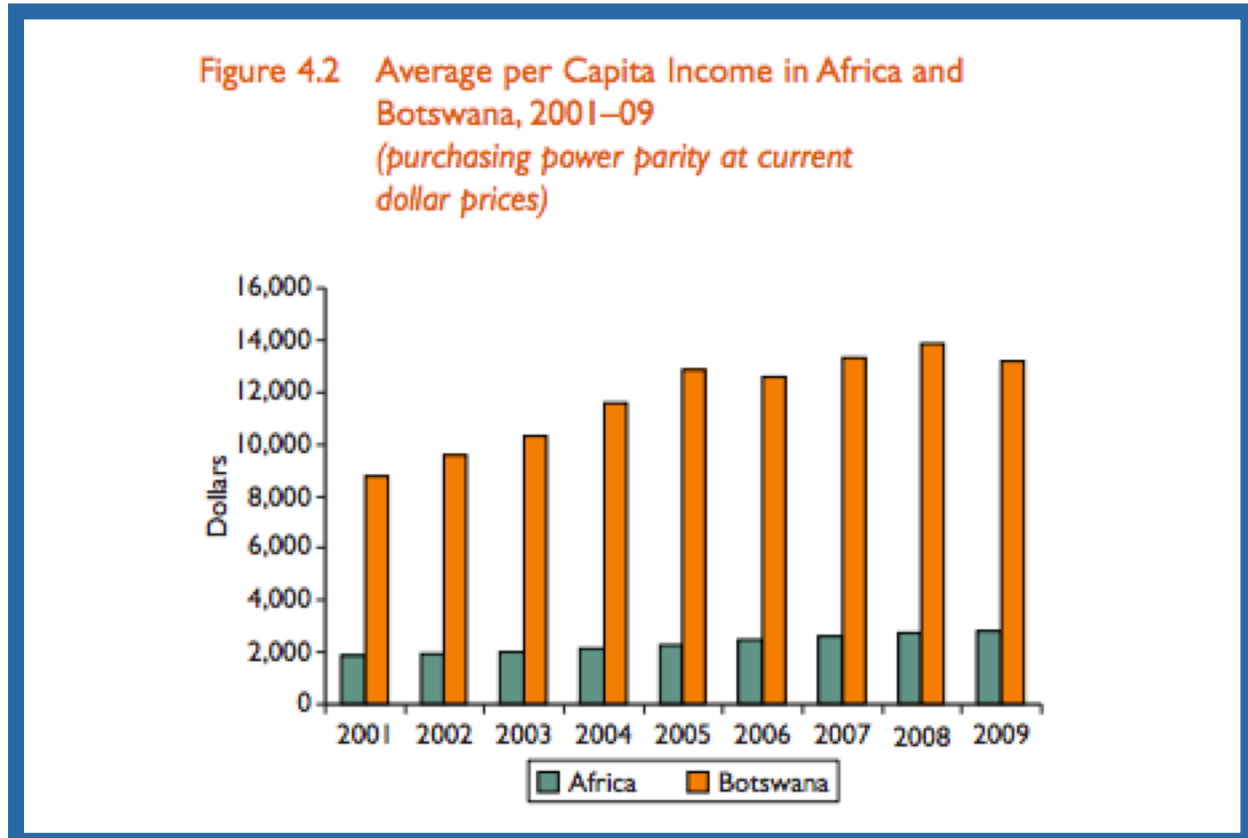


10th Grade Modernization Inquiry

Does Development Mean Progress?



Michael Lewin. 2011. "Botswana's Success: Good Governance, Good Policies, and Good Luck." © World Bank. Creative Commons Attribution license.

Supporting Questions

1. What are the impacts of development in Kenya?
2. What are the impacts of development in Botswana?
3. What are the impacts of development in Algeria?
4. Does development impact different African countries in different ways?



10th Grade Modernization Inquiry

Does Development Mean Progress?

New York State Social Studies Framework Key Idea & Practices	10.8 TENSIONS BETWEEN TRADITIONAL CULTURES AND MODERNIZATION: Tensions exist between traditional cultures and agents of modernization. Reactions for and against modernization depend on perspective and context. ✓ Gathering, Using, and Interpreting Evidence ✓ Comparison and Contextualization ✓ Geographic Reasoning
Staging the Compelling Question	Read the UN description of the Human Development Index (HDI) and examine the United States HDI rank. Discuss what students think “development” and “progress” mean. Students could also read an NPR blog post and discuss the costs and benefits of labeling countries as “developing.”

Supporting Question 1 Group Research Opportunity	Supporting Question 2 Group Research Opportunity	Supporting Question 3 Group Research Opportunity	Supporting Question 4
Understand	Understand	Understand	Assess
What are the impacts of development in Kenya?	What are the impacts of development in Botswana?	What are the impacts of development in Algeria?	Does development impact different African countries in different ways?
Formative Performance Task	Formative Performance Task	Formative Performance Task	Formative Performance Task
Write a one-page research summary that includes discussion of HDI rank, life expectancy, years of schooling, gross national income, changes over time, and the challenges to development in Kenya.	Write a one-page research summary that includes discussion of HDI rank, life expectancy, years of schooling, gross national income, changes over time, and the challenges to development in Botswana.	Write a one-page research summary that includes discussion of HDI rank, life expectancy, years of schooling, gross national income, changes over time, and the challenges to development in Algeria.	Presents the research summary from Formative Performance Tasks 1, 2, and 3 to the class. After presentations, develop a claim supported by evidence that answers the supporting question.
Featured Sources	Featured Sources	Featured Sources	Featured Sources
Source A: Excerpted explanatory note on the 2014 Human Development Report composite indices, Kenya Source B: Excerpt from “Africa’s Powerhouse” Source C: Additional sources decided by students and/or teachers	Source A: Excerpted explanatory note on the 2014 Human Development Report composite indices, Botswana Source B: Excerpt from “Botswana’s Success: Good Governance, Good Policies, and Good Luck” Source C: Additional sources decided by students and/or teachers	Source A: Excerpted explanatory note on the 2014 Human Development Report composite indices, Algeria Source B: “Algeria’s Large Youth Population Has Few Opportunities” Source C: Additional sources decided by students and/or teachers	Source A: Featured sources from Supporting Questions 1, 2, and 3 Source B: Additional sources decided by students and/or teachers

Summative Performance Task	<p>ARGUMENT Does development mean progress? Using your assigned African country or all three countries, construct an argument (e.g., detailed outline, poster, essay) that addresses the compelling question using specific claims and relevant evidence from contemporary sources while acknowledging competing views.</p> <p>ACT Work collaboratively to write a resolution proposal to the United Nations addressing the common problems of development across all three countries and proposing international or intracontinental solutions.</p>
-----------------------------------	--



Overview

Inquiry Description

This inquiry leads students through an investigation of modernization and development in three African countries: Kenya, Botswana, and Algeria. By investigating the compelling question “Does development mean progress?” students focus on the characteristics of development in these countries and respond to the challenges that each country faces in light of modernization. The inquiry is designed to be a series of research case studies in which students work in groups to research one of the three countries and write a one-page research summary on their assigned country. Teachers could assign and form groups in any number of ways, including having multiple groups of students researching the same country. Students then present their research to the class in the last formative performance task. Students will respond to the compelling question based on the perspective of their respective country or could choose to compare all three countries. In the extension activity, students work collaboratively to discuss commonalities and differences in development across these countries in Africa.

In addition to the Key Idea listed earlier, this inquiry highlights the following Conceptual Understanding:

- (10.8a) Cultures and countries experience and view modernization differently. For some, modernization is a change from a traditional, rural, agrarian condition to a secular, urban, industrial condition. Some see modernization as a potential threat and others see it as an opportunity.

NOTE: This inquiry is expected to take four to six 40-minute class periods. The inquiry time frame could expand if teachers think their students need additional instructional experiences (i.e., supporting questions, formative performance tasks, and featured sources). Teachers are encouraged to adapt the inquiries in order to meet the needs and interests of their particular students. Resources can also be modified as necessary to meet individualized education programs (IEPs) or Section 504 Plans for students with disabilities.

Structure of the Inquiry

In addressing the compelling question “Does development mean progress?” students work through a series of supporting questions, formative performance tasks, and featured sources in order to construct an argument with evidence and counterevidence from a variety of sources.

Staging the Compelling Question

The compelling question could be staged by having the students read the United Nations description of the Human Development Index (HDI). Students should then discuss what they think “development” and “progress” mean. Students will then examine and discuss the HDI of the United States. Students could also read the NPR blog post [“If you shouldn’t call it the Third World, what should you call it?”](#), and discuss the costs and benefits of labeling countries as “developing,” and consider whether or not they view these labels as problematic.



Supporting Question 1

The first supporting question—“What are the impacts of development in Kenya?”—asks students from group 1 to focus on development efforts in Kenya. Kenya was chosen as a case study because it is viewed as falling into the low human development category, ranking 147 out of 187 indexed countries, although it has seen recent surges in economic growth and stability. By focusing on Kenya’s HDI rank, life expectancy, years of schooling, gross national income, changes over time, and the challenges the country faces, students write a one-page research summary on the state of development within Kenya. To begin their summary, students use the HDI ranking information from the United Nations’ explanatory note on the 2014 Human Development Report composite indices and an article from the Brookings Institute that highlights the growth of Kenya. They are also encouraged to seek additional sources through their research.

Supporting Question 2

The second supporting question—“What are the impacts of development in Botswana?”—asks students from group 2 to focus on development efforts in Botswana. Botswana was chosen as a case study because it falls into the medium human development category, ranking 109 out of 187 indexed countries, and has been considered consistently stable while displaying room for growth. By focusing on Botswana’s HDI rank, life expectancy, years of schooling, gross national income, changes over time, and the challenges the country faces, students write a one-page research summary on the state of development within Botswana. To begin their summary, students use the HDI ranking information from the United Nations’ explanatory note on the 2014 Human Development Report composite indices and an article from Michael Lewin that explains Botswana’s success. They are also encouraged to seek additional sources through their research.

Supporting Question 3

The third supporting question—“What are the impacts of development in Algeria?”—asks students from group 3 to focus on development efforts in Algeria. Algeria was chosen as a case study because it is categorized as a high human development country, ranking 93 out of 187 indexed countries, although it faces challenges due to the recent instability of nearby countries. By focusing on Algeria’s HDI rank, life expectancy, years of schooling, gross national income, changes over time, and the challenges the country faces, students write a one-page research summary on the state of development within Algeria. To begin their summary, students use the HDI ranking information from the United Nations’ explanatory note on the 2014 Human Development Report composite indices and an article from *Voice of America* that highlights the particular challenges youth face in Algeria. They are also encouraged to seek additional sources through their research.



Supporting Question 4

In the last supporting question—“Does development impact different African countries in different ways?”—students are given the opportunity to present their research findings to the class and compare the impacts of development across all three countries. Students use all of the featured sources from the inquiries in collaboration with the research presentations to develop a claim supported by evidence that answers the supporting question. Teachers could have students present their research in a variety of formats, including posters or digital formats. Teachers could also have students complete an organizer for each country based on the presentations.

Summative Performance Task

At this point in the inquiry, students have examined the impact of development on their assigned countries and compared these impacts across all three countries. Students should be able to demonstrate the breadth of their understanding and their ability to use evidence from multiple sources to support their claims. In this task, students construct an evidence-based argument responding to the compelling question “Does development mean progress?” It is important to note that students’ arguments could take a variety of forms, including a detailed outline, poster, or essay.

Students’ arguments likely will vary, but could include any of the following:

- Development does mean progress for countries such as Kenya, which has experienced growth across all of the human development indicators and ranks high in adult literacy rates.
- Development does not mean progress because Botswana, for example, has shown growth across human development indicators, but its growth relies heavily upon minerals such as diamonds that will eventually run out.
- Development does not always mean progress. Algeria has remained economically stable and ranks high on the human development index, but its progress will be measured by how well Algerians are able to manage current issues including high youth unemployment, lack of opportunities, and threats of terrorism.

Students have the opportunity to Take Informed Action by demonstrating that they *understand* the ideas gained from the inquiry by working collaboratively to *assess* the common problems of development across the countries studied. Students could extend their arguments and *act* by writing a resolution proposal to the United Nations that addresses the issues of development and proposes international or intracontinental solutions.



Staging the Compelling Question

Featured Source

Source A: United Nations Development Programme, explanation of the human developmental index, "Human Developmental Index (HDI)," 2015

The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI can also be used to question national policy choices, asking how two countries with the same level of GNI per capita can end up with different human development outcomes. These contrasts can stimulate debate about government policy priorities.

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The health dimension is assessed by life expectancy at birth component of the HDI is calculated using a minimum value of 20 years and maximum value of 85 years. The education component of the HDI is measured by mean of years of schooling for adults aged 25 years and expected years of schooling for children of school entering age. Mean years of schooling is estimated by UNESCO Institute for Statistics based on educational attainment data from censuses and surveys available in its database. Expected years of schooling estimates are based on enrolment by age at all levels of education. This indicator is produced by UNESCO Institute for Statistics. Expected years of schooling is capped at 18 years. The indicators are normalized using a minimum value of zero and maximum aspirational values of 15 and 18 years respectively. The two indices are combined into an education index using arithmetic mean.

The standard of living dimension is measured by gross national income per capita. The goalpost for minimum income is \$100 (PPP) and the maximum is \$75,000 (PPP). The minimum value for GNI per capita, set at \$100, is justified by the considerable amount of unmeasured subsistence and nonmarket production in economies close to the minimum that is not captured in the official data. The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean. Refer to Technical notes for more details.

The HDI does not reflect on inequalities, poverty, human security, empowerment, etc. The HDRO offers the other composite indices as broader proxy on some of the key issues of human development, inequality, gender disparity and human poverty.

A fuller picture of a country's level of human development requires analysis of other indicators and information presented in the statistical annex of the report.

Courtesy of United Nations Development Programme, [www.undp.org](http://hdr.undp.org/en/content/human-development-index-hdi). Used with Permission.
<http://hdr.undp.org/en/content/human-development-index-hdi>



Staging the Compelling Question

Featured Source

Source B: United Nations Development Programme, article examining the HDI of the United States over time, “Explanatory Note on the 2014 Human Development Report Composite Indices: USA” (excerpt), 2014

Human Development Index (HDI)

The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Just as in the 2013 HDR, a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of education among the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and ii) expected years of schooling for children of school-entry age, which is the total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. Standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) rates.

To ensure as much cross-country comparability as possible, the HDI is based primarily on international data from the United Nations Population Division, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics and the World Bank. As stated in the introduction, the HDI values and ranks in this year's report are not comparable to those in past reports (including the 2013 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2014 report includes recalculated HDIs from 1980 to 2013.

The United States HDI value and rank

The United States HDI value for 2013 is 0.914— which is in the very high human development category— positioning the country at 5 out of 187 countries and territories. Between 1980 and 2013, the United States HDI value increased from 0.825 to 0.914, an increase of 10.8 percent or an average annual increase of about 0.31 percent.

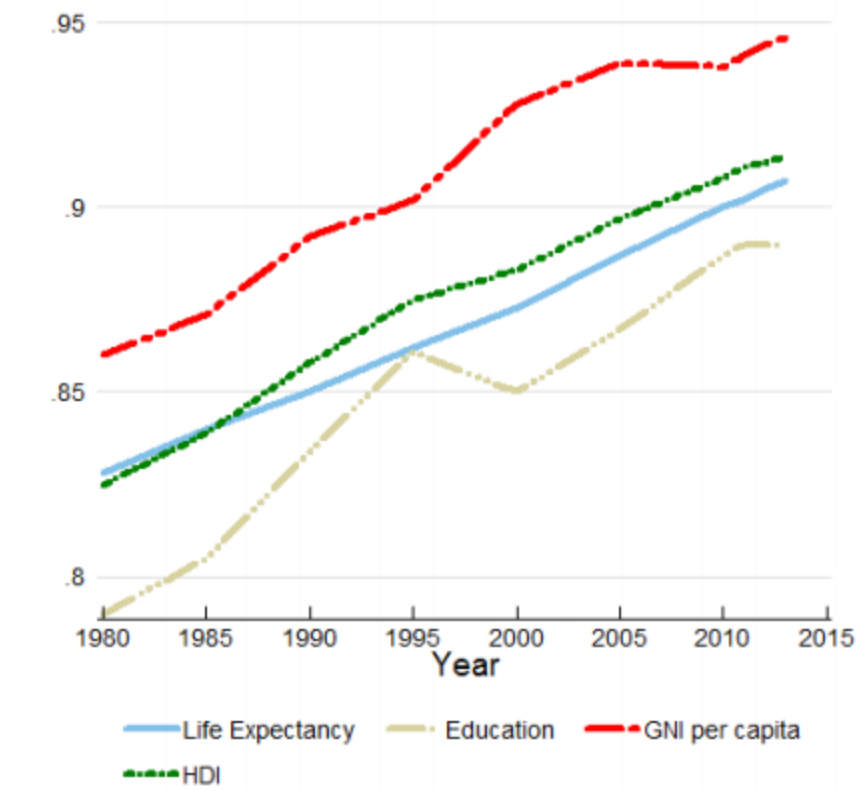
Table A reviews the United States progress in each of the HDI indicators. Between 1980 and 2013, the United States life expectancy at birth increased by 5.1 years, mean years of schooling increased by 1 year and expected years of schooling increased by 2.4 years. The United States GNI per capita increased by about 76.5 percent between 1980 and 2013.

Table A: The United States HDI trends based on consistent time series data and new goalposts

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1980	73.8	14.1	11.9	29,633	0.825
1985	74.6	14.4	12.2	31,997	0.839
1990	75.2	15.2	12.3	36,638	0.858
1995	76.0	15.7	12.7	39,079	0.875
2000	76.8	15.3	12.7	46,551	0.883
2005	77.6	15.9	12.8	50,203	0.897
2010	78.5	16.4	12.9	49,849	0.908
2011	78.7	16.5	12.9	50,863	0.911
2012	78.8	16.5	12.9	51,707	0.912
2013	78.9	16.5	12.9	52,308	0.914

Figure 1 below shows the contribution of each component index to the United States HDI since 1980.

Figure 1: Trends in the United States HDI component indices 1980-2013



Courtesy of United Nations Development Programme, www.undp.org. Used with Permission. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/USA.pdf



Supporting Question 1

Featured Source

Source A: United Nations Development Programme, article examining the HDI of Kenya over time, “Explanatory Note on the 2014 Human Development Report Composite Indices: Kenya” (excerpt), 2014

Human Development Index (HDI)

The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Just as in the 2013 HDR, a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of education among the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and ii) expected years of schooling for children of school-entry age, which is the total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. Standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) rates.

To ensure as much cross-country comparability as possible, the HDI is based primarily on international data from the United Nations Population Division, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics and the World Bank. As stated in the introduction, the HDI values and ranks in this year's report are not comparable to those in past reports (including the 2013 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2014 report includes recalculated HDIs from 1980 to 2013.

Kenya's HDI value and rank

Kenya's HDI value for 2013 is 0.535— which is in the low human development category—positioning the country at 147 out of 187 countries and territories. Between 1980 and 2013, Kenya's HDI value increased from 0.446 to 0.535, an increase of 20.0 percent or an average annual increase of about 0.55 percent.

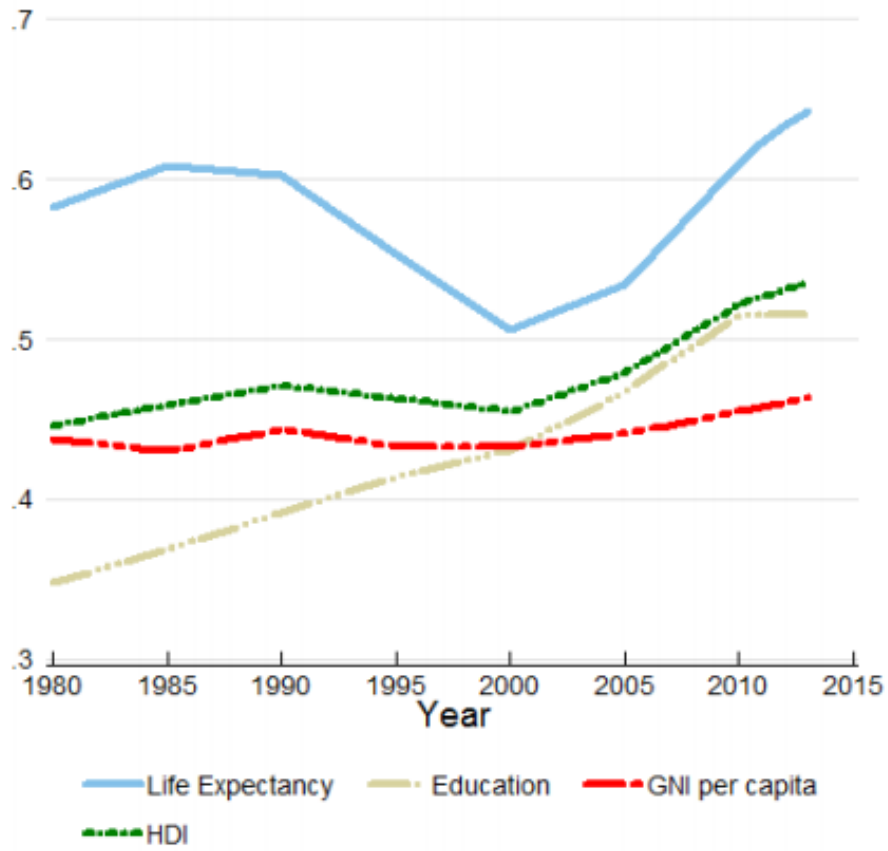
Table A reviews Kenya's progress in each of the HDI indicators. Between 1980 and 2013, Kenya's life expectancy at birth increased by 3.9 years, mean years of schooling increased by 3.6 years and expected years of schooling increased by 1.7 years. Kenya's GNI per capita increased by about 18.4 percent between 1980 and 2013.

Table A: Kenya's HDI trends based on consistent time series data and new goalposts

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1980	57.8	9.3	2.7	1,822	0.446
1985	59.5	9.2	3.4	1,727	0.459
1990	59.1	9.1	4.2	1,894	0.471
1995	56.0	8.7	5.1	1,760	0.463
2000	52.9	8.4	5.9	1,759	0.455
2005	54.7	9.7	5.9	1,856	0.479
2010	59.6	11.0	6.3	2,029	0.522
2011	60.4	11.0	6.3	2,072	0.527
2012	61.1	11.0	6.3	2,100	0.531
2013	61.7	11.0	6.3	2,158	0.535

Figure 1 below shows the contribution of each component index to Kenya’s HDI since 1980.

Figure 1: Trends in Kenya’s HDI component indices 1980-2013



Courtesy of United Nations Development Programme, www.undp.org. Used with Permission.
http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/KEN.pdf



Supporting Question 1

Featured Source

Source B: Mwangi S. Kimenyi and Josephine Kibe, article describing the importance of Kenya to the East African Community, "Africa's Powerhouse" (excerpts), *Brookings Institute*, 2014

Lately many observers have been avidly discussing the recent high rates of economic growth in Africa. Speaking in Washington earlier this year, Donald Kaberuka, the president of the African Development Bank offered some cautionary words. While the good economic news from the continent may well represent a turning point from a past characterized by hopelessness, he said, Africa nevertheless remains far from a tipping point. To reach such a threshold, Africa requires major investments in three "I's": institutions, integration, and infrastructure. Even with the recent robust growth experienced over the past decade, Africa still suffers a major infrastructure deficit. Most of the countries have relatively weak institutions. And the regional integration project has been slow and marred by compliance and commitment deficits. Thus, as Kaberuka noted, although Africa has reached a turning point, progress to a tipping point is not an easy journey.

One of the regions in Africa that is making remarkable progress in all these "I's" is the East African Community. The EAC's original members -- Kenya, Uganda, and Tanzania -- have recently been joined by Rwanda and Burundi. South Sudan is expected to join the community soon. The region has fast-tracked regional integration and has seen considerable progress in institutional reforms. Moreover, East Africa boasts much greater political stability than it has at any time in its recent past, and peace has been restored in most of the countries. The region has also seen major investments in both national and regional infrastructure; many more projects have been planned and are scheduled to commence shortly. On Nov. 28, for example, President Uhuru Kenyatta of Kenya inaugurated the commencement of construction of a rail project that will link Kenya's coast town of Mombasa to Kampala (Uganda), Kigali (Rwanda), and Juba (South Sudan). With positive growth trajectory predicted over the medium term, the EAC has a good chance of reaching a developmental tipping point. (The photo above shows Ugandan President Yoweri Museveni waving an EAC flag during an event attended by the region's other leaders at Mombasa Port in August.)

Within the EAC, the Kenyan economy is the anchor. The overall performance of the region will to a great extent depend on what happens in Kenya. Kenya's economy is the largest in the region and is much more dynamic than those of other member countries. The country's economy is much better linked to the other economies in terms of investment flows and trade. Thanks to its more advanced human capital base, its more diversified economy, and its role as a leader in the information communication revolution in the region, Kenya's economy is expected to remain strong, creating salutary benefits to the other member countries. The prospects for a strong economy are boosted by recent institutional reforms that have culminated in the adoption of a new constitution that provides for devolved governance.

Kenya's economic dominance in the region is based on a strong private sector that has evolved under relatively market-friendly policies for most of the post-independence era. Kenya's record of relative political stability and its lack of dramatic ideological shifts over the same period have done much to cement its position....

Although Kenya has never experienced military rule, and its political environment can be described as somewhat democratic, the country has had its share of politically instigated violence along ethnic divisions and tribal lines. Even though elections in Kenya have been marred by flaws and irregularities, the country is considered to have a wider democratic space compared to its neighbors.

Following the post-election violence in 2007-2008, Kenya held a constitutional referendum in August 2010, approving a new constitution that brought several important reforms. Among other things, the new constitution allows Kenyans to initiate referenda, thus promoting popular initiative. This democratic environment is not enjoyed in Uganda, where Yoweri Museveni has held power for the last 25 years, and who has stated that he will run yet again in the 2016 elections if his party endorses him.



As previously observed, Kenya has the largest economy amongst the members of EAC in terms of GDP. Kenya's GDP accounts for 40 percent of the region's GDP, followed by Tanzania at 28 percent, Uganda at 21 percent, Rwanda at 8 percent, and lastly Burundi at 3 percent. In terms of GDP at current market prices, Kenya's 2011 GDP stood at \$34 billion, well ahead of the closest rival economy, Tanzania, with a GDP of \$24 billion.

Compared to other African countries, Kenya has very limited arable land and rainfall -- but it also boasts the most sophisticated agricultural sector. Horticulture contributes the highest percentage of agricultural gross domestic product (33 percent), followed by food crops (32 percent). Industrial crops and industrial crops contribute 17 percent each. Kenya has consistently done well in horticulture and tea production and export. The horticulture industry has existed since pre-colonial times and continued to flourish when the export market was opened in Europe in the post-independence period.

Kenya is doing better than Tanzania in this industry because of the infrastructural rigidities inherent in Tanzania's export system. Tanzania produces much more horticulture produce than Kenya but sells very little overseas. Compared to Kenya, Tanzanian farmers grow the produce on a small scale and lack networks to enable them combine their harvest at lower costs when exporting. Additionally, higher freight charges at Kilimanjaro International Airport and Julius Nyerere International Airport in Dar Es Salaam, coupled with inadequate storage facilities at the airports, make it even harder for Tanzania to export. By contrast, Kenya's Nairobi Jomo Kenyatta airport is well served by major airlines and charter operators, making it easier to access European markets and the rest of the world. The Kenyan government has also supported this sector by ensuring that supply chain bottlenecks are minimized as much as possible by streamlining the process. At the same time, the Ministry of Agriculture has steadily increased funding for irrigation projects and subsidized fertilizers.

Another agricultural product that makes Kenya competitive compared to its neighbors is black tea. Kenya is the world's number-one exporter of black tea. (Tanzania and Uganda are also major producers of black tea.) Kenya is competitive in tea production and export not least due to the fact that is the home of the Mombasa Tea Auction Center, the second largest tea auction venue in the world, which, among its other advantages, provides direct feedback of market prices to factories and farmers. Additionally, favorable weather conditions and tropical rich volcanic soils result in the production of high grade tea that has a unique flavor, making it the best in the world. Incentives offered by the government, such as value-added tax exemptions, withholding tax holidays for firms that process and package tea, and Export Processing Zones that offer favorable conditions for exporters, make Kenya's tea industry a competitive cluster in the region and in the world.

In terms of intra-East African trade, Kenya ranks at the top, averaging 37 percent in 2011-2012, followed by Uganda at 24. The intra-regional trade is driven by the manufacturing industry, and particularly the Fast-Moving Consumer Goods (FMCGs) and processed products that are major drivers of the economy. Kenya's competitive edge in this industry stems from the diversification of its exports basket, which makes it less vulnerable to shocks. Additionally, compared to the region, the country's transport system, including roads, the Mombasa port, and the airports, is more advanced than those of most other countries in the region (though there are bottlenecks at Mombasa). Kenya, Uganda, and Rwanda have recently started building a superhighway from Mombasa to Kigali that will ease the movement of cargo through these countries. The fact that Kenya is one of the only two East African countries that is not landlocked (the other being Tanzania) gives the country a competitive advantage in terms of international trade. Kenya is also the region's major exporter and importer with the rest of the world.

Kenya is also very competitive in terms of human capital. It ranks at the top in terms of adult literacy rates. The adult literacy rate in Kenya is 87 percent, followed by Uganda at 73.2 percent, Tanzania at 72.9 percent, Rwanda at 70.7 percent and lastly Burundi's literacy rate is 66.6 percent. In comparison to other East African countries, meanwhile, Kenya has the highest public expenditure in education at 17.7 percent between 2008-2009 and 2011-2012, compared to Uganda, which spends an average of 10 percent. Education plays a major role in increasing productivity and economic growth and reducing poverty and inequality. Studies comparing the state of primary schools in Kenya, Uganda, and Tanzania conclude that a child from a poor household in Kenya is more likely to succeed than a child from a wealthy household from Tanzania or Uganda. Tanzania exhibits the worst performance



among the three East African countries. Kenya also ranks on top in terms of enrollment of students in higher education, followed by Uganda and then Tanzania. In 2012, Kenya enacted the Universities Act, which is aimed at improving the quality of education at all levels by promoting separation of governance of universities and other tertiary institutions and strengthening its technical sector by separating it from the university sector. The Global Competitiveness Index (GCI) 2013-2014 ranks Kenya 44th in quality of education out of 148 countries. By comparison, Rwanda ranks 51st, Uganda 82nd, Tanzania 100th, and Burundi 143rd.

Kenya's private sector has been more dynamic than that of the other members of the community, which has translated into a more competitive and innovative economy relative to its neighbors. The service sector has been a huge contributor to the growth of the private industry in Kenya. This sector is the largest contributor to GDP growth since 2007 in the country, according to the IMF regional economic outlook for sub-Saharan Africa. Kenya has emerged as a technological and financial hub for East and Central Africa. A major techno-city project is underway in Konza, 40 miles from Nairobi, that aims to reinforce Kenya's reputation as the regional technology leader in Africa. The project has been dubbed the "Silicon Savannah." IBM also set up its first African research lab in Nairobi, following the likes of Google, Microsoft, and Intel, which also have their regional headquarters in Nairobi....

It should come as no little surprise that, in 2012, Kenya attracted the most private equity deals in East Africa. These involved investments in firms that have not gone public and are therefore unlisted on the stock exchange. The main reason for this large volume of investment is that Kenya is widely viewed as the regional economic hub because of the financial infrastructure that is already in place.

Another area in which Kenya is doing tremendously well in comparison to the other East African countries and the rest of the world is the mobile money services sector. The country is ranked number one in the world in mobile money. Mpesa, the flagship mobile phone banking product, put Kenya at the forefront of mobile money transfers and mobile banking services. Mpesa's success in Kenya is attributed to several factors: the need to provide a solution to the high cost of sending money from one place to another; the presence of a dominant player in the market (Safaricom), which was able to develop an efficient agent network; and support from the regulatory body (Central Bank of Kenya), which advocated for regulation to follow innovation....

Kenya boasts a market-based economy and the most liberal economic system in East Africa. A market-based system, among its other advantages, promotes economic efficiency and competition and encourages foreign investment. Since independence, the market structure has changed from one in which prices are influenced by the government to one in which they are determined by the market forces of supply and demand. Kenya has been a pioneer in embracing freedom of enterprise, and this manifests itself clearly in the broadcasting industry, where Kenya Television Network (KTN), the first non-pay, privately-owned TV station in Africa, was founded in Kenya. Liberalization of the agricultural sector was undertaken in the 1980s and 1990s, reducing government's control of agricultural production and marketing. This led to an environment that encouraged private sector participation in agriculture.

Moreover, building on the African Growth and Opportunity Act (AGOA), Kenya has developed a textile and apparel industry that exports to the United States. AGOA is a law that was passed in the United States that offers incentives for African countries to export to the United States in an effort to build free markets and open African economies. The World Bank recently hailed Kenya's private sector as the most vibrant and dynamic in East Africa. The Kenyan economy has been market-based for a longer time than all the other East African economies, and this has given it a competitive edge in attracting foreign investment to the country. Kenya has consistently attracted relatively high levels of foreign direct investment (FDI). FDI flows to Kenya have consistently been to transformative industries such as high technology. The recent FDI flows to Uganda and Tanzania are driven by recently discovered resources and are geared towards extractive industries. Kenya is the main source of FDI to its neighbors; outward investments to other countries have increased from \$9 million in 2011 to \$16 million in 2012. There are big Kenyan companies that operate throughout the East African region (Equity Bank, Kenya Commercial Bank, Nation Media Group).

The recent planning documents issued by the Kenyan government, The Economic Recovery Strategy (ERS) for Wealth and Employment Creation and Kenya Vision 2030 , detail carefully designed strategies that focus on growing and developing the economy. Vision 2030 in particular aims to transform Kenya to a newly industrialized, middle-income country by 2030. It is based on three pillars: the economic pillar, which seeks to maintain and sustain economic growth of 10 percent per year for 25 years; the social pillar, which seeks to invest in Kenyans so as to improve the quality of life in education, health, and housing (among other public goods); and the political pillar, which focuses on moving the nation forward as one and envisions a democratic system that is issue-based, people-centered, results-oriented, and accountable to the public.

In conclusion, Kenya remains a vibrant and promising economy in East Africa, one that is resilient and has the ability to bounce back after political shocks such as the 2007-2008 election violence and the Westgate Mall terrorist attack in Nairobi. There are challenges that the country still needs to address, above all poverty, inequality, and access to health services. The recent discovery of resources such as oil, base titanium, coal, and underground water, augur well for the country's future economic performance.

Courtesy of The Brookings Institution. Used with Permission.

<http://www.brookings.edu/research/opinions/2013/12/30-kenya-economy-kimenyi>



Supporting Question 2

Featured Source

Source A: United Nations Development Programme, article examining the HDI of Botswana over time, “Explanatory Note on the 2014 Human Development Report Composite Indices, Botswana” (excerpt), 2014

Human Development Index (HDI)

The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Just as in the 2013 HDR, a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of education among the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and ii) expected years of schooling for children of school-entry age, which is the total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. Standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) rates.

To ensure as much cross-country comparability as possible, the HDI is based primarily on international data from the United Nations Population Division, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics and the World Bank. As stated in the introduction, the HDI values and ranks in this year's report are not comparable to those in past reports (including the 2013 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2014 report includes recalculated HDIs from 1980 to 2013.

Botswana's HDI value and rank

Botswana's HDI value for 2013 is 0.683— which is in the medium human development category— positioning the country at 109 out of 187 countries and territories. Between 1980 and 2013, Botswana's HDI value increased from 0.470 to 0.683, an increase of 45.4 percent or an average annual increase of about 1.14 percent.

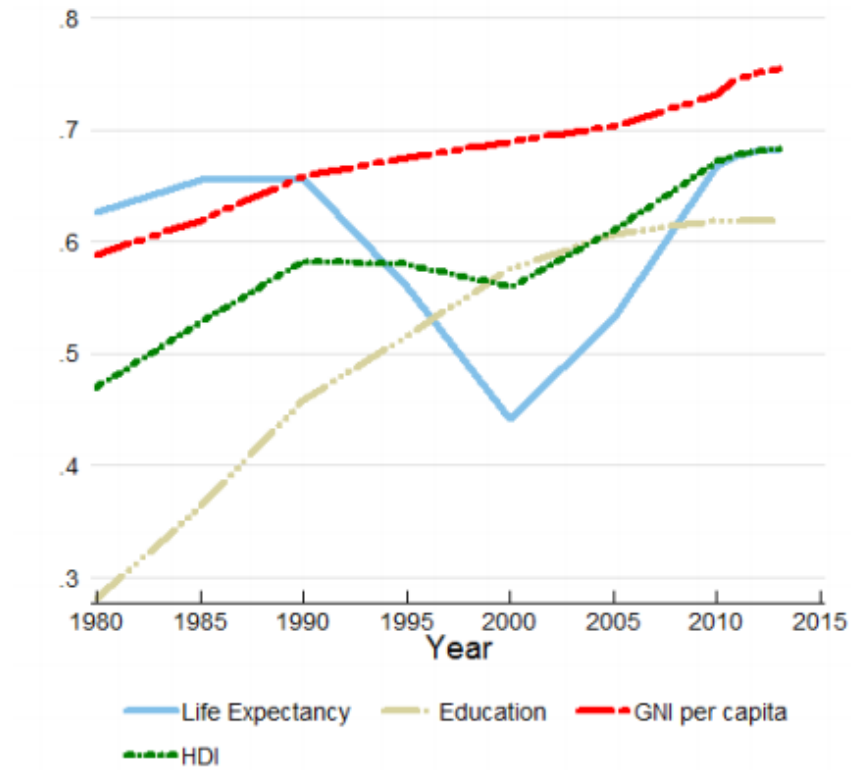
Table A reviews Botswana's progress in each of the HDI indicators. Between 1980 and 2013, Botswana's life expectancy at birth increased by 3.7 years, mean years of schooling increased by 6.5 years and expected years of schooling increased by 4.3 years. Botswana's GNI per capita increased by about 199.7 percent between 1980 and 2013.

Table A: Botswana's HDI trends based on consistent time series data and new goalposts

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1980	60.7	7.4	2.3	4,935	0.470
1985	62.7	8.5	3.8	6,025	0.528
1990	62.7	10.0	5.4	7,833	0.583
1995	56.3	10.6	6.6	8,751	0.580
2000	48.7	11.7	7.5	9,611	0.560
2005	54.6	12.0	8.2	10,486	0.610
2010	63.4	11.7	8.8	12,763	0.672
2011	64.0	11.7	8.8	13,930	0.678
2012	64.2	11.7	8.8	14,400	0.681
2013	64.4	11.7	8.8	14,792	0.683

Figure 1 below shows the contribution of each component index to Botswana’s HDI since 1980.

Figure 1: Trends in Botswana’s HDI component indices 1980-2013



Courtesy of the United Nations Development Programme, www.undp.org. Used with Permission. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/BWA.pdf.



Supporting Question 2

Featured Source

Source B: Michael Lewin, article examining the growing economy of Botswana, “Botswana’s Success: Good Governance, Good Policies, and Good Luck” (excerpt), *Information Centre for the Extractives Sector*, 2011

Botswana’s Success: Good Governance, Good Policies, and Good Luck

Michael Lewin

Over the past 60 years, Botswana’s economy has been one of the most successful in the world. The country’s achievement is remarkable, because at independence, in 1966, its prospects were not encouraging.

Economic and Social Indicators

Botswana is a sparsely populated, arid, landlocked country; at independence it was also one of the poorest countries in the world, with per capita income of just \$70 a year. In the first few years of independence, about 60 percent of current government expenditure consisted of international development assistance. There were only 12 kilometers of paved roads, and agriculture (mostly cattle farming for beef production) accounted for 40 percent of gross domestic product (GDP).

By 2007 Botswana had 7,000 kilometers of paved roads, and per capita income had risen to about \$6,100 (\$12,000 at purchasing power parity), making Botswana an upper-middle-income country comparable to Chile or Argentina. Its success is also evident in other measures of human development. At independence, life expectancy at birth was 37 years. By 1990 it was 60, 10 years above the African average. Under-five mortality had fallen to about 45 per 1,000 live births in 1990, compared with 180 for Africa as a whole. Development assistance has shrunk to less than 3 percent of the government budget, and agriculture currently accounts for only about 2.5 percent of GDP. Major strides have also been made in infrastructure and education.¹

Annual growth in per capita income averaged 7.0 percent between 1966 and 1999 (table 4.1 and figure 4.1). The country’s performance is particularly impressive compared with that of other African economies (figure 4.2).

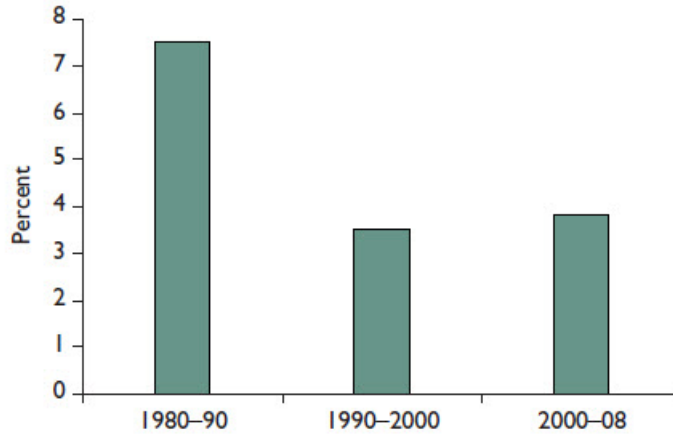
Table 4.1 Annual Growth in per Capita Income in Selected Economies, 1966–99

Economy	Average growth rate
Botswana	7.0
Chile	2.1
Hong Kong SAR, China	4.6
Indonesia	3.8
Ireland	4.1
Korea, Rep. of	6.1
Singapore	6.2
Thailand	4.6

Source: Adapted from Leith 2005.



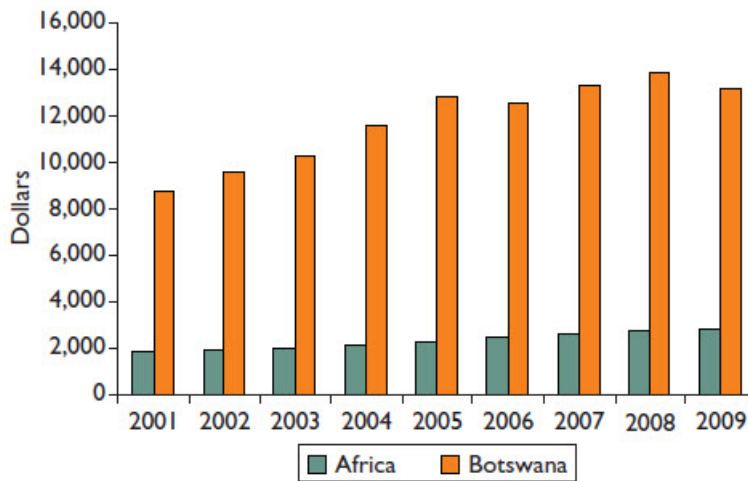
Figure 4.1 Average Annual Growth in per Capita Income in Botswana, 1980–2008



Source: Leith 2005.

Leith, J. Clark. Why Botswana Prospered. Ed. J. Clark Leith. Montreal: MQUP, 2005. Print. Used with permission.

Figure 4.2 Average per Capita Income in Africa and Botswana, 2001–09
(purchasing power parity at current dollar prices)



Source: OECD n.d.

Critics have argued that the social gains from this growth have been somewhat limited. In fact, in addition to the gains in health and life expectancy noted above, there have been gains in poverty reduction and education. The proportion of poor people fell from about 50 percent in 1985 to 33 percent in 1994, and the proportion of people completing at least primary school rose from less than 2 percent at independence to about 35 percent in 1994 (Leith 2005).



Not all indicators are as positive: income distribution in Botswana remains very unequal (the Gini coefficient was about 0.55 in 1994).² Unemployment remains high, reflecting to a large extent rural to urban migration, although it too has fallen, dropping from about 21 percent in the 1990s to about 17 percent in 2008.

Diamonds and Development

Botswana's extraordinary growth was fueled by minerals, particularly diamonds. At independence, beef, the country's main export and largest sector, contributed 39 percent of GDP. From independence until the 1970s, international aid dominated the government budget and was the main source of foreign exchange. At that time the mineral sector, mainly diamonds, began to take off and soon became the dominant sector. Income growth and the growth of the mining sector accelerated in tandem from about 197/75 until recently.

Luck—the discovery of diamonds as well as other important minerals—was clearly an element of Botswana's success. However, there is considerable disagreement over whether the discovery of minerals in a developing economy generally brings good luck or bad.³ Indeed, many countries in Africa, including Zambia, Nigeria, the Democratic Republic of Congo, Sierra Leone, and others, have squandered vast amounts of their natural wealth. One does not have to be persuaded that natural resources are necessarily a curse to conclude that they certainly are not sufficient for economic success or even a good predictor of it. In the case of Botswana, minerals turned out to be lucky, but other key ingredients in the recipe for success were present, including good governance and good economic management.

Avoiding the bad governance curse

Mineral-based countries seem to be prone to bad government, a phenomenon Acemoglu and others have termed “good economics, bad politics.” In almost all developing countries, the government owns the mineral resources and is therefore the main recipient of the revenues from their extraction. This concentration of revenues with the government as the conduit of benefits to the rest of the economy can lead to a host of problems, including rent-seeking, corruption, and the efficiency losses that result from them. It is not surprising that, with easily accessible wealth concentrated in the hands of the government, malignant dictatorships and predatory regimes often thrive. There also seems to be a greater tendency for armed civil conflict in mineral-based economies (Collier and Hoeffler 2004). These “bad politics” are extremely costly.

Botswana has avoided these manmade disasters. Part of its success may reflect luck: Botswana's relatively homogeneous population has less potential for ethnic polarization, which when combined with mineral rents can be particularly combustible. Still, most of the credit must be given to the leadership, which, since independence, has designed and fostered the conditions of governance that have ensured stability and social and economic progress. The government established respect for property rights and the rule of law. It maintained a high degree of transparency, which was reinforced by continuing the Tswana tribal tradition of consultation. These consultative institutions, known as *kgotla*, created a degree of trust in the government—the sense that government exists to serve the people and promote development and is not the instrument of one group or individuals for the purpose of getting hold of the wealth. Tswana tradition also respected private property; the fact that many of the tribal leaders who helped usher in modern government were also large cattle owners may have reinforced this respect.

Acemoglu and Robinson (1999) emphasize that property rights and the rule of law are the key factors explaining development success. They also emphasize the importance of the preindependence colonial regime in determining the adoption of these institutions after independence. More heavily settled colonies tended to establish institutions to maintain the rule of laws and enforce property rights; in sparsely settled colonies, the colonial regimes tended to be more “extractive” or “exploitative,” unconstrained by law and respect for property. Although Botswana's colonial past is not typical of the kind of regime that usually led to a postindependence government constrained by



law and property rights, its unique colonial history had the same effect. ⁴ Before independence, Botswana was a British protectorate, the colonial power having been “invited” in. Because Botswana was not colonized for economic or strategic advantage, the colonial rulers, it is argued, did not impose the extractive-type regime often found in other sparsely populated areas. Thus the regime that evolved after independence was one that respected the law and property and was dedicated to development.

More controversial is the role of democracy. Botswana has maintained a parliamentary democracy since independence. To be sure, its democracy is not perfect; the country has had one-party rule since independence, women’s representation is limited, and there has been some criticism that minorities (particularly the San people) are not treated equally. Nevertheless, the government functions in a democratic manner, elections are “free and fair,” and the government is responsive to the electorate and transparent in its dealings.

Is democracy a positive factor for economic growth and development? None of the miracle East Asian economies or Latin America’s high performer (Chile) was democratic during the first years of rapid growth and development, leading many commentators to conclude that property rights and the rule of law are more important than democracy (Acemoglu, Johnson, and Robinson 2003). For some observers, democracy is actually a hindrance to economic development. Although this conclusion is probably unwarranted, the fact that many democracies (such as India) have not fared well economically undoubtedly means that democracy is neither sufficient nor necessary for growth and development.⁵

In the case of mineral-rich countries like Botswana, democracy may be an important catalyst. Mineral-dependent economies seem to spawn the predatory type of dictatorship rather than the relatively benevolent ones of East Asia’s past. Although this notion is largely speculative, it seems that a democratic government dependent on mineral wealth is more likely than a dictatorial one to be responsive to development needs, to settle disputes peacefully, and to respect the rule of law. Very few, if any, mineral-rich countries in Africa have been ruled as peacefully and productively as Botswana; it is hard to escape the conclusion that the democratic institutions established at independence are an important part of the explanation.

Social science cannot rigorously assess the relative importance or contribution of leadership in the evolution of successful institutions. However, in the case of Botswana, leadership, particularly that of its first president, Seretse Khama, may have been crucial, especially in the areas of mineral exploitation and the rights of the state versus those of the tribes. The discovery of minerals can easily lead to civil war and the dissolution of the state. To prevent this from happening, even before independence, Khama’s party, the Botswana Democratic Party (BDP), wrote into its platform its intention to assert the state’s rights to all mineral resources. After independence, the government reached agreement on ownership of mineral resources with the tribal authorities. Although the largest diamond deposits were discovered in Khama’s own district of Bamangato, he chose the country over his tribal land, thus helping limit the possibility of conflict.

Implementing good policies

All mineral-based economies face the issue of an appreciating real exchange rate. The well-known possible harmful consequences of this are often referred to as Dutch disease. Prevention of Dutch disease in Botswana consisted of three components: fiscal saving, a surplus on the current account of the balance of payments, and heavy government investment in infrastructure and human capital. Together these policies limited to the erosion of domestic productivity and competitiveness that can result from the appreciation of the real exchange rate. High fiscal saving limits current consumption, reducing pressure on domestic price inflation, a typical problem in natural resource booms. Some of the government saving took the form of offshore investments, which directly limited real exchange rate depreciation and diversified the sources of future foreign exchange revenues. The accumulation of reserves is a form of self-insurance against short-run declines in mineral revenues as well as long-run reductions in these revenues as a result of mineral depletion. The instruments of public saving took the form of



the Public Service Debt Management Fund and the Revenue Stabilization Fund. These funds have proved to be successful mechanisms for managing fiscal saving; income from the Revenue Stabilization Fund is now a stable source of government revenue.

Another part of the fiscal saving was channeled to domestic assets, combating the effect of the loss of competitiveness by raising productivity. When this investment is focused on public goods (for example, infrastructure, health, and human capital), it will contribute to growth without crowding out private sector investment and development. Public sector saving was positive in every year between 1975 and 1996, fluctuating between 10 and 40 percent of GDP. Public sector investment was fairly constant at about 10 percent of GDP.⁶ However, if one counts expenditure on health and human capital investment, government investment has consistently remained about 20 percent of GDP. The capital budget focused on basic infrastructure with about 30 percent devoted to water, electricity, roads, communication, and transportation. Twenty percent of the capital budget, on average went to education and around 30 percent of recurrent expenditures was devoted to education and health.⁷ While quantifying the effectiveness of public expenditure on growth and development is notoriously difficult, particularly in resource-based economies where soft budget constraints may lead overinvestment, the emphasis on infrastructure, health, and education seems to have served Botswana well. As noted above, the number of paved roads increased from around 20 kilometers in 1970 to 2300 in 1990; 90 percent of the population had access to safe water (compared with 29 percent in 1970); and the number of telephone connections rose from around 5,000 in 1970 to 136,000 in 2001.⁸ Similarly, in educational achievement Botswana leads Africa. For example, adult literacy, male and female, is around 80 percent compared with 69 percent and 50 percent, respectively, for the rest of sub-Saharan Africa.⁹

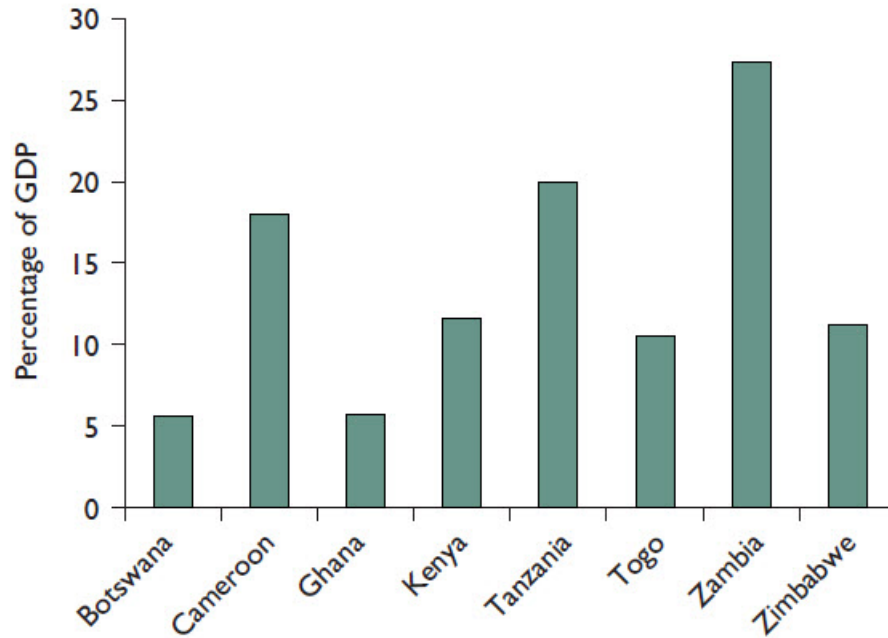
As a result of its prudent fiscal policy, Botswana has enjoyed relative macroeconomic stability and avoided the boom-slump cycles that characterize many mineral-based economies. Monetary policy was also restrained: for most of the postindependence period, inflation was moderate, averaging about 10 percent (Maipose n.d.). The periodic slow-downs in the diamond industry have thus by and large not been passed on to the rest of the economy. By withholding some of the benefits from the economy during the booms, the government has, to some extent, been able to insulate it from the busts.¹⁰

Shunning import substitution and parastatals

Two things Botswana did not do are also significant. Unlike many African countries, it did not adopt a policy of import substitution, and it did not expand the extent of state-owned productive entities, which employ only about 5 percent of the workforce in Botswana (figure 4.3).



Figure 4.3 Percentage of GDP Accounted for by State-Owned Enterprises in Selected African Countries, Early 1990s



Source: Leith 2005.

Leith, J. Clark. *Why Botswana Prospered*. Ed. J. Clark Leith. Montreal: MQUP, 2005. Print. Used with permission.

Being part of the South African Customs Union (which required cooperation with the then odious regime in South Africa) meant maintaining a fairly low tariff regime and provided a steady stream of government revenue. Avoiding an activist import-substituting policy and maintain limited government involvement in production seems to have paid off for Botswana by allowing it to avoid many of the inefficiencies and structural deficits that so often arise from such policies.

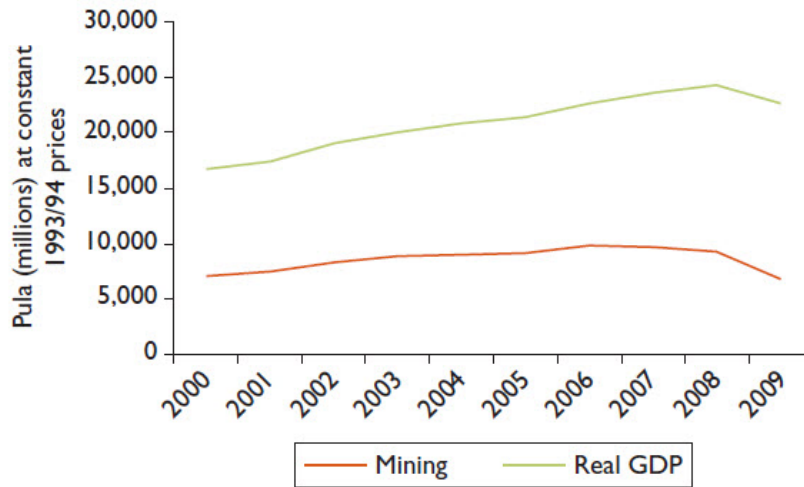
Trade policy is also an area where good governance and good policies reinforce one another. A government rich with mineral revenues is an inviting target for rent seekers and worse; restricting the avenues for rent seeking and corruption thus helps preserve the efficiency and integrity of the government. Even if the theoretical merits of import substitution or the existence of state-owned enterprises seem persuasive, in practice both often result in inefficiency and drain fiscal resources.

Good fiscal policies by themselves may not be sufficient for success. Many mineral-based economies with high rates of investment have not enjoyed the positive results that Botswana has. The quality of investment is evidently as important as the quantity. Moreover, in the hands of the venal and corrupt, government savings funds can easily turn into slush funds for the favored elites. There may be a lesson in this from Botswana: good policy encourages better government. Policy formulators should therefore not ignore the political economy consequences of economic policy. Botswana's combination of policy and governance evidently helped it avoid the worst effects of the resource curse.

Planning For A Future Without Minerals

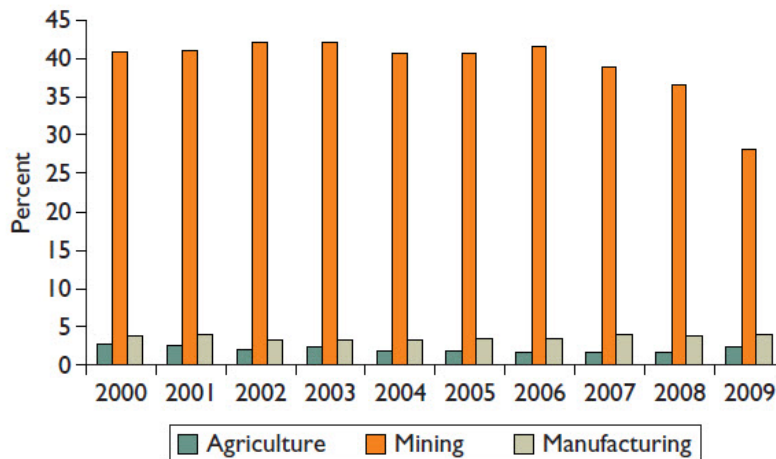
Botswana is still a mineral-based economy: it has not succeeded in significantly diversifying its economy away from diamonds. Government remains the largest employer (employing 30 percent of the active workforce); other than minerals (which employ a relatively small share of workers), most production is in nontraded goods. This pattern is typical of mineral-dependent economies. Real GDP and mining income have moved in tandem since 2000 (figure 4.4), and mining consistently accounts for about 40 percent of GDP, completely dwarfing the contributions of manufacturing and agriculture (figure 4.5).¹¹ Minerals, mostly diamonds, comprise about 85 percent of exports, and mineral revenues account for about 50 percent of government revenues (Bank of Botswana 2008).¹²

Figure 4.4 Mining Revenues and Real GDP in Botswana, 2000–09



Source: Bank of Botswana 2010.

Figure 4.5 Contributions of Mining, Manufacturing, and Agriculture to Botswana’s GDP, 2000–09



Source: Bank of Botswana 2010.

The diamond industry is expected to decline in the near future, with revenues projected to begin falling in 2016 and to be depleted by 2029 (Basdevant 2008). If these projections are correct, adjustment is inevitable and unlikely to be painless, although Botswana's prudent policies—particularly regarding saving and investment—have left it in a relatively strong position to facilitate a soft landing. For most years, domestic saving has been above 40 percent and investment about 35 percent of GDP. (The difference is the surplus on the current account of the balance of payments.) This implies that from the perspective of the economy as a whole, all revenue from minerals is being saved rather than consumed, because total saving from national income is roughly equal to mineral income. When mineral revenues begin to decline, some of the adjustment could thus be absorbed by saving rather than consumption. Thus, even if growth slows, consumption growth can be maintained as the proportion of consumption to income rises.

The government has also been a big saver. Central bank profits and other income from accumulated assets now make up about 30 percent of government revenue, most of it income from the accumulated saving of mineral revenues. At times, the overall fiscal surplus rose to more than 30 percent of GDP (Maipose n.d.), and public sector investment (as noted) has been consistently about 10 percent of GDP. If investment is defined more broadly to include human capital and health, public investment rises to about 20 percent of GDP, which meets the IMF benchmark for sustainability (Basdevant 2008). The government has used this accumulated savings to smooth expenditure over the business cycle, thus providing the economy with a short-run shock absorber. However, the accumulated saving is also a long-run shock absorber, because it has built up human and physical capital and financial assets managed by the Bank of Botswana now amount to about 40 months of imports.

These advantages notwithstanding, Botswana faces serious challenges. Dependence on mineral exports is the key weakness of the current economic outlook and diversification of the traded goods sector is the most important policy objective. Accumulated foreign assets and the income from them can ease the welfare cost of adjustment, but it cannot eliminate it. Barring a miraculous jump in productivity, some real depreciation of the pula and the consequent hardships this may cause, will be necessary to create the competitiveness needed to replace falling mineral exports.

In 2009 manufacturing contributed less than 5 percent of GDP (see figure 4.5). This share will have to rise if Botswana is to avoid decline. The fact that manufacturing has been flat as a proportion of income conceals its growth, because just keeping pace with Botswana's growing economy has required rapid growth.¹³ However, manufacturing growth will have to accelerate if Botswana is to raise or even maintain its standard of living in the long run.

Key to such growth will be Botswana's ability to attract foreign direct investment (FDI). Although FDI fell between 2002 and 2007 (Bank of Botswana 2010), Botswana's reputation as a stable country and successful economy should help it attract FDI in the future.¹⁴ Policy makers should examine the country's overall investment environment with a view to attracting desirable investment.¹⁵

Clouding Botswana's smooth transition to a more diversified economy is HIV/AIDS, which hit Botswana harder than any country in Africa (with the possible exception of South Africa). The epidemic has reversed many of the impressive gains in health indicators achieved over the past 100 years and reduced productivity. The number of deaths from AIDS began declining in about 2003 (World Bank 2009), but the costs and consequences of the epidemic will persist for many years.

Conclusion

Landlocked Botswana seems to have defied the odds by creating a successful economy. Poverty has been reduced, education has become more widespread, and health indicators had improved before the HIV/AIDS epidemic undid some of that progress.



The country's vast natural resources played a key role in this accomplishment, but the mere endowment of resources is clearly not the whole story. In much of Africa—and in other parts of the world—natural resources have not always been conducive to growth and development; in many cases they seem to have brought out the worst in countries, in the form of conflict and predatory governments.

Studying the effect of mineral wealth on economics outcomes is timely, because the increase in the prices of natural resources as a result of the rise of China and India is likely to result in windfalls for many African countries. How can countries turn these windfalls into long-run growth and development? In Botswana's case, the key to successfully harnessing natural resources lay in good governance and good policies. Governance has not been perfect in Botswana, but it has been good. Botswana has been largely free of kleptocracy and civil conflict; it has maintained a transparent, law-abiding government; and it has implemented good policies, including a hyper-prudent fiscal policy, which has done much to diversify foreign exchange earnings and prevent the volatility that typifies many resource-based economies. Investments in human and physical capital and vast improvements in infrastructure have also raised Botswana's productivity, which, together with its substantial financial reserve in the form of foreign assets, should help ease the transition to a more diversified economy.

NOTES

1. For discussions of Botswana's success, see Maipose (n.d.), Acemoglu and Johnson (2003) and Leith (2005).
2. Leith (2005) notes that when measured accurately, taking into account social health, and educational services provided by the government to the poor, this measure falls to about 0.53. No measure of inequality is without serious analytical problems; the Gini coefficient is probably the best available and most widely used index. The coefficient ranges from 0 (perfect equality) to 1 (perfect inequality). The higher the index, the more unequal the society. An index above 0.5 is thought to denote an unequal distribution (Leith 2005).
3. See, for example, Auty (2004) and Sachs and Warner (1995). For a contrary view, see Stevens (2003) and Brunnschweiler and Bulte (2008). See also Lederman and Maloney (2007).
4. The analysis is based on the idea that some colonial regimes were mostly "extractive" —that is, the regime existed to reap the maximum out of the colony's economy. Other regimes, usually ones in which there were more colonial settlers, were less extractive. They often establish institutions that put more constraints on the extractive and arbitrary powers of government. These constraining institutions often carried over into independence.
5. All of the high-performing developing countries mentioned have established strong democratic institutions. The question therefore arise whether the causality runs the other way, from growth to democracy. It can also be argue that democracy is necessary to sustain a high-income economy (see Barro 1997).
6. Isham and Kaufmann (1999) estimate this proportion (10 percent of GDP) to be the likely ceiling for public investment to remain productive. Beyond this they find public sector investment is likely to be detrimental to growth.
7. Lange and Wright (2002) point out that the only single "nonproductive" item of comparable weight in the budget was defense expenditure, which average about 11 percent of total expenditure. While this is high relative to most countries Botswana arguable had good reason to do this.
8. World Bank cited Lange and Wright, 2002, 32.
9. World Bank 2009. Botswana, however, lags other upper middle income countries in these categories.
10. Botswana has not been able to escape the effects of the current global crisis: GDP declined 4 percent in 2009, and for the first time in many years, Botswana had fiscal and balance of payments deficits. However, the economy appears to have weathered the worst, with the Bank of Botswana projecting real growth of more than 3 percent for 2010 and 2011.
11. Mining's share fell in 2009 because of the slump in world trade, not because of the declining importance of the sector.
12. Between 2005 and 2008, before the effects of the global slump set in, exports grew by about 40 percent. The share of diamonds fell from about 75 percent in 2005 to about 65 percent in 2008. Total mining



remained more or less constant, however, at about 85 percent of total exports. The share of diamonds fell because of rising copper and nickel exports (Botswana Central Statistical Office 2009).

13. Other areas of interest are services, including financial services; downstream diamond processing and trading; and tourism, which represented about 10 percent of GDP in 2008 and is a potential growth sector for export earnings.
14. FDI rose again in 2008. It is too early to tell whether this is a trend.
15. Botswana had the best ranking in Africa in Transparency International's corruption perception index in 2011 and ranked 33rd worldwide. (See http://www.transparency.org/policy_research/surveys_indices/cpi/2010). On the World Bank's 2010 Ease of Doing Business index, Botswana ranked 3rd regionally but only 52nd worldwide, indicating some room for improvement (see <http://www.doingbusiness.org/rankings>).

REFERENCES

- Acemoglu, D., S. Johnson, and J. A. Robinson. 2003. "An African Success: Botswana." In *In Search of Prosperity: Analytical Narratives On Economic Growth*, ed. D. Rodrik. Princeton, NJ: Princeton University Press.
- Acemoglu, D., S. Johnson, and J. A. Robinson. 1999. "On the Political Economy of Institutions and Development." *American Economic Review* 91 (4): 938-63.
- Alexeev, Michael, and Robert Conrad. 2009. "The Elusive Curse of Oil." *Review of Economics and Statistics* 91 (3): 586-98.
- Auty, R. (ed.) 2001. "Resource Abundance and Economic Development." *Wider Studies in Development* Oxford University Press, Oxford, UK.
- Bank of Botswana. 2008. *Annual Report*. Garbarone. 2010. *Botswana Financial Statistics*. Gaborone. <http://www.bankofbotswana.bw/index.php/content/20091106150350-botswana-financial-statistics>.
- Barro, R. 1997. *Determinants of Economic Growth: A Cross-Country Empirical Study*. Cambridge, MA: MIT Press.
- Basdevant, O. 2008. "Are Diamonds Forever? Using the Permanent Income Hypothesis to Analyze Botswana's Reliance on Diamond Revenue." IMF Working Paper, International Monetary Fund, Washington, DC.
- Botswana, Central Statistical Office. 2009. *External Monthly Trade Digest* January. Gaborone. <http://www.cso.gov.bw/>.
- Brunnschweiler, C.N. and E.H. Bulte. 2008. "The Resource Curse Revisited and Revised: A Tale of Paradoxes and Red Herrings." *Journal of Environmental Economics and Management* 55: 248-64.
- Collier, P., and A. Hoeffler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56, Oxford University, Oxford, UK.
- _____. 2005. "Democracy and Resource Rents." Oxford University, Oxford UK.
- Corden, W.M., and P.J. Neary. 1982. "Booming Sector and Deindustrialization in a Small Open Economy." *Economic Journal* 92: 825-48.
- Hausmann, R., and R. Rigobon. 2003. "An Alternative Interpretation of the 'Resource Curse': Theory and Policy Implications." NBER Working Paper 9424, National Bureau of Economic Research Cambridge, MA.

Isham, J. and D. Kaufmann. 1999. "The Forgotten Rationale of Policy Reform: The Productivity of Investment Projects." *Quarterly Journal of Economics* 116 (1).

Lange, G., and M. Wright. 2002. "Sustainable Development in Mineral Economies: The Example of Botswana." Ceepa Discussion Paper Series, University of Pretoria, Pretoria, South Africa.

Lederman, D., and W.F. Maloney, eds. 2007. *Natural Resources: Neither Curse nor Destiny*. Washington, DC: World Bank.

Leith, J.C. 2005. *Why Botswana Prospered*. Montreal: McGill-Queen's University Press.

Maipose, G. n.d. *Policy and Institutional Dynamics in Sustained Growth in Botswana*. University of Botswana, Gaborone.

OECD (Organisation for Economic Co-operation and Development). N.d. *Africa Economic Outlook*. <http://www.africaneconomicoutlook.org/en/countries/southern-africa/botswana/>.

Sachs, Jeffrey D., and Andrew M. Warner. 1995. "Natural Resource Abundance and Economic Growth." NBER Working Paper W5392, National Bureau of Economic Research, Cambridge, MA.

Stevens, P. 2003. "Resource Impact: Curse or Blessing? A Literature Survey." *Journal of Energy Literature* 11 (1): 3-42.

World Bank. 2009. *Country Partnership Strategy for the Republic of Botswana*. Washington, DC.

Michael Lewin. 2011. "Botswana's Success: Good Governance, Good Policies, and Good Luck." © World Bank. Creative Commons Attribution license. <http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/Botswana-success.pdf>.



Supporting Question 3

Featured Source

Source A: United Nations Development Programme, article examining the HDI of Algeria over time, “Explanatory Note on the 2014 Human Development Report Composite Indices: Algeria” (excerpt), 2014

Human Development Index (HDI)

The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Just as in the 2013 HDR, a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of education among the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and ii) expected years of schooling for children of school-entry age, which is the total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. Standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) rates.

To ensure as much cross-country comparability as possible, the HDI is based primarily on international data from the United Nations Population Division, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics and the World Bank. As stated in the introduction, the HDI values and ranks in this year's report are not comparable to those in past reports (including the 2013 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2014 report includes recalculated HDIs from 1980 to 2013.

Algeria's HDI value and rank

Algeria's HDI value for 2013 is 0.717— which is in the high human development category—positioning the country at 93 out of 187 countries and territories. Between 1980 and 2013, Algeria's HDI value increased from 0.509 to 0.717, an increase of 40.8 percent or an average annual increase of about 1.04 percent. The rank is shared with Dominica.

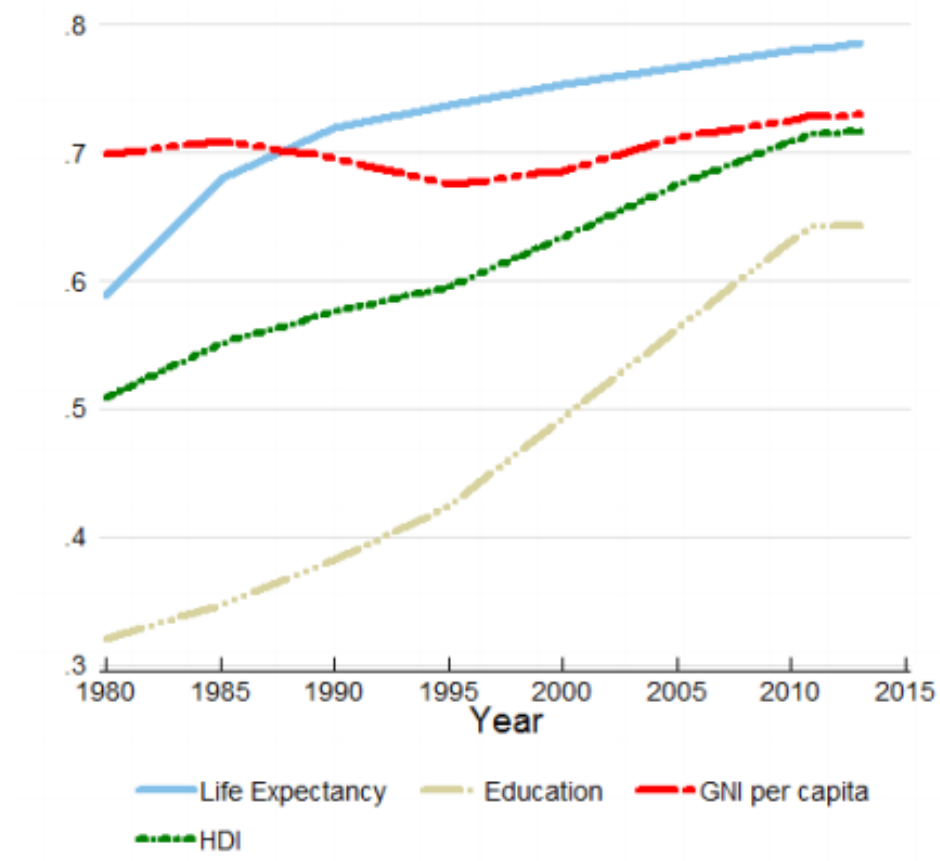
Table A reviews Algeria's progress in each of the HDI indicators. Between 1980 and 2013, Algeria's life expectancy at birth increased by 12.8 years, mean years of schooling increased by 5.8 years and expected years of schooling increased by 4.6 years. Algeria's GNI per capita increased by about 22.9 percent between 1980 and 2013.

Table A: Algeria's HDI trends based on consistent time series data and new goalposts

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1980	58.2	9.4	1.8	10,215	0.509
1985	64.1	9.4	2.6	10,929	0.551
1990	66.8	9.5	3.6	10,004	0.576
1995	67.9	9.6	4.7	8,711	0.595
2000	69.0	10.7	5.9	9,378	0.634
2005	69.9	12.0	6.9	11,134	0.675
2010	70.6	13.6	7.6	12,185	0.709
2011	70.7	14.0	7.6	12,495	0.715
2012	70.9	14.0	7.6	12,356	0.715
2013	71.0	14.0	7.6	12,555	0.717

Figure 1 below shows the contribution of each component index to Algeria's HDI since 1980.

Figure 1: Trends in Algeria's HDI component indices 1980-2013



Courtesy of the United Nations Development Programme, www.undp.org. Used with Permission.
http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/DZA.pdf.



Supporting Question 3

Featured Source

Source B: Staff, article describing the demographics of Algeria, “Algeria’s Large Youth Population Has Few Opportunities” *Voice Of America*, 2011

NOTE: Teachers and students can access this article online by clicking on this link:

<http://www.voanews.com/content/algerias-large-youth-population-has-few-opportunities--118663984/137069.html>