

RESOURCE BOOKLET: TAMING THE NILE: THE ASWAN HIGH DAM

Read all the resources (A to I) before you start the question

Resources A to I are about Egypt and the Aswan High Dam. Geographic concepts used in this question. Environment: the natural and cultural surroundings of a place. Change: how something becomes different over time. Interaction: how natural and cultural processes affect each other. Perspectives: the different views people hold about an issue, because their values, needs and experiences differ. Sustainability: meeting the needs of people now without harming the ability of future people to meet theirs. Processes: the sequence of actions or events that shape an environment.

Resource A: Where is Egypt?

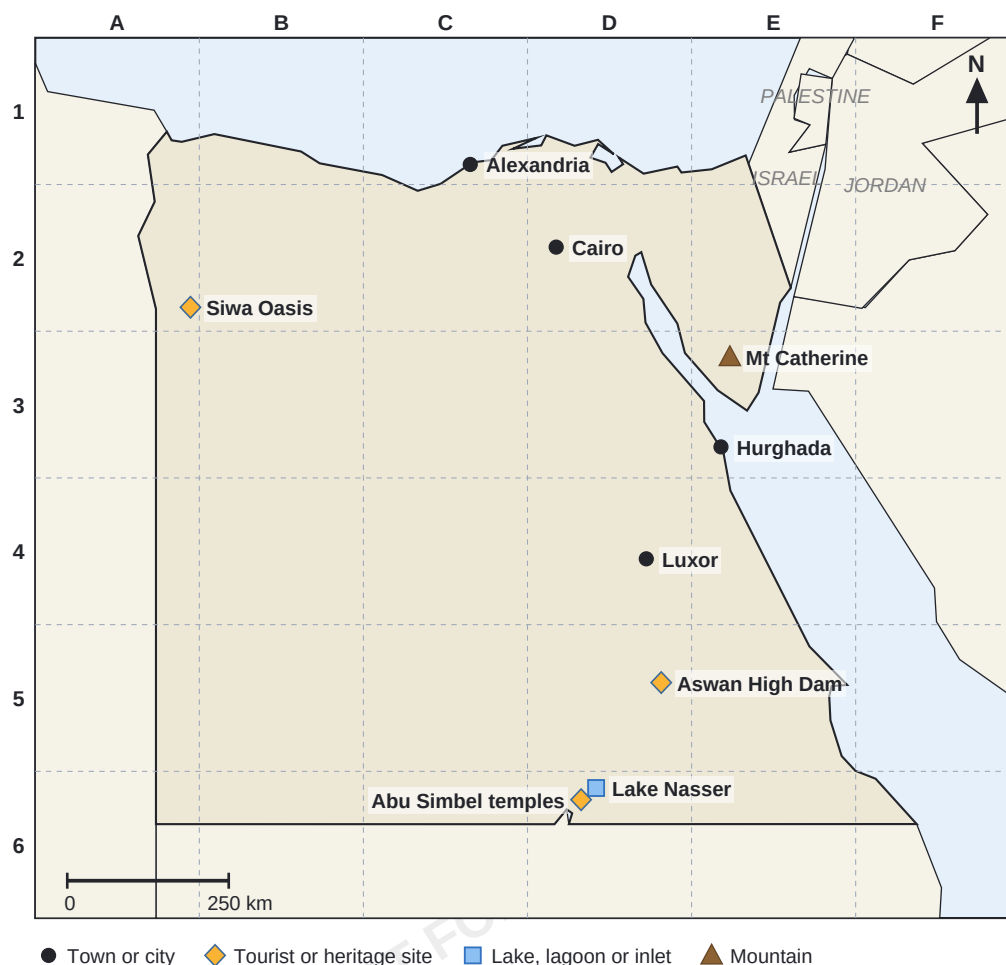
Egypt is a transcontinental country: most of it is in the north-east corner of Africa, and the Sinai Peninsula is in the south-west corner of Asia. The Mediterranean Sea is to the north and the Red Sea is to the east. It lies between about 22.0°N and 31.7°N latitude and 24.7°E and 36.9°E longitude, and its land area is about 995,450 km². Cairo is the capital, about 16,600 km from Auckland in a straight line.



Resource A: Egypt in north-east Africa (sketch map)

Source: Wikipedia: Egypt. Coordinates: Wikipedia / GeoNames. Land area: World Bank, World Development Indicators (CC BY 4.0), retrieved 2026-10-29. Coastlines: Natural Earth 1:50m (public domain), simplified by TPH. Distance calculated by TPH from latitude and longitude.

Resource B: Features of Egypt



Resource B: Map of Egypt (sketch map; grid squares A to F across and 1 to 6 down)

Source: TPH sketch map. Coastlines: Natural Earth 1:50m (public domain), simplified. Positions of features: Wikipedia / GeoNames coordinates, approximate. The River Nile is not drawn.

Resource C: The natural environment

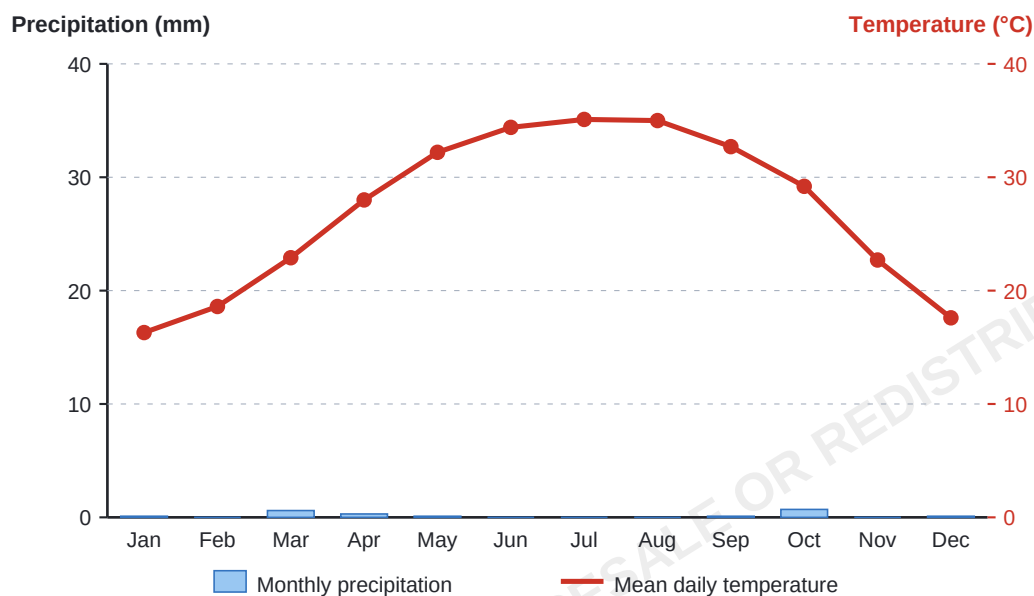
Egypt has four main physical regions: the Nile Valley and Delta, the Western Desert, the Eastern Desert and the Sinai Peninsula. The Western Desert lies between the Nile and the Libyan border and the Eastern Desert between the Nile and the Red Sea. The country's highest point is Mount Catherine, at 2,642 m above sea level, and the Qattara Depression in the Western Desert is 133 m below sea level.

Almost no rain falls: Aswan receives only 2.0 mm in a year (Resource D). The Nile, which flows north through the country, is the longest river in the world at 7,088 km. The Blue Nile, which begins near Lake Tana in Ethiopia, carries more than twice the water of the White Nile, so the river's flow in Egypt depends on rain that falls far to the south.

Source: Wikipedia: Geography of Egypt; Nile.

Resource D: Climate of Aswan

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Temp (°C)	16.3	18.6	22.9	28.0	32.2	34.4	35.1	35.0	32.7	29.2	22.7	17.6	27.1
Rain (mm)	0.1	0.0	0.6	0.3	0.1	0.0	0.0	0.0	0.1	0.7	0.0	0.1	2.0



Resource D: Climate graph for Aswan

Source: Climate table for Aswan on Wikipedia (1991–2020 normals). Yearly values are the mean of the monthly temperatures and the total of the monthly rainfall.

Resource E: Living with the Nile

Egypt's agriculture depends entirely on irrigation. For thousands of years the Nile's annual flood in late summer left silt on the land beside the river, so the valley and the delta were ideal for farming. But the flood varied: high-water years could destroy the whole crop, while low-water years could create widespread drought and famine. About 95% of the country's people live along the banks of the Nile and in the Nile Delta, and along the Suez Canal. Cotton was Egypt's economically important crop. Agricultural land is only 4.2% of Egypt's land area.

Source: Wikipedia: Aswan High Dam; Demographics of Egypt.; World Bank, World Development Indicators (CC BY 4.0), retrieved 2026-10-29

Question One (24 marks)

(a) Use Resources A to D to describe, in detail, the location and geographic environment of Egypt.

In your answer refer to at least TWO grid squares on the map in Resource B and to data from the climate graph or table in Resource D.

[6 marks]

(b) Explain ONE natural challenge and ONE cultural challenge that Egypt faced before 1960 which led to the decision to build the Aswan High Dam.

Use evidence from the resource booklet. Natural challenge:

Cultural challenge:

[6 marks]

THE WORKED ANSWERS TO PARTS (a) AND (b)

Question 1 (24 marks) [Egypt]

(a) Use Resources A to D to describe, in detail, the location and geographic environment of Egypt. In your answer refer to at least TWO grid squares on the map in Resource B and to data from the climate graph or table in Resource D.

(a) Answer: Location: Egypt is in the north-east corner of Africa (and its Sinai Peninsula is in south-west Asia), between about 22.0°N and 31.7°N and 24.7°E and 36.9°E, about 16,600 km from Auckland, with the Mediterranean Sea to the north and the Red Sea to the east (Resource A). Cairo is in grid square D2 and the Aswan High Dam is in D5 (Resource B). **Environment:** most of Egypt is desert (the Western and Eastern Deserts); the Nile Valley and Delta and the Sinai Peninsula are the other regions; Mount Catherine is the highest point at 2,642 m (Resource C). The climate is hot and extremely dry: at Aswan the mean temperature ranges from 16.3°C in January to 35.1°C in July, and the total rainfall is only 2.0 mm a year (Resource D).

- Achievement: describes the location or the environment, with some detail, e.g. Egypt is in the north-east of Africa and is mostly desert with the Nile flowing through it.
- Merit: describes both location and environment in detail, using the resources: position and neighbouring seas, a grid reference or distance, the four regions, and climate figures (hottest and coolest month, annual rainfall).
- Excellence: links position to environment, e.g. a location in the subtropics, far from the rain-bearing areas, explains the desert and why the Nile, which starts in rainier highlands to the south, is the only large source of water; uses the regional context (Africa, Asia, the Mediterranean and the Red Sea) and several resources.
- Marking (TPH): 3 marks for the location (position, neighbours, direction or distance, a correct grid reference) and 3 marks for the environment (landforms or regions, climate with figures, the Nile).

KEY TAKEAWAY

Describe a place in two steps: where it is (position, direction, distance, grid square) and what it is like (landforms, climate with figures).

(b) Explain ONE natural challenge and ONE cultural challenge that Egypt faced before 1960 which led to the decision to build the Aswan High Dam. Use evidence from the resource booklet. Natural challenge: Cultural challenge:

(b) Answer: Natural challenge: the Nile's flood was unreliable and the country is a desert. Egypt's farming depends entirely on irrigation from the Nile (Resource E). The annual flood varied: in a high-water year the flood could destroy the whole crop, and in a low-water year there was drought and famine. The Aswan Low Dam of 1902 was too small to control this, because water still passed down the valley, so floods and droughts continued. Aswan gets only 2.0 mm of rain a year (Resource D), so rain could not replace the river. **Cultural challenge:** a fast-growing population on a narrow strip of land. Egypt's population grew from 26.9 million in 1960 to 34.6 million in 1970 and 109.3 million in 2020 (Resource F), and about 95% of people live along the Nile and in the Delta (Resource E), so more people needed food, jobs and electricity from the same small area of farmland (only 4.2% of the land is agricultural). The government wanted to protect the economically important cotton crop and

to industrialise, which needed controlled water and electricity.

- Natural challenge (3 marks): 1 mark for naming a valid natural challenge (the variable Nile flood, drought or aridity), 1 mark for explaining how it caused a problem (crop loss, famine), 1 mark for evidence from the resources (Resource D rainfall; Resource E flood information).
- Cultural challenge (3 marks): 1 mark for naming a valid cultural challenge (population growth, demand for electricity or food, a cotton-based economy, industrialisation), 1 mark for explaining why it needed a dam, 1 mark for evidence (population figures in Resource F, the 95% figure or agricultural land share in Resource E).
- Do not mix them: a natural challenge is caused by nature (flood, climate, desert); a cultural challenge is caused by people (population, politics, economy). Do not describe the impacts of the dam: part (b) asks for challenges BEFORE the dam. Merit and Excellence answers explain each challenge in detail, and link two connected factors, e.g. low flood plus a growing population leads to famine risk.
- Natural challenge: Natural challenge: the Nile's flood was unreliable and the country is a desert. Egypt's farming depends entirely on irrigation from the Nile (Resource E). The annual flood varied: in a high-water year the flood could destroy the whole crop, and in a low-water year there was drought and famine. The Aswan Low Dam of 1902 was too small to control this, because water still passed down the valley, so floods and droughts continued. Aswan gets only 2.0 mm of rain a year (Resource D), so rain could not replace the river.
- Cultural challenge: Cultural challenge: a fast-growing population on a narrow strip of land. Egypt's population grew from 26.9 million in 1960 to 34.6 million in 1970 and 109.3 million in 2020 (Resource F), and about 95% of people live along the Nile and in the Delta (Resource E), so more people needed food, jobs and electricity from the same small area of farmland (only 4.2% of the land is agricultural). The government wanted to protect the economically important cotton crop and to industrialise, which needed controlled water and electricity.

KEY TAKEAWAY

A natural challenge comes from nature (flood, climate, land) and a cultural challenge comes from people (population, economy, decisions): explain each with evidence.

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