

1 **Supplementary Table S1.** Reclassification of the European Space Agency (ESA) Land cover
 2 map for this study. Land cover classes shown in the same color were merged together for
 3 spatial analysis in this study.

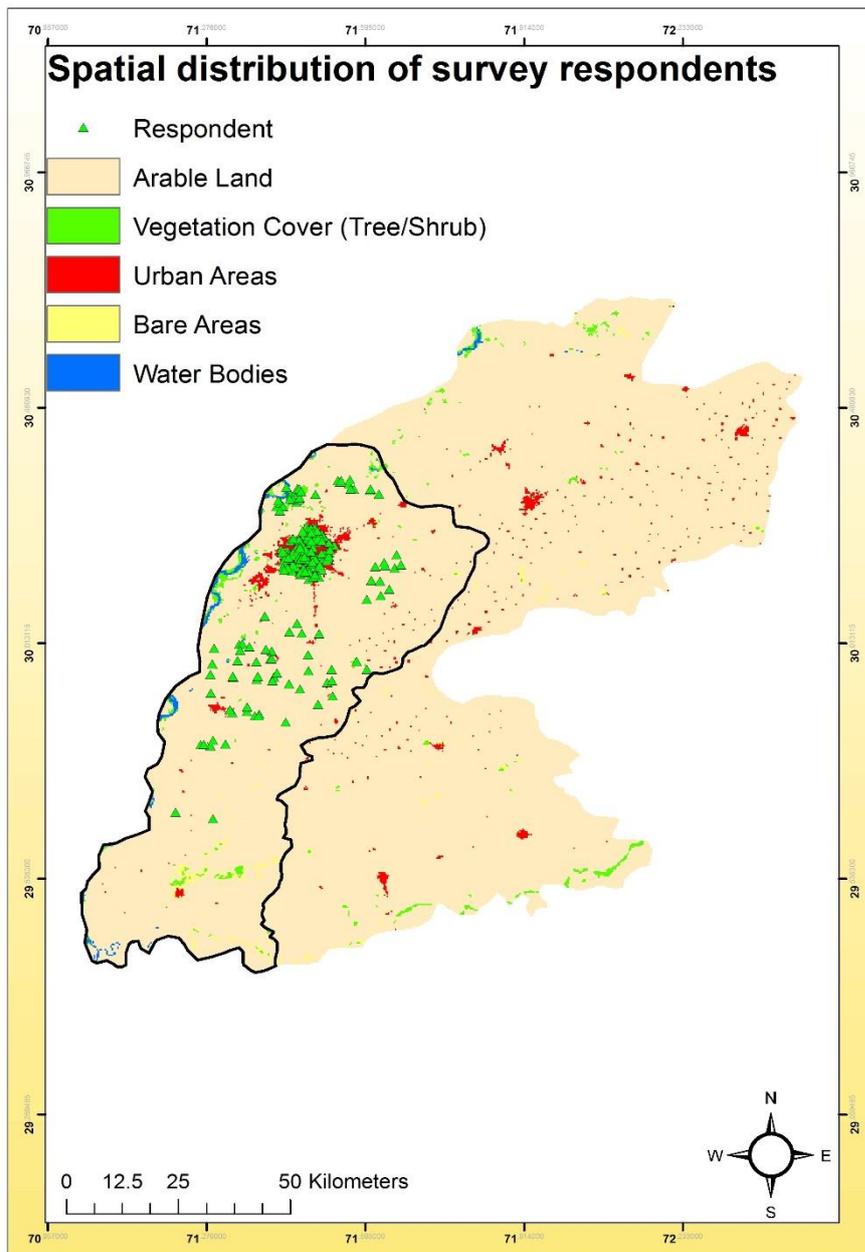
| Original ESA Land Cover Classes |
|---|
| 10; Cropland |
| 11; Herbaceous cover;255;255;100 |
| 12; Tree or shrub cover;255;255;0 |
| 20; Cropland |
| 30; Mosaic cropland (>50%) / natural vegetation (tree |
| 40; Mosaic natural vegetation (tree |
| 50; Tree cover |
| 60; Tree cover |
| 70; Tree cover |
| 100; Mosaic tree and shrub (>50%) / herbaceous cover (<50%);140;160;0 |
| 110; Mosaic herbaceous cover (>50%) / tree and shrub (<50%);190;150;0 |
| 120; Shrubland;150;100;0 |
| 122; Shrubland deciduous;150;100;0 |
| 130; Grassland;255;180;50 |
| 150; Sparse vegetation (tree |
| 180; Shrub or herbaceous cover |
| 190 ;Urban areas;195;20;0 |
| 200; Bare areas;255;245;215 |
| 201; Consolidated bare areas;220;220;220 |
| 202; Unconsolidated bare areas;255;245;215 |
| 210; Water bodies;0;70;200 |

| Reclassified Land Cover Classes | |
|---|-------------------------------|
|  | Arable Land |
|  | Vegetation cover (tree/shrub) |
|  | Urban Area |
|  | Bare Area |
|  | Body of Water |

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23 **Supplementary Figure S1.** Domicile location of respondents interviewed in the study area.



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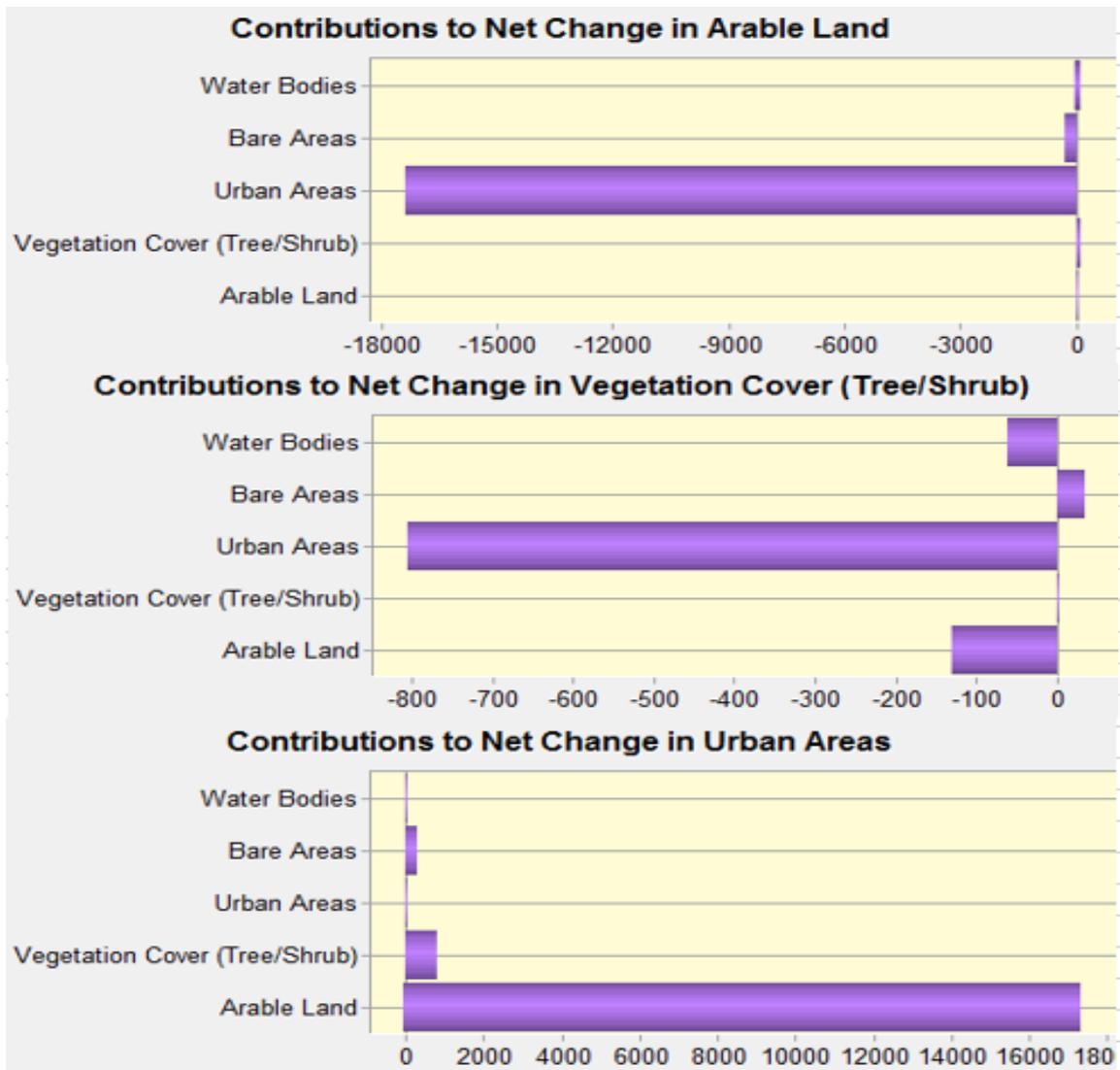
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39 **Supplementary Figure S2.** Contribution to net change of land use observed in Multan
40 region between 2002-2015(in hectares)
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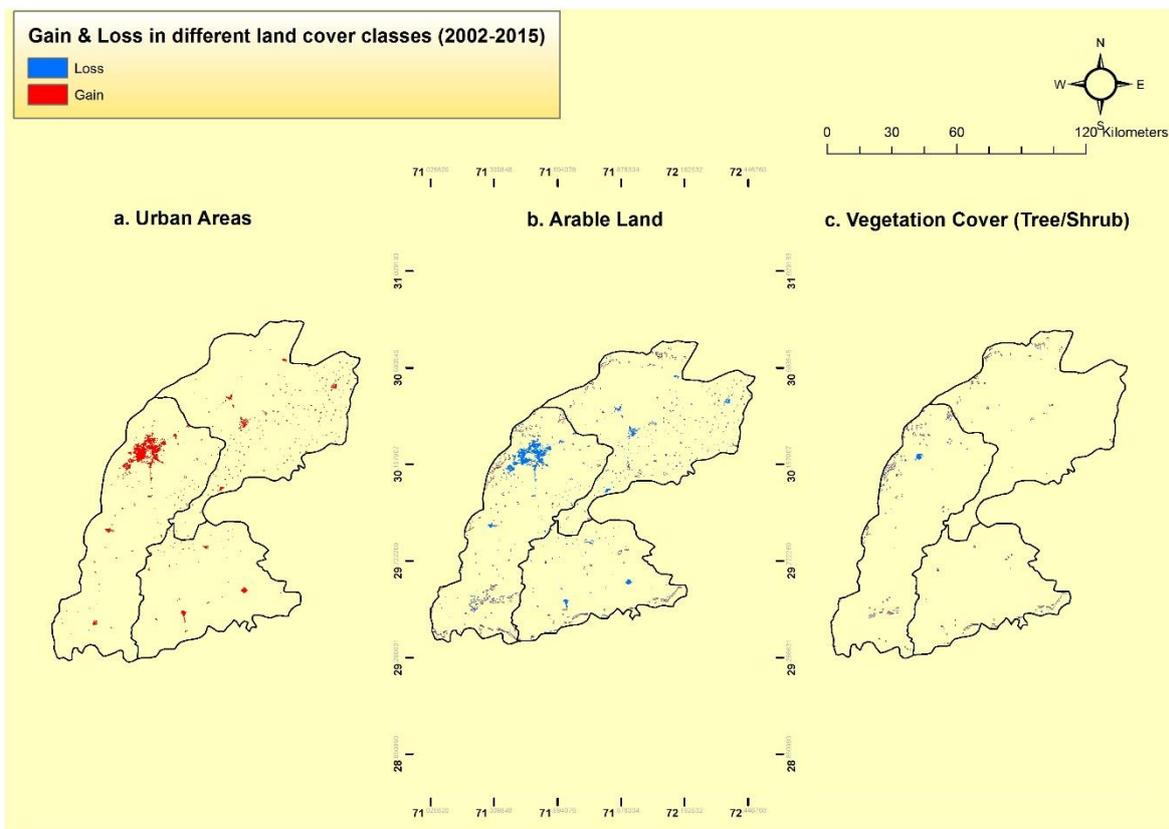
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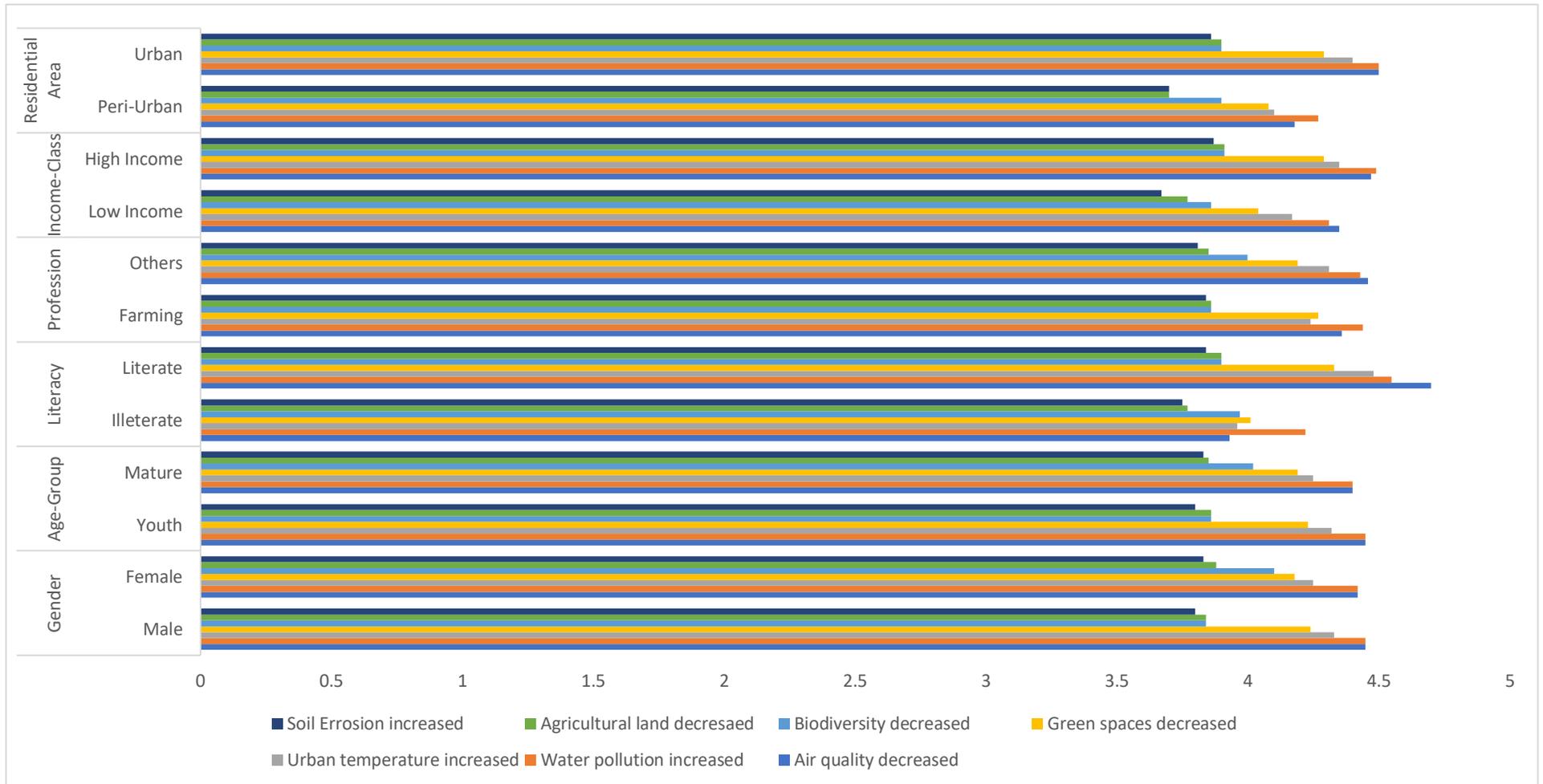
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Supplementary Figure S3. Map of the study area showing gain/loss in the land area under the land cover classes, a) urban areas, b) arable land, and c) vegetation cover (tree/shrub) during 2002-2015.



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88 **Figure S4.** Bar Chart showing mean responses within each demographic category to the questions on whether the respondents have observed changes in the
 89 ecosystem services in the study area.



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92 **Figure S5.** Bar Chart showing mean responses within each demographic category to the questions on whether urban sprawl is responsible for changes in
 93 ecosystem services in the study area.

