The following Appendix (Appendix 1) is the Electronic Supplementary Material of the article entitled “Hydrochemical characterization and irrigation suitability of the Ganges Brahmaputra River System: review and assessment” at https://doi.org/10.1007/s11629-021-6834-z

**Appendix 1 Rotated component matrix of principal component analysis**

| Item            | PC1 | PC2 |
|-----------------|-----|-----|
| Ken River       | 0.06| 0.96|
| Betwa River     | 0.10| 0.94|
| Gomti River     | 0.00| 0.97|
| Damodar River   | 0.27| 0.94|
| Garra River     | 0.08| 0.97|
| Gandaki River   | 0.93| 0.33|
| Dudhkoshi River | 0.99| -0.12|
| Indrawoti River | 0.96| 0.25|
| Yarlung River   | 0.94| 0.13|
| Brahmaputra River| 0.99| 0.12|
| Teesta River    | 0.93| -0.07|
| Rangit River    | 0.97| 0.12|
| Eigenvalue      | 7.27| 4.22|
| % of Variance   | 60.57| 35.18|
| Cumulative %    | 60.57| 95.75|