Waterscapes, access and the ghost of the scarcity postulate

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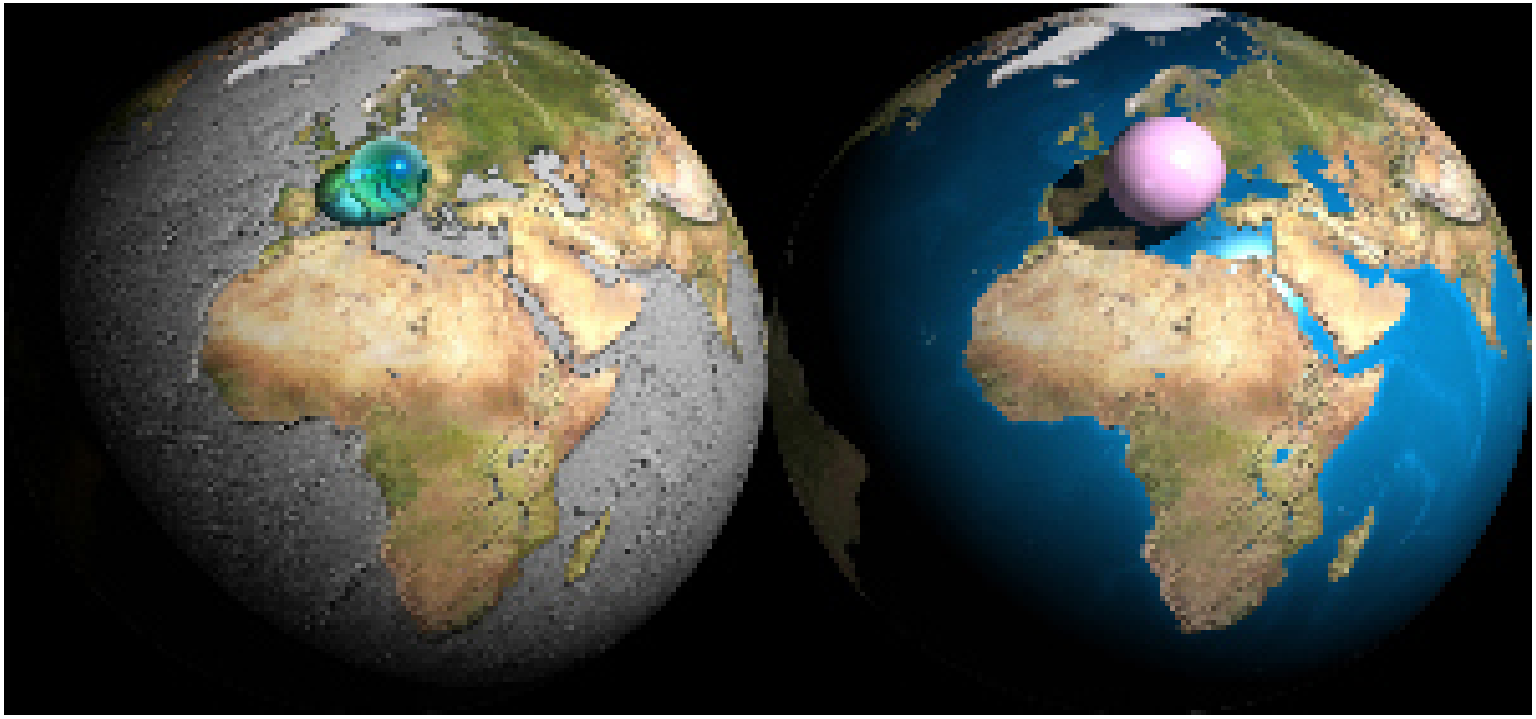

Are we running out?
What is scarcity?

Global portrayals of water scarcity

- Only 3 per cent of water is fresh out of which only 0.3 per cent available for human consumption
- Over one billion lack access to safe water and about 2.4 billion lack access to adequate sanitation
- 6,000 die daily from water-borne diseases

Locating landscapes

- Glacken's Traces on the Rhodian Shore (1967): Three interpretations of landscapes (the idea of a designed earth; the influence of the environment on society and the role of humans as modifiers of the natural world)

- Landscape as imbued with myth, memory, metaphor – not merely a mindless race towards a machine-driven universe (Schama)

- Landscape as 'imagined' and 'real' – 'the symbolic environment created by human acts of conferring meaning to nature and the environment' (Greider and Garkovich 1994)

How much of ‘waterscapes’

- Both ‘real’ and ‘imagined’ waterscapes are linked with assumptions of abundance/ scarcity (e.g. limits to growth; spaceship earth) - landscape transformed to combat scarcity

- Scarcity like ‘nature’, ‘culture’ and ‘modern’ - some of the most complex and difficult words in the English language - they are unstable and polyvalent (Raymond Williams). The meanings are shaped and bound up with the problems they are being used to discuss

- How are understandings of scarcity constructed? What do they obscure?

A human development approach to water and scarcity

- Expansion of human capabilities and human freedom;
- Aristotle – human good or flourishing; necessities
- The paradox of water and diamonds
- Water is more than just a public good or economic good
- Access to water unequal; contested; moulded by poverty/ gender/ social relations

Scarcity: a brief journey

- Thinkers from Aristotle and Plato to Adam Smith, Marx, Keynes have been concerned about scarcity
- Assigning value: the paradox of water and diamonds (Plato's Euthydemus 304B)
- Haushaltslehre (die Oekonomie) v/s Oekonomik (Aristotle's Oikonomia – the domain of subsistence and the household)
- 17th / 18th century: From scarcities to scarcity - scarcity made out to be the ubiquitous and permanent feature of the human condition (The propensity in human nature ..to truck, barter, and exchange one thing for another' - A Smith)

Scarcity: a brief journey

- Marginal utility theorists (Menger and Walras)
- Scarcity as the raison d'etre of society / the basis of government /
- Legitimises the need to allocate and manage property (e.g. economic goods/ formalisation of rights)
- Lord Robbins (1932) – Economics defined as the science that studies human behaviour as a relationship between ends and scarce means which have alternative uses'
- Homo economicus as universal?

Challenges to the scarcity postulate

- Economic anthropology (Marshall Sahlins and Karl Polanyi) and the distinction between formal and substantive meanings of ‘economic’

- Institutionalism and post-institutional approaches
- Entitlements and Amartya Sen

- Interactionist approaches

- Socio-political perspectives and contestations around scarcity

Waterscapes and scarcity

Vision 21 : World Commission on Water for the 21st Century chaired by Ismael Serageldin, Vice President of the World Bank. Current water scarcities do not lie in absolute shortage – but argue that future population growth will lead to generalised scarcity and water waters. What the Commission terms the "gloomy arithmetic" of water condemns us to future water shortage and water wars – unless, following Malthus, market discipline is brought to water use primarily through water pricing.

Some portrayals of global water scarcity

- "**Without full-cost pricing** the present vicious cycle of waste, inefficiency, and lack of service for the poor will continue. There will be little investment from the private sector, services will be of poor quality and rationed, and there will be little left for investing in water quality and other environmental improvement."

- **Falkenmark's thresholds of water stress and water scarcity…a** country whose renewable fresh water availability, on an annual per capita basis, exceeds about 1,700 cubic meters will suffer only occasional or local water problems. Below this threshold countries begin to experience periodic or regular water stress. When fresh water availability falls below 1,000 cubic meters per person per year, countries experience chronic water scarcity, in which the lack of water begins to hamper economic development and human health and well-being. When renewable fresh water supplies fall below 500 cubic meters per person, countries experience **absolute scarcity**.

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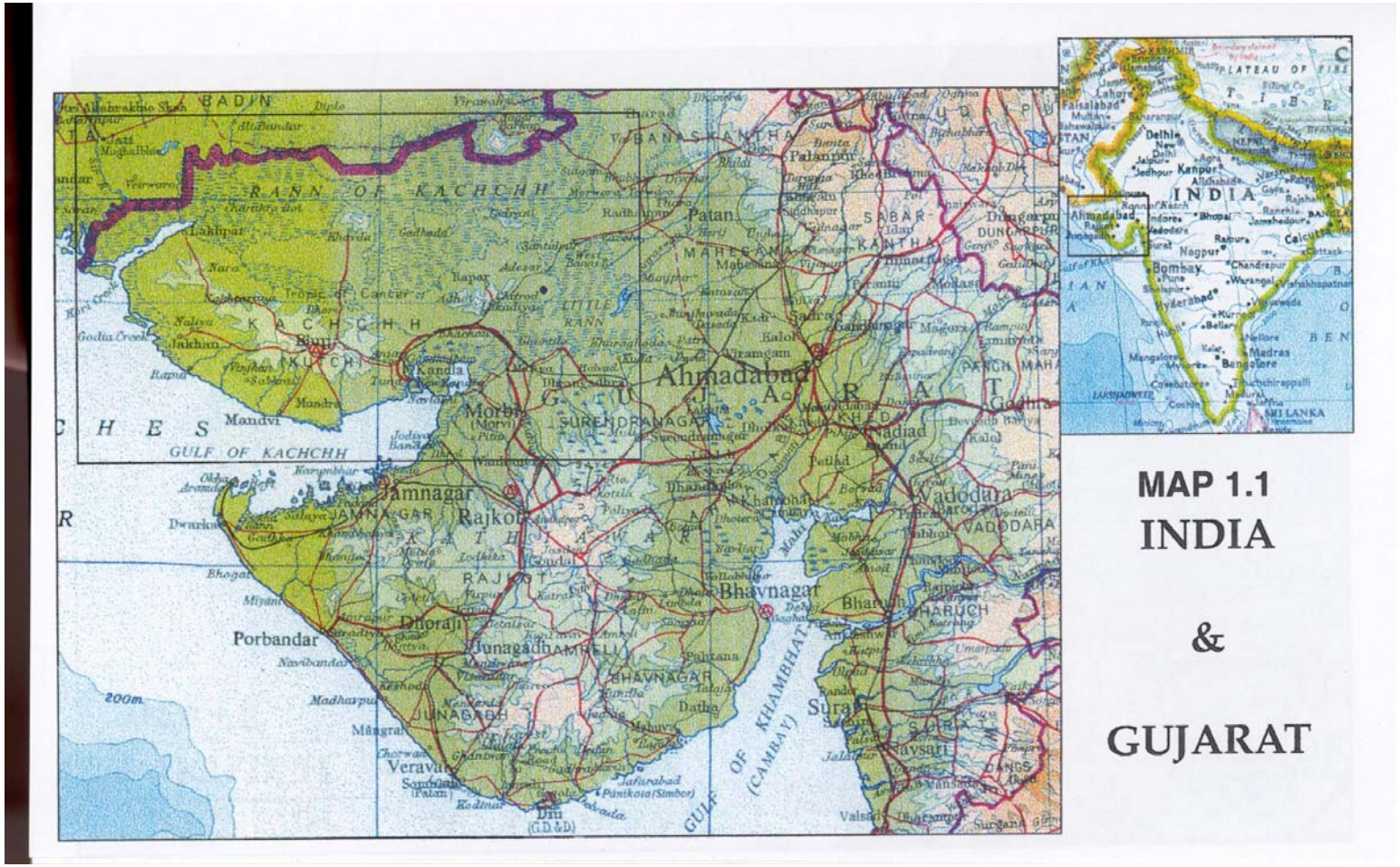
Problems with conventional notions of scarcity

- Physical and economic scarcity v/s scarcity arising due to socio-political processes
- Efficiency v/s equity considerations
- Safety zone of supply and demand v/s redistribution/ enhancing equity
- Human development approach to scarcity

The case of Kutch in western India



Living with scarcity

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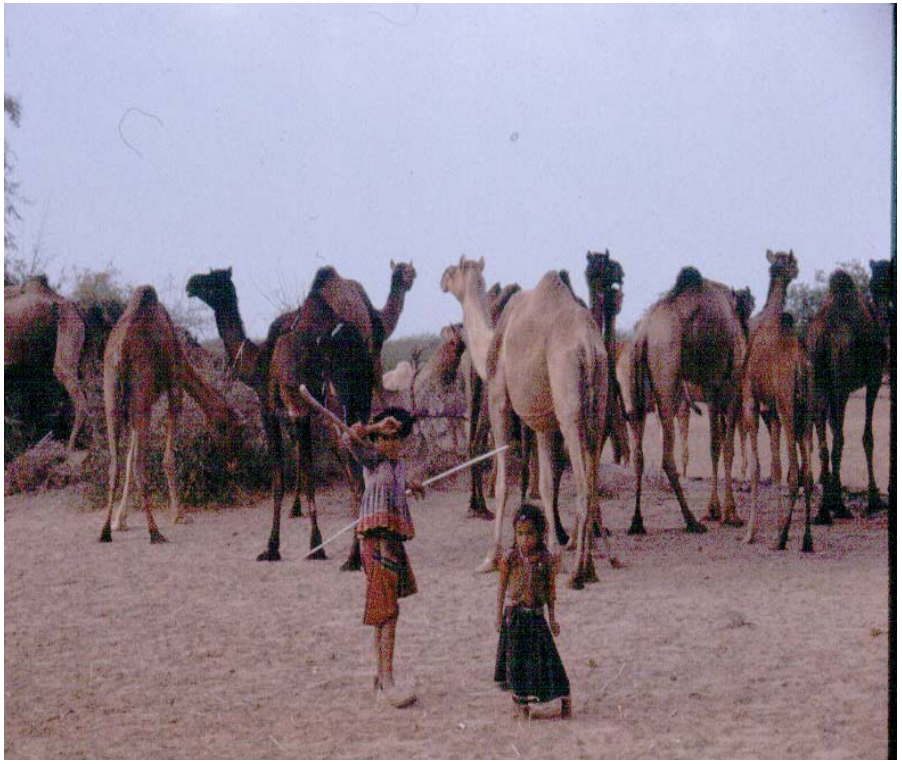

Living with uncertain water supplies

Naturalising scarcity

- Dryland blindness – failure to recognise that uncertainty is an intrinsic feature of life in drylands
- ‘Solutions’ focus on augmenting supplies instead of looking at how water is unequally used and abused
- Ignores local knowledges of scarcities
- Short-term and ad hoc measures that sustain a relief economy and industry
- Leads of the proliferation of scarcity conditions
- Scarcity is naturalised

Why does it matter?

- Scarcity as a ‘meta-narrative’
- The ‘manufacture’ of scarcity to suit the interests of powerful actors
- Scarcity as a technical term (e.g. conflict)
- Science and technology as the ‘solutions’ (Technological optimism v/s pessimism)
- Technology as the both the ‘problem’ and ‘solution’ (e.g. privatisation models) and site of politics
- Responses to scarcity not neutral but as part of socio-political choices

Conclusions

- Scarcity or access (ability to derive benefit from things)? / Scarcities or scarcity?
- How are different resources and commodities distinct (re: materiality/ temporal and spatial availability/ symbolic meaning etc.)
- From resource determinism to regimes of value
- Fluidities and materialities of resources
- Re-thinking understandings of innovation systems, institutional and policy arrangements regarding resource allocation
- Mobilisations around scarcity (how challenge dominant and pervasive thinking/ simplistic solutions)