

Appendix 1. An extract of a portion of the matrix resulting from the process of ‘morphological analysis’.

Table A1.1 The following table presents one set of row and columns from the matrix of drivers and variables used in the Mexican case, to illustrate the results of carrying out ‘morphological analysis’. In this case, the complete matrix contained seven variables, each previously identified by the community as a key aspect of the local socio-ecological system. The matrix contents were used during the creation of alternative contrasting future scenarios. For more information about the drivers and all the system variables included in this matrix see Escalante Semerena et al. (2014).

| System variable | | Drivers of change | | | | | | | | | |
|--|--|--|--|---|--|---|---|---|--|---|--|
| | | Social driver: Tightening/ loosening immigration controls in US | | Technological driver: Change in timber harvesting machinery | | Environmental driver: Climate change | | Economic driver: Changes in global market prices for timber products | | Political driver: Mexican Political stability | |
| State 1: US immigration controls tighten and allow fewer entries per year | State 2: US immigration controls are relaxed and allow more entries per year | State 1: Improvement reducing production costs | State 2: Technology remains the same and productions costs increase | State 1: Temperatures increase slightly, rainfall patterns remain similar to today | State 2: Temperatures increase 2C, rainfall decreases significantly | State 1: Timber prices go up | State 2: Timber prices go down | State 1: Self-defence forces are not in the territory | State 2: Self-defence forces appear in the territory | | |
| Extraction levels and exclusion rights of forestry | Extraction levels increase to satisfy population’s needs | Extraction levels would reduce as demand reduces | Increased extraction levels, with exclusion of external individuals | Extraction levels would decrease | Levels of extraction levels and exclusion would remain constant | Extraction levels would be lower as forest system changes | Increased extraction levels and exclusion of external individuals | Extraction levels and external exclusion would both be lower | Extraction levels and external exclusion would both be lower | Extraction and rights to access would controlled by external and violent groups | |