



User: Project Stunting  
Project: Project Stunting

```

1 . do "C:\Users\shimanto\AppData\Local\Temp\STD00000000.tmp"
2 . use "C:\Users\shimanto\Desktop\Stunting Papers\DATA\Stata\BDKR7RDT\childdata.dta", clear
3 .
   end of do-file
4 . do "C:\Users\shimanto\AppData\Local\Temp\STD00000000.tmp"
5 . svyset [pw=wt],psu(v001) strata(v022)

       pweight: wt
           VCE: linearized
   Single unit: missing
       Strata 1: v022
         SU 1: v001
       FPC 1: <zero>

```

```

6 .
7 . svy:tab stunted,count
   (running tabulate on estimation sample)

```

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>

stunted	count
Not Stun	<b>5479</b>
Stunted	<b>2402</b>
Total	<b>7881</b>

Key: count = **weighted count**

```

8 . svy: tab mage1 stunted, col count
   (running tabulate on estimation sample)

```

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>

mage1	stunted		Total
	Not Stun	Stunted	
15-19	<b>696.9</b> <b>.1272</b>	<b>329.5</b> <b>.1372</b>	<b>1026</b> <b>.1302</b>
20-24	<b>1914</b> <b>.3492</b>	<b>818.3</b> <b>.3407</b>	<b>2732</b> <b>.3466</b>
25+	<b>2869</b> <b>.5236</b>	<b>1254</b> <b>.5221</b>	<b>4123</b> <b>.5231</b>
Total	<b>5479</b> <b>1</b>	<b>2402</b> <b>1</b>	<b>7881</b> <b>1</b>

Key: **weighted count**  
**column proportion**

Pearson:

Uncorrected	chi2 (2)	=	<b>1.6484</b>	
Design-based	F(1.98, 1283.84)	=	<b>0.5964</b>	P = <b>0.5489</b>

9 .  
 10 . svy: tab areal stunted, col count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672

Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

areal	stunted		Total
	Not Stun	Stunted	
Urban	1560 .2848	524.2 .2183	2085 .2645
Rural	3919 .7152	1877 .7817	5796 .7355
Total	5479 1	2402 1	7881 1

Key: **weighted count**  
**column proportion**

Pearson:

Uncorrected chi2(1) = 38.0600  
 Design-based F(1, 650) = 19.2398 P = 0.0000

11 .  
 12 . svy: tab division1 stunted, col count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672

Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

division1	stunted		Total
	Not Stun	Stunted	
Barisal	299.7 .0547	145.2 .0604	444.8 .0564
Chittago	1108 .2022	521.5 .2172	1629 .2067
Dhaka	1472 .2687	497.6 .2072	1970 .2499
Khulna	550.7 .1005	188.6 .0785	739.3 .0938
Rajshahi	437.7 .0799	232.2 .0967	669.9 .085
Rangpur	632.1 .1154	282.3 .1176	914.4 .116
Sylhet	598.4 .1092	258 .1074	856.4 .1087
Mymensin	380.7 .0695	276.2 .115	656.9 .0833
Total	5479 1	2402 1	7881 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected chi2(7) = **83.9929**  
 Design-based F(5.43, 3527.02) = **8.3189** P = **0.0000**

13 .  
 14 . svy: tab melevel1 stunted, col count  
 (running tabulate on estimation sample)

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>

melevel1	stunted		Total
	Not Stun	Stunted	
No educa	<b>325.3</b> .0594	<b>239.7</b> .0998	<b>565.1</b> .0717
Primary	<b>1392</b> .254	<b>868.7</b> .3617	<b>2261</b> .2868
Secondar	<b>2734</b> .499	<b>1111</b> .4628	<b>3846</b> .488
Higher	<b>1028</b> .1876	<b>181.8</b> .0757	<b>1210</b> .1535
Total	<b>5479</b> 1	<b>2402</b> 1	<b>7881</b> 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected chi2(3) = **246.9032**  
 Design-based F(2.96, 1926.47) = **59.7707** P = **0.0000**

15 .  
 16 . svy: tab helevel stunted, col count  
 (running tabulate on estimation sample)

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,758</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,739.281</b>
			Design df	=	<b>650</b>

helevel1	stunted		Total
	Not Stun	Stunted	
No educa	<b>657.6</b> .1221	<b>497.7</b> .2114	<b>1155</b> .1493
Primary	<b>1729</b> .3211	<b>953.8</b> .4051	<b>2683</b> .3466
Secondar	<b>1877</b> .3485	<b>689.6</b> .2929	<b>2566</b> .3316
Higher	<b>1122</b> .2084	<b>213</b> .0905	<b>1335</b> .1725
Total	<b>5385</b> 1	<b>2354</b> 1	<b>7739</b> 1

Key: **weighted count**  
**column proportion**

Pearson:  
Uncorrected chi2(3) = 268.7987  
Design-based F(2.99, 1942.26) = 70.2643 P = 0.0000

17 .  
18 . svy: tab fage1 stunted, col count  
(running tabulate on estimation sample)

Number of strata = 22  
Number of PSUs = 672  
Number of obs = 7,774  
Population size = 7,756.7318  
Design df = 650

fage1	stunted		Total
	Not Stun	Stunted	
>= 24	293.3 .0543	146.1 .0619	439.4 .0567
25-29	1172 .2171	548.3 .2324	1720 .2217
30-34	1412 .2617	580.7 .2461	1993 .2569
35+	2520 .4669	1084 .4596	3604 .4647
Total	5397 1	2359 1	7757 1

Key: **weighted count**  
**column proportion**

Pearson:  
Uncorrected chi2(3) = 5.1540  
Design-based F(2.98, 1936.01) = 1.3726 P = 0.2495

19 .  
20 . svy: tab mwork stunted, col count  
(running tabulate on estimation sample)

Number of strata = 22  
Number of PSUs = 672  
Number of obs = 7,902  
Population size = 7,880.8346  
Design df = 650

mwork1	stunted		Total
	Not Stun	Stunted	
No	3373 .6156	1322 .5504	4695 .5958
Yes	2106 .3844	1080 .4496	3186 .4042
Total	5479 1	2402 1	7881 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected chi2(1) = 29.6307  
 Design-based F(1, 650) = 19.2110 P = 0.0000

21 .  
 22 . svy: tab hhocu stunted, col count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672  
 Number of obs = 7,766  
 Population size = 7,751.0612  
 Design df = 650

hhocu1	stunted		Total
	Not Stun	Stunted	
Jobless	38.97 .0072	17.06 .0072	56.03 .0072
Farmer	544.6 .1009	300.4 .1275	845.1 .109
Agricult	350.3 .0649	241 .1023	591.3 .0763
Business	1218 .2258	416.8 .1769	1635 .2109
Others	3243 .6011	1381 .5861	4624 .5966
Total	5395 1	2356 1	7751 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected chi2(4) = 59.9064  
 Design-based F(3.89, 2527.06) = 12.0469 P = 0.0000

23 . \*insig  
 24 . svy: tab religion stunted, col count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672  
 Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

religion1	stunted		Total
	Not Stun	Stunted	
Islam	5016 .9154	2215 .9224	7231 .9176
Others	463.3 .0846	186.4 .0776	649.7 .0824
Total	5479 1	2402 1	7881 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected  $\chi^2(1)$  = **1.0669**  
 Design-based  $F(1, 650)$  = **0.7381** P = **0.3906**

25 . \*Sig  
 26 . svy: tab wind stunted, col count  
 (running tabulate on estimation sample)

Number of strata = **22** Number of obs = **7,902**  
 Number of PSUs = **672** Population size = **7,880.8346**  
 Design df = **650**

wind1	stunted		Total
	Not Stun	Stunted	
Poorest	<b>1031</b> .1881	<b>685.4</b> .2854	<b>1716</b> .2178
Poorer	<b>1015</b> .1853	<b>597.4</b> .2488	<b>1613</b> .2046
Middle	<b>1061</b> .1937	<b>450.5</b> .1876	<b>1512</b> .1918
Richer	<b>1159</b> .2115	<b>419.4</b> .1746	<b>1578</b> .2002
Richest	<b>1213</b> .2215	<b>248.8</b> .1036	<b>1462</b> .1855
Total	<b>5479</b> 1	<b>2402</b> 1	<b>7881</b> 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected  $\chi^2(4)$  = **242.7486**  
 Design-based  $F(3.94, 2559.16)$  = **41.1220** P = **0.0000**

27 . \*insig  
 28 . svy: tab hhmembers stunted, col count  
 (running tabulate on estimation sample)

Number of strata = **22** Number of obs = **7,902**  
 Number of PSUs = **672** Population size = **7,880.8346**  
 Design df = **650**

hhmembers	stunted		Total
	Not Stun	Stunted	
less equ	<b>684</b> .1248	<b>282.4</b> .1176	<b>966.4</b> .1226
greater	<b>4795</b> .8752	<b>2119</b> .8824	<b>6914</b> .8774
Total	<b>5479</b> 1	<b>2402</b> 1	<b>7881</b> 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected chi2(1) = 0.8202  
 Design-based F(1, 650) = 0.5610 P = 0.4541

29 . \*insig  
 30 . svy: tab hhsex stunted, col count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672  
 Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

hhsex1	stunted		Total
	Not Stun	Stunted	
Male	4732 .8636	2091 .8706	6823 .8658
Female	747.2 .1364	310.8 .1294	1058 .1342
Total	5479 1	2402 1	7881 1

Key: **weighted count**  
**column proportion**

Pearson:  
 Uncorrected chi2(1) = 0.6998  
 Design-based F(1, 650) = 0.4960 P = 0.4815

31 . \*insig  
 32 . svy: tab hhmembers stunted, row count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672  
 Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

hhmembers	stunted		Total
	Not Stun	Stunted	
less equ	684 .7078	282.4 .2922	966.4 1
greater	4795 .6935	2119 .3065	6914 1
Total	5479 .6953	2402 .3047	7881 1

Key: **weighted count**  
**row proportion**

Pearson:  
 Uncorrected chi2(1) = 0.8202  
 Design-based F(1, 650) = 0.5610 P = 0.4541

```

33 . *insig
34 . svy: tab hhsex stunted, row count
    (running tabulate on estimation sample)

```

Number of strata = 22  
 Number of PSUs = 672

Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

hhsex1	stunted		Total
	Not Stun	Stunted	
Male	4732 .6936	2091 .3064	6823 1
Female	747.2 .7063	310.8 .2937	1058 1
Total	5479 .6953	2402 .3047	7881 1

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = 0.6998  
 Design-based F(1, 650) = 0.4960 P = 0.4815

```

35 .
36 . svy: tab anc stunted, row count
    (running tabulate on estimation sample)

```

Number of strata = 22  
 Number of PSUs = 671

Number of obs = 4,682  
 Population size = 4,690.4205  
 Design df = 649

anc1	stunted		Total
	Not Stun	Stunted	
less4	1633 .6618	834.5 .3382	2468 1
4above	1653 .7437	569.7 .2563	2223 1
Total	3286 .7006	1404 .2994	4690 1

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = 37.2651  
 Design-based F(1, 649) = 30.2551 P = 0.0000



37 .  
 38 . svy: tab media stunted, row count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 672

Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

medial	Not Stun	stunted Stunted	Total
No	2969 .6527	1580 .3473	4549 1
Yes	2510 .7534	821.5 .2466	3332 1
Total	5479 .6953	2402 .3047	7881 1

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = 92.3911  
 Design-based F(1, 650) = 65.6642 P = 0.0000

39 .  
 40 . svy: tab csection stunted, row count  
 (running tabulate on estimation sample)

Number of strata = 22  
 Number of PSUs = 671

Number of obs = 4,879  
 Population size = 4,884.1536  
 Design df = 649

csection1	Not Stun	stunted Stunted	Total
No	2132 .654	1128 .346	3260 1
Yes	1265 .7793	358.4 .2207	1624 1
Total	3398 .6956	1487 .3044	4884 1

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = 80.3238  
 Design-based F(1, 649) = 59.0922 P = 0.0000

```

41 . *insig
42 . svy: tab csex stunted, row count
    (running tabulate on estimation sample)

```

Number of strata = **22**  
 Number of PSUs = **672**

Number of obs = **7,902**  
 Population size = **7,880.8346**  
 Design df = **650**

csex1	stunted		Total
	Not Stun	Stunted	
male	<b>2867</b> .6955	<b>1255</b> .3045	<b>4122</b> <b>1</b>
Female	<b>2612</b> .6951	<b>1146</b> .3049	<b>3759</b> <b>1</b>
Total	<b>5479</b> .6953	<b>2402</b> .3047	<b>7881</b> <b>1</b>

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = **0.0014**  
 Design-based F(1, 650) = **0.0011** P = **0.9735**

```

43 .
44 . *insig
45 . svy: tab tf1 stunted, row count
    (running tabulate on estimation sample)

```

Number of strata = **22**  
 Number of PSUs = **672**

Number of obs = **7,902**  
 Population size = **7,880.8346**  
 Design df = **650**

tf1	stunted		Total
	Not Stun	Stunted	
modern t	<b>1539</b> .7676	<b>466</b> .2324	<b>2005</b> <b>1</b>
Other	<b>3940</b> .6706	<b>1935</b> .3294	<b>5876</b> <b>1</b>
Total	<b>5479</b> .6953	<b>2402</b> .3047	<b>7881</b> <b>1</b>

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = **66.5485**  
 Design-based F(1, 650) = **37.6695** P = **0.0000**

```

46 . *insig
47 . svy: tab pschtype stunted, row count
    (running tabulate on estimation sample)

```

Number of strata = 22  
 Number of PSUs = 672

Number of obs = 6,618  
 Population size = 6,608.16  
 Design df = 650

pschtype1	stunted		Total
	Not Stun	Stunted	
School	4503 .7198	1753 .2802	6255 1
Madrasha	243.1 .6888	109.8 .3112	352.9 1
Total	4746 .7182	1862 .2818	6608 1

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(1) = 1.5888  
 Design-based F(1, 650) = 1.1994 P = 0.2739

```

48 .
49 . svy: tab cagel stunted, row count
    (running tabulate on estimation sample)

```

Number of strata = 22  
 Number of PSUs = 672

Number of obs = 7,902  
 Population size = 7,880.8346  
 Design df = 650

cagel	stunted		Total
	Not Stun	Stunted	
0-11	1375 .8025	338.3 .1975	1713 1
12-23	1082 .6614	553.9 .3386	1636 1
24-35	944 .6136	594.6 .3864	1539 1
36-47	990.4 .6706	486.5 .3294	1477 1
48-59	1088 .7176	428.3 .2824	1516 1
Total	5479 .6953	2402 .3047	7881 1

Key: **weighted count**  
**row proportion**

Pearson:

Uncorrected chi2(4) = 158.5781  
 Design-based F(3.94, 2562.78) = 31.0446 P = 0.0000

50 .  
 51 . svy: tab Place\_delivery stunted, row count  
 (running tabulate on estimation sample)

Number of strata	=	<b>22</b>	Number of obs	=	<b>4,883</b>
Number of PSUs	=	<b>671</b>	Population size	=	<b>4,889.3782</b>
			Design df	=	<b>649</b>

Place_delivery1	Not Stun	stunted Stunted	Total
Home	<b>1580</b> .6419	<b>881.6</b> .3581	<b>2462</b> 1
HF	<b>1821</b> .7503	<b>606</b> .2497	<b>2427</b> 1
Total	<b>3402</b> .6958	<b>1488</b> .3042	<b>4889</b> 1

Key: **weighted count**  
**row proportion**

Pearson:  
 Uncorrected chi2(1) = **67.7819**  
 Design-based F(1, 649) = **52.8371** P = **0.0000**

52 .  
 53 . svy: tab birthord stunted, row count  
 (running tabulate on estimation sample)

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>

birthord1	Not Stun	stunted Stunted	Total
1-3	<b>4899</b> .7097	<b>2004</b> .2903	<b>6903</b> 1
4-6	<b>549.2</b> .597	<b>370.7</b> .403	<b>919.9</b> 1
7-10	<b>30.33</b> .5313	<b>26.76</b> .4687	<b>57.09</b> 1
11	<b>.3483</b> .6163	<b>.2168</b> .3837	<b>.5651</b> 1
Total	<b>5479</b> .6953	<b>2402</b> .3047	<b>7881</b> 1

Key: **weighted count**  
**row proportion**

Pearson:  
 Uncorrected chi2(3) = **56.1334**  
 Design-based F(2.38, 1545.65) = **19.3796** P = **0.0000**

```
54 . *insig
55 . svy: tab fever stunted, row count
    (running tabulate on estimation sample)
```

Number of strata = 22  
Number of PSUs = 672

Number of obs = 7,899  
Population size = 7,876.1177  
Design df = 650

fever	stunted		Total
	Not Stun	Stunted	
0	3647 .6989	1571 .3011	5218 1
1	1828 .6881	828.7 .3119	2657 1
8	0 0	1.559 1	1.559 1
Total	5475 .6951	2402 .3049	7876 1

Key: **weighted count**  
**row proportion**

Pearson:  
Uncorrected chi2(2) = 4.5345  
Design-based F(1.95, 1267.52) = 1.5640 P = 0.2102

```
56 . *insig
57 . svy: tab cough stunted, row count
    (running tabulate on estimation sample)
```

Number of strata = 22  
Number of PSUs = 672

Number of obs = 7,899  
Population size = 7,876.1177  
Design df = 650

cough	stunted		Total
	Not Stun	Stunted	
0	3469 .6939	1530 .3061	4999 1
1	2005 .6971	871.4 .3029	2877 1
Total	5475 .6951	2402 .3049	7876 1

Key: **weighted count**  
**row proportion**

Pearson:  
Uncorrected chi2(1) = 0.0839  
Design-based F(1, 650) = 0.0585 P = 0.8090

```

58 . *insig
59 . svy: tab diarrhea stunted, row count
    (running tabulate on estimation sample)

```

```

Number of strata   =      22
Number of PSUs     =     672
Number of obs      =     7,899
Population size     =  7,876.1177
Design df          =      650

```

diarrhea	Not Stun	stunted Stunted	Total
0	5198 .6932	2300 .3068	7498 1
1	277 .7322	101.3 .2678	378.4 1
Total	5475 .6951	2402 .3049	7876 1

Key: **weighted count**  
**row proportion**

Pearson:

```

Uncorrected chi2(1) = 2.5878
Design-based F(1, 650) = 1.8967 P = 0.1689

```

```

60 .
61 . *****
62 . **Univariate Logistic regression
63 . *****
64 .
65 .
66 . svy: logit stunted i.areal, or
    (running logit on estimation sample)

```

Survey: Logistic regression

```

Number of strata   =      22
Number of PSUs     =     672
Number of obs      =     7,902
Population size     =  7,880.8346
Design df          =      650
F( 1, 650)         =     19.13
Prob > F           =     0.0000

```

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
areal						
Rural	1.42599	.1156933	4.37	0.000	1.215984	1.672264
_cons	.3359408	.0239683	-15.29	0.000	.2920243	.3864619

```

67 . svy: logit stunted ib3.division1, or
    (running logit on estimation sample)

```

Survey: Logistic regression

```

Number of strata   =      22
Number of PSUs     =     672
Number of obs      =     7,902
Population size     =  7,880.8346
Design df          =      650
F( 7, 644)         =     10.09
Prob > F           =     0.0000

```

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
division1						
Barisal	<b>1.432799</b>	<b>.1785089</b>	<b>2.89</b>	<b>0.004</b>	<b>1.121859</b>	<b>1.82992</b>
Chittagong	<b>1.392558</b>	<b>.1773636</b>	<b>2.60</b>	<b>0.010</b>	<b>1.08442</b>	<b>1.788254</b>
Khulna	<b>1.013049</b>	<b>.1360012</b>	<b>0.10</b>	<b>0.923</b>	<b>.7782944</b>	<b>1.318611</b>
Rajshahi	<b>1.568915</b>	<b>.1976076</b>	<b>3.58</b>	<b>0.000</b>	<b>1.225149</b>	<b>2.009138</b>
Rangpur	<b>1.321384</b>	<b>.1669947</b>	<b>2.21</b>	<b>0.028</b>	<b>1.03099</b>	<b>1.693571</b>
Sylhet	<b>1.275304</b>	<b>.1536436</b>	<b>2.02</b>	<b>0.044</b>	<b>1.006637</b>	<b>1.615676</b>
Mymensingh	<b>2.145988</b>	<b>.2454813</b>	<b>6.68</b>	<b>0.000</b>	<b>1.714257</b>	<b>2.686448</b>
_cons	<b>.3380427</b>	<b>.0318893</b>	<b>-11.50</b>	<b>0.000</b>	<b>.2808818</b>	<b>.4068361</b>

68 . svy: logit stunted ib3.melevel, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>
			F( 3, 648)	=	<b>56.60</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
melevel1						
No education	<b>4.165832</b>	<b>.5601155</b>	<b>10.61</b>	<b>0.000</b>	<b>3.199192</b>	<b>5.424545</b>
Primary	<b>3.527703</b>	<b>.3660447</b>	<b>12.15</b>	<b>0.000</b>	<b>2.877425</b>	<b>4.324938</b>
Secondary	<b>2.297559</b>	<b>.2280107</b>	<b>8.38</b>	<b>0.000</b>	<b>1.890756</b>	<b>2.791888</b>
_cons	<b>.1769045</b>	<b>.0159764</b>	<b>-19.18</b>	<b>0.000</b>	<b>.1481572</b>	<b>.2112296</b>

69 . svy: logit stunted ib3.helevel, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,758</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,739.281</b>
			Design df	=	<b>650</b>
			F( 3, 648)	=	<b>67.73</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
helevel1						
No education	<b>3.987612</b>	<b>.4256189</b>	<b>12.96</b>	<b>0.000</b>	<b>3.233629</b>	<b>4.917401</b>
Primary	<b>2.906123</b>	<b>.2802433</b>	<b>11.06</b>	<b>0.000</b>	<b>2.404793</b>	<b>3.511965</b>
Secondary	<b>1.936035</b>	<b>.1953238</b>	<b>6.55</b>	<b>0.000</b>	<b>1.588095</b>	<b>2.360206</b>
_cons	<b>.1898154</b>	<b>.0164322</b>	<b>-19.20</b>	<b>0.000</b>	<b>.1601423</b>	<b>.2249867</b>

70 . svy: logit stunted i.mwork, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>
			F( <b>1</b> , <b>650</b> )	=	<b>19.17</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
mwork1						
Yes	<b>1.308636</b>	<b>.0804018</b>	<b>4.38</b>	<b>0.000</b>	<b>1.159909</b>	<b>1.476433</b>
_cons	<b>.3918158</b>	<b>.0175253</b>	<b>-20.95</b>	<b>0.000</b>	<b>.3588707</b>	<b>.4277854</b>

71 .

72 . svy: logit stunted ib3.hhocu, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,766</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,751.0612</b>
			Design df	=	<b>650</b>
			F( <b>4</b> , <b>647</b> )	=	<b>9.87</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
hhocu1						
Jobless	<b>1.27917</b>	<b>.3681188</b>	<b>0.86</b>	<b>0.393</b>	<b>.7269638</b>	<b>2.250834</b>
Farmer	<b>1.612048</b>	<b>.16981</b>	<b>4.53</b>	<b>0.000</b>	<b>1.310831</b>	<b>1.982482</b>
Agriculture	<b>2.0103</b>	<b>.2437747</b>	<b>5.76</b>	<b>0.000</b>	<b>1.584343</b>	<b>2.550777</b>
Others	<b>1.244192</b>	<b>.0915166</b>	<b>2.97</b>	<b>0.003</b>	<b>1.076863</b>	<b>1.437521</b>
_cons	<b>.3421935</b>	<b>.0243465</b>	<b>-15.07</b>	<b>0.000</b>	<b>.2975755</b>	<b>.3935014</b>

73 . svy: logit stunted ib2.anc, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>4,682</b>
Number of PSUs	=	<b>671</b>	Population size	=	<b>4,690.4205</b>
			Design df	=	<b>649</b>
			F( <b>1</b> , <b>649</b> )	=	<b>30.11</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
anc1						
less4	<b>1.482349</b>	<b>.1063414</b>	<b>5.49</b>	<b>0.000</b>	<b>1.287575</b>	<b>1.706587</b>
_cons	<b>.3446763</b>	<b>.0190704</b>	<b>-19.25</b>	<b>0.000</b>	<b>.3091917</b>	<b>.3842334</b>



74 . svy: logit stunted ib4.wind, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>
			F( <b>4</b> , <b>647</b> )	=	<b>34.15</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
wind1						
Poorest	<b>1.836755</b>	<b>.1663163</b>	<b>6.71</b>	<b>0.000</b>	<b>1.53756</b>	<b>2.194171</b>
Poorer	<b>1.625662</b>	<b>.1530774</b>	<b>5.16</b>	<b>0.000</b>	<b>1.351229</b>	<b>1.955832</b>
Middle	<b>1.172892</b>	<b>.11465</b>	<b>1.63</b>	<b>0.103</b>	<b>.9680505</b>	<b>1.421078</b>
Richest	<b>.5662996</b>	<b>.0634426</b>	<b>-5.08</b>	<b>0.000</b>	<b>.4544731</b>	<b>.7056418</b>
_cons	<b>.3619926</b>	<b>.026756</b>	<b>-13.75</b>	<b>0.000</b>	<b>.3130887</b>	<b>.4185351</b>

75 . svy: logit stunted ib1.media, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>
			F( <b>1</b> , <b>650</b> )	=	<b>65.15</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
medial						
No	<b>1.626062</b>	<b>.0979418</b>	<b>8.07</b>	<b>0.000</b>	<b>1.44468</b>	<b>1.830218</b>
_cons	<b>.3272672</b>	<b>.0171105</b>	<b>-21.36</b>	<b>0.000</b>	<b>.2953358</b>	<b>.3626509</b>

76 . \*Csec ommited

77 . svy: logit stunted ib1.csection, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>4,879</b>
Number of PSUs	=	<b>671</b>	Population size	=	<b>4,884.1536</b>
			Design df	=	<b>649</b>
			F( <b>1</b> , <b>649</b> )	=	<b>58.16</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
csection1						
No	<b>1.868301</b>	<b>.1531172</b>	<b>7.63</b>	<b>0.000</b>	<b>1.590582</b>	<b>2.194511</b>
_cons	<b>.2832021</b>	<b>.0200528</b>	<b>-17.82</b>	<b>0.000</b>	<b>.2464407</b>	<b>.3254472</b>

78 . svy: logit stunted i.cagel, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>
			F( <b>4</b> , <b>647</b> )	=	<b>27.49</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
cagel						
12-23	<b>2.080246</b>	<b>.194352</b>	<b>7.84</b>	<b>0.000</b>	<b>1.731573</b>	<b>2.499129</b>
24-35	<b>2.559724</b>	<b>.2424703</b>	<b>9.92</b>	<b>0.000</b>	<b>2.125262</b>	<b>3.083001</b>
36-47	<b>1.996501</b>	<b>.18378</b>	<b>7.51</b>	<b>0.000</b>	<b>1.666362</b>	<b>2.392047</b>
48-59	<b>1.599612</b>	<b>.1448962</b>	<b>5.19</b>	<b>0.000</b>	<b>1.338958</b>	<b>1.911006</b>
_cons	<b>.2460596</b>	<b>.0172147</b>	<b>-20.04</b>	<b>0.000</b>	<b>.2144757</b>	<b>.2822946</b>

79 . svy: logit stunted ib2.Place\_delivery, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>4,883</b>
Number of PSUs	=	<b>671</b>	Population size	=	<b>4,889.3782</b>
			Design df	=	<b>649</b>
			F( <b>1</b> , <b>649</b> )	=	<b>52.40</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
Place_delivery1						
Home	<b>1.676504</b>	<b>.1196651</b>	<b>7.24</b>	<b>0.000</b>	<b>1.45725</b>	<b>1.928746</b>
_cons	<b>.3327175</b>	<b>.01835</b>	<b>-19.95</b>	<b>0.000</b>	<b>.2985675</b>	<b>.3707737</b>

80 . svy: logit stunted i.birthord, or  
(running logit on estimation sample)

Survey: Logistic regression

Number of strata	=	<b>22</b>	Number of obs	=	<b>7,902</b>
Number of PSUs	=	<b>672</b>	Population size	=	<b>7,880.8346</b>
			Design df	=	<b>650</b>
			F( <b>3</b> , <b>648</b> )	=	<b>14.14</b>
			Prob > F	=	<b>0.0000</b>

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
birthord1						
4-6	<b>1.650368</b>	<b>.1364608</b>	<b>6.06</b>	<b>0.000</b>	<b>1.403033</b>	<b>1.941305</b>
7-10	<b>2.15698</b>	<b>.6583226</b>	<b>2.52</b>	<b>0.012</b>	<b>1.184595</b>	<b>3.927555</b>
11	<b>1.522079</b>	<b>2.152887</b>	<b>0.30</b>	<b>0.767</b>	<b>.0946714</b>	<b>24.47121</b>
_cons	<b>.4090013</b>	<b>.0145636</b>	<b>-25.11</b>	<b>0.000</b>	<b>.3813808</b>	<b>.4386222</b>

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81 .
82 . ****
83 . **Multivariate Logistic regression
84 . ****
85 .
86 . svy: logit stunted ib2.areal ib3.division1 ib3.melevel ib3.helevel i.mwork ib3.hhocu ib4.wind ib
    (running logit on estimation sample)

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Survey: Logistic regression

Number of strata	=	22	Number of obs	=	7,745
Number of PSUs	=	672	Population size	=	7,726.8527
			Design df	=	650
			F( 31, 620)	=	13.52
			Prob > F	=	0.0000

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
areal						
Urban	1.034397	.0943617	0.37	0.711	.8647537	1.23732
division1						
Barisal	1.219796	.1695982	1.43	0.153	.9283609	1.602719
Chittagong	1.278924	.1698561	1.85	0.064	.9853362	1.659989
Khulna	.9320216	.1361035	-0.48	0.630	.6996692	1.241536
Rajshahi	1.22798	.1660295	1.52	0.129	.9416501	1.601375
Rangpur	1.116241	.1565404	0.78	0.433	.8475472	1.470119
Sylhet	.9918965	.135521	-0.06	0.953	.7584925	1.297124
Mymensingh	1.65839	.2083763	4.03	0.000	1.295788	2.12246
melevel1						
No education	1.922573	.3259295	3.86	0.000	1.378197	2.681973
Primary	1.802889	.2399966	4.43	0.000	1.388185	2.34148
Secondary	1.536143	.1779528	3.71	0.000	1.223605	1.928511
helevel1						
No education	1.896696	.2594099	4.68	0.000	1.449981	2.481037
Primary	1.588708	.1880273	3.91	0.000	1.259258	2.004351
Secondary	1.33947	.1495521	2.62	0.009	1.075768	1.667812
mwork1						
Yes	1.057249	.0759353	0.78	0.439	.9181788	1.217384
hhocu1						
Jobless	1.347716	.4380501	0.92	0.359	.7118931	2.551419
Farmer	1.243516	.1385431	1.96	0.051	.9991715	1.547614
Agriculture	1.284888	.165444	1.95	0.052	.9978357	1.654519
Others	1.133483	.0875776	1.62	0.105	.9739238	1.319183
wind1						
Poorest	1.228472	.1413894	1.79	0.074	.9799744	1.539984
Poorer	1.247973	.133076	2.08	0.038	1.012206	1.538655
Middle	1.065082	.1085391	0.62	0.536	.8719225	1.301032
Richest	.7050587	.0850161	-2.90	0.004	.5564111	.8934182
medial						
No	1.109427	.0794391	1.45	0.147	.9639085	1.276914
cage1						
12-23	2.164407	.2111079	7.92	0.000	1.787151	2.6213
24-35	2.64688	.2636193	9.77	0.000	2.176705	3.218614
36-47	1.995646	.1970016	7.00	0.000	1.643993	2.422519
48-59	1.529508	.1499607	4.33	0.000	1.261653	1.854229
birthord1						

4-6	1.154847	.108199	1.54	0.125	.9607831	1.388108
7-10	1.171124	.3939238	0.47	0.639	.6049999	2.266994
11	.4575288	.8813153	-0.41	0.685	.0104167	20.09579
_cons	.0708176	.0139163	-13.47	0.000	.048146	.104165

87 . logit stunted ib2.areal ib3.division1 ib3.melevel ib3.helevel i.mwork ib3.hhocu ib4.wind ib1.med

Iteration 0: log likelihood = -4801.3561  
 Iteration 1: log likelihood = -4472.8174  
 Iteration 2: log likelihood = -4463.7277  
 Iteration 3: log likelihood = -4463.7135  
 Iteration 4: log likelihood = -4463.7135

Logistic regression	Number of obs	=	7,745
	LR chi2(31)	=	675.29
	Prob > chi2	=	0.0000
Log likelihood = -4463.7135	Pseudo R2	=	0.0703

stunted	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]
areal					
Urban	1.040093	.0647294	0.63	0.528	.920658 1.175022
division1					
Barisal	1.173953	.1297487	1.45	0.147	.9453081 1.457901
Chittagong	1.270798	.1235691	2.46	0.014	1.050287 1.537606
Khulna	.9478732	.1072167	-0.47	0.636	.7593962 1.183129
Rajshahi	1.28199	.1356015	2.35	0.019	1.041956 1.57732
Rangpur	1.051197	.1171327	0.45	0.654	.8449611 1.307772
Sylhet	.9812669	.1093602	-0.17	0.865	.7887193 1.22082
Mymensingh	1.662331	.162671	5.19	0.000	1.372212 2.013788
melevel1					
No education	1.946845	.2781945	4.66	0.000	1.471293 2.576107
Primary	1.742016	.1942576	4.98	0.000	1.400013 2.167566
Secondary	1.521655	.1512036	4.22	0.000	1.252374 1.848835
helevel1					
No education	1.85021	.2203591	5.17	0.000	1.465019 2.336677
Primary	1.674841	.1728767	5.00	0.000	1.368084 2.05038
Secondary	1.359041	.1323777	3.15	0.002	1.122848 1.644917
mwork1					
Yes	1.054458	.0589887	0.95	0.343	.9449549 1.17665
hhocu1					
Jobless	1.042828	.3203313	0.14	0.891	.5711426 1.904062
Farmer	1.129235	.1103578	1.24	0.214	.9323913 1.367636
Agriculture	1.171467	.1287575	1.44	0.150	.9444378 1.453071
Others	1.067811	.0715818	0.98	0.328	.9363391 1.217743
wind1					
Poorest	1.247484	.1195352	2.31	0.021	1.033885 1.505213
Poorer	1.321691	.1179822	3.12	0.002	1.109549 1.574394
Middle	1.096152	.0942957	1.07	0.286	.9260762 1.297462
Richest	.6904462	.0669923	-3.82	0.000	.5708735 .8350642
medial					
No	1.1003	.0714694	1.47	0.141	.9687729 1.249685
cage1					
12-23	2.245716	.1848289	9.83	0.000	1.911166 2.638828
24-35	2.55619	.2129808	11.26	0.000	2.171058 3.009643
36-47	2.079472	.1767948	8.61	0.000	1.760292 2.456526

48-59	<b>1.520101</b>	<b>.1305657</b>	<b>4.88</b>	<b>0.000</b>	<b>1.284578</b>	<b>1.798807</b>
birthord1						
4-6	<b>1.15597</b>	<b>.092575</b>	<b>1.81</b>	<b>0.070</b>	<b>.9880493</b>	<b>1.352429</b>
7-10	<b>1.165883</b>	<b>.3006678</b>	<b>0.60</b>	<b>0.552</b>	<b>.7032988</b>	<b>1.932725</b>
11	<b>.8979575</b>	<b>1.319897</b>	<b>-0.07</b>	<b>0.942</b>	<b>.0503599</b>	<b>16.01132</b>
_cons	<b>.0736081</b>	<b>.011473</b>	<b>-16.74</b>	<b>0.000</b>	<b>.0542317</b>	<b>.0999076</b>

88 . estat ic

Akaike's information criterion and Bayesian information criterion

Model	Obs	ll(null)	ll(model)	df	AIC	BIC
.	<b>7,745</b>	<b>-4801.356</b>	<b>-4463.713</b>	<b>32</b>	<b>8991.427</b>	<b>9213.981</b>

Note: N=Obs used in calculating BIC; see [\[R\] BIC note](#).

89 .

end of do-file

90 . do "C:\Users\shimanto\AppData\Local\Temp\STD00000000.tmp"

91 . \*\*\*\*\*

92 . \* Stage A \*\*\* Compile parameters/inputs for Level-weights calculations

93 . \*\*\*\*\*

94 . \* a\_c\_h completed clusters by strata

95 . gen a\_c\_h=.

(8,759 missing values generated)

96 . quietly levelsof v022, local(lstrata)

97 . quietly foreach ls of local lstrata {

98 . \* A\_h total number of census clusters by strata

99 . gen A\_h = 0

100 . replace A\_h = 96 if v022 == 1  
(73 real changes made)

101 . replace A\_h = 44 if v022 == 2  
(200 real changes made)

102 . replace A\_h = 532 if v022 == 3  
(633 real changes made)

103 . replace A\_h = 96 if v022 == 4  
(190 real changes made)

104 . replace A\_h = 138 if v022 == 5  
(314 real changes made)

```
105 . replace A_h = 918 if v022 == 6
    (942 real changes made)

106 . replace A_h = 96 if v022 == 7
    (292 real changes made)

107 . replace A_h = 167 if v022 == 8
    (458 real changes made)

108 . replace A_h = 1081 if v022 == 9
    (554 real changes made)

109 . replace A_h = 96 if v022 == 10
    (89 real changes made)

110 . replace A_h = 101 if v022 == 11
    (248 real changes made)

111 . replace A_h = 863 if v022 == 12
    (567 real changes made)

112 . replace A_h = 37 if v022 == 13
    (261 real changes made)

113 . replace A_h = 343 if v022 == 14
    (764 real changes made)

114 . replace A_h = 96 if v022 == 15
    (40 real changes made)

115 . replace A_h = 104 if v022 == 16
    (233 real changes made)

116 . replace A_h = 664 if v022 == 17
    (639 real changes made)

117 . replace A_h = 70 if v022 == 18
    (293 real changes made)

118 . replace A_h = 698 if v022 == 19
    (678 real changes made)

119 . replace A_h = 96 if v022 == 20
    (126 real changes made)

120 . replace A_h = 26 if v022 == 21
    (240 real changes made)

121 . replace A_h = 358 if v022 == 22
    (925 real changes made)

122 .
123 .
124 . * M_h average number of households per cluster by strata
125 . gen M_h = 0
```

```
126 . replace M_h = 7 if v022 == 1
    (73 real changes made)

127 . replace M_h = 15 if v022 == 2
    (200 real changes made)

128 . replace M_h = 49 if v022 == 3
    (633 real changes made)

129 . replace M_h = 16 if v022 == 4
    (190 real changes made)

130 . replace M_h = 17 if v022 == 5
    (314 real changes made)

131 . replace M_h = 59 if v022 == 6
    (942 real changes made)

132 . replace M_h = 26 if v022 == 7
    (292 real changes made)

133 . replace M_h = 26 if v022 == 8
    (458 real changes made)

134 . replace M_h = 52 if v022 == 9
    (554 real changes made)

135 . replace M_h = 9 if v022 == 10
    (89 real changes made)

136 . replace M_h = 19 if v022 == 11
    (248 real changes made)

137 . replace M_h = 58 if v022 == 12
    (567 real changes made)

138 . replace M_h = 19 if v022 == 13
    (261 real changes made)

139 . replace M_h = 58 if v022 == 14
    (764 real changes made)

140 . replace M_h = 6 if v022 == 15
    (40 real changes made)

141 . replace M_h = 21 if v022 == 16
    (233 real changes made)

142 . replace M_h = 62 if v022 == 17
    (639 real changes made)

143 . replace M_h = 24 if v022 == 18
    (293 real changes made)

144 . replace M_h = 61 if v022 == 19
    (678 real changes made)
```

```

145 . replace M_h = 9 if v022 == 20
    (126 real changes made)

146 . replace M_h = 13 if v022 == 21
    (240 real changes made)

147 . replace M_h = 49 if v022 == 22
    (925 real changes made)

148 . * m_c total number of completed households (added from the HR dataset)
149 . gen m_c= 20160

150 . * M total number of households in country
151 . gen M = 32067700

152 . * S_h households selected per stratum
153 . gen S_h = 120

154 .
155 . * Steps to approximate Level-1 and Level-2 weights from Household or Individual
156 . *****
157 . * Stage B *** Approximate Level-weights ***
158 . *****
159 . * Steps to approximate Level-1 and Level-2 weights from Household or Individual Weights
160 . *Step 1. De-normalize the final weight, using approximated normalization factor
161 . gen d_HH = wgt * (M/m_c)

162 . *Step 2. Approximate the Level-2 weight
163 . * f the variation factor
164 . gen f = d_HH / ((A_h/a_c_h) * (M_h/S_h))

165 . * Calculating the level-weights based on different values of alpha
166 . local alphas 0 0.1 .25 .50 .75 0.90 1

167 . local i = 1

168 . foreach dom of local alphas{
    2. gen wt2_`i' = (A_h/a_c_h)*(f^`dom')
    3. gen wt1_`i' = d_HH/wt2_`i'
    4. local ++i
    5. }

169 .
170 . *svyset using alpha 0.5
171 . svyset v001, weight(wt2_3) strata(v022) , singleunit(centered) || _n, weight(wt1_3)
    Note: Stage 1 is sampled with replacement; further stages will be ignored for variance estimation.

    pweight: <none>
    VCE: linearized
    Single unit: centered
    Strata 1: v022
    SU 1: v001
    FPC 1: <zero>
    Weight 1: wt2_3
    Strata 2: <one>
    SU 2: <observations>
    FPC 2: <zero>
    Weight 2: wt1_3

```



```

172 .
173 . *****
174 . **Multilevel binary logistic Logistic regression
175 . *****
176 . svy: melogit stunted ib2.areal ib3.division1 ib3.melevel ib3.helevel i.mwork ib3.hhocu ib4.wind
    (running melogit on estimation sample)

```

Survey: Mixed-effects logistic regression

Number of strata	=	22	Number of obs	=	7,745
Number of PSUs	=	672	Population size	=	12,290,793
			Design df	=	650
			F( 31, 620)	=	11.61
			Prob > F	=	0.0000

stunted	Odds Ratio	Linearized Std. Err.	t	P> t	[95% Conf. Interval]	
areal						
Urban	.9472949	.1203634	-0.43	0.670	.7381247	1.21574
division1						
Barisal	1.650415	.3566542	2.32	0.021	1.079706	2.522788
Chittagong	1.588777	.3535462	2.08	0.038	1.026346	2.459415
Khulna	.9637594	.2323008	-0.15	0.878	.6003653	1.547112
Rajshahi	1.583396	.3394592	2.14	0.032	1.039352	2.412217
Rangpur	1.188506	.2653397	0.77	0.439	.7666763	1.842429
Sylhet	1.109096	.2426818	0.47	0.636	.7217218	1.704388
Mymensingh	2.423994	.4969037	4.32	0.000	1.620746	3.625335
melevel1						
No education	1.971187	.3941263	3.39	0.001	1.331122	2.919024
Primary	1.909316	.2919134	4.23	0.000	1.414151	2.577864
Secondary	1.661242	.2217111	3.80	0.000	1.278259	2.158973
helevel1						
No education	1.924663	.2970237	4.24	0.000	1.421503	2.605922
Primary	1.591872	.216178	3.42	0.001	1.219265	2.078346
Secondary	1.364998	.1765352	2.41	0.016	1.058866	1.759638
mwork1						
Yes	1.063877	.088698	0.74	0.458	.9032173	1.253114
hhocu1						
Jobless	1.305196	.4956196	0.70	0.483	.6192234	2.751084
Farmer	1.259039	.1627574	1.78	0.075	.9767829	1.622857
Agriculture	1.393058	.2205889	2.09	0.037	1.020777	1.90111
Others	1.117934	.0995295	1.25	0.211	.9386261	1.331497
wind1						
Poorest	1.391219	.1970481	2.33	0.020	1.053438	1.837309
Poorer	1.406622	.1744942	2.75	0.006	1.102522	1.7946
Middle	1.120979	.1401262	0.91	0.361	.8769922	1.432844
Richest	.6449255	.0923589	-3.06	0.002	.486836	.854351
medial						
No	1.027553	.0879518	0.32	0.751	.8685823	1.215619
cage1						
12-23	2.531003	.277602	8.47	0.000	2.040602	3.13926
24-35	3.081317	.3610728	9.60	0.000	2.447966	3.878532
36-47	2.29423	.2589261	7.36	0.000	1.838195	2.863404
48-59	1.670027	.1813546	4.72	0.000	1.349322	2.066955
birthord1						
4-6	1.162346	.1257539	1.39	0.165	.93988	1.437469

7-10	1.116192	.4082898	0.30	0.764	.5442503	2.289176
11	.4826677	1.010296	-0.35	0.728	.0079183	29.4215
_cons	.0424738	.0117804	-11.39	0.000	.0246373	.073223
v001						
var(_cons)	1.386637	.1980263			1.047551	1.835481

```
177 . melogit stunted ib2.areal ib3.division1 ib3.melevel ib3.helevel i.mwork ib3.hhocu ib4.wind ib1.m
```

Fitting fixed-effects model:

```
Iteration 0: log likelihood = -4469.7983
Iteration 1: log likelihood = -4463.7183
Iteration 2: log likelihood = -4463.7135
Iteration 3: log likelihood = -4463.7135
```

Refining starting values:

```
Grid node 0: log likelihood = -4557.9287
```

Fitting full model:

```
Iteration 0: log likelihood = -4557.9287 (not concave)
Iteration 1: log likelihood = -4464.2399
Iteration 2: log likelihood = -4457.1048
Iteration 3: log likelihood = -4456.8997
Iteration 4: log likelihood = -4456.8995
```

```
Mixed-effects logistic regression      Number of obs      =      7,745
Group variable:          v001          Number of groups   =      672
```

```
Obs per group:
    min =      1
    avg =     11.5
    max =     31
```

```
Integration method: mvaghermite      Integration pts.   =      7
```

```
Log likelihood = -4456.8995          Wald chi2(31)      =     537.09
                                      Prob > chi2         =     0.0000
```

stunted	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
areal						
Urban	1.038664	.07227	0.55	0.586	.9062516	1.190424
division1						
Barisal	1.168263	.1439903	1.26	0.207	.9175474	1.487485
Chittagong	1.269134	.138985	2.18	0.030	1.023979	1.572983
Khulna	.9332815	.1160964	-0.56	0.579	.7313524	1.190964
Rajshahi	1.263314	.1496174	1.97	0.048	1.001616	1.593387
Rangpur	1.036865	.1276225	0.29	0.769	.8146145	1.319752
Sylhet	.9640189	.1189417	-0.30	0.766	.7569433	1.227744
Mymensingh	1.675034	.186938	4.62	0.000	1.345945	2.084586
melevel1						
No education	1.941736	.2835449	4.54	0.000	1.458452	2.585164
Primary	1.740659	.1978743	4.88	0.000	1.392999	2.175086
Secondary	1.531933	.1546209	4.23	0.000	1.256974	1.867038
helevel1						
No education	1.867038	.2268958	5.14	0.000	1.471326	2.369176
Primary	1.680179	.1766482	4.94	0.000	1.367298	2.064657
Secondary	1.363659	.1350718	3.13	0.002	1.123035	1.655839

mwork1						
Yes	1.056567	.0610457	0.95	0.341	.9434451	1.183252
hhocul						
Jobless	1.035968	.3235419	0.11	0.910	.5617051	1.910663
Farmer	1.140206	.1142665	1.31	0.190	.9368702	1.387672
Agriculture	1.188561	.1343738	1.53	0.127	.9523317	1.483388
Others	1.068124	.0732134	0.96	0.336	.9338494	1.221705
wind1						
Poorest	1.271383	.1272871	2.40	0.016	1.044857	1.547021
Poorer	1.347348	.1245254	3.23	0.001	1.124112	1.614916
Middle	1.105921	.0976233	1.14	0.254	.9302202	1.314808
Richest	.6853503	.0683414	-3.79	0.000	.5636803	.8332825
medial						
No	1.088451	.0725356	1.27	0.203	.9551773	1.240321
cage1						
12-23	2.300984	.1931445	9.93	0.000	1.951928	2.71246
24-35	2.6078	.221426	11.29	0.000	2.208002	3.079988
36-47	2.123639	.1839356	8.70	0.000	1.792072	2.516554
48-59	1.542112	.1346509	4.96	0.000	1.299548	1.82995
birthord1						
4-6	1.154555	.0944371	1.76	0.079	.9835367	1.355311
7-10	1.155556	.3046567	0.55	0.583	.6892482	1.937341
11	.9372618	1.39641	-0.04	0.965	.0505441	17.38007
_cons	.0710336	.0116087	-16.18	0.000	.0515652	.0978523
v001						
var(_cons)	.0951414	.0307231			.0505242	.1791595

LR test vs. logistic model: chibar2(01) = **13.63** Prob >= chibar2 = **0.0001**

178 . estat ic

Akaike's information criterion and Bayesian information criterion

Model	Obs	ll(null)	ll(model)	df	AIC	BIC
.	<b>7,745</b>	.	<b>-4456.9</b>	<b>33</b>	<b>8979.799</b>	<b>9209.308</b>

Note: N=Obs used in calculating BIC; see [R] BIC note.

179 .  
end of do-file

180 .