

## Identifying outcomes - end-user's use of energy services

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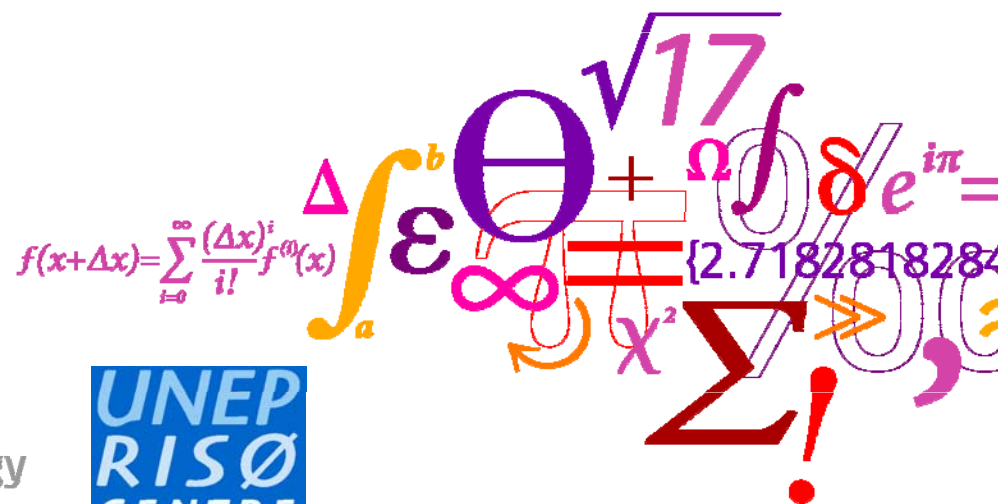
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# Identifying "outcomes"

End-users' use of energy services

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## “Outcome” as an element of the causal chain

- Input –material, financial, social, institutional, and/or know-how
- Output - often an energy service or an energy vector
- Outcome – improvements attributable to the utilization of energy services. How are end-users affected by improved energy services?
- Impact – similar to outcomes, further downstream, subject to other influences and circumstances

## How are end-users affected by improved energy services?

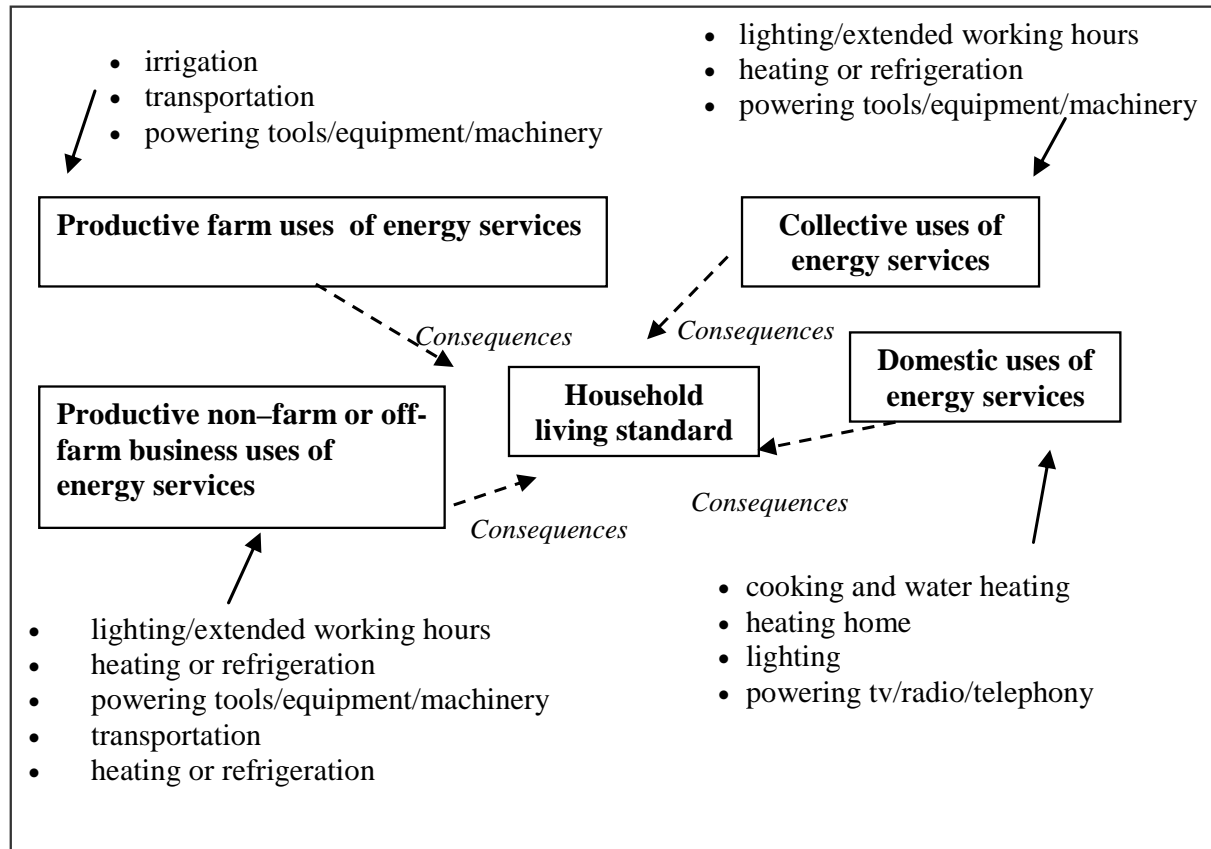
- Answer linked to how well we understand how they use energy services. (Likely to be location specific.)
- Simplify, let's assume all productive/commercial activities are owned by households  $\implies$  ultimately households are the agents affected by access to improved energy services.
- Three common classes of uses are:
  - (i) Domestic,
  - (ii) Collective (e.g. schools, clinics or street lighting)
  - (iii) Productive.
    - farm uses
    - non-farm uses

# Improved energy services affect households living standards

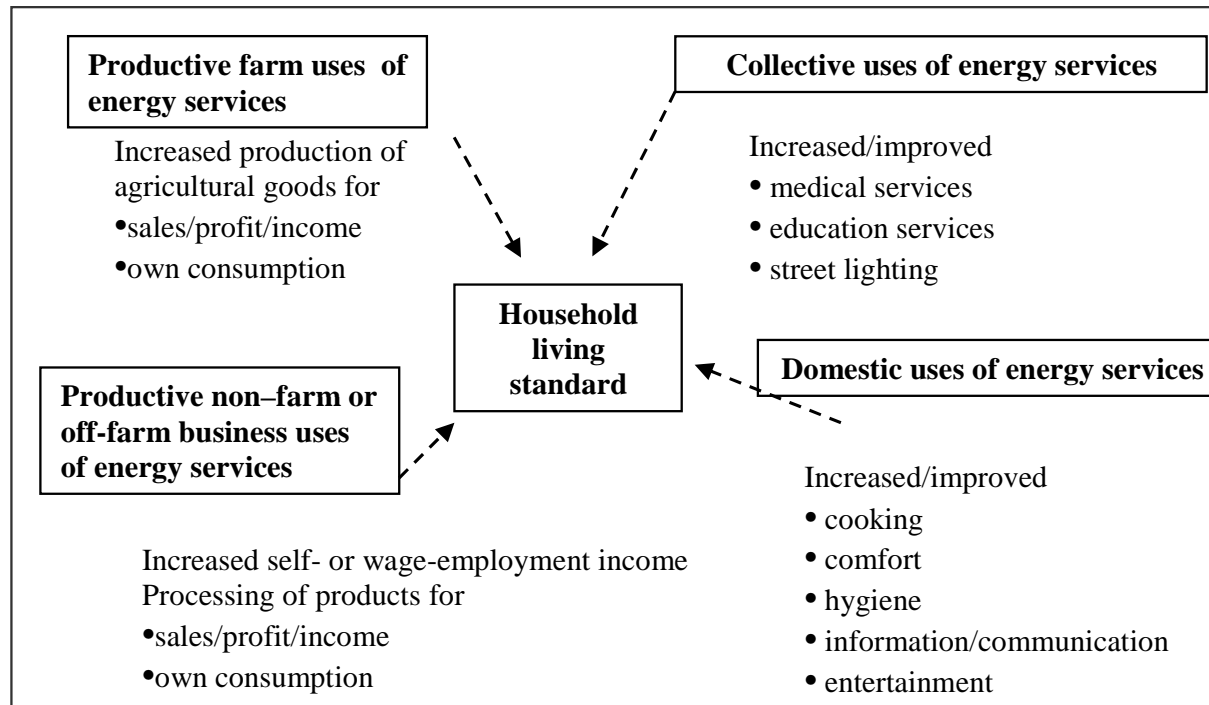
“Living standards” – monetary income, sense of security, connection to outside world, or opportunities to generate their livelihoods

- “Livelihood” - not all income is monetary, how does the household organize itself, or its members, and draw on available resources, so as to meet its various needs?
- We will proceed for now to classify households activities as falling into categories:
  - (i) Domestic,
  - (ii) Collective (e.g. schools, clinics or street lighting)
  - (iii) Productive.
    - farm uses
    - non-farm uses

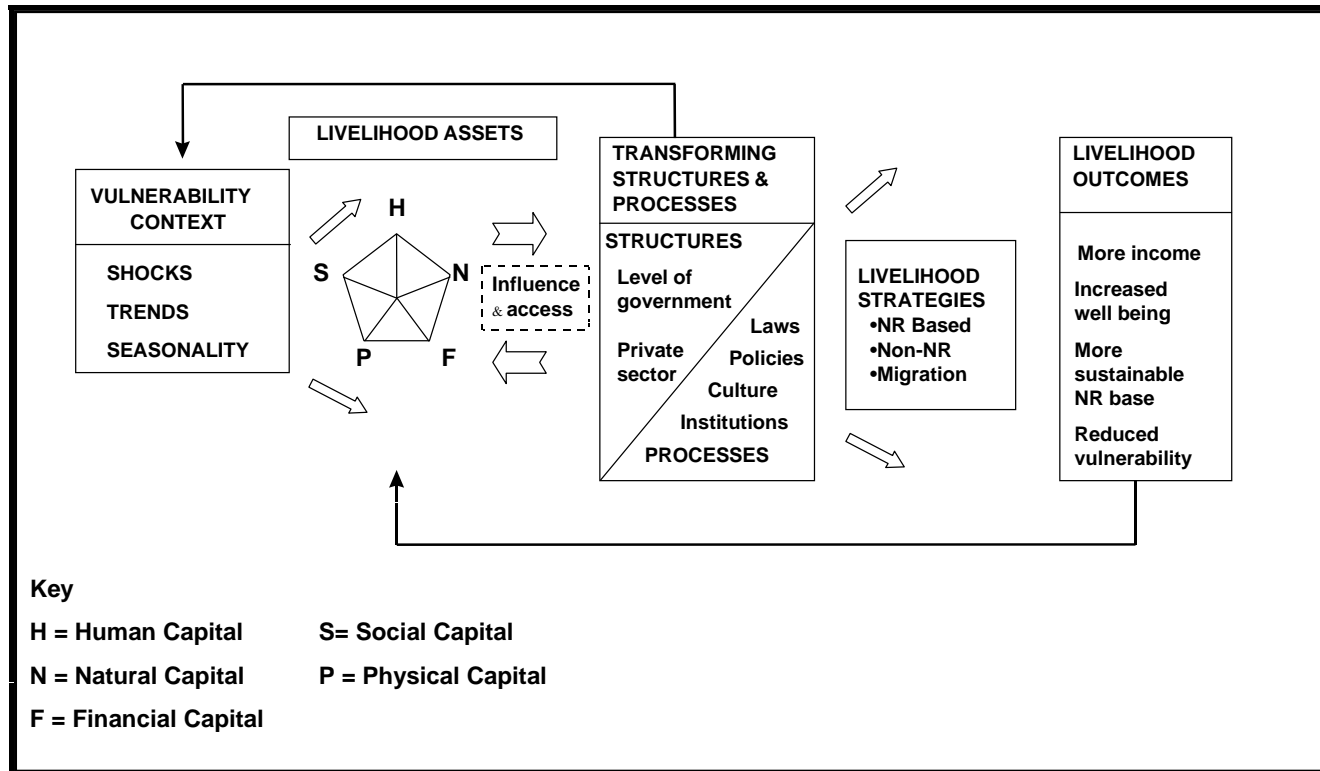
# Examples of energy services utilization which have consequences for household living standards



# Examples of consequences for household living standards from the utilization of energy services



# Sustainable Livelihoods Framework





## Afterthoughts on outputs

- Our assessment/evaluation depends crucially on how well we understand end-users use of energy in their "livelihood generation" (not necessarily modelled according to the SL Framework)
  
- Outcomes may be more interesting in terms of "results" – but the sustainability of outcomes depend crucially on the sustainability of inputs – do not overlook inputs (spares, maintenance, training for usage)