

## EQUATORIAL KUNDU

Equatorial Kundo is a low-income country that has suffered from free-trade exploitation, acute inequalities, and lost its capacity for domestic sustainability. The country is a mostly unregulated economy with untapped natural resources, but no capital markets, a weak judicial system, poorly enforced contracts, and rampant government corruption. Equatorial Kundo faces challenges to improve education equity, healthcare, and the environment to boost long-term economic growth. Child mortality rates are rising and while traditionally high, literacy rates are dropping.

Population clustering is heaviest along the Kundo River Cities in the north and the capital Azunaka. Deforestation and erosion, aggravated by bushfires and the use of firewood as the primary source of fuel, are serious concerns as well as the environmental toll of the mining industry. Mining is a mainstay of the economy, accounting for more than one-fourth of GDP and employing roughly 80% of the population.

## GEOGRAPHY

### *Area*

land: 652,230 sq km

water: 0 sq km



## CLIMATE

Semiarid in northwest; northeast and south has cool, dry season (May to October) and hot, rainy season (November to April)

## NATURAL RESOURCES

antimony, phosphates, coal, manganese, rare earth elements, cobalt, chromate, oil and gas deposits, timber, hydropower, arable land

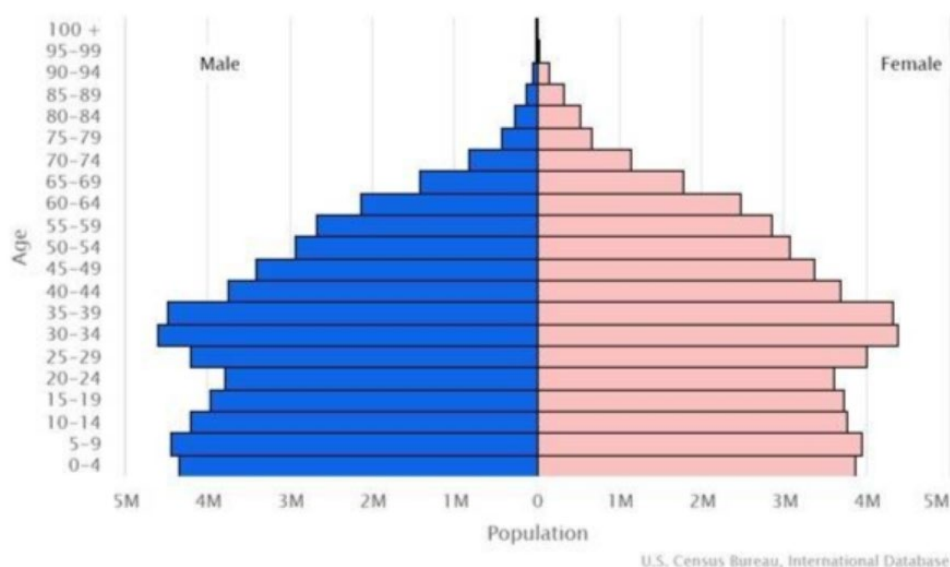
## PEOPLE AND SOCIETY

Population: 242,923,845 (2022 est.)

Population growth rate: 1.95% (2022 est.)

*Median age and population pyramid*

<b>total:</b> <b>31.9 years</b>	<b>male:</b> <b>30.8 years</b>	<b>female:</b> <b>33 years (2020 est.)</b>
------------------------------------	-----------------------------------	---



### *Dependency ratios*

Dependency ratios are a measure of the age structure of a population. They relate the number of individuals that are likely to be economically "dependent" on the support of others. Dependency ratios contrast the ratio of youths (ages 0-14) and the elderly (ages 65+) to the number of those in the working-age group (ages 15-64). Changes in the dependency ratio provide an indication of potential social support requirements resulting from changes in population age structures.

<b>total dependency ratio:</b> <b>45.1</b>	<b>youth dependency ratio:</b> <b>33.6</b>	<b>elderly dependency ratio:</b> <b>11.4</b>	<b>potential support ratio:</b> <b>8.8 (2020 est.)</b>
---	---	---	---

### *Sex ratio*

Total population: 1.01 male(s)/female (2022 est.)

<b>at birth: 1.11 male(s)/female</b>	<b>0-14 years: 1.12 male(s)/female</b>	<b>15-24 years: 1.06 male(s)/female</b>	<b>25-54 years: 1.02 male(s)/female</b>	<b>55-64 years: 0.9 male(s)/fe- male</b>	<b>65 years and over: 0.5 male(s)/female</b>
--	--	---	---	--	--

### *Maternal mortality ratio*

43 deaths/100,000 live births (2017 est.)

### *Infant mortality rate*

<b>total: 14.75 deaths/1,000 live births</b>	<b>male: 15.09 deaths/1,000 live births</b>	<b>female: 14.38 deaths/1,000 live births (2022 est.)</b>
--	---	---

### *Life expectancy at birth*

<b>total population: 75.52 years</b>	<b>male: 72.95 years</b>	<b>female: 78.37 years (2022 est.)</b>
--------------------------------------	--------------------------	--

### *Total fertility rate*

2.05 children born/woman (2022 est.)

### *Contraceptive prevalence rate*

76.5% (2018/19)

### *Children under the age of 5 years underweight*

13.4% (2017)

### *Education expenditures*

5.1% of GDP (2020 est.)

### *Literacy*

*defined as: age 15 and over who can read and write*

<b>total population: 81.5%</b>	<b>male: 85%</b>	<b>female: 78.2% (2018)</b>
--------------------------------	------------------	-----------------------------

## ECONOMY

Low-income; natural resource rich; extreme poverty; return of political stability has helped growth; sharp tax revenue drop due to COVID-19; leading cobalt producer; environmentally fragile

Real GDP (purchasing power parity)	Real GDP growth rate	Real GDP per capita	GDP (official exchange rate)	Inflation rate
\$41.82 billion (2020 est.)	4.2% (2017 est.)	\$1,500 (2020 est.)	\$13.964 billion (2019 est.)	5.6% (2019 est.)

*note: data are in 2017 dollars*

*Population below poverty line*

70.7% (2012 est.)

*Household income or consumption by percentage share*

lowest 10%: 2.2%

highest 10%: 34.7% (2010 est.)

*Exports - partners*

United States 19%, France 18%, United Arab Emirates 7%, China 6%, Japan 6%, Germany 5%, India 5% (2019)

*Exports*

\$4.09 billion (2019 est.) *note: data are in current year dollars*

*Imports - partners*

China 24%, France 11%, United Arab Emirates 9%, India 7%, South Africa 5% (2019)

*Imports*

\$4.7 billion (2019 est.) *note: data are in current year dollars*

## ENVIRONMENT AND ENERGY

*Environment - current issues*

water pollution; inadequate supplies of potable water; water scarcity and periodic drought in the north; soil erosion; desertification; deforestation; loss of biodiversity

*Electrification*

total population: 47% (2019)	urban areas: 71% (2019)	rural areas: 35% (2019)
------------------------------	-------------------------	-------------------------

### Electricity

<b>installed generating capacity: 4.354 million kW (2020 est.)</b>	<b>consumption: 9,682,060,000 kWh (2019 est.)</b>	<b>exports: 0 kWh (2019 est.)</b>	<b>imports: 0 kWh (2019 est.)</b>	<b>transmission/distribution losses: 4.599 billion kWh (2019 est.)</b>
--	---	-----------------------------------	-----------------------------------	--

### Electricity generation sources

fossil fuels: 43.5% of total installed capacity (2020 est.)

nuclear: 0% of total installed capacity (2020 est.)

solar: 0.1% of total installed capacity (2020 est.)

wind: 0% of total installed capacity (2020 est.)

hydroelectricity: 55.5% of total installed capacity (2020 est.)

tide and wave: 0% of total installed capacity (2020 est.)

geothermal: 0% of total installed capacity (2020 est.)

biomass and waste: 0.9% of total installed capacity (2020 est.)

### Energy consumption per capita

8.047 million Btu/person (2019 est.)

### Petroleum

total petroleum production: 66,900 bbl/day (2021 est.)

refined petroleum consumption: 137,700 bbl/day (2019 est.)

crude oil and lease condensate exports: 12,900 barrels/day (2018 est.)

crude oil and lease condensate imports: 9,000 barrels/day (2018 est.)

crude oil estimated reserves: 5 billion barrels (2021 est.)

<b>Refined petroleum products - production</b>	<b>Refined petroleum products - exports</b>	<b>Refined petroleum products - imports</b>
94,830 bbl/day (2015 est.)	8,541 bbl/day (2015 est.)	24,340 bbl/day (2015 est.)

### Natural gas

production: 0 cubic meters (2021 est.)

consumption: 0 cubic meters (2021 est.)

exports: 0 cubic meters (2021 est.)

imports: 0 cubic meters (2021 est.)

proven reserves: 84.95 billion cubic meters (2021 est.)

*Carbon dioxide emissions*

17.319 million metric tonnes of CO<sub>2</sub> (2019 est.)

from coal and metallurgical coke: 0 metric tonnes of CO<sub>2</sub> (2019 est.)

from petroleum and other liquids: 17.319 million metric tonnes of CO<sub>2</sub> (2019 est.)

from consumed natural gas: 0 metric tonnes of CO<sub>2</sub> (2019 est.)

## SCENARIO: RESPONSIBLE DIGITAL TRANSFORMATION OF EQUATORIAL KUNDU

The President has said that the way out of the socio-economic crisis is through an improved balance of trade AND a more informed foundation for encouraging sustainable domestic markets. With an eye on climate change and the repositioning of global trade imperatives, Equatorial Kundu seeks assistance from a wealthy impact investor who grew up in the country herself, to support solutions through digital transformation (DT). She made her money through platform economies and she knows from personal experience how some win and some lose with digital transformation. Having worked with big tech companies she is not willing to commit to a large monetary investment in digital transformation without some critical evaluation of certain conditions. In particular she has developed some circumspection about digital ethics, the (in) effectiveness of self-regulatory frameworks for Artificial Intelligence (AI) and big data usage.

The impact investor calls a meeting of key stakeholders so that she can lay out a strategy for digital transformation that is responsible in terms of its commitment to social, environmental as well as economic infrastructural development.

The following parties attend the meeting:

- ★ Several big tech companies from the US
- ★ Local and international banks
- ★ Local corporations
- ★ International financial organisations
- ★ Civil society groups from the nation and community leaders
- ★ Government representatives from the national treasury, the reserve bank, the ministry for trade and development, and the Ministry of the Environment
- ★ The Chamber of Commerce from the nation
- ★ Several young start-ups from the nation
- ★ media representatives from Equatorial Kundu
- ★ Local and international NGOs with interests in women, young people, environmental protection
- ★ Research centres & universities from the surrounding countries

The investor sets out a challenge: She will award a 5-year contract to a consortium of interests who can design a digital transformation strategy that is 'not like all those models that big consultancy organizations sell to small businesses and countries.' She wants 'responsible' digital transformation, and along with the broad economic benefits DT offers, she requires that at least two of the [Sustainable Development Goals \(SDGs\)](#) will be a specific focus and achievable for the strategy. In addition, she wants the bidder to be mindful of:

- Unsustainable dependency relationships created by DT
- The relationship between AI technology and climate change
- The sensitive use of personal data and data monetization in the context of digital economy
- The risk of techno-colonialism; and
- The North/South World digital divide.

---

## DIGITAL TRANSFORMATION SCENARIOS IN EQUATORIAL KUNDU

The impact investor announces that one of the three specific digital transformation settings should be worked-up in each bid:

- a. The enhancement of general economic policy within government with a special interest in improved trade bargaining and sustainable domestic markets. In the past, the nation has been a major exporter of cobalt and forest products, while depleting the natural resources of its domestic markets in these areas.
- b. The enhancement of the capital city, which has 'smart city' urban development aspirations. The special interest should be equitable urban development, which requires a responsible strategy for digital transformation. So far, the city's urban development has been plagued with data inequality and discriminatory availability of public services. There have been calls for better balancing between private and public actors in the management of transport; taking into account social inequality and data privacy; surveillance technologies; data bias between rich and poor neighbourhoods and implementation of AI such as predictive policing, climate change, etc.
- c. The enhancement of a struggling consumer-based business organizations (such as an indigenous business collective, or a start-up in the early stages of development) that needs a national DT strategy to be implemented in order to innovate in a manner that complements sustainable national economic goals as well as business profitability.

---

## TASK AND STEPS TO BE TAKEN

Select from the list above and put together a stakeholder team to create a winning bid. As a group, decide on one of the DT settings you want to embed your strategy. The choice of SDGs and the DT focus is up to your team. The following steps may help you to develop a sustainable DT strategy:

1. Discuss the country's situation and state what is known.
  - Identify the relevant circumstances regarding the chosen setting and analyze how they are interlinked.
2. Choose your DT Scenario and the SDGs you will address in your bid.
3. Brainstorm possible approaches where the use of DT comes in to promote and improve the social and economic situation of the country in response to your elected scenario and SDGs.
4. Identify what is still open/unknown and derive what you need to research.
  - Assign each group member a role and responsibility in terms of research tasks.
5. Based on what you have elaborated, develop a sustainable DT strategy that considers the aspects stated in the scenario.
  - Use the template "instruction on the production of a case cast" below.



## INSTRUCTION ON THE PRODUCTION OF A CASE CAST

One part of your assignment is to present your findings from this task in a short video pitch of 2.5 minutes (preferably screencast).

Further, we ask you to submit a proposal to make transparent the elements of the bid, how you'll address the solution, and your bid's expected impacts.

Format: Format: 10 - 12 slides (ppt.) or 3 - 4 pages (word, single-spaced, max. 12 pt.) without cover sheet/title slide and appendix.

The following instructions may help you to develop your pitch and proposal:

Aspects to be addressed in your video pitch	Additional information
<p><b>How do you want to address the issues described in the scenario?</b></p> <p><b>Why did you choose this approach?</b></p>	<ul style="list-style-type: none"> <li>- Shortly outline the problem by listing the factors you identified in the scenario</li> <li>- Explain your solution in 1-2 sentences</li> </ul>
<p><b>How do you want to achieve this?</b></p>	<ul style="list-style-type: none"> <li>- Describe your strategy, your team and stakeholders involved</li> <li>- Describe how it considers the “responsible” aspect</li> </ul>
<p><b>What does the success of your strategy look like in a 1-3-10 years?</b></p>	<ul style="list-style-type: none"> <li>- Outline the overall success</li> <li>- The success for the stakeholder subgroups</li> <li>- Tech/business model improvements</li> <li>- Broader impacts</li> </ul>

Aspects to be addressed in your proposal	Additional information
<b>What does your proposal include?</b>	<ul style="list-style-type: none"> <li>- Shortly outline the problem by listing the factors you identified in the scenario</li> <li>- Explain, how different issues are interlinked and what solution you as a group propose</li> </ul>
<b>Who and what is included?</b>	<ul style="list-style-type: none"> <li>- Explain who and what is included and why</li> <li>- Explain who and what isn't included and why</li> <li>- Describe your plan to address gaps</li> </ul>
<b>How do you plan to implement it?</b>	<p>Develop a rough project plan including:</p> <ul style="list-style-type: none"> <li>- Resource analysis</li> <li>- Stakeholder analysis</li> <li>- Time plan</li> </ul>
<b>What are expected outcomes and Impacts?</b>	<ul style="list-style-type: none"> <li>- In 1-3-10 years</li> <li>- Success metrics</li> <li>- Sustainability plan – expected obstacles and management plan</li> <li>- Critical reflection</li> </ul>
<b>Appendix</b>	<p>Includes</p> <ul style="list-style-type: none"> <li>- A complete list of references (<a href="#">APA Style guide-lines</a>)</li> <li>- List of each group member's contribution (table or bullets)</li> </ul>