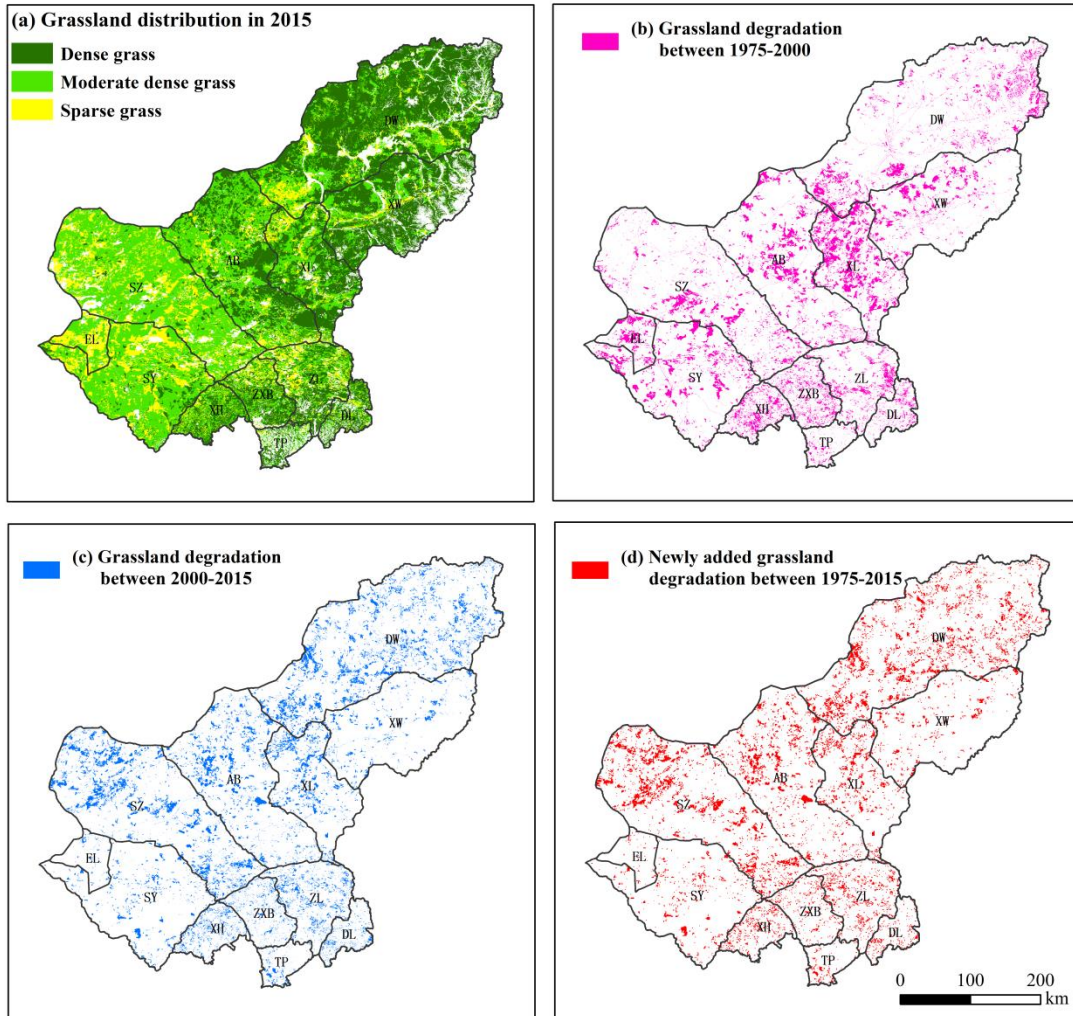# Supplementary Information

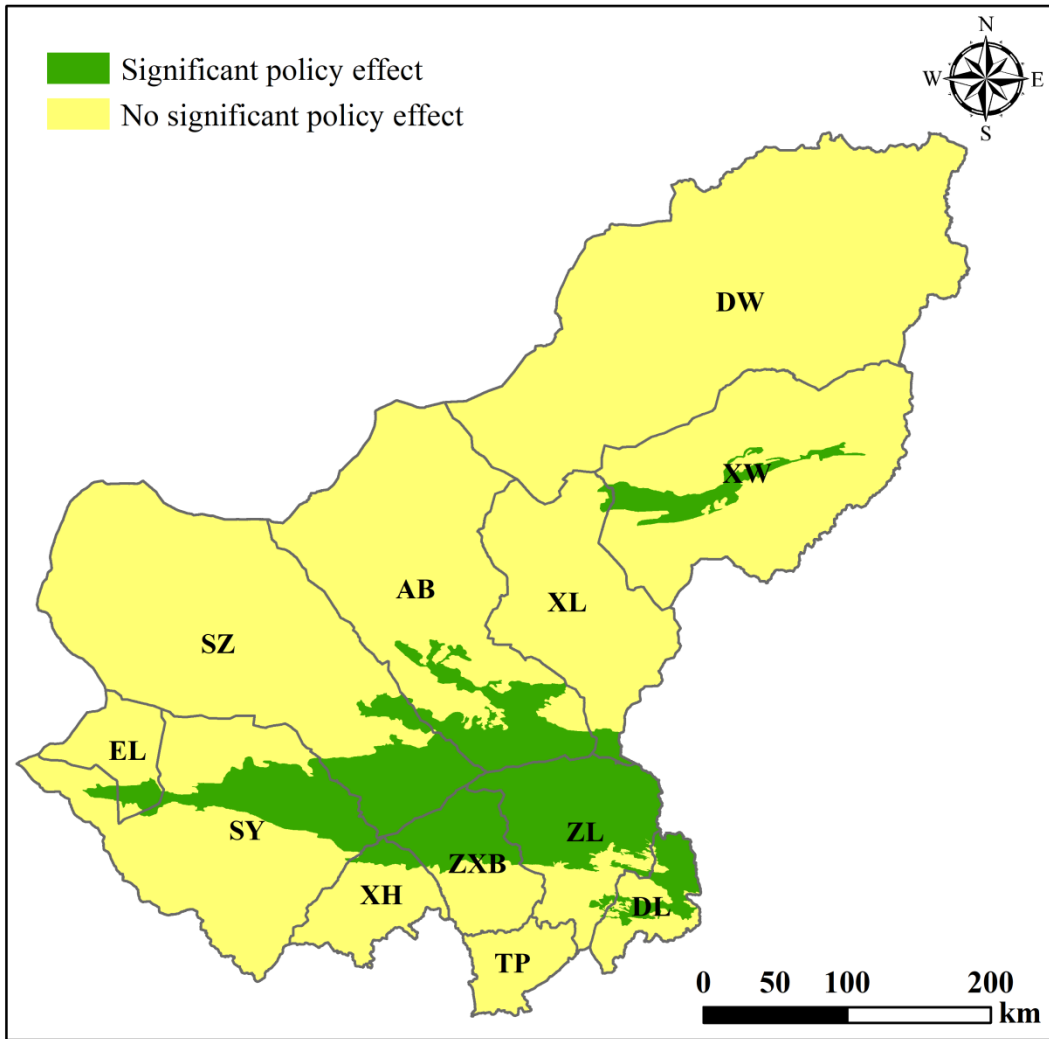Fig. S 1: Grassland degradation between 1975 and 2015

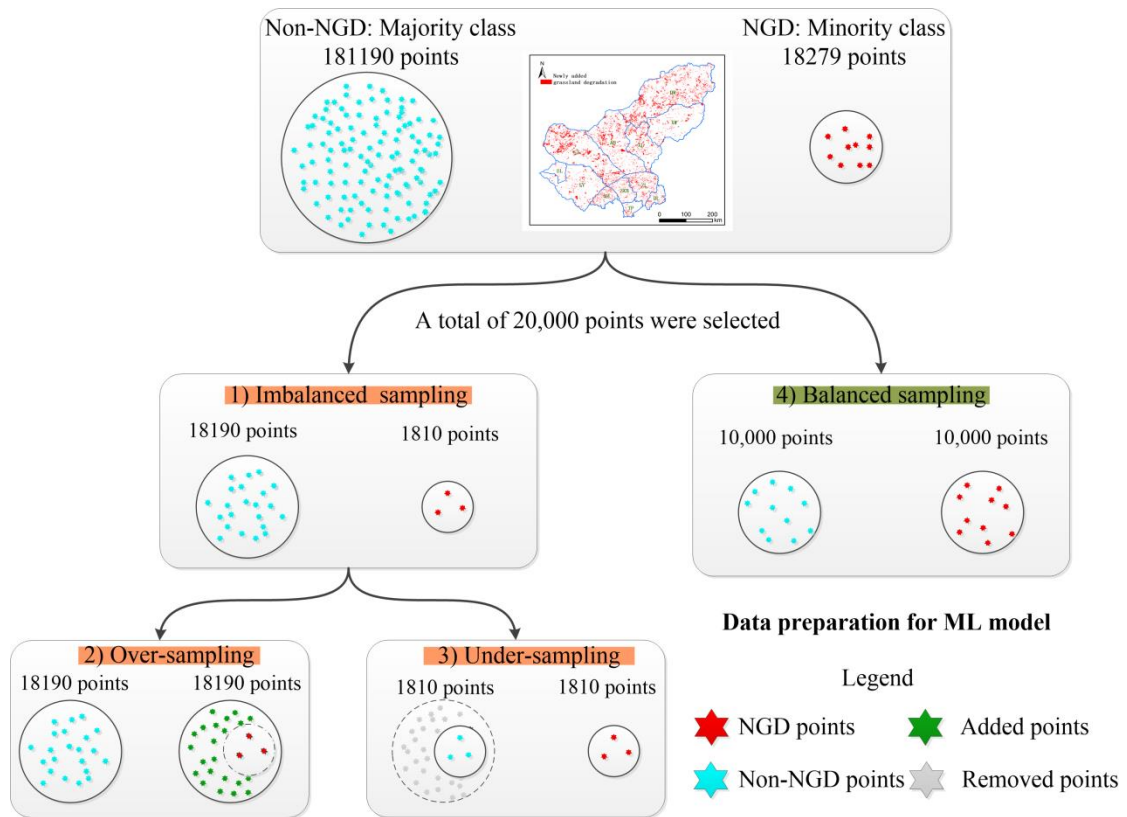Fig. S 2: Assumptions on policy effect in the policy scenario setting.

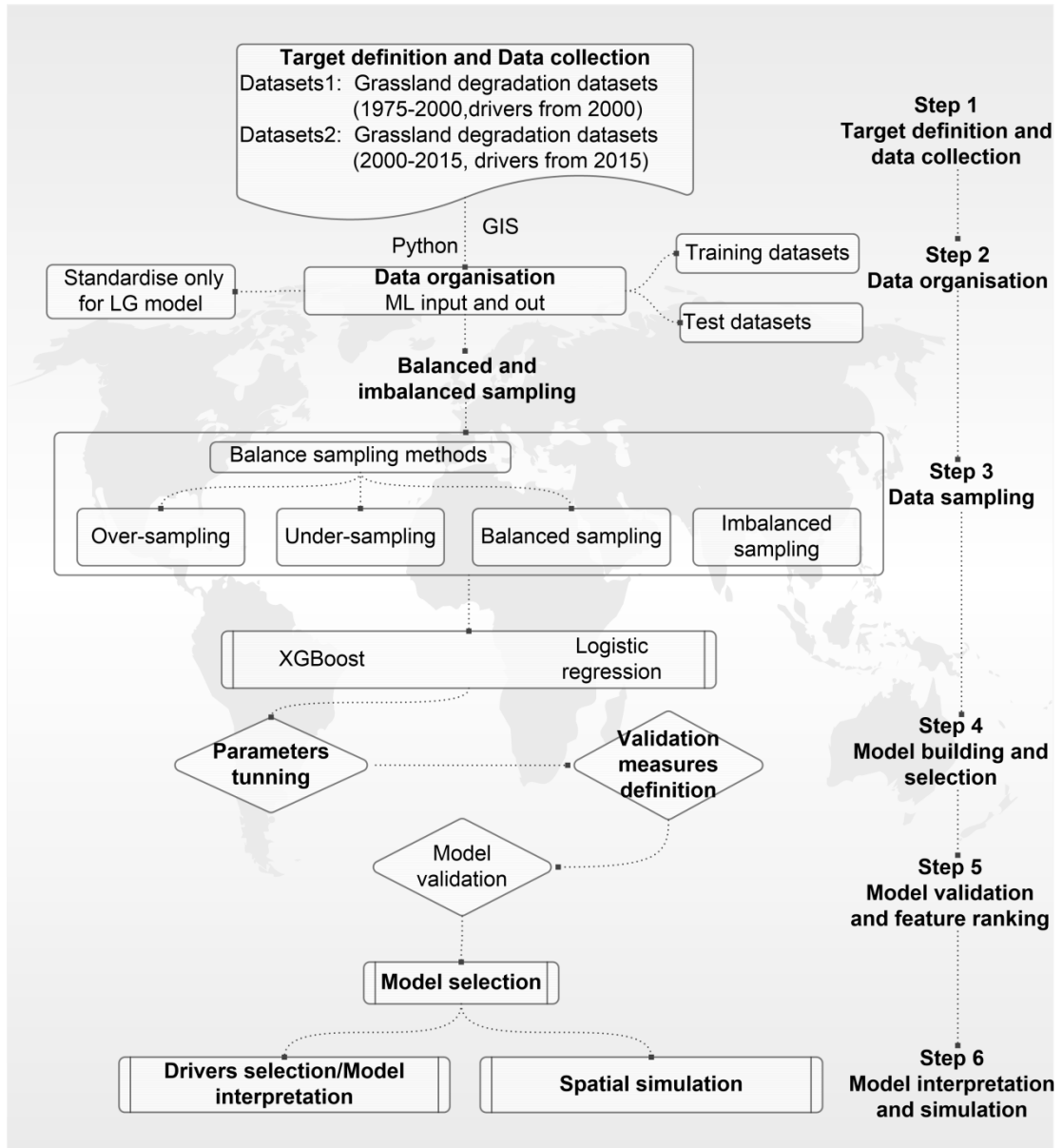Fig. S 3: Data organisation and the four sampling strategies used in this study.

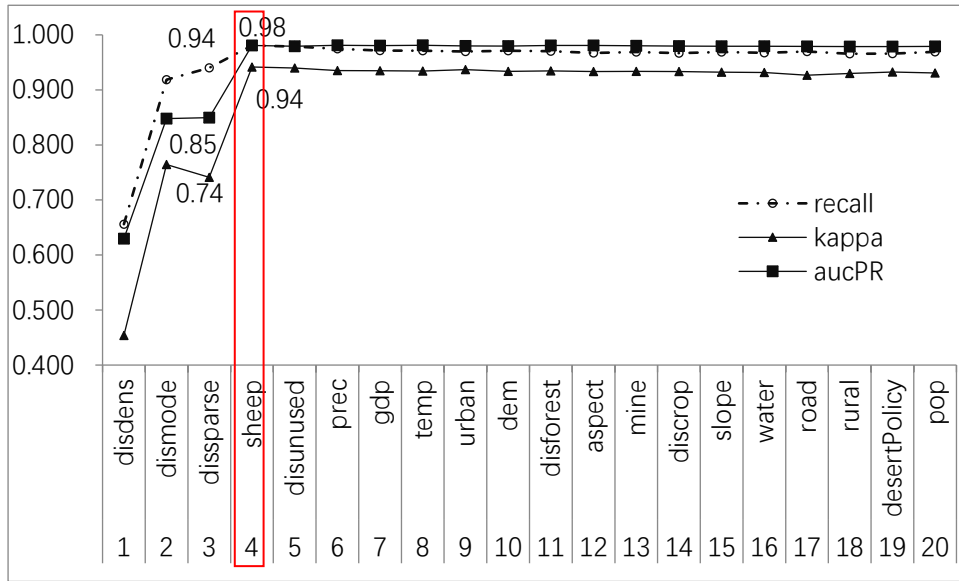Fig. S 4: The workflow of the machine leaning process in this study.

Fig. S 5: Values obtained for κ, recall and ACC using the recursive elimination method.
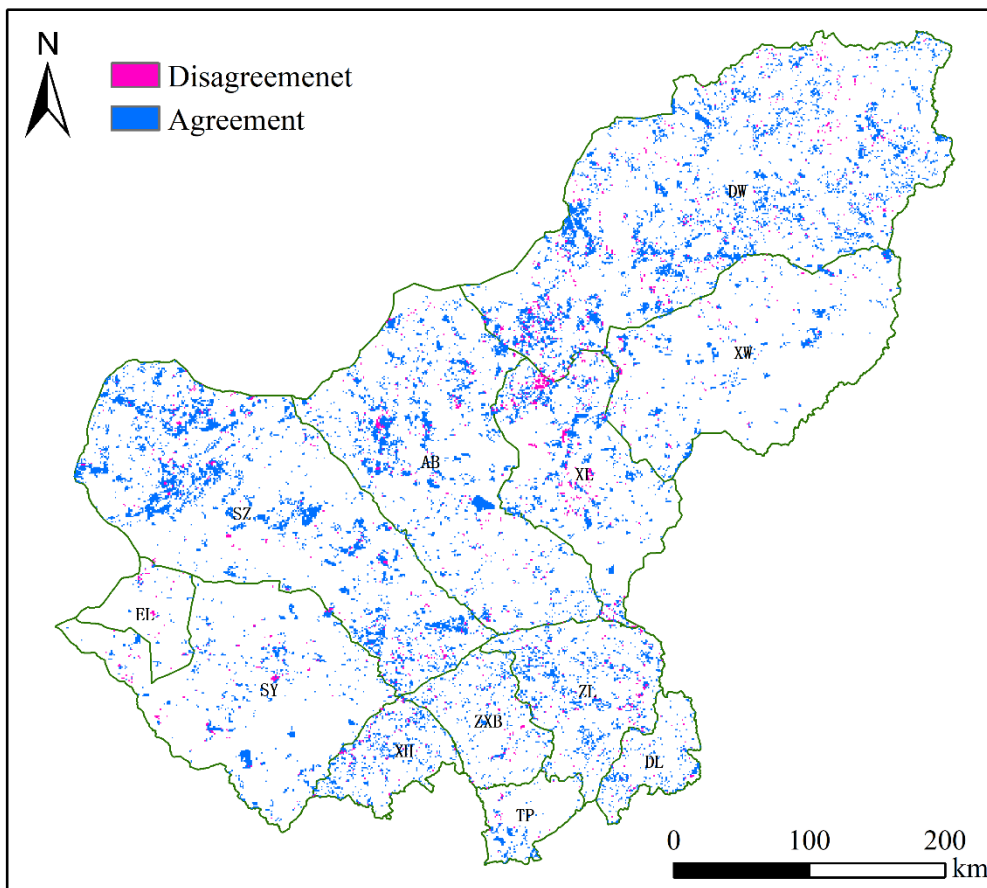

Fig. S 6: Maps of prediction results with top four drivers in Figure 6 and observed values.
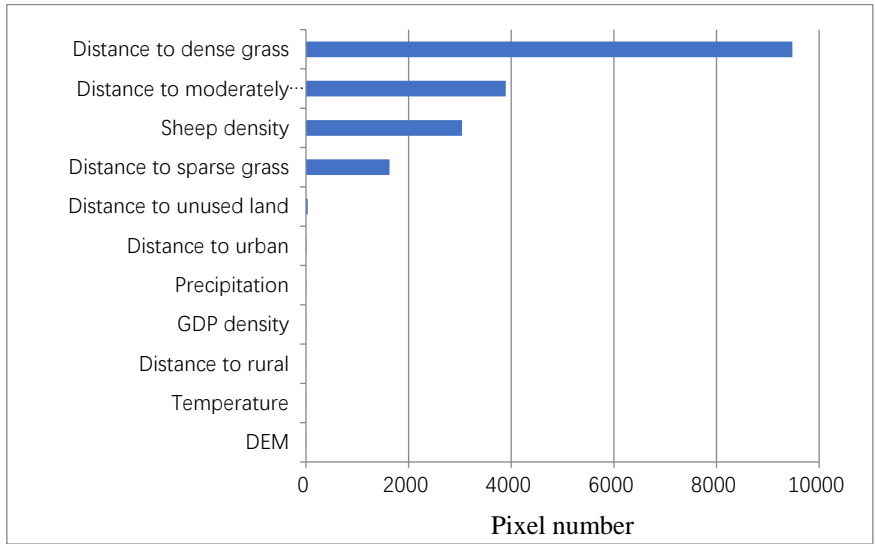
Fig. S 7: The number of pixels in which a driver is dominant. This analysis is limited to only the primary drivers.
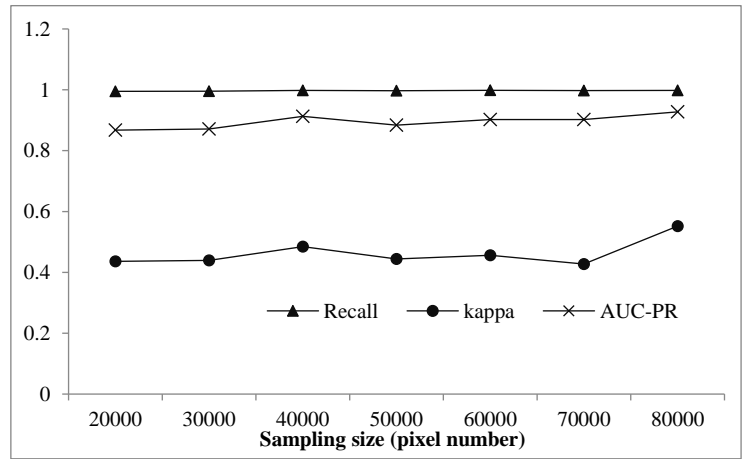

Fig. S 8: Under-sampling simulation results for different sampling sizes.