# Supplementary file 1

**Undernutrition among children and its determinants across the parliamentary constituencies of India: A geospatial analysis**

## **Univariate Local Moran’s I Results**

**Table 1** Univariate LISA Moran's *I* Statistics showing the spatial dependency (at parliamentary constituency level) of the prevalence of undernutrition and predictor variables, India, 2015-16

|  |  |
| --- | --- |
| Indicators of undernutrition and predictor variables | Univariate Moran’s *I* |
| Children underweight (%) | 0.776 |
| Children stunted (%) | 0.758 |
| Children wasted (%) | 0.562 |
| Poverty head count ratio (%) | 0.670 |
| Households using improved sanitation facility (%) | 0.772 |
| Women with ten or more years of schooling (%) | 0.726 |
| Births delivered at health facilities (%) | 0.755 |
| Mothers who had at least four antenatal care visits (%) | 0.821 |
| Women whose body mass index (bmi) was below normal (bmi < 18.5 kg/m2) (%) | 0.719 |
| Women aged 20-24 years married before age 18 years (%) | 0.751 |
| Children aged 6-59 months who were anaemic (%) | 0.645 |
| Children aged 6-23 months who received adequate diet (%) | 0.756 |

All Moran’s *I* values significant at 999 permutation (pseudo p<0.001)

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## **Bi-variate Local Moran’s I Results- LISA Maps**

## Figures 1-6 depict the Bi-variate Local Moran’s I Results:

|  |  |  |
| --- | --- | --- |
| (a) | (b) | (c) |
| **Fig. 1 Bivariate LISA cluster of improved sanitation vs children (a) stunted, (b) underweight and (c) wasted, across parliamentary constituencies of India** | | |
| (a) | (b) | (c) |
| **Fig.2 Bivariate LISA cluster of Women with 10 or more years of schooling vs children (a) stunted, (b) underweight and (c) wasted, across parliamentary constituencies of India** | | |
| (a) | (b) | (c) |
| **Fig.3 Bivariate LISA cluster of Children age 12-23 months receiving an adequate diet vs children (a) stunted, (b) underweight and (c) wasted, across parliamentary constituencies of India** | | |
| (a) | (b) | (c) |
| **Fig.4 Bivariate LISA cluster of Children age 6-59 months who are anaemic vs children (a) stunted, (b) underweight and (c) wasted, across parliamentary constituencies of India** | | |
| (a) | (b) | (c) |
| **Fig.5 Bivariate LISA cluster of institutional births vs children (a) stunted, (b) underweight and (c) wasted, across parliamentary constituencies of India** | | |
| (a) | (b) | (c) |
| **Fig.6 Bivariate LISA cluster of Women age 20-24 years married before age 18 years vs children (a) stunted, (b) underweight and (c) wasted, across parliamentary constituencies of India** | | |