

Geology, Geography, the Environment

...and other stuff you need to know
about Egypt's human ecology





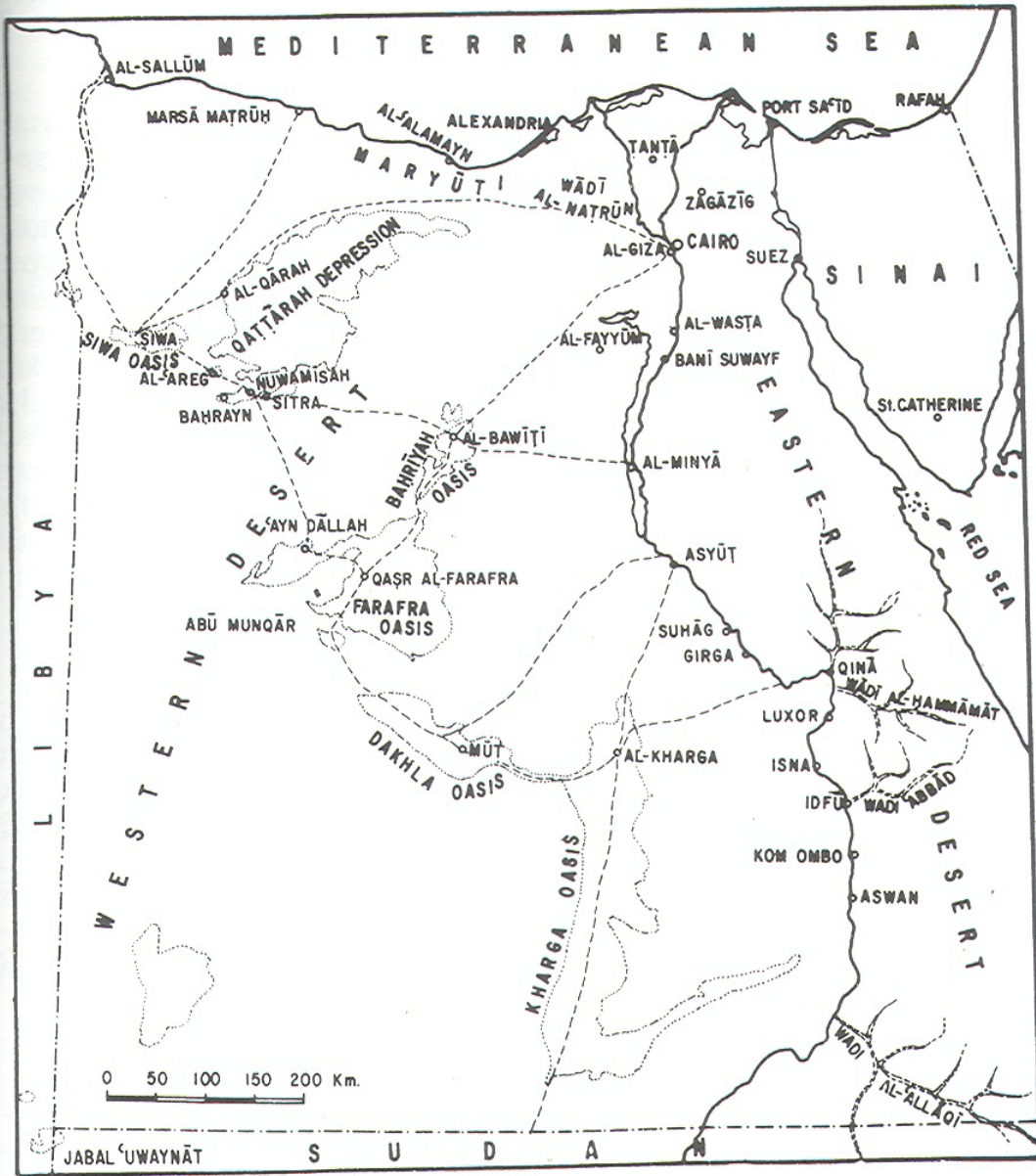
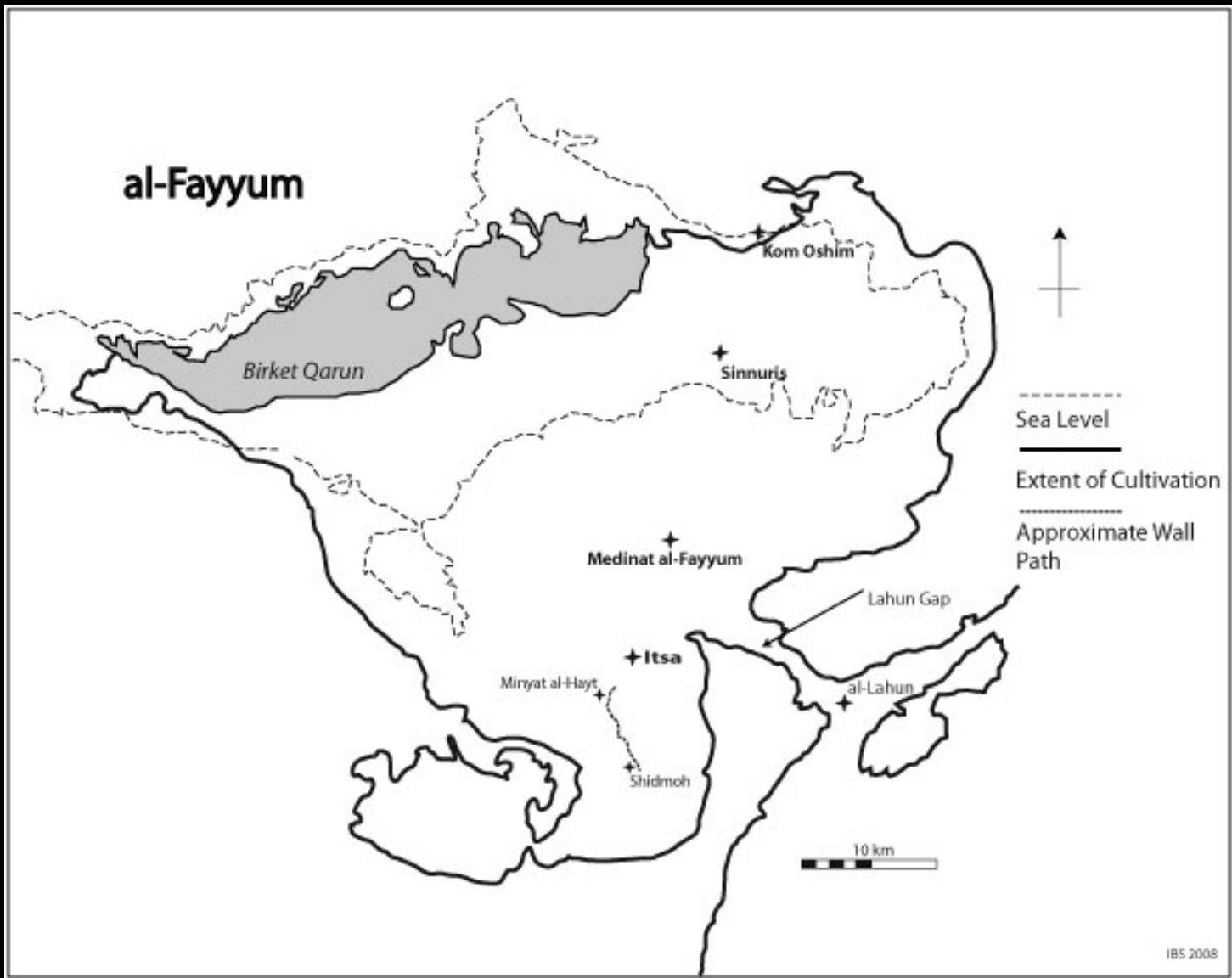


Fig. 4. A map of the Oases

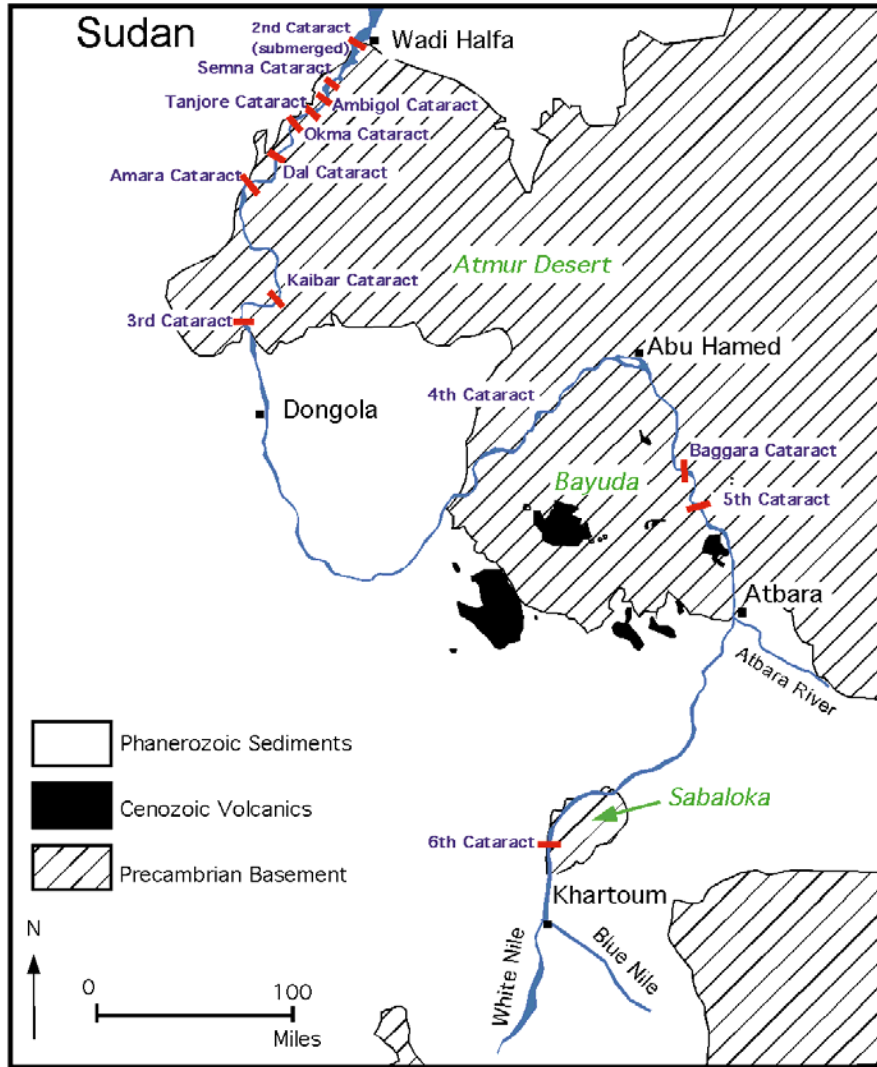


So let me say just a word or two about – The Nile.



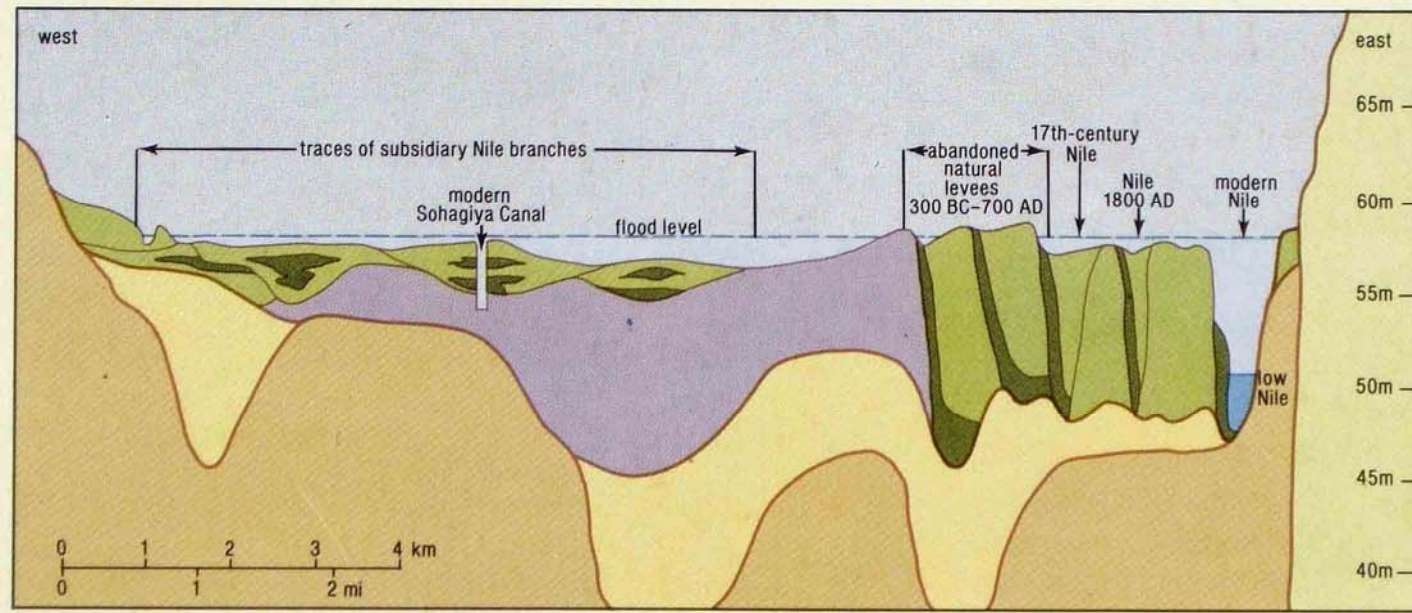
Egypt

Sudan







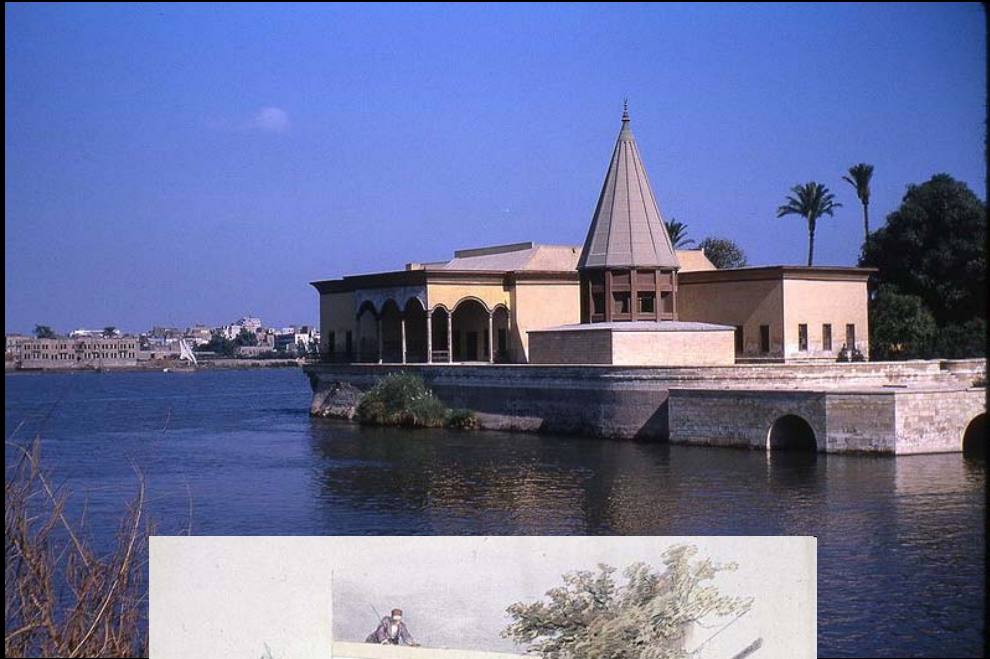


Generalized cross section through the Nile valley between Sohag and Asyut (after Butzer). In historical times the main river has migrated eastward leaving traces of its earlier raised banks. The vertical scale is greatly exaggerated.

- limestone
- sands and gravels > 15,000 BC
- sands 15,000-3 000 BC
- silts and gravels 3 000-300 BC
- silts 300 BC-present
- gravels 300 BC-present



**Nile mosaic of Palestrina –
1st c. BCE**

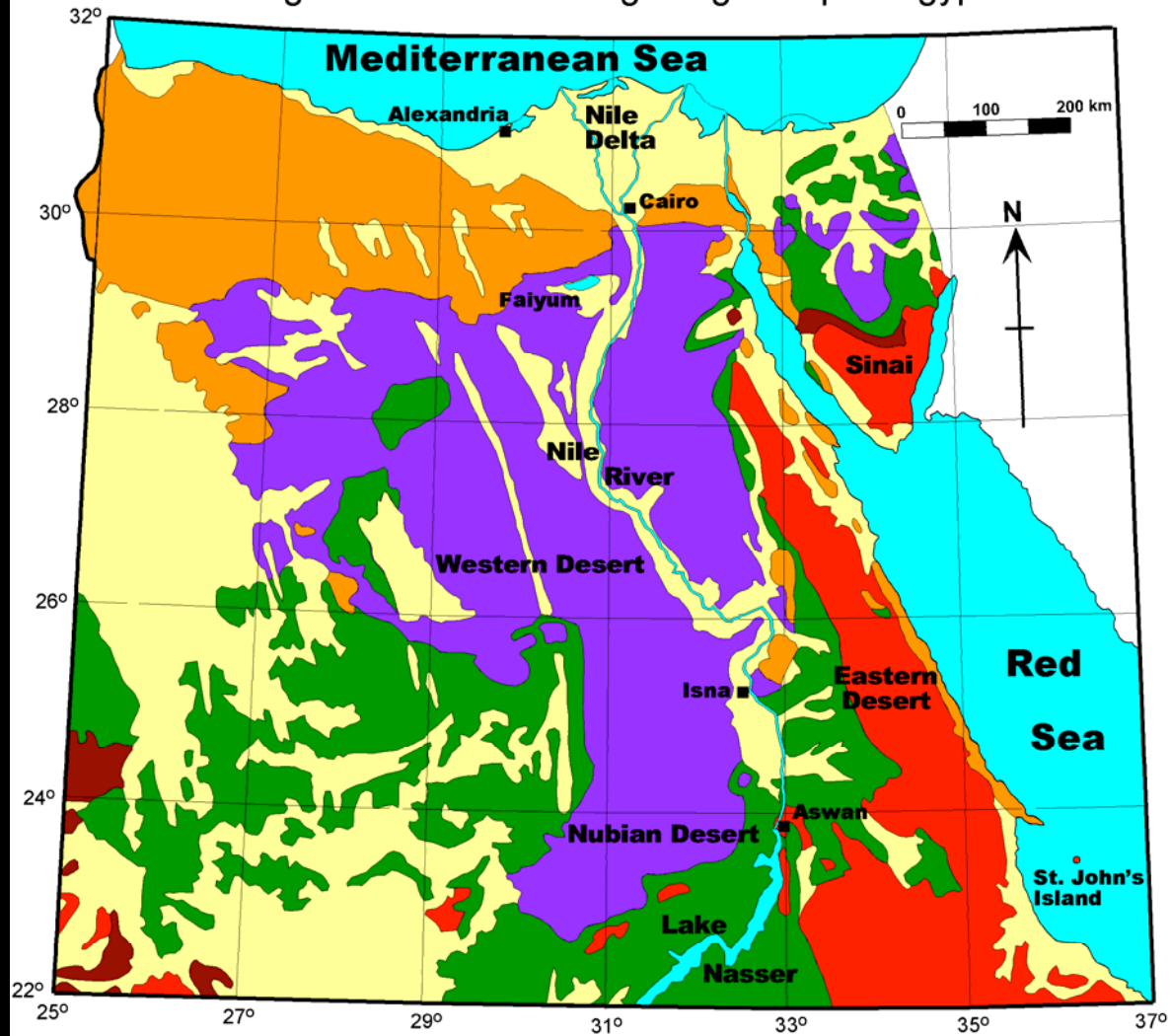




Geology



Figure 1: Generalized geologic map of Egypt



CENOZOIC

QUATERNARY Thick deposits of unconsolidated sediments: mainly sand dunes in the Western Desert; floodplain sand, silt and clay in the Nile Valley; and wadi sand and gravel in the Eastern Desert and Sinai

TERTIARY

Neogene Mainly sandstone and conglomerate

Paleogene Mainly limestone

MESOZOIC

Mainly sandstone of Upper Cretaceous age

PALEOZOIC

Mainly sandstone and shale

PRECAMBRIAN

Igneous and metamorphic rocks ('crystalline basement')

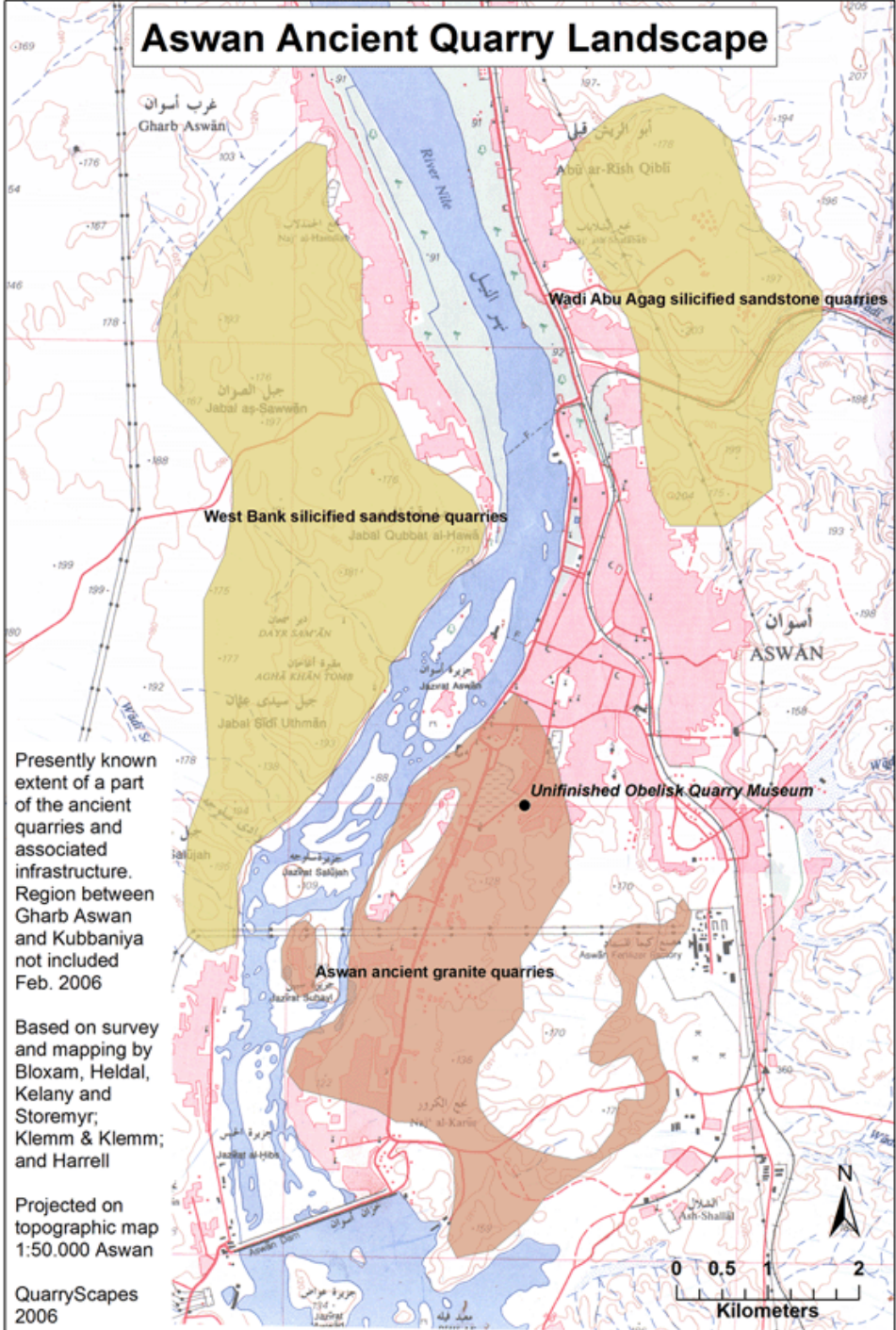








Aswan Ancient Quarry Landscape



Presently known extent of a part of the ancient quarries and associated infrastructure. Region between Gharb Aswan and Kubbaniya not included Feb. 2006

Based on survey and mapping by Bloxam, Heldal, Kelany and Storemyr; Klemm & Klemm; and Harrell

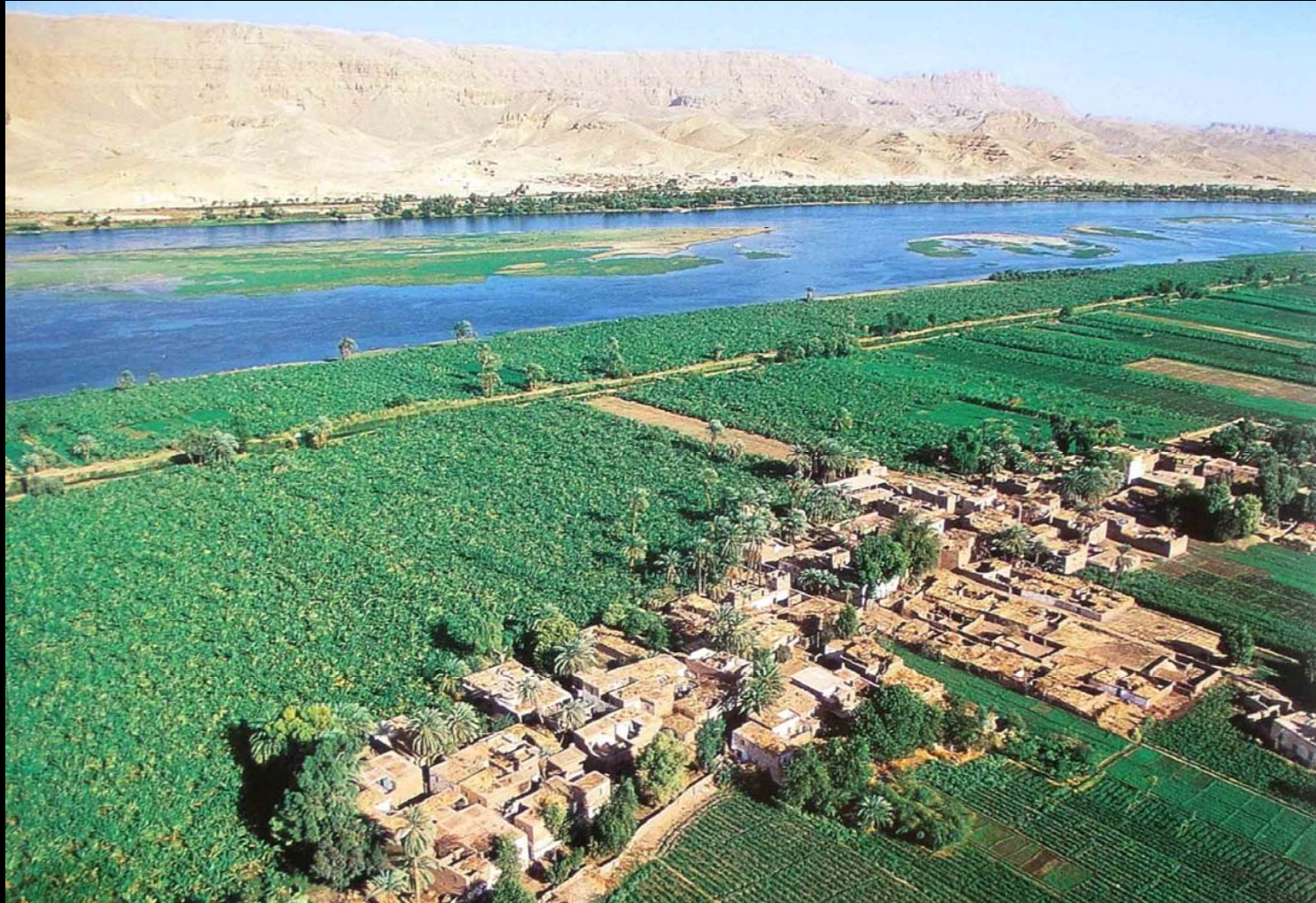
Projected on topographic map 1:50.000 Aswan

QuarryScapes 2006





Agriculture and the Food Economy

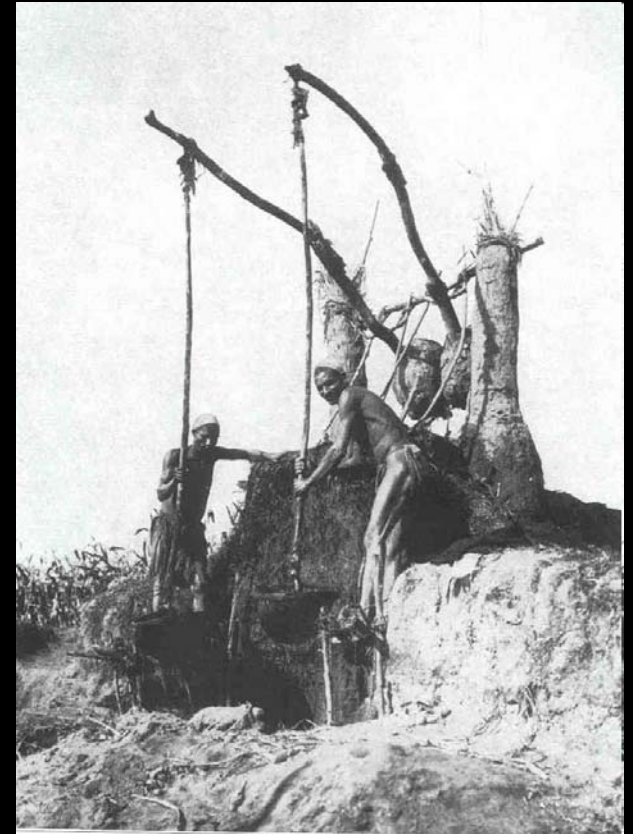
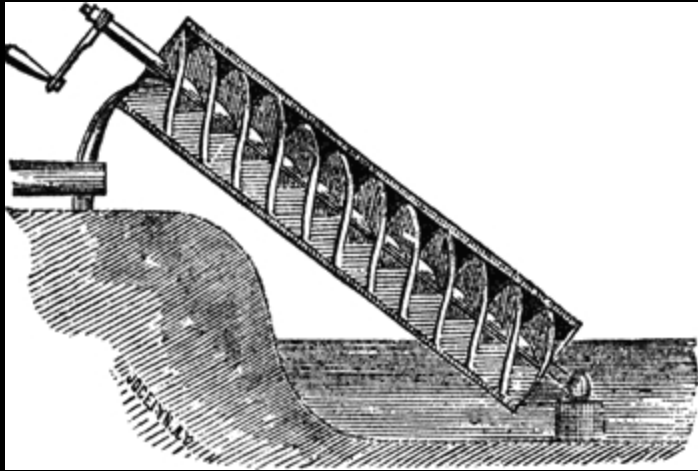








The Shaduf, Archimedes Screw, and the Saqiya







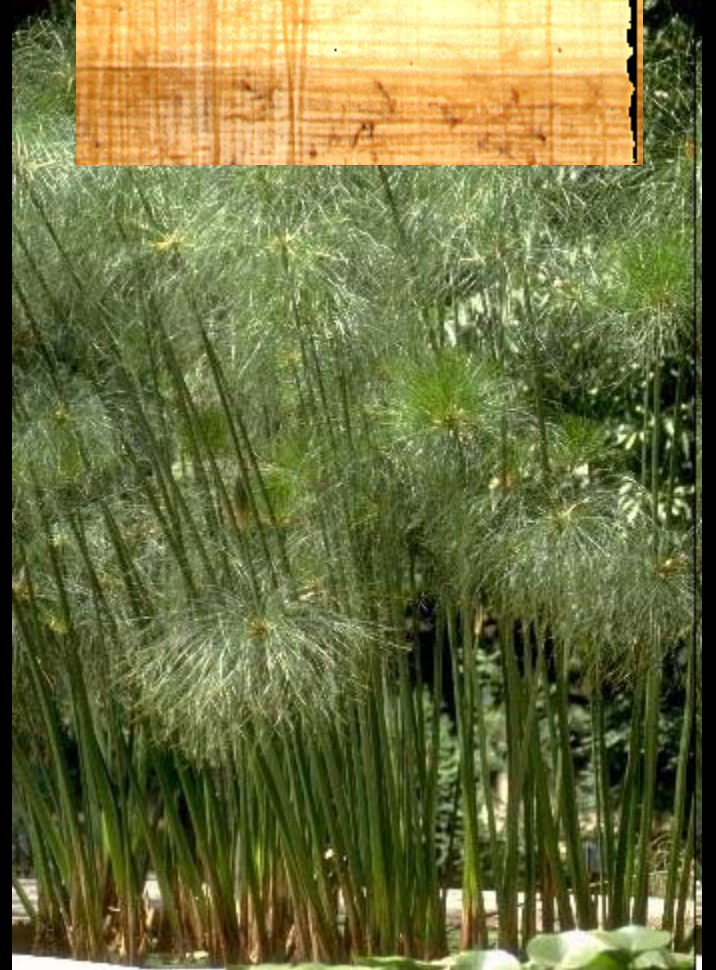


Some other edibles:

- Fish (Nilotic and from the sea)
- Legumes (esp. lentils and later fava beans)
- Milk and milk products
- Spices and garden vegetables (Cucumber, cumin, onion, garlic, etc.)
- Dates
- Tree fruits and nuts
- Grapes (wine and vinegar)
- Olive and other oils
- Honey
- Later periods – sugarcane
- Salt (as preservative)
- Barley (beer)

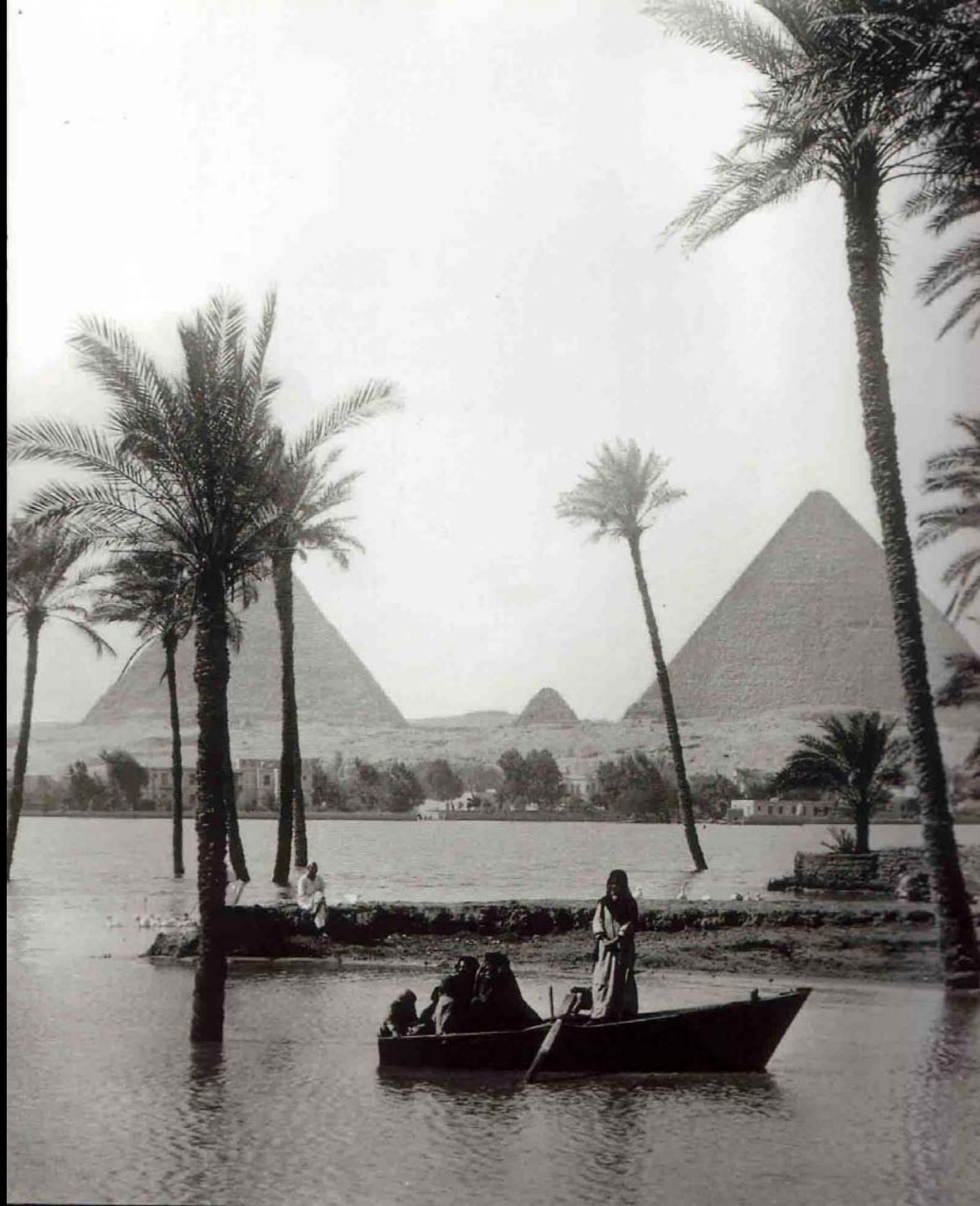


...and then there is the imported stuff



Transport





Animal transport



Resource poor or Resource rich?: The local and the imported

Quote from the medieval Arab author Ibn Fadl Allah:

Most merits of Egypt are brought to her, so much so that someone even said that the four elements are brought to her: water which is the Nile, is brought from the south, the soil is brought in the water otherwise it is only sand that does not grow plants, fire from wood which is imported into it and the air/wind blows from one of the two seas, the Rumi or the Qalzum