

Supplementary Table 1 Methods for Groundwater quality assessment

	Graphical methods:	Statistical methods	Geographic information system (GIS)-based methods	Artificial intelligence methods
Hydrogeochemical methods	Collins diagram Radial/vector diagram, Karnath Stiff diagram, Stiff Pie chart/circular diagram Langelier-Ludwig diagram, Langelier-Ludwig Piper trilinear diagram, Piper Schoeller diagram, Schoeller Durov diagram, Zaporozec Giggenbach triangle, Giggenbach USSL diagram, USSL Willcox diagram Gibbs diagram, Gibbs Self-organizing maps			
		Time series modeling,		

Multivariate statistical
techniques

Principle component
analysis

Cluster analysis, Otto

Factor analysis,

Partial least squares
modeling

Remote sensing (RS)
technique

Groundwater quality
index

Geostatistical modeling

Artificial neural network

Fuzzy logic

Multi-criteria decision making
