Supplementary Materials- Full models

Table 5 Multi-level logistic regression analysis for child stunting and community-households- and individual-level factors.

| Factor | | Null mo | del | | Mode | el 1 | | Model | 2 |
|------------------------|-----|-------------|-------|-----|--------|-------|------|---------------|-----------------|
| | | 95 % | р- | | | р- | | | |
| Individual Level | aOR | CI | value | aOR | 95% CI | value | aOR | 95% CI | <i>p</i> -value |
| Child's birth order | | | | | | | | | |
| First | | | | | | | | | |
| Second | | | | | | | | | |
| ≥Third | | | | | | | | | |
| Sex of child | | | | | | | | | |
| Female | | | | | | | | | |
| Male | | | | | | | | | |
| Child's age | | | | | | | | | |
| 0-5 months | | | | | | | 1.00 | | |
| 6-23 months | | | | | | | 3.27 | (1.57- 6.78) | <0.01 |
| 24-59 months | | | | | | | 2.82 | (1.40- 5.67) | <0.01 |
| Ever breastfed | | | | | | | | | |
| No | | | | | | | | | |
| Yes | | | | | | | | | |
| Diarrhoea past 2 weeks | | | | | | | | | |
| No | | | | | | | 1.00 | | |
| yes | | | | | | | 0.51 | (0.24- 1.08) | 0.08 |
| Household Level | | | | | | | | | |
| Wealth quintiles | | | | | | | | | |
| Lowest | | | | | | | | | |
| Second | | | | | | | | | |

| Third | | | | | | | |
|--------------------------|------|--------------|------|------|--------------|---|------|
| Fourth | | | | | | | |
| Highest | | | | | | | |
| No.Household members | | | | | | | |
| ≤5 | | | | | | | |
| >5 | | | | | | | |
| Food Security | | | | | | | |
| Food Insecure | | | | | | | |
| Food Secure | | | | | | | |
| Drinking water source | | | | | | | |
| Improved | | | | | | | |
| Unimproved | | | | | | | |
| Toilet facility | | | | | | | |
| Improved | 1.00 | | | 1.00 | | | |
| Unimproved | 1.68 | (1.12- 2.50) | 0.01 | 1.71 | (1.14- 2.55) | (| 0.01 |
| Maternal education level | | | | | | | |
| Primary or lower | | | | | | | |
| Highschool or higher | | | | | | | |
| Paternal education level | | | | | | | |
| Primary or lower | | | | | | | |
| Highschool or higher | | | | | | | |
| Maternal BMI | | | | | | | |
| Underweight | | | | | | | |
| Normal | | | | | | | |
| Overweight | | | | | | | |
| Obese | | | | | | | |
| Maternal height | | | | | | | |
| ≥ 155cm | 1.00 | | | 1.00 | | | |

| ≥150 & <155cm | | 1.45 | (0.98- 2.15) | 0.08 | 1.52 | (1.02- 2.26) | 0.04 |
|------------------------|------|------|--------------|------|------|--------------|------|
| <150cm | | 2.15 | (1.19- 3.89) | 0.01 | 2.23 | (1.29- 4.35) | 0.01 |
| Maternal age at birth | | | | | | | |
| >40yrs | | | | | | | |
| 30-39yrs | | | | | | | |
| 20-29yrs | | | | | | | |
| <20yrs | | | | | | | |
| Village Assembly (MOR) | 1.59 | 1.53 | | | 1.55 | | |

Table 6 Multi-level logistic regression analysis for child wasting and community-households- and individual-level factors.

| Factor | | Null mo | del | | Model | 1 | | Model | 2 |
|---------------------|----|---------|-------|-----|--------|---------|------|---------------|---------|
| | | 95% | р- | | | | | | |
| Individual Level | OR | CI | value | aOR | 95% CI | p-value | aOR | 95% CI | p-value |
| Child's birth order | | | | | | | | | |
| First | | | | | | | | | |
| Second | | | | | | | | | |
| ≥Third | | | | | | | | | |
| Sex of child | | | | | | | | | |
| Female | | | | | | | 1.00 | | |
| Male | | | | | | | 0.54 | (0.25- 1.19) | 0.13 |
| Child's age | | | | | | | | | |
| 0-5 months | | | | | | | 1.00 | | |
| 6-23 months | | | | | | | 1.15 | (0.36-3.72) | 0.81 |
| 24-59 months | | | | | | | 0.38 | (0.11- 1.31) | 0.13 |
| Ever breastfed | | | | | | | | | |
| No | | | | | | | | | |
| Yes | | | | | | | | | |

| Diarrhoea past 2 weeks |
|--------------------------|
| No |
| yes |
| Household Level |
| Wealth quintiles |
| Lowest |
| Second |
| Third |
| Fourth |
| Highest |
| No.Household members |
| ≤5 |
| >5 |
| Food Security |
| Food Insecure |
| Food Secure |
| Drinking water source |
| Improved |
| Unimproved |
| Toilet facility |
| Improved |
| Unimproved |
| Maternal education level |
| Primary or lower |
| Highschool or higher |
| Paternal education level |
| Primary or lower |
| Highschool or higher |

| Maternal BMI | | | | | | | |
|------------------------|------|------|--------------|------|------|--------------|------|
| Underweight | | | | | | | |
| Normal | | | | | | | |
| Overweight | | | | | | | |
| Obese | | | | | | | |
| Maternal height | | | | | | | |
| ≥ 155cm | | 1.00 | | | 1.00 | | |
| ≥150 & <155cm | | 2.32 | (1.08- 4.99) | 0.05 | 2.17 | (1.00- 4.74) | 0.05 |
| <150cm | | 0.46 | (0.06- 3.67) | 0.47 | 0.42 | (0.05- 3.37) | 0.41 |
| Maternal age at birth | | | | | | | |
| >40yrs | | | | | | | |
| 30-39yrs | | | | | | | |
| 20-29yrs | | | | | | | |
| <20yrs | | | | | | | |
| Village Assembly (MOR) | 1.04 | 1.10 | | | 1.40 | | |

| Table 7 Multi-level loc | aistic rea | aression analy | vsis for | child underweig | pht and comm | unity-households- | and individual-level factors. |
|-------------------------|------------|----------------|----------|-----------------|--------------|-------------------|-------------------------------|
| | | | | | | 1 | |

| Factor | | Null mo | odel | | Mode | el 1 | | Model 2 | |
|---------------------|----|---------|---------|-----|--------|-----------------|------|---------------|---------|
| Individual Level | OR | 95% CI | p-value | aOR | 95% CI | <i>p</i> -value | aOR | 95% CI | p-value |
| Child's birth order | | | | | | | | | |
| First | | | | | | | 1.00 | | |
| Second | | | | | | | 1.92 | (1.09- 3.36) | 0.02 |
| ≥Third | | | | | | | 6.77 | (2.00-22.82) | <0.01 |
| Sex of child | | | | | | | | | |
| Female | | | | | | | | | |
| Male | | | | | | | | | |
| Child's age | | | | | | | | | |

| 0-5 months | | | 1.00 | | |
|------------------------|------|-------------------|--------|---------------|------|
| 6-23 months | | | 4.83 | (1.36- 17.24) | 0.02 |
| 24-59 months | | | 4.59 | (1.29- 16.26) | 0.02 |
| Ever breastfed | | | | | |
| No | | | | | |
| Yes | | | | | |
| Diarrhoea past 2 weeks | | | | | |
| No | | | | | |
| yes | | | | | |
| Household Level | | | | | |
| Wealth quintiles | | | | | |
| Lowest | | | | | |
| Second | | | | | |
| Third | | | | | |
| Fourth | | | | | |
| Highest | | | | | |
| No.Household members | | | | | |
| ≤5 | | | | | |
| >5 | | | | | |
| Food Security | | | | | |
| Food Insecure | | | | | |
| Food Secure | | | | | |
| Drinking water source | | | | | |
| Improved | 1.00 | | 1.00 | | |
| Unimproved | 1.74 | (1.06- 2.87) 0.03 | 3 1.97 | (1.19- 3.29) | 0.01 |
| Toilet facility | | | | | |
| Improved | 1.00 | | 1.00 | | |
| Unimproved | 1.98 | (1.10-3.56) 0.02 | 2 2.11 | (1.16- 3.82) | 0.01 |

| Maternal education level | 1.00 | | |
|--------------------------|-----------|-------------------|---------------------------|
| Highschool or higher | 1.00 | (036-117) 01 | 15 |
| Patornal education lovel | 0.05 | (0.50-1.17) 0.1 | 15 |
| Primary or lower | | | |
| Highschool or higher | | | |
| | | | |
| Material DMI | | | |
| Underweight | | | |
| Normal | | | |
| Overweight | | | |
| Obese | | | |
| Maternal height | | | |
| ≥ 155cm | 1.00 | | 1.00 |
| ≥150 & <155cm | 1.51 | (0.90- 2.53) 0.1 | 11 1.68 (0.99-2.84) 0.06 |
| <150cm | 0.58 | (0.22- 1.52) 0.2 | 27 0.49 (0.18-1.34) 0.17 |
| Maternal age at birth | | | |
| >40yrs | 1.00 | | 1.00 |
| 30-39yrs | 0.50 | (0.15- 1.72) 0.2 | 27 0.41 (0.12- 1.43) 0.16 |
| 20-29yrs | 0.62 | (0.19- 2.02) 0.4 | 43 0.51 (0.15-1.68) 0.27 |
| <20yrs | 1.41 | (0.37- 5.32) 0.6 | 52 1.52 (0.40- 5.86) 0.54 |
| Village Assembly (MOR) | 1.27 1.36 | | 1.34 |