Three Million Amara are Missing: An Analysis based on the 1994 and the 2007 Ethiopian Population Censuses

By Berhanu Abegaz

(bxabeg@wm.edu) March 2015

It is not uncommon for national censuses to be politicized in those countries where hyper-polarization along ethnic or sectarian lines makes politicians overly sensitive to the power of numbers. As one of the hallmarks of this phenomenon, the 2007 Ethiopian census count for the Amara inexplicably falls short by a whopping 3 million for 2007 or by 4 million for 2014. To fix ideas, this is equivalent to declaring all Gurage-Silte, or all Sidama, or all Affar plus Wolayta practically non-existent. This research note offers census-based estimates of this gap along with the possible reasons for a large gap that stretches one's credulity.

Ethiopian Political Demography

Decennial national censuses of population and housing play an important role in providing data on fertility, mortality, migration, and growth for various sectors of the population. These data contribute to a better planning of the economy, the family, and the administrative as well as the electoral systems. Ethiopia has conducted only three national censuses in its long history: in 1984, 1994, and 2007. There have been significant improvements in conforming to international standards, especially in terms of the coverage of enumeration areas and in efficiency of the count.

Much like the 2006 Nigerian census, the 2007 Ethiopian census has unfortunately raised eyebrows with regard to a significant miscount--especially of the Amara ethnic group but also the Gurage-Silte group. All sorts of numbers and motivations have been thrown around in the acrimonious public discussion on the subject. We do know with some certainty that the Amara are one of the two linguistic groups which together account for the majority of the Ethiopian population with the Oromo/Amara ratio being 29%/28% in 1984 and 32%/30% in 1994. This ratio, however, showed a precipitous rise in 2007 to 34%/27% which begs a satisfactory explanation that is yet to be provided by the census authorities.

Demographic changes are generally slow especially in a traditional society which has been experiencing only a moderate improvement in living standards. Since there is little evidence of a large differential fertility, mortality, emigration, or socio-economic development among the various groups in Ethiopian society, the sizeable deviation of the census count in 2007 from a reasonable expectation is rather puzzling.

As we will show below, a careful analysis of the census data shows that at least 3 million and possibly as many as 6 million native Amharic speakers were missing from the 2007 census. These are remarkable numbers which call for a careful ascertainment of their validity and a clear identification of the probable reasons for this outcome.

It should be noted at the outset that the 1994 Ethiopian Constitution enshrined a system of political ethnicity. Ethiopians were for the first time in their long history required to carry ethnic identity (*gosssa*) cards. The 1994 and 2007 censuses asked citizens to self-identity by ethnicity as well as by one's mother tongue from lists provided.

Estimating the Size of the Missing Amara

Table 1 provides data on the distribution of the population by ethnicity. By self-identification, about 60% of the population belongs with the two largest and comparably-sized linguistic groups—the Oromo and the Amara. Two other groups, the Somali and the Tigre, account for about 5% each. The remaining 30% is accounted for by some 80 officially recognized ethic groups. Ethiopia is indeed a model of nation of minorities in both ethnic and religious terms. A good rule of thumb involves 'thirds": in terms of ethnic mix (Oromo:Amara:Rest) and, to a lesser extent, religious mix (Orthodox Christian:Muslim:Rest).¹

One striking observation from this table is the significant fall in the national population share of the Amara (which were, in fact, the largest ethnic group by mother tongue in 1994). Table 2 provides data on the regional distribution of the Amara which had remained stable in the intercensal period of 13 years. In 1994, some 79 percent of the Amara resided in the Amhara Regional State (ARS), about 11 percent in the Oromiya Regional State (ORS), and 6 percent in Addis Ababa where they historically comprised the majority of the residents. There is little evidence of a marked inter-regional shift in the Amara population since then.

Table 2, however, provides a hint that there is a decline in the proportion of native Amharic speakers identifying themselves ethnically as Amara. We will return to the magnitude of this identity shifting a little later.

We need to produce two sets of estimates based on the aggregate census data in order to throw some light on the vexed question of the missing Amara: (1) credible projections of the Amara population for 2007 which can be independently compared with what the census actually reported, and (2) defensible estimates of the changes in the size of the self-identified Amara population in 2007 relative to the size of the population reporting Amharic as mother tongue. The results are reported in Table 3.

Annual population growth rates for Ethiopia and other low-income countries generally fall in the range of 2.5-3.0%. The reported intercensal growth rate of 3.8% per

¹ Berhanu Abegaz, "Ethiopia: A Model Nation of Minorities," *Ethiomedia.com*, June 1, 2005. Downloadable from: http://www.ethiomedia.com/newpress/census_portrait.pdf.

year for Oromo is clearly an over-estimate. The growth rate of 2.9% for the Tigrayan group, which is similar in culture and living standards to the Amara, is the more reasonable comparator for the Amara. For example, the mean number of children ever born to a women (the total fertility rate) was 7.0 in Amhara and 6.8 Tigray. The mortality rates are equally comparable across demographic groups.

Projections based on self-identification data: The projections based on the self-identification data are made for country-level as well as for the major administrative regions in which the Amara reside in appreciable numbers.

Using the rather high Oromo growth rate, we project the Amara population as 26.2 million for 2007. This yields a shortfall of 6.2 million Amara relative to the official figures. Using the more realistic Tigrayan growth rate, we project the Amara population at 23.3 million which yields a shortfall of 3.3 million Amara relative to the 2007 census report. The number of the missing is in the range of 3.3 million and 6.2 million (Table 3, A).

The highest estimates are obtained when applying to the Amara the country-level growth data for the Oromo and the Tigre (Table 3, C). The upper range of number of missing Amara falls in the range of 3.3-6.5 million or $\underline{4.9}$ million on the average. This is quite a startling number with disturbing implications: it implies that a number larger than all Tigre or all Somali have been missed by the census or somehow eliminated.

When we break this down by region of residence and use the growth rates of the total population of each region for the presumed growth rate of the Amara, we obtain a gap of 2.7 million persons. A conservative estimate of the missing Amara, therefore, falls in the <u>2.7-3.3</u> million range. *Three million seems to be a robust estimate* (Table 3, D).

Projections made using mother tongue data: The projections based on mother-tongue data reported in Table 3 do two things for us: they offer a check on the estimates based on self-identification, and they provide an important estimate of the size of identity shifters (more on this below). Again, using the ethnic Tigrayan growth rate and the region-specific growth rates, our calculations show a missing Amara population by mother tongue of 3.0-3.3 million—3.15 million being the midpoint. Theses ballpark figures are interestingly consistent with estimates made by others using a less elaborate methodology.²

Possible Explanations

The head of the Central Statistical Authority (CSA), in her 2008 presentation of the results of the 2007 Census to Parliament, insisted that the census figures for the ARS and Addis Ababa (though at variance with CSA's own projections based on the 1994 Census) are indeed correct. The skeptics rightly did not buy it³. Five years later, CSA raised the

² Cens Kerk, "Absurd Statistical Gimmick in Ethiopia's 2007 Census," *Ethiomedia.com*, December 15, 2008. http://www.ethiomedia.com/aurora/9404.html.

³ Yonas Abiye, "Latest Census Report Sparks Controversy for the Second Time," Reporter, June 22, 2013.

growth rate for ARS from 1.7% to 2.3%, without so much an explanation, in its mid-census population projections for 2013.

Government leaders have publicly speculated about unusually high mortality rates (excessively high AIDS-related mortality being a favorite bogey) or differentially falling fertility rates in ARS and Addis Ababa relative to other regions. Let us now take a quick look at five notable factors which singly or together might explain the puzzling gap.

Differential fertility and mortality: Comparative census or demographic survey data on mortality rates, total fertility rates (TFR), age at marriage, literacy rates, household size, and income do not show large enough inter-ethnic differences. While Addis Ababa reportedly has a low fertility rate that is slightly above that of senile Tokyo (TFR of 1.7 or below replacement rate), ARS has fertility rates that match the national average (TFR of 4.0) or exceed it (mean number of children ever born being 7.0 relative to the national average of 6.7) while mortality rates are not appreciably higher.⁴

It may be helpful to point out here that there are three distinct Amara subgroups: about quarter of Amara live in destitution in highly economically vulnerable sub-regions of ARS (northwest Gondar, southwest Gojam, and northeast Wollo). About half reside in the better-endowed rural *Woreda* and in the towns of ARS whose eco-demographic profile is similar to the national average.

The remaining quarter, the group with among the highest income and educational attainment in the country, resides outside the ARS primarily in the Addis Ababa-Hawasa-Harrar triangle. However, there is no credible evidence that the Amara residing in these regions have a discernibly lower fertility or higher mortality rates than other linguistic communities to explain such a large gap.

Differential shifts in ethnic identity: Anecdotal evidence suggests that the fluidity of government-mandated ethnic identity is such that one can easily reclassify oneself for all sorts of reasons. We notice from the last column of Table 2 that the self-identification/mother-tongue ratios have declined marginally in all regions except in Affar and Amhara. Since the denominator is more or less fixed, this suggests that many who self-identified as Amara in the 1994 Census might very well have registered as non-Amara by 2007 either in response to the relentless discrimination and persecution or as a change of heart for those with mixed parentage.

But, how much of the gap can it account for? Recall here that nearly a quarter of the projected 2007 Amara population (using the Tigrayan growth rate) of 25 million live outside the ARS. Sixty percent (3 million out of the 5 million) lives in the ORS while most of the rest live in Addis Ababa. If we apply the decline in the self-identification/mother-tongue ratio of -0.024 in Oromiya to all Amara living outside ARS, we obtain a high-end figure of some 120,000 people for possible identity shifters. It is a drop in the bucket. *The*

⁴ CSA, *Ethiopia: Mini Demographic and Health Survey*, Addis Ababa: July 2014. http://www.corhaethiopia.org/images/Newsdoc/mini%20dhs%202014_%20final%20report3july2014.pdf.

inescapable conclusion is that the missing 3 million Amara are to be searched for mainly in ARS and Addis Ababa.

Selective emigration of the Amara: Since we are interested in the total Amara population, internal migration is not salient here. The size of the Ethiopian Diaspora has increased substantially in the past 15 years—especially in North America, EU, the Horn of Africa, and the Middle East. However, there is no readily available evidence that the rate of emigration is higher for the Amara than for other ethnic groups. We must again look elsewhere for the elusive answer.

Discriminatory population control: Ethiopia has a reputation for an aggressive national population policy since 1993. The main goal is to limit population growth, improve its structure, and enhance reproductive health mainly through family planning. Family planning services, if provided under a voluntary and cohesive health care system, can allow families to attain their desired number and spacing of children⁵. This is achieved primarily through diffusion of knowledge as well as based on informed consent in using myriad contraceptive methods (pills, implants, injectables, IUDs, condoms, and sterilizations). With generous financing from USAID, DfID, UNFP, GAVI, and the Government itself, contraceptive use rate in Ethiopia rose from 8% in 2000 to 41% in 2014 for married women (three-fourths of whom rely on injectables)⁶. Ethiopia has indeed become a darling of international funders of programs for population control.

The issue here, of course, is whether the Government has deployed its health services (clinics, hospitals, health extension workers, etc.) differentially by targeting the Amara and others for aggressive, involuntary, or deceptive population control practices in the name of family planning and immunization. Persistent accusations of Amara women being subjected to long-acting contraceptives and deceptive sterilizations are common enough to warrant a thorough and impartial investigation. At the very least, we will then be able to differentiate the proportion of the missing millions that is due to averted births and excess mortality (such as due to HIV-AIDS) and what proportion is attributable to miscounting and/or deliberate undercounting.

Deliberate miscounting and undercounting: The various manifestos of the ruling Tigray Peoples Liberation Front (TPLF) are full of strident attacks on the Amara. The Amara continue to be demonized by ethno-nationalists of all hues for being the flag-bearers of Ethiopian identity. The Amara have been singled out for collective punishment in myriad forms including lackluster federal budgetary allocations for basic public services

_

⁵ J. Bongasrts, et al., Family Planning Programs for the 21st Century, New York: Population Council, 2012.

⁶ CSA, Ethiopia: Mini Demographic and Health Survey, Addis Ababa: July 2014.

http://www.corhaethiopia.org/images/Newsdoc/mini%20dhs%202014_%20final%20report3july2014.pdf.

⁷ Tigrayan People Liberation Front (TPLF), TPLF Manifesto, February 1976.

(such roads, education, and health) in the ARS. Tens of thousands of Amara, historically dispersed in all administrative regions of Ethiopia, have been subjected to unprovoked violence, mass murder, dispossession, daily intimidation, and ethnic cleansing from districts where they lived for generations⁸.

It is, therefore, entirely probable that a deliberate policy of census undercounting has been deployed as an effective tool for shortchanging the Amara in the current system of federal revenue sharing which is based on population size and need. This seemingly absurd practice may also have been used to justify the disenfranchisement of hundreds of thousands, if not millions. Many opposition MPs have, in fact, made such allegations.

Final Thoughts

The analyses presented here show that at least 3 million Amara were inexplicably erased from official records in the 2007 national population and housing census. This amounts to 5% of the national population and 4% of the Orthodox Christian population of 2007.

This outcome is rather baffling precisely because it is not a product of innocent oversight or incompetence on the part of CSA. Firstly, every rural hamlet and urban *Kebele* is tightly controlled by an extensive network of agents of the ruling party (currently, one minder for every five citizens). Secondly, the Amara are a sedentary population which means that they are not susceptible to a significant undercount. Third, Addis Ababa is the largest and most tightly controlled city-- half of the population increase between 1994 and 2007 could not be so easily missed for technical reasons.

The recent and unprecedented politicization of census data and population policy in Ethiopia sets an insidious practice that bodes ill not only for the larger groups such as the Amara; it also sets a dangerous precedent for other politically disfavored or marginalized groups. It is also eminently understandable: in fragile and polarized polities, rent-seeking state elites have a strong incentive to win not just elections but also censuses.

Willful manipulation of census and economic data undermines trust in official data in the eyes of citizens and foreign investors alike. Practicing eugenics on selected groups of citizens, if true, raises a serious legal case of genocide. This saga, therefore, calls for a full and satisfactory investigation involving the major stakeholders in Ethiopian society and the international groups funding data collection (including the upcoming 2017 census) and population control activities in Ethiopia.

[see tables overleaf]

⁸ U.S. Department of State, *Country Reports on Human Rights Practices* 2011: *Ethiopia*, http://www.state.gov/j/drl/rls/hrrpt/2011humanrightsreport/index.htm?dlid=186425#wrapper.

Table 1

Ethiopia: Distribution of the Population by Ethnicity, 1994 and 2007

ETHNIC GROUP	Self-id: 1994	Self-id: 2007	Implied Annual Growth rate	Language: 1994	Language: 2007	Implied Annual Growth rate
Affar	1,019,569	1,286,427	0.020	965,462	1,290,844	0.026
Agew	555,733	911,814	0.049	500,323	707,599	0.032
Amara	16,013,618	20,081,557	0.020	17,278,551	21,846,445	0.020
Gamo	719,848	1,110,670	0.042	690,069	1,076,792	0.043
Gedeo	639,907	983,622	0.042	637,082	982,716	0.042
Gurage	1,389,052	1,880,436	0.027	797,359	1,499,978	0.068
Hadya	928,045	1,277,646	0.029	923,064	1,262,046	0.028
Kefficho	599,191	874,707	0.035	569,626	843,274	0.037
Kembata	499,927	631,543	0.020	486,871	618,725	0.021
Oromo	17,086,454	25,560,625	0.038	16,701,645	25,123,300	0.039
Sidama	1,842,386	2,969,412	0.047	1,875,203	2,999,229	0.046
Silte	901,850	943,912	0.004	827,603		
Somali	3,384,824	4,627,575	0.028	3,187,053	4,649,732	0.035
Tigre	3,285,311	4,521,682	0.029	3,216,762	4,358,787	0.027
Wolayta	1,269,491	1,689,283	0.025	1,228,801	1,640,641	0.026
Rest	2,997,070	6,018,495	0.039	3,245,305	5,485,676	0.053
Total	53,132,276	74,385,784	0.025	53,130,779	74,385,784	0.031

Sources: CSA, The 1994 Population and Housing Census of Ethiopia, Volume 1 (Country Level), Addis Ababa: June 1998, Tables 2.14 and 2.15.

Notes:

- Self-id = self-identification
- Language = mother tongue
- Growth Rate (g) = annualized growth rate base on the intercensal growth rate (for the 13-year period, 1994-2007).

Calculations are based using exponential growth: $Y_{2007} = Y_{1994} \cdot e^{13g}$.

The implied growth rates also low for the Affar, Silte and Kembata. They are unrealistically high the Agew, Gamo, Gedeo, Oromo, and Sidama. All these call into question the credibility of the 2007 census numbers.

Table 2

The Distribution of the Amara Population by Region, 1994 and 2007

Region	Self-id: 1994	Self-id: 2007	Difference	Language: 1994	Language: 2007	Difference	S/L: 2007-1994
ADDIS ABABA	1,019,729	1,288,895	269,166	1,534,758	1,944,775	410,017	-0.002
AFFAR	46,534	72,523	25,989	68,968	95,047	26,079	0.088
AMHARA	12,615,160	15,752,992	3,137,832	12,896,955	16,014,580	3,117,625	0.006
BENISHANGUL-GUMUZ	102,061	170,132	68,071	104,773	176,170	71,397	-0.008
DIRE DAWA	69,798	68,962	-836	83,508	90459	6,951	-0.074
GAMBELLA	12,566	25,862	13,296	13,713	34,119	20,406	-0.158
HARARI	42,781	41,768	-1,013	48,484	50,503	2,019	-0.055
OROMIYA	1,684,128	1,943,578	259,450	2,062,175	2,452,306	390,131	-0.024
SNNP	312,929	411,756	98,827	438,403	612,333	173,930	-0.041
SOMALI	20,951	29,525	8,574	27,919	29,738	1,819	0.242
TIGRAY	81,297	70,561	-10,736	93,258	131,810	38,552	-0.336
Total	16,007,934	19,876,554	3,868,620	17,372,914	21,631,840	4,258,926	-0.002

Table 3
The Amara Population: Actual and Projected, 1994, 2007

A. By Self-Identification: Country Level			PROJECTIONS	5**:		
Group	Census 1994`	Census 2007	OG: 2007	TG: 2007	OG Gap: 2007	TG Gap: 2007
Amara	16,013,618	20,081,557	26,244,055	23,346,323	6,162,498	3,264,766
B. By Self-Identi	fication: Region	al Levels				
Region				Projected*: 2007	Gap	Share of Gap (%)
ADDIS ABABA	1,019,729	1,288,895		1,715,212	426,317	15.8
AMHARA	12,615,160	15,752,992		17,459,768	1,706,776	63.4
DIRE DAWA	69,798	68,962		94,123	25,161	0.9
OROMIYA	1,684,128	1,943,578		2,423,585	480,007	17.8
SNNP	312,929	411,756		450,328	38,572	1.4
Rest	306,190	410,371		423,776	13,405	0.5
Total Amara	16,007,934	19,876,554		22,566,793	2,690,239	100.0
C. By Mother Tor	l ngue: Country Lo	evel	OG: 2007	TG: 2007	OG Gap: 2007	TG Gap: 2007
Amara	17,278,551	21,846,445	28,317,101	25,190,474	6,470,656	3,344,029
D. By Mother To	ngue: Regional l					
Region						
				Projected*: 2007	Gap	Share of Gap (%)
ADDIS ABABA	1,534,758	1,944,775		Projected*: 2007 2,581,505	Gap 636,730	Share of Gap (%)
	1,534,758 12,896,955			•	1	
ADDIS ABABA		1,944,775		2,581,505	636,730	21,2
ADDIS ABABA AMHARA	12,896,955	1,944,775 16,014,580		2,581,505 17,849,781	636,730 1,835,201	21.2 61.1
ADDIS ABABA AMHARA DIRE DAWA	12,896,955 83,508	1,944,775 16,014,580 90,459		2,581,505 17,849,781 112,611	636,730 1,835,201 22,152	21.2 61.1 0.7
ADDIS ABABA AMHARA DIRE DAWA OROMIYA	12,896,955 83,508 2,062,175	1,944,775 16,014,580 90,459 2,452,306		2,581,505 17,849,781 112,611 2,967,623 630,894	636,730 1,835,201 22,152 515,317	21.2 61.1 0.7 17.1
ADDIS ABABA AMHARA DIRE DAWA OROMIYA SNNP	12,896,955 83,508 2,062,175 438,403	1,944,775 16,014,580 90,459 2,452,306 612,333		2,581,505 17,849,781 112,611 2,967,623	636,730 1,835,201 22,152 515,317 18,561	21.2 61.1 0.7 17.1 0.6
ADDIS ABABA AMHARA DIRE DAWA OROMIYA SNNP Rest Total Amara	12,896,955 83,508 2,062,175 438,403 357,115 17,372,914	1,944,775 16,014,580 90,459 2,452,306 612,333 517,387		2,581,505 17,849,781 112,611 2,967,623 630,894 494,258	636,730 1,835,201 22,152 515,317 18,561 -23,129	21.2 61.1 0.7 17.1 0.6 - 0.8

Note: For details on the assumptions that underlie the projections, refer to Table 4 below.

Table 4 The Projected Amara Population for 2007: Assumptions and Calculations

Appendix Table:	Calculations fo	or Table 3						
0 10-1								
A. By Self-Identification: Country Level			PROJECTIONS**:					
Group	Census 1994`	Census 2007	Census Growtth	OG: 2007	TG: 2007	TG: 2015	OG Gap: 2007	TG Gap: 2007
Amara	16,013,618	20,081,557	0.020	26,244,055	23,346,323	29,442,508	6,162,498	3,264,766
Oromo	17,086,454	25,560,625	0.038					
Tigre	3,285,311	4,521,682	0.029					
National	53,132,276	74,385,784	0.025					
B. By Self-Identi	fication: Regio	nal Levels						
Region			What if*	Projected: 2007	Gap	Share (%)		
ADDIS ABABA	1,019,729	1,288,895	0.040	1,715,212	426,317	15.8		
AMHARA	12,615,160	15,752,992	0.025	17,459,768	1,706,776	63.4		
DIRE DAWA	69,798	68,962	0.023	94,123	25,161	0.9		
OROMIYA	1,684,128	1,943,578	0.028	2,423,585	480,007	17.8		
SNNP	312,929	411,756	0.028	450,328	38,572	1.4		
Rest	306,190	410,371	0.025	423,776	13,405	0.5		
Total Amara	16,007,934	19,876,554		22,566,793	2,690,239	100.0		
her Tongue: Cou	intry Level		Census Growth	OG: 2007	TG: 2007	TG: 2015	OG Gap: 2007	TG Gap: 2007
Amara	17,278,551	21,846,445	0.020	28,317,101	25,190,474	31,768,204	6,470,656	3,344,029
Oromo	16,701,645	25,123,300	0.038	20,517,101	23)190)474	32,700,204	0,470,030	3,344,029
Tigre	3,216,762	4,358,787	0.029					
National	53,130,779	74,385,784	0.025					
D. By Mother To	ngue: Regional	Levels						
Region Regional Evels		What if*	Projected: 2007	Gap	Share (%)			
ADDIS ABABA	1,534,758	1,944,775	0.040	2,581,505	636,730	21.2		
AMHARA	12,896,955	16,014,580	0.025	17,849,781	1,835,201	61.1		
DIRE DAWA	83,508	90,459	0.023	112,611	22,152	0.7		
OROMIYA	2,062,175	2,452,306	0.028	2,967,623	515,317	17.1		
SNNP	438,403	612,333	0.028	630,894	18,561	0.6		
Rest	357,115	517,387	0.025	494,258	-23,129	- 0.8		
Total Amara	17,372,914	21,631,840	3.02)	24,636,673	3,004,833	100.0		

Notes: Here below is a description of how the "what-if" projections were made.

- Addis Ababa =using the average growth rates of Dire Dawa, Bahir Dar, and Mekele.
- Amhara = using the growth rate of Tigray.
- Dre-Dawa =using own growth rate.
- Oromiya = using own growth rate.
- SNNP = using own growth rate.
- Rest = using national growth rate.

Sources: CSA (Ethiopia), various census reports. Available online.

======

^{*} Applying the following reported growth rates for:

^{**} Using the growth rate of the Oromo (OG) or the Tigre (TG) by self-identification.