Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Democratic Republic of Congo (DRC)*
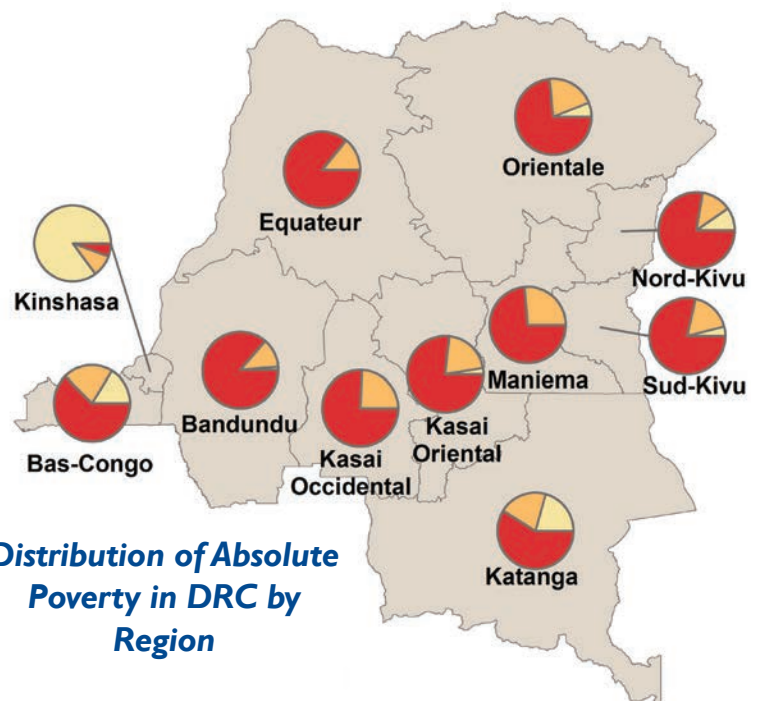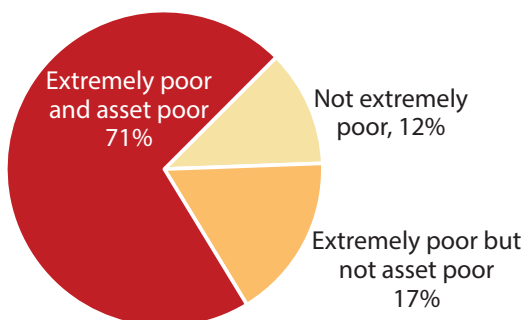*An Analysis Brief from The DHS Program*

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from the Democratic Republic of The Congo based on the 2013-14 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from the Democratic Republic of the Congo

Geographic variations in poverty

- At the national level, the majority of women (71%) live in extremely poor and asset poor households.
- In all regions of the DRC except Kinshasa, a high proportion of married women live in extremely poor and asset poor households, reaching 75% or higher in several regions.
- In Bandundu and Equateur regions, over 80% of women live in extremely poor and asset poor households.
- In Kinshasa, 85% of women live in not extremely poor households.

Distribution of Absolute Poverty in DRC

Extremely poor and asset poor 71%

Not extremely poor, 12%

Extremely poor but not asset poor 17%

Distribution of Absolute Poverty in DRC by Region

Ideal Number of Children by Region within Poverty Groups

Mean ideal number of children

Not extremely poor

Legend:
- 8-10
- 6-8
- 4-6
- not enough data
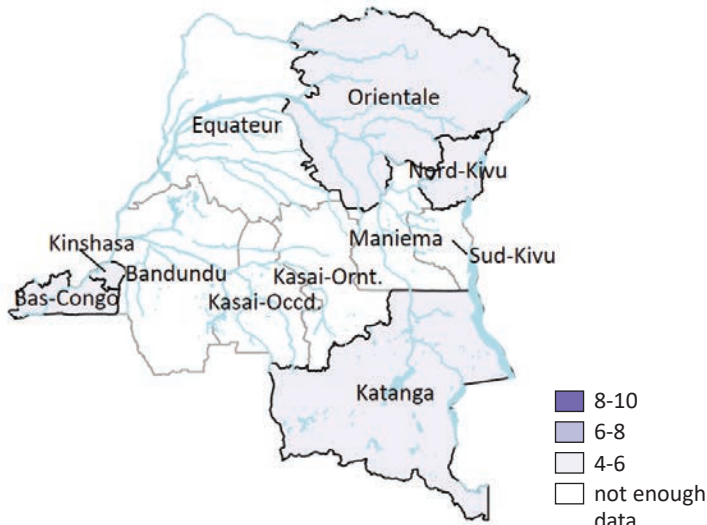
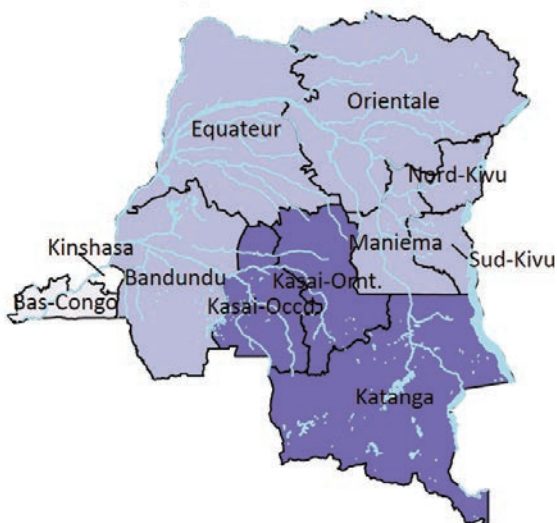### Extremely poor but not asset poor
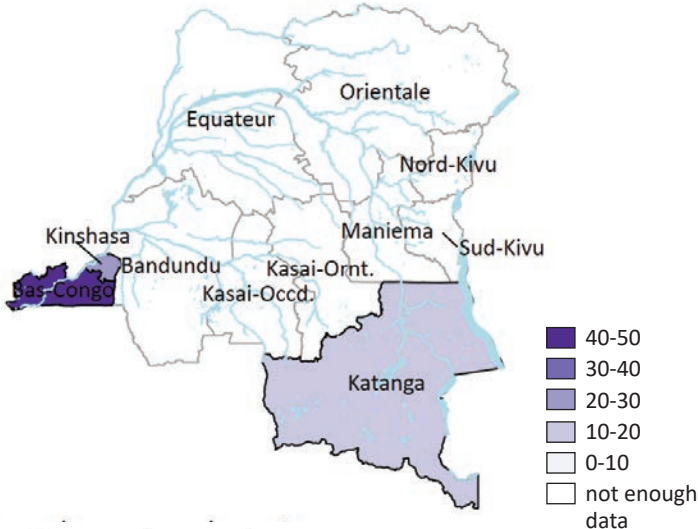

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in the DRC, the mean ideal number of children is 5.1 for married women in not extremely poor households, 6.4 in extremely poor but not asset poor households, and 6.9 in extremely poor and asset poor households.

- Ideal number of children increases with the level of poverty; the lowest average ideal number of children is found in the not extremely poor group and the highest in the extremely poor and asset poor group.

- Katanga, Kasai-Occidental, and Kasai-Oriental show the highest levels of mean ideal number of children in both of the extremely poor poverty groups, at between 7.4 and 8.7.

- Further analysis indicates significant regional disparities in ideal number of children within the same absolute poverty group after controlling for women's education, residence, and parity.

Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

Legend:
- 40-50
- 30-40
- 20-30
- 10-20
- 0-10
- not enough data

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- Nationally, the proportion of married women with demand for family planning satisfied by modern methods (DSMM) is 28% for women in the not extremely poor group, 20% in the extremely poor but not asset poor group, and 12% in the extremely poor and asset poor group.

- Generally, women in the extremely poor but not asset poor group have a higher level of DSMM compared with women in the extremely poor and asset poor group.

- Katanga region shows the lowest level of DSMM for the extremely poor and asset poor group, at 4%.

- In several regions, the number of women in the not extremely poor group is too small to give reliable estimates.

- Further analysis indicates significant regional disparities in DSMM mainly within the extremely poor and asset poor group after controlling for women's education, residence, and parity.

Conclusions

Overall the DRC has one of the highest fertility preferences in sub-Saharan Africa with close to 7 mean ideal number of children among married women. In addition, only 16% of married women in the DRC have their demand for family planning satisfied by modern methods. While interventions to lower fertility preferences and increase demand satisfied by modern methods are needed across DRC, this analysis suggests that interventions should consider targeting both women in the most impoverished groups as well as those from the lowest performing regions such as Katanga, Kasai-Occiental and Kasai-Oriental regions. In the DRC, regional disparities in these indicators within poverty groups are apparent even after controlling for woman's education, residence, and parity.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Ethiopia*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Ethiopia based on the 2016 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Ethiopia

Geographic variations in poverty

- At the national level, the majority of women (78%) live in extremely poor and asset poor households.

- In most regions in Ethiopia except Addis Ababa, Dire Dawa, and Harari, a high proportion of married women live in extremely poor and asset poor households—highest in the Somali region, at 86%, followed by SNNPR, at 85%.

- In Addis Ababa a large majority of women are in the not extremely poor group (89%), while just over half of women in Dire Dawa (56%) and Harari (51%) are in this group.

Distribution of Absolute Poverty in Ethiopia

Extremely poor and asset poor 78%

Not extremely poor, 12%

Extremely poor but not asset poor 10%
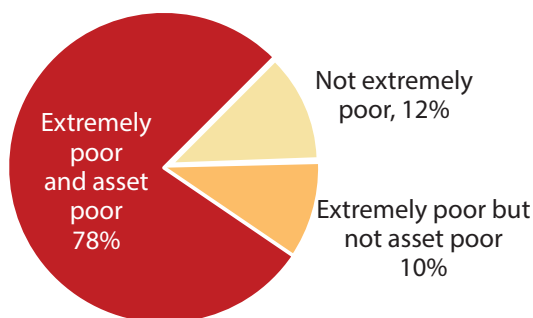
Distribution of Absolute Poverty in Ethiopia by Region
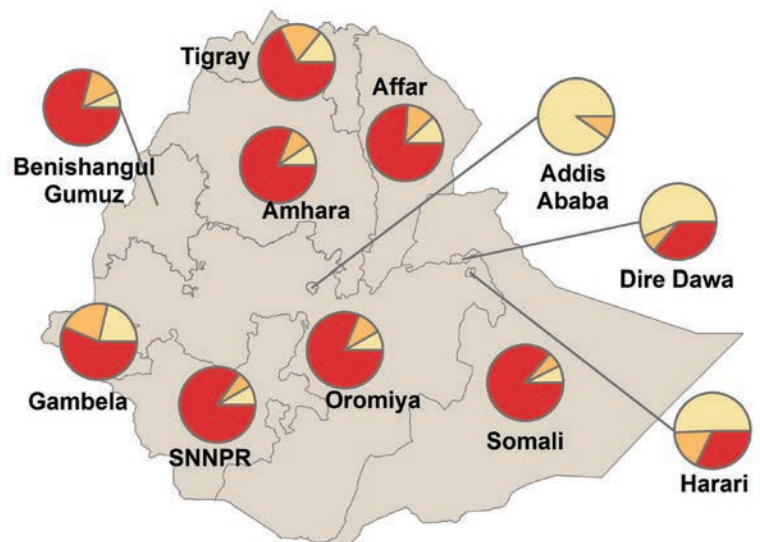
Ideal Number of Children by Region within Poverty Groups

Mean ideal number of children

Not extremely poor

Legend:
- 9-12
- 7-9
- 5-7
- 3-5
- not enough data

Extremely poor but not asset poor

Extremely poor and asset poor
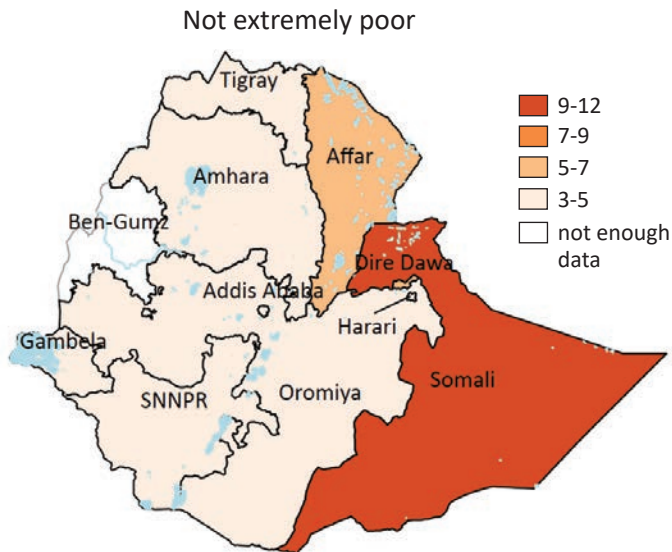

Fertility preferences: Ideal number of children

- Overall in Ethiopia, the mean ideal number of children is 4.3 for married women in not extremely poor households, 4.6 in extremely poor but not asset poor households, and 5.1 in extremely poor and asset poor households.

- Several regions including Tigray, Amhara, Oromiya, and Gambela show an increase in the mean ideal number of children with an increase in the level of poverty.

- The highest mean ideal number of children is in the Somali region, at approximately 11 children in all three poverty groups.

- Further analysis indicates significant regional disparities in ideal number of children mainly within the extremely poor and asset poor group after controlling for women's education, residence, and parity. However, this was mainly due to the Somali region.
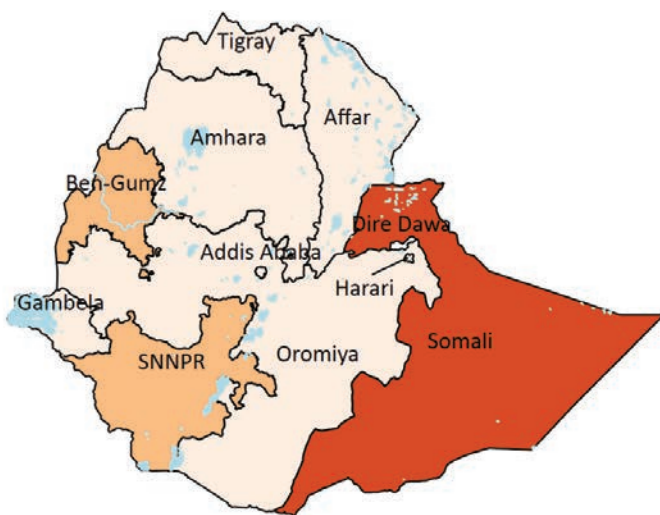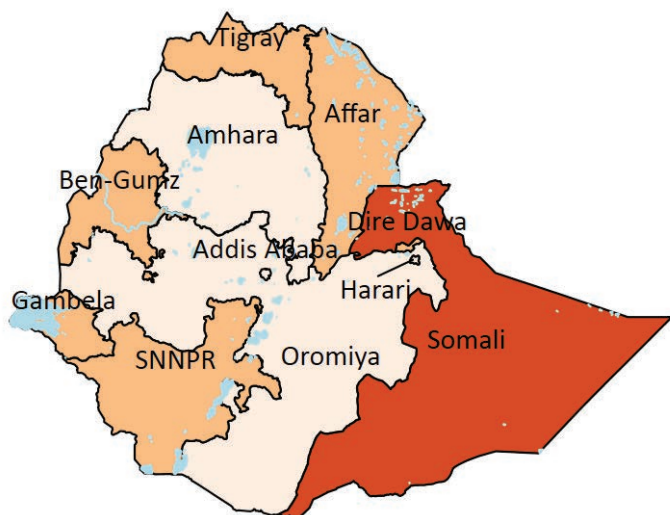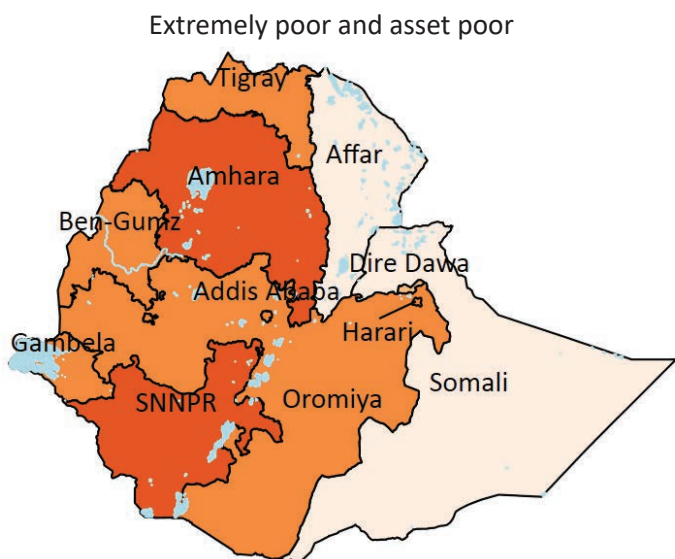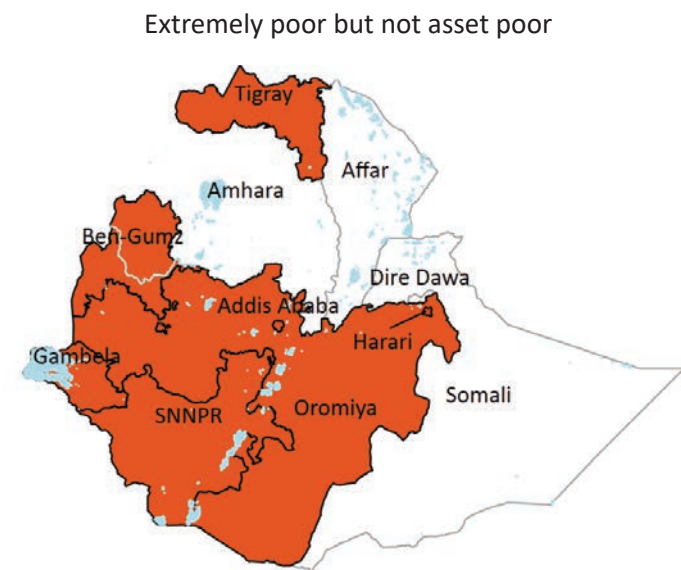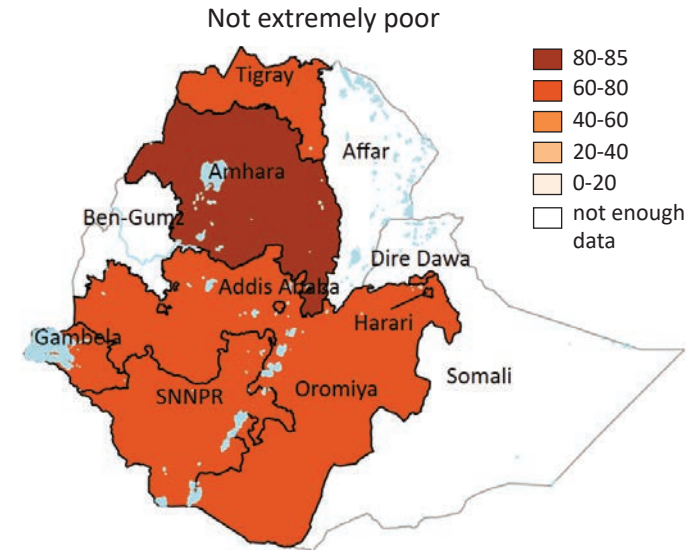
Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

■	80-85
■	60-80
■	40-60
■	20-40
□	0-20
□	not enough data

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- The proportion of women in Ethiopia with demand for family planning satisfied by modern methods (DSMM) is 77% for women in not extremely poor households, 75% in extremely poor but not asset poor households, and 56% in extremely poor and asset poor households.

- The not extremely poor group has the highest levels of DSMM, and highest in the Amhara region at 85%. Four regions—Affar, Dire Dawa, Somali, and Benishangul-Gumuz—have insufficient data to give a reliable estimate.

- The extremely poor and asset poor group has the lowest levels of DSMM, at only 4% among women in the Somali region, followed by Affar at 15%.

- Further analysis indicates significant regional disparities in DSMM mainly within the extremely poor and asset poor group after controlling for women's education, residence, and parity.

Conclusions

Regional disparities in ideal number of children and demand satisfied for modern methods of contraception were apparent among women in the most impoverished households after controlling for woman's education, residence, and parity. Interventions to lower fertility preferences and increase demand satisfied by modern methods in Ethiopia should consider targeting women in the poorest households and particularly those residing in the Somali region.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Ghana*

## An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Ghana based on the 2014 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Ghana

Geographic variations in poverty

- At the national level, the three-quarters of women live in households that are not extremely poor.

- In all regions except Upper West, Upper East, and Northern, a high proportion of women are in the not extremely poor group, with the highest proportion in Greater Accra at 95%.

- Approximately one-fifth of women in Upper West, Upper East, and Northern regions are in the extremely poor and asset poor group.
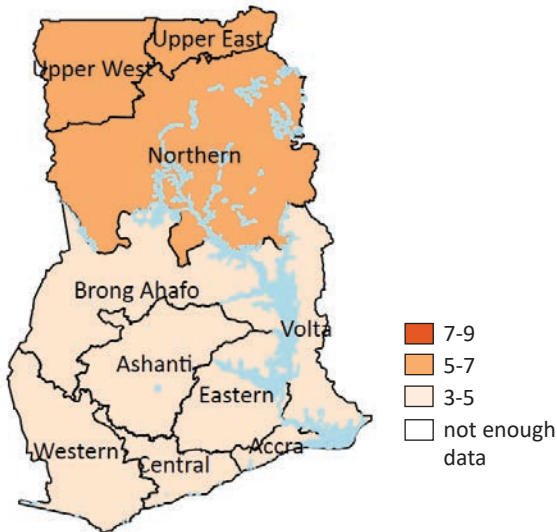
Distribution of Absolute Poverty in Ghana
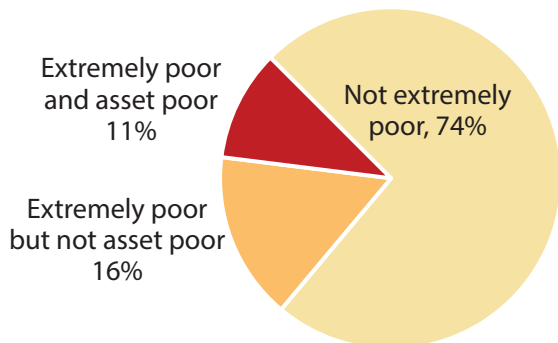
Distribution of Absolute Poverty in Ghana by Region
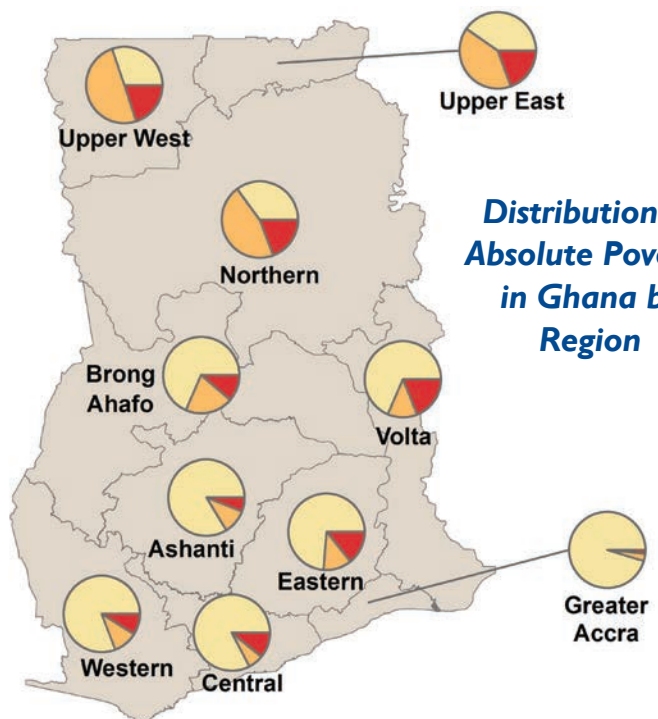
Ideal Number of Children by Region within Poverty Groups
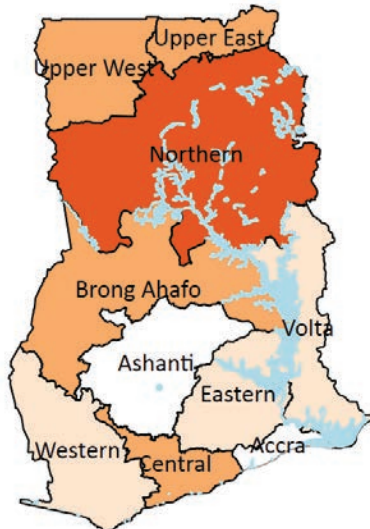
Mean ideal number of children

Not extremely poor

Legend:
- 7-9
- 5-7
- 3-5
- not enough data

Extremely poor but not asset poor
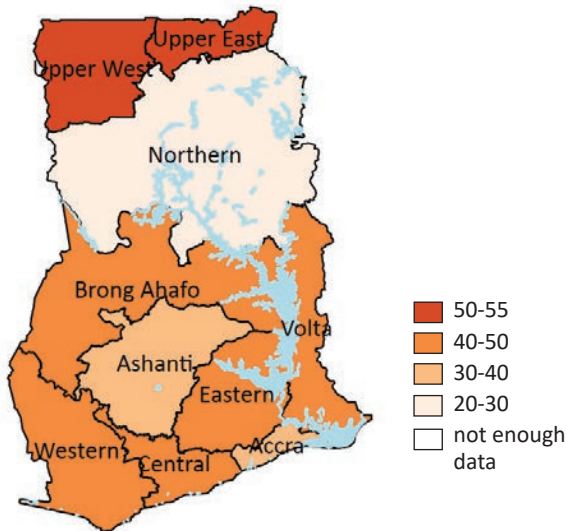

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Ghana, the mean ideal number of children is 4.3 for married women in not extremely poor households, 5.6 in extremely poor but not asset poor households, and also 5.6 in extremely poor and asset poor households.

- The lowest mean number of ideal children is found in Greater Accra for the not extremely poor group, at 3.8.

- Within each poverty group, the Northern region shows the highest mean ideal number of children, at approximately 7 in all three groups.

- Further analysis indicates significant regional disparities in ideal number of children mainly in the not extremely poor group and the extremely poor but not asset poor group after controlling for women's education, residence, and parity. The Northern region has significantly higher mean ideal number of children compared to the Upper West in all poverty groups.

Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

■	50-55
■	40-50
■	30-40
■	20-30
□	not enough data

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- The proportion of married women in Ghana with demand for family planning satisfied by modern methods (DSMM) is 40% for women in not extremely poor households, 38% in extremely poor but not asset poor households, and 36% in extremely poor and asset poor households.

- DSMM is highest for the not extremely poor group; in many regions, however, the two extreme poverty groups have insufficient numbers of women to give a reliable estimate.

- The highest level of DSMM, at 54%, is found in the Upper East region for the not extremely poor group. The lowest level is in the Northern region for the extremely poor and asset poor group, at 23%.

- Further analysis indicates little or no evidence of regional variations in DSMM within all three poverty groups after controlling for women's education, residence, and parity. For the not extremely poor group, Greater Accra, Ashanti, and the Northern region have significantly lower levels of DSMM compared with the Upper West region.

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Conclusions

Family planning interventions in Ghana should consider targeting the Northern region. Women living in the most impoverished households in the Northern region have the lowest demand satisfied for modern methods in the country. Further analysis, which controled for women's education, residence, and parity, indicates regional variation for fertility preferences but less so for demand satisfied by modern methods.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Haiti*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Haiti based on the 2016-17 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Haiti

Geographic variations in poverty

- At the national level in Haiti, 45% of women live in extremely poor and asset poor households, 44% live in not extremely poor households, and 11% live in extremely poor but not asset poor households.

- In all regions except Aire Metropolitaine, Nord, and Nord-Est, more than half of women live in extremely poor and asset poor households, with the highest percentage found in Grande-Anse region at 78%.

- In Aire Metropolitaine, 85% of women live in households categorized as not extremely poor, followed by Nord, Nord-Est, and Reste-Ouest at approximately 40%.
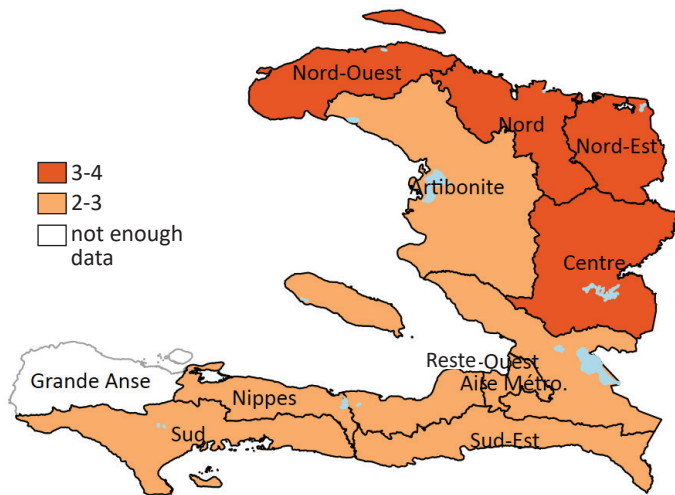
Distribution of Absolute Poverty in Haiti

Extremely poor and asset poor 45%

Not extremely poor, 44%

Extremely poor but not asset poor 11%
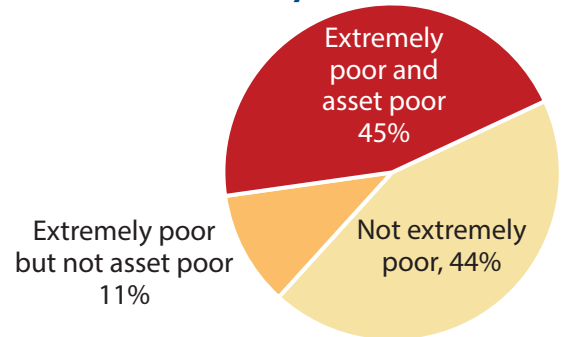
Distribution of Absolute Poverty in Haiti by Region
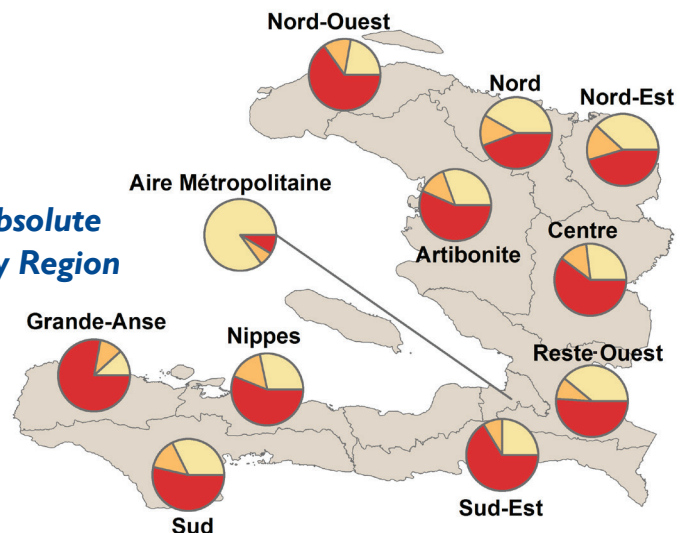
Ideal Number of Children by Region within Poverty Groups
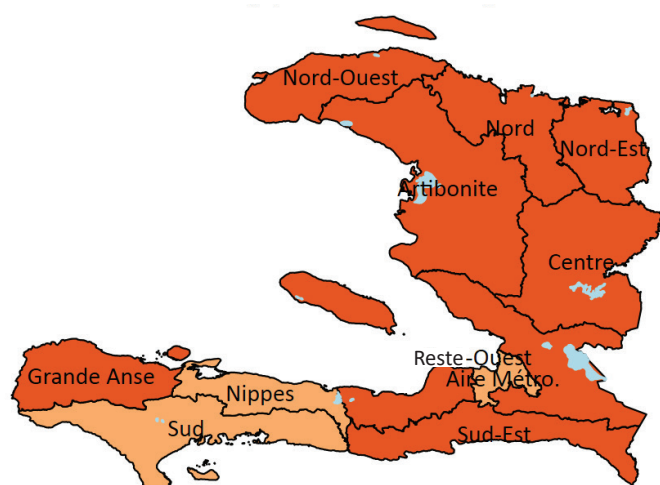
Mean ideal number of children

Not extremely poor

Legend:
- 3-4
- 2-3
- not enough data

Extremely poor but not asset poor
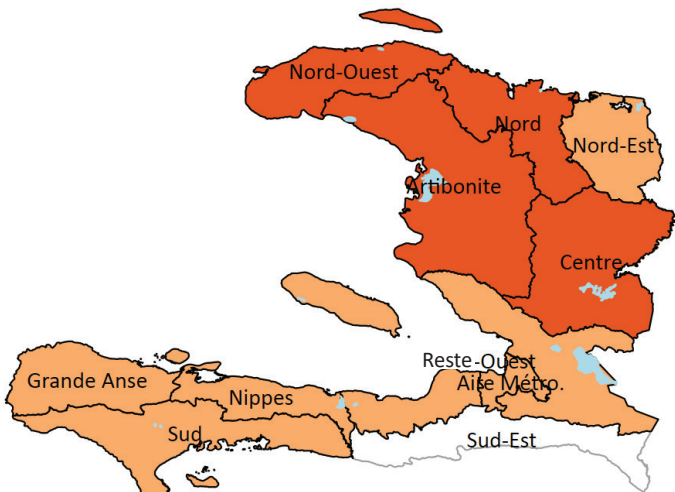
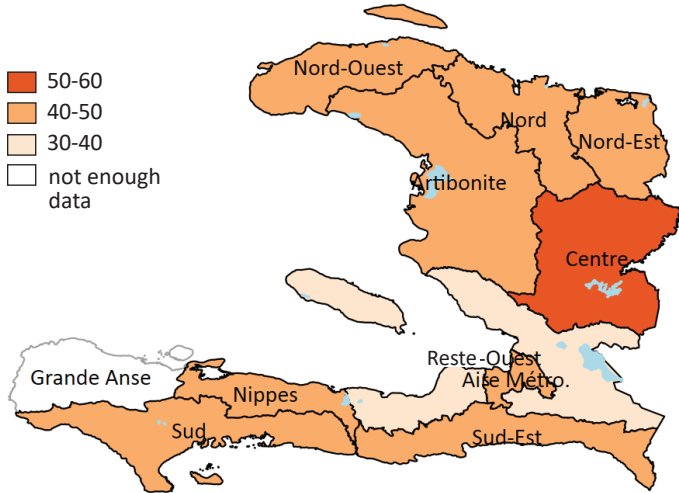### Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Haiti, the mean ideal number of children is 2.9 for married women in not extremely poor households, 3.0 in extremely poor but not asset poor households, and 3.2 in extremely poor and asset poor households.

- In most regions, all three poverty groups have a mean ideal of approximately 3 children.

- The highest mean ideal number, at 3.5 children, is found in Nord-Est for the extremely poor and asset poor group, and the lowest levels are found in Nippes and Aire Metropolitaine, at between 2.7 and 2.8 children across all three poverty groups.

- Further analysis shows little or no evidence of regional variations in ideal number of children within all three poverty groups after controlling for women's education, residence, and parity.
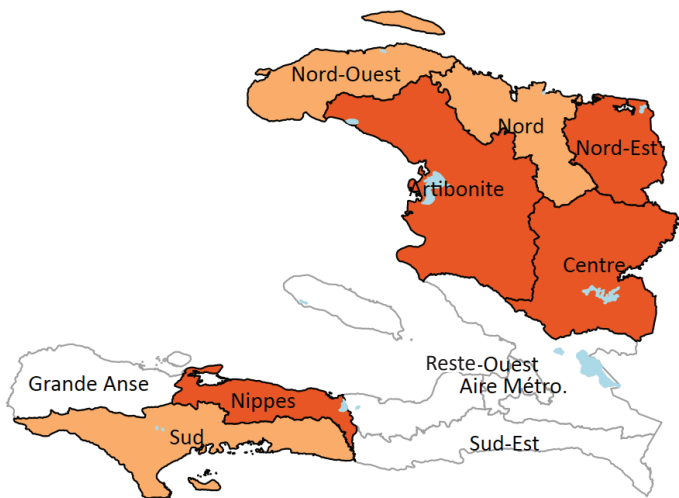
Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

Legend:
- 50-60
- 40-50
- 30-40
- not enough data

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- The proportion of married women in Haiti with demand for family planning satisfied by modern methods (DSMM) is 45% for women in not extremely poor households, 47% in extremely poor but not asset poor households, and 43% in extremely poor and asset poor households.

- For the extremely poor but not asset poor group, the highest level of DSMM is found in Centre and Nord-Est regions at 57%. In many regions, however, this poverty group has insufficient data to provide a reliable estimate.

- The lowest level of DSMM, at 32%, is found in the Sud-Est region for the extremely poor and asset poor group, followed by Reste-Ouest and Sud at 34%.

- Further analysis indicates little or no significant regional variations in DSMM within all three poverty groups after controlling for women's education, residence, and parity. Within the extremely poor and asset poor group, the Reste-Ouest, Sud-Est, and Sud regions have significantly lower odds of DSMM compared with the Nord region.

Conclusions

Further analysis that controls for women's education, residence, and parity has shown almost no regional variation in fertility preferences across the three poverty groups. Some variations found in the extremely poor and asset poor poverty group suggest that interventions that aim to increase demand satisfied by modern methods should consider targeting women living in the poorest households in the Reste-Ouest, Sud-Est, and Sud regions.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Malawi*
An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Malawi based on the 2015-16 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Malawi

Geographic variations in poverty

- At the national level in Malawi, 17% of women live in households categorized as not extremely poor, 30% live in extremely poor but not asset poor households, and 53% live in extremely poor and asset poor households.

- In all three regions, almost half of women live in extremely poor and asset poor households.
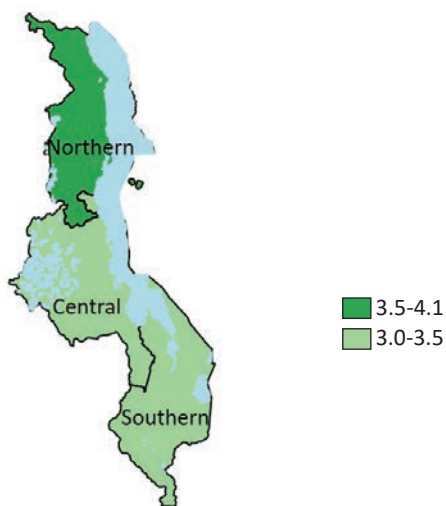

Distribution of Absolute Poverty in Malawi

Not extremely poor, 17%

Extremely poor and asset poor 53%

Extremely poor but not asset poor 30%
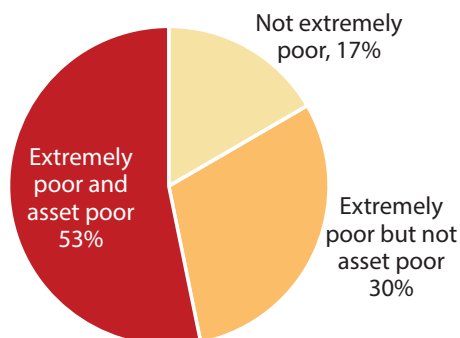
Distribution of Absolute Poverty in Malawi by Region
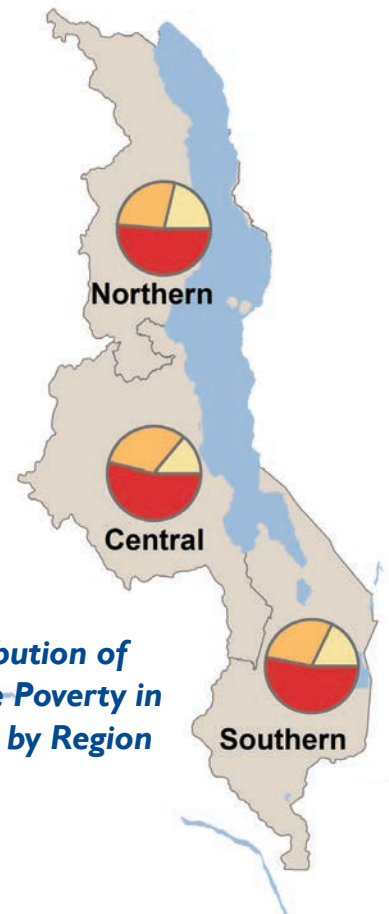
Northern

Central

Southern

Ideal Number of Children by Region within Poverty Groups

Mean ideal number of children

Not extremely poor

3.5-4.1
3.0-3.5

Extremely poor but not asset poor
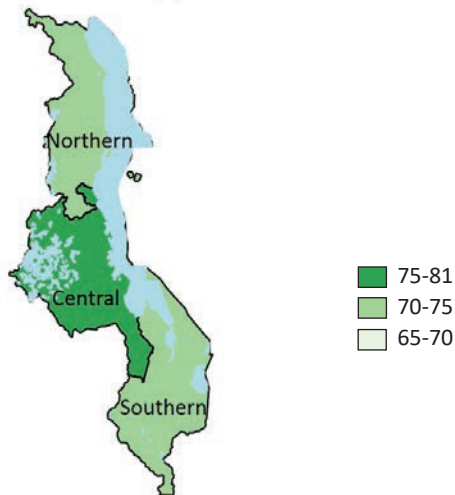

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Malawi, the mean ideal number of children is 3.4 for married women in not extremely poor households, 4.0 in extremely poor but not asset poor households, and 3.9 in extremely poor and asset poor households.

- There is little variation in the mean ideal number of children by region. The range is from 3.3 in the Central region for the not extremely poor group to approximately 4.0 for in all three regions for the other two poverty groups.

- Further analysis shows no evidence of regional variations in ideal number of children within all three poverty groups after controlling for women's education, residence, and parity.

Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

Legend:
- 75-81
- 70-75
- 65-70

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- Overall in Malawi, the proportion of married women with demand for family planning satisfied by modern methods (DSMM) is 77% for women in not extremely poor households, 76% in extremely poor but not asset poor households, and 73% in extremely poor and asset poor households.

- The lowest level of DSMM is 66% in the Northern region for the extremely poor and asset poor group.

- The highest level is 80% in the Central region for the not extremely poor group and the extremely poor but not asset poor group.

- Further analysis indicates that the Central region has significantly higher levels of DSMM compared with the Northern region after controlling for women's education, residence, and parity across all poverty groups, while there is no evidence of difference in DSMM between the Southern and Northern regions.

Conclusions

Further analysis that controls for women's education, residence, and parity has shown almost no regional variation in fertility preferences across the three poverty groups. Interventions aimed at improving demand satisfied by modern methods should consider targeting women outside the Central region and especially those in the Northern region. Demand satisfied for modern methods is significantly lower in the Northern region compared to the Central region for all poverty groups even after controlling for women's education, residence, and parity.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Mozambique*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Mozambique based on the 2015 AIDS Indicator Survey (AIS) on regional variations in poverty and regional estimates of demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Mozambique
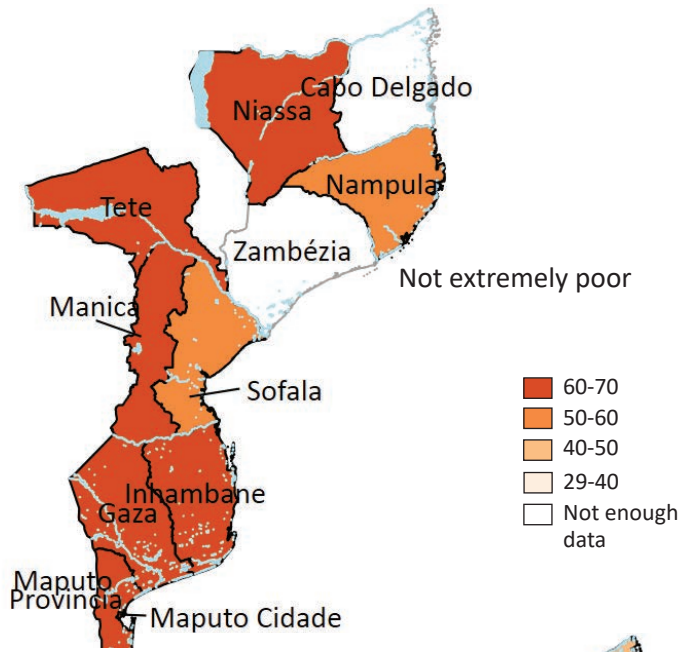
Geographic variations in poverty

- At the national level in Mozambique, 47% of married women live in extremely poor and asset poor households, 28% live in extremely poor but not asset poor households, and 24% live in not extremely poor households.

- The northern regions have a higher percentage of women in the extremely poor and asset poor group.

- The highest percentage of extremely poor and asset poor women were found in Nampula region at 61%.

- The two regions of Maputo Cidade and Maputo Provincia have a different distribution of poverty compared to the remaining regions with most women in the not extremely poor group (94% and 74% respectively).

Distribution of Absolute Poverty in Mozambique by Region
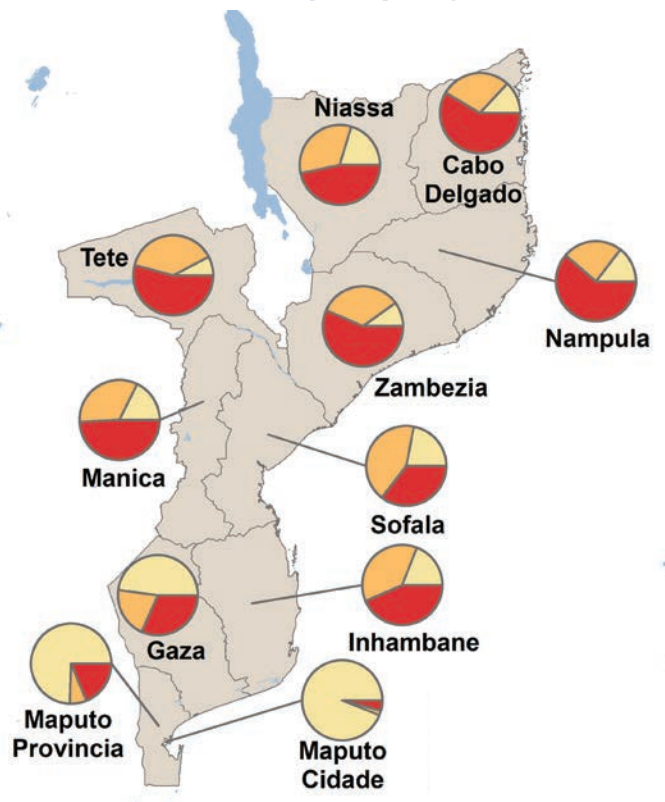
Distribution of Absolute Poverty in Mozambique
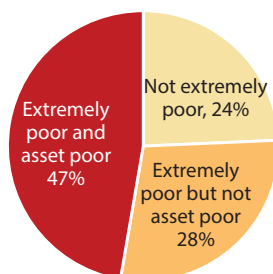
Extremely poor and asset poor 47%

Not extremely poor, 24%

Extremely poor but not asset poor 28%

Not extremely poor

■	60-70
■	50-60
■	40-50
□	29-40
□	Not enough data

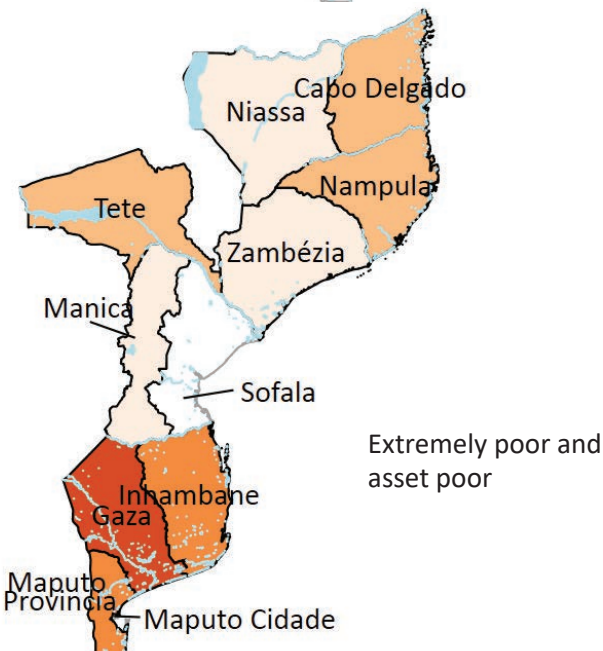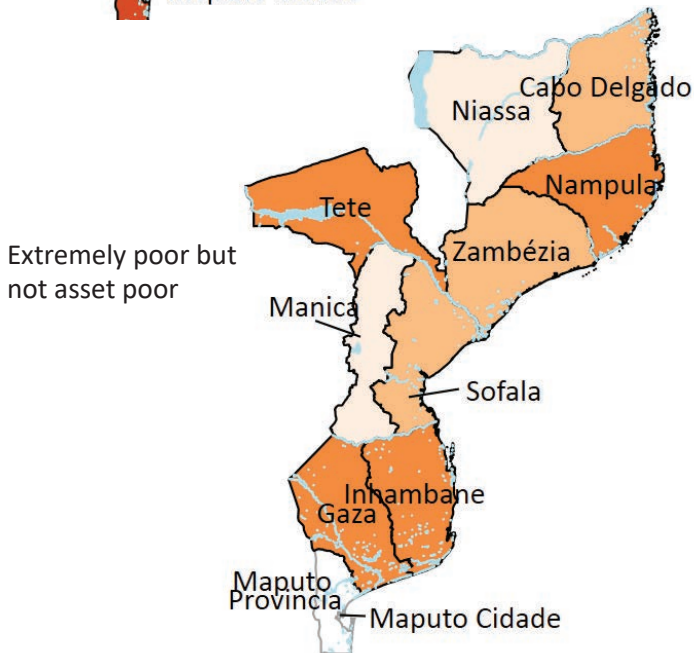Extremely poor but not asset poor

Extremely poor and asset poor

Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

- The proportion of married women in Mozambique with demand for family planning satisfied by modern methods (DSMM) is 64% for women in not extremely poor households, 49% in extremely poor but not asset poor households, and 42% in extremely poor and asset poor households.

- Within the not extremely poor group, several regions have levels of DSMM above 60%.

- The lowest level of DSMM is 29% in Zambézia region within the extremely poor and asset poor group.

- Further analysis indicates no evidence of regional variations in DSMM in the not extremely poor group and the extremely poor but not asset poor group after controlling for women's education, residence, and parity. In the extremely poor and asset poor group, Tete, Imhambane, and Gaza regions have higher levels of DSMM compared with Nissa region. For Tete and Imhambane, this difference is marginal.

© 2017 Arturo Sanabria, Courtesy of Photoshare

Conclusions

Interventions to improve demand satisfied by modern methods in Mozambique should consider targeting women in the extremely poor but not asset poor and the extremely poor and asset poor groups and especially for the central regions (Manica, Zambézia, Sofala) and Niassa.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Nepal*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Nepal based on the 2016 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Nepal

Geographic variations in poverty

*   At the national level in Nepal, 63% of married women live in households categorized as not extremely poor, 31% live in extremely poor but not asset poor households, and 7% live in extremely poor and asset poor households.

*   Provinces 1, 3, 4, 5, and 7 have a high proportion of women in the not extremely poor group, at 60% and above.

*   Province 2 has the highest proportion of women in the extremely poor but not asset poor group, at 53%, and Province 6 has the highest proportion in the extremely poor and asset poor group, at 33%.

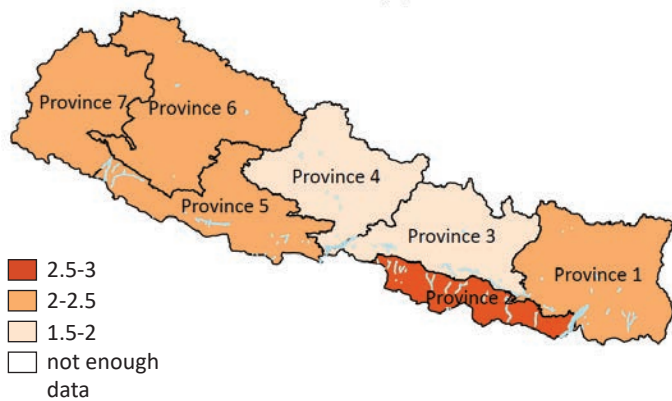### *Distribution of Absolute Poverty in Nepal*

Extremely poor and asset poor 7%

Not extremely poor, 63%

Extremely poor but not asset poor 31%
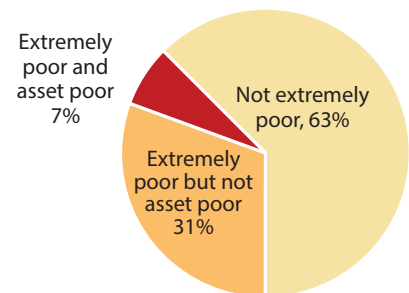
Distribution of Absolute Poverty in Nepal by Region
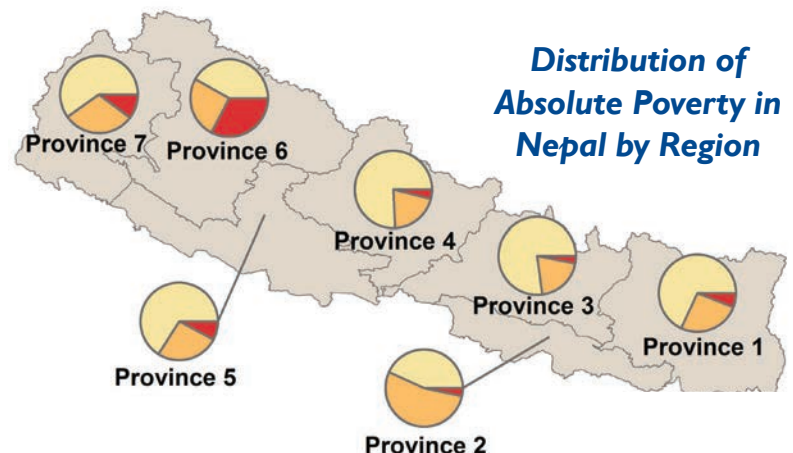
Ideal Number of Children by Region within Poverty Groups
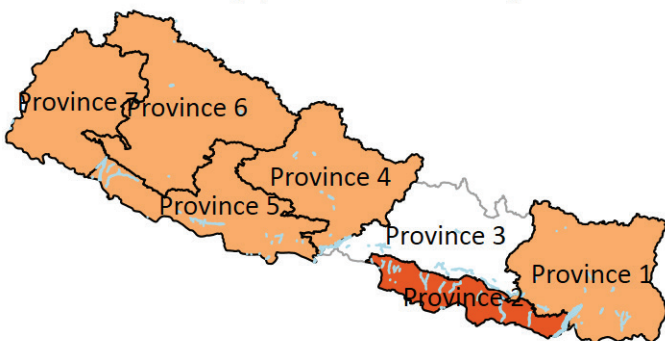
Mean ideal number of children

Not extremely poor

Legend:
- 2.5-3
- 2-2.5
- 1.5-2
- not enough data

Extremely poor but not asset poor
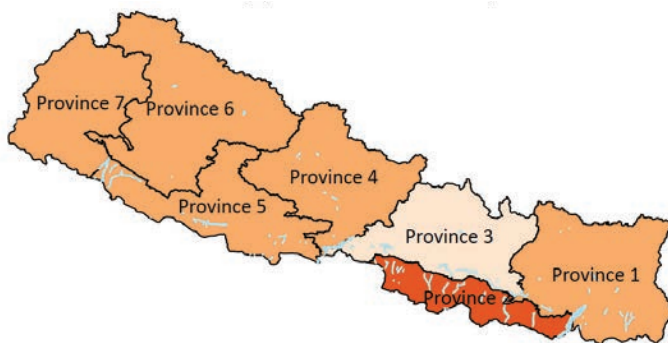
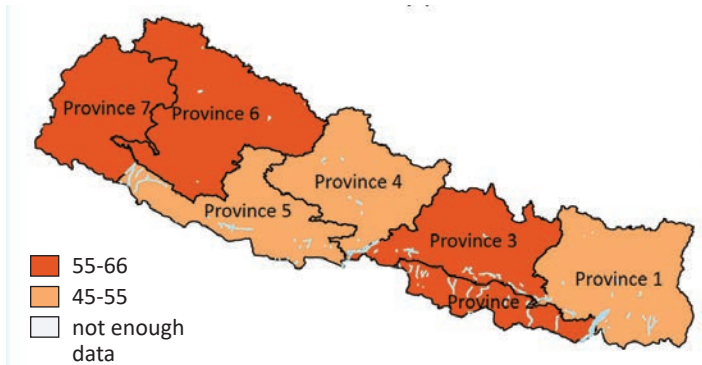### Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Nepal, the mean ideal number of children is 2.1 for married women in not extremely poor households, 2.4 in extremely poor but not asset poor households, and also 2.4 in extremely poor and asset poor households.

- There is little variation in mean ideal number of children by region. In most provinces the mean ideal number is in the range of 2.0-2.5 children in all three poverty groups. Province 2 has the highest mean ideal number at 2.5-2.7 children across the three poverty groups.

- Further analysis shows little or no evidence of regional variations in ideal number of children within all three poverty groups after controlling for women's education, residence, and parity. Province 2, however, has a consistently significantly higher mean ideal number of children compared with Province 1 across the three groups.
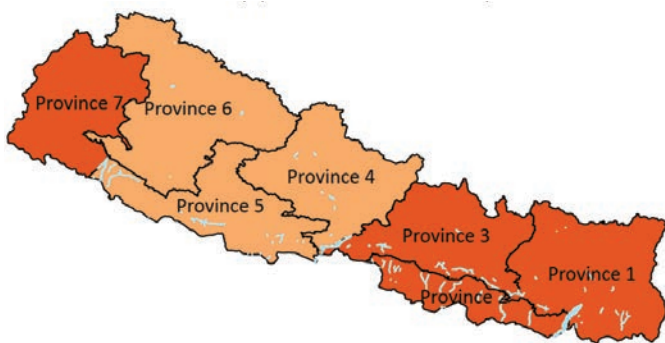
Demand for Family Planning Satisfied by Region within Poverty Groups

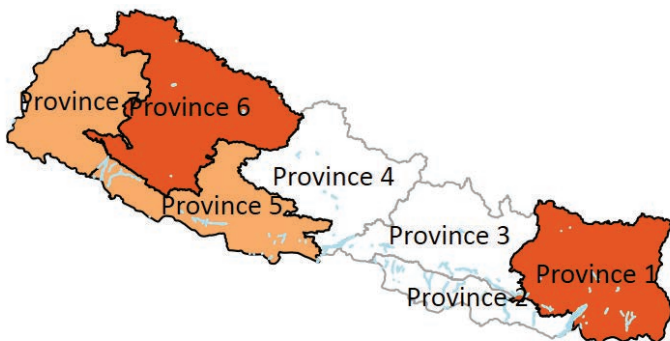*Percent of demand for family planning satisfied by modern methods*

Not extremely poor

Legend:
- 55-66
- 45-55
- not enough data

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- The proportion of women in Nepal with demand for family planning satisfied by modern methods (DSMM) is 55% for women in not extremely poor households, 58% in extremely poor but not asset poor households, and 56% in extremely poor and asset poor households.

- There is little variation in DSMM between the regions across the three poverty groups.

- For the not extremely poor group, four regions show DSMM above 60% while two regions show the lowest level, at 47%. The highest level of DSMM, at 65%, is found in Province 7 for the extremely poor but not asset poor group.

- In the remaining regions, almost half of women in the extremely poor but not asset poor group have their demand for family planning satisfied by modern methods.

- Further analysis indicates no evidence of regional variations in DSMM within the two extremely poor groups after controlling for women's education, residence, and parity. For the not extremely poor group, Provinces 2, 3, and 6 have higher levels of DSMM compared with Province 1. For Province 2 the difference is marginal.

Conclusions

There is very little regional variation in fertility preferences and demand satisfied for modern contraception across the three poverty groups. There are already relatively low fertility preferences in Nepal. However, there is an opportunity to increase the demand for family planning satisfied by modern methods across the country and in all poverty groups, as only about half of married women have their demand for family planning satisfied by modern methods.

Resources and credits

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Nigeria*

*An Analysis Brief from The DHS Program*

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Nigeria based on the 2013 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Nigeria

Geographic variations in poverty

- At the national level in Nigeria, 41% of women live in households categorized as not extremely poor, 31% live in extremely poor but not asset poor households, and 27% live in extremely poor and asset poor households.

- More than 60% of women in the three southern regions live in not extremely poor households.

- The highest proportions of women in the extremely poor and asset poor group are in the North East and North West regions, at 43% and 37% respectively.
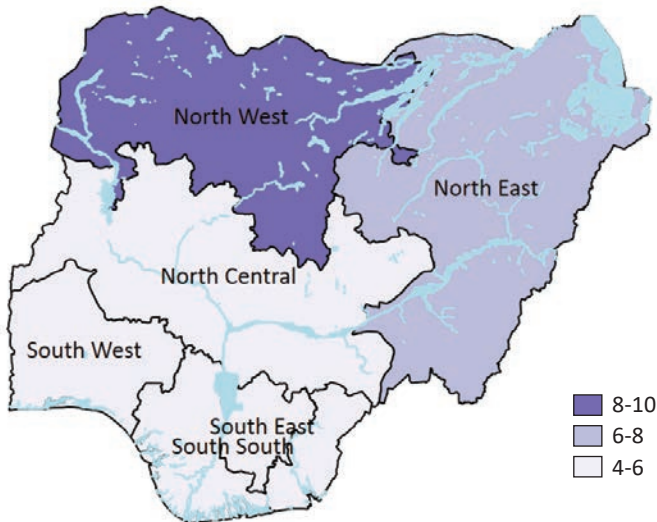
Distribution of Absolute Poverty in Nigeria

Extremely poor and asset poor 27%

Not extremely poor, 41%

Extremely poor but not asset poor 31%
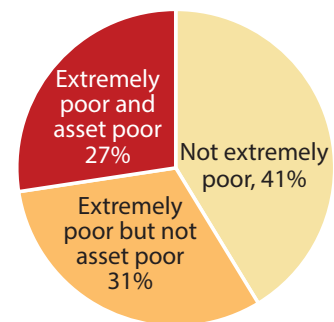
Distribution of Absolute Poverty in Nigeria by Region
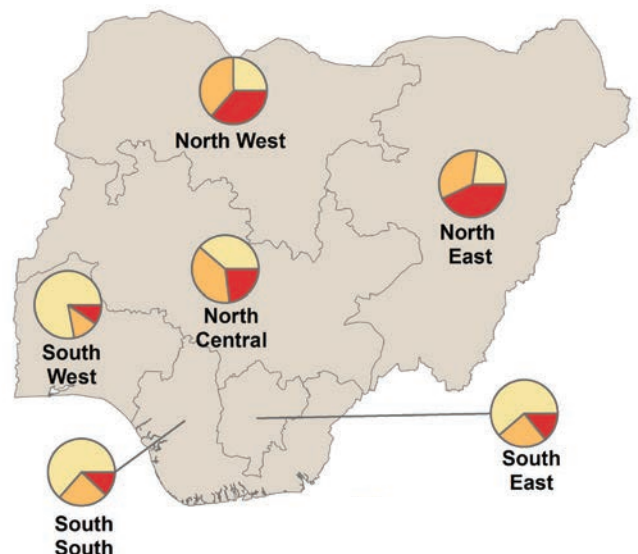
Ideal Number of Children by Region within Poverty Groups
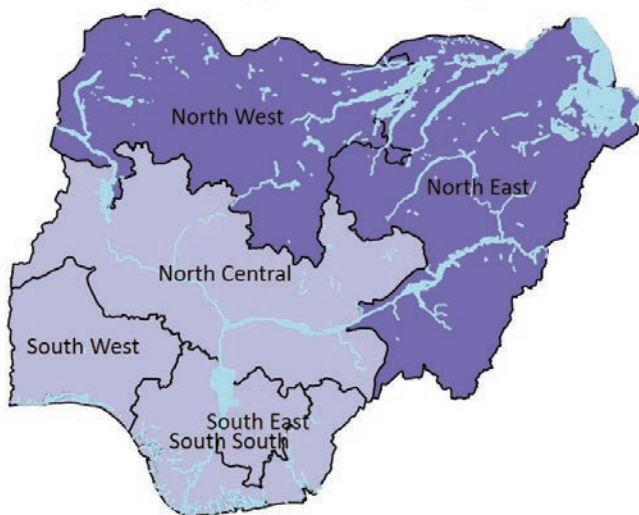
Mean ideal number of children

Not extremely poor

Legend:
- 8-10
- 6-8
- 4-6

Extremely poor but not asset poor
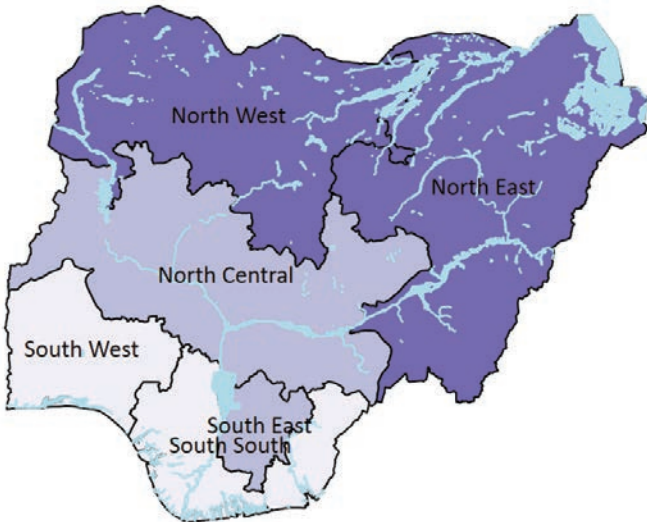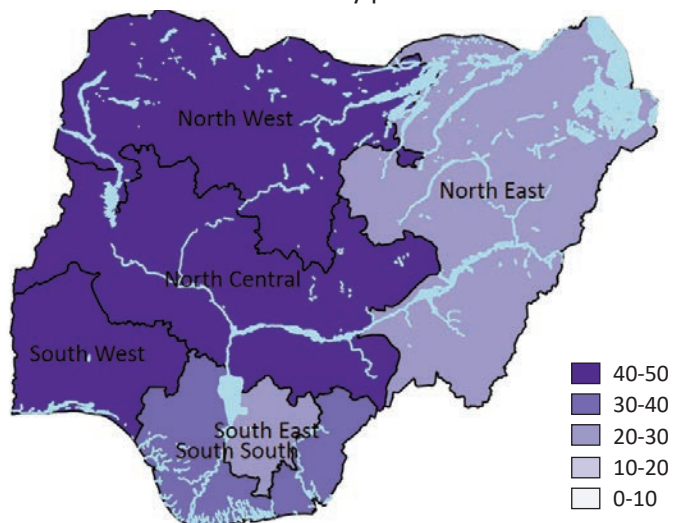

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Nigeria, the mean ideal number of children is 5.9 for married women in not extremely poor households, 7.9 in extremely poor but not asset poor households, and 8.2 in extremely poor and asset poor households.

- The highest mean ideal numbers of children, at 8 to 9, are found in the North East and North West regions across all three poverty groups.

- The not extremely poor group has a substantially lower mean ideal number of children—lowest in the South West region at 4.5 children.

- Further analysis shows that the North East and North West regions have a significantly higher mean ideal number of children compared with the North Central region across all three poverty groups after controlling for women's education, residence, and parity.
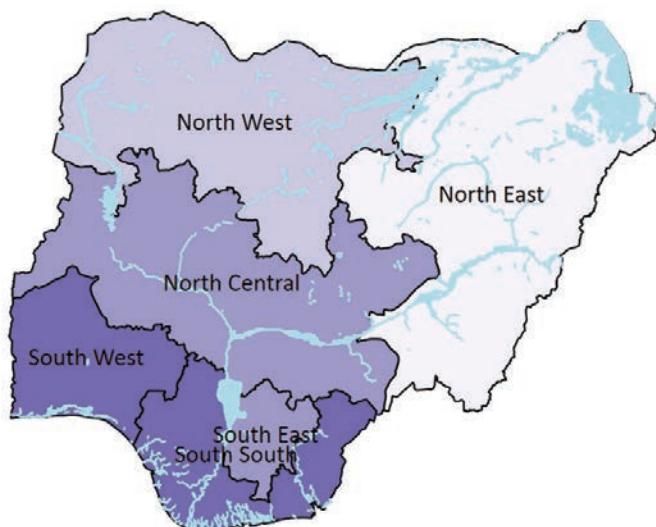
Demand for Family Planning Satisfied by Region within Poverty Groups

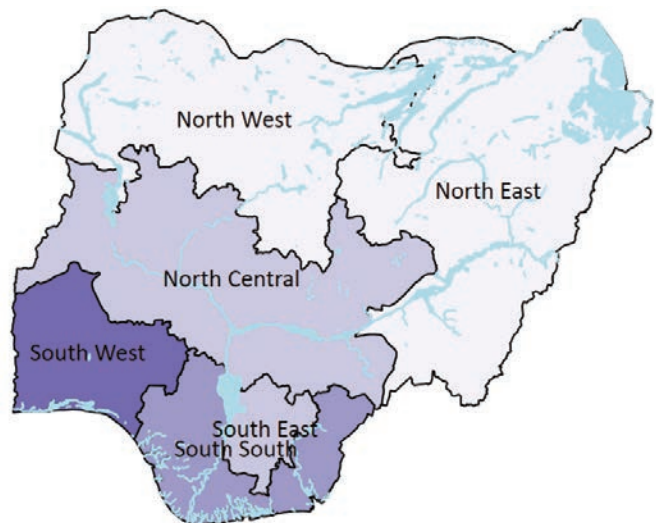### *Percent of demand for family planning satisfied by modern methods*

Not extremely poor

40-50
30-40
20-30
10-20
0-10

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- The proportion of married women in Nigeria with demand for family planning satisfied by modern methods (DSMM) is 40% for women in not extremely poor households, 23% in extremely poor but not asset poor households, and 16% in extremely poor and asset poor households.

- The level of DSMM is highest for the not extremely poor group in the South West region, at 48%, followed by the North Central and North West regions at 41%.

- The lowest level of DSMM is among the extremely poor and asset poor group in the North East region, at only 7%, followed by the North West region at 10%.

- Further analysis indicates that regional variations in DSMM exist after controlling for women's education, residence, and parity.

Conclusions

Overall Nigeria has one of the highest fertility preferences in sub-Saharan Africa with close to 7 mean ideal number of children among married women. In addition, less than a third of married women in Nigeria have their demand for family planning satisfied by modern methods. While interventions to lower fertility preferences and increase demand satisfied by modern methods are needed nationwide, this analysis suggests that targeting both women in the poorest households and the lowest performing regions, such as North East and North West regions would be especially effective.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Pakistan*
An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Pakistan based on the 2017-18 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Pakistan

Geographic variations in poverty

- Overall, almost three-quarters (72%) of married women in Pakistan live in households categorized as not extremely poor, 23% live in extremely poor but not asset poor households, and 5% live in extremely poor and asset poor households.

- The Federally Administered Areas (FATA) have the highest percent of women in the extremely poor and asset poor group, at 18%, and ICT Islamabad and Gilgit Baltistan have the lowest, at less than 1%.

- In regions other than FATA, ICT Islamabad and Gilgit Baltistan, 58-80% of women live in not extremely poor households, while 3-11% live in extremely poor and asset poor households.
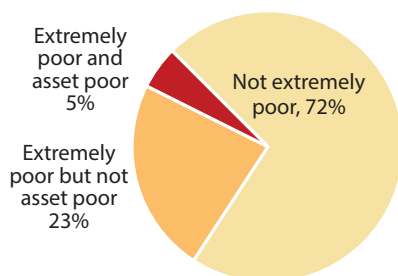
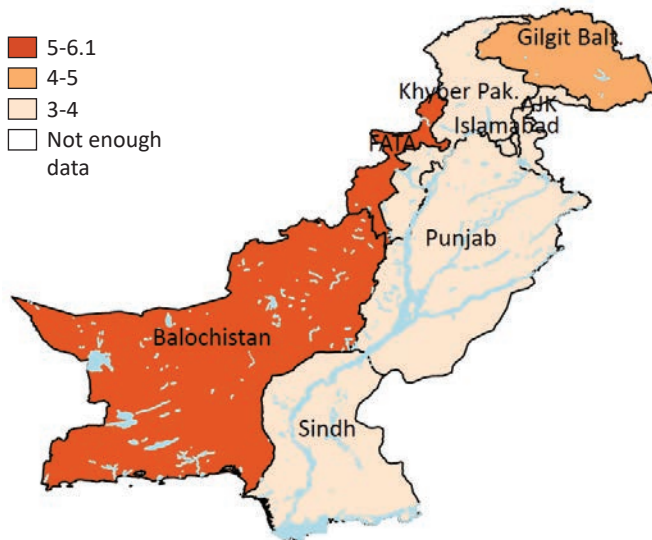**Distribution of Absolute Poverty in Pakistan by Region**
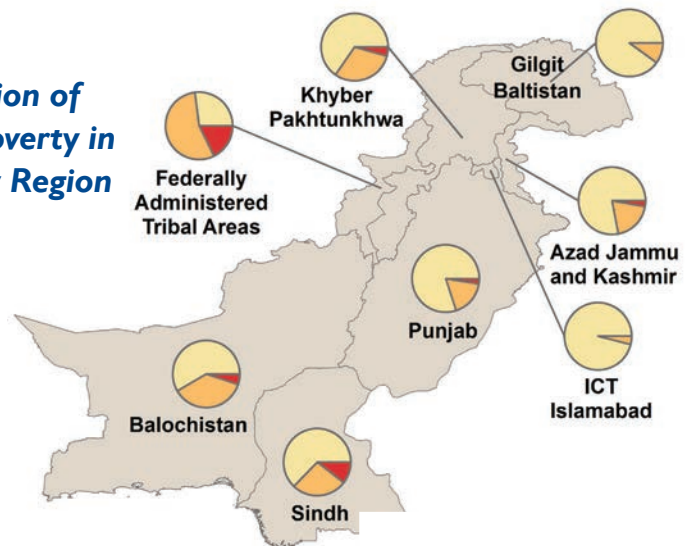
Distribution of Absolute Poverty in Pakistan

Extremely poor and asset poor 5%

Not extremely poor, 72%

Extremely poor but not asset poor 23%

Ideal Number of Children by Region within Poverty Groups

Mean ideal number of children

Not extremely poor

- 5-6.1
- 4-5
- 3-4
- Not enough data

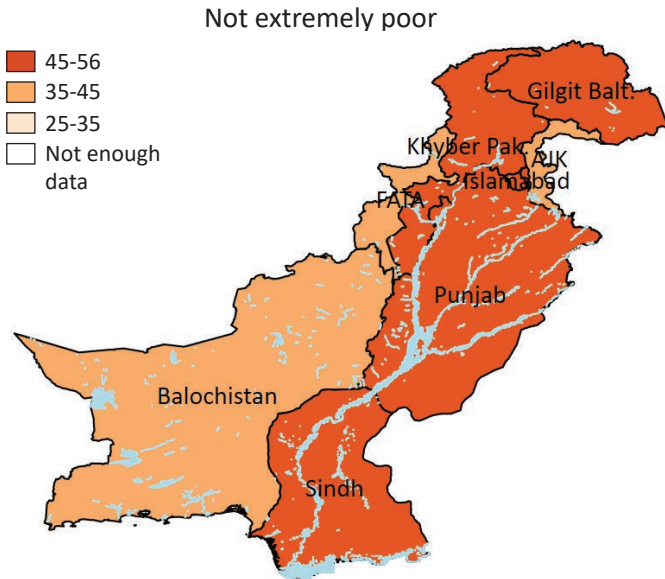Extremely poor but not asset poor

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Pakistan, the mean ideal number of children is 3.6 for married women in not extremely poor households, 4.7 in extremely poor but not asset poor households, and 5.1 in extremely poor and asset poor households.

- For most regions, ideal number of children increases with the level of poverty.

- Balochistan and FATA regions have the highest mean ideal number of children across the three poverty groups, at between 5 and 6 children.

- Further analysis indicates significant regional disparities in ideal number of children within the not extremely poor group and the extremely poor but not asset poor group after controlling for women's education, residence, and parity. Gilgit Baltistan and Azad Jammu and Kashmir were excluded from this analysis.

Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

Legend:
- 45-56
- 35-45
- 25-35
- Not enough data

Gilgit Balt.
Khyber Pak.
Islamabad
AJK
FATA
Punjab
Balochistan
Sindh

Extremely poor but not asset poor

Gilgit Balt.
Khyber Pak.
Islamabad
AJK
FATA
Punjab
Balochistan
Sindh

Extremely poor and asset poor

Gilgit Balt.
Khyber Pak.
AJK
Islamabad
FATA
Punjab
Balochistan
Sindh

Demand for family planning satisfied by modern methods

- The proportion of married women in Pakistan with demand for family planning satisfied by modern methods (DSMM) is 50% in the not extremely poor group, 43% in the extremely poor but not asset poor group, and 30% in the extremely poor and asset poor group.

- In the not extremely poor group, Punjab, Sindh, and ICT Islamabad have a level of DSMM higher than the national average for this group.

- Punjab and Sindh also have a higher level of DSSM than the national average for the extremely poor but not asset poor group.

- Estimates for the extremely poor and asset poor group were suppressed for most regions due to the small number of women in this group.

- Further analysis shows limited regional variation in DSMM within the same poverty group after controlling for women's education, residence, and parity. Gilgit Baltistan and Azad Jammu and Kashmir were excluded from this analysis.

Conclusions

Interventions aimed at lowering fertility preferences should consider targeting the Balochistan and FATA regions where the mean ideal number of children is the highest in the country across all poverty groups. There is an opportunity to increase demand satisfied by modern methods across the country and all poverty groups; generally about one half or less of women in all regions and poverty groups have their demand for family planning satisfied by modern methods.

Resources and credits

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Rwanda*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Rwanda based on the 2014-15 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Rwanda

Geographic variations in poverty

- In Rwanda, about two-thirds of married women (63%) live in extremely poor and asset poor households

- Almost two-thirds of women in Kigali City live in households considered not extremely poor, while about a quarter live in extremely poor and asset poor households.

- The other four regions share a poverty pattern opposite of Kigali City, with a low proportion of women (13- 16%) in not extremely poor group and a high proportion (55-78%) in the extremely poor and asset poor group.

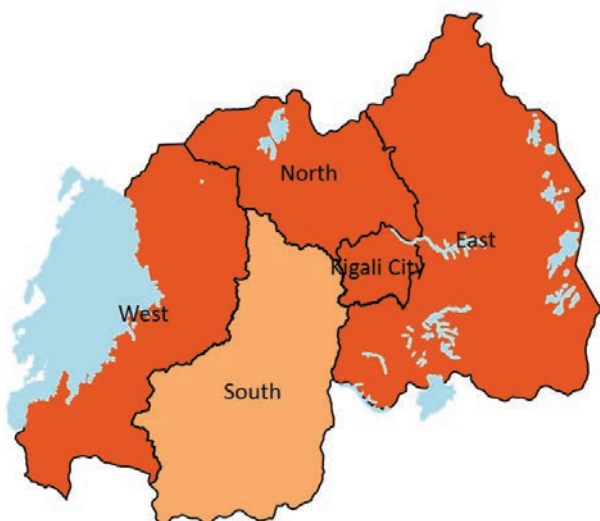### Distribution of Absolute Poverty in Rwanda
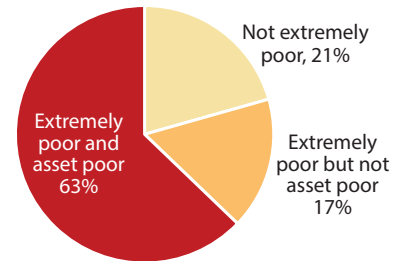
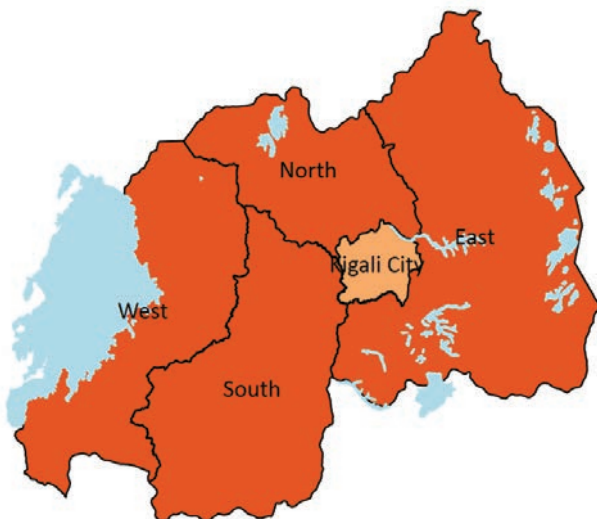### Distribution of Absolute Poverty in Rwanda by Region
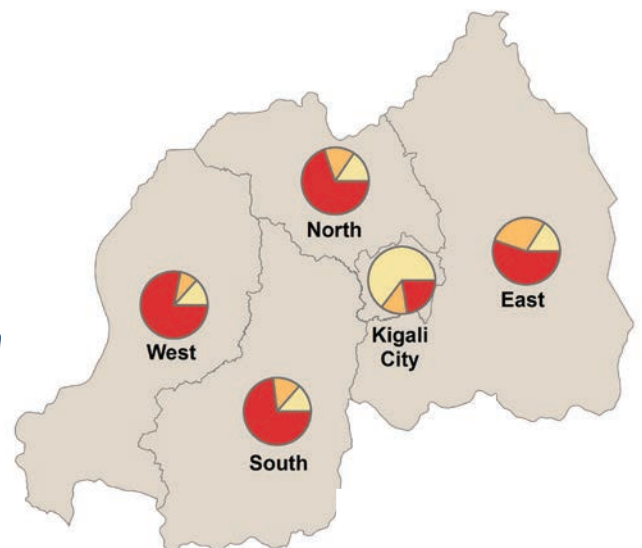
Ideal Number of Children by Region within Poverty Groups
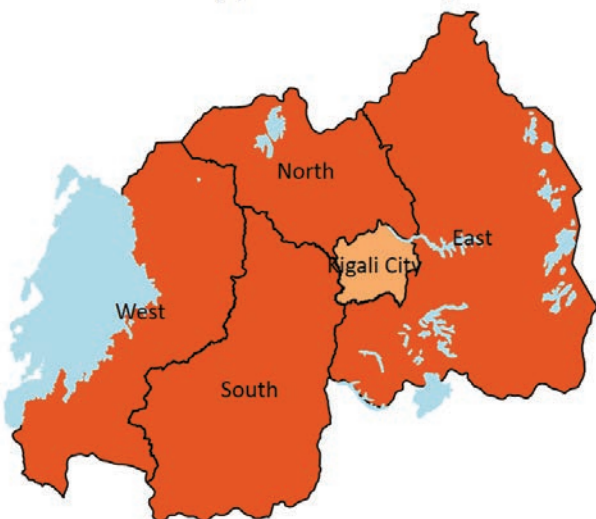
Mean ideal number of children

Not extremely poor

Extremely poor but not asset poor
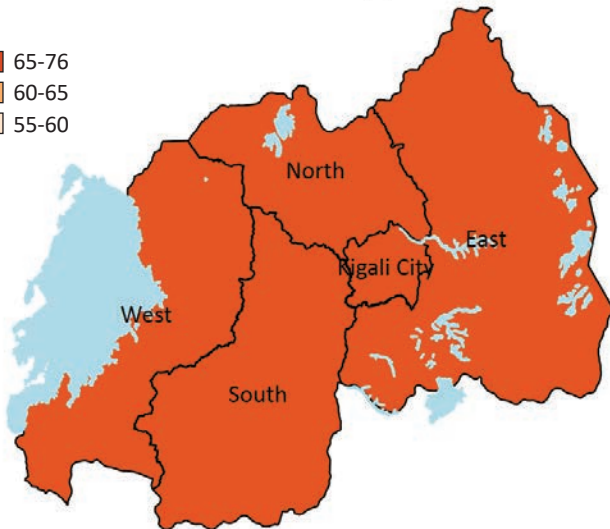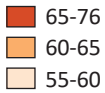

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Rwanda, the mean ideal number of children reported by married women is similar across the three poverty groups, at 3.6-3.7 children.

- Regional variations are minimal except for Kigali City, where women in the two extremely poor groups have a lower ideal number of children compared with other regions.

- Further analysis indicates that, compared with Kigali City, other regions have a significant but only slightly higher mean ideal number of children among women in the two extremely poor groups after controlling for women's education, residence, and parity.

- No significant regional differences are found among women in the not extremely poor group.
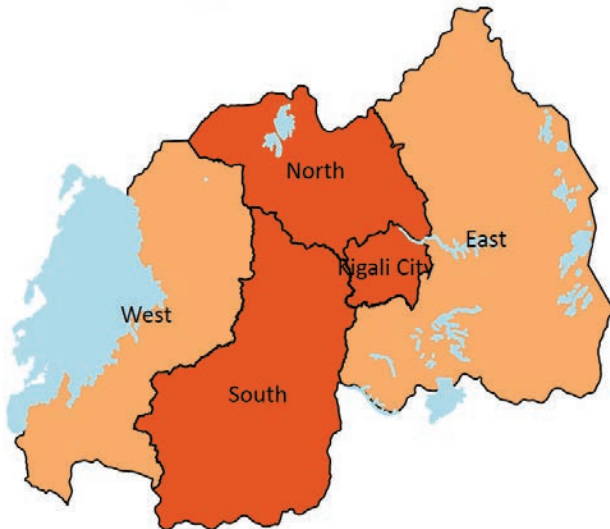
Demand for Family Planning Satisfied by Region within Poverty Groups

Percent of demand for family planning satisfied by modern methods

Not extremely poor

■	65-76
■	60-65
□	55-60

Extremely poor but not asset poor

Extremely poor and asset poor

Demand for family planning satisfied by modern methods

- The proportion of married women in Rwanda with demand for family planning satisfied by modern methods (DSMM) ranges from 64% in the extremely poor and asset poor group to 70% in the not extremely poor group.

- For the not extremely poor group, 65% or more of the women in all regions have their demand for family planning satisfied by modern methods.

- For the two extremely poor groups, DSMM is 65% or more in three regions—South, North, and Kigali City.

- The lowest level of DSSM is found in the West region among extremely poor and asset poor women, at 57%.

- Further analysis shows no regional variation in DSMM within the same poverty group after controlling for women's education, residence, and parity.

Conclusions

In Rwanda, the overall mean ideal number of children is close to 4 and demand satisfied by modern methods is 66% among married women. There are few regional variations in fertility preferences and demand satisfied by modern methods in Rwanda. Of note, Kigali has the lowest fertility preferences and the North has the highest demand satisfied by modern methods compared to other regions across all poverty groups. While there are opportunities to reduce fertility preferences and increase demand satisfied in Rwanda, a regionally-targeted approach does not seem warranted.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Uganda*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Uganda based on the 2016 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Uganda

Geographic variations in poverty

- Nationally in Uganda, 25% of married women live in households considered not extremely poor, 34% live in extremely poor but not asset poor households, and 42% live in extremely poor and asset poor households.

- Kampala has the highest proportion of not extremely poor women, at 90%, and Karamoja has the lowest, at 1%.

- In Karamoja, 83% of women are extremely poor and asset poor. In a few regions bordering with Sudan and Congo, more than half of married women live in extremely poor and asset poor households.

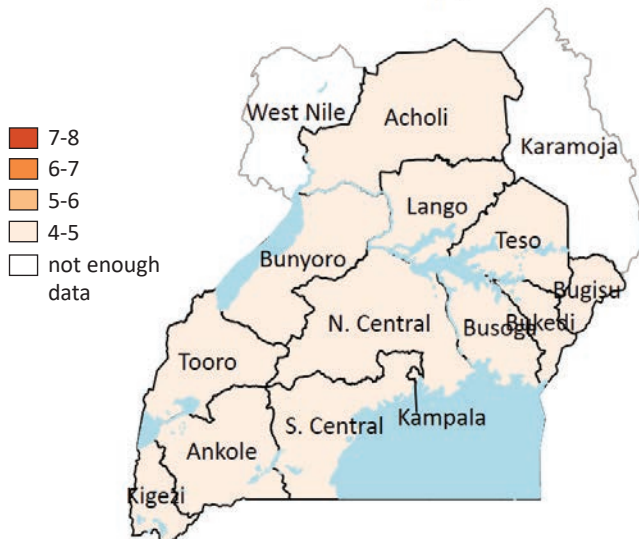***Distribution of Absolute Poverty in Uganda by Region***
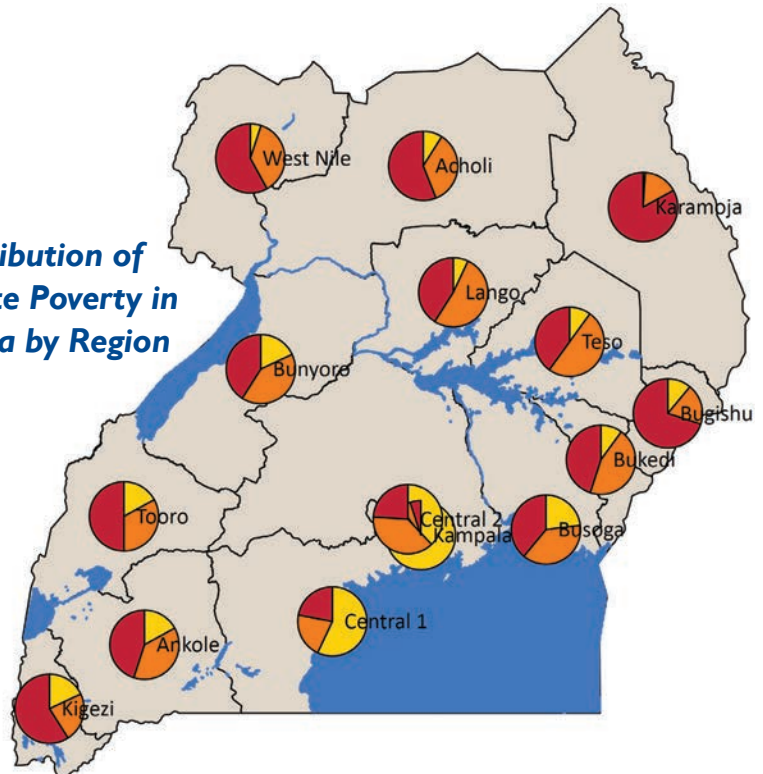
Distribution of Absolute Poverty in Uganda
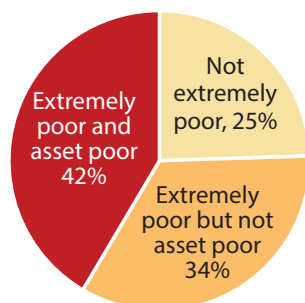
Not extremely poor, 25%

Extremely poor but not asset poor 34%

Extremely poor and asset poor 42%

Ideal Number of Children by Region within Poverty Groups

Mean ideal number of children

Not extremely poor

Legend:
- 7-8
- 6-7
- 5-6
- 4-5
- not enough data

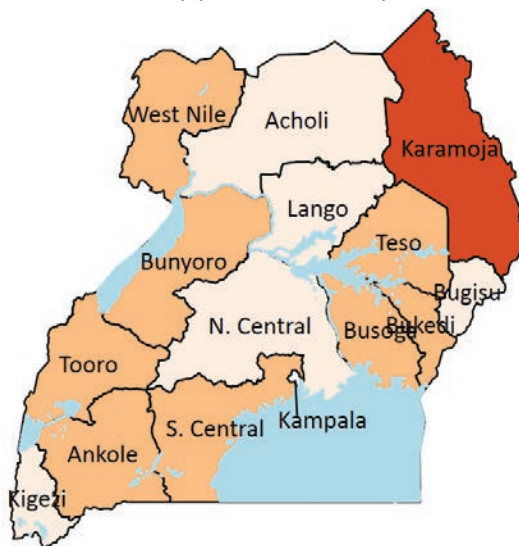#### Extremely poor but not asset poor
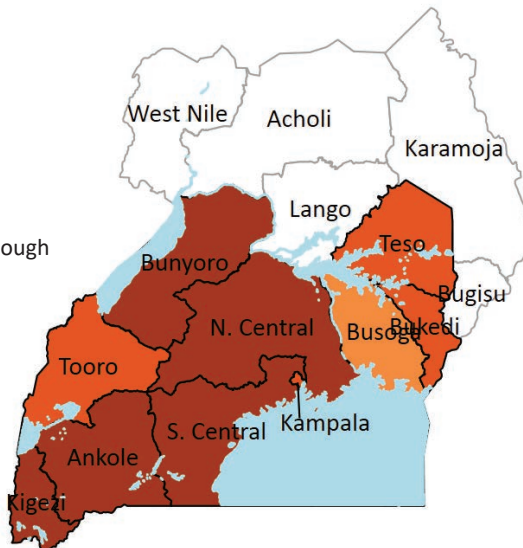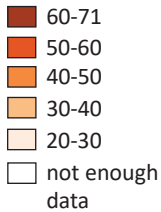

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Uganda, the mean ideal number of children is 4.6 for married women in not extremely poor households, 5.3 in extremely poor but not asset poor households, and 5.2 in extremely poor and asset poor households.

- In all regions, the mean ideal number of children is fewer than 5 for the not extremely poor group, while in most regions it is more than 5 for the two extremely poor groups.

- Karamoja has the highest mean number of ideal children, at 6.7 for the extremely poor but not asset poor group and 7.7 for the extremely poor and asset poor group.

- Further analysis indicates significant regional disparities in ideal number of children especially within the extremely poor and asset poor group after controlling for women's education, residence, and parity.
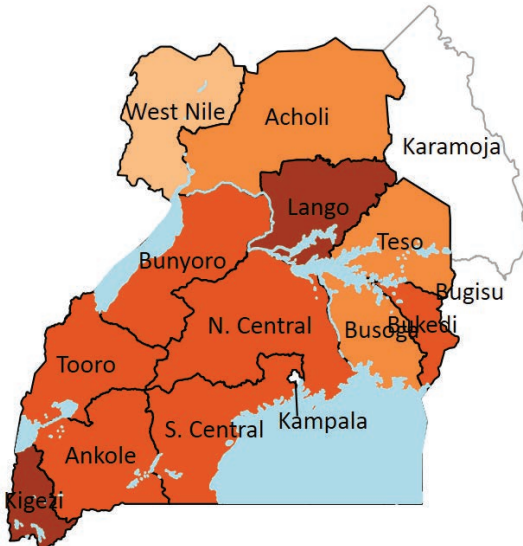
Demand for Family Planning Satisfied by Region within Poverty Groups

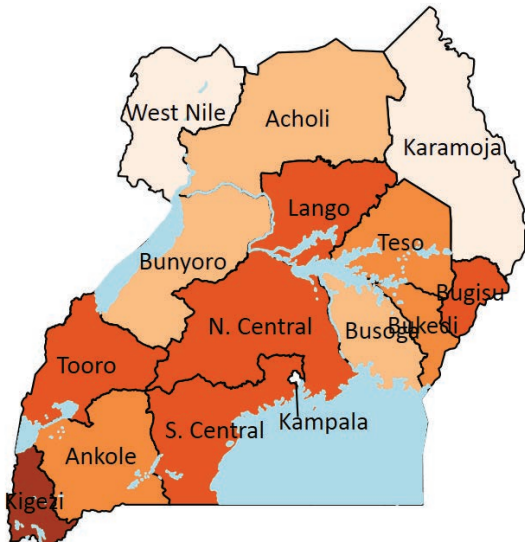*Percent of demand for family planning satisfied by modern methods*

Not extremely poor

Legend:
- 60-71
- 50-60
- 40-50
- 30-40
- 20-30
- not enough data

West Nile, Acholi, Karamoja, Lango, Teso, Bunyoro, Bugisu, N. Central, Busoga, Bukedi, Tooro, S. Central, Kampala, Ankole, Kigezi

Extremely poor but not asset poor

West Nile, Acholi, Karamoja, Lango, Teso, Bunyoro, Bugisu, N. Central, Busoga, Bukedi, Tooro, S. Central, Kampala, Ankole, Kigezi

Extremely poor and asset poor

West Nile, Acholi, Karamoja, Lango, Teso, Bunyoro, Bugisu, N. Central, Busoga, Bukedi, Tooro, S. Central, Kampala, Ankole, Kigezi

Demand for family planning satisfied by modern methods

- In Uganda, 60% of married women in the not extremely poor group have their demand for family planning satisfied by modern methods (DSMM), compared with 52% in the extremely poor but not asset poor group and 46% in the extremely poor and asset poor group.

- In most regions, 40% or less of women in the extremely poor and asset poor group have their demand for family planning satisfied by modern methods.

- Karamoja and West Nile have the lowest levels of DSMM, at less than 25%

- Further analysis indicates significant regional disparities in DSMM especially within the extremely poor and asset poor group after controlling for women's education, residence, and parity.

Conclusions

Interventions aimed at lowering fertility preferences in Uganda should consider targeting women in the extremely poor groups and the Karamoja region. Family planning programs should consider targeting women living in extremely poor households in the Karamoja and West Nile regions where less than a quarter of married women have their demand satisfied by modern methods.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.

Regional disparities in fertility preferences and demand for family planning satisfied by modern methods across levels of poverty: *Zambia*

An Analysis Brief from The DHS Program

Study Summary

The DHS Analytical Studies 71 examines subnational variations in fertility preferences and family planning outcomes associated with poverty in married women in 12 recent Demographic and Health Surveys. Poverty is measured based on a standard set of criteria for unsatisfied basic needs and the ownership of specific assets. Households are categorized into three poverty groups: not extremely poor, extremely poor but not asset poor, and extremely poor and asset poor. This brief summarizes the results from Zambia based on the 2013-14 DHS on regional variations in poverty, regional estimates of mean ideal number of children, and demand for family planning satisfied by modern methods, for each poverty group among married women.

Results from Zambia

Geographic variations in poverty

* Nationally in Zambia, married women are distributed more or less evenly across the three poverty groups.

* In most regions, more than one-third of women live in extremely poor and asset poor households, except in Lusaka and Copperbelt, where less than 20% of women are in this poverty group.

* The poorest region is the Western, where more than two-thirds of women live in extremely poor and asset poor households, while less than 10% live in not extremely poor households.
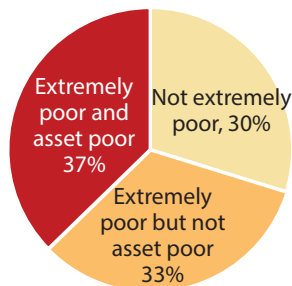
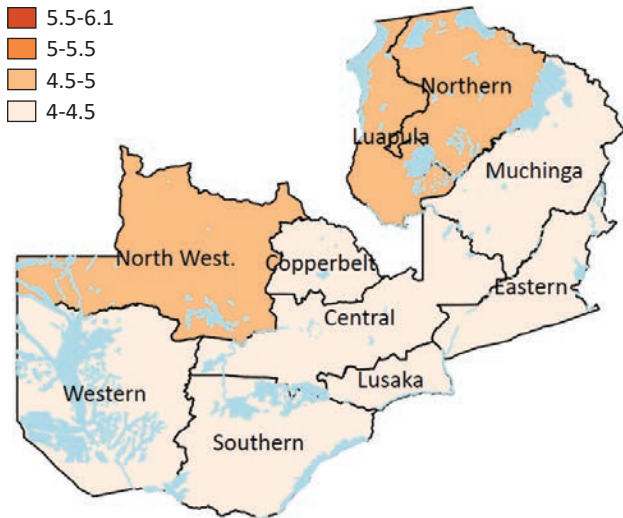**Distribution of Absolute Poverty in Zambia by Region**
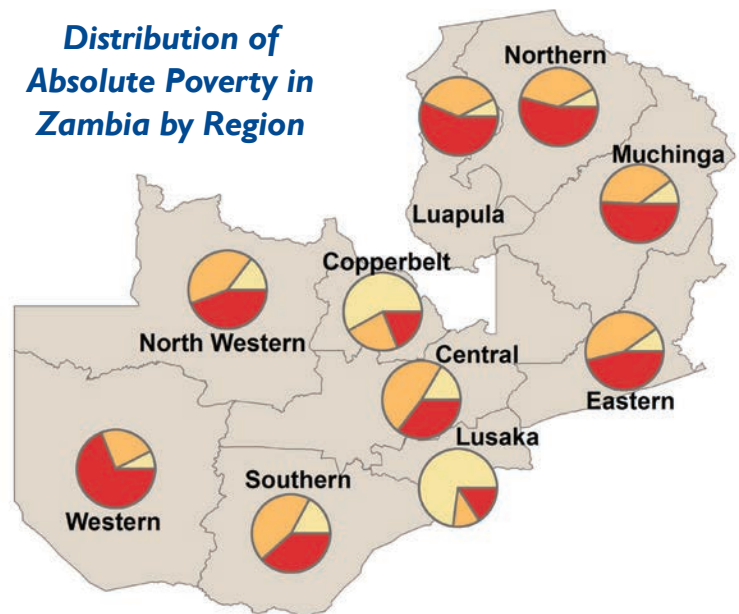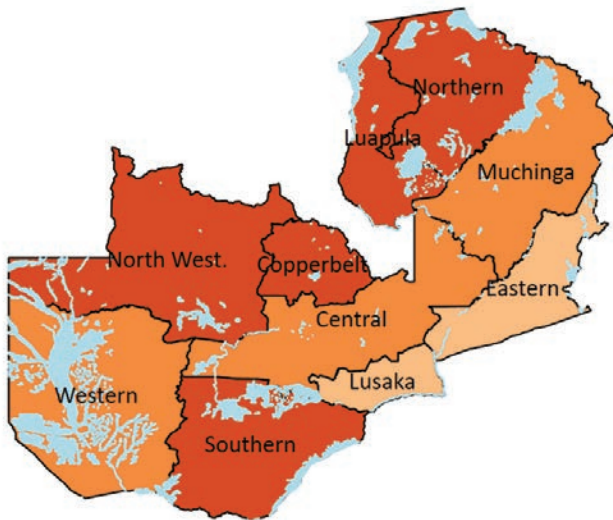

Distribution of Absolute Poverty in Zambia

Extremely poor and asset poor 37%

Not extremely poor, 30%

Extremely poor but not asset poor 33%

Ideal Number of Children by Region within Poverty Groups

Mean ideal number of children
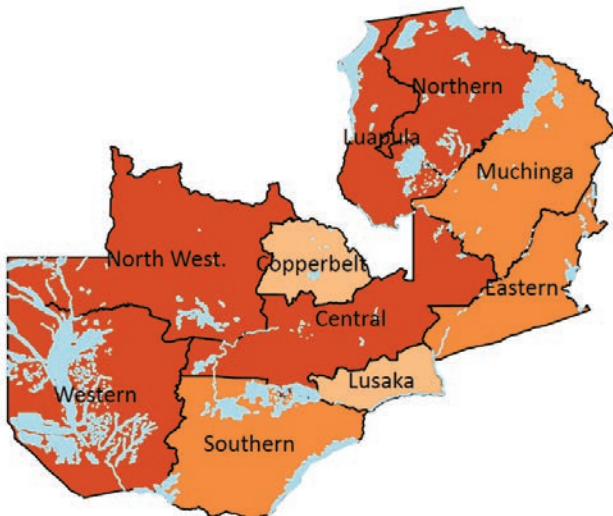
Not extremely poor

Legend:
- 5.5-6.1
- 5-5.5
- 4.5-5
- 4-4.5

Extremely poor but not asset poor

Extremely poor and asset poor

Fertility preferences: Ideal number of children

- Overall in Zambia, the mean ideal number of children is 4.4 for women in not extremely poor households, 5.4 in extremely poor but not asset poor households, and also 5.4 in extremely poor and asset poor households.

- In most regions, women in the not extremely poor group report an average of 4.5 or fewer children as the ideal number. In almost all regions, the two extremely poor groups have an average ideal number of 5 or more children.

- Women in the extremely poor and asset poor group that live in the Northern and North Western regions report the highest ideal number, at approximately 6 children.

- Further analysis indicates significant regional disparities in ideal number of children in the two extremely poor groups after controlling for women's education, residence, and parity.

Demand for Family Planning Satisfied by Region within Poverty Groups

*Percent of demand for family planning
satisfied by modern methods*

Not extremely poor

Legend:
- 75-85
- 65-75
- 55-65
- 45-55
- 35-45

Extremely poor but not asset poor

Extremely poor and asset poor
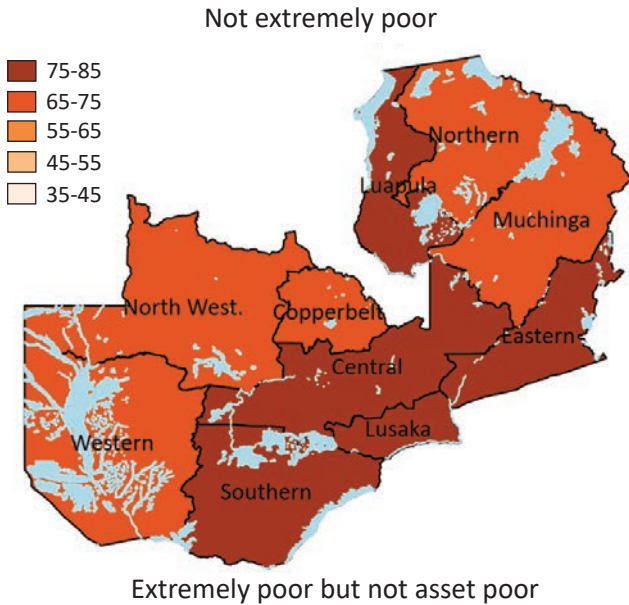
Demand for family planning satisfied by modern methods

- In Zambia, the proportion of married women who have their demand for family planning satisfied by modern methods (DSMM) is 76% in the not extremely poor group, 62% in the extremely poor but not asset poor group, and 55% in the extremely poor and asset poor group.

- In all 10 regions, more than 65% of women in the not extremely poor group have their demand for family planning satisfied by modern methods.

- The extremely poor and asset poor group has the lowest level of DSMM, at only 38% in the Northern region.

- Further analysis indicates significant regional disparities in DSMM in the extremely poor and asset poor group after controlling for women's education, residence, and parity.
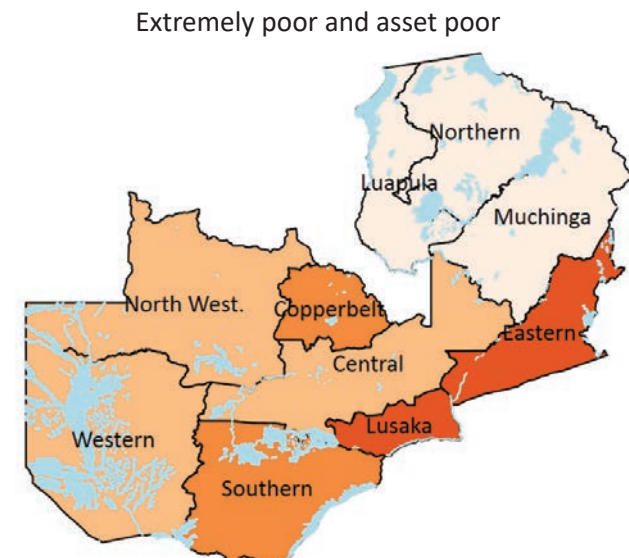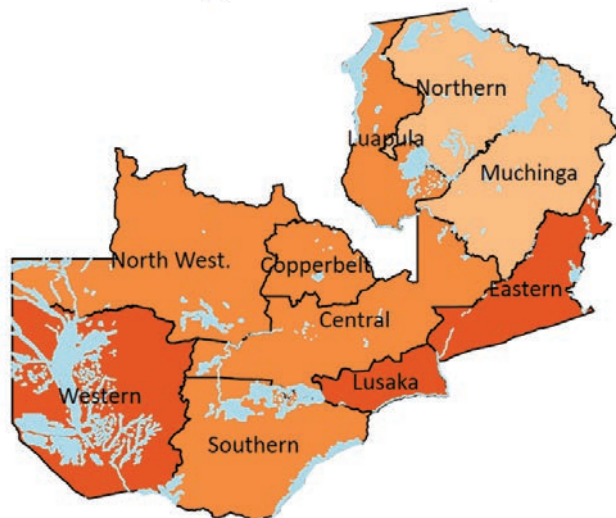
© 2018 Shepherd Mulwanda, Courtesy of Photoshare

Conclusions

This analysis suggests that interevntions to address high fertility preferences could focus on women in the extremely poor groups and especially in the Northern and Western regions. Interventions for increasing demand satisfied for modern methods should consider targeting women living in extremely poor and asset poor households and especially in the Luapula, Muchinga, and Northern regions.

Resources and credits

This brief summarizes The DHS Program's Analytical Studies 71, "Regional disparities in fertility preferences and demand satisfied for family planning by modern methods across levels of poverty" by Shireen Assaf and Wenjuan Wang. It was published by ICF with funding from The United States Agency for International Development through The DHS Program. For the full report or more information about The DHS Program, please visit www.dhsprogram.com.