**Additional file 1**

**Table S1 The population, gross regional product and landform of the sample counties and districts in 2018**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **County/District** | **Population (Thousands)** | **Gross regional product (USD: million)** | **Gross regional product per capita (USD)** | **Landform** |
| Rural | Hefeng | 205 | 927.10  | 4485.37  | Mountainous |
|  | Laohekou | 482 | 5518.75  | 11367.60  | Plain and hilly |
|  | Zhuxi  | 315 | 1244.71  | 3917.80  | Hilly and mountainous |
|  | Macheng  | 880 | 4615.84  | 5202.27  | Hilly and mountainous |
| Urban | Echeng | 314 | 3951.90  | 12495.86  | Plain, hilly and mountainous |
|  | Xiling  | 405 | 5657.89  | 13855.56  | Plain and hilly |
|  | Qingshan  | 575 | 9479.72  | 16345.88  | Plain |
|  | Xisaishan | 233 | 2983.97  | 12702.36  | Plain and hilly |