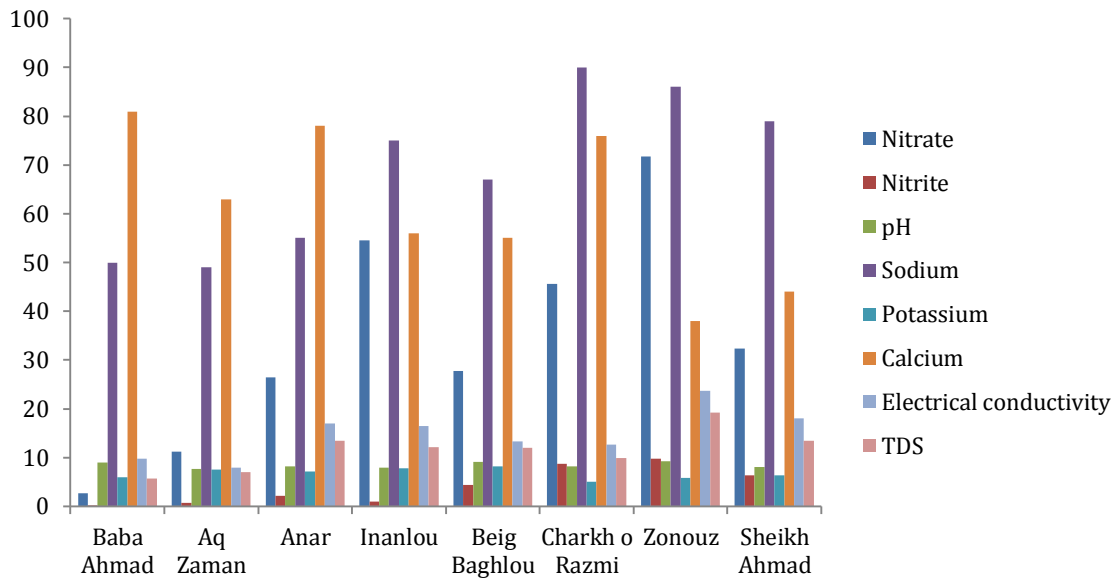


**Table 3)** Descriptive statistics of physiochemical parameters of the samples from selected dams' downstream in Aras River

Parameter	Unit	Samples' number	Minimum	Maximum	Average	Standard deviation
Nitrate( $NO_3$ )	mg/L	4	26	717	323	187.64
Nitrite( $NO_2$ )	mg/L	4	0.02	0.98	0.68	0.45
Electrical conductivity (EC)	$\mu S/cm$	4	789	2346	1645	345.66
pH	-	4	7.64	9.23	8.17	0.43
Sodium (Na)	mg/L	4	49	90	67	11.1
Potassium (K)	mg/L	4	5.8	8.2	7.5	0.56
Calcium (Ca)	mg/L	4	38	81	64	11.46
Total Dissolved solids (TDS)	mg/L	4	568	1920	1211	469.07
Lead (Pb)	$\mu g/L$	4	0.05	0.2	0.09	23.2
Cadmium (Cd)	$\mu g/L$	4	0.02	1.78	0.8	15.11
Copper (Cu)	$\mu g/L$	4	0.6	29.1	11.7	5.97
Manganese (Mn)	$\mu g/L$	4	6.7	88.16	7.9	18.63
Chrome (Cr)	$\mu g/L$	4	9.66	38.26	12.45	9.67
Cobalt (Co)	$\mu g/L$	4	12.78	181.36	57.89	34.74
Iron (Fe)	$\mu g/L$	4	7.6	292.31	88.92	87.17
Zink (Zn)	$\mu g/L$	4	1.9	69.87	11.87	11.53



**Chart 1**) a comparison of the measured parameters in the selected stations (2019-2020)

**Table 4)** the results of Pearson correlation in the studied area (2019-2020)

Parameters	NO <sub>3</sub>	NO <sub>2</sub>	EC	pH	Na	K	Ca	TDS	Pb	Cd	Cu	Mn	Cr	Co	Fe	Zn
<b>NO<sub>3</sub></b>	1															
<b>NO<sub>2</sub></b>	0.71*	1														
<b>EC</b>	0.36	0.178	1													
<b>pH</b>	0.00	0.00	0.43	1												
<b>Na</b>	0.48	0.47	0.79*	-0.23	1											
<b>K</b>	0.19	0.23	0.07	0.00	0.66*	1										
<b>Ca</b>	0.35	0.17	0.00	0.43	0.28	0.81♦	1									
<b>TDS</b>	0.57	0.59	1♦	-0.26	0.79*	0.18	0.11	1								
<b>Pb</b>	0.46	0.32	0.00	-0.63	0.42	0.12	0.26	0.79♦	1							
<b>Cd</b>	0.02	0.06	0.00	-0.43	0.26	0.53	0.34	0.78♦	0.42	1						
<b>Cu</b>	0.05	0.04	0.00	-0.32	0.1	0.16	0.21	0.8♦	0.53	0.29	1					
<b>Mn</b>	0.1	0.12	0.00	-0.32	0.11	0.67*	-0.21	0.83♦	0.69*	0.49	0.55	1				
<b>Cr</b>	0.23	0.08	0.00	-0.31	0.2	0.14	-0.23	0.84♦	0.58	0.68*	0.36	0.25	1			
<b>Co</b>	0.09	0.18	0.00	-0.11	0.3	0.41	0.12	0.79♦	0.69*	0.58	0.4	0.19	0.37	1		
<b>Fe</b>	0.3	0.2	0.8♦	0.3	0.2	0.4	0.1	0.8♦	0.64*	0.15	0.2	0.01	0.2	0.2	1	
<b>Zn</b>	0.04	0.02	0.01	-0.4	0.5	0.53	0.1	0.79♦	0.32	0.2	0.5	0.43	0.2	0.1	0.1	1
♦ Significant correlation at level 0.01										*Significant correlation at level 0.05						