Good
3	06-06-2024	25	4	2	5	25	Good
4	07-06-2024	30	6	2	5	30	Good
5	10-06-2024	32	8	2	5	32	Good
6	13-06-2024	27	8	2	5	27	Good
7	17-06-2024	37	4	2	5	37	Good
8	24-06-2024	29	6	2	5	29	Good
9	27-06-2024	30	5	2	5	30	Good

Station: Near ESIC Hospital , Tuem Industrial Estate							City: Tuem
Duration:- June-2024							
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hrs	24-Hrs	24-Hrs	24-Hrs		
		Pollutants concentration in µg/m3					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
1	03-06-2024	77	23	2	11	77	Satisfactory
2	04-06-2024	53	16	4	9	53	Satisfactory
3	06-06-2024	34	10	2	5	34	Good
4	07-06-2024	40	9	2	10	40	Good
5	10-06-2024	56	15	2	5	56	Satisfactory
6	13-06-2024	32	11	2	5	32	Good
7	18-06-2024	41	11	2	5	41	Good
8	24-06-2024	41	11	2	5	41	Good
9	27-06-2024	32	8	2	5	32	Good

Percentage of AQI Category for NAMP locations in Goa for JUNE 2024



Results and Interpretation:

It is seen that during the month of June 2024, out of 17 locations AQI is -

Dominantly Good at 10 locations namely – Panaji, Ponda, Margao, Bicholim, Honda, Usgao, Codli, Sanguem, Tilamol and Kundaim

Good to Satisfactory at 4 locations namely – Assanora, Amona, Cuncolim and Tuem

Good to Satisfactory to Moderate at 3 locations namely – Mapusa, Vasco and Baina

(Dominant refers to 75% and above)