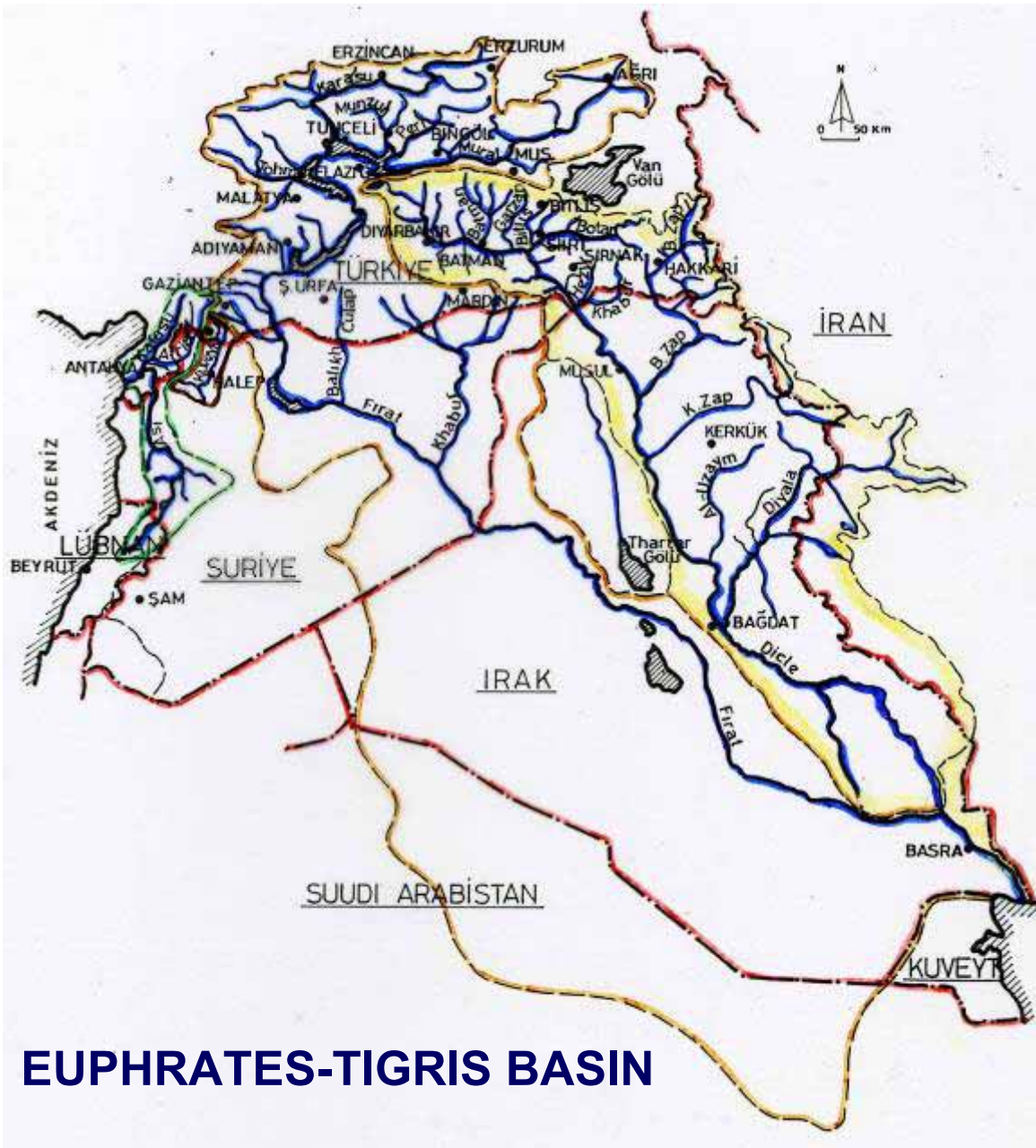


ASPECTS OF TRANSBOUNDARY COOPERATION IN THE EUPHRATES-TIGRIS BASIN

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	Eup.	Tig.	E-T
Q_{TUR}	32	24	56
Q_{SYR}	4	0	4
Q_{SAR}	0	-	0
Q_{IRN}	-	10	10
Q_{IRQ}	1	23	24
ΣQ_{E-T}	37	57	94

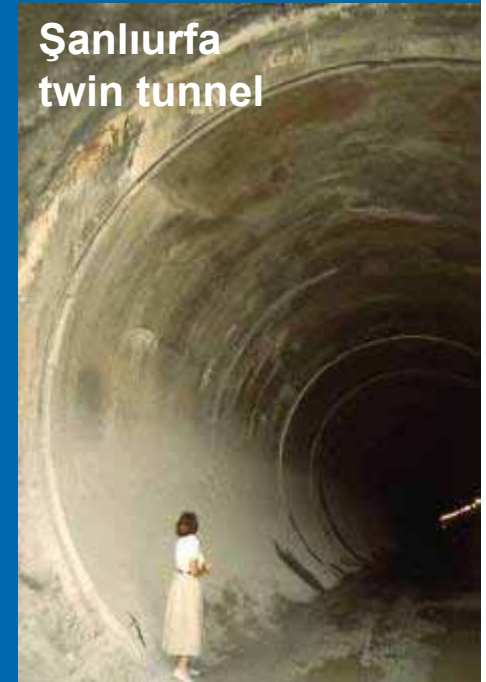
$Eup_{TUR} = 85 \%$, $Tig_{TUR} = 40 \%$, $E-T_{TUR} = 60 \%$

(km^3/y)

EQUITABLE AND REASONABLE USE



Şanlıurfa twin tunnel



	km ³ /y	m ³ /sec	% of Q _{TUR}	% of Q _{tot}
U _{Eup,TUR}	19	600	60	50
U _{Tig,TUR}	8	250	35	15
U _{E-T,TUR}	27	850	50	30

OUTFLOW FROM TURKEY

	km ³ /y	m ³ /sec	% of Q _{TUR}	% of Q _{tot}
O _{Eup,TUR}	13	400	40	→ 50
O _{Tig,TUR}	16	500	65	→ 85
O _{E-T,TUR}	29	900	50	→ 70

Outflow at Karkamış

[1987: 500 m³/s]

- **STOCHASTIC NATURE**
- **PROBABILISTIC ALLOCATION**



RESERVOIR REGULATION



Hydro-solidarity

Q_{\max} 

V_{sed} 

Q_0 

Q_{\min} 

$$V_{\text{TUR.Eup}} = 60 - 70 \text{ km}^3 (= 2 \cdot Q_{\text{TUR.Eup}})$$

$$V_{\text{TUR.Tig}} = 20 \text{ km}^3 (= Q_{\text{TUR.Tig}})$$

$$V_{\text{SYR.Eup}} = 15 \text{ km}^3$$

$$V_{\text{IRQ.Tig}} = 20 \text{ km}^3$$

$$e_{\text{res,TUR}} = (1/4) \cdot U_{\text{TUR}}$$

CONFIDENCE BUILDING & COOPERATION



Atatürk dam

Tools:

- Sincere diplomacy (!) for integral basin management

Prerequisites:

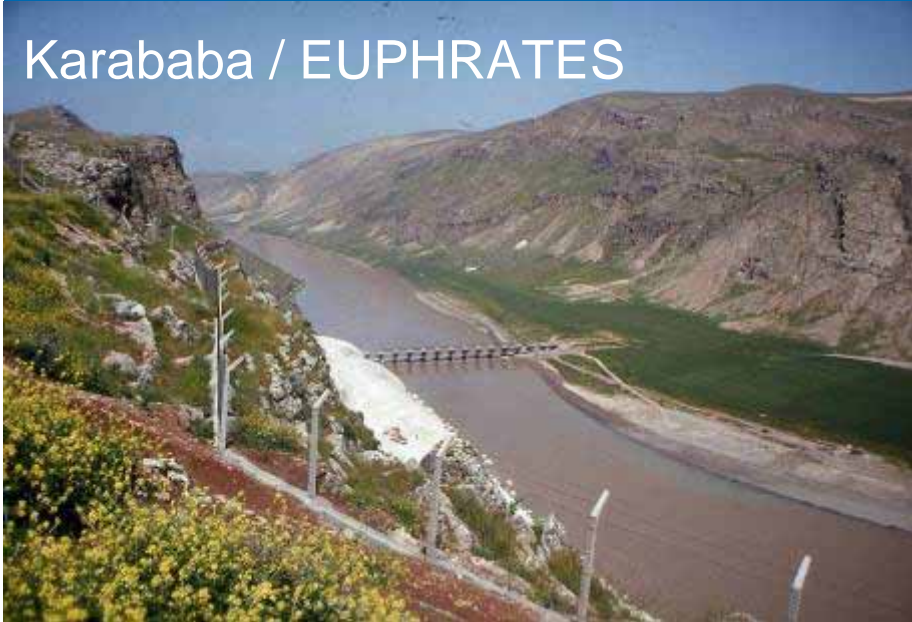
- Ending belligerent activities!
- Normalizing international relations!

COOPERATION

- wet : ENERGY >>
- average : AGRI.PRODUCT >>
- dry : WATER >>

DATA DISCREPANCIES

Karababa / EUPHRATES



Hasankeyf / TIGRIS



$$Q.Eup = 37 - 29 = 8 \text{ km}^3/\text{y}$$

$$Q.Tig.= 58 - 42 = 16 \text{ km}^3/\text{y}$$

$$Q. (E-T) = 95 - 71 = 24 \text{ km}^3/\text{y}$$

THREE-STAGE PLAN (1984)

1. Water resources
2. Land resources
3. Development plan