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Strengthening Partnerships, Results,
and Innovations in Nutrition Globally

SNAPSHOTS OF NUTRITION IN UGANDA



These subregional snapshots have been constructed as part of the “Pathways to Better Nutrition” case study evaluations implemented by the USAID-funded SPRING project. Using key indicators and objectives named in the 2011 Uganda Nutrition Action Plan (UNAP), these snapshots present the diversity of factors affecting malnutrition in the country. One can best interpret these snapshots as a set, assessing what objectives or set of constraints are most pressing in each subregion. The contextual factors that will affect subnational implementation of national nutrition policy may vary across regions.

ABOUT SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded Cooperative Agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute. SPRING provides state-of-the-art technical support and focuses on the prevention of stunting and maternal and child anemia in the first 1,000 days.

RECOMMENDED CITATION

Pomeroy, Amanda, Alexis D'Agostino. 2014. *Snapshots of Nutrition in Uganda: 2014 Compendium*. Arlington, VA. USAID/Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project.

ACKNOWLEDGMENTS

SPRING would like to thank USAID for their continued support and input. The authors would also like to thank the larger "Pathways to Better Nutrition" Case Study Team, the SPRING Uganda Country team, and the Office of the Prime Minister in Uganda for their comments on this work.

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CONTENTS

CENTRAL 1 SUBREGION	6
CENTRAL 2 SUBREGION	8
EAST CENTRAL SUBREGION	10
EASTERN SUBREGION.....	12
KAMPALA SUBREGION.....	14
KARAMOJA SUBREGION	16
NORTH SUBREGION.....	18
SOUTHWEST SUBREGION	20
WEST NILE SUBREGION.....	22
WESTERN SUBREGION.....	24
ANNEX I: SELECTION OF INDICATORS IN UGANDA SUBREGION SNAPSHOTS.....	26

'SNAPSHOTS OF NUTRITION' READER'S GUIDE

These snapshots are intended to present the diversity of factors affecting malnutrition in the country based upon the dimensions outlined by the Ugandan Nutrition Action Plan (UNAP). Best read alongside other evidence from SPRING's 'Pathways to Better Nutrition' (PBN) Case Study Series, the snapshots can be used in the following ways:

- By nutrition program planners in Uganda to help inform what weaknesses are, and are not, modifiable in their subregion; what new interventions to plan and advocate for in next year's workplan; and what aspects of current interventions may need revision in order to meet the 2016 UNAP targets.
- By nutrition policy makers in Uganda at the national and local level to prioritize plans and funding for activities tailored to improve the indicators furthest from the national average or UNAP targets.
- By nutrition monitoring and evaluation officers both in Uganda and elsewhere to use as a data point to work from in planning their evaluation of the effectiveness of the UNAP from 2011 onward.

In addition to the subregion snapshots, SPRING is endeavoring to complete snapshots for Lira and Kisoro, the two districts where other PBN data collection is occurring. Once complete, SPRING can share templates and guidance on how others can create these snapshots for their district's planning purposes.

Snapshots of Nutrition in Uganda: Central 1 Subregion

SUMMARY OF KEY UNAP INDICATORS FOR CENTRAL 1 SUBREGION

Indicator	Level in Central 1	UNAP National Target (2016)
Any anemia, children 6–59 months. ¹	56.8%	50.0%
Any anemia, WRA ¹	23.5%	12.0%
Calorie consumption (average calories) ³	1998 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	58.8%	75.0%
Low birthweight (<2.5kg) ¹	14.4%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	4.4%	*
Overweight, children under 5 yrs. ¹	4.3%	No increase**
Overweight, non-pregnant women ¹	23.3%	No target
Stunting, children under 5 yrs. ¹	32.5%	32.0%
Underweight, children under 5 yrs. ¹	12.9%	10.0%
Underweight, non-pregnant women ¹	7.3%	8.0%
Vitamin A deficiency, children 6-59 months ²	29.1%	13.0%
Vitamin A deficiency, WRA ²	32.7%	12.0%
Wasting, children under 5 yrs. ¹	5.8%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP, for these the SUN/WHO target for 2025 is given.

DESCRIPTION OF CENTRAL 1 CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

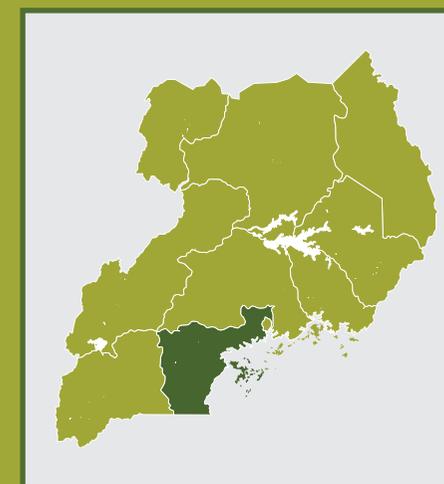
Location: Rural

Households in lowest national wealth quintile*:
Below Average (6%)

Households reporting conflict or raiding as an issue: Below Average (0%)

Literacy rate for women of reproductive age (WRA):
Above Average (80%)

Refugee population level:
Low



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

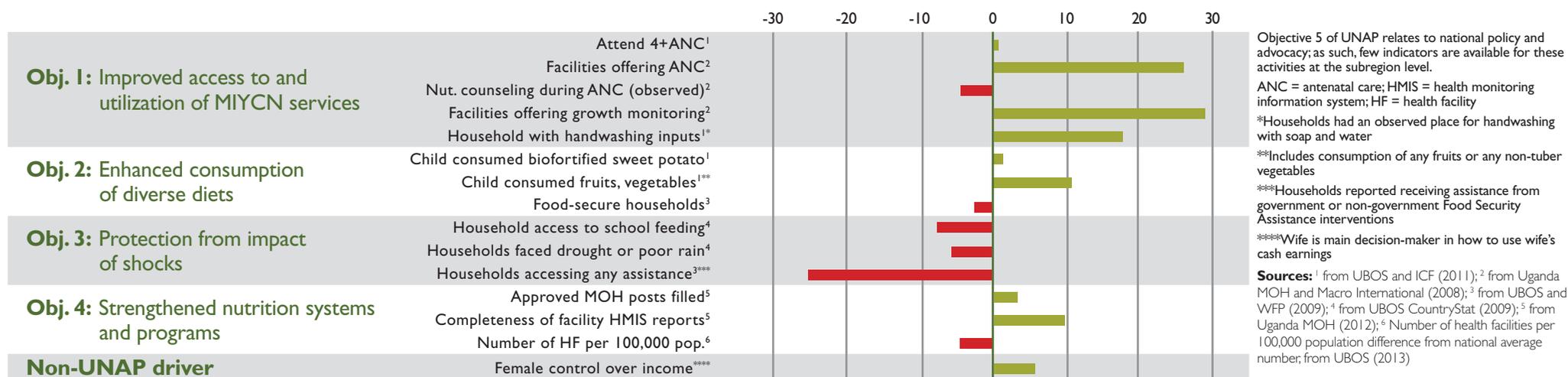
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountryStat 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Matooke	31.4%	41%	54%	5%
2	Cereals	24.6%			
	Rice		94%	0%	6%
	Maize-Grain		35%	55%	10%
	Maize-Flour		81%	16%	3%
	Bread		94%	0%	5%
	Millet		77%	18%	4%
	Sorghum		100%	0%	0%
3	Roots and Tubers	20.1%			
	Sweet potatoes		29%	66%	6%
	Cassava-Fresh		26%	69%	5%
	Cassava-Flour		73%	23%	5%
4	Legumes and Pulses	10.7%			
	Fresh beans		27%	62%	11%
	Dry beans		46%	51%	3%
	Groundnuts		83%	13%	4%
	Peas		97%	3%	0%

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." Economic Policy Research Centre. Research Series No. 70. July 2010.

Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

UBOS. 2013. *District profiles by selected indicators*. Data received: 7 February 2013.

Uganda Bureau of Statistics CountrySTAT Database (object name CFSVA2009); accessed January 14, 2014, <http://countrystat.org/home.aspx?c=UGA&tr=231>

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011: Vitamin A Addendum*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

Uganda Ministry of Health (MOH). 2012. *Annual Health Sector Performance Report: Financial Year 2011/2012*. Kampala, Uganda: Ministry of Health.

UBOS and United Nations World Food Programme (WFP). 2009. *Comprehensive Food Security & Vulnerability Analysis (CFSVA): Uganda*. Kampala, Uganda: UBOS and UNWFP.

Uganda MOH and Macro International Inc. 2008. *Uganda Service Provision Assessment Survey 2007*. Kampala, Uganda: Ministry of Health and Macro International Inc.

United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: Central 2 Subregion

SUMMARY OF KEY UNAP INDICATORS FOR CENTRAL 2 SUBREGION

Indicator	Level in Central 2	UNAP National Target (2016)
Any anemia, children 6–59 months ¹	54.2%	50.0%
Any anemia, WRA ¹	30.9%	12.0%
Calorie consumption (average calories) ³	1850 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	71.8%	75.0%
Low birthweight (<2.5kg) ¹	12.5%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	8.2%	*
Overweight, children under 5 yrs. ¹	4.8%	No increase**
Overweight, non-pregnant women ¹	20.4%	No target
Stunting, children under 5 yrs. ¹	36.1%	32.0%
Underweight, children under 5 yrs. ¹	11.4%	10.0%
Underweight, non-pregnant women ¹	8.2%	8.0%
Vitamin A deficiency, children 6-59 months ²	21.7%	13.0%
Vitamin A deficiency, WRA ²	29.8%	12.0%
Wasting, children under 5 yrs. ¹	5.3%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF CENTRAL 2 CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

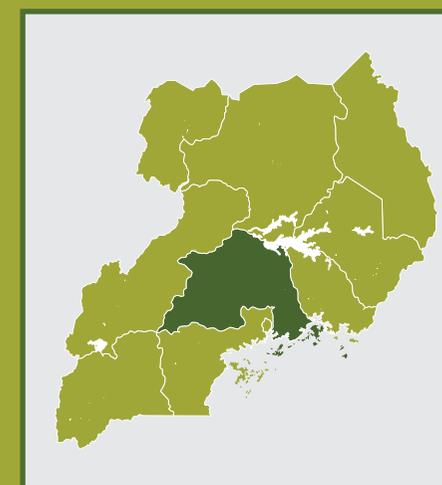
Location: Rural

Households in lowest national wealth quintile*:
Below Average (8%)

Households reporting conflict or raiding as an issue: Below Average (0%)

Literacy rate for women of reproductive age (WRA):
Above Average (75%)

Refugee population level:
Low



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

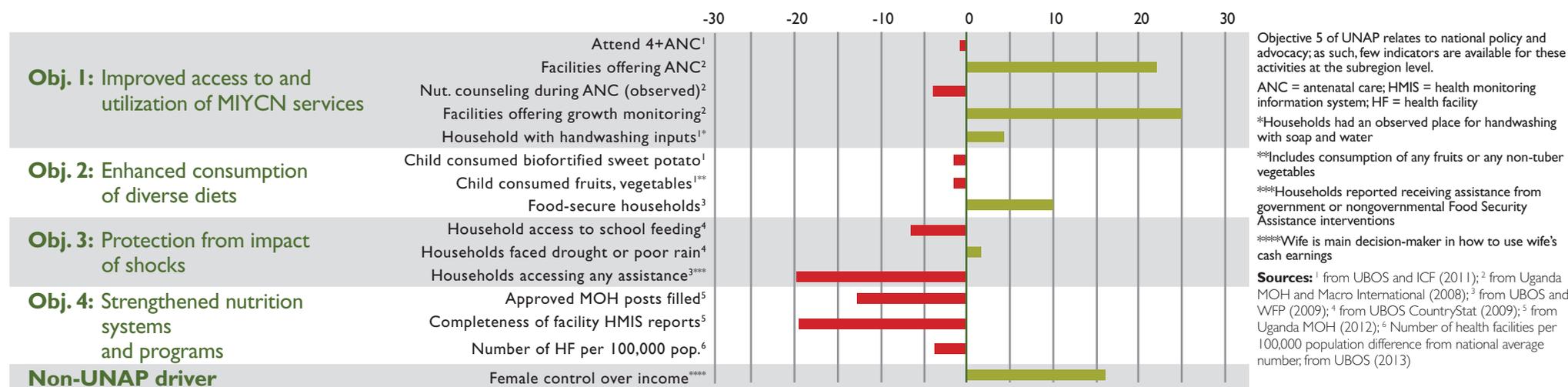
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Roots and Tubers	30.3%			
	Sweet potatoes		21%	74%	5%
	Cassava-Fresh		25%	70%	5%
	Cassava-Flour		57%	42%	1%
	Irish potatoes		60%	32%	8%
2	Cereals	23.9%			
	Rice		94%	2%	4%
	Maize-Grain		19%	71%	10%
	Maize-Flour		76%	21%	3%
	Bread		95%	1%	4%
	Millet		65%	30%	5%
	Sorghum		36%	52%	12%
3	Matooke	19.7%	36%	57%	7%
4	Legumes and Pulses	12.5%			
	Fresh beans		22%	70%	9%
	Dry beans		44%	53%	4%
	Groundnuts		80%	17%	3%
	Peas		87%	13%	0%

Source: Ssewanyana & Kasirye (2010)

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

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Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

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Snapshots of Nutrition in Uganda: East Central Subregion

SUMMARY OF KEY UNAP INDICATORS FOR EAST CENTRAL SUBREGION

Indicator	Level in East Central	UNAP National Target (2016)
Any anemia, children 6–59 months ¹	67.5%	50.0%
Any anemia, women of reproductive age ¹	29.9%	12.0%
Calorie consumption (average calories) ³	1756 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	56.1%	75.0%
Low birthweight (<2.5kg) ¹	11.9%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	0.9%	*
Overweight, children under 5 yrs. ¹	2.1%	No increase**
Overweight, non-pregnant women ¹	15.7%	No target
Stunting, children under 5 yrs. ¹	33.5%	32.0%
Underweight, children under 5 yrs. ¹	16.7%	10.0%
Underweight, non-pregnant women ¹	11.9%	8.0%
Vitamin A deficiency, children 6–59 months ²	39.7%	13.0%
Vitamin A deficiency, WRA ²	40.9%	12.0%
Wasting, children under 5 yrs. ¹	5.0%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF EAST CENTRAL CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Peri-Urban with Urban Center

Households in lowest national wealth quintile*: Below Average (12%)

Households reporting conflict or raiding as an issue: Below Average (0.8%)

Literacy rate for women of reproductive age (WRA): Average (58%)

Refugee population level: Low

Notes:

*Considered a measure of poverty.

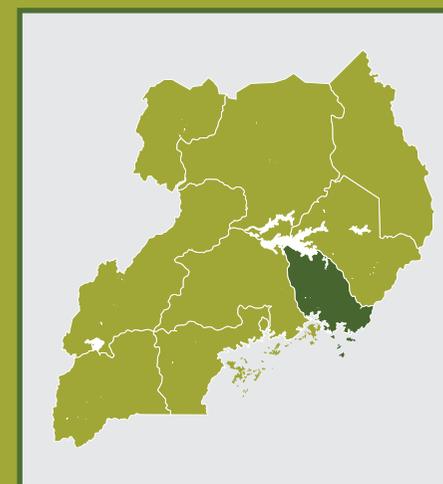
Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

Households reporting conflict or raiding based on national average of 1%

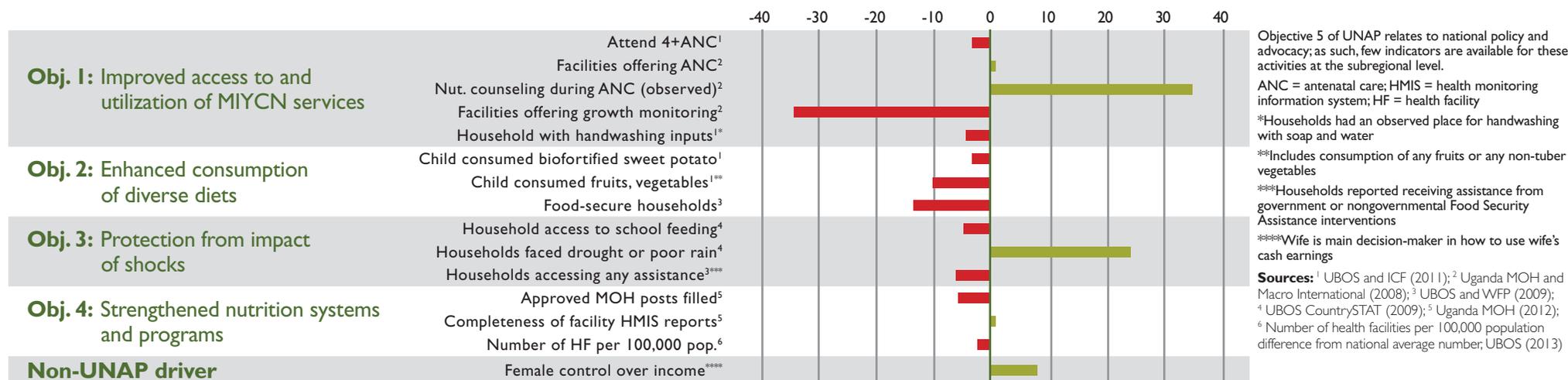
Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.



IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Roots and Tubers	43%			
	Sweet potatoes		21%	74%	5%
	Cassava-Fresh		25%	70%	5%
	Cassava-Flour		57%	42%	1%
	Irish potatoes		60%	32%	8%
2	Cereals	32.1%			
	Rice		94%	2%	4%
	Maize-Grain		19%	71%	10%
	Maize-Flour		76%	21%	3%
	Bread		95%	1%	4%
	Millet		65%	30%	5%
	Sorghum		36%	52%	12%

Source: Ssewanyana & Kasirye (2010)

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

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United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: Eastern Subregion

SUMMARY OF KEY UNAP INDICATORS FOR EASTERN SUBREGION

Indicator	Level in Eastern	UNAP National Target (2016)
Any anemia, children 6–59 months ¹	54.6%	50.0%
Any anemia, WRA ¹	27.9%	12.0%
Calorie consumption (average calories) ³	1880 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	62.6%	75.0%
Low birthweight (<2.5kg) ¹	6.8%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	8.3%	*
Overweight, children under 5 yrs. ¹	2.5%	No increase**
Overweight, non-pregnant women ¹	9.2%	No target
Stunting, children under 5 yrs. ¹	25.3%	32.0%
Underweight, children under 5 yrs. ¹	10.0%	10.0%
Underweight, non-pregnant women ¹	20.0%	8.0%
Vitamin A deficiency, children 6–59 months ²	42.4%	13.0%
Vitamin A deficiency, WRA ²	51.2%	12.0%
Wasting, children under 5 yrs. ¹	4.8%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

*UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

**Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given instead.

DESCRIPTION OF EASTERN CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

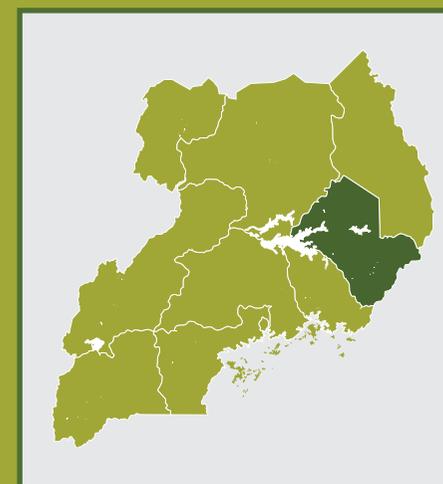
Location: Rural

Households in lowest national wealth quintile*:
Above Average (33%)

Households reporting conflict or raiding as an issue: Average (0.4%)

Literacy rate for women of reproductive age (WRA):
Below Average (49%)

Refugee population level:
Low



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

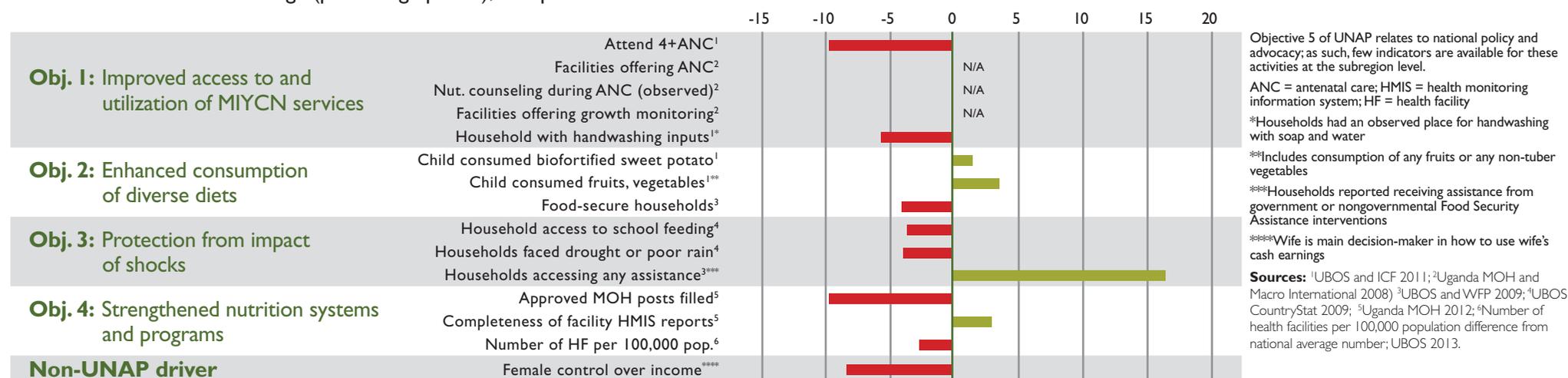
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Cereals	35.3%			
	Rice		85%	9%	6%
	Maize-Grain		13%	75%	11%
	Maize-Flour		54%	42%	4%
	Bread		97%	0%	3%
	Millet		21%	71%	8%
	Sorghum		36%	60%	4%
2	Roots and Tubers	32.4%			
	Sweet potatoes		20%	73%	7%
	Cassava-Fresh		24%	62%	14%
	Cassava-Flour		39%	58%	4%
	Irish potatoes		91%	9%	0%
3	Matooke	14.5%	28%	67%	5%
4	Legumes and Pulses	10.2%			
	Fresh beans		24%	70%	6%
	Dry beans		49%	49%	3%
	Groundnuts		62%	32%	5%
	Peas		50%	45%	6%

Source: Ssewanyana & Kasirye (2010)

Sources:

- Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.
- Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.
- Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." *Economic Policy Research Centre. Research Series No. 70*. July 2010.
- Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.
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- United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: Kampala Subregion

SUMMARY OF KEY UNAP INDICATORS FOR KAMPALA SUBREGION

Indicator	Level in Kampala	UNAP National Target (2016)
Any anemia, children 6-59 months ¹	39.8%	50.0%
Any anemia, WRA ¹	19.6%	12.0%
Calorie consumption (average calories) ³	1645 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	43.6%	75.0%
Low birthweight (<2.5kg) ¹	10.5%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	15.6%	*
Overweight, children under 5 yrs. ¹	3.5%	No increase**
Overweight, non-pregnant women ¹	40.4%	No target
Stunting, children under 5 yrs. ¹	13.5%	32.0%
Underweight, children under 5 yrs. ¹	5.7%	10.0%
Underweight, non-pregnant women ¹	7.7%	8.0%
Vitamin A deficiency, children 6-59 months ²	27.9%	13.0%
Vitamin A deficiency, WRA ²	29.7%	12.0%
Wasting, children under 5 yrs. ¹	4.4%	5.0%

Sources: IUBOS and ICF (2011), 2UBOS and ICF (2012), 3UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF KAMPALA CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Urban

Households in lowest national wealth quintile*:
Below Average (0%)

Households reporting conflict or raiding as an issue: n/a

Literacy rate for women of reproductive age (WRA):
Above Average (91%)

Refugee population level:
Low



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

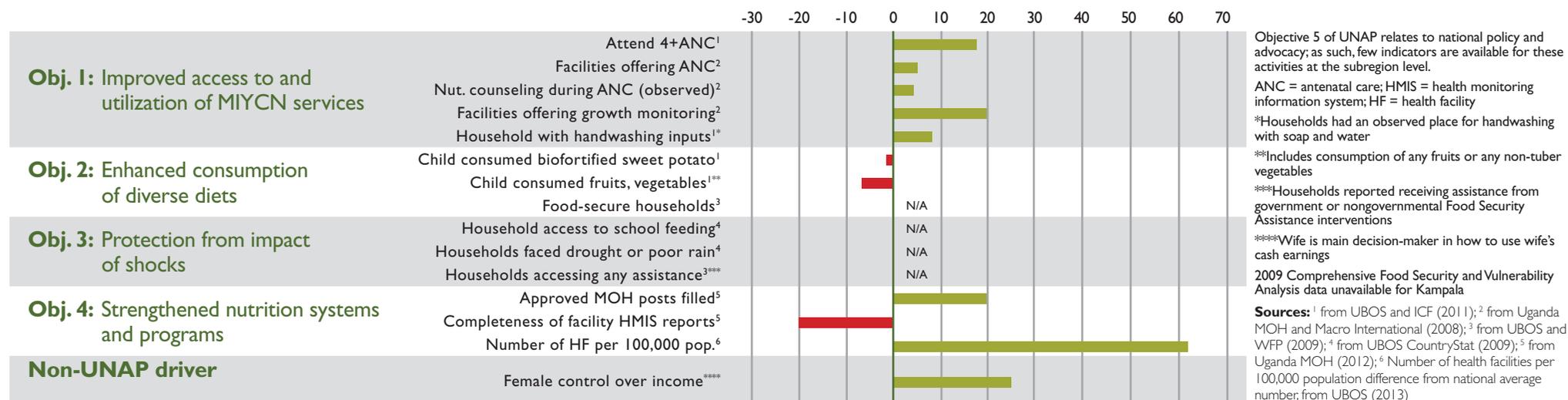
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift	
1	Cereals	29.9%				
	Rice		99%	1%	0%	
	Maize-Grain		100%	0%	0%	
	Maize-Flour		98%	1%	2%	
	Bread		99%	0%	1%	
	Millet		82%	4%	14%	
	Sorghum		100%	0%	0%	
2	Matooke	20.3%	95%	1%	4%	
	3	Roots and Tubers	13.7%			
		Sweet potatoes		93%	4%	2%
		Cassava-Fresh		86%	6%	6%
		Cassava-Flour		81%	0%	19%
Irish potatoes		98%	1%	1%		
4	Sugar	13.5%	99%	0%	0%	
5	Legumes and Pulses	12.2%				
	Fresh beans		84%	6%	10%	
	Dry beans		99%	1%	1%	
	Groundnuts		99%	1%	0%	
	Peas		100%	0%	0%	

Source: Ssewanyana & Kasirye (2010)

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." *Economic Policy Research Centre. Research Series No. 70*. July 2010.

Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

UBOS. 2013. *District profiles by selected indicators*. Data received: 7 February 2013.

UBOS CountrySTAT Database (object name CFSVA2009); accessed January 14, 2014, <http://countrystat.org/home.aspx?c=UGA&tr=231>

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011: Vitamin A Addendum*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

Uganda Ministry of Health (MOH). 2012. *Annual Health Sector Performance Report: Financial Year 2011/2012*. Kampala, Uganda: MOH.

UBOS and United Nations World Food Programme (UNWFP). 2009. *Comprehensive Food Security & Vulnerability Analysis (CFSVA): Uganda*. Kampala, Uganda: UBOS and UNWFP.

Uganda MOH and Macro International Inc. 2008. *Uganda Service Provision Assessment Survey 2007*. Kampala, Uganda: MOH and Macro International Inc.

United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: Karamoja Subregion

SUMMARY OF KEY UNAP INDICATORS FOR KARAMOJA SUBREGION

Indicator	Level in Karamoja	UNAP National Target (2016)
Any anemia, children 6-59 months ¹	69.5%	50.0%
Any anemia, WRA ¹	43.3%	12.0%
Calorie consumption (average calories) ³	1470 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	82.2%	75.0%
Low birthweight (<2.5kg) ¹	9.8%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	2.2%	*
Overweight, children under 5 yrs. ¹	0.1%	No increase**
Overweight, non-pregnant women ¹	1.0%	No target
Stunting, children under 5 yrs. ¹	45.0%	32.0%
Underweight, children under 5 yrs. ¹	31.9%	10.0%
Underweight, non-pregnant women ¹	32.8%	8.0%
Vitamin A deficiency, children 6-59 months ²	22.1%	13.0%
Vitamin A deficiency, WRA ²	15.6%	12.0%
Wasting, children under 5 yrs. ¹	7.1%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF KARAMOJA CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

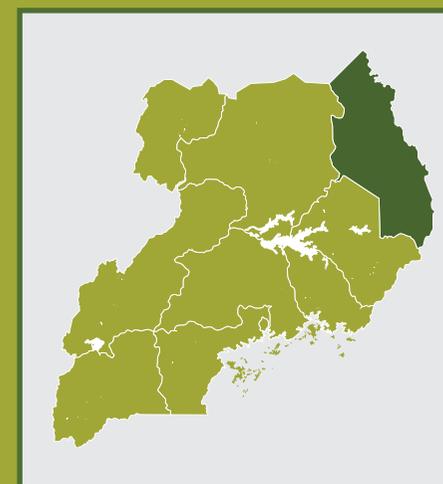
Location: Rural

Households in lowest national wealth quintile*:
Above Average (79%)

Households reporting conflict or raiding as an issue: Above Average (13%)

Literacy rate for women of reproductive age (WRA):
Below Average (23%)

Refugee population level:
Low



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

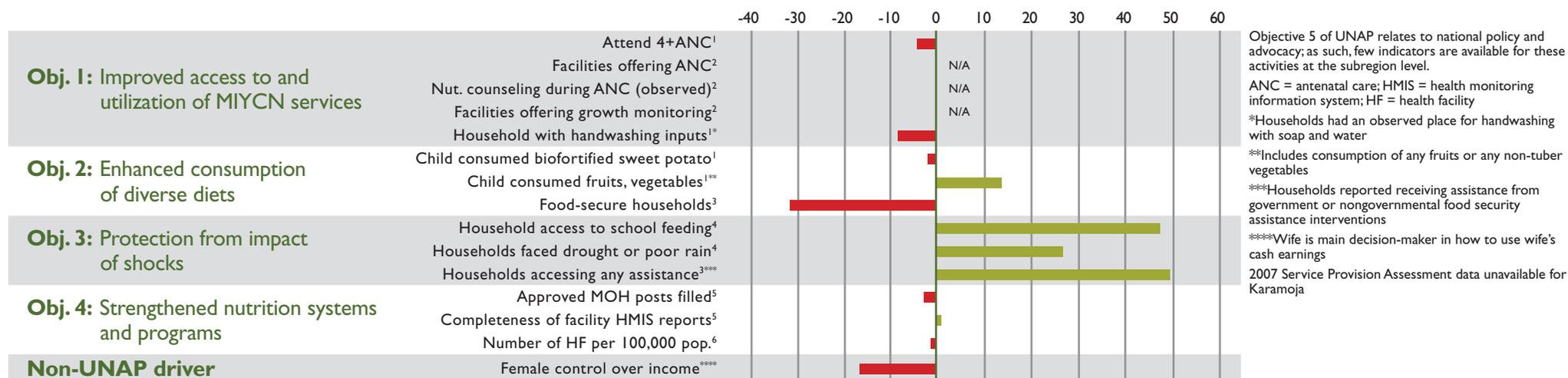
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



Sources:

- Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.
- Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.
- Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." Economic Policy Research Centre. Research Series No. 70. July 2010.
- Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.
- UBOS. 2013. *District profiles by selected indicators*. Data received: 7 February 2013.
- UBOS CountrySTAT Database (object name CFSVA2009); accessed January 14, 2014, <http://countrystat.org/home.aspx?c=UGA&tr=231>
- UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.
- UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011: Vitamin A Addendum*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.
- Uganda Ministry of Health (MOH). 2012. *Annual Health Sector Performance Report: Financial Year 2011/2012*. Kampala, Uganda: MOH.
- UBOS and United Nations World Food Programme (UNWFP). 2009. *Comprehensive Food Security & Vulnerability Analysis (CFSVA): Uganda*. Kampala, Uganda: UBOS and UNWFP.
- Uganda MOH and Macro International Inc. 2008. *Uganda Service Provision Assessment Survey 2007*. Kampala, Uganda: MOH and Macro International Inc.
- United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: North Subregion

SUMMARY OF KEY UNAP INDICATORS FOR NORTH SUBREGION

Indicator	Level in North	UNAP National Target (2016)
Any anemia, children 6–59 months ¹	34.0%	50.0%
Any anemia, WRA ¹	13.1%	12.0%
Calorie consumption (average calories) ³	1470 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	72.0%	75.0%
Low birthweight (<2.5kg)	11.4%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	2.7%	*
Overweight, children under 5 yrs. ¹	4.1%	No increase**
Overweight, non-pregnant women ¹	7.2%	No target
Stunting, children under 5 yrs. ¹	24.7%	32.0%
Underweight, children under 5 yrs. ¹	12.3%	10.0%
Underweight, non-pregnant women ¹	16.3%	8.0%
Vitamin A deficiency, children 6–59 months ²	29.3%	13.0%
Vitamin A deficiency, WRA ²	27.4%	12.0%
Wasting, children under 5 yrs. ¹	3.4%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF NORTH CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*:
Above Average (41%)

Households reporting conflict or raiding as an issue: Average (0.5%)

Literacy rate for women of reproductive age (WRA):
Below Average (49%)

Refugee population level:
Low

Notes:

*Considered a measure of poverty.

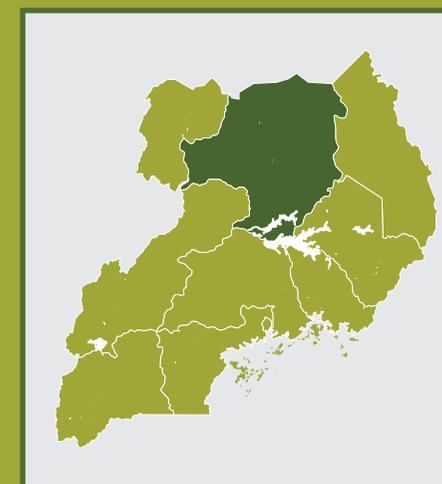
Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

Households reporting conflict or raiding based on national average of 1%

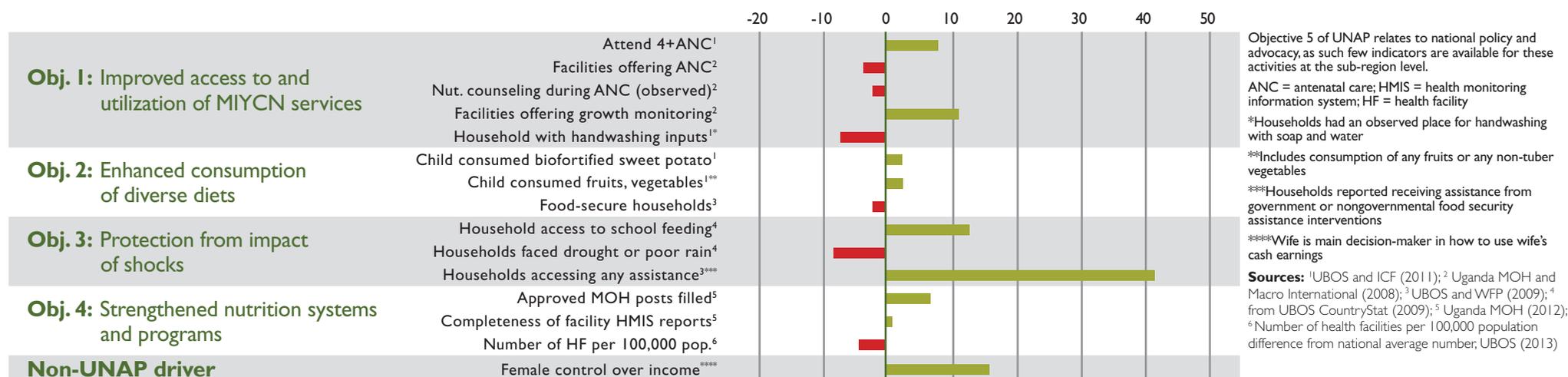
Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.



IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Cereals	45.4%			
	Rice		86%	7%	6%
	Maize-Grain		34%	32%	34%
	Maize-Flour		37%	17%	46%
	Bread		96%	0%	0%
	Millet		32%	57%	11%
	Sorghum		41%	27%	31%
2	Roots and Tubers	28.5%			
	Sweet potatoes		32%	59%	9%
	Cassava-Fresh		41%	51%	7%
	Cassava-Flour		63%	34%	3%
3	Legumes and Pulses	20.2%			
	Fresh beans		15%	70%	15%
	Dry beans		50%	33%	17%
	Groundnuts		63%	28%	9%
	Peas		28%	20%	52%

Source: Ssewanyana & Kasirye (2010)

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." *Economic Policy Research Centre, Research Series No. 70*. July 2010.

Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

UBOS. 2013. *District profiles by selected indicators*. Data received: 7 February 2013.

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United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: Southwest Subregion

SUMMARY OF KEY UNAP INDICATORS FOR SOUTHWEST SUBREGION

Indicator	Level in Southwest	UNAP National Target (2016)
Any anemia, children 6–59 months ¹	24.6%	50.0%
Any anemia, WRA ¹	11.4%	12.0%
Calorie consumption (average calories) ³	2599 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	51.9%	75.0%
Low birthweight (<2.5kg) ¹	7.9%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	4.7%	*
Overweight, children under 5 yrs. ¹	5.8%	No increase**
Overweight, non-pregnant women ¹	23.0%	No target
Stunting, children under 5 yrs. ¹	41.7%	32.0%
Underweight, children under 5 yrs. ¹	5.1%	10.0%
Underweight, non-pregnant women ¹	4.8%	8.0%
Vitamin A deficiency, children 6–59 months ²	35.4%	13.0%
Vitamin A deficiency, WRA ²	38.0%	12.0%
Wasting, children under 5 yrs. ¹	4.0%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF SOUTHWEST CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural with Peri-Urban Center

Households in lowest national wealth quintile:*
Below Average (6%)

Households reporting conflict or raiding as an issue: Average (0.6%)

Literacy rate for women of reproductive age (WRA):
Above Average (76%)

Refugee population level:
Moderate/High

Notes:

*Considered a measure of poverty.

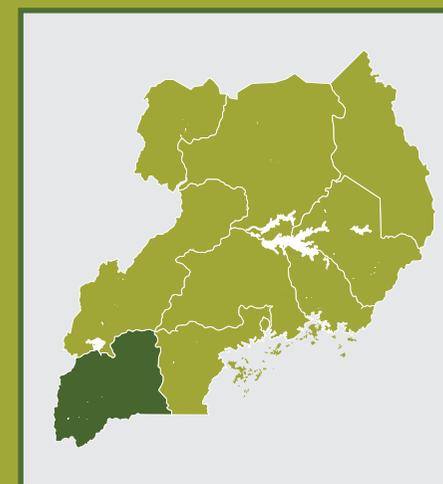
Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

Households reporting conflict or raiding based on national average of 1%

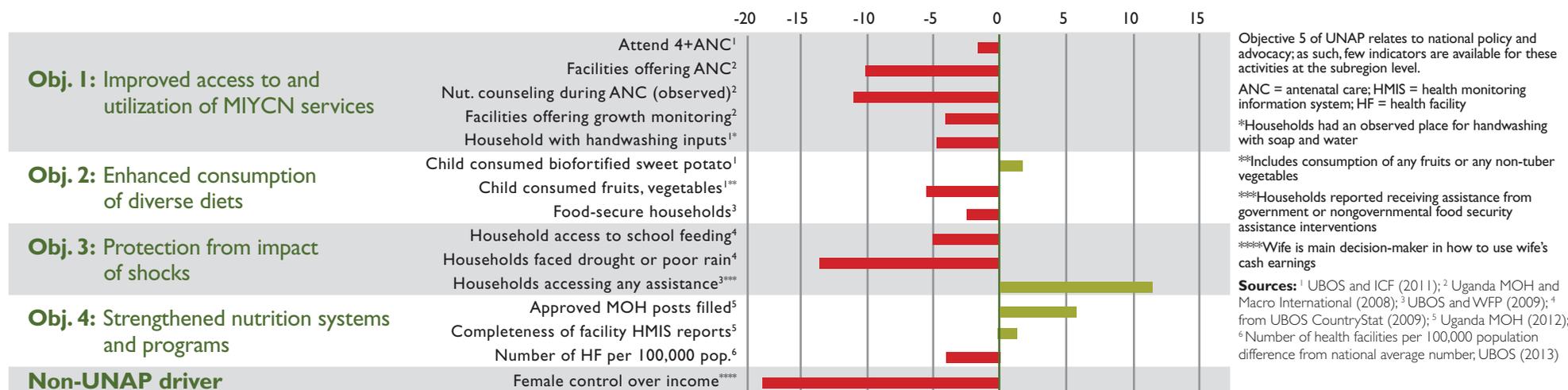
Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.



IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Matooke	49.1%	21%	73%	6%
2	Cereals	17.7%			
	Rice		85%	10%	5%
	Maize-Grain		25%	71%	3%
	Maize-Flour		81%	17%	2%
	Bread		95%	1%	2%
	Millet		26%	69%	5%
	Sorghum		30%	65%	6%
3	Roots and Tubers	14.6%			
	Sweet potatoes		18%	76%	6%
	Cassava-Fresh		18%	79%	4%
	Cassava-Flour		45%	55%	0%
	Irish potatoes		25%	72%	4%
4	Legumes and Pulses	13.1%			
	Fresh beans		11%	85%	5%
	Dry beans		32%	65%	3%
	Groundnuts		58%	38%	5%
	Peas		38%	57%	5%

Source: Ssewanyana & Kasirye (2010)

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." *Economic Policy Research Centre. Research Series No. 70*. July 2010.

Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

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UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

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Uganda Ministry of Health (MOH). 2012. *Annual Health Sector Performance Report: Financial Year 2011/2012*. Kampala, Uganda: MOH.

UBOS and United Nations World Food Programme (UNWFP). 2009. *Comprehensive Food Security & Vulnerability Analysis (CFSVA): Uganda*. Kampala, Uganda: UBOS and UNWFP.

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United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: West Nile Subregion

SUMMARY OF KEY UNAP INDICATORS FOR WEST NILE SUBREGION

Indicator	Level in West Nile	UNAP National Target (2016)
Any anemia, children 6–59 months ¹	64.4%	50.0%
Any anemia, WRA ¹	32.3%	12.0%
Calorie consumption (average calories) ³	1778 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	65.1%	75.0%
Low birthweight (<2.5kg) ¹	10.6%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	4.5%	*
Overweight, children under 5 yrs. ¹	2.2%	No increase**
Overweight, non-pregnant women ¹	4.5%	No target
Stunting, children under 5 yrs. ¹	37.8%	32.0%
Underweight, children under 5 yrs. ¹	17.9%	10.0%
Underweight, non-pregnant women ¹	20.9%	8.0%
Vitamin A deficiency, children 6–59 months ²	28.8%	13.0%
Vitamin A deficiency, WRA ²	35.9%	12.0%
Wasting, children under 5 yrs. ¹	6.2%	5.0%

Sources: 1UBOS and ICF (2011), 2UBOS and ICF (2012), 3UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF WEST NILE CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

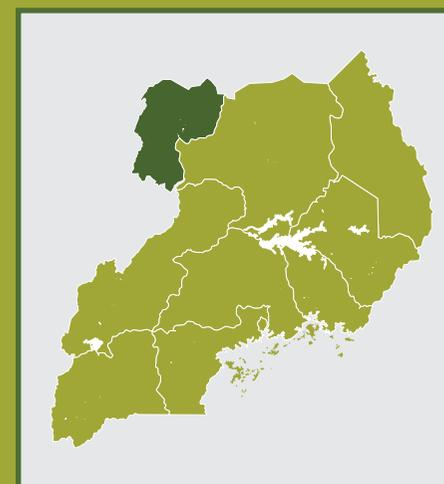
Location: Rural

Households in lowest national wealth quintile:
Above Average (41%)

Households reporting conflict or raiding as an issue: Average (1%)

Literacy rate for women of reproductive age (WRA):
Below Average (45%)

Refugee population level:
Moderate/High



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

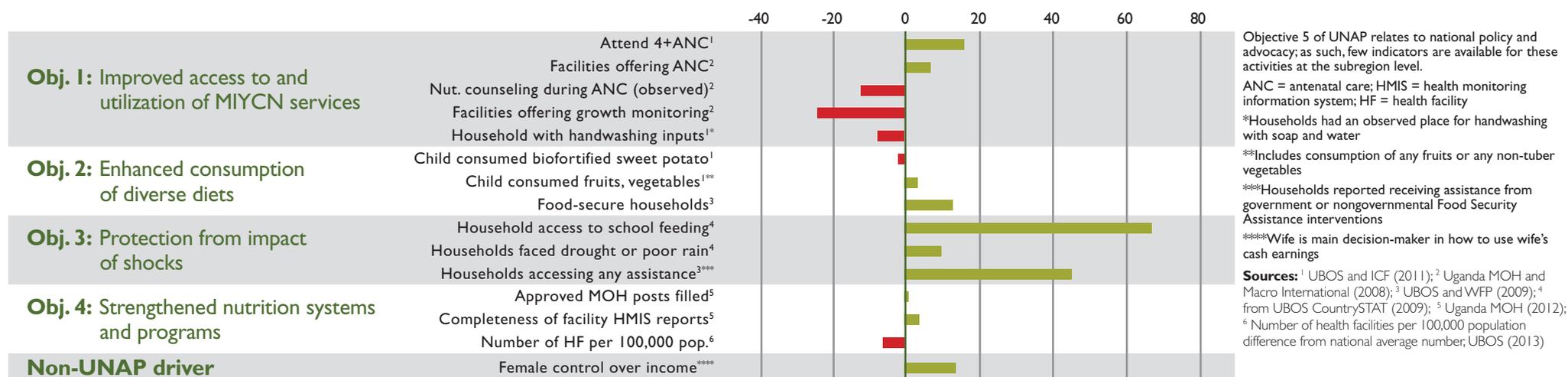
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountryStat 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Roots and Tubers	60.6%			
	Sweet potatoes		44%	49%	8%
	Cassava-Fresh		56%	40%	3%
	Cassava-Flour		47%	49%	4%
	Irish potatoes		100%	0%	0%
2	Legumes and Pulses	18.6%			
	Fresh beans		37%	63%	0%
	Dry beans		73%	25%	2%
	Groundnuts		61%	36%	3%
	Peas		47%	50%	3%
3	Cereals	15%			
	Rice		80%	14%	6%
	Maize-Grain		47%	41%	10%
	Maize-Flour		73%	22%	5%
	Bread		100%	0%	0%
	Millet		38%	60%	3%
	Sorghum		53%	46%	1%

Source: Ssewanyana & Kasirye (2010)

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

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Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

UBOS. 2013. *District profiles by selected indicators*. Data received: 7 February 2013.

UBOS CountrySTAT Database (object name CFSVA2009); accessed January 14, 2014, <http://countrystat.org/home.aspx?c=UGA&tr=231>

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011: Vitamin A Addendum*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

Uganda Ministry of Health (MOH). 2012. *Annual Health Sector Performance Report: Financial Year 2011/2012*. Kampala, Uganda: Ministry of Health.

UBOS and United Nations World Food Programme (WFP). 2009. *Comprehensive Food Security & Vulnerability Analysis (CFSVA): Uganda*. Kampala, Uganda: UBOS and UNWFP.

Uganda MOH and Macro International Inc. 2008. *Uganda Service Provision Assessment Survey 2007*. Kampala, Uganda: Ministry of Health and Macro International Inc.

United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Snapshots of Nutrition in Uganda: Western Subregion

SUMMARY OF KEY UNAP INDICATORS FOR WESTERN SUBREGION

Indicator	Level in Western	UNAP National Target (2016)
Any anemia, children 6–59 months. ¹	38.6%	50.0%
Any anemia, WRA ¹	17.3%	12.0%
Calorie consumption (average calories) ³	2261 calories	2500 calories
Exclusive breastfeeding, under 6 months ¹	68.5%	75.0%
Low birthweight (<2.5kg) ¹	8.3%	9.0%
Minimum acceptable diet (MAD), children under 2 yrs. ¹	5.9%	*
Overweight, children under 5 yrs. ¹	3.2%	No increase**
Overweight, non-pregnant women ¹	22.9%	No target
Stunting, children under 5 yrs. ¹	43.9%	32.0%
Underweight, children under 5 yrs. ¹	15.5%	10.0%
Underweight, non-pregnant women ¹	7.8%	8.0%
Vitamin A deficiency, children 6–59 months ²	30.4%	13.0%
Vitamin A deficiency, WRA ²	27.8%	12.0%
Wasting, children under 5 yrs. ¹	2.7%	5.0%

Sources: ¹UBOS and ICF (2011), ²UBOS and ICF (2012), ³UBOS (2006)

* UNAP provides a target for a dietary diversity index of 75, but this measure is unavailable for Uganda's subregions.

** Overweight indicators are not given targets by UNAP; for these, the SUN/WHO target for 2025 is given.

DESCRIPTION OF WESTERN CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*:
Below Average (14%)

Households reporting conflict or raiding as an issue: Average (1.2%)

Literacy rate for women of reproductive age (WRA):
Average (63%)

Refugee population level:
Moderate/High



Notes:

*Considered a measure of poverty.

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Peri-Urban, <300 persons per sq km=Rural.

Average literacy and wealth index quintiles defined from the national average of UDHS 2011 indicators.

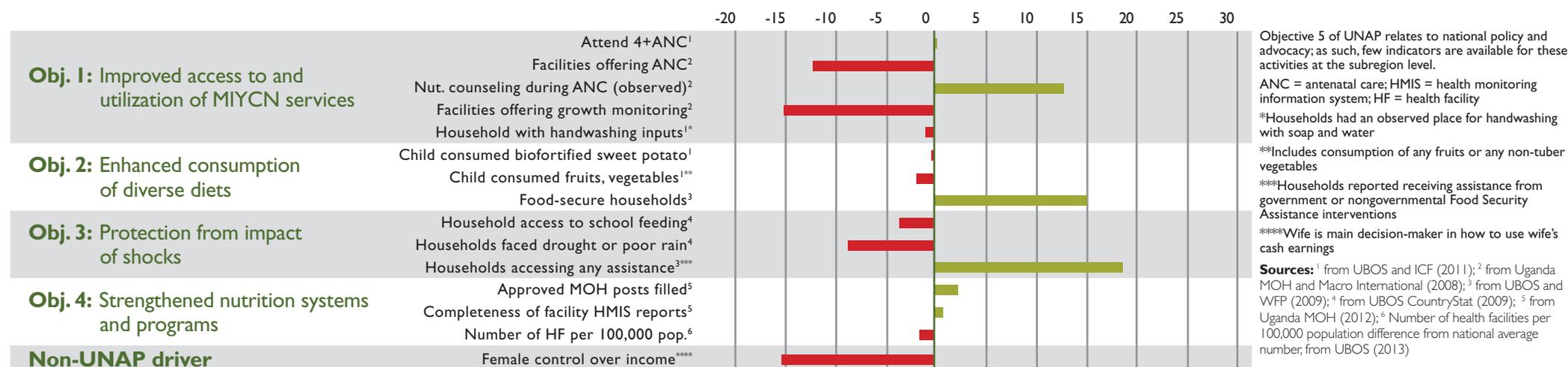
Households reporting conflict or raiding based on national average of 1%

Refugee population measured by existence of: no refugee settlements=Low, one refugee settlement=Medium, more than one refugee settlement=Moderate/High

Sources: UNHCR 2013, UBOS CountrySTAT 2009, UBOS & ICF 2011, UBOS and WFP 2009.

IDENTIFIED BARRIERS AND DRIVERS OF BETTER NUTRITION, BY SELECTED UNAP OBJECTIVE AREAS

Difference from national average (percentage points), except where noted below.



PRIMARY FOODS EATEN (GREATER THAN 10% OF DIET), BY RANK AND SOURCE

Rank	Food Type	Contribution to Caloric Intake	Amount Purchased	Amount Grown	Amount as Gift
1	Roots and Tubers	30.1%			
	Sweet potatoes		22%	72%	7%
	Cassava-Fresh		19%	76%	5%
	Cassava-Flour		41%	57%	2%
	Irish potatoes		28%	62%	10%
2	Matooke	27.6%	29%	65%	7%
3	Legumes and Pulses	18.3%			
	Fresh beans		28%	64%	8%
	Dry beans		38%	59%	3%
	Groundnuts		57%	39%	5%
	Peas		23%	76%	1%
4	Cereals	16%			
	Rice		93%	5%	3%
	Maize-Grain		15%	69%	13%
	Maize-Flour		54%	41%	5%
	Bread		97%	2%	1%
	Millet		45%	51%	4%
	Sorghum		21%	76%	3%

Sources:

Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Uganda*. World Health Organization.

Government of Uganda. 2011. *2011-2016 Uganda Nutrition Action Plan: Scaling Up Multi-Sectoral Efforts to Establish a Strong Nutrition Foundation for Uganda's Development*. Kampala, Uganda: Government of Uganda.

Ssewanyana, Sarah and Ibrahim Kasirye. 2010. "Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal." *Economic Policy Research Centre. Research Series No. 70*. July 2010.

Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical Report. Population Size and Distribution*. Kampala, Uganda: UBOS.

UBOS. 2013. *District profiles by selected indicators*. Data received: 7 February 2013.

Uganda Bureau of Statistics CountrySTAT Database (object name CFSVA2009); accessed January 14, 2014, <http://countrystat.org/home.aspx?c=UGA&tr=231>

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011: Vitamin A Addendum*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

Uganda Ministry of Health (MOH). 2012. *Annual Health Sector Performance Report: Financial Year 2011/2012*. Kampala, Uganda: MOH.

UBOS and United Nations World Food Programme (UNWFP). 2009. *Comprehensive Food Security & Vulnerability Analysis (CFSVA): Uganda*. Kampala, Uganda: UBOS and UNWFP.

Uganda MOH and Macro International Inc. 2008. *Uganda Service Provision Assessment Survey 2007*. Kampala, Uganda: Ministry of Health and Macro International Inc.

United Nations High Commissioner for Refugees (UNHCR). 2013. "2013 UNHCR country operations profile-Uganda." Accessed August 22, 2013: <http://www.unhcr.org/pages/49e483c06.html>.

Source: Ssewanyana & Kasirye (2010)

ANNEX I: Selection of Indicators in Uganda Subregion Snapshots

This document provides an explanation of what indicators are included in the SPRING “Pathways to Better Nutrition” (PBN) country subregional snapshots. It also provides the methodology for attachment of indicators to the activities named in the national nutrition plans. While this Annex discusses Uganda specifically, the same methods were used for the snapshots in both case study countries (See SPRING’s website for further details on the Nepal PBN Case Study).

Description of Characteristics

The first set of indicators in the snapshots was chosen to give a very brief insight into the variation of context across sub-regions. In consultation with experts, review of situation analyses, and review of the CIA country profiles for Uganda, SPRING found facets of variation that **cannot** be easily modified but **can** affect nutritional status and programming. The following facets appeared to be important:

- Urbanicity¹
- Poverty level
- Literacy
- Refugee population
- Recent conflict (household reported conflict or raiding as an issue)

Other factors that were considered included religious or ethnic populations; significant differentials in geography; occurrence of natural disasters; and political affiliations.

Summary of Key Plan Indicators

The snapshots next provide a summary table of the key indicators for Uganda, taken directly from the target indicators given in the Uganda Nutrition Action Plan (UNAP). See the UNAP for the details on these indicators. The one exception is the inclusion of overweight. This has become a consideration in some of the subregions, and SPRING considered it useful to include alongside other anthropometric indicators.

Generally speaking, the key indicators in this summary table correspond to higher level results in the illustrative results framework in Figure 1 (at end of this document), which SPRING developed to show logical pathways to the key indicators affecting nutrition status in Uganda (and in Nepal, see the Nepal-specific case study work for further details). The indicators in this first summary table line up temporally with “late” outputs and beyond in the framework. Late outputs include behavioral results; “early” outcomes are non-anthropometric conditions that directly affect “late” outcomes, which in turn consist of anthropometric prevalence.²

¹ The degree to which a geographical unit is urban – <http://www.urbanicity.us/Urbanicity.html>

² Final impacts are on mortality and long-term morbidity, however none of the analyzed national plans address these, and as such they are not included in the snapshots.

Selected Barriers and Drivers of Better Nutrition, by Selected UNAP Objective Areas

SPRING has provided a set of indicators to represent the objective areas in the UNAP. These indicators link to specific activities named in the plan to overcome barriers and drive improvement in nutrition, but they were not specifically given by the UNAP. SPRING has defined a methodology for selection that is meant to provide a representative selection of indicators.

Given the correspondence of the UNAP key indicators to late outputs and outcomes in the results framework in Figure 1, SPRING considered activities up to and including “early” outputs for inclusion as “drivers or barriers”, as they precede, and can potentially affect, the key indicators.

Using this framework as a starting point, SPRING examined the detailed implementation matrix in each plan to attach indicators to the listed interventions, as one would for a performance monitoring plan (PMP). The team checked the main compendiums for nutrition and nutrition-sensitive indicators to find measurable indicators that could be attached.¹ Some of these sources are:

- WHO infant and young child feeding indicator compendium
- CORE Group essential nutrition actions trilogy
- Measure DHS reproductive health compendium
- USAID review of health systems strengthening measures
- USAID feed the future indicator list
- JMP water and sanitation measures
- UNDP gender-sensitive service delivery indicator guide
- DHS guide to statistics

From the final set of standardized indicators, one to four indicators per objective were chosen to represent the barriers and drivers in each subregion. Selected indicators were chosen to provide a diversity of information from both the supply and demand side, and from the individual, household and system level. The final set of indicators was also evaluated by the following criteria:

1. Representativeness of activity for objective theme
2. Global relevance
3. Availability of indicator in existing data collection mechanisms (surveys, HIS, etc.)
4. Variation across subregions

Where possible, SPRING ensured data availability did not have undue influence over the other criteria. For some, an indicator was disqualified because it was not linked to an activity that is useful to report below national level, for instance most of the activities in UNAP objective area 5.

To get a sense of what barriers and drivers transcended country context, SPRING also conducted a crosswalk of the Uganda implementation plan with the other PBN country, Nepal, for similar action areas. Indicators for activities that overlapped were prioritized for inclusion in the snapshots.

Primary Foods Eaten Table

The final table in the snapshot describes the type and source of foods most eaten in each subregion. These data cannot be evaluated as other drivers and barriers would, against the national average. However, this information is still useful for the planning of nutrition interventions in Objective 2 related to local foods, access to markets, and/or agricultural production.

Figure 1 on the following page gives a general overview of SPRING's arrangement of some of the key activities proposed over the course of a results framework.

¹ Every attempt was also made to standardize use of indicators for similar activities across the two countries, Uganda and Nepal.

Figure 1. Illustrative Results Framework of Nutrition Plan Activities, Outputs, Outcomes, and Impacts

	Inputs	Process	Early Intermediate Outputs	Late Intermediate Outputs	Early Outcomes	Late Outcomes	Impacts
			Increasing Coverage of:	Increasing Behaviors of:	Decreased Prev. of:	Decreased Prev. of:	
Nutrition (Specific) Interventions	Improve political advocacy for nutrition Strengthen commodity delivery/infrastructure & human resources Improve coordination & implementation of policies	Financing Mechanisms Hiring/Training/Retention Policy and Governance Strategies (NPA, other) Community Engagement Changes to Supply Chain Changes to other Service Infrastructure	IFA tablets/ANC	IFA compliance	Maternal anemia	Stunting/low birthweight	Child Mortality Nutrition-related Morbidity
			Counseling	Exclusive/appropriate breastfeeding		Stunting/underweight	
				Diversified eating	Maternal/child anemia	Stunting/underweight/low birthweight	
			Zinc	Appropriate treatment of diarrhea	Diarrhea	Stunting/underweight	
			Handwashing commodities (soap, tippy tap, latrines)	Use of handwashing commodities	Diarrhea	Stunting/underweight	
Nutrition (Sensitive) Interventions	Strengthen IS and research in nutrition innovation \$/Funding Strengthen community involvement Improve government & private sector coverage of nutrition services	Changes to nutrition & food security surveillance systems Aid interventions aimed at decreasing household shocks Agricultural training on practices and productivity	Deworming commodities	Appropriate treatment with dewormer	Diarrhea	Stunting/underweight	
			Inputs for and knowledge of biofortification	Consumption of biofortified foods	Maternal/child anemia, micronutrient deficiencies	Stunting/underweight/low birthweight	
			Food-secure households		Wasting/micronutrient deficiencies	Stunting/underweight/low birthweight	
			Food production	Diet diversity	Wasting/micronutrient deficiencies	Stunting/underweight/low birthweight	
			Food storage				
Country Context: Sociodemographics, Epidemiology/nutritional status at baseline, cultural norms, and existing systems							