Supplementary Materials

**Table 1**

Corrected 2000 carbon densities for each land use/cover type used in the InVEST model.

|  |  |
| --- | --- |
| Land use/cover types | Regional carbon density (Mg/ha) |
| Aboveground carbon density | Belowground carbon density | Soil organic carbon density | Dead organic matter carbon density |
| Cropland | 1.13  | 80.70  | 68.68  | 0 |
| Woodland | 8.43  | 115.90  | 88.73  | 7.8 |
| Grassland | 7.46  | 86.50  | 76.04  | 0 |
| Water | 0  | 0 | 11.46  | 0 |
| Built-up land | 0.50  | 0 | 63.85  | 0 |
| Unused land | 0.26  | 0 | 25.70  | 0 |

**Table 2**

Corrected 2010 carbon densities for each land use/cover type used in the InVEST model.

|  |  |
| --- | --- |
| Land use/cover types | Regional carbon density (Mg/ha) |
| Aboveground carbon density | Belowground carbon density | Soil organic carbon density | Dead organic matter carbon density |
| Cropland | 1.43  | 80.70  | 71.11  | 0 |
| Woodland | 10.60  | 115.90  | 91.88  | 7.8 |
| Grassland | 9.38  | 86.50  | 78.74  | 0 |
| Water | 0.00  | 0.00  | 11.87  | 0 |
| Built-up land | 0.63  | 0.00  | 66.11  | 0 |
| Unused land | 0.33  | 0.00  | 26.62  | 0 |

**Table 3**

Corrected 2020 carbon densities for each land use/cover type used in the InVEST model.

|  |  |
| --- | --- |
| Land use/cover types | Regional carbon density (Mg/ha) |
| Aboveground carbon density | Belowground carbon density | Soil organic carbon density | Dead organic matter carbon density |
| Cropland | 1.95  | 80.70  | 74.00  | 0 |
| Woodland | 14.51  | 115.90  | 95.61  | 7.8 |
| Grassland | 12.83  | 86.50  | 81.94  | 0 |
| Water | 0.00  | 0.00  | 12.35  | 0 |
| Built-up land | 0.86  | 0.00  | 68.80  | 0 |
| Unused land | 0.45  | 0.00  | 27.70  | 0 |

**Table 4**

Attributes of threat data.

|  |  |  |  |
| --- | --- | --- | --- |
| Threats | Maximum effective distance(km) | Weight | Decay types |
| Non-irrigated arable land | 6 | 0.6 | linear |
| Urban land use | 10 | 1 | exponential |
| Rural settlements | 5 | 0.8 | exponential |
| Other construction land | 1 | 0.5 | exponential |
| Sandy land | 10 | 0.3 | exponential |

**Table 5**

Sensitivity of different land use/cover types to different threat factors.

|  |  |  |
| --- | --- | --- |
| Land use/cover types | Habitat | Threats |
| Non-irrigated arable land | Urban land use | Rural settlements | Other construction land | Sandy land |
| Cropland | 0.4 | 0 | 0.8 | 0.7 | 0.7 | 0.4 |
| Woodland | 0.8 | 0.5 | 0.8 | 0.6 | 0.7 | 0.1 |
| Grass land | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 |
| Water | 0.9 | 0.5 | 0.6 | 0.4 | 0.6 | 0.8 |
| Built-up land | 0 | 0 | 0 | 0 | 0 | 0 |
| Unused land | 0 | 0 | 0 | 0 | 0 | 0 |