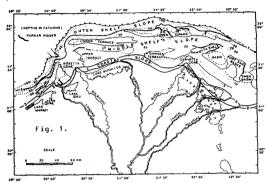
Geological and Physical Aspects of the Nile Delta with reference to the natural and man-made hazards Mahmoud Kh. EL-SAYED

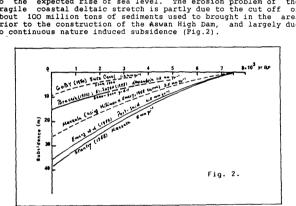
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The Nile delta belongs to a group of deltaic coastlines that are largely shaped by waves. It represents one of the world's largest deltas with most conspicuous physiographic features (Fig.1).

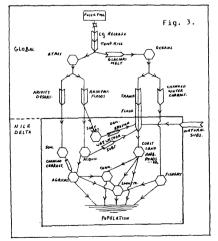


The geological history of the delta started in the Late Miocene; the contemporary delta is however much modern (Late Plicocene). Tectonics and sediment input influenced the formation and development of this area. The Nile cone was resulted from the accumulation of turbidites offshore.

The lower Nile delta host several axes of socio-economic development. However, this area has long experienced continuous erosional problems, and presently is regarded as most vulnerable to the expected rise of sea level. The erosion problem of the fragile coastal deltaic stretch is partly due to the cut off of about 100 million tons of sediments used to brought in the area prior to the construction of the Aswan High Dam, and largely due to continuous nature induced subsidence (Fig.2).



A conceptual model is provided to illustrate the variables forces and their different interaction on the coastal deltaic Nile area (Fig. 3).



This paper presents a synthesis of geological, geomorphological, geophysical and hydrodynamic aspects of the Nile delta and aimed to discuss the natural and man-made hazards regarding the erosion and subsidence of this area.

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