

Contested Waters: Conflict is the mother of scarcity

Daanish Mustafa
Dept. of Geography
King's College, London
e-mail: daanish.mustafa@kcl.ac.uk

[What we must appreciate is that] “A common world is not something we come to recognise, as though it had always been here (and we had not until now noticed it)”. The divisive effects of imposing one’s own self-certitude upon the fractal human landscape may be so because “We perhaps never differ about opinions, but rather always about things, about what world we inhabit. And very probably, it never happens that adversaries come to agree on opinions: they begin, rather, to inhabit a different world.” (Latour, 2004a: p. 454).

Research Challenge 1

What is Water?

Pakistan Water According to the Techno-modern Elites.

Jo Kalabagh dam ke khilaf hain, mein kehta hun ghadaar hain! Ghadaar hain! Ghaddar hain!

All those against Kalabagh dam, I say are Traitors! Traitors! Traitors!”





(President Lahore Chambers of Commerce and Industry, 03/04/2015, Lahore)

Four Conceptual Approaches to Climate Change

- GCM scenario assessment
- Contemporary water problems
- Anecdotal historic evidence
- Politico-cultural reconstruction



Key:

-  Indivisible- Inextricably linked to the achievement of another goal.
-  Reinforcing - Aids the achievement of another goal.
-  Enabling - Creates conditions that further another goal.
-  Black band connecting the SDG is SDG17: Partnerships for the Goals
Arrows show direction of movement

Contemporary Water Problems



Development and Environment

Woman complaining about water



Women waiting since morning for transport



Multiple Values of Water

- Economic/Livelihood/Production value
- Material/use value/life/health
- Cultural
- Spiritual
- Esthetic
- Identity
- Symbolic

Water Under Techno-cultural Modernity

- A resource (White 1973 and 1967)
- A hazard (Wescoat 1992, White 1945)
- Integral to environmental quality
- Increasingly commodified (Bakker 2005)
- Techno-nature for modern state building (Swyngedouw 1999)
- Subject to the capitalist metabolism (Swyngedouw 2004)
- For imperial Control (Gilmartin 1995, Cosgrove & Petts 1992)

Research Challenge 2

**How to re-centre uncertainty in
water planning and
development?**

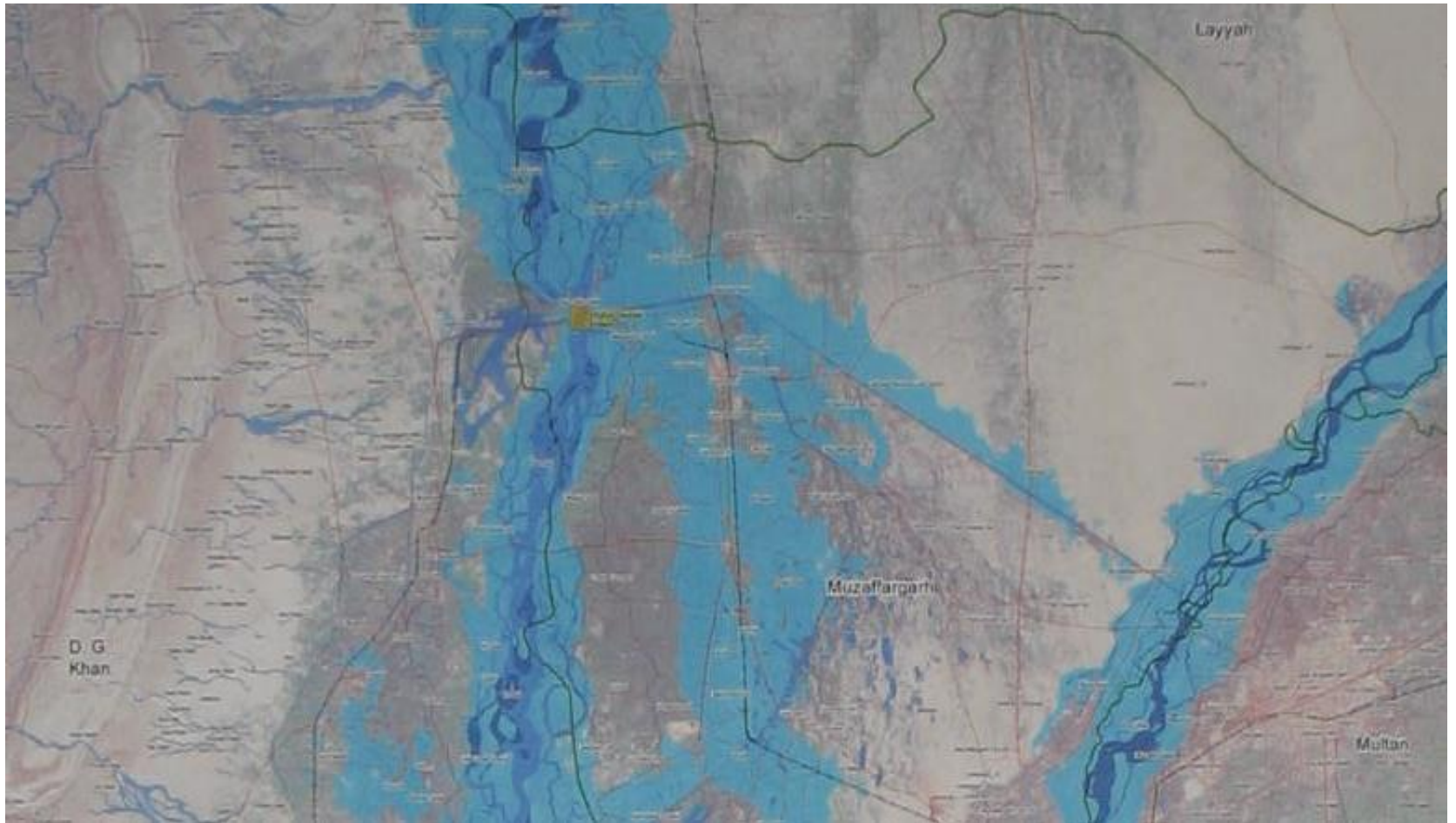
Key Predictive Model enabling
Measurement, Control & Prediction
is

Average (mean) conditions

e.g. mean annual flows, cubic meters of
water per capita etc.

Hazardscape concept invites us to move
beyond averages and focus on how
hazardousness is in fact normal.

Energy, Floods & Drainage

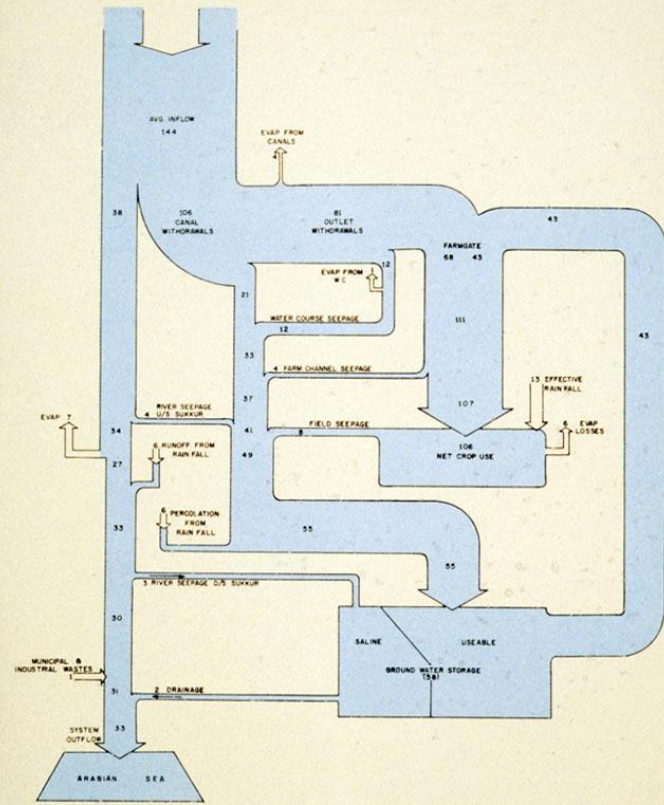


Research Challenge 3

What are the surface
groundwater interactions in
large irrigated systems?
(saline/fresh GW)

Conflicting Views of the Basin

CHA was completed in 1971 as a barrage-cum-reservoir. The reservoir has a diversion capability of 30,000 cusecs with storage capacity of 0.5 MAF.



Indus Basin Irrigation System
Water Balance (1993)

(in feet)



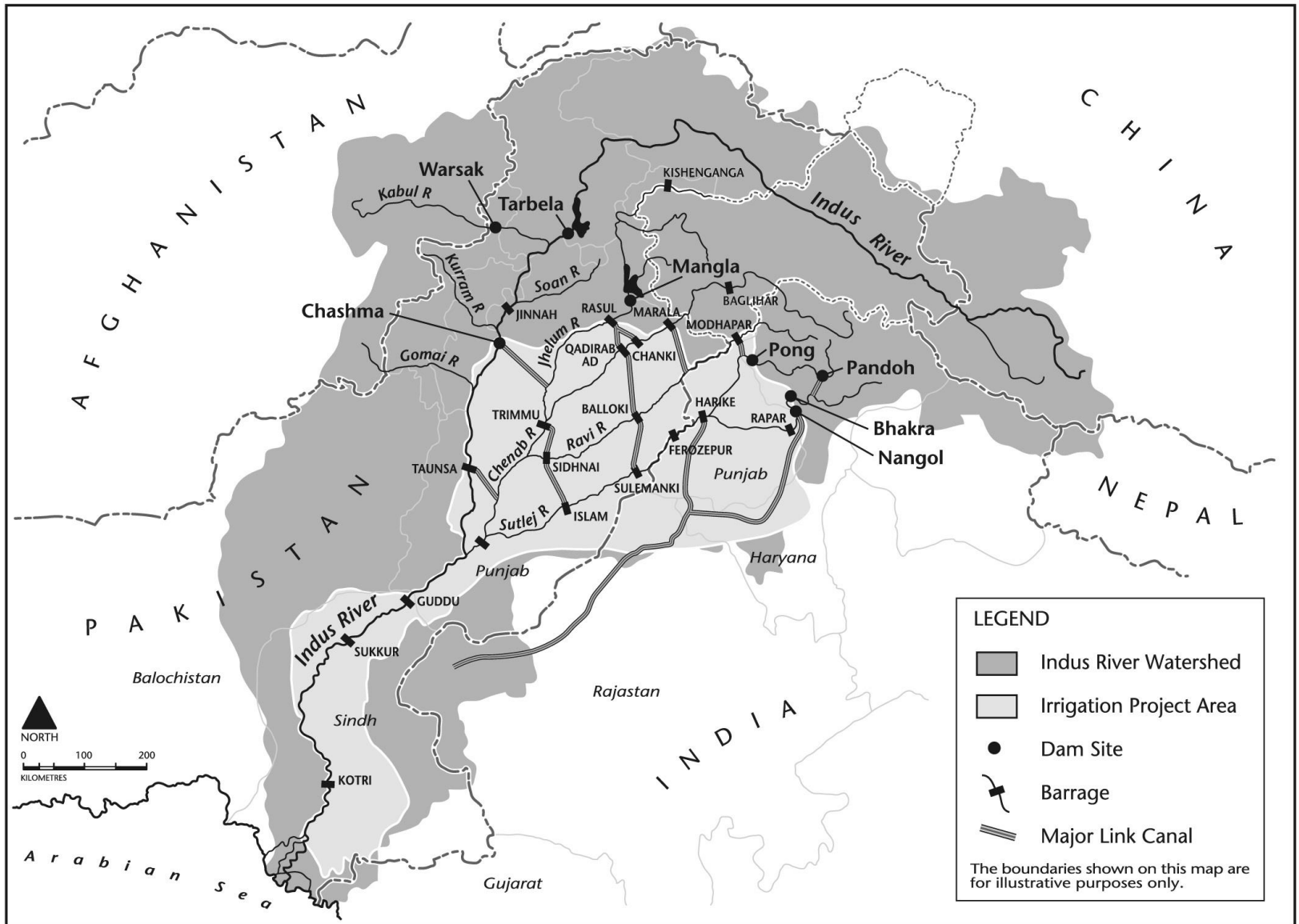


Figure -- Indus Basin and its Major Infrastructure

Research Challenge 5

Agriculture is not Magic.

(So how does one improve water productivity without breaking the bank on energy?)

Multiple Ecosystem Services



Fishing

Groundwater recharge

Moderation of flood flows

Carbon sequestration

Leisure

Agricultural production

Research Challenge 6

How do we produce ourselves
through the Energy-Water Nexus?
Could we produce ourselves
differently?