

The politics of scarcity and renewable energy

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Current scarcity concerns

- ‘Perfect storm of energy, food, climate and water crises, cross border conflicts etc’
- 2007-2008 food and global financial crises
- So called scarcity of resources, justifying large scale land acquisitions & grabs
- Planetary boundaries and Anthropocene debates – premised on limits and scarcity

Outline

- Scarcity as taken for granted and natural
- A selective and brief journey of a concept
- Inequalities in access
- Scarcity challenges arising through a radical transition to renewable energy
- Why does it matter?

Needs and scarcity

- Basic needs like energy, water and food are intrinsically linked with notions of scarcity. 'Scarcity' is used to justify a range of approaches to enhance access (e.g. markets, regulatory frameworks, basic rights)
- Scarcity like 'nature', 'culture' and 'modern' – one of the most complex and difficult words in the English language - 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?

The legacy of scarcity

“...the whole human development, at least up to now, has been a bitter struggle against scarcity.”

(Jean-Paul Sartre)

From scarcities to scarcity

- Lord Robbins (1932) – Economics defined as the science that studies human behaviour as a relationship between ends and scarce means which have alternative uses'
- Legitimises the need to allocate and manage property (e.g. water as an economic good/ formalisation of rights)
- *Homo oeconomicus* as universal?
- Scarcity made out to be the ubiquitous and permanent feature of the human condition (from scarcities to scarcity – Xenos)

Challenges to the scarcity postulate

- Economic anthropology (Sahlins and Polanyi)
- Common property theory
- Entitlements and Amartya Sen
- The role of meaning, practices and culture
- Socio-political perspectives and contestations around scarcity

Living with scarcities



Plenty within scarcity/ Scarcity within plenty



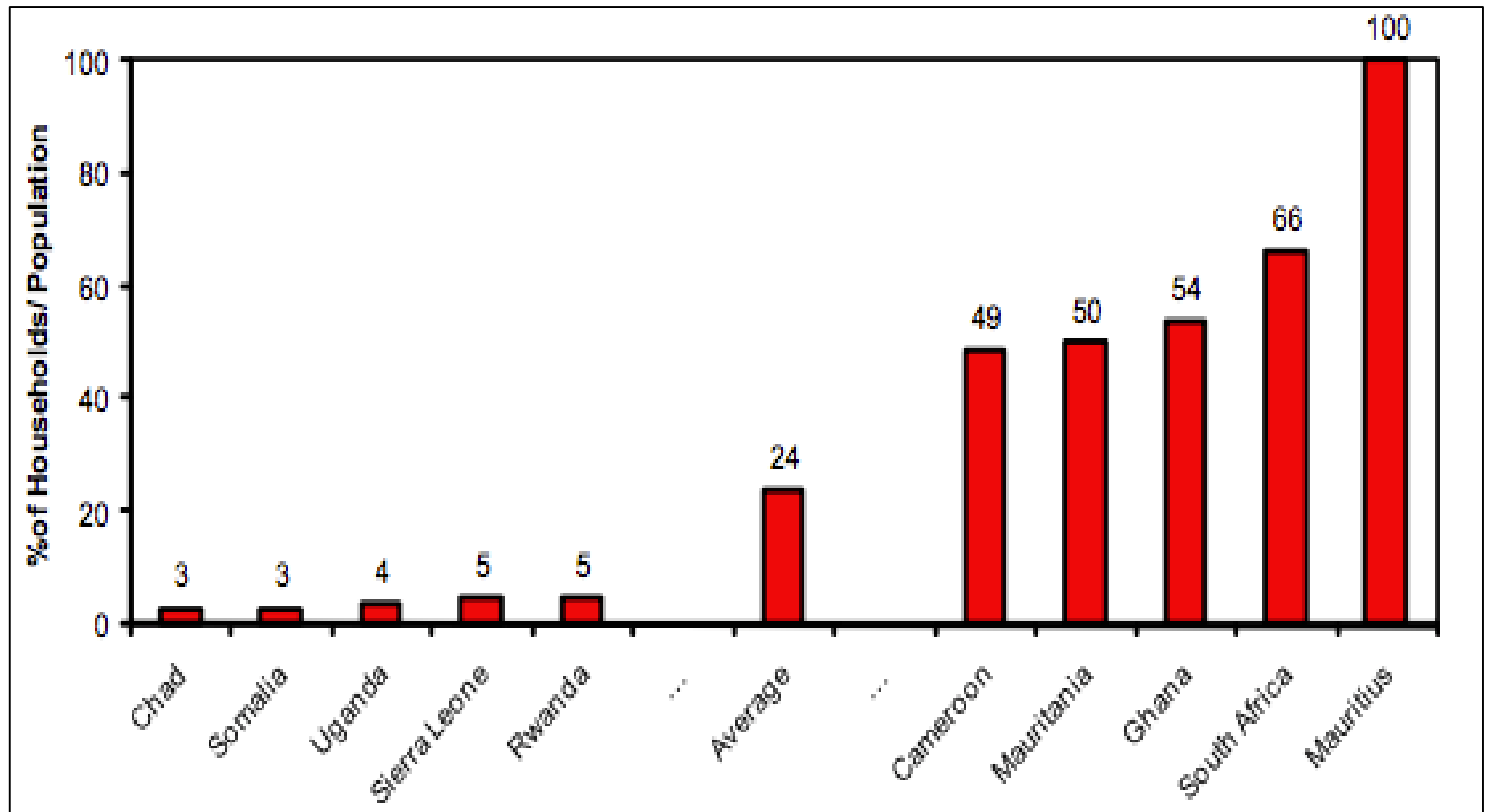
Problems with conventional notions of scarcity

- Focus on volumetric amounts ignores socio-political processes
- No questioning of logic of supply/ demand
- Solutions can increase control over the resource & dispossess local users
- Efficiency v/s equity considerations
- Technology portrayed as neutral
- Powerful players tend to benefit
- Neglect of local perspectives/ experiences/practices
- Scarcity is naturalised & made permanent

Inequality in energy access globally

- 1.5 billion have no source to electricity globally (UNEP, 2011) and demand will grow by 40%
- Energy key for socio-economic development; education, poverty, and health and all SDGs
- Global North pathways based on apparent abundance of fossil fuel resources are unsustainable
- Average person in global North consumes 24 times as much materials and 12 times more energy than person in Global South
- Investment in RE and 'green' infrastructure in global South low (UNEP 2011) / state patronage to fossil industry.
- Unequal access to energy arising through historical and socio-political processes as well as contemporary policy and business decisions

Access rates for least and most electrified countries in SSA (Brew and Hammond, 2010)



Nexus with land and water

- Land and water systems are tightly linked to energy production, and also vulnerable to degradation from it.
- First-generation biofuels require significant land and water inputs
- Even second-generation biofuels that are produced from non-edible biomass and non-food crops like jatropha have considerable social costs

RE and dispossession

- Notions of 'scarcity' and 'abundance' as political strategy (N. Hildyard) and future is colonised in certain ways
- Growing perceptions of energy scarcity fuelled trends in land grabbing and large scale dispossession of local people



**Before: Forest livelihood - Kilwa,
Tanzania**



**After: Jatropha 'trial plot' on 34,000 ha
Tanzania**

RE availability v/s access

- In the global South, several potential sources for plentiful RE – e.g. proximity to the coast, plenty of sunlight and wind.
- However, despite this ‘abundance’, due to fluctuating character of RE sources, high variability especially when required
- This can lead to or justify price fluctuations
- Challenges to integration in transmission grid (Pueyo et al, 2016)

Green energy business v/s energy security



Political economy of renewables

- **South Africa:** Significant commercial scale RE projects and leadership in RE. Yet massive resistance from big energy giant Eskom, traditional state monopoly.
- Primacy of centralised v/s decentralised paradigms
- **Kenya:** despite success in wind energy, low transmission, low rural demand and high resistance due to displacement and dispossession from land

Conclusions

- Scarcity not natural or universal
- Responses to scarcity not neutral but as part of socio-political choices
- Linked to access, practices and meaning
- The 'manufacture' of scarcity to suit the interests of powerful actors
- Scarcity evoked as a technical term with science and technology as the 'solutions'
- Schemes to mitigate scarcity have contradictory impacts and build on local gender and power relations
- Even so called environmentally friendly infrastructure is not without wider socio political and environmental challenges

Thank you!

Photos and slides : All Lyla Mehta expect
for Max Martin (no. 17), Ian Scoones (no.
15)