


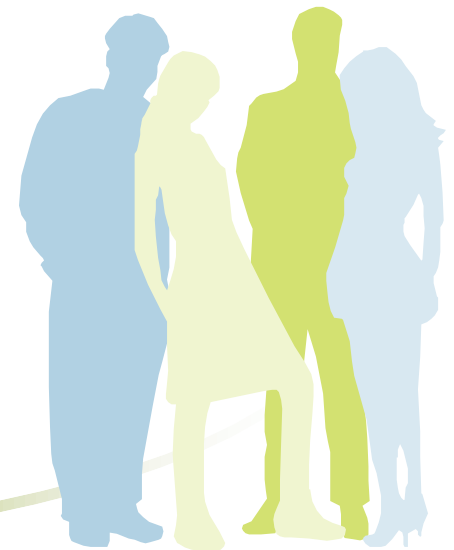


SPATIAL INTERPRETATION OF SOCIO-ECONOMIC INFORMATION

MSDP (2011-2031) Project



Planner Ripan Debnath
Decode-Bestway-Geomark JVC





Presentation Outline

- Basic information
- Findings of field verification
- Method & outcome of spatial interpretation
- Resultant maps/figures
 - Overall scenario
 - Scenario by family types
 - Scenario by structure (settlement) types
- Remarks



Basic Information

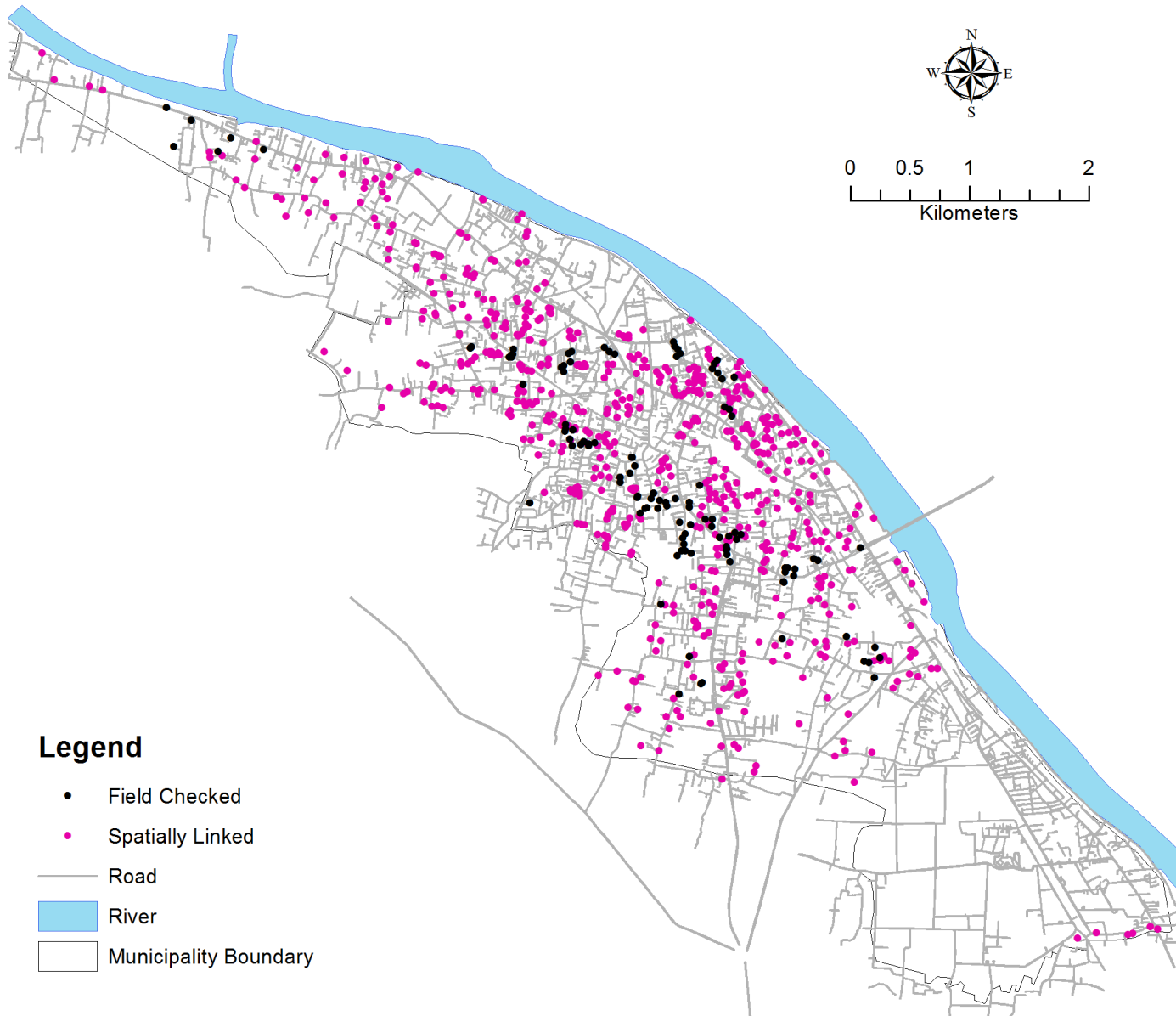
- Location: Mymensingh Municipality
- Area type: Urban
- Total surveyed: 938 households (HH)
- Sample checked: 208 HH (22%)
- Spatially linked information: 629 HH (67% of total)
- Variables considered for spatial interpretation: 21 Nos.
- Parent classifier: 2 variables
 - Family type (Single & Joint)
 - Settlement type (Pucca & Others)



Findings of Field Verification

- Variation between the results of total surveyed and checked HHs is ranging within $\pm 5\%$ which is generally acceptable and indicates great reliability of the total survey work.
- Some high deviations have been observed for distance related figures which indicates that most of the field checking were performed within a close proximity to the city center.
- Coincidentally the checked sample HHs belong a rich community since the deviations in income and expenditure proportions have been observed among the upper ranges of the respective classifications.
- Disaster and other problem related results sustained as were found in previous analysis.

Map of Checked & Spatially Linked Data



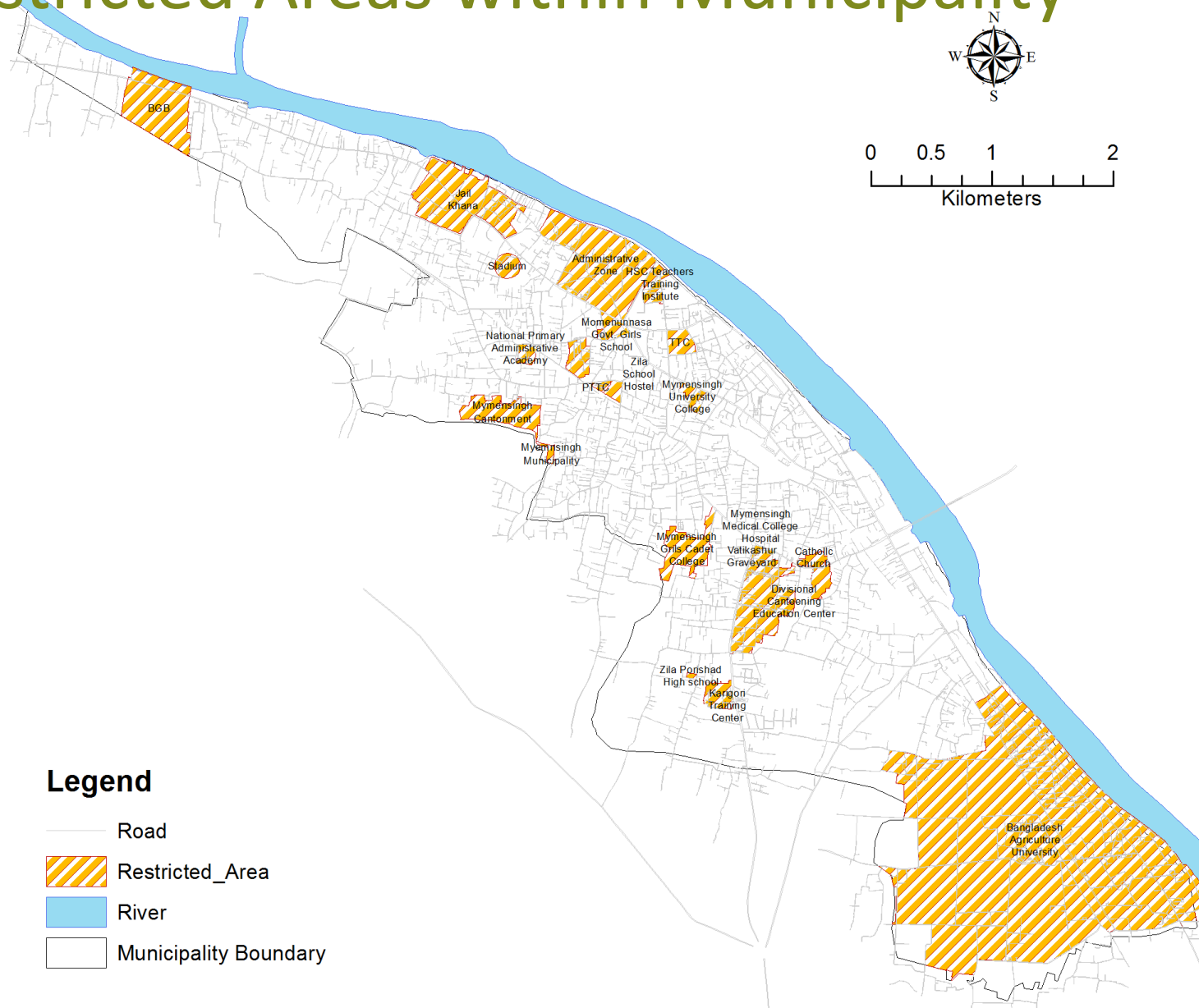
Method & Output

- Tools used: 3D Analyst Tools
- Area of exclusion: Restricted & large institutions
- Output format: Raster
- Output categories:
 - Overall scenario
 - Parent classifiers' oriented



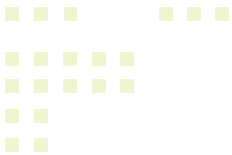
3D Analyst Tools
in ArcMap

Restricted Areas within Municipality



Summary of Considered Variables

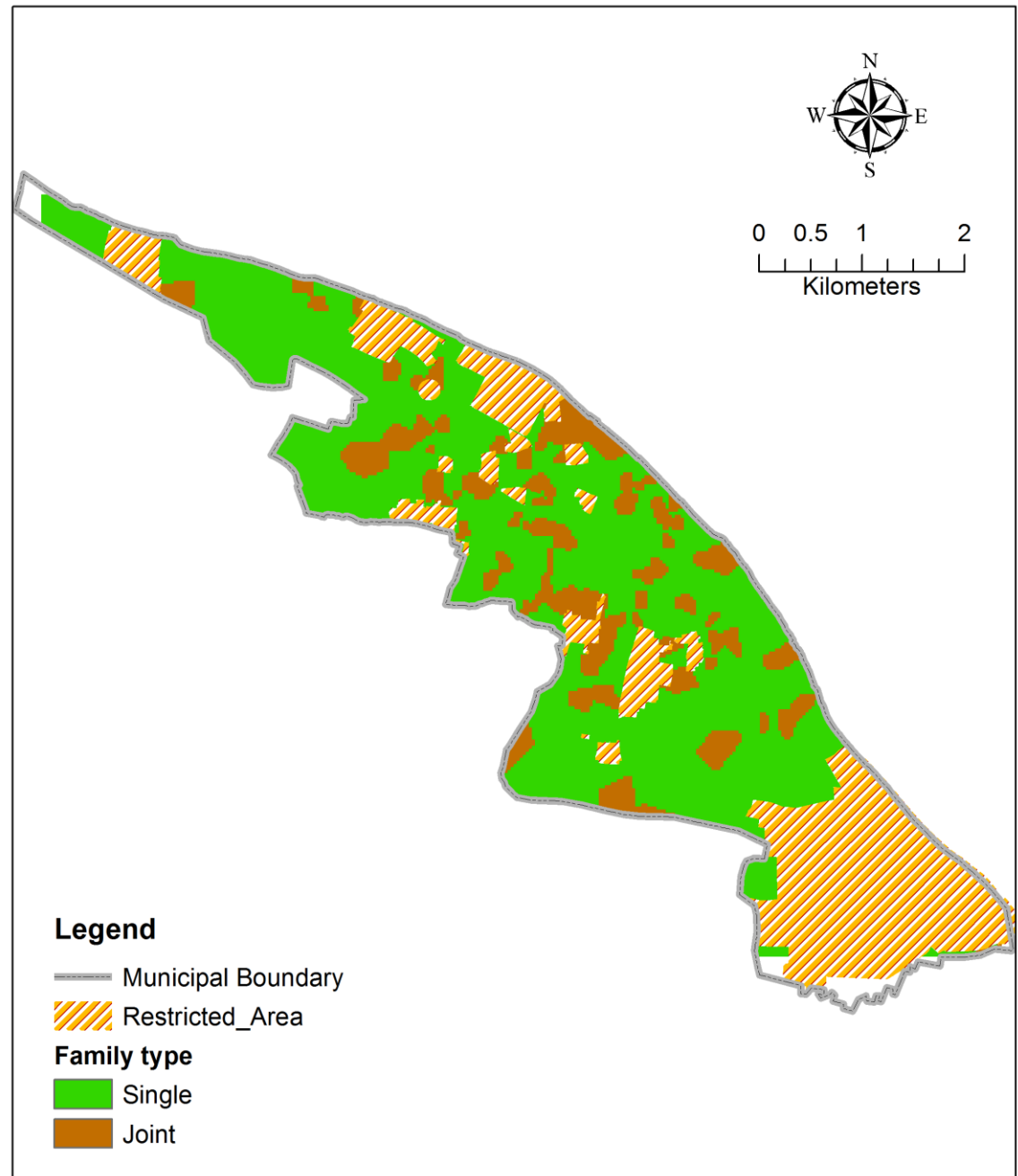
| Variable | Status of Response | |
|---|--------------------|---------|
| | N | Percent |
| Total family member | 629 | 100.00% |
| Type of the Family | 619 | 98.40% |
| Monthly Income of the Family | 626 | 99.50% |
| Monthly Family Expense of the Family | 626 | 99.50% |
| Year of Immigration | 218 | 34.70% |
| Reason of Immigration | 189 | 30.00% |
| Is the H.H. Owner of the Land/Flat? | 609 | 96.80% |
| Type of Structure | 522 | 83.00% |
| Land area in katha | 227 | 36.10% |
| Value of Land | 308 | 49.00% |
| Area of House/Flat (in sq ft) | 81 | 12.90% |
| Value of House/Flat | 81 | 12.90% |
| Has Land been Filled to Build the House? | 416 | 66.10% |
| Which Type of Land Use is Demanded More in this Area? | 570 | 90.60% |
| Land value in 2002 | 445 | 70.70% |
| Land value in 2007 | 456 | 72.50% |
| Land value in 2012 | 582 | 92.50% |
| Had anyone been Sick in Last One year? | 587 | 93.30% |
| What change has taken place ? | 202 | 32.10% |
| Are you interested to change your current LU? | 629 | 100.00% |
| Are you interested to leave space for road widening? | 629 | 100.00% |



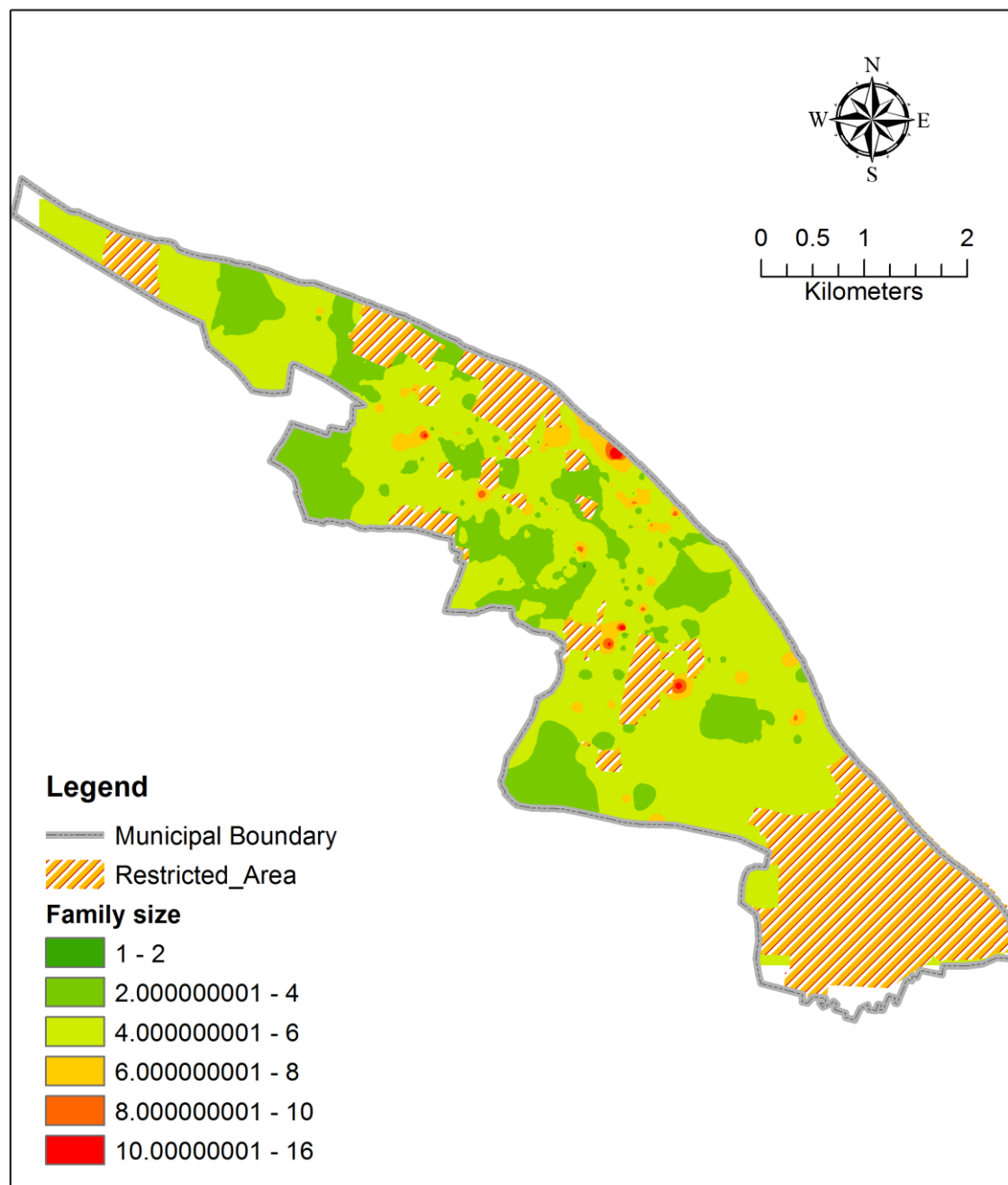
Spatial Interpretation

OVERALL SCENARIO

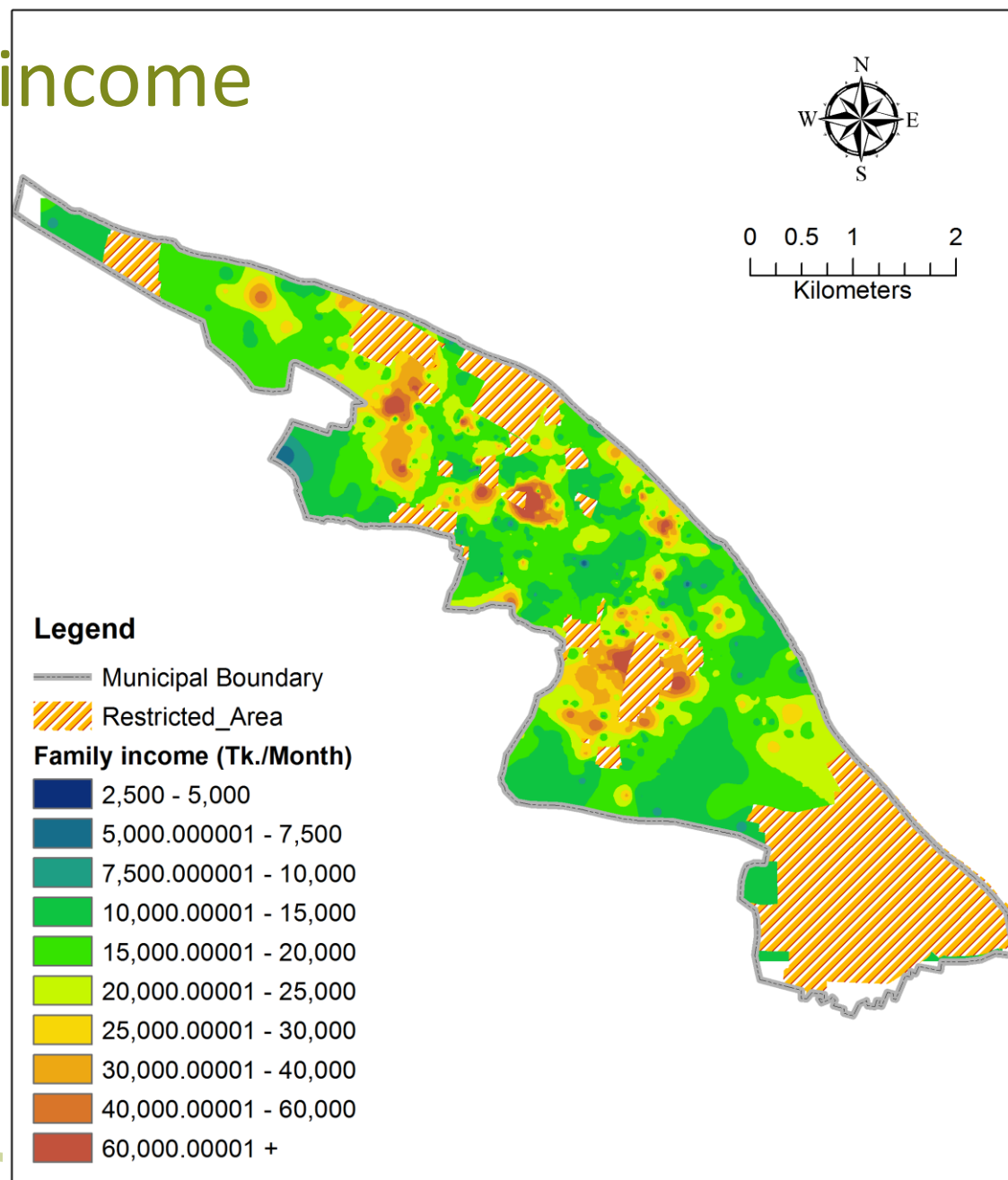
Family Type



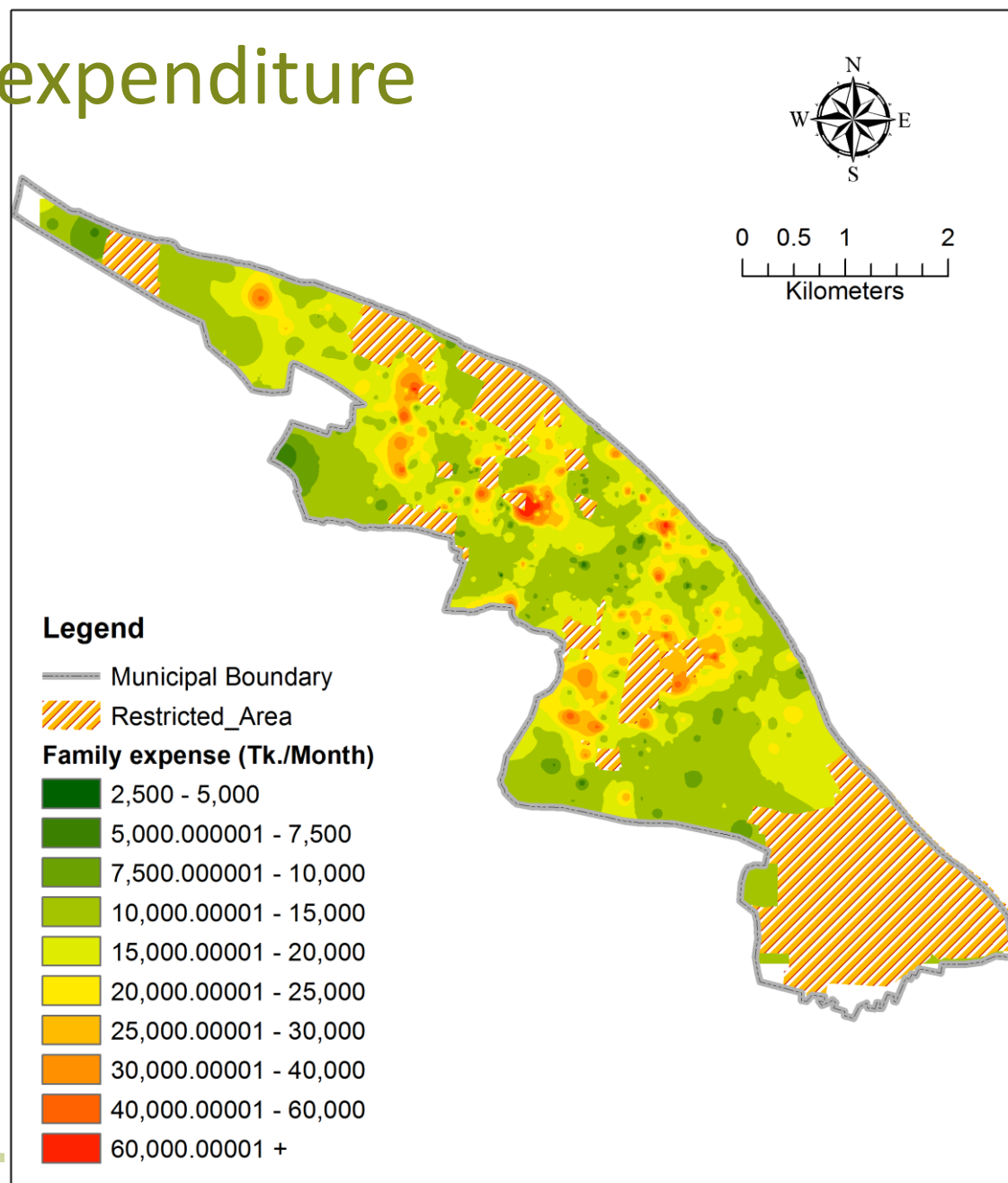
Family size



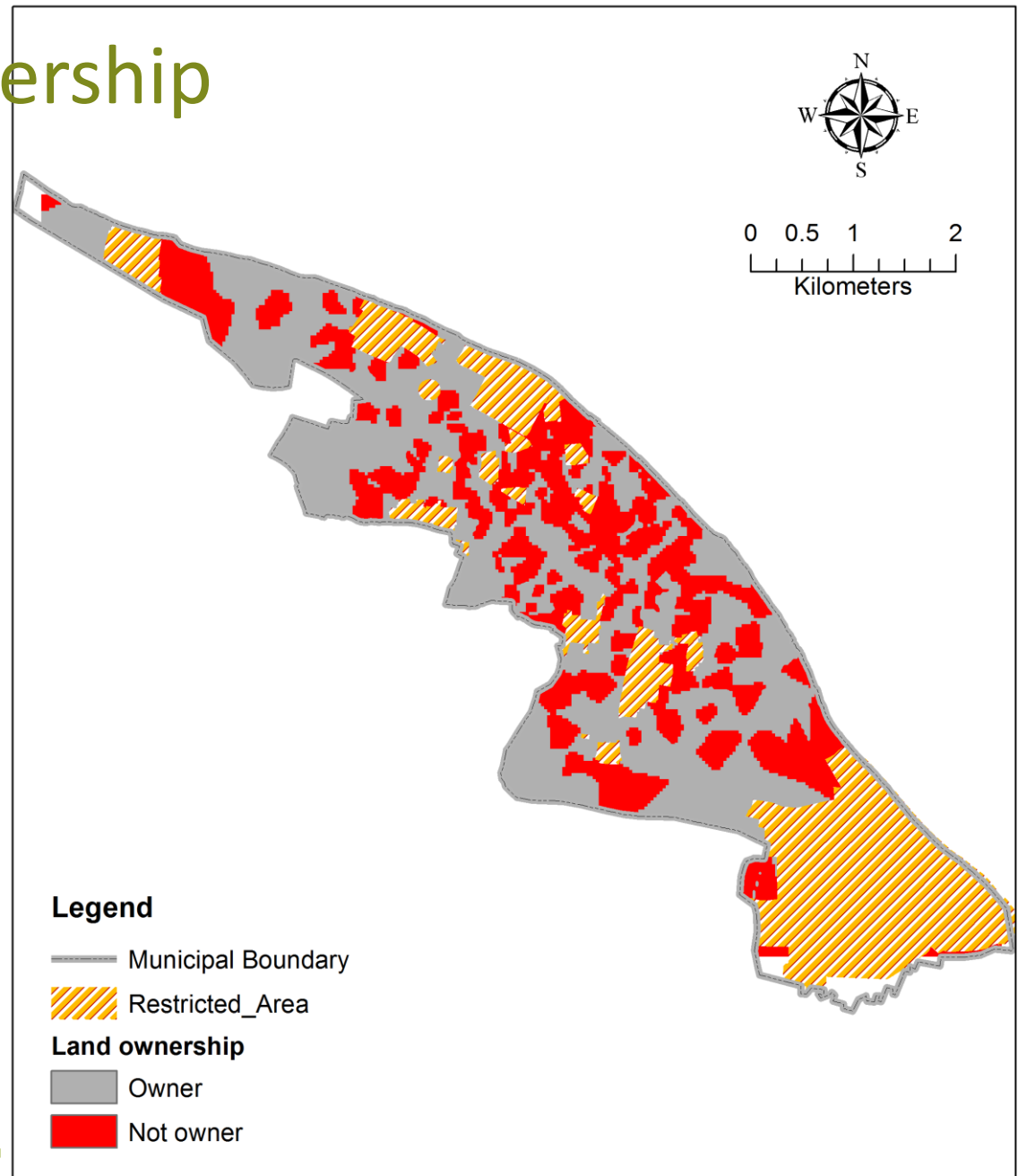
Total monthly income



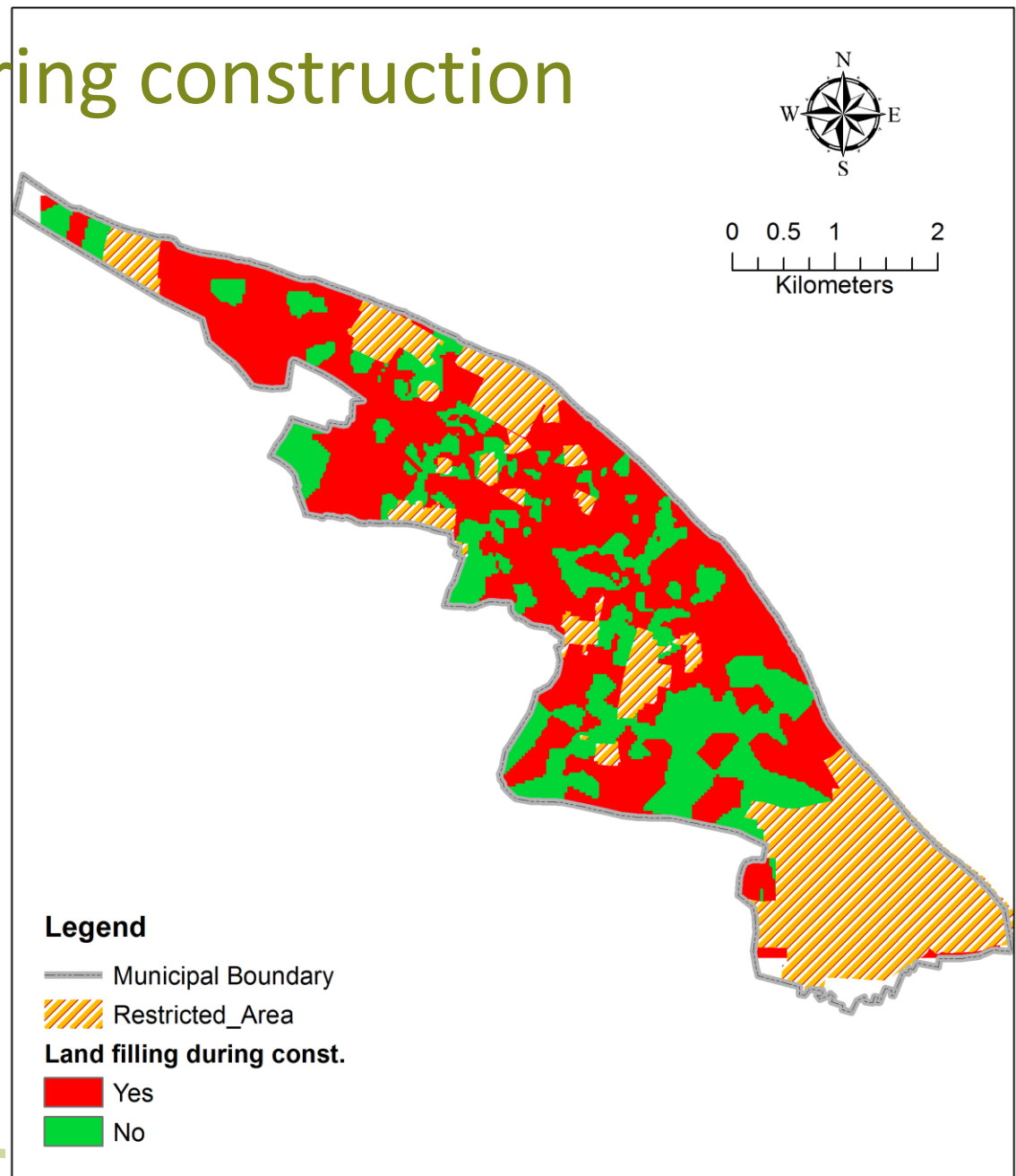
Total monthly expenditure



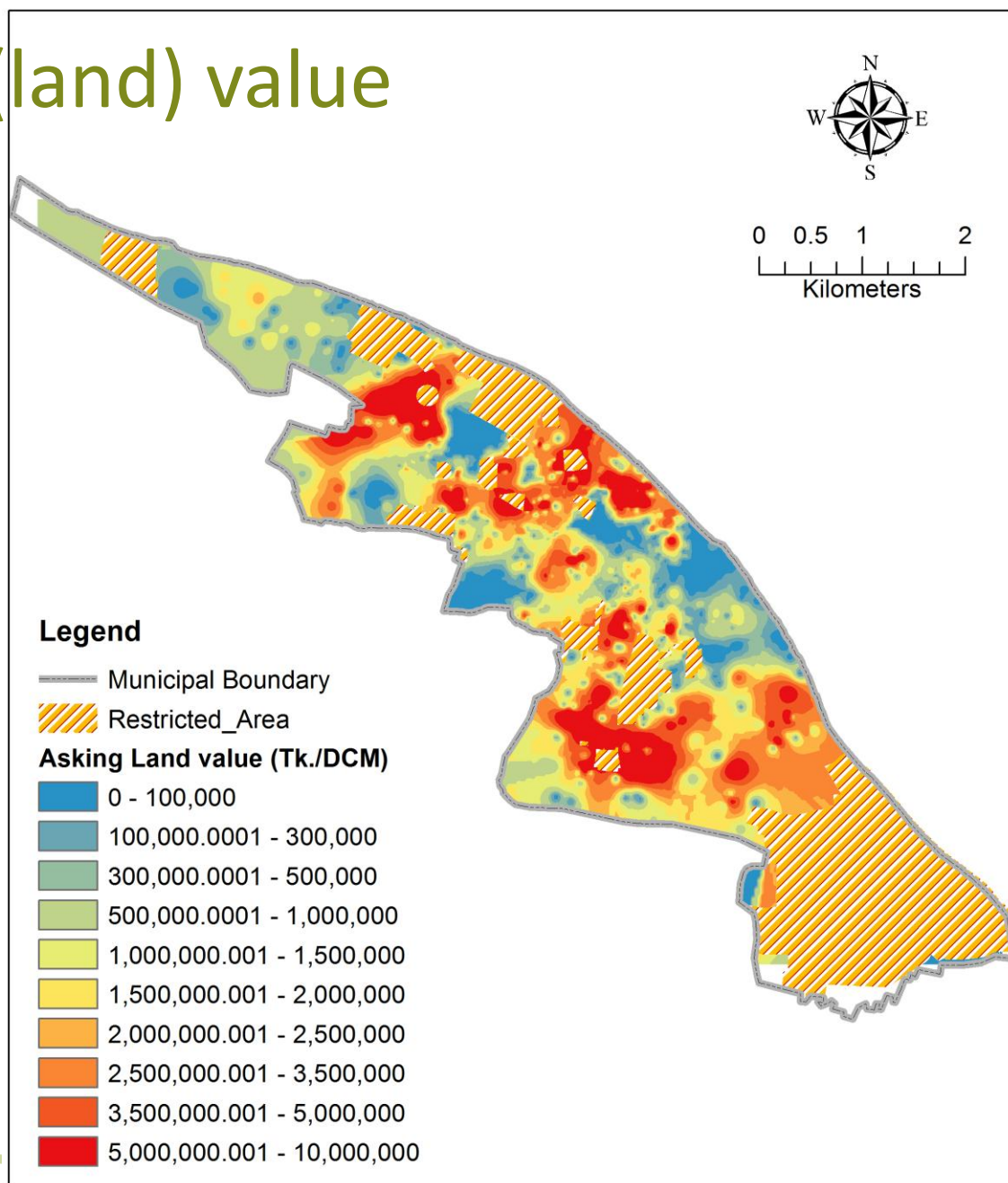
Land/Flat ownership



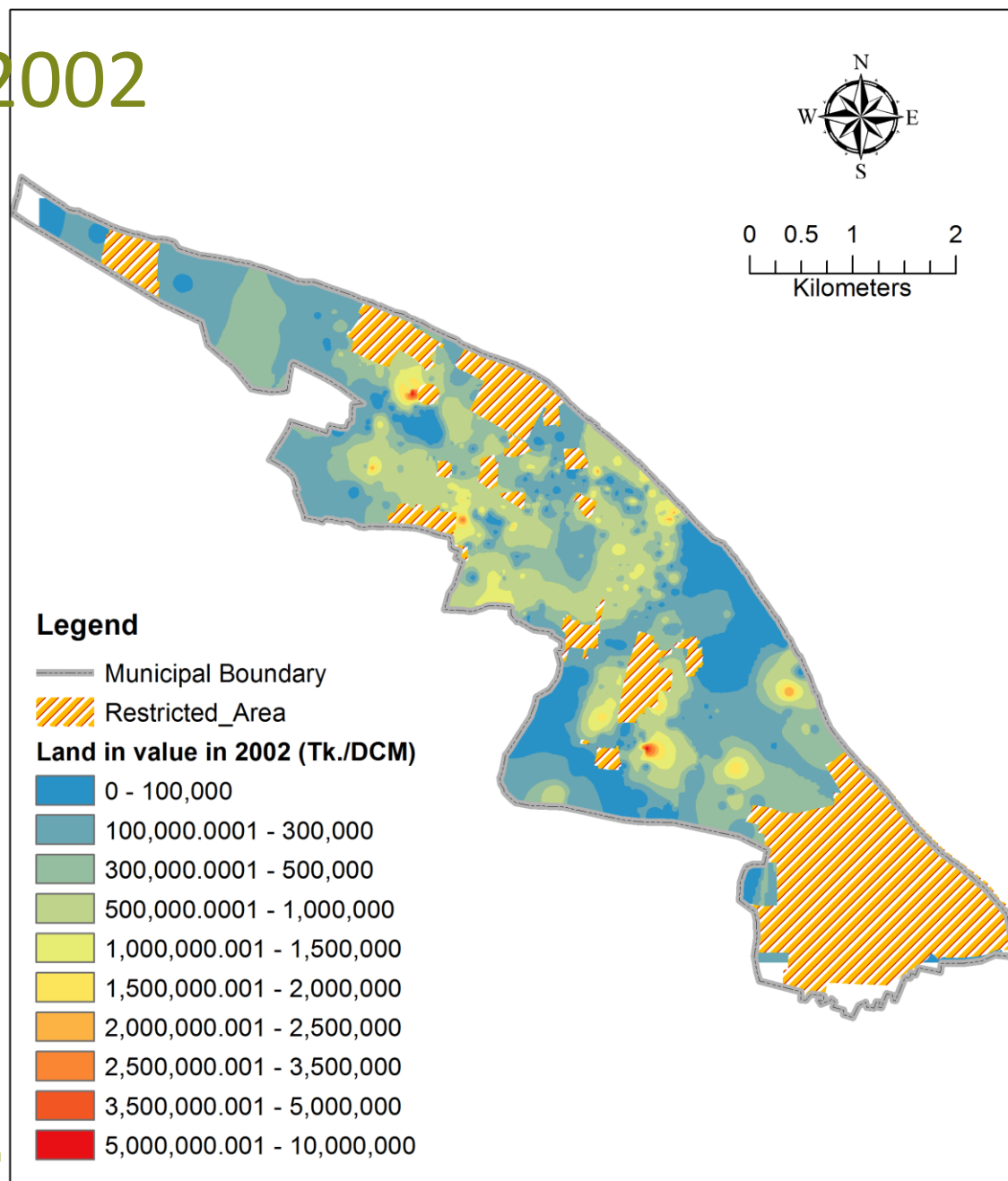
Land filling during construction



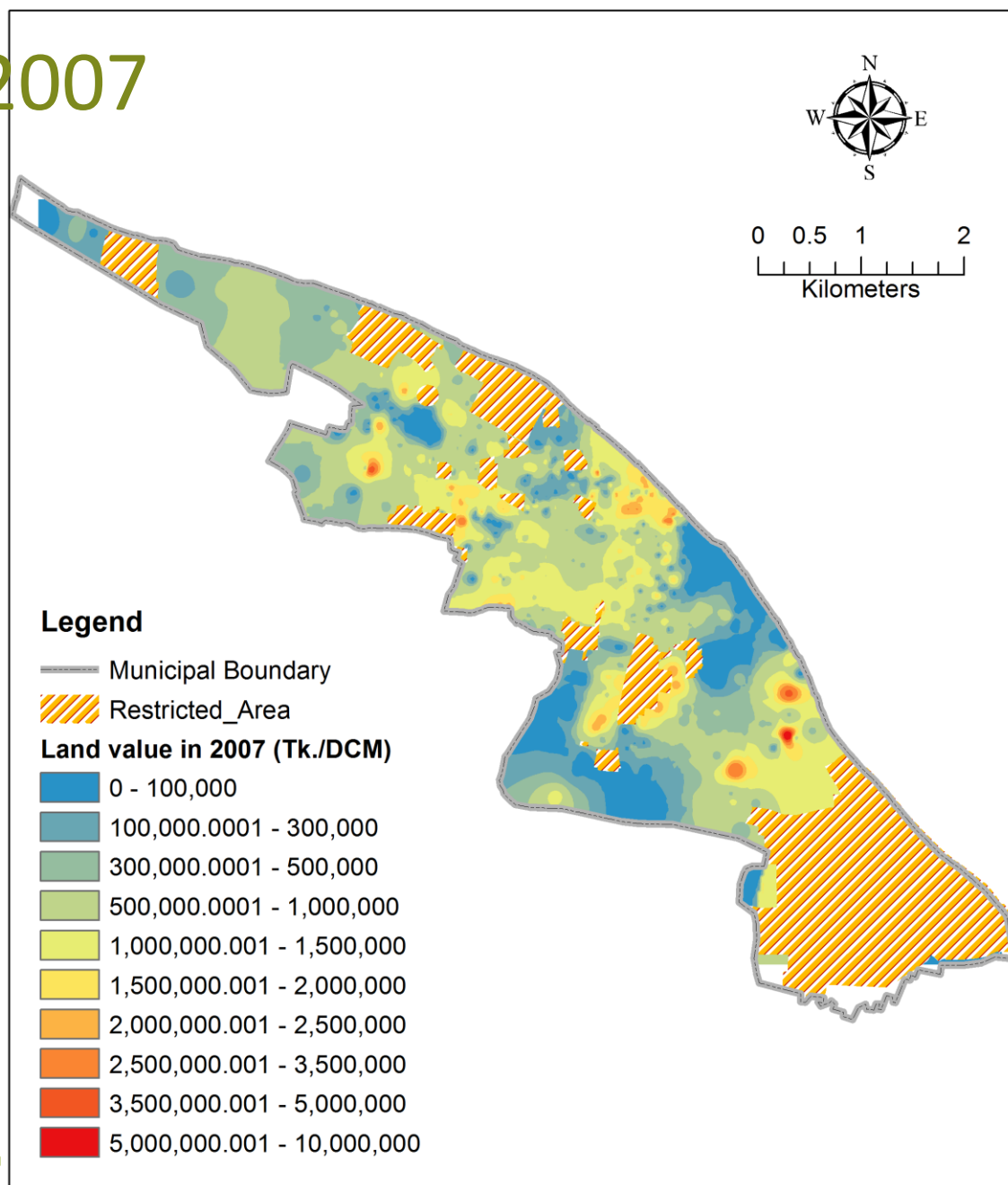
Current asset (land) value



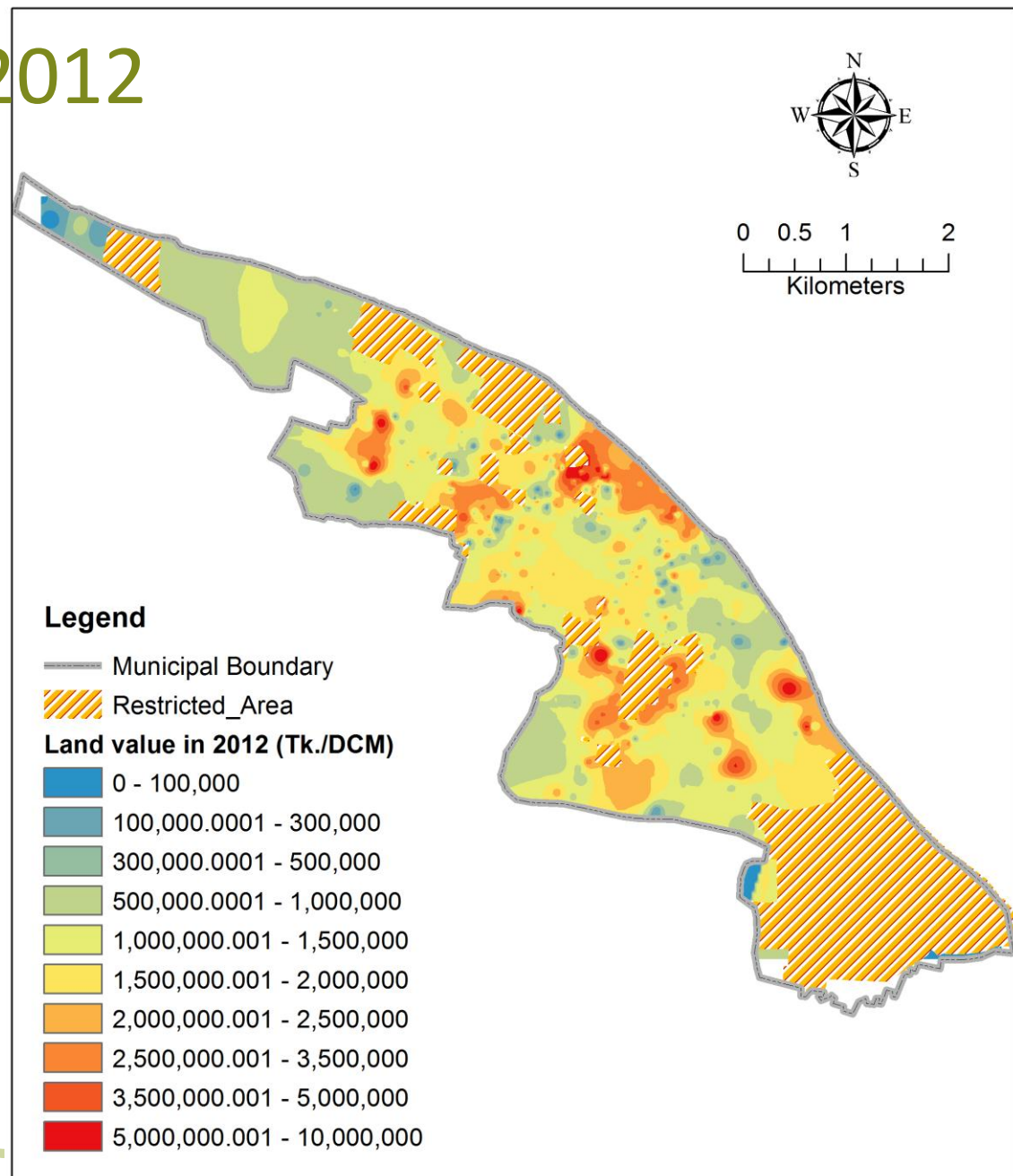
Land value in 2002



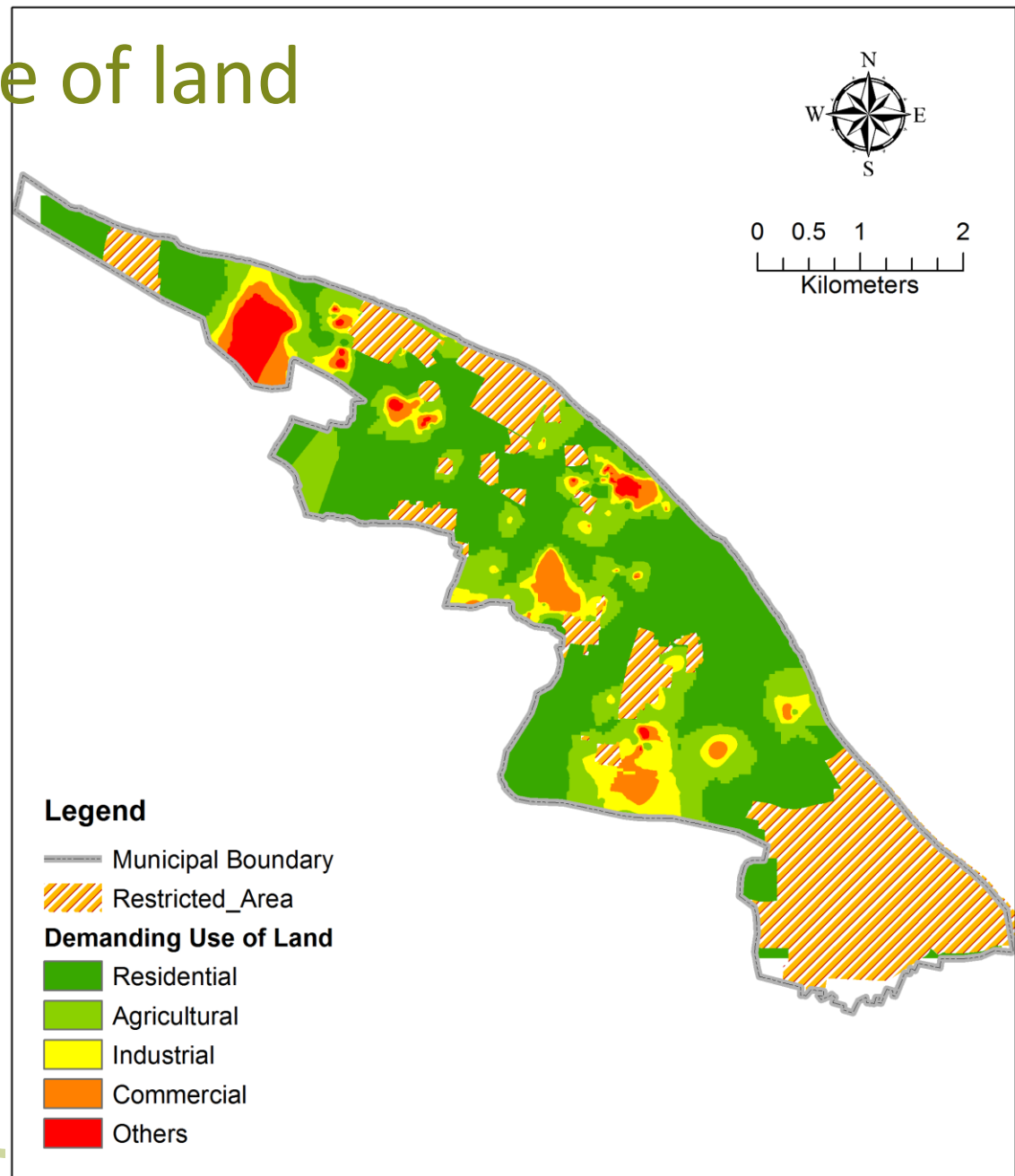
Land value in 2007



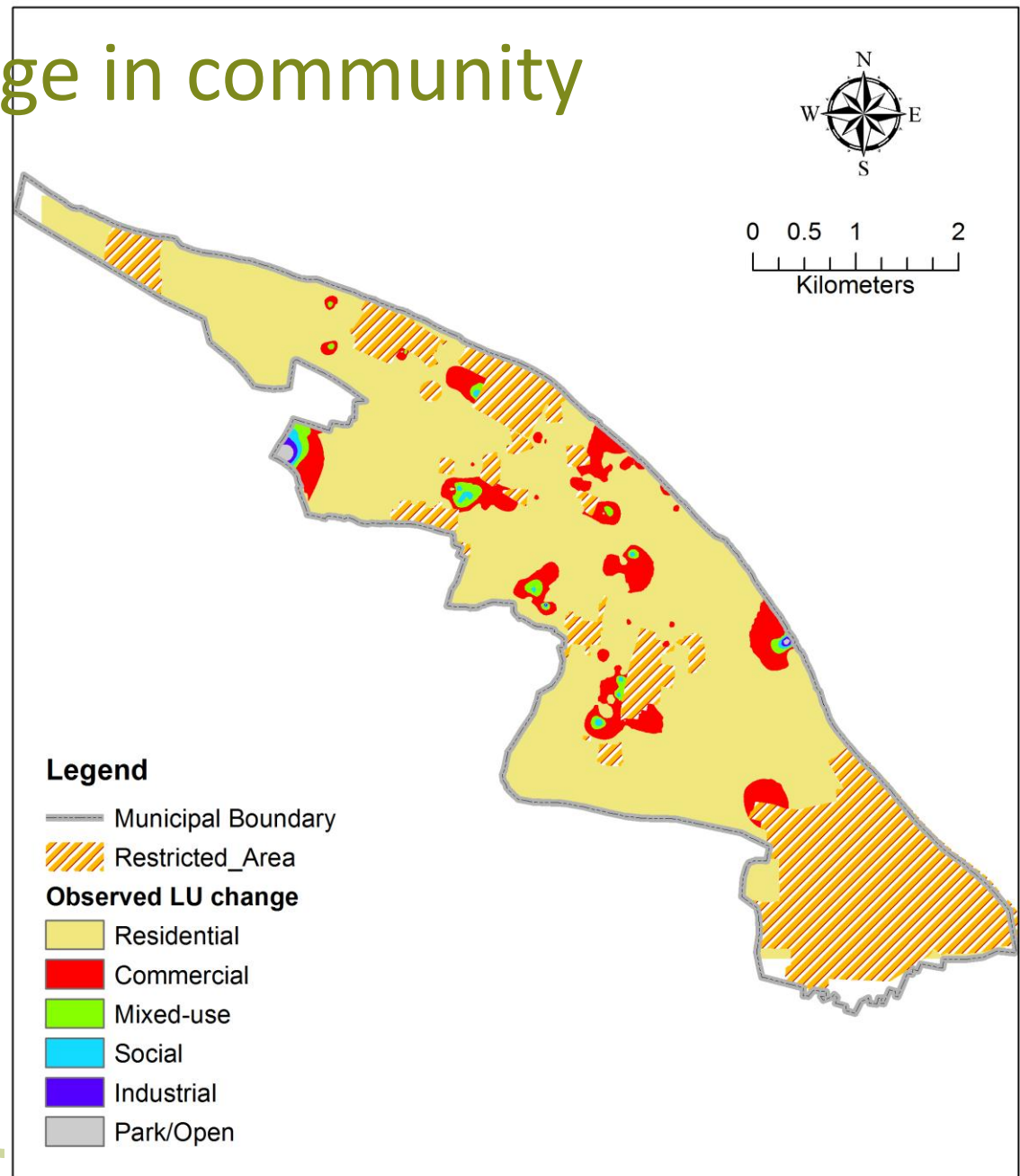
Land value in 2012



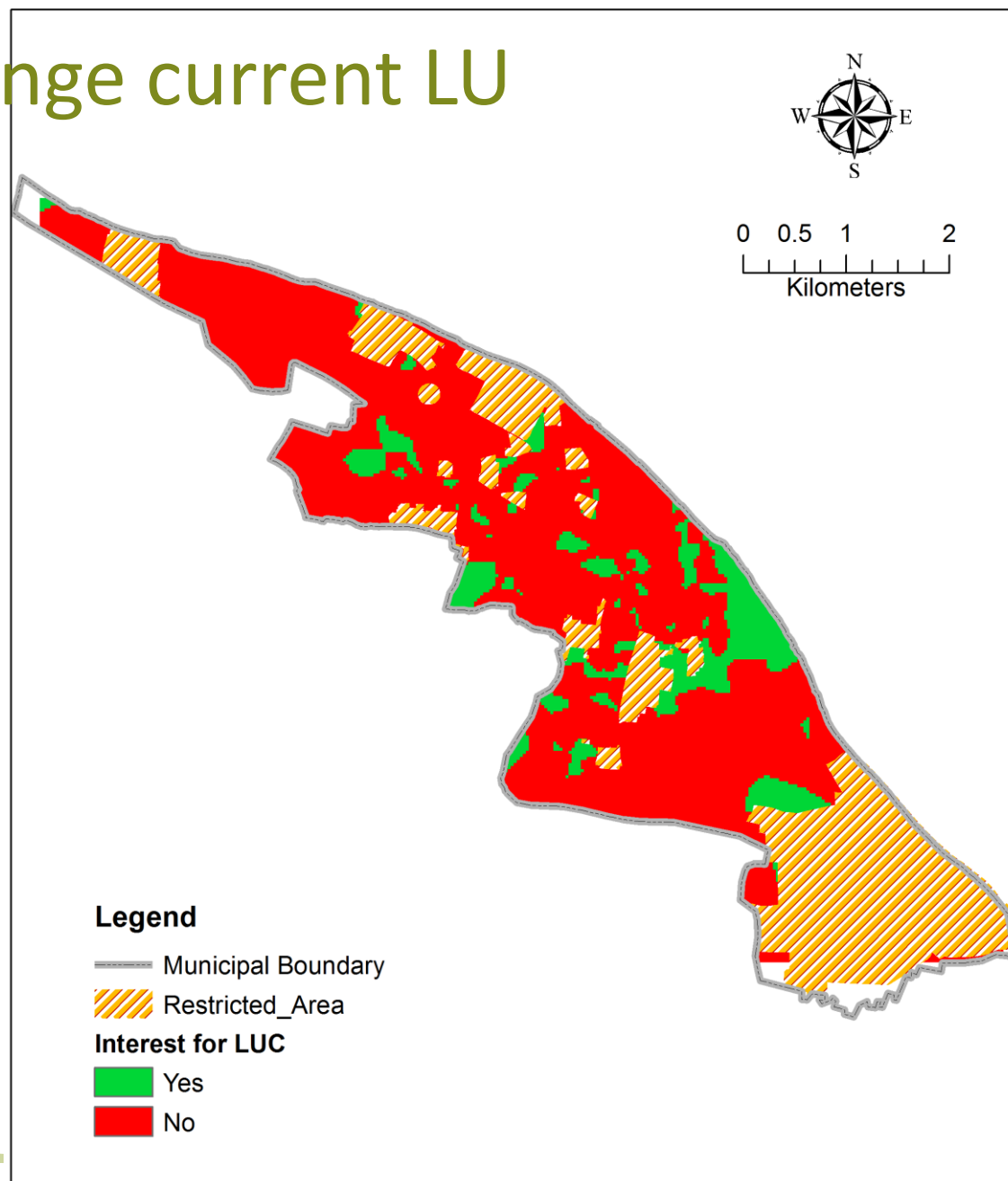
Demanding use of land



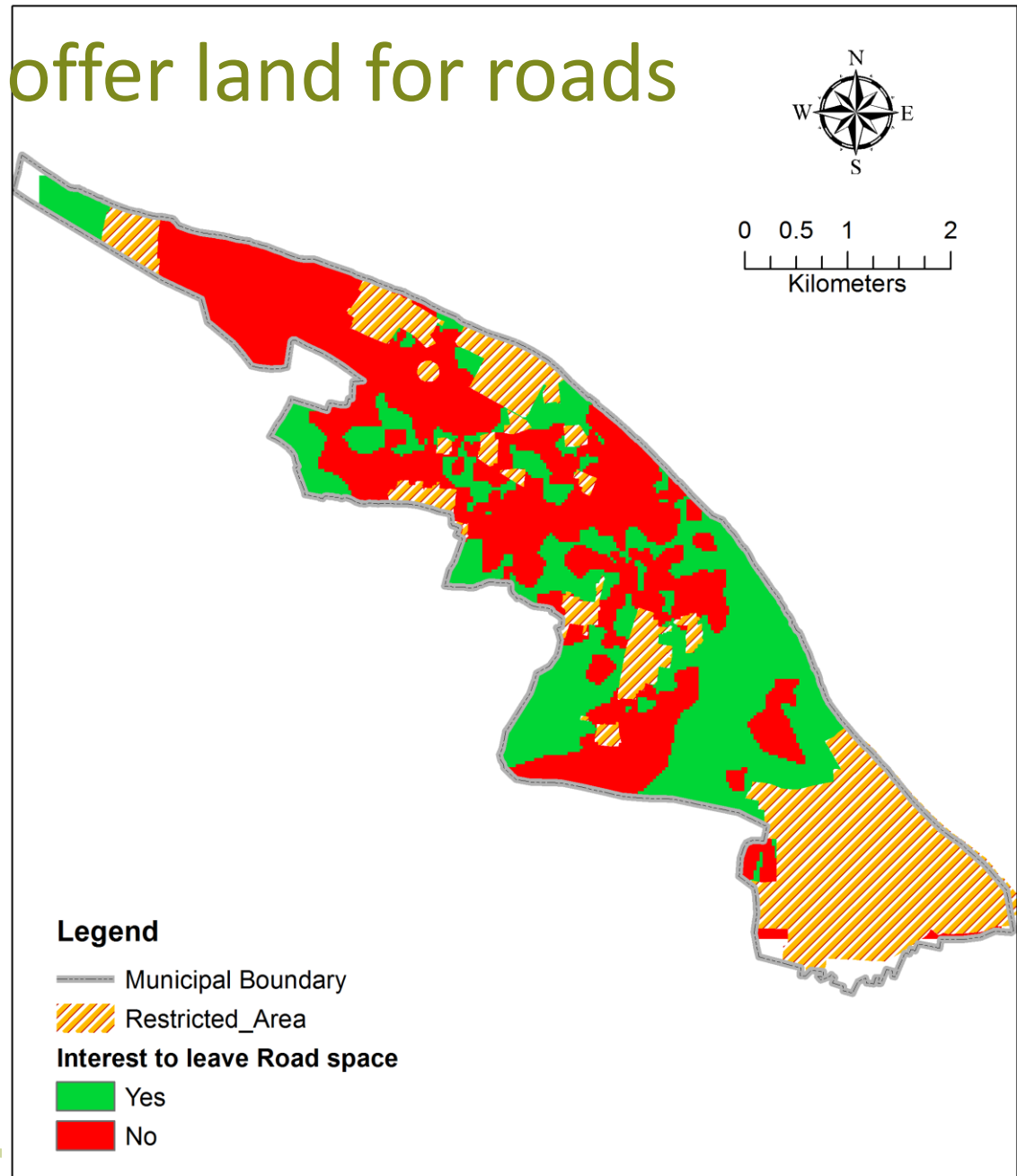
Land-use change in community



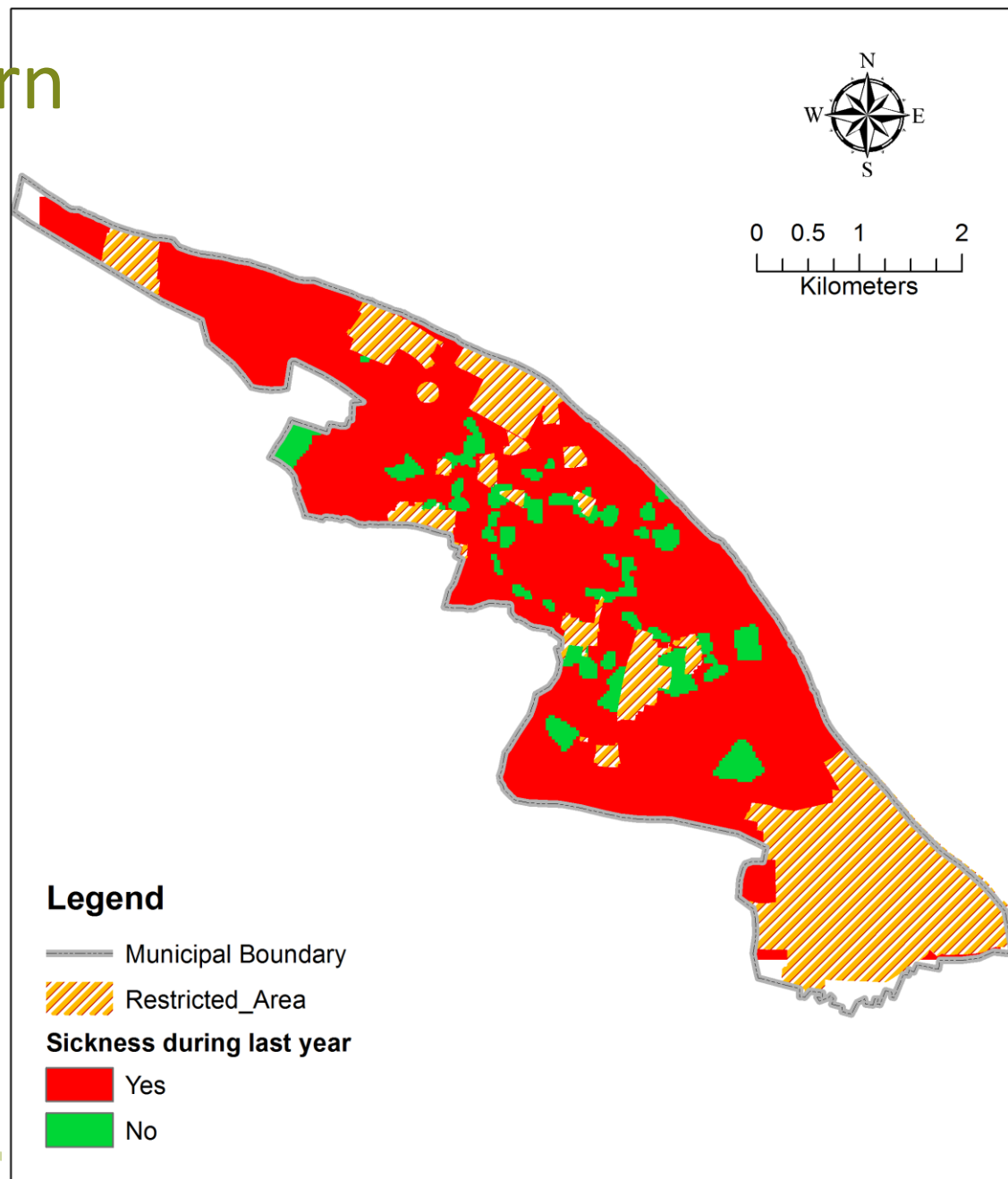
Interest to change current LU



Willingness to offer land for roads



Sickness pattern

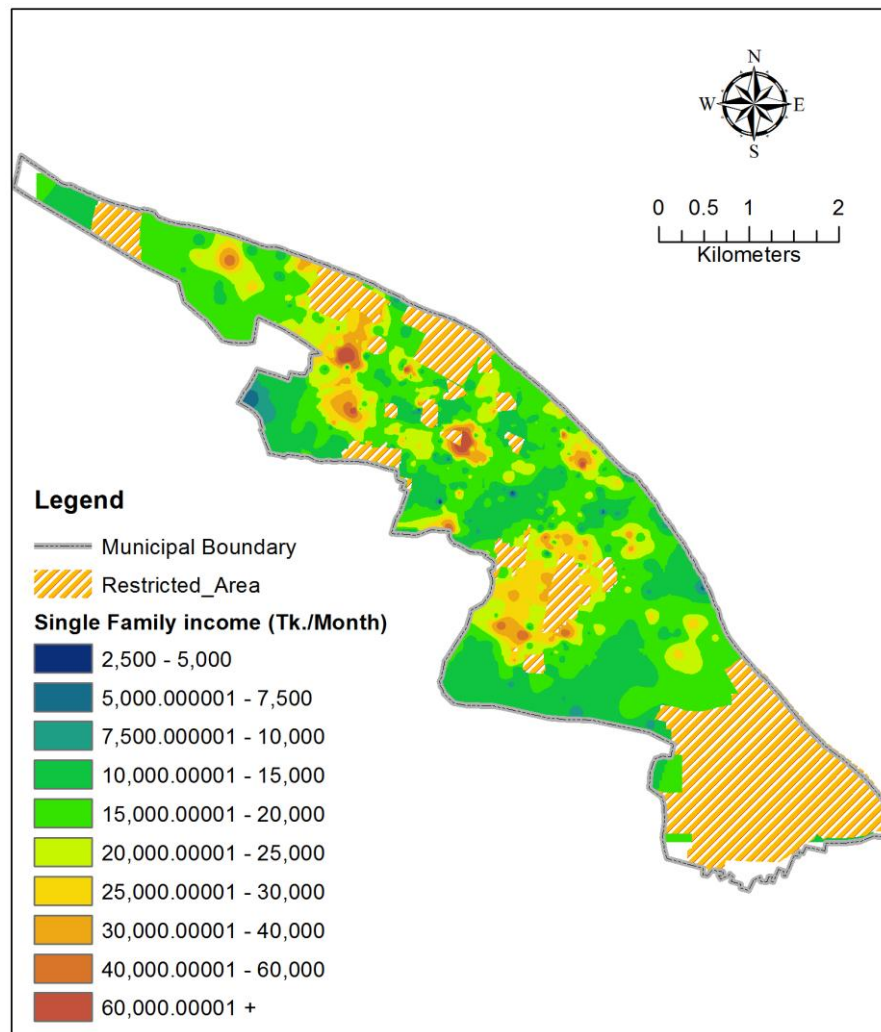
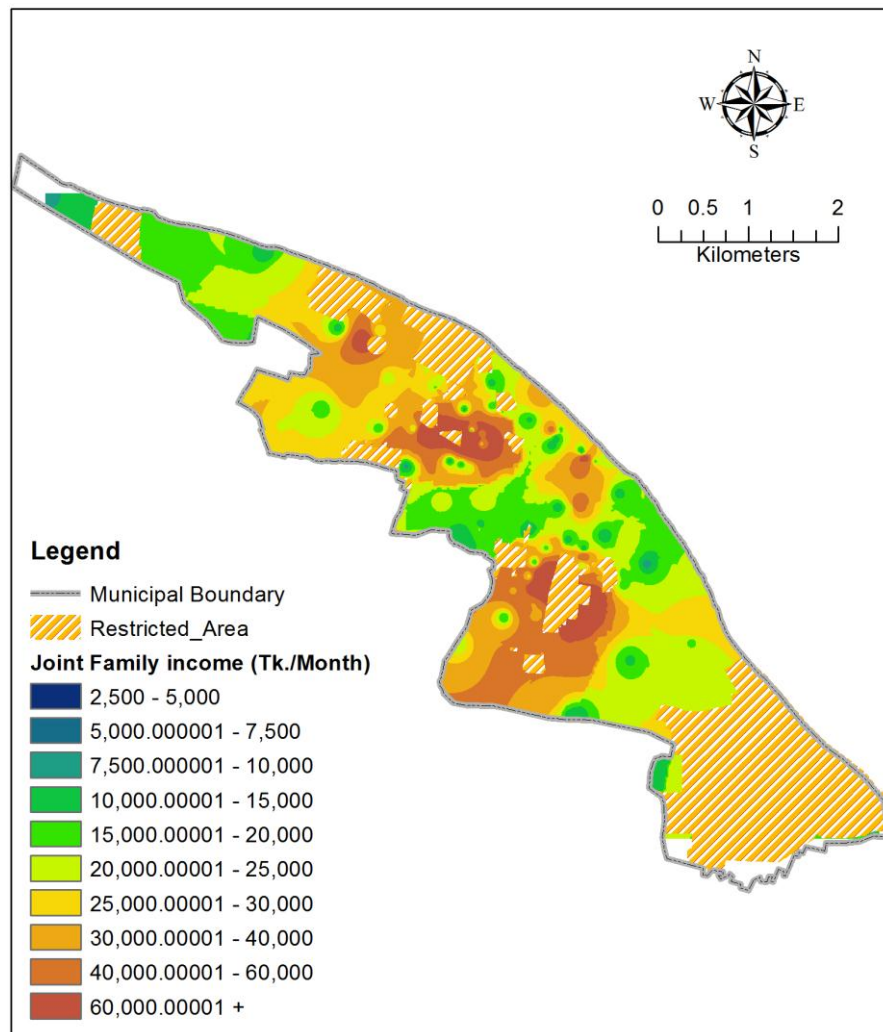




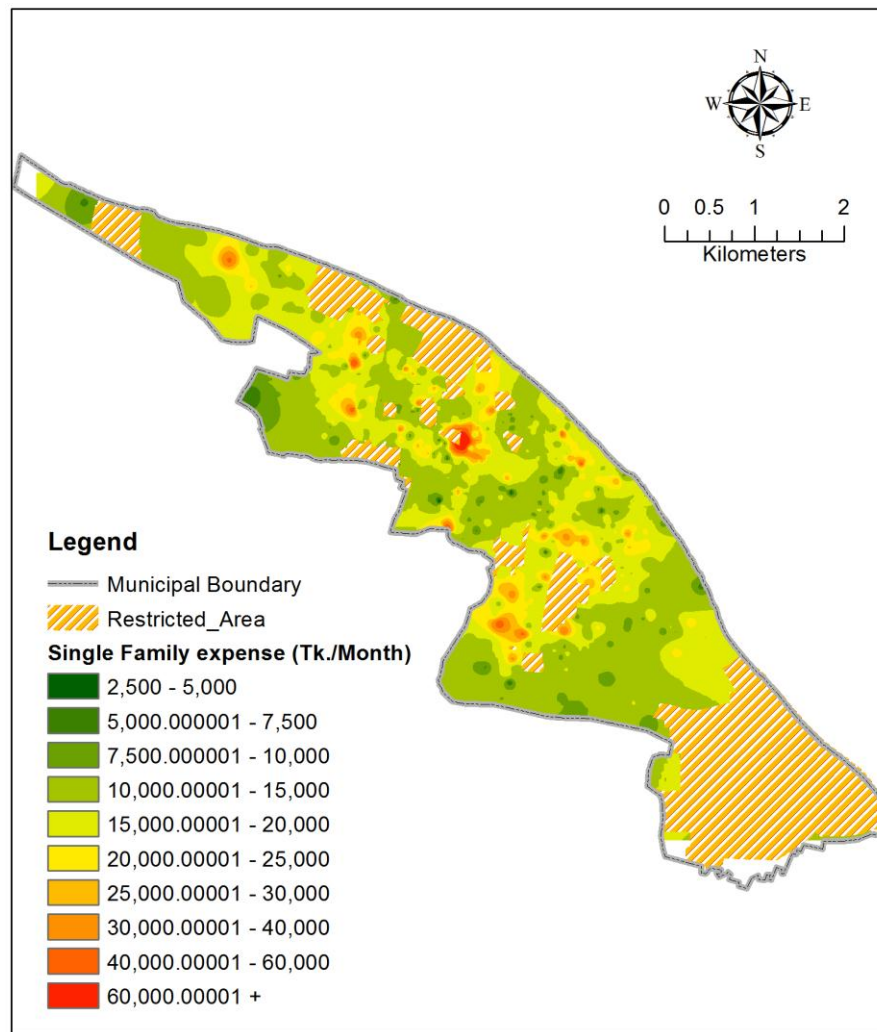
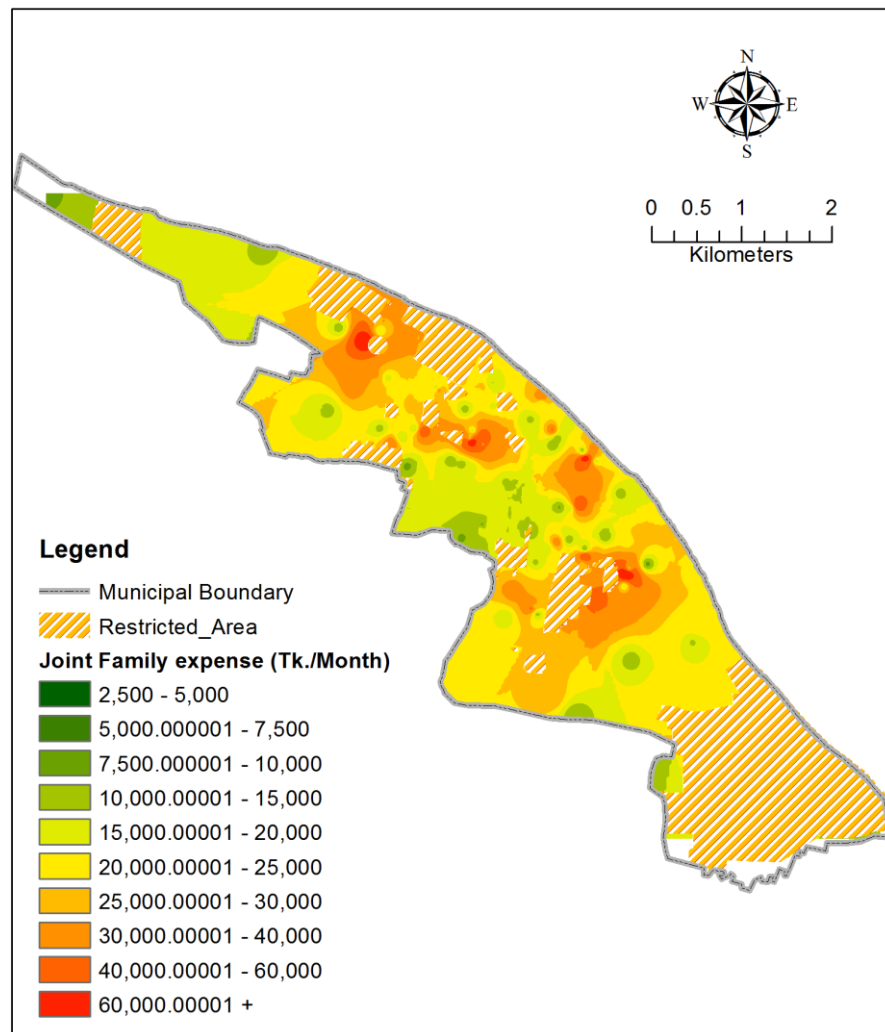
Spatial Interpretation

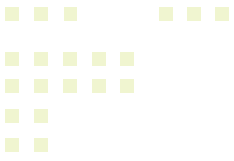
SCENARIO BY FAMILY TYPE

Monthly Income: Joint vs. Single family



Expenditure: Joint vs. Single family

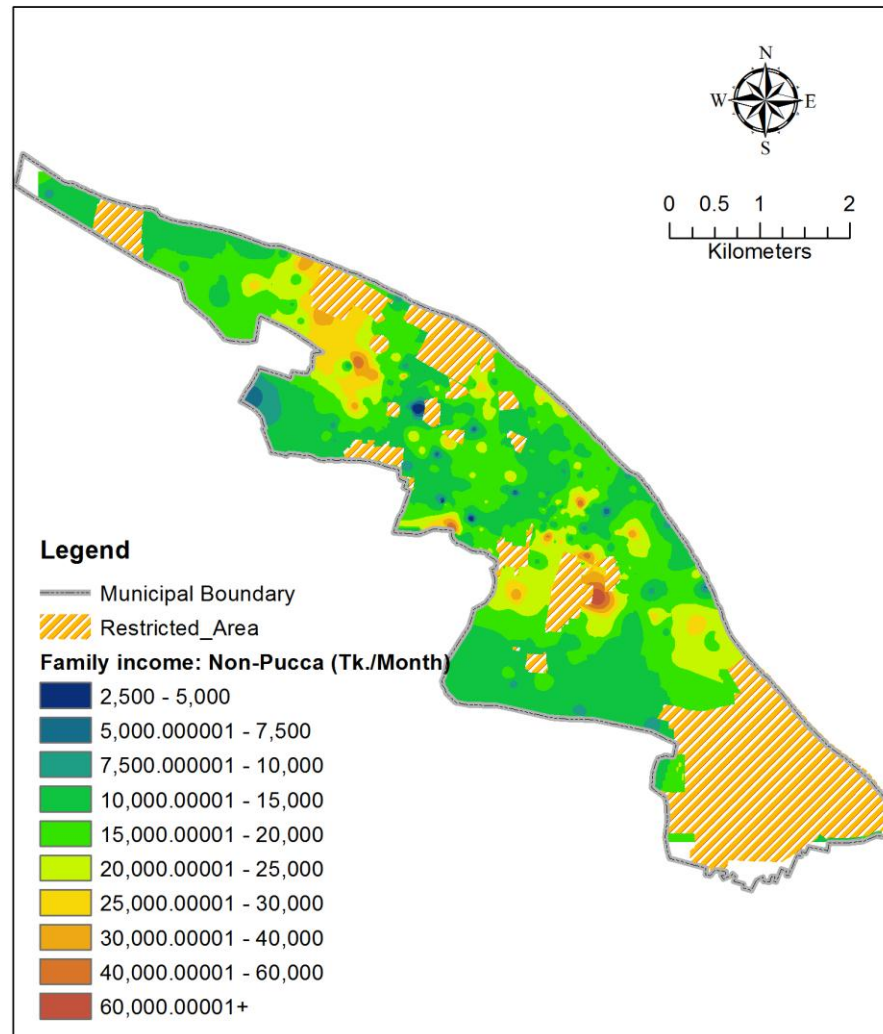
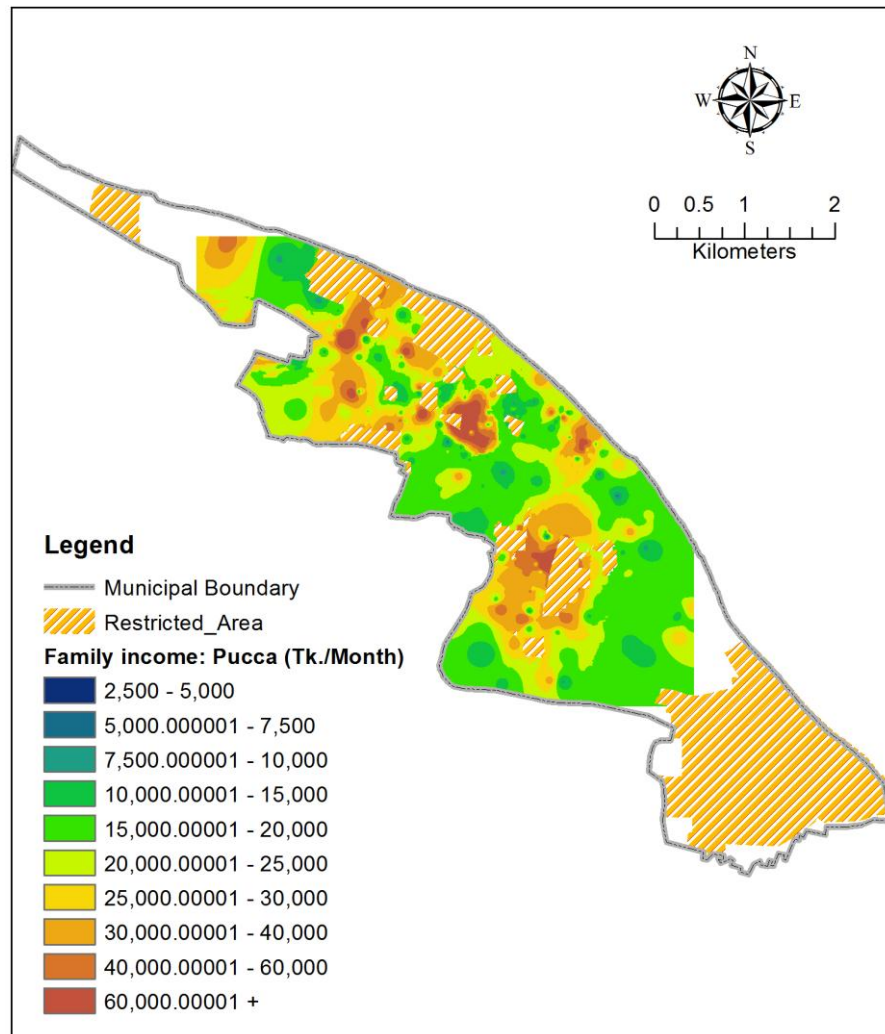




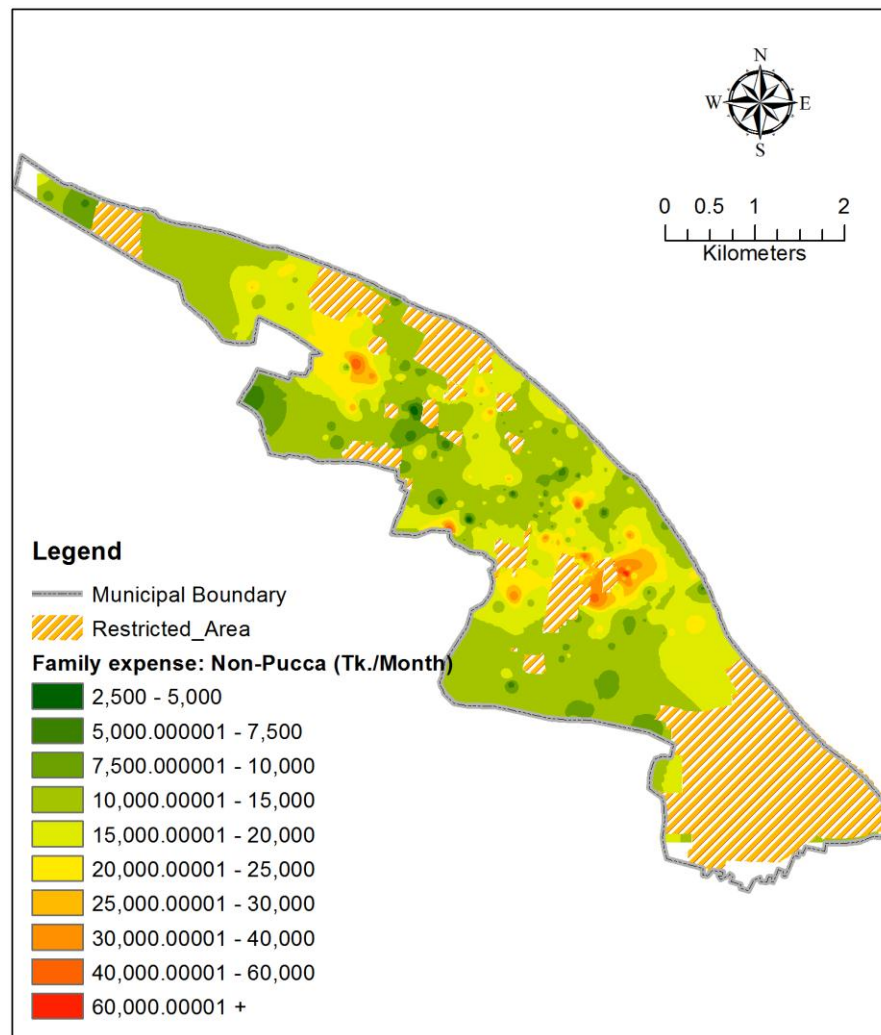
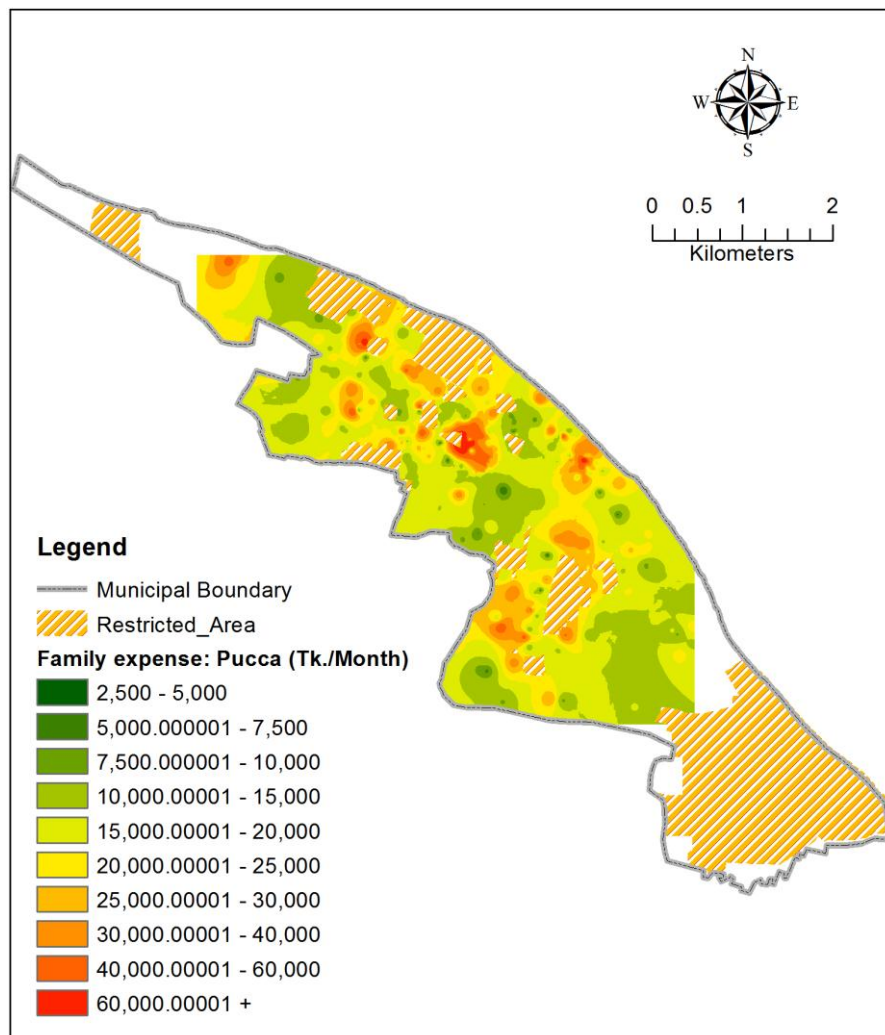
Spatial Interpretation

SCENARIO BY SETTLEMENT TYPE

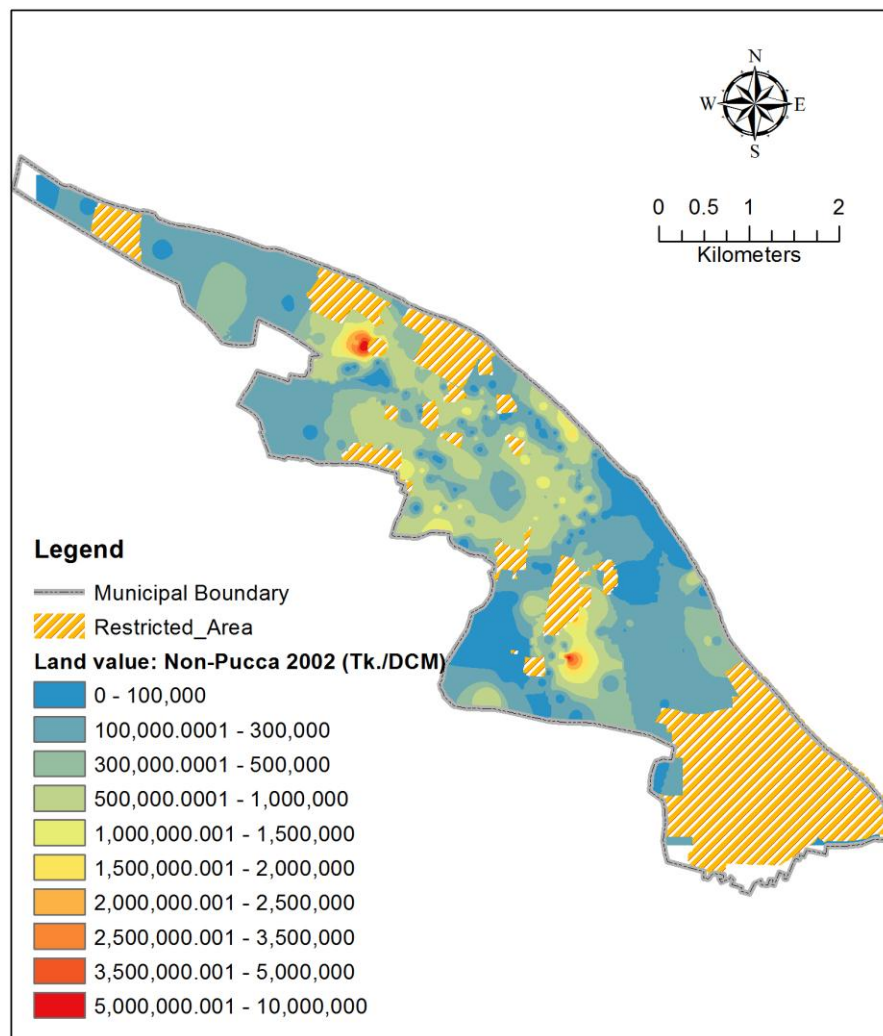
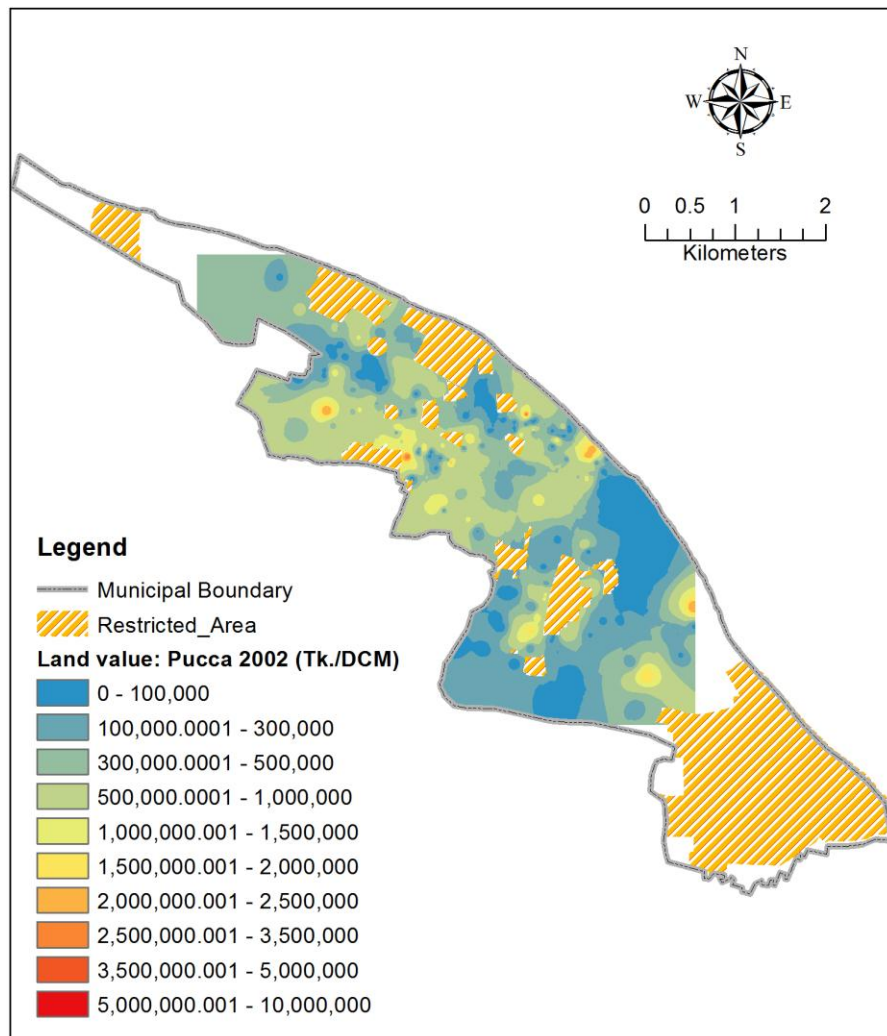
Family Income: Pucca vs. Other types



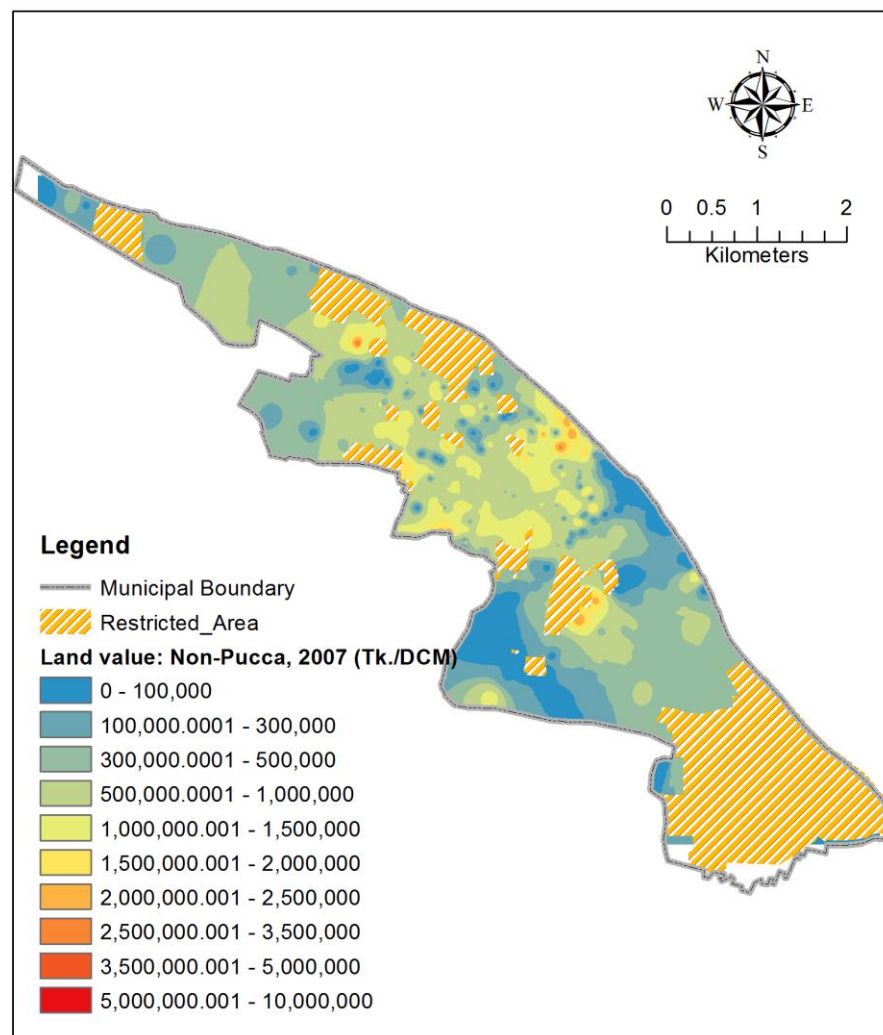
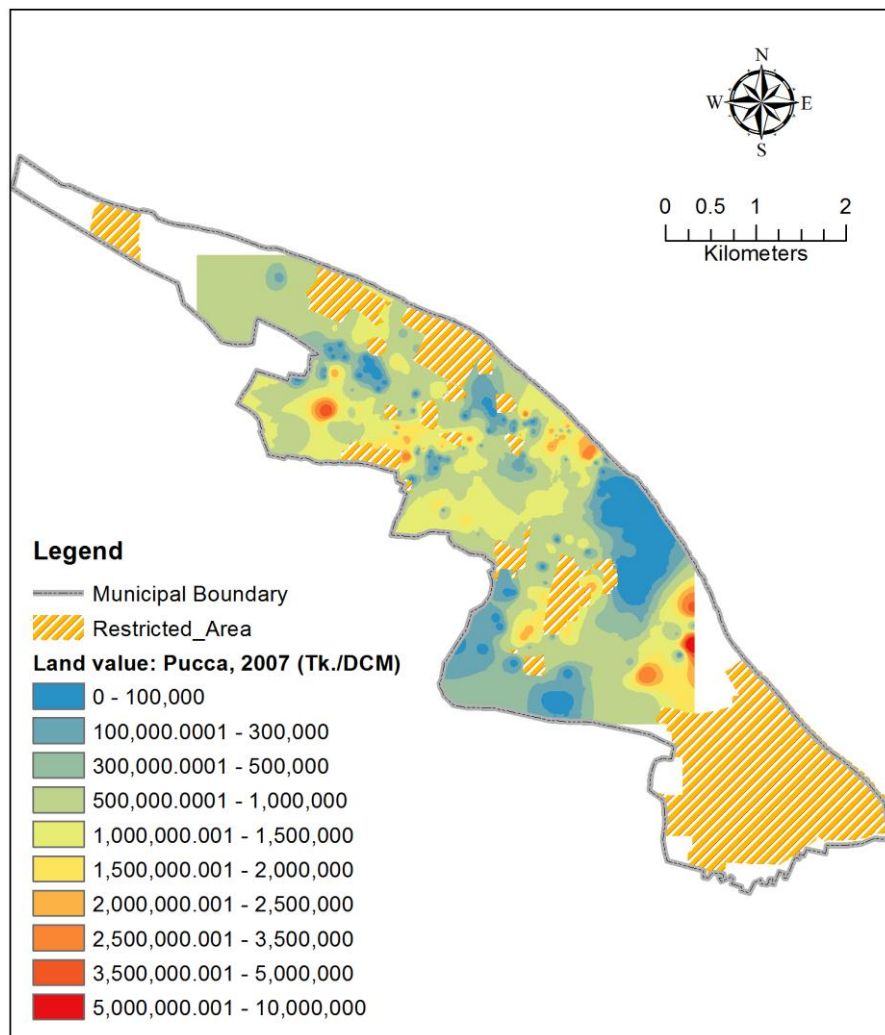
Family expense: Pucca vs. other types



Land value in 2002: Pucca vs. other types



Land value in 2007: Pucca vs. other types



Land value in 2012: Pucca vs. other types

