

AMHARA

Demography and Health

Aynalem Adugna

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Landforms, Climate and Economy

Located in northwestern Ethiopia the Amhara Region between 9°20' and 14°20' North latitude and 36° 20' and 40° 20' East longitude the Amhara Region has an estimated land area of about 170000 square kilometers . The region borders Tigray in the North, Afar in the East, Oromiya in the South, Benishangul-Gumiz in the Southwest and the country of Sudan to the west [1].

Amhara is divided into 11 zones, and 140 Weredas (see map at the bottom of this page). There are about 3429 kebeles (the smallest administrative units) [1]. "Decision-making power has recently been decentralized to Weredas and thus the Weredas are responsible for all development activities in their areas." The 11 administrative zones are: North Gonder, South Gonder, West Gojjam, East Gojjam, Awie, Wag Hemra, North Wollo, South Wollo, Oromia, North Shewa and Bahir Dar City special zone. [1]

The historic Amhara Region contains much of the highland plateaus above 1500 meters with rugged formations, gorges and valleys, and millions of settlements for Amhara villages surrounded by subsistence farms and grazing fields. In this Region are located, the world- renowned Nile River and its source, Lake Tana, as well as historic sites including Gonder, and Lalibela. "Interspersed on the landscape are higher mountain ranges and cratered cones, the highest of which, at 4,620 meters, is Ras Dashen Terara northeast of Gonder.Millennia of erosion has produced steep valleys, in places 1,600 meters deep and several kilometers wide. In these valleys flow rapid streams [that are] unsuitable for navigation but [with great potentials] as sources of hydroelectric power and water for irrigation" [2].

A year 2000 report by USAID painted a grim picture of life in most of Amhara, especially the Eastern half [3]. It states that Amhara land has been cultivated for millennia with no variations, or improvement in the farming techniques, and that the resulting environmental damage has contributed to the trend of deteriorating climate with frequent draughts, loss of crops and the resulting food shortage, and periodic famines.

The Region suffers from recurrent droughts and pest invasions. Of the 105 Weredas in Amhara 48 are drought-prone and chronically food insecure. Studies show that there has not been a single year since 1950 with drought in the eastern part of the Amhara. "Famines have been recorded as far back as biblical times". On the other hand, much of Western Amhara has good soils and adequate rainfall, and often produces agricultural surpluses [3].

"Cereals account for more that 80% of cultivated land and 85% of total crop production. The principal cereal crops in the Amhara Region are teff, barley, wheat, maize, sorghum and finger millet. Pulses and oil crops are the other major categories of field crops. ... About 27.9 percent of the livestock in Ethiopia, 30.7 percent of the poultry, and 18.5 percent of the beehives are found in Amhara Region. Most of the Region is on the highland plateau and is characterized by rugged

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mountains, hills, plateaus, valleys and gorges. Hence, the Region has varied landscapes composed of steep fault escarpments and adjoining lowland plains in the east, nearly flat plateaus and mountains in the center, and eroded landforms in the north. Most of the western part is a flat plain extending into the Sudan lowlands. The topographical features represent diversified elevations ranging from 700 meters above sea level (m.a.s.l.) in the eastern edge to over 4600 m.a.s.l. in the northwest. Based on moisture availability and thermal zones, ten major agro-ecological zones and 18 sub-zones have been identified in the Region. A little over 50 percent of the total area of the Region is considered potentially arable for agricultural production activities." [3]

The USAID estimated a population growth rate of 3% per year and a doubling time of 25 years for Amhara. This is also true and for the whole nation. According to the Agency, the consequences of this rapid population growth include severe land shortages and rapid natural resource degradation. It is estimated that 94 percent of households have insufficient land to meet their food needs [3]

"Rural households are compelled to clear and cultivate marginal lands on steep hillsides. Only one to three percent of the Amhara Region remains forested..... Overgrazing further denudes the land of vegetative cover. Forage requirements are estimated to be 40 percent below needed levels to maintain the current livestock population". "Much of the annual rainfall comes in short violent events of up to 100 mm/day. The exposure of denuded slope areas to this type of rainfall results in Ethiopia having one of the most serious soil degradation problems in the world. Annual rates of soil loss in the Amhara Region in some steep lands and overgrazed slopes exceed 300 tons/ha/year, or 250 mm/year" [3]

Land degradation has been a major problem for several decades. Individual farmers and the three governments the country has had in the last half century considered resettlement the main safety valve, leading to the out-migration of several hundred thousand Amhara farmers to other regions of the country.

Population Distribution*

The population of Amhara region was estimated to be 28 million in mid-2018 (see table below). The CSA's total population estimate for the Amhara Region for mid-2008 was 20,136,000 [3] with a fifty-fifty numerical split between the sexes. Of these 2,408,000 (12%) were urban residents. The percentage of the urban population is below the national average. A sub-Regional analysis for the 105 Weredas in the Amhara Region shows the unevenness of population distribution, with the following Weredas as the ten most populous (see map at the bottom of this page for location of Weredas).

*Note : We have argued that the 2007 census undercounted the population of Addis Ababa and Amha.

Read the source below :

Aynalem Adugna and Helmut Kloos. *Evaluation of the 2007 Ethiopian Census Data, with an Emphasis on Coverage in the Amhara Region*. Ethiopian Journal of Development Research, Vol. 36, Number 1, 2014

1994 Census*					May 11, 2018
Region	Urban	Rural	Total	Percent	
Tigray	2,667,789	468,478	3,136,267	5.9%	6,276,729
Afar	980,705	79,868	1,060,573	2.0%	2,122,565
Amhara	12,568,982	1,265,319	13,834,301	25.9%	27,687,108
Oromiya	16,762,437	1,970,088	18,732,525	35.1%	37,490,108
Somali	2,761,479	437,035	3,198,514	6.0%	6,401,307
Benishangul Gumuz	424,432	36,027	460,459	0.9%	921,534
SNNPR	9,672,210	704,818	10,377,028	19.5%	20,767,937
Gambella	154,438	27,424	181,862	0.3%	363,967
Addis Ababa	28,149	2,084,588	2,112,737	4.0%	4,228,300
Dire Dawa	78,676	173,188	251,864	0.5%	504,065
	46,099,297	7,246,833	53,346,130	100.0%	106,763,619**
*Source: http://www.irpps.cnr.it/etiopia/pdf/MigrationChap2.PDF					
**Source: http://countrymeters.info/en/Ethiopia (For May 11 2018)					

Population Size of the Largest 10 Weredas in Amhara (July, 2008)

Rank	Wereda	Population
1	Este	424,041
2	Merawi	351,397
3	Adet	351,327
4	Achefer	342,889
5	Farta	324,270
6	Kemekem	319,831
7	Dembia	315,903
8	Bure Wemberma	312,078
9	Alefa	307,449

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10	Dera	305,490
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Only one Wereda (Este) has a population over 400,000. In thirteen Weredas the population mid 2008 size was between 25,000 and 300,000. Eighteen Weredas had a population of 200,000 to 250,000. The majority of Weredas (a total of 53 Weredas) were in the 100,000 to 200,000 range. The remaining twelve Weredas had a population of less than 100,000. Woldya Wereda, Berehet and Debre Tabor had the smallest population sizes (less than 50,000).

A ranking on the basis of density (persons per square kilometers) produces different Wereda placements. A total of 23 rural Weredas in Amhara have densities above two hundred persons per square kilometer (July 2008):

Weredas with Densities above 200 Persons per Square Kilometer (July 2008)

Wereda	Density	Wereda	Density
Tehuldere	359.1	Dega Damot	230.0
Efratna Gidim	353.4	Faggeta Lekoma	228.6
Antsokiyana Gemza	281.0	Merawi	219.2
Banja	263.3	Gondar Zuria	216.7
Adet	260.7	Debay Telagen	215.5
Dembia	260.1	Kalu	213.0
Dessie Zuria	258.0	Sekela	211.0
Farta	254.4	Ankesha	210.1
Kuarit	252.1	Hulet Ej Enese	207.8
Enemay	251.0	Kemekem	205.0
Fogera	246.8	Dejen	203.4

Source: [4]

Amhara Weredas with Densities less than 100 Persons Per square Kilometer (July, 2008)

Wereda	Density	Wereda	Density
Minjarina Shenkora	94.8	Brehet	48.8
Kelala	94.5	Alefa	48.1
Beyeda	94.4	Habru	43.6
Hagere Mariam Ke	82.2	Gondar	40.3
Belesa	78.3	Zikuala	21.5
Childga	75.1	Metema	20.8
Dehana	71	Sanja	18.1
Addi Arkai	69.1	Quara	6.8
Sekota	59.2		

[Click HERE](#) to access a Regional map of Ethiopia's Demographic and Health Survey Results and then click Amhara

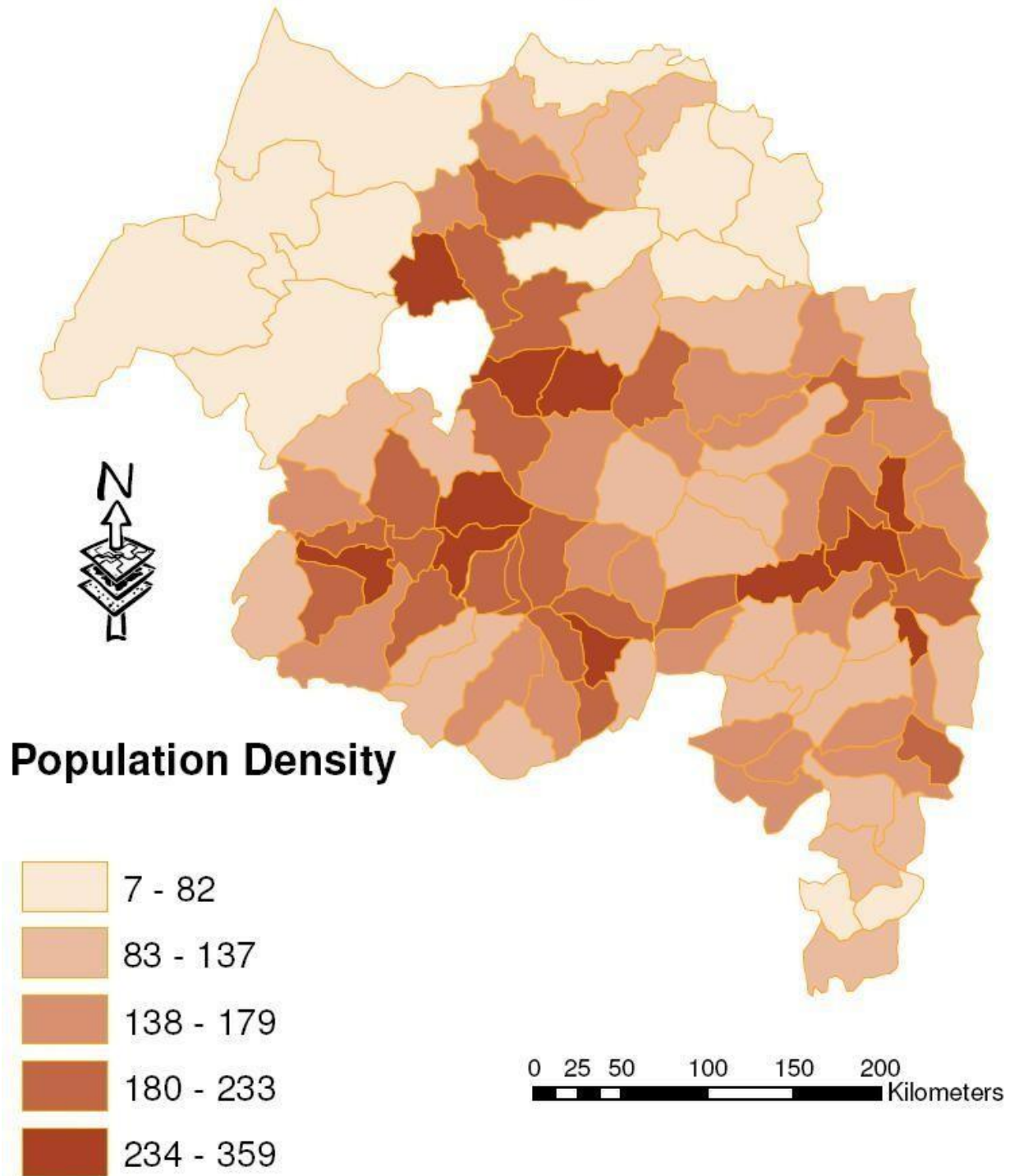
Also see the population density map below:

[Click HERE](#) to access an interactive population density map based on the 2007 census and zoom into the Amhara region (the darker the shade, the larger the population size of Weredas). The discrepancies between the numbers in the map and the tables above reflect the level of population undercounts in the 2007 census*. Use the back arrow on the web browser to return.

*Note : We have argued that the 2007 census undercounted the population of Addis Ababa and Amhara. Read the source below :

Aynalem Adugna and Helmut Kloos. *Evaluation of the 2007 Ethiopian Census Data, with an Emphasis on Coverage in the Amhara Region*. Ethiopian Journal of Development Research, Vol. 36, Number 1, 2014

Population Density, Amhara 2008



North Gondar		
Wereda	Population	Density
Addi Arkai	154,318	69.1
Beyeda	108,625	94.4
Janamora	177,786	102.8
Debark	177,315	117.3
Dabat	172,489	143.8
Sanja	151,093	18.1
Lay Armacho	168,011	154.8
Wegera	262,955	141.2
Gondar Zuria	278,835	216.7
Dembia	315,903	260.1
Chilga	238,891	75.1
Metema	83,000	20.8
Quara	50,347	6.8
Alefa	307,449	48.1
Belesa	200,530	78.3
Gondar	213,673	40.3

Debub Wello		
Mekdela	151,156	113.1
Tenta	197,067	156.8
Kutaber	180,307	190.0
Ambasel	158,768	172.8
Tehulbere	174,041	359.1
Werebabu	129,812	169.6
Kalu	245,489	213.0
Dessie Zuria	285,306	258.0
Lagambo	226,138	193.5
Sayint	274,139	131.4
Debresina	179,213	193.7
Kelala	167,051	94.5
Jama	153,267	130.5
Were Ilu	173,939	176.1
Wegde	144,036	168.6
Kombolcha	75,438	8711.1
Dessie	185,512	12301.9

South Gondar		
Wereda	Population	Density
Ebenat	235,091	103.6
Kemekem	319,831	205.0
Fogera	270,243	246.8
Farta	324,270	254.4
Lay Gayint	242,306	193.4
Tach Gayint	119,891	143.7
Sidama	267,154	129.1
Este	424,041	179.1
Dera	305,490	189.9
Debre Tabor	42,841	7323.2
Semien Wello		
Bugna	245,769	107.3
Kobo	261,897	135.0
Gidan	193,593	174.3
Meket	275,478	143.1
Walda	151,140	160.1
Dawntna Delant	207,094	130.8
Guba Lafto	196,289	192.2
Habru	243,572	43.6
Weldiya	46,855	131,198.0
Semien Shewa		
Weremo Wajetuna Mida	105,979	122.1
Lay Betna Tach Bet	144,009	151.2
Siyadebrina Wayu Ensaro	175,435	148.5
Moretna Jiru	112,492	161.8
Gera Midrina Keya Gebriel	192,407	114.1
Geshe Rabel	72,897	110.0
Antsokiyana Gemza	108,502	281.0
Efratna Gidim	150,019	353.4
Mama Midirna Lalo Midir	148,720	148.3
Mafud Mezezo Majana W.	196,783	163.6
Kewet	158,960	188.7
Angolaterana Asagirt	126,352	127.3

Mirab Gojam		
Wereda	Population	Desnsity
Achefer	342889	136.3
Bahir Dar Zuria	283514	137.5
Adet	351327	260.7
Merawi	351397	219.2
Sekela	122172	211
Kuarit	194838	252.1
Dega Damot	185547	230
Dembecha	131790	155.6
Jabi Tehnan	287045	233.2
Bure Wemberma	312078	141.4
Wag Hemra		
Zikuala	69241	21.5
Sekota	188035	59.2
Dehana	137144	71
Bahir Dar Special		
Wereda	183489	6553.2

Misrak Gojam		
Bibugn	118262	175.1
Hulet Ej Enese	291234	207.8
Goncha Siso Enese	164713	165.5
Enbise Sar Midir	156893	150.4
Enarj Enawga	180786	194.1
Enemay	177528	251
Debay Telatgen	141842	215.5
Machakel	270578	132.9
Guzamin	270578	158.7
Baso Liben	160840	120
Awabel	205789	176.9
Dejen	127818	203.4
Shebel Berenta	109162	121.5
Debre Markos	93902	4361.4
Agew Awi		
Danela	219196	142.3
Banja	219165	263.3
Ankesha	245013	210.1
Guangua	220550	102
Faggeta Lekoma	139617	228.6
Oromia		
Chefe Golan Dew.	238313	196.6
Bati	214013	158.4
Artuma Fursina J.	220529	117.8

Urban Population

Amhara has a total of 169 urban centers with a population of 2000 or more. With a population of 213,000, Gonder is the most populous city. In Mid 2008 it was the only city in Amhara with a population over 200,000. The table below shows the top ten urban centers by population size (July 2008):

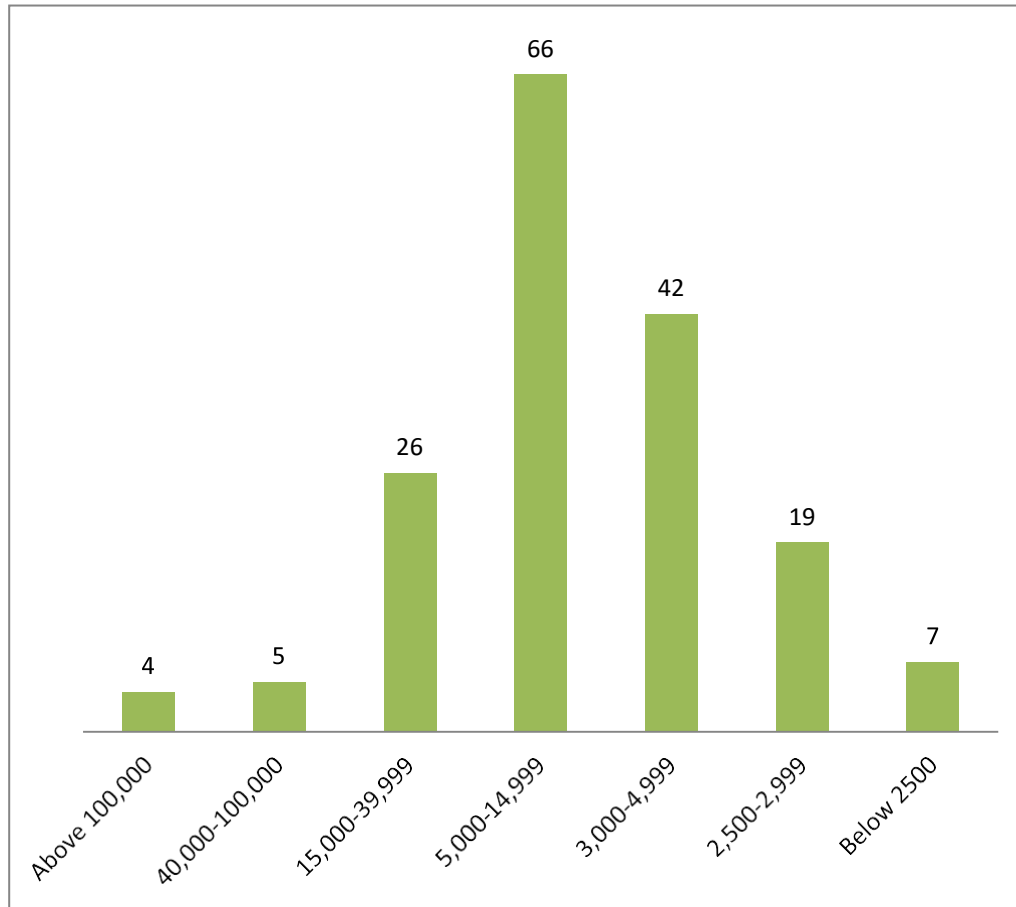
The 10 Biggest Urban Centers in Amhara Region (July, 2008)

City/town	Population
Gonder	213673
Dessie	185512
Bahir Dar	183489
Debre Markos	93902
Kombolcha	75438
Debre Berhan	73767
Weldiya	46855
Debre Tabor	42841
Kobo	39654
Mota	34538

Source: [4]

Two-thirds of the urban centers in Amhara have a population of less than 10,000. More than a third have a population of less than 5,000. The following graph shows the number of urban centers in different size-classes (July, 2008):

Number of Urban Centers in Amhara by Size-Class of Towns (July 2008)



Source: [4]

Sex Ratios

Sex Ratio [(number of males ÷ number of females) x 100] can reveal the state of a population's gender balance. An imbalance can point to underlying forces such as gender-specific mortality due to wars or high maternal mortality, migrant selectivity, etc. The results for urban centers in Amhara point to a predominantly feminine population (sex ratio below 100). The ratios range from 74.5 in Shawra (Semen Gonder) and Kone (Semen Wello) to 127.8 in Metema Yohannes (Semen Gondar). The towns with the lowest and highest sex ratio are both in Semen Gondar. More than two-thirds of the urban centers (116 towns) in Amhara have predominantly feminine ratios (sex ratios below 100). A very likely explanation is a higher female out-migration from the surrounding countryside with small and medium-sized towns as primary destinations. The following table lists urban centers with the lowest and highest sex ratios.

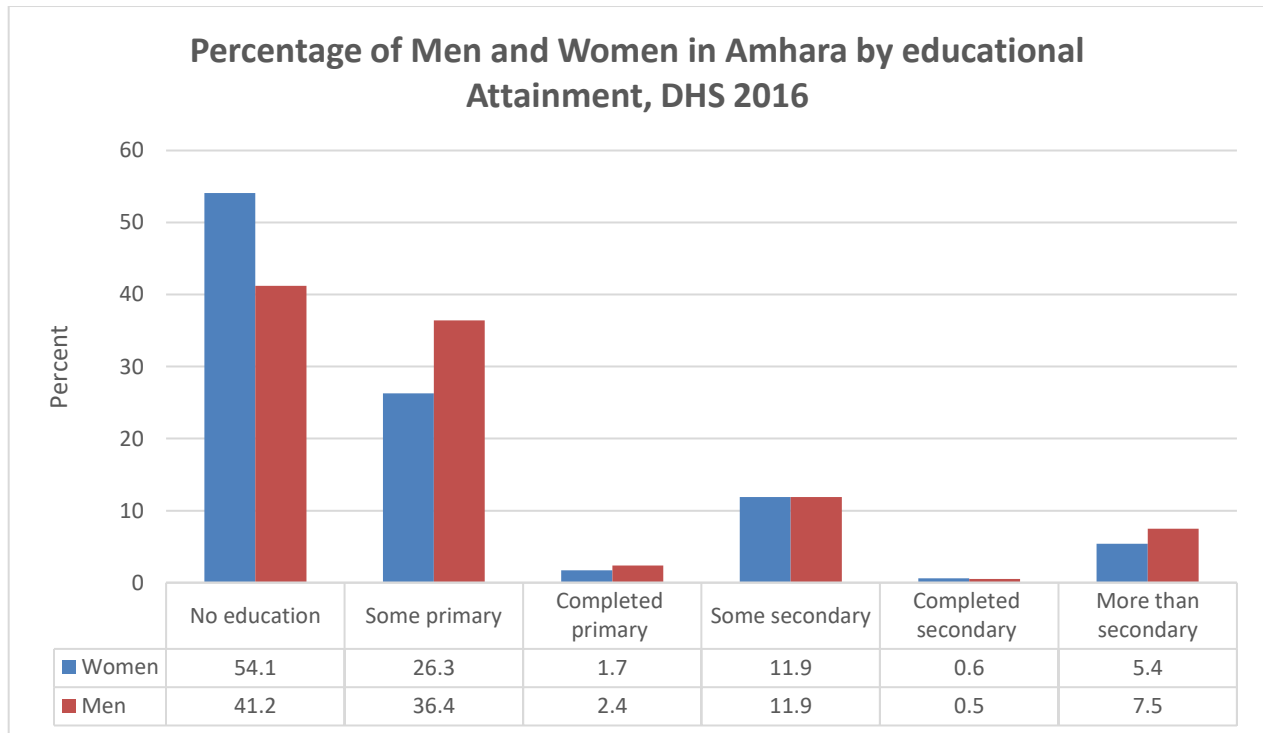
Urban Centers in Amhara Region with High and Low Sex Ratios (July, 2008)

Urban centers with high sex ratios		Urban centers with low sex ratios	
Urban center	Sex ratio	Urban center	Sex Ratio
Metema Yohannes	127.8	Weyin Amba	89.3
Abderafi	121.8	Degaga	89.0
Shehedi	118.1	Yesmala	88.8
Jewha	117.8	Masha	88.7
Bora	116.4	Gebeze Mariam	88.6
Kemise	116.0	Wetet Abay	88.4
Bokesa	115.8	Liguama	88.4
Gerba	115.5	Dabat	88.2
Degan	113.9	Zege	88.1
Selladingay	112.8	Yifag	87.8
Bistima	112.4	Ebenat	87.8
Harbu	112.1	Tikil Dingay	87.4
Kombolcha	110.4	Felege Berhan	87.3
Alem Ketema	109.8	Koladiba	87.1
Shewa Robit	109.7	Kimir Dingay	86.9
Chefa Robit	109.7	Ambacheber	86.8
Mehal Meda	109.0	Kabe	86.5
Mekoy	108.7	Arb Gebeya	86.1
Weldiya	108.3	Degolo	85.7
Robit	108.3	Teda	85.4
Chagni	107.5	Chuahit	85.2
Bahir Dar	106.7	Addis Kidame	85.1
Jihur	106.3	Abmba Giorgis	83.8
Balchi	105.9	Addis Alem	82.9
Debre Tabor	105.7	Rob Gebeya	82.2
Degel Ber	105.4	Kuyi	82.1
Kobo	105.4	Mahdere Selam	81.9
Senbete	105.0	Amba Meda	81.9
Mersa	104.9	Made Werk	81.8
Majete	104.6	Shebel Berenta	78.5
Metiteh Bila	104.5	Sede	78.1
Fetira	104.1	Gomenge	77.6
Deneba	104.1	Kone	74.5
Dessie	103.8	Shawra	74.4

Source: [4]

Socio-Economic and Demographic Characteristics

The graph below shows the educational attainment of Amhara men and women at the time of the 2016 Demographic and Health Survey (DHS) [5]. The numbers and percentages don't point to a highly literate populace fully equipped to make informed choices about issues such as family size, income generation, respect for women's rights, etc. In the 2005 DHS, Amhara men represented the highest proportion (13.4%) of men who feared that contraception will make women promiscuous, and the second highest proportion (24%) who responded that their wives should get sterilized; not them [6]. However, illiteracy is higher among Amhara women (54.1%) than men (41.2%) (see graph below), and the proportion of men who have completed some primary level of education is higher by 10.1 percentage points. Even though above secondary level education is low among both men and women, here too, the percentage is higher for men (7.5%) than for women (5.4%).



Source: [5]

Source: [5]

This has clear implications for a number of demographic outcomes including births - number of pregnancies, timing of births, birth intervals, use of contraceptives, child survival - breast-feeding practices (whether it is exclusive for the first 6 months or not), immunization, hygiene, child nutrition, food supplementation, medical care, avoidance of harmful traditional practices, etc. depend on a woman's educational attainment. Moreover, the low educational level has effects on migration probabilities and a definite impact on types of economic opportunities available to Amhara women upon arrival at places of destination. Four-fifths of Amhara women did not have access to media - newspapers, radio, or television - and were unable to benefit from national educational campaigns on health, immunization, and safe child-bearing and rearing practices. The proportion of Amhara men with no access to media was slightly lower at 71% [6].

Determinants of Fertility in Amhara Region

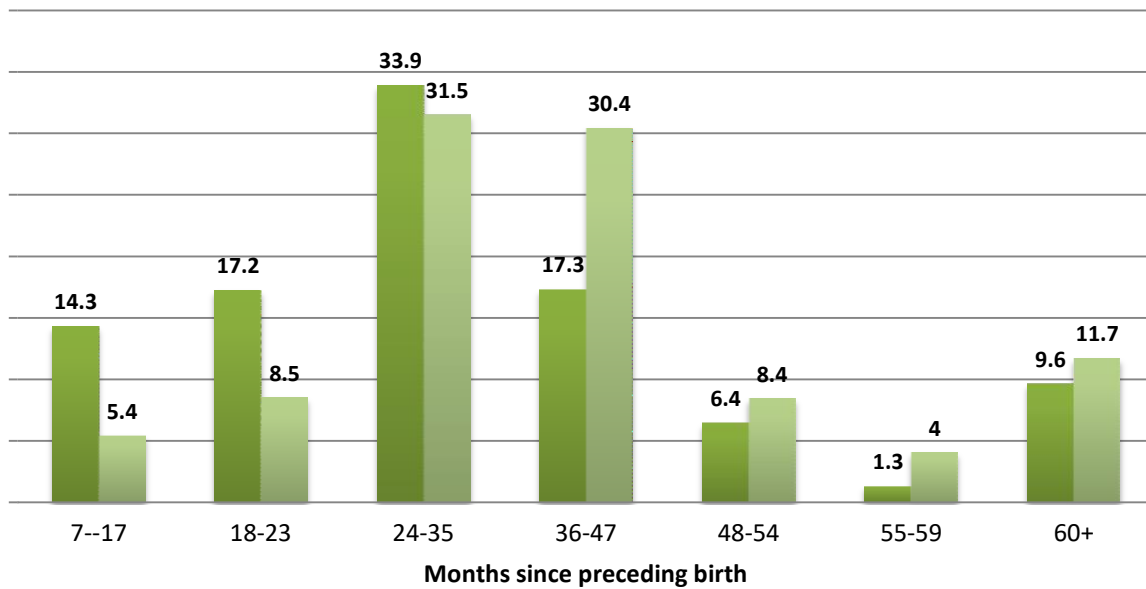
There is evidence of a down ward trend in fertility among Amhara women as confirmed by the total fertility rate of 5.1 in 2005 [6] and 4.1 in 2016 [5]. Amhara's rate is among the lowest in the country. Of the predominantly rural Regions, only Gambella has a lower TFR (4.0). The reported number of children ever born (CEB) of 7.0 for women aged 40-49 during the 2005 DHS points to the recency of the fertility decline. It is also a powerful evidence of a generational shift, with women in the 40-49 age group reporting 2 additional life time births (CEB = 7) than the total fertility of

5.1 - the projected completed fertility of women currently in the 15-49 age group. The graph below shows the mechanisms involved in the fertility decline among Amhara women (Afar women are used as a comparative group).



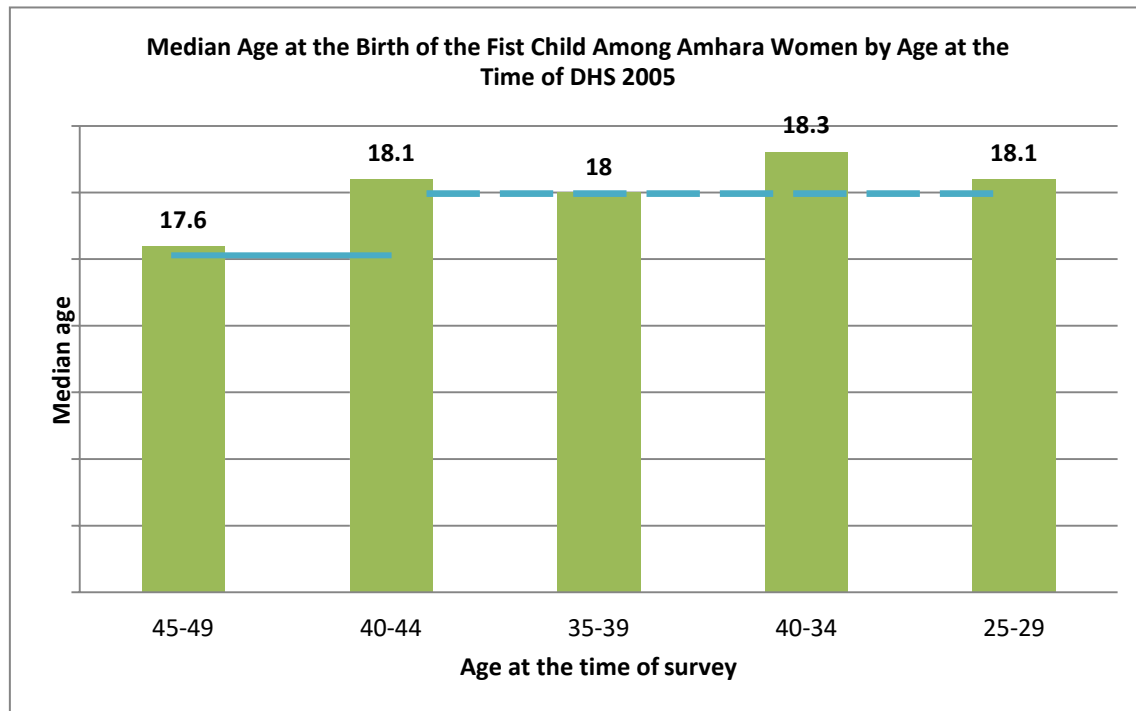
Percentage Distribution of Afar and Amhara Women who had Nonfirst Births in the Five Years Preceding DHS 2005 by the Number of Months Since the Preceding Birth

■ Afar ■ Amhara



Source: [5]

Amhara women are delaying child birth. Nearly three times more Afar women than Amhara women had a (non-first) birth 7-17 months prior to DHS 2005 (the most recent period prior to the survey). The percentage of Afar women who had a non-first birth 18-23 months prior to DHS 2005 (following the birth of the previous child) was also much higher; twice as high. In sum, while a third of Afar women had had non-first births 7-23 months prior to DHS 2005; only 14% had done so among Amhara women. On the other hand, the percentage of Amhara women who had non-first births 36-47 months, 48-54 months, 55-59 months, and 60+ months prior to DHS 2005 is consistently higher among Amhara women than Afar women.



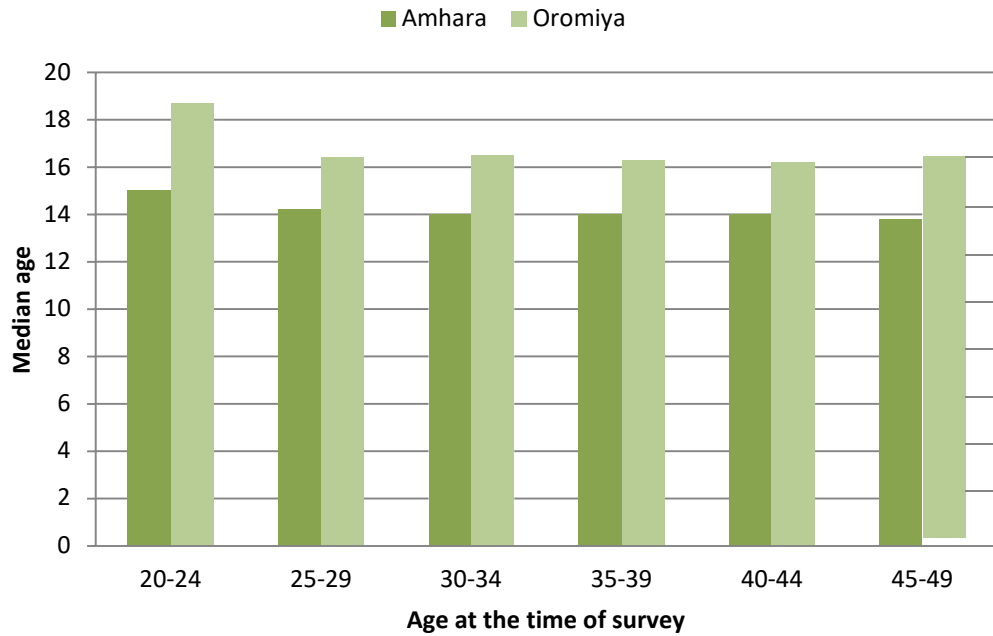
Source: [5]

The graph above proves that the ongoing decline in fertility among Amhara women is primarily due to changes in spacing of births, and has little to do with the timing of the start of childbearing which has hovered around 18 in recent years.

The direct (intermediate) determinants of fertility include marriage - age at first marriage and the proportion of women who ultimately marry. Polygamy can also have some impact. At 22% Amhara men represent the second highest proportion of men by Region who have more than one wife [5].

The relatively high age at the birth of the first child for Amhara women is not a reflection of late age at marriage. In fact, Amhara women in any current age group have the lowest median age at first marriage of any region (see next graph). Oromiya is added for comparison. The graph shows that the age at first marriage hardly changed over the years in both Amhara and Oromiya but there is a hint of a slight increase for the youngest five-year age cohort shown in the graph.

Median Age at First Marriage: Amhara and Oromiya Women Aged 25-49 at DHS 2005

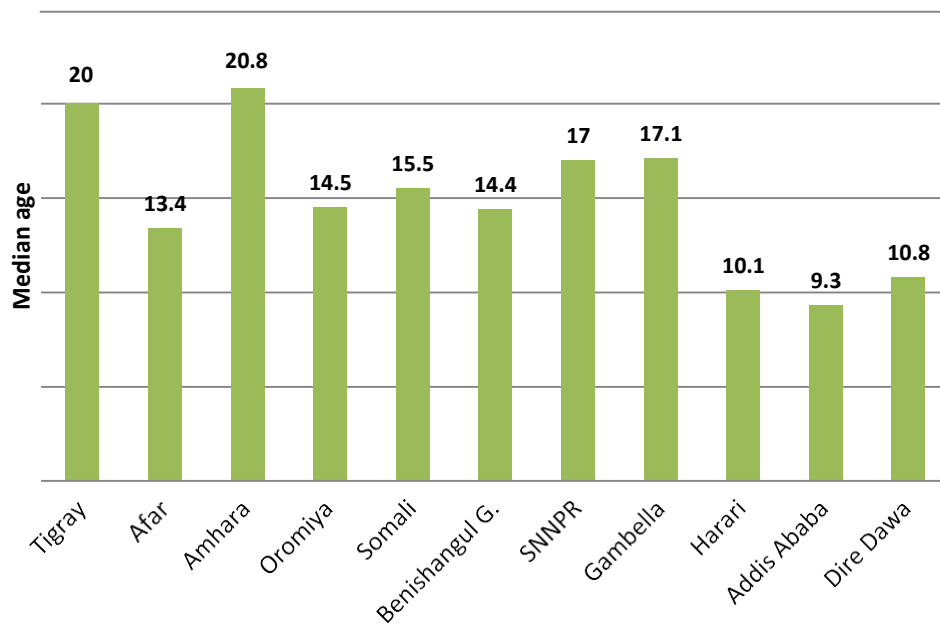


Source: [5]

Another direct (intermediate) determinant of fertility often studied in demography is the length of breast-feeding, and the resulting lactational amenorrhoea (inability to conceive). All of the Regions are included in the graph below for comparative analysis.



**Median Number of Months of Postpartum Amenorrhoea
Following Births in the Three Years Preceding DHS 2005**

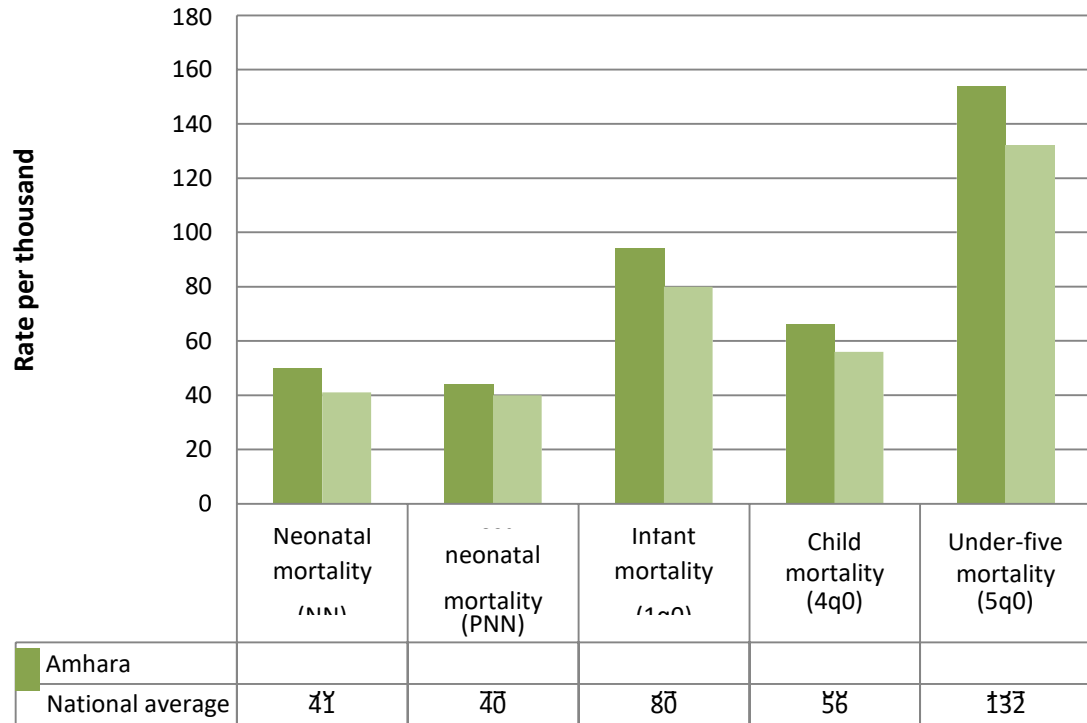


Amhara women have the longest median length of lactational amenorrhoea (20.8 months), followed by women in Tigray. The number for Amhara is possibly one of the major factors behind the relatively low total fertility rate (TFR) in Amhara.

Infant and Child Mortality Levels and Trends

Infant and child mortality have been on a decline in Amhara, and nationally. However, the Amhara Region still has high mortality (both infant and children) with rates higher than the national average (see graph below).

Neonatal, Post-neonatal, Infant, Child, and Under-five Mortality Rates for the 10-year Period Preceding DHS 2005 (Amhara Region and the National Average)

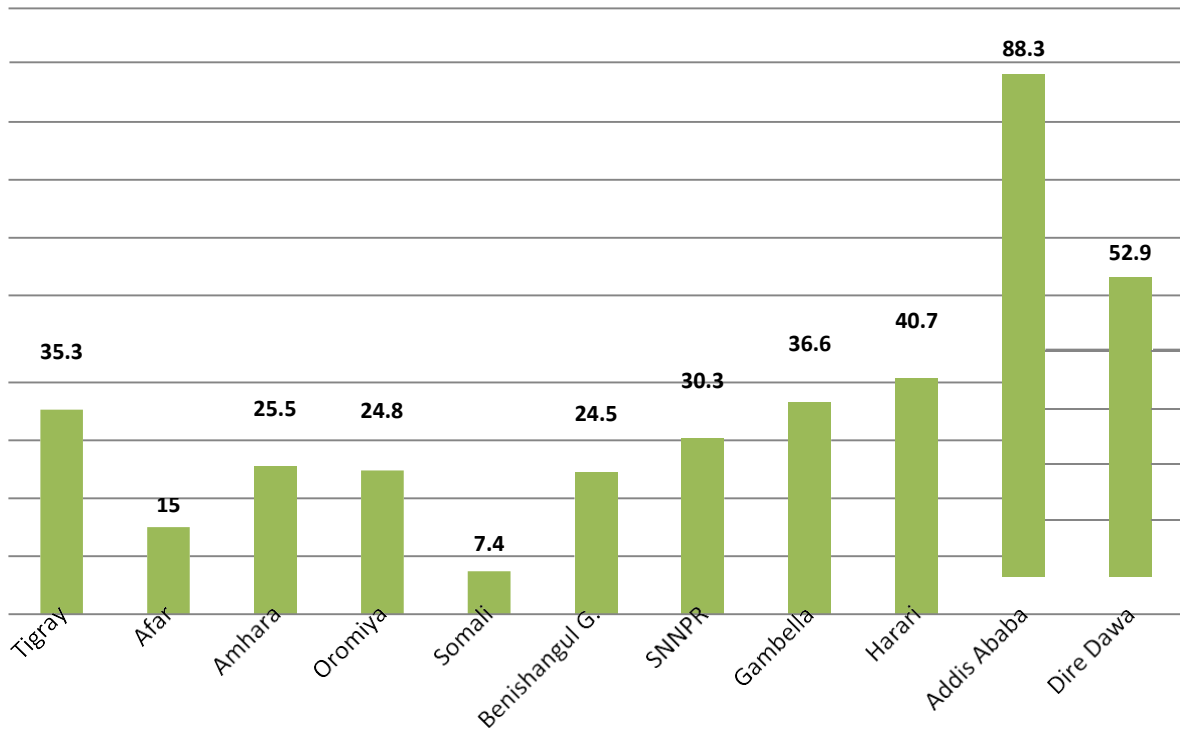


Source: [5]

The highest percentage difference in mortality between Amhara and the national average is among neonates where 18% more newborn infants die in Amhara than in the nation as a whole before reaching the age of one month. The second highest percentage difference is in child mortality (15.1%) followed by Infant mortality (14.8%) and post-neonatal mortality (14.3%). The reasons behind these survey outcomes are many and likely to include availability of and access to health care, economic circumstances, and cultural factors which may have disproportionately larger impacts on infants and children in Amhara.

A routinely cited factor in infant and child survival is the availability of, and access to, prenatal care. The 2005 DHS asked respondents in Amhara about the use or non use of this service. The result is shown in the next graph. All of the Regions added to allow comparative analysis.

Percentage Distribution of Women who had a Live Birth in the Five Years Preceding DHS 2005 and Received Antenatal Care (ANC) During Pregnancy for the Most Recent Birth by Region



Source: [5]

Roughly a quarter of women in Amhara, Oromiya and Benishangul Gumuz received prenatal care. Only two Regions - Afar and Somali - fared worse with Somali women registering a single-digit attendance rate. These are very low numbers even in comparison to rates in the other predominantly rural Regions of Tigray Gambella and SNNP. The comparison with the predominantly urban Regions of Addis Ababa, Dire Dawa, and Harari casts Amhara in even worse light. Lack of prenatal care is often correlated with delivery in settings other than those that are appropriately equipped to ensure safe outcomes for both mother and child. The main evidence for this is that 96.3% of deliveries in Amhara take place at home [5].

References:

1. <http://www.etharc.org/Amhara/About%20Us/Geography.htm>

2. <http://countrystudies.us/ethiopia/40.htm>

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