MUHAMMAD SAAD 2019-AG-8953 SECTION A-1 B.SC AGRICULTURAL ENGINEERING

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ENGINEERING

TOPIC INDUS RIVER

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INTRODUCTION

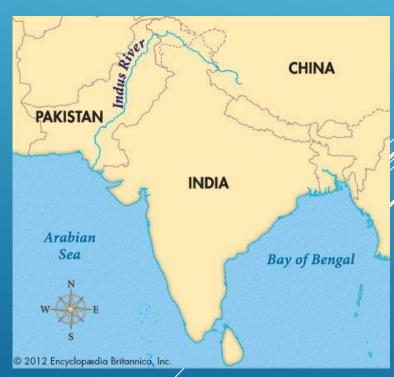
► Indus River is a great trans-Himalayan river of South Asia.

► longest rivers with a length of some 2,000 miles

(3,200 km).

► Total drainage area is about 450,000 square miles.

► Annual flow 58 cubic miles



HISTORY



- ▶ Indus River originates in Tibet.
- ▶ At least 8,000 years old.
- ► The river's conventional name derives from the Tibetan and Sanskrit name Sindhu.

RIVER CAPACITY



- ► Receives an average annual water inflow of about 146 MAF.
- ▶ Mostly derived from snow and glacial melting.
- ► Pakistan's current water availability at various canal head works is about 97.71 MAF with estimated annual losses of 48.29 MAF.

STRUCTURE

▶ In Pakistan currently there are six barrages on the Indus.

(Guddu Barrage, Sukkur Barrage, Kotri Barrage, Taunsa Barrage, Chashma Barrage and Jinnah Barrage)

▶ Tarbela is only reservoir on Indus River.

AREA IRRIGATED BY INDUS RIVER

- ▶ The Indus River System (IRS) was developed into a complex network of canals.
- ▶ 74% of its water was utilized for irrigation
- ▶ During the period of British administration, large canal systems were constructed.
- ▶ 8.5 to 18.2 MH in Pakistan and 2.02 to 8.5 MH in India.

- The Indus River is the second most polluted river with plastic in the world.
- Contributes 164,332 tonnes of plastic waste (to the sea) annually.
- Return flow from agriculture.



Thanks