**Appendix B.**

The formulas are as follows:

|  |  |
| --- | --- |
|  | (3) |
|  | (4) |

Where, and are the final growth probability of land-use k in unit and the growth probability surface of the land use, respectively. is the function of decision sets. donates the predicted land use type of the th decision tree for vector . represents the total decisions. is a random value between 0 and 1. is a user-determined threshold for generating new land-use patches.