

# Disappearing Delta Practice Test And Answer Key

## Disappearing Delta

The Nile delta's fertile land eroded along the Mediterranean coast of Egypt is highly increased, 100 metres per year is eroded in some parts. In the past, sediment brought to the delta by River Nile is replaced in the place, where the land is scoured away from the coastline by the Mediterranean sea currents. But, this is no longer the case.

All the sediment which used to flow down the river is virtually blocked by the two large dams at Aswan in the south of Egypt. So, it was blamed by the people for the loss of the delta land till now. The Nile flowed freely before the dams were built, which carries the large amount of sediment north from the interior of Africa to be deposited on the Nile delta. This happened for 7000 years, Atlast it covered a region of over 22,000 square kilometres with the fertile slit's layer. In the Delta Region, new, nutrient-rich soil is brought down by the Annual flooding. It replaces what had been scoured away by the sea and provides the fertilizers for Egypt's richest food growing area. The problem occurred when the Aswan dam was built in the 20th Century for the purpose of providing electricity and irrigation and protecting the large population centre of Cairo and to prevent the floods from the surrounding areas. Most of the sediments with its natural fertilizers instead of passing down to the delta, accumulated up above the dam in the southern, upstream half of Lake Nasser.

However, the story is not finished. The silt and sand picked up by the sediment-free water which emerged from the Aswan Dams and eroded the river bed as well as banks on the 800-kilometre trip to Cairo. The water samples are taken in Cairo before the river enters the delta by Daniel Jean Stanley of the Smithsonian Institute, which indicates that sometimes rivers pick up more than 850 grams of sediment per cubic metre of water. About half of what it carried before the dams were constructed. Stanley in Marine Geology says that "I'm ashamed to say that the significance of this didn't strike me until after I had read 50 or 60 studies". A lot of sediment is still entering into the delta. But, no sediments come out into the Mediterranean to restore the coastline. Therefore, the sediment must be stuck on the delta itself.

Most of the Nile water is bypassed into more than 10,000 kilometres of irrigation canals and what directly reaches the sea through the rivers in the delts is only a small proportion. Stanley explains that water in the irrigation canals is either still or moves slowly so it cannot carry the sediment. The sediment went down to the bottom of the canal and the farmers added it to the fields or expelled it with the water into the four large freshwater lagoons which are situated near the outer edges of the delta. So, what reaches to the coastline is very little to replace what Mediterranean currents wash away.

Most of Egypt's food supply depended on the farms located on the delta plains, fishing and aquaculture in the lagoons. Stanley says, "Pollutants are building up faster and faster". It is because the sediments which come to rest in the fields and lagoons are combined with

industrial, municipal and agricultural waste from the region of Cairo, which is considered as the home to more than 40 million people.

Fredric Siegal of George Washington University says, "In Manzalah Lagoon, for example, the increase in mercury, lead, copper and zinc coincided with the building of the High Dam at Aswan, the availability of cheap electricity, and the development of major power-based industries". He agreed to it based on his investigations of sediment from the delta lagoons. From that time, the significant increase in the concentration of mercury is noted. With that, leaded fuels and other industrial sources also found to be dramatically increased. It can badly affect the productivity of fishing and farming as it enters into the food chain. One more problem is that agricultural wastes include fertilizers which increases the plant growth in the lagoons and disturbed the ecology of the area, with serious consequences on the fishing industry.

According to Siegel, international environmental organisations are starting to invest closer to the region, the partial reason being the erosion problems and pollution of the Nile. But, majorly, they fear the effect this situation will bring on the whole Mediterranean coastal ecosystem. It cannot be solved easily. As an immediate solution, Stanley believes that creating the artificial flood to drive out the delta waterways, similar to the natural floods did before the dams were built. He says that long term alternative processes such as desalination could increase the amount of water available. Stanley said that in his view, Egypt should devise a way to have more water running through the river and the delta". It is difficult to accomplish in a desert region with a rapidly growing population.

## Disappearing Delta IELTS Reading Questions

### Questions 1 - 5

Answer the questions below.

Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer.

1. Where are the two large dams located which block the sediment-flow ?
2. When was the Aswan dam built ?
3. Who took the water sample in Cairo ?
4. What sinks into the bottom of the Delta ?
5. Who began to pay closer attention to the delta region ?

### Questions 6 - 10

Choose the correct letter **a, b, c or d**.

6. How many years has the Nile flowed freely ?
  - a. 9000 years
  - b. 7500 years

- c. 7000 years
  - d. 700 years
7. Who adds the sediment into the fields ?
- a. Agricultural workers
  - b. Farmers
  - c. Stanley
  - d. Siegel
8. Where did Fredric Siegal investigate the sediment ?
- a. Delta lagoons
  - b. Nile delta
  - c. Cairo
  - d. Southern Egypt
9. What would be the immediate solution to resolve the problems in the Nile, according to Stanley ?
- a. Stimulating natural floods
  - b. Desalination
  - c. Creating artificial floods
  - d. Creating artificial tsunami
6. Which is building up faster and faster, according to Stanley ?
- a. Pollution
  - b. Pollutants
  - c. Problems
  - d. Sediment

## Questions 11 - 14

Complete the notes below.

Write **NO MORE THAN TWO WORDS AND/ OR A NUMBER** from the passage for each answer.

### Problems and Pollutants

- The farms located on the 11\_\_\_\_\_, fishing and aquaculture in the 12\_\_\_\_\_ which serves most of the Egypt's food supply
- Concentration of the 13\_\_\_\_\_ is significantly increased
- Plant growth in the lagoons is increased by 14\_\_\_\_\_ wastes

## Disappearing Delta IELTS Reading Answers Key

Identify the mistakes in your answers with *disappearing delta reading answers with explanation*.

**(Note: The text in italics is from the reading passage and shows the location from where the answer is taken or inferred. The text in the regular font explains the answer in detail.)**

1. Aswan

**Explanation:** *All the sediment which used to flow down the river is virtually blocked by the two large dams at Aswan in the south of Egypt.*

2. 20th Century

**Explanation:** *The problem occurred when the Aswan dam was built in the 20th Century for the purpose of providing electricity and irrigation and protecting the large population centre of Cairo and to prevent the floods from the surrounding areas.*

1. Daniel Jean Stanley

**Explanation:** *The water samples are taken in Cairo before the river enters the delta by Daniel Jean Stanley of the Smithsonian Institute, which indicates that sometimes rivers pick up more than 850 grams of sediment per cubic metre of water.*

2. Sediment

**Explanation:** *The sediment went down to the bottom of the canal and the farmers added it to the fields or expelled it with the water into the four large freshwater lagoons which are situated near the outer edges of the delta.*

3. International environmental organisations

**Explanation:** *According to Siegel, international environmental organisations are starting to invest closer to the region, the partial reason being the erosion problems and pollution of the Nile.*

4. b. 7000 years

**Explanation:** *The Nile flowed freely before the dams were built, which carries the large amount of sediment north from the interior of Africa to be deposited on the Nile delta. This happened for 7000 years*

5. b. Farmers

**Explanation:** *The sediment went down to the bottom of the canal and the farmers added it to the fields or expelled it with the water into the four large freshwater lagoons which are situated near the outer edges of the delta*

6. a. Delta lagoons

**Explanation:** Fredric Siegal of George Washington University says, "In Manzalah Lagoon, for example, the increase in mercury, lead, copper and zinc coincided with the building of the High Dam at Aswan, the availability of cheap electricity, and the development of major power-based industries". He agreed to it based on his investigations of sediment from the delta lagoons.

7. c. Creating Artificial Floods

**Explanation:** As an immediate solution, Stanley believes that creating the artificial flood to drive out the delta waterways, similar to the natural floods did before the dams were built.

8. b. Pollutants

**Explanation:** Stanley says, "Pollutants are building up faster and faster".

9. Delta plains

10. Lagoons

**Explanation:** Most of Egypt's food supply depended on the farms located on the delta plains, fishing and aquaculture in the lagoons.

11. Mercury

**Explanation:** From that time, the significant increase in the concentration of mercury is noted.

12. Agricultural

**Explanation:** One more problem is that agricultural wastes include fertilizers which increases the plant growth in the lagoons and disturbed the ecology of the area