Knowledge Institutions in Africa and their development 1960-2020

Mali

Introduction

This report about the development of the knowledge institutions in Mali 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 Mali's population increased from 5.0 million in 1950, via 8.5 million in 1990 to 20.3 million in 2020.
- Adult literacy was only 36% in 2018 (46% for men; 26% for women). Mean years of schooling increased from 0.7 years in 1990 to 2.4 years in 2018, very low for African standards.
- Net primary school enrolment was 62% in 2018, and net secondary school enrolment 30%. Expected years of schooling increased from 2.1 years in 1990 to 7.6 years in 2018, a major improvement but low for African standards.
- The education index improved from .081 in 1990 to .289 in 2018. For all education variables capital city Bamako always had a much better situation and Mopti the worst situation. Regional inequality was and still is extreme. The education situation between 2010 and 2018 deteriorated in many regions.
- The gross enrolment rate for tertiary education was only 5.5% in 2018: a total of ca 90,000 students at Mali's higher education institutions. There were also 9,100 students abroad.
- 6 Mali has nine public universities and only two private ones; there are also nine think tanks known to us.
- 7 And the country has at least six museums.

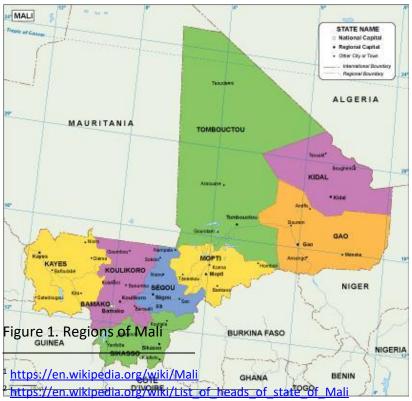
Part 1: The Story

Mali's demographic and education development

Officially called the Republic of Mali, Mali has a surface area of 1.22 million km², is located in West Africa, and used to be a French colony from the 19th century until its Independence on June 20 1960¹. It is divided into 11 regions, officially speaks French but has local languages like Bambara, Bomu, Tieyaxo Bozo, Toro So Dogon, Maasin, Fulfulde, and Arabic. Since independence, Mali has had six official presidents; Modibo Keita (1960-1968), Moussa Traore (1968-1991), Amadou Toumani Toure (1991-1992), Alpha Oumar Konare (1992-2002), Amadou Toumani Toure (2002-2012), Amadou Sanogo (2012-2012 for 21 days), Dioncounda Traore (2012-2013, acting president) and Ibrahim Boubacar Keita (2013-present)².

The Malian population has boomed over the last 70 years. In 1950 5.0 million Malians³ were Counted, but in 2020 the new census result amounted to 20.3 million inhabitants. Of these 20.3 millions, 44% can be found in urban areas compared to only 10% in 1955. The most populated area is the capital city Bamako (1.3 m. people). The sex ratio in Mali is 1:1 males to females. The 0-14 years age group in Mali accounts for 47% of the population, 50.5% range between 15-64 years old and make up the working age population, while the remaining 2.5% are 65 years and older. The life expectancy increased from only 27.0 years in 1950 to 60.5 years in 2020.

Since 2011 Mali has experienced major unrest and in parts of the country a civil war and the very turbulent recent past must have had a major impact on education in general and universities and other tertiary institutions in particular.



³ All demographic information: https://www.worldometers.info/world-population/mali-population/

Literacy and enrolment

According to UNESCO, the adult literacy rate in Mali was 36% in 2018 (46% for men and 26% for women)⁴. For all levels of teaching, the enrolment ratio of females is lower than for males. This is true for the primary and secondary, but especially at the higher level of education as seen in the table below.

Gender differences in enrolment in Mali

	Enrolled (%)	Recent Enrolment (%)	Female enrolment (%)	Male enrolment (%)
Primary	17.02(1971)	58.94(2018)	55.76(2018)	62.02(2018)
Secondary	03.58(1983)	29.93(2018)	26.81(2018)	32.96(2018)
University	00.14(1971)	05.50(2015)	03.23(2015)	07.74(2015)

Compulsory education in Mali lasts 9 years from age 7 to age 15. The number of enrolled pupils in Malian primary and secondary schools increased from 21.1% and 3.6% respectively in 1983 to 62.0% and 30.0% respectively in 2018. It is important to note that the enrolment percentage has been going down since 2011 for the primary education sector (when it was 69.5%) and since 2014 for secondary education (when it was 35%), after the start of political turmoil and war. A little over 50% of Malian boys and girls go to primary school but unfortunately don't follow up with secondary school and those numbers have been dropping since 2014. There's a slight difference in terms of the enrolment numbers between the boys and the girls as more boys tend to be given the opportunity to go to school⁵. When it comes to the tertiary level of education, even less students are enrolled. The 19-23 years old constitute roughly 8% of the population and can be regarded as the age group for university students. Gross enrolment was only 5.5% in 2015 (men 7.7% and women 3.2%). Unfortunately, the percentage of enrolled students is dropping, just like in primary and secondary education. There are 90,000 students in Mali's higher education institutions. According to Campusfrance these were 88,000 in 2014, while they also assess the numbers of students abroad to be 9,100. Many of those went to France, Morocco, Senegal, Saudi Arabia, and Tunisia, in that order⁶.

Regional differentiation of education results in Mali, 1990-2018

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 1990 and 2018 and uses eight regions. Between 1990 and 2018 the population of Mali as a whole increased 2.26 times, but regional growth differences are very high: from 1.61 times in Mopti to 15.2 times in Tombouctou, where many Malian (and other) returnees from Libya stayed in 2018.

⁴ http://uis.unesco.org/en/country/ml

⁵ https://data.worldbank.org/indicator/SE.SEC.NENR.MA ?locations=BF

⁶ https://ressources.campusfrance.org/publications/mobilite_pays/en/mali_en.pdf

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 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 1990, 2000, 2010, and 2018 (the latest year available at the moment). 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 Mali was extremely low in 1990 (.081, one of the lowest in the world) but it improved a lot (to .287 in 2018; which is still very low). Bamako had a much better education situation than any of the other regions. During the 1990-2010 period Mopti always had the worst score, but improvements in that region have been most rapid compared to all other regions, and in 2018 the last position had been taken over by Tombouctou, which was also the region with the slowest growth between 1990 and 2018. Regional inequality was extreme in 1990 and 2000, but improved afterwards.

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". In Mali the figure for mean years of schooling was extremely low in 1990 (0.7 years for the country as a whole), and it increased to 2.4 years in 2018, still very low for African standards. Bamako had much better figures than all other regions. Mopti always had the worst situation. Koulikoro experienced the fastest improvements, and Tombouctou the slowest (in fact the education results in that region stagnated at a very low level. Between 2010 and 2018, when the country experienced political turmoil and civil war, the situation in Bamako, Gao & Tidal, and Tombouctou deteriorated. Regional inequality went from very extreme in 1990 and 2000 to extreme afterwards.

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"⁸. In Mali there has been a very rapid development, from an extremely low level: from 2.1 years of expected schooling in 1990 to 7.6 years in 2018. Again Bamako had much better education prospects for its children, while those in Mopti had the worst prospects in 1990-2010, a position that was taken over by Tombouctou in 2018. That also was the area with the least rapid growth, while Mopti experienced the fastest growth during the period as a whole. Regional inequality was extreme in 1990 and 2000, but became less extreme afterwards. Between 2010 and 2018 the problematic situation in the country also had a rather dramatic

⁷ http://uis.unesco.org/en/glossary-term/mean-years-schooling

⁸ http://hdr.undp.org/en/content/expected-years-schooling-children-years

impact on children's education prospects: it deteriorated in Bamako, Koulikoro, Segou, Sikasso, and above all in Tombouctou, Gao, and Kidal. See tables 1-4 in part 2.

Mali's tertiary knowledge development

In the area currently called Mali one of the most ancient centres of learning in Africa could be found: in Timbuktu. Wikipedia⁹ writes: "The University of Timbuktu is a collective term for the teaching associated with three mosques in the city of Timbuktu in what is now Mali: the masajid (mosques) of Sankore, Djinguereber, and Sidi Yahya. It was not a university in the modern sense, but a loosely organized scholastic community that endured for many centuries during the medieval period... After Timbuktu was occupied because of the 1591 Battle of Tondibi, the university went into decline. In 1593, Ahmad I al-Mansur cited "disloyalty" as the reason for arresting, and subsequently killing or exiling, many of Timbuktu's scholars...". Currently there is no university in Timbuktu, and it is in the middle of the war zone in Mali.

Mali currently has a total of 11 higher-education institutions of which 9 are state-owned and the remaining 2 are private. The country equally possesses a few think tanks as well as museums for the creation of policies and preservation and sharing of Malian history/culture respectively. In terms of universities, the table below shows the development of universities within the country. The website 4ICU served as the main data source in regards to the number of universities and their rankings worldwide¹⁰. Wikipedia does not give useful additional information about the universities in Mali, so we will restrict our overview to 4ICU, and add data from WHED.

Mali, Number of Universities, 1960-2020

Туре	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Public	3	3	3	3	3	3	3	3	3	3	9	9	9
Private	0	0	0	0	0	0	0	1	1	1	1	1	1+1
Private Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	3	3	3	3	3	3	4	4	4	10	10	10+1

Public and private universities in Mali



Université des Sciences Techniques et de Technologie de Bamako¹¹, and Université des sciences sociales et de gestion de Bamako¹²

⁹ https://en.wikipedia.org/wiki/University_of_Timbuktu

¹⁰ https://www.4icu.org

¹¹ http://malijet.com/thumbnail.php?file=thumbnail/article_medium/rectorat_197276982.jpg&size=article_large



Institut Polytechnique Rural de Formation et de Recherche Appliquée¹³

The public universities in Mali, in contrast to most African countries, are relatively more abundant than their private counterparts. They always have had more students than the privately owned universities. In fact, of the 0.55% of the population attending higher-education programs, only 12% are in private institutions (1 out of 8)¹⁴. Institut Polytechnique Rural de Formation et de Recherches Appliquées de Katibougou is the oldest in the country, more than half a century before the independence of Mali. Despite not being the oldest, the Université des Lettres et des Sciences Humaines de Bamako seems to be the biggest in terms of student numbers. The Malian universities offer at the very least certificates in various fields for higher-education (medical, business, politics, law, science and/or technology). The Askia Mohamed high-school is home to the Confucius Institute in Mali via a partnership with the Southwest Forestry University in China. In all universities there is the possibility of doing a BSc but the possibilities of an MSc are scarcer let alone PhD. Amongst all the programs offered in these universities; business, management and accounting seem to be the most popular ones in Mali. An interesting trait here is the fact that almost all the universities can be found in Bamako. This limits access to higher-education for those who live in towns other than Bamako, let alone the vast countryside. Table 5 in part 2 shows an overview of all the public universities in Mali. Private Universities are not very important yet in Mali. More details can be found in table 6 in part 2. below.

Think tanks in Mali

Aside from the universities, Mali possesses a few structures which identify or play the same or similar roles as think thanks. Some of them are affiliated to the United Nations (such as Programme des Nations Unies pour le Développement (PNUD), foreign agencies, or agencies set up by the Malian government themselves (such as Direction Nationale de la Statistique). Table 7 in part 2 gives a list of organisations which are recognised in the think tank category and which could be verified. According to UNESCO there were only 700 employed researchers in the country in 2015 and also in 2017. However the composition of their type of employment was very different in these two years: in 2015 37% worked in higher education, 57% in (other) government positions, and 6% in NGOs. In 2017 this had changed to a mere 2% in higher education, 58% in government,

¹²

http://malijet.com/thumbnail.php?file=universite mali fsje fseg.jpg.pagespeed.ic.BlUXpM5ZuG 323788273.jpg&size =article large

¹³ <u>https://www.ipr-ifra.edu.ml/wordpress/service-comptabilite/</u>

¹⁴ https://www.nationmaster.com/country-info/profiles/Mali/Education/All-stats

and 31% in businesses (probably including private and privatized universities), while there were 9% in NGO positions and with thinktanks¹⁵.

Museums in Mali



Model of the Great Mosque of Djennéin the National Museum of Mali¹⁶

There are six known museums in Mali and they are for the most part state owned. They are found in Bamako, Gao, Timbuktu, Djenne and Fombiri ⁵. The oldest and biggest is the National Museum of Mali. A list of the museums in Mali can be found in table 8 in part 2.

¹⁵ http://uis.unesco.org/en/country/ml?theme=science-technology-and-innovation

¹⁶ https://upload.wikimedia.org/wikipedia/commons/thumb/7/7a/BamakoDjenn%C3%A9_02.JPG/1280px-BamakoDjenn%C3%A9_02.JPG

Part 2: The Data

Table 1: Regions and Population of Mali, 1990-2018

Мар	Region / Région	Populatio	n x 1000	'18/
		1990	2018	'90
	Bamako	1010	2900	2.87
	Gao and Kidal	90	560	6.22
	Kayes	1360	2750	2.02
	Koulikoro	1430	3690	2.58
Tombouctou	Mopti	1380	2220	1.61
	Segou	1530	3030	1.98
Koulikoro Gao	Sikasso	1600	3180	1.99
Mopti	Tombouctou	50	760	15.20
Kayes Segoul Bamako Sikasso				
Mali Total		8450	19100	2.26

Source: https://globaldatalab.org/shdi, Version 4.1. map: Wikipedia

Table 2: Mali Education index 1990-2018¹⁷

Region	1990	2000	2010	2018	2018/1990
Bamako	218	439	577	542	2.49
Gao and Kidal	150	222	279	229	1.53
Kayes	69	119	204	247	3.58
Koulikoro	73	151	279	297	4.07
Mopti	41	88	161	187	4.56
Segou	66	113	238	222	3.36
Sikasso	52	124	250	248	4.77
Tombouctou	126	140	196	163	1.29
Total	81	168	277	289	3.57
Inequality	5.3	5.0	3.6	3.3	-

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

Region	1990	2000	2010	2018	2018/1990
Bamako	2.4	4.7	6.5	5.9	2.46
Gao and Kidal	1.3	1.7	1.9	1.7	1.31
Kayes	0.6	0.8	1.4	1.6	2.67
Koulikoro	0.6	0.9	1.7	2.6	4.33
Mopti	0.3	0.5	0.8	0.9	3.00
Segou	0.5	0.6	1.4	1.6	3.20
Sikasso	0.4	0.6	1.3	1.5	3.75

 17 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.

Tombouctou	1.0	1.0	1.1	1.0	1.00
Total	0.7	1.2	2.0	2.4	3.43
Inequality	8.0	9.4	8.1	6.6	

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

Region	1990	2000	2010	2018	2018/1990
Bamako	4.9	10.2	13.0	12.5	2.55
Gao and Kidal	3.9	5.9	7.8	6.3	1.62
Kayes	1.8	3.3	5.7	7.0	3.89
Koulikoro	2.0	4.3	8.0	7.6	3.80
Mopti	1.1	2.6	4.8	5.7	5.18
Segou	1.7	3.3	6.7	6.1	3.59
Sikasso	1.4	3.7	7.4	7.1	5.07
Tombouctou	3.4	3.8	5.7	4.6	1.35
Total	2.1	4.6	7.6	7.6	3.62
Inequality	4.5	3.9	2.7	2.7	

Table 5: Public Universities in Mali

University	University since
Institut Polytechnique Rural de Formation et de Recherches Appliquées de	1897
Katibougou <u>http://www.ipr-ifra.org/</u>	
Ecole Nationale d'Ingenieurs Abderhame Baba Toure (Bamako)	1939
https://www.eni-abt.ml/	
Ecole Normale Superieure de Bamako	1963
https://www.auf.org/les_membres/nos-membres/ecole-normale-superieure-	
<u>de-bamako/</u>	
École Normale d'Enseignement Technique et Professionnel	2010
http://enetp.edu.ml/	
Universite des sciences sociales et de gestion de Bamako	2011
http://ussgb.ml/	
Université des lettres et des sciences humaines de Bamako	2011
http://ulshb.edu.ml/	
Université des sciences juridiques et politiques de Bamako	2011
http://usjpb.edu.ml/	
Université des sciences, des techniques et des technologies de Bamako	2011
http://www.usttb.edu.ml/	
Université de Segou	2012
http://universitesegou.ml/universite/presentation/	

Table 6: Private Universities in Mali

University	University Since	Location of Campuses
Université Mandé Bukari		
No website known	2012 (1999?)	Bamako
African Business School		
http://abs-	?	Bamako

Table 7 Think Tanks in Mali (all in Bamako)

Think Tanks	Website
Centre d'études et de renforcement des capacités d'analyse et de plaidoyer (CERCAP)	2005-2009, closed now
	https://www.sipri.org/research/conflict-peace-and- security/africa/mali
, ,	https://www.ilri.org/where-are-we/mali-country- office
	https://www.niaid.nih.gov/research/niaid-research- mali
International Food Policy Research Institute (IFPRI)	https://www.ifpri.org/country/mali
Institut d'Economie Rurale (IER)	http://www.ier.ml/
Programme des Nations Unies pour le Développment (PNUD)	http://www.ml.undp.org/
Groupe de Recherche en Economie Appliquee et Theorique (GREAT)	https://www.greatmali.net/
Sahel Institute	http://insah.cilss.int/

Table 8: Museums in Mali¹⁸

Museums	Where	Website
Musée national du Mali	Bamako	
Musee de la Femme MusoKunda	Bamako	https://musokunda.org/
Musee de site de Djenné	Djenne	http://djenne-patrimoine.org/dp6.htm
Musée Dogon de Fombori	Fombori	
Musee du Sahel	Gao	
Musee Municipale de Tombouctou	Timbuktu	

Acknowledgements: This particular 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 made by Kevin Beyina (Mechanical Engineering; Delft University of Technology), and supervised and extended by Ton Dietz (African Studies Centre Leiden).

¹⁸ https://en.wikipedia.org/wiki/List of museums in Mali