

## INFLUENCE OF GREAT HYDRAULIC WORKS UPON NATURE AND MANKIND

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**Rezumat.** *Marile uvraje hidraulice reprezintă modificări importante ale mediului înconjurător și influențează atât oamenii (în timpul construcției și al exploatării) cât și mediul natural. Lucrarea de față compară influențele a două asemenea uvraje Canalul Suez și Canalul Panama. Ambele lucrări sunt relative recente, au același scop (favorizarea comerțului mondial pe direcția Est-West) și au fost inițiate de Ferdinand Lesseps. Posibilitatea execuțiilor a fost examinată cu mult timp înainte de începerea lucrărilor. Ambele uvraje sunt importante surse de venituri și au creat lungi dispute între marile puteri. Creșterea prognozată a nivelului oceanic planetar afectează diferit cele două construcții.*

**Abstract.** *The great hydraulic works represent heavy environmental modifications and influence both humans (during the construction and the utilization) and nature. The present paper compares these influences for two such works the Suez Canal and the Panama Canal. Both are relatively recent, have the same purpose (the increase of the East-West trade) and were initiated by Ferdinand de Lesseps. The possibility of realization was analyzed long time before the beginning of the work. Both works are sources of huge incomes and created endless disputes between the great powers. The forecast level increase of the planetary ocean will affect differently these works.*

**Keywords:** Suez Canal, Panama Canal, hydraulic works, history of Suez and Panama canals

### 1. Introduction

The great hydraulic works represent heavy environmental modifications and influence both the humans (during the construction and the utilization) and the neighboring ecosystems. The present paper compares these influences for two very important hydraulic works the Suez Canal and the Panama Canal. For the Suez Canal there are archeological proves regarding the accomplishment of such a waterway during the 12<sup>th</sup> dynasty of Ancient Egypt. For realizing a waterway through the Panama isthmus, the first proposal was made by Charles V, head of Holy Roman Empire and king of Spain [1]. Since opening, these two canals became keys ways for international maritime trade in the east-west direction. Both are exceptional achievements and a source of great revenues. In the past, the incomes created acute conflicts between the great powers. The realization of the canals required hard work and was a tremendous tragedy for local and foreign workers (about 220,000 deceases for Panama and several thousands for Suez). Sea level rise, as result of global warming, will affect differently this two works.

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