



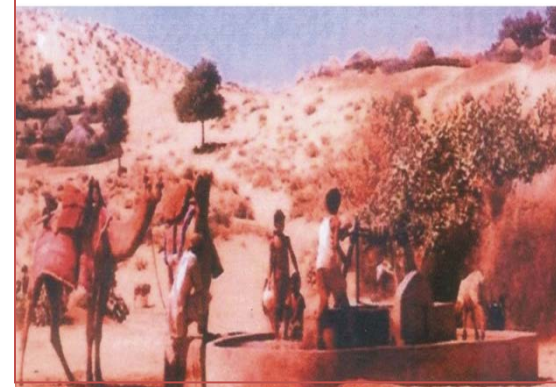
SMALL DAMS ORGANIZATION SINDH

PRESENTATION ON SMALL DAMS IN SINDH Hyderabad

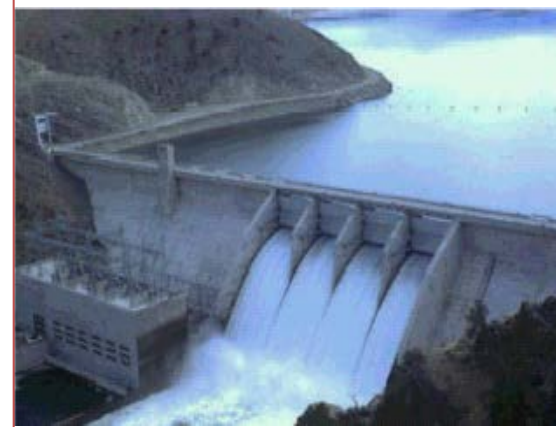
BY
Project Director/ Chief Engineer

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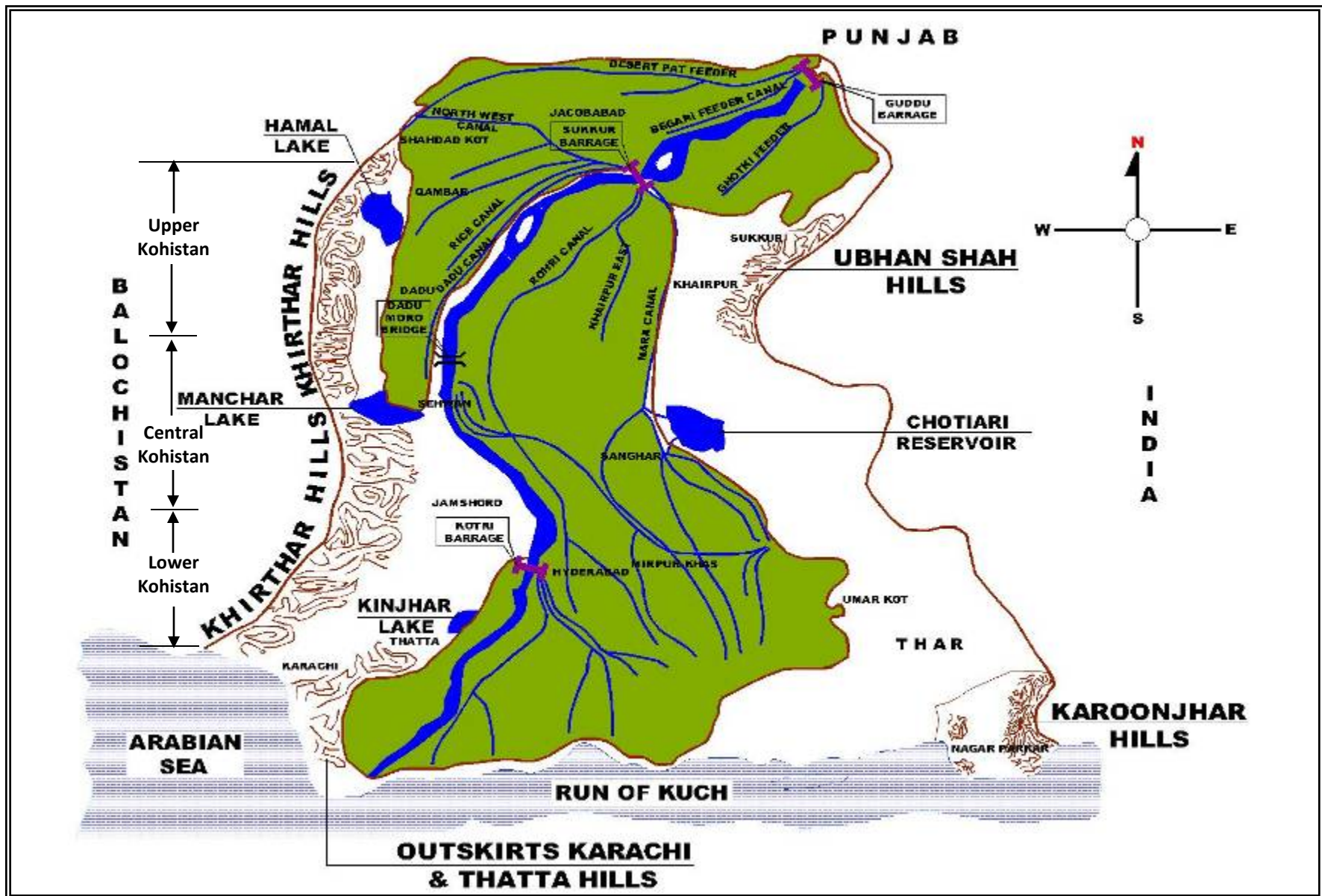
Present Traditional Water Conveyance Sources in Arid Zone, Sindh.



Proposed Water Conveyance Sources in Arid Zone, Sindh.



LOCATION OF POTENTIAL AREAS FOR CONSTRUCTION OF DAMS IN SINDH



POTENTIAL AREAS FOR CONSTRUCTION OF DAMS IN SINDH

- ❑ **Khirthar Hills:** ➔ **From Qambar-Shahdadkot to Karachi including Dadu, Jamshoro and Thatta Districts.**
- ❑ **Karoonjhar Hills** ➔ **Nagarparkar (Tharparkar District).**
- ❑ **Ubhan Shah Hills** ➔ **Sukkur & Khairpur Districts.**

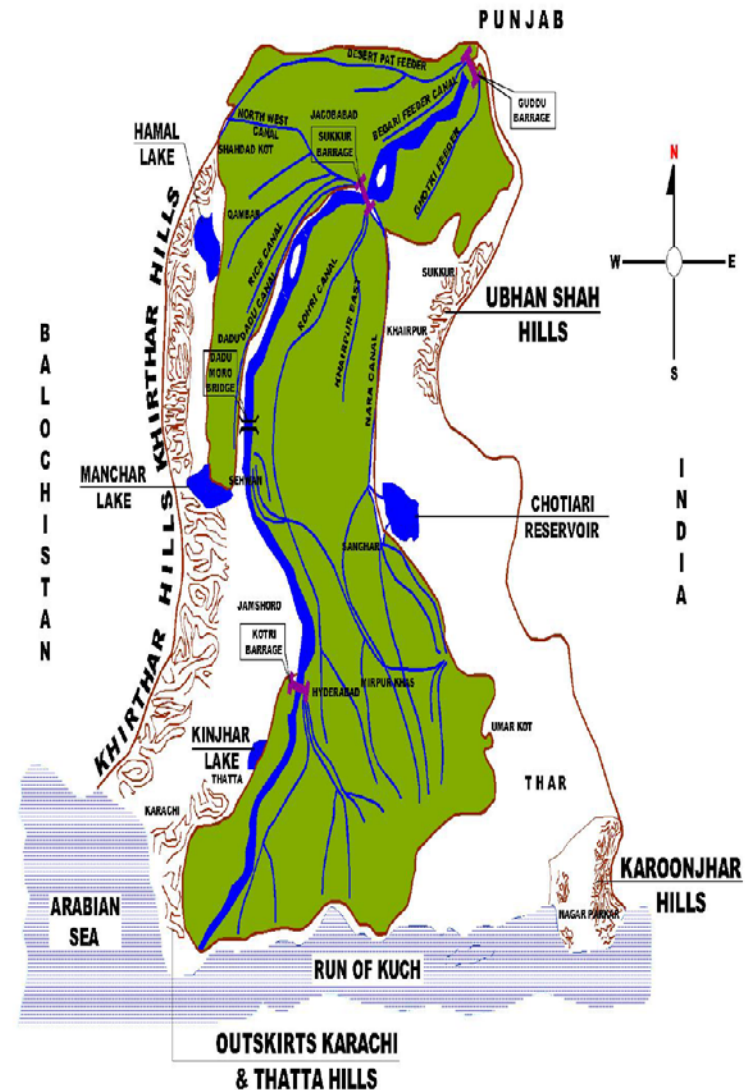
Region	Catchment Area (Sq: kms)	Rainfall (Avg:)	Mean Annual Run-off M.A.ft.	Area under benefit M.Acres
Khirthar Hills	11974	7"-9" (175-225 mm)	0.445	0.356
Karoonjhar Hills	725	18" (460 mm)	0.104	0.084
Ubhan Shah Hills	460	6" (150 mm)	0.025	0.020
TOTAL	13159		0.574	0.460

BRIEF ON SMALL DAMS IN SINDH

- Irrigation Department Government of Sindh launched its long term plan of constructing Small Dams in Sindh province some years ago; in the regions of Kohistan (Khirthar Hills), Nagarparkar (Karoonjhar Hills) & Ubhan Shah Hills.
- The Department has identified almost **122** potential sites through feasibility studies for the construction of various types of dams in Nagarparkar & Kohistan Regions.
- The Department has so far completed **06** small dams, recharge dams & delay action dams and **15** Nos. Small Gabion Structures across various Nais in Nagarparkar area & **13** recharge dams, detention weirs & delay action dams in Kohistan area, while **21** Small Dams are expected to be completed in few months and included among them.
- These structures would recharge/save about **3.54 M.A.F.** water from the hill torrents of Karoonjhar , Ubhan Shah & Khirthar Hills and cultivate about **1,28,917** acres of land and provide water for drinking purpose for people and livestock as well.
- **23** other small dams have also been under taken and initiated as PC-Is of these structures are sent to Federal/ Provincial Governments for approval.

IRRIGATION SUMMARY

Gross area	=	35 million acres
Culturable area	=	20 million acres
Culturable area under command of barrages	=	12.81 million acres
Balance un-irrigated	=	7.19 million acres (area, elevated above contour levels of barrages)
Means of possible irrigation	=	Rain water harvesting by means of small / Medium Dams



POSSIBILITY FOR CONSTRUCTION OF DAMS IN SINDH

❑ STORAGE DAMS

(30%)

- To store water.
- To release water through gravity flow or pressurized Irrigation methods.

❑ RECHARGE DAMS

(70%)

- To recharge the Aquifer.
- To lift the water through Tube wells.
- To release the water through pressurized Irrigation methods. (H.E.I.S. etc)

▪ Delay Action Dams:

- Retention Weirs
- Flood Diversion Weir



SMALL DAMS ORGANIZATION SINDH, HYDERABAD

PHOTOGRAPHS

LANGHEJI DAM, JAMSORO



NAIMANGO DAM, JAMSHORO



DETENTION WEIR SARI, JAMSHORO



STORAGE DAM RANPUR, NAGARPARKAR



ECONOMIC IMPLICATIONS

- **Storage/ Recharge of about 3.54 M.A.F.**
- **1 M.A.F in economic parlance is worth \$ 1 Billion so almost \$ 3.54 Billion would accrue per annum.**
- **An assessment by WAPDA that almost 31.5 M.A.F of water has been lost into the Sea in the last 10 years. So, a loss of about \$ 31.5 Billion in the last ten years.**
- **Financial constraints are great impediments in our progress.**
- **Released amount only 15% of the stipulated amount during the last 5 years.**
- **World Bank is requested through this forum to kindly extend us its generous support for the betterment of Humanity.**
- **Hence help avert an other Human tragedy that the people of Thar and Arid Zones of Sindh have witnessed recently, which resulted in colossal loss of precious Human lives.**

Thanks