Conversion of Land-Use and its Effects modelling framework (CLUE)

Driving Factors
Demographic, Socio-economic, Biophysical

Individual Land use classes in SMM catchment
Cropland, Forest cover, Built-up, Water, Soil, Shrubland

Future time series maps for SMM catchment

Location Characteristics
Location Suitability

Conversion Settings
Conversion Elasticity

Preference Location

Neighborhood Functions

Spatial Policies & Restrictions
Urban & Protected forest, wetlands and parks

Statistical Analysis

Land use @ time t

CLUE-s Allocation

Check If Conversion is allowed

Conversion Matrix

<table>
<thead>
<tr>
<th>Land use</th>
<th>Tree cover</th>
<th>Cropland</th>
<th>Built up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree cover</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Cropland</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Built up</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

Check If Allocated = Demand

Land Requirements/Demand
Future annual demand per land use

Extrapolation of Trends
Based on historical land use change