

Knowledge Institutions in Africa and their development 1960-2020

Eritrea

Introduction

This report about the development of the knowledge institutions in Eritrea was made as part of the preparations for the AfricaKnows! Conference (2 December 2020 – 28 February 2021) in Leiden, and elsewhere, see www.africaknows.eu.



Reports like these can never be complete, and there might also be mistakes. Additions and corrections are welcome! Please send those to dietzaj@asc.leidenuniv.nl

Highlights

- 1 Eritrea became an independent country in 1991 (officially in 1993), after a long war of independence with the central authorities in Ethiopia. Its population increased from 0.8 million in 1950 via 2.8 million in 2005 to at least 3.5 million currently (or much higher; sources differ a lot).
- 2 Eritrea's adult literacy rate was 77% in 2018 (84% for men and 69% for women). Mean years of schooling for adults are only 3.9 in 2018 (and 3.7 in 2005; the first year for which there are data).
- 3 Net primary school enrolment was 68% in 2012 but deteriorated to only 52% in 2018 (boys 54% and girls 49%). Expected years of schooling for children decreased from 5.3 years in 2005 to 5.0 years in 2018.
- 4 The education index (part of the human development index) decreased from .272 in 2005 to .269 in 2018 (it was .279 in 2010). For all variables Asmara/Maekel had the best situation, and Gash Barka in the southwest (bordering Sudan) the worst.
- 5 Tertiary education started in 1958 as an initiative from Roman Catholic missionaries in Italy. Gradually it became the University of Asmara, but that was dismantled and decentralized in the early 2000s. Currently there are seven tertiary knowledge institutions and all are public institutions. Eritrea is one of the very few African countries without private tertiary knowledge institutions. We could also find no think tanks.
- 6 We found two museums in the country, one in Asmara, and one in the Red Sea coastal town of Massawa.

Part 1: The Story

Introduction: Eritrea's demographic and education development

Eritrea is located in the Horn of Africa, along the Red Sea. Before 1890 the Red Sea Coast that later became Eritrea was under the influence of Imperial Ethiopia and Turkey. Eritrea was an Italian colony from the late 19th century until the Second World War, and British until 1952. Between 1952 and 1962 Eritrea was part of the Federation of Ethiopia and Eritrea. The territory was then annexed to Ethiopia. After thirty years of independence war, Eritrea became independent in 1991/93. Eritrea is a one-party state¹. Since its independence, there have been no national elections and the country is still governed by President Isaias Afewerki².

Eritrea's population increased from 822,000 in 1950 to at least 3.5 million in early 2020 (yearly growth rate of +1.41%)³. Other sources use much higher current figures: up to 6.1 million⁴. The population of Eritrea has always been mostly rural. In 1955 only 12% of the Eritrean population lived in cities (about 100,000 people) and currently the urban population only increased to 22%, which remains low for African standards⁵, although other sources give higher percentages. Therefore cities in Eritrea are mostly small. Eritrea's capital Asmara is the largest city of the country, accounting for 564,000/650,000 inhabitants⁶, followed by Keren (74,800/146,000). The other cities of the countries are much smaller: Massawa (23,100/37,000), Assab (21,300/40,000), Mendefera (17,700/63,000), Tesseney (65,000). Life expectancy increased from 33 years for males and 35 years for females in 1950 to 65 years for males and 70 years for females currently. The median age first decreased from 18 years in 1960 to 15.6 years in 1995. It is currently about 19 years, which remains low. Fertility is decreasing: in 1960 an average women gave birth to 7 live-born children, while current levels are at 4.1⁷.

Eritrea is a multi-ethnic country, counting nine officially recognized ethnic groups. Approximately 50% of the population is Muslim and 50% Christian (U.S. Department of State 2011), but also here figures are unclear (and politically sensitive).

1 <https://nl.wikipedia.org/wiki/Eritrea>

2 https://en.wikipedia.org/wiki/Isaias_Afewerki

3 <https://www.worldometers.info/world-population/eritrea-population/>

4 https://theodora.com/wfbcurrent/eritrea/eritrea_people.html

5 <http://worldpopulationreview.com/countries/eritrea-population/>

6 Worldometers and https://en.wikipedia.org/wiki/List_of_cities_in_Eritrea (estimates for 2010). Population figures for Eritrea are notoriously unreliable.

7 <https://www.worldometers.info/demographics/eritrea-demographics/>



Sources: <https://www.britannica.com/place/Eritrea>, https://nl.wikipedia.org/wiki/Geschiedenis_van_Eritrea

Literacy and enrolment

Compulsory education lasts eight years from age 6 to age 13 in Eritrea. The adult literacy rate was 77% in 2018 (men 84% and women 69%) and 155,000 adult men as well as 316,000 adult women were regarded as illiterate⁸.

Of Eritrea's 506,000 primary-school-age children (6-10 years old in Eritrea) 52% actually went to school in 2018 (54% boys and 49% girls). This figure was much better in 2012: 68%. For the 572,000 secondary-school-age pupils (11-17 years old in Eritrea) the net enrolment was 51% in 2012, but it decreased to 42% in 2018 (men 43% and women 40%). Finally, tertiary education remains low in Eritrea. In fact, the 'gross enrolment rate' of tertiary students is only around 3.4% (2016; the number of people in the 18-22 age range was 304,000). Until 2005, there was a high discrepancy between women and men enrolment (ratio female to male of 0.15), which is actually becoming more equal (ratio female to male of 0.7)⁹. It would mean that currently only 10,000 students study in one of Eritrea's higher education institutions. It is unclear how many Eritrean students are studying abroad¹⁰.

Regional differentiation of education results in Eritrea, 2005-2018

The information provided by the Globaldatalab about the subregional human development index, its components and its indicators (<https://globaldatalab.org/shdi>) provides data for the period between 2005 and 2018 and uses six regions. Between 2005 and 2018 the population of Eritrea as a whole increased 1.25 times, but regional differences are not provided. The Debub, or Southern region had and has most people.

The Globaldatalab provides data about the education index (one of the three indexes that together form the Human Development Index), and about two relevant indicators: mean years

⁸ <http://uis.unesco.org/en/country/er>

⁹ <https://www.theglobaleconomy.com/Eritrea>

¹⁰ Campusfrance does not give details for Eritrea:

https://ressources.campusfrance.org/publications/mobilite_pays/en/

of schooling, showing the average education level of the adult population per region, and expected years of education, showing the expected number of years current children will attend schools. This excludes the religious, koranic schools and only deals with the official, state-based, school system.

We present the data for the years 2005, 2010, and 2018 (the latest year available at the moment). Data for many other countries already starts in 1990, but Eritrea only in 2005 (and neighbouring Ethiopia in 2000). See tables 1-4 in part 2.

Education Index

The education index is one of the elements of the human development index. The education index in Eritrea slightly increased from .272 in 2005 to .279 in 2010, but afterwards decreased to a level below the 2005-level in 2018: .269. Maekel/Central/Asmara always had the best education situation, and Gash Barka always the worst. Regional inequality was and is quite extreme.

Mean Years of Schooling for Adults

According to UNESCO, 'Mean Years of Schooling' is an indicator about the "average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating individual grades"¹¹. In Eritrea there was hardly any improvement between 2005 and 2018 (from 3.7 years to 3.9 years. Again Maekel had the best results and Gash Barka the worst and regional inequality was and is extreme.

Expected Years of Schooling for Children

UNDP defines the 'expected years of schooling' as the: "Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life"¹². In Eritrea the expected years of schooling increased somewhat between 2005 and 2010 (from 5.3 years to 5,4 years, but the situation deteriorated after 2010 up to a level that in 2018 was lower than in 2005 (in 2018: 5.0 years). And once again, also here Maekel always had the best, and Gash Barka always the worst situation.

Eritrea's tertiary knowledge development

We will first give some information about universities in Eritrea, then about Eritrean think tanks and finally the museums. The information includes the ranks of a limited number of universities, according to the 4ICU website (position inside the country and worldwide), but only one university was included. The table below shows the development of Eritrea's tertiary knowledge sector. All institutions are public. Eritrea is one of the very few African countries without private knowledge institutions.

Eritrea's universities or other tertiary knowledge institutes 1995 – 2020

¹¹ <http://uis.unesco.org/en/glossary-term/mean-years-schooling>

¹² <http://hdr.undp.org/en/content/expected-years-schooling-children-years>

Type	1958-2000	2000	2005	2010	2015	2020
Public	1	1	3	7	7	7
Private	0	0	0	0	0	0
Total	1	1	3	7	7	7

Sources: see table 5 in part 2.

Universities and colleges in Eritrea

This is what Wikipedia has to say about the start of tertiary knowledge institutes in what is now Eritrea: *“the "University of Asmara" was created by (an) Italian religious organizations. Indeed The University of Asmara (UoA) was the nation's first university, and was founded in 1958 by the 'Piae Madres Nigritiae' (Comboni Sisters). The school was meant to provide for the local population, though its initial enrollment in the 1950s was entirely Italian. The university was founded with the name "Collegio Cattolico della Santa Famiglia": the roots were in the 1941 "Scuola di Medicina", linked to the Asmara Hospital (then named "Regina Elena"). In the early years, the curriculum reflected Italian educational plans, and courses were taught in Italian with a view to preparing students to receive the "laurea" (degree) from a university in Italy. In 1958, members of the missionary congregation 'Piae Madres Nigritiae' or Comboni Sisters began private education classes for 10 Italian female students: the "Holy Family University Institute" was founded by the Italian Sister Marianora and Sister Fosca.B. D'Ambrosio... By 1964, the university had been renamed and began offering Associate Diploma programs in the Arts, Commerce, and the Sciences... In 1979 the new (university) president pushed through a major reorganization of the curriculum and structure. The next years saw an increase in students from 300 to 2,700. New courses, staff, day and evening extension programs and campus buildings revived the university, together with a bilateral agreement to exchange students and faculty with the University of Addis Ababa, particularly focusing on graduate training in Addis Ababa to produce faculty for Eritrea.... In the 1980s, the Arid Zone Agricultural College was established as a faculty...”¹³*

The university was closed in September 2006 by the government, which then opened five new institutions of higher education in different cities of the country. These colleges are covering the different programs and faculties of the former University of Asmara. The Eritrean government claims that the restructuring of the University of Asmara¹⁴ will boost the number of students by making the new institutions more accessible in this predominantly rural country, where 80% of the population lives from agriculture. However, critics see the closing of the university as a political act in order to boost government’s control on students.

¹³

[https://en.wikipedia.org/wiki/University_of_Asmara#:~:text=The%20University%20of%20Asmara%20\(UoA,the%201950s%20was%20entirely%20Italian.](https://en.wikipedia.org/wiki/University_of_Asmara#:~:text=The%20University%20of%20Asmara%20(UoA,the%201950s%20was%20entirely%20Italian.)

¹⁴ https://en.wikipedia.org/wiki/University_of_Asmara



(Former) University of Asmara/Faculty of Medicine¹⁵



Eritrea Institute of Technology¹⁶

Currently there is one public tertiary knowledge institute in Eritrea, the Eritrea Institute of Technology (2004), and there are six colleges (one in 2004 and four in 2006)¹⁷. The Eritrea Institute of Technology is the biggest tertiary structure with 6,000 students. They are all public and managed by the government. Each of the tertiary education facilities offers programs of only one faculty (decentralized policy) and the numbers of courses/programs inside each college are very limited. Tertiary education remains incomplete because of this lack of possibilities and the high lack of postgraduate programs. To continue their study, students necessarily have to leave Eritrea.

The development of tertiary education as well as the increase of student enrolment is also curbed by the compulsory and indefinite army conscription, which already starts from the last year of secondary school (average service of 6.5 years). Both men and women have to follow military training next to regular courses. Compulsory conscription drives thousands of young Eritrean each year into exile (currently more than 500,000 Eritreans live abroad). In military service, they also acquire civil knowledge in the different schools, next to military skills. However, students are deploring the low quality, the lack of freedom and the

¹⁵ https://en.wikipedia.org/wiki/University_of_Asmara#/media/File:UniversityOfAsmara.jpg

¹⁶ https://media-exp1.licdn.com/dms/image/C561BAQFFp6x4qx_GHg/company-background_10000/0/1519798510535?e=2159024400&v=beta&t=YgAeo23501FTj7Ln_TNnZh5biAujHvX_5Fo423UBpa4

¹⁷ https://en.wikipedia.org/wiki/Education_in_Eritrea

repressive disciplinary regime. A significant part continues to work for the Eritrean state, as teacher or in the administration¹⁸.

Think tanks in Eritrea

After doing some research on internet with the keywords “Eritrea Think tanks”, we couldn’t find any relevant institute. The database Wikidata doesn’t have any article corresponding to think tanks in Eritrea. The 2018 Global Go To Think Tanks Index Report¹⁹ of Lauder Institute at the University of Pennsylvania reports five think tanks in Eritrea, but without naming them.

Next to these five alleged think tanks, there are also some international aid institutions, which include activities in and on Eritrea, like the Africa Economic and Security Council (AESC) with headquarters in Brussels or regional think tanks, generally based in Addis Ababa (Ethiopia). For example, the Horn of Africa Economic and Social Policy Institute, the InterAfrica Group and the Organization for Social Science Research in Eastern and Southern Africa (OSSREA). The Chinese Institution Confucius is also virtually present in Eritrea.

Museums in Eritrea



National Museum of Eritrea in Asmara²⁰

There are currently only two museums in Eritrea. The first one is the National Museum of Eritrea²¹ located in the capital Asmara. Established in 1992, it promotes Eritrean history and culture, also focusing on archeology. The museum also has as its mission to preserve cultural heritage threatened by wars and political instability²².

18 <https://www.hrw.org/report/2019/08/08/they-are-making-us-slaves-not-educating-us/how-indefinite-conscription-restricts#page>

19 https://repository.upenn.edu/cgi/viewcontent.cgi?article=1017&context=think_tanks

20 https://upload.wikimedia.org/wikipedia/commons/9/9e/Asmara%2C_museo_nazionale%2C_ingresso.JPG

21 https://en.wikipedia.org/wiki/National_Museum_of_Eritrea

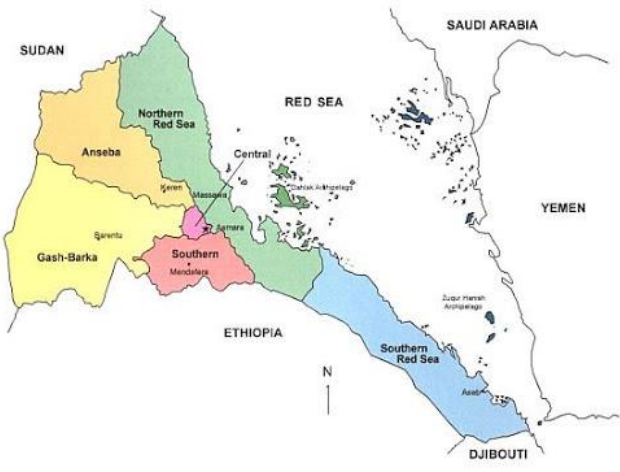
22

https://books.google.nl/books?id=SYsgplc3mrsC&pg=PA77&dq=National+Museum+of+Eritrea&hl=en&sa=X&redir_esc=y#v=onepage&q=National%20Museum%20of%20Eritrea&f=false

The second museum is the Northern Red Sea Regional Museum, located in Massawa on the Red Sea. This museum would have a counterpart for the South (the status of the Southern Red Sea Regional Museum still has to be determined). Next to these museums, the country has other cultural sites like castles, churches and mosques, statues, memorial monuments, which testify of Eritrean history and cultural background. See table 6 for a list of museums.

Part 2: The Data

Table 1: Eritrea: regions and population (as given by Globaldatalab²³)

Map	Region	Population x 1000		'18/'05
		2005	2018	
 <p>Regional Administration of Eritrea</p>	Anseba	380	470	1.24
	Debub	840	1050	1.25
	Debubawi	90	110	1.24
	Gash Barka	510	640	1.26
	Maekel	650	810	1.25
	Semenawi	350	440	1.26
Eritrea Total		2830	3500	1.24

Source: <https://globaldatalab.org> 4.0

Map: <http://www.eritrea.be/old/eritrea%20regional%20map.jpg>

Debub = Southern ; Debubawi (- Keyih Bahri) = Southern Red Sea (including the city of Assab); Maekel = Central, (including the capital Asmara); Semenawi (- Keyih Bahri) = Northern Red Sea (including the city of Massawa).

Table 2: Eritrea: Education index 2005-2018²⁴

Region	2005	2010	2018	2018/2005
Anseba	204	208	199	0.98
Debub	258	264	252	0.98
Debubawi	285	293	285	1.00
Gash Barka	141	144	137	0.97
Maekel	466	479	468	1.00
Semenawi	182	185	177	0.97
Total	272	279	269	0.99
Inequality	3.3	3.3	3.4	

Table 3: Eritrea: Regional data for 'mean years of schooling' for adults

Region	2005	2010	2018	2018/2005

²³ Probably the population figures are (much?) higher.

²⁴ The HDI data, and its components go from 0 (worst level) to 1 (best level). We present the figures x 1000. The inequality figure is the highest value divided by the lowest value in a particular year.

Anseba	1.9	2.0	2.0	1.05
Debub	2.9	2.9	3.0	1.03
Debubawi	4.6	4.8	4.9	1.07
Gash Barka	1.3	1.3	1.3	1.00
Maekel	8.1	8.4	8.5	1.05
Semenawi	1.8	1.9	1.9	1.06
Total	3.7	3.9	3.9	1.05
Inequality	6.2	6.5	6.5	

Table 4: Eritrea: Regional data for 'expected years of schooling' for children

Region	2005	2010	2018	2018/2005
Anseba	5.0	5.1	4.7	0.94
Debub	5.8	5.9	5.5	0.95
Debubawi	4.7	4.8	4.4	0.94
Gash Barka	3.6	3.6	3.4	0.94
Maekel	7.1	7.2	6.6	0.93
Semenawi	4.4	4.5	4.1	0.93
Total	5.3	5.4	5.0	0.94
Inequality	2.0	2.0	1.9	

Table 5: Tertiary education institutions in Eritrea (all: public institutions)

University	Year of establishment	Location	rank 4icu 2019
College of Health Sciences	1999 (2005)	Asmara	
Eritrea Institute of Technology http://www.eit.edu.er	2004	Mai Nefhi	12880 (country: 1)
Orotta School of Medecine	2004	Asmara	
College of Agriculture	2006	Hamelmalo	
College of Arts and Social Sciences	2006	Adi Keyh	
College of Business and Economics	2006	Halhale	
College of Marine Sciences and Technology	2006	Massawa	

(Sources: Wikipedia Universities, 4ICU, WHED https://www.whed.net/results_institutions.php; and other sources)

Table 6: Museums in Eritrea

Museums	Year of establishment	Location
National Museum of Eritrea	1992	Asmara
Northern Red Sea Regional Museum	2000	Massawa
Southern Red Sea National Museum ?	-	Massawa

(source: Wikipedia: Museums, and other sources)

This report was made as a student assignment for the Bachelor's Minor 'African Dynamics', which is a joint course of Leiden University, Delft University of Technology and Erasmus University Rotterdam, guided by the African Studies Centre Leiden (Marleen Dekker and Madi Ditmars). This report was

Knowledge institutions in Africa and their development 1960-2020: Eritrea

made by Félicie Derriks (TUDelft Bachelor of Civil Engineering) and supervised and extended by Ton Dietz (African Studies Centre Leiden), and with support from Jan Abbink (also ASCL).