

Supplementary Table S1. Results of principal component analysis (PCA) of 11 soil properties and their norm values for constructing evaluation indicators for the minimum data set (MSD)

Property	PC1	PC2	PC3	Norm value
SBD	0.912	-0.094	0.346	2.735
SOM	0.987	-0.059	0.086	2.96
TN	0.961	0.115	-0.038	2.882
TP	0.931	-0.27	0.167	2.792
TK	0.508	0.662	0.541	1.523
AN	0.92	0.254	-0.219	2.759
AP	0.978	-0.011	0.058	2.933
AK	0.951	-0.179	0.01	2.852
ExCa	0.991	-0.077	-0.02	2.972
ExMg	0.811	-0.425	0.372	2.663
ExMn	0.888	0.164	-0.347	2.432
Eigenvalues	8.991	0.848	0.76	
Percent (%)	81.737	7.707	6.91	
Cumulative percent (%)	81.737	89.444	96.354	