Introduction to Mapping Techniques: Identifying the Vulnerable and Underserved Subgroups of Young People

Reducing Inequalities – Universal Access for Family Planning

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Using maps and data to identify vulnerable and underserved subgroups of young people in order to develop evidence-based, targeted policies and programs and monitor indicators of success

National MDGs and PRS goals cannot be achieved without addressing the needs of the most vulnerable groups of young people
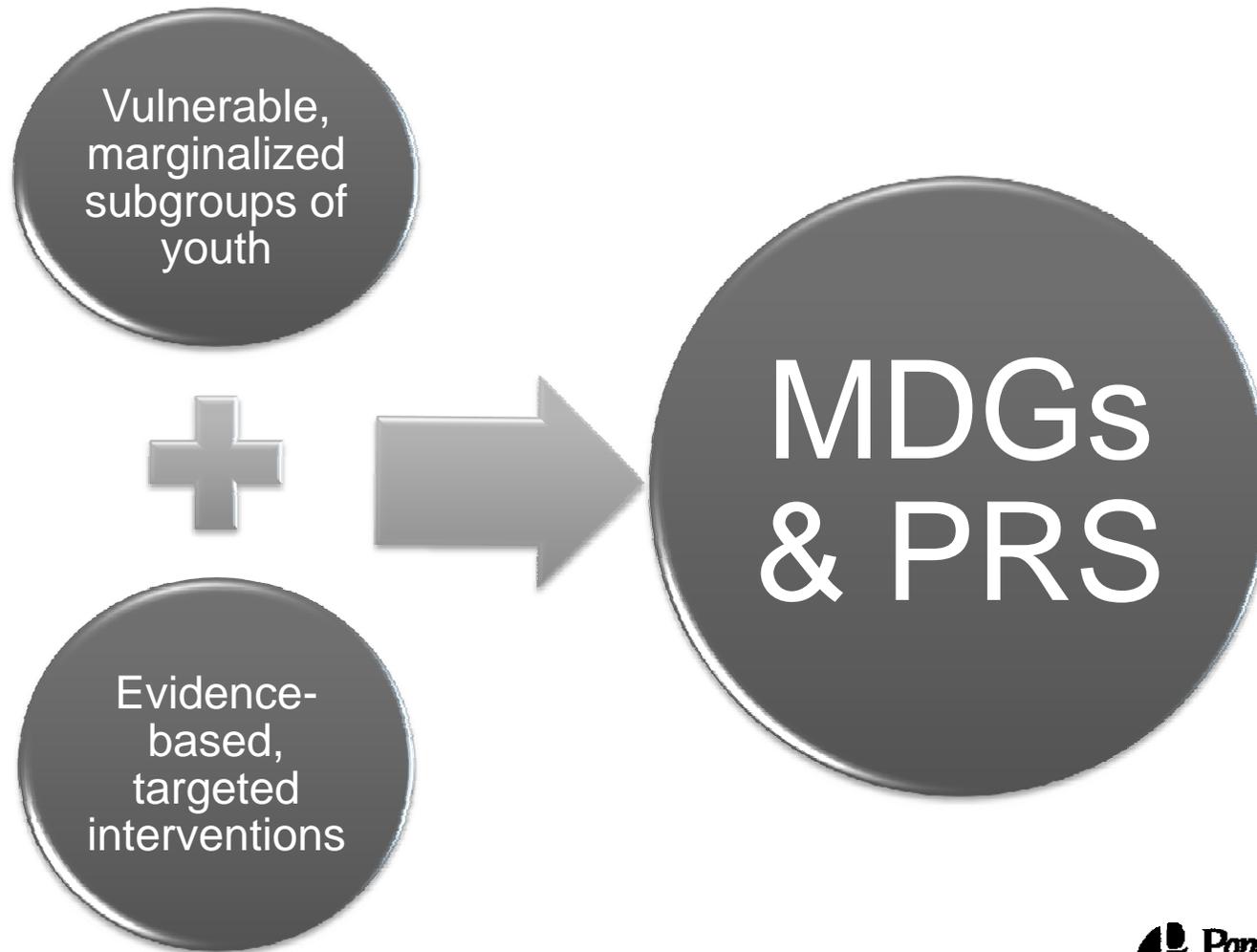
Nationally representative data informs both national policies and youth intervention strategies when disaggregated by:

Age

Childbearing Status

Sex

Living Arrangements

Marital Status

School Enrollment

Ethnicity

Linguistic Group

Child Marriage: Ethiopia
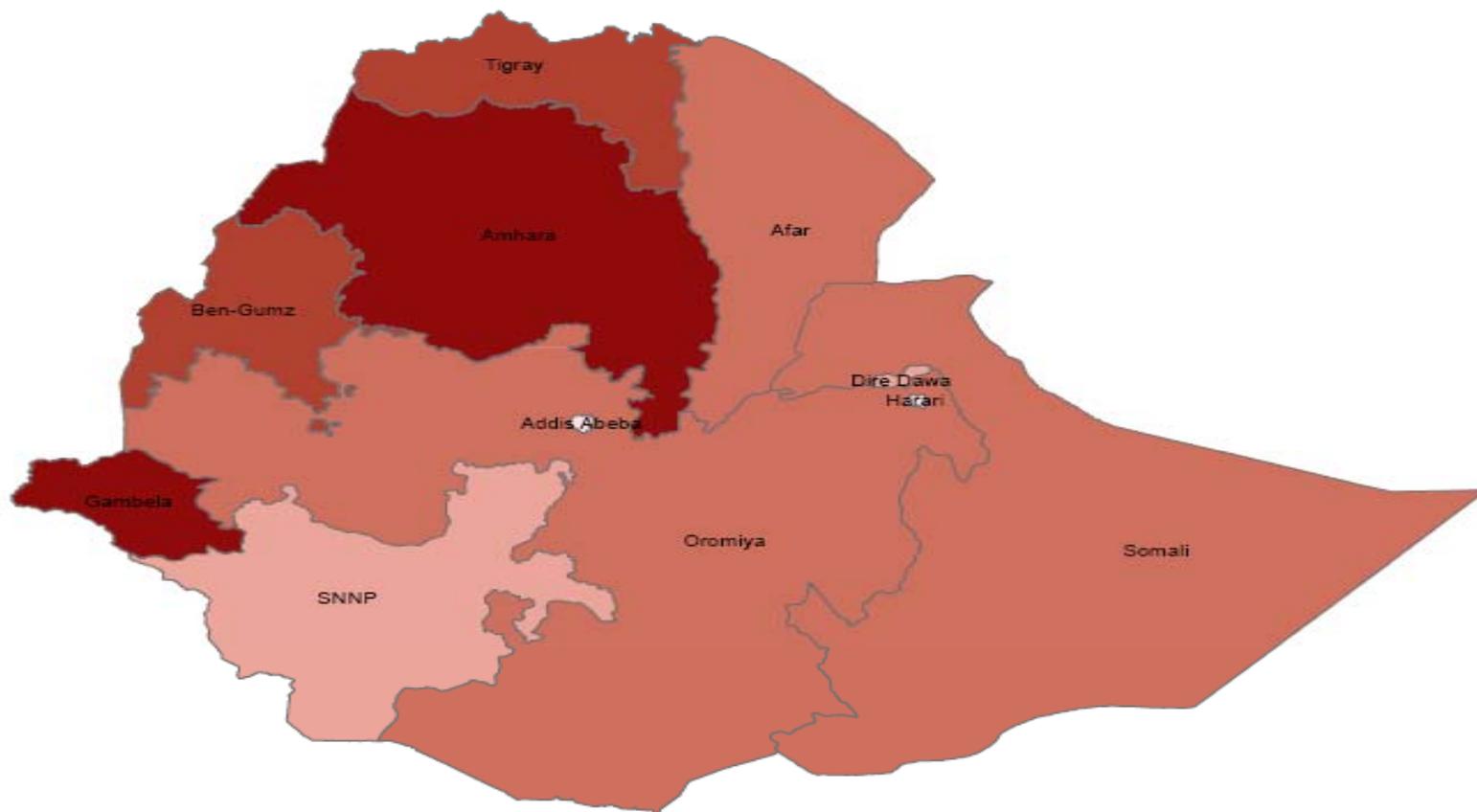
Percent of females (20-24) who were married by 15

	5.8 - 8.3
	8.4 - 12.4
	12.5 - 21.7
	21.8 - 30.0
	30.1 - 47.8
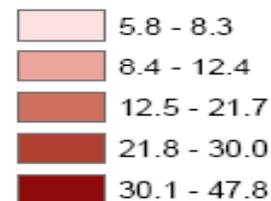
Source: 2005 Demographic and Health Survey
From: *2005 Ethiopia Adolescent Data Guide*

Km
0   75   150   300   450   600
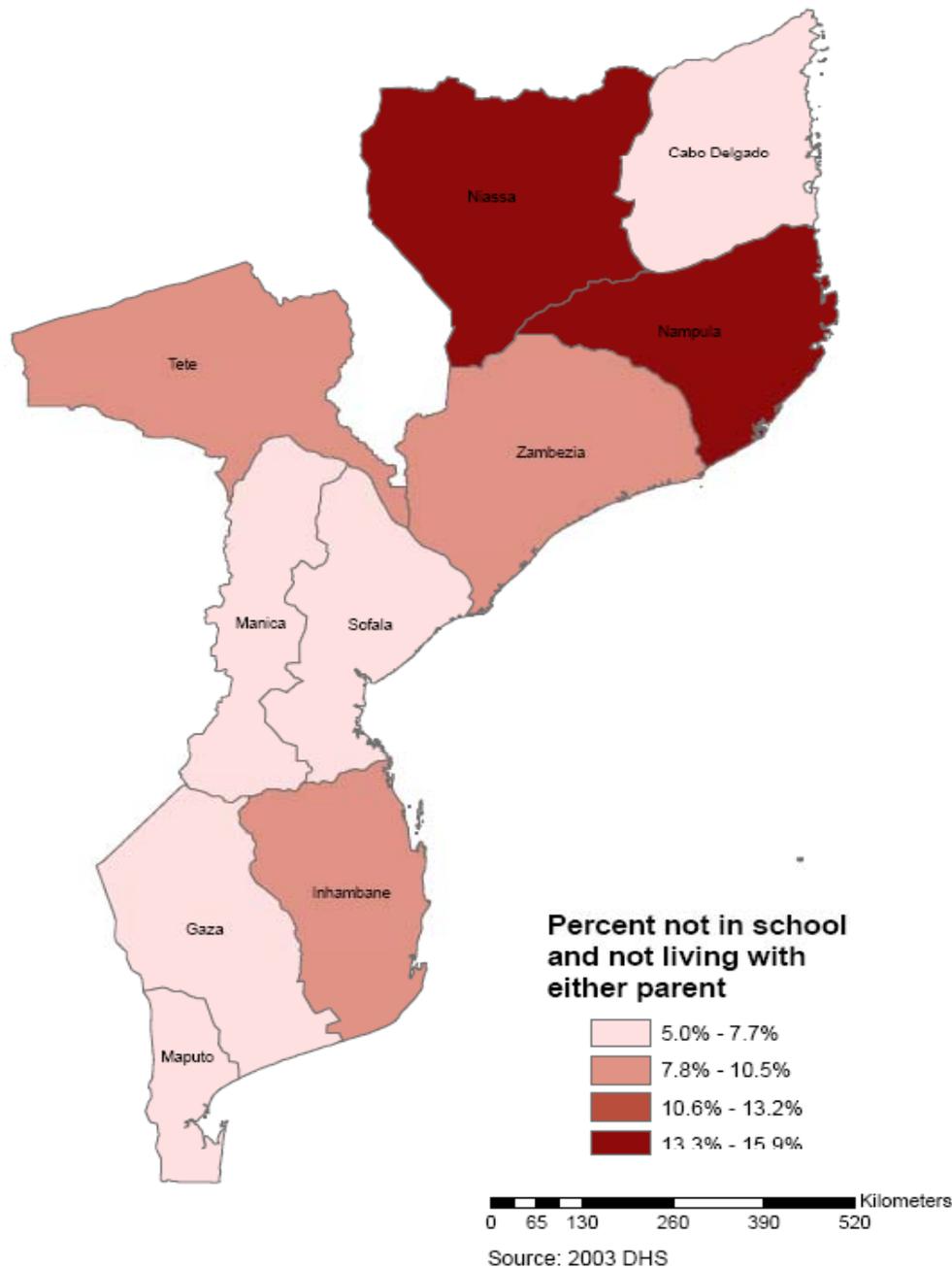
Targeting policies to reach the most vulnerable:

Percent of 10-14 year old girls not in school and not living with either parent, Mozambique

Percent not in school and not living with either parent

- 5.0% - 7.7%
- 7.8% - 10.5%
- 10.6% - 13.2%
- 13.3% - 15.9%

Source: 2003 DHS

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From: *2003 Mozambique Adolescent Data Guide*

Percent of young people attending school during the present school year: Guatemala
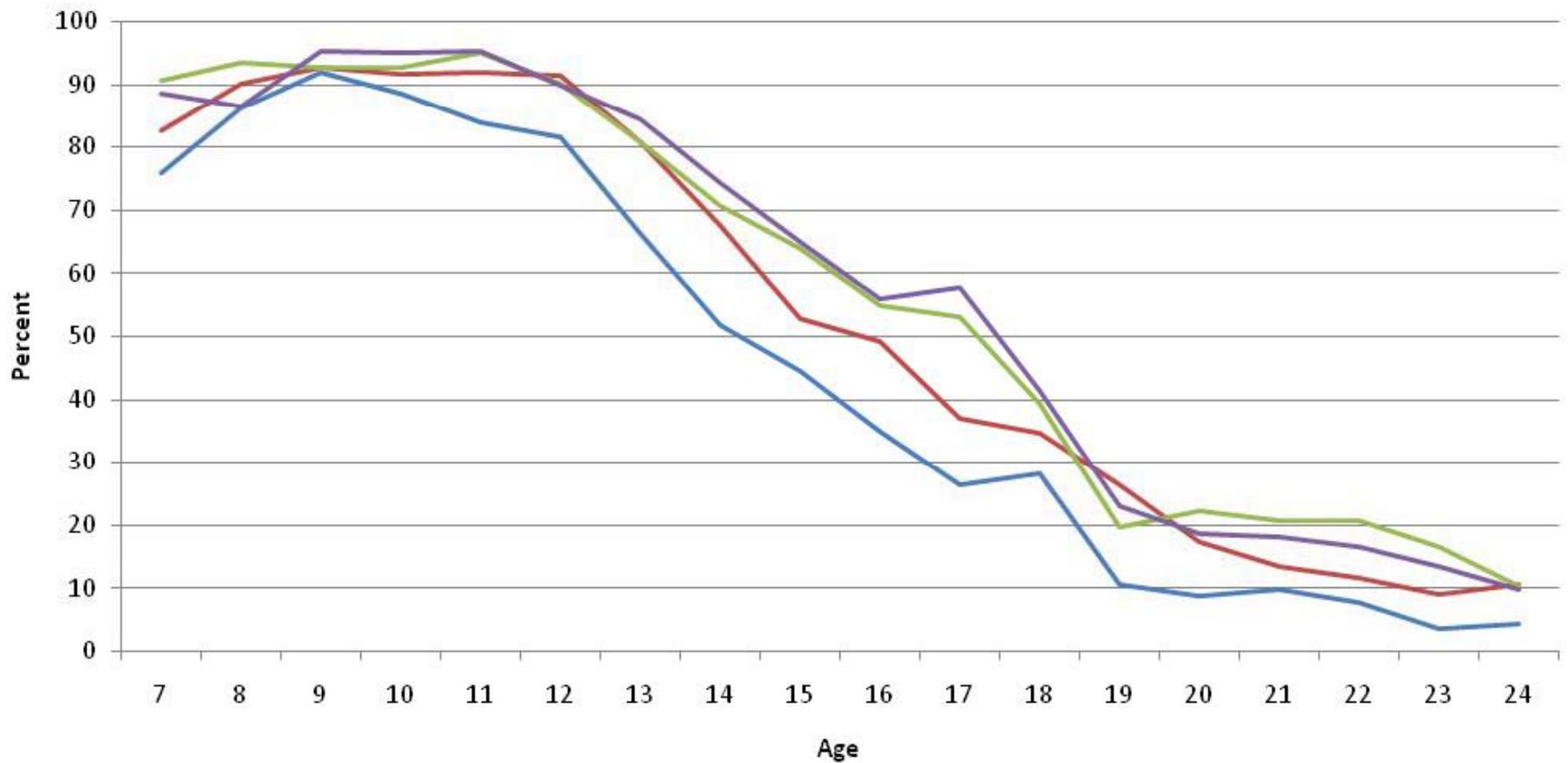
Legend: Mayan female — Mayan male — Ladino female — Ladino male

In some countries, especially those in sub-Saharan Africa, the majority of girls 10-14 are living with only one or no parent; in some settings 10% or more are living with neither parent and are not in school

Country	% living with one parent	% living with neither parent	% living with neither parent and not in school	Estimated number of girls living with neither parent and not in school*
Nigeria (2003)	21	19	5	402,800
Malawi (2004)	23	31	5	45,100
Mozambique (2003)	27	25	9	125,247
Ethiopia (2005)	21	15	8	391,400
Haiti (2000)	31	30	13	70,600
Peru (2000)	21	11	2	30,000
Bolivia (2003)	22	8	4	21,000
Dominican Republic (2002)	32	22	2	9,600
Indonesia (2002/03)	9	7	1	109,100

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Using local or regional data and maps to monitor progress on indicators of success at the program level

The following data can be used in conjunction with nationally representative data:

Type of Data	Description
Coverage Exercise	A supply-side analysis of program coverage
Adolescent Surveys	"Laboratory" for analysis of adolescents' lives in specific geographic zones
Baseline Surveys	Surveys conducted to establish a baseline for future interventions

Current adolescent, health, and development-related policy and programs miss large populations of at-risk young people

Coverage Exercise: Creating a profile of the beneficiaries of youth initiatives

Country	Number of beneficiaries surveyed	Males	Females	10-14 years	15-19 years	20+ years
Burkina Faso	6216	56%	44%	7%	30%	63%
Ethiopia	10866	58%	42%	22%	45%	33%
Guinea Bissau	7625	57%	43%	7%	37%	56%
Mauritania	5452	83%	17%	28%	42%	25%
Guatemala	12866	47%	53%	37%	54%	9%

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Social Isolation of Married Girls

Case study: Amhara, Ethiopia

	All boys (n = 925)	All girls (n = 937)	Never married girls (n = 663)	Ever married girls (n = 274)
Social participation in the last week				
Socialized with friends	80.1***	70.3	71.9~	66.4
Gone outside your home to meet same-sex friends	36.1***	21.2	24.0**	14.6
Gone to a church or mosque	17.2	25.0***	21.9	32.8**
Participated in a coffee ceremony	81.6***	76.7	75.0	80.7~
Media exposure in the last week				
Listened to the radio	37.2***	24.4	27.0**	17.9
Watched TV	9.1	7.8	9.5**	3.6
*Differences between groups significant at ~p<0.10; *p<0.05; **p<0.01; ***p<0.001*				

Source: Erulkar, Anabel S., Tekle-Ab Mekbib, Negussie Smith, and TshehaiGulema. 2004. "The experience of adolescence in rural Amhara Region Ethiopia." Accra, Ghana: Population Council.

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Using national data and maps in ways that serve to monitor indicators of success at the program level

Using the Nepal DHS data to measure indicators on a regional level
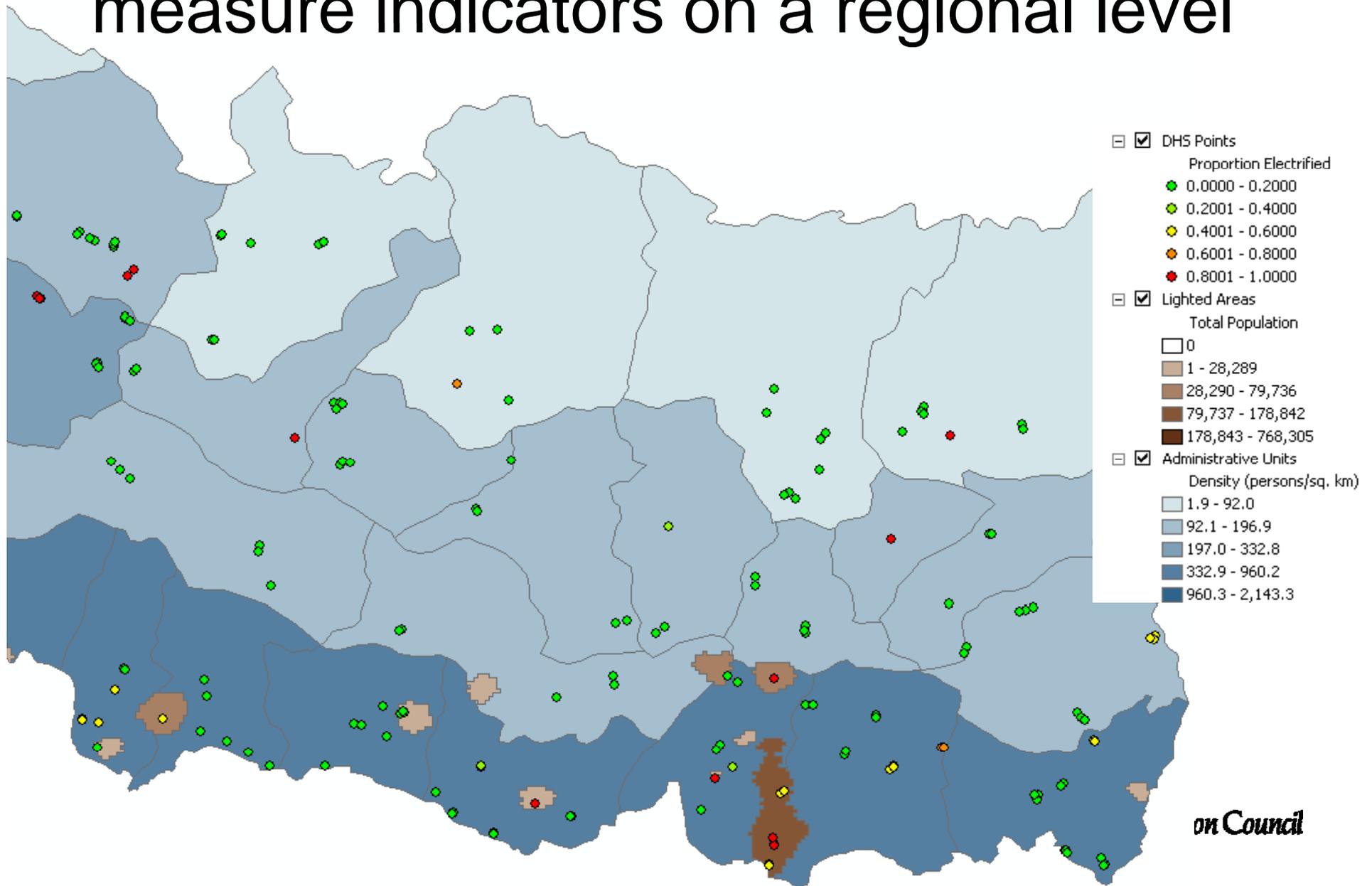
Extreme Cases: Child Mortality

•Strikingly, infants and children with particularly high probabilities of death (red circles) were also found to be located in sparsely populated and non-urban areas.

■Survival chances for children, however, were greatest (green circles) in the most and least dense areas suggesting that the role of population density of child death and survival is complex and bears additional consideration.

Population density
per sq. km
0 - 1
2 - 5
6 - 25
26 - 50
51 - 100
101 - 250
251 - 92,637

Extreme cases present
• High
• Both
• Low
○ Neither

0 125 250   500   km

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Example: Estimating program reach for Girls' Economic Empowerment Program in Liberia

15-19 year olds	Females	Males
% population (urban areas)	5.8	4.4
% not in school (urban areas)	25.3	14.7
Urban community of 100,000		
Estimated # of 15-19 year olds	5800	4400
Estimated # of 15-19 year olds not in school	**1467**	**647**

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Conclusion/Practical Applications

- Datasets such as DHS, census, MICs, LSMS, and PAPFAM can be analyzed/disaggregated in order to highlight the experiences of adolescents

- This data can be uploaded into mapping software to create maps to show regional/geographic variations in indicators

- Use this data alongside program indicators in order to monitor success and compare with local youth populations

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Thank you!

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