



The food sustainability problem:

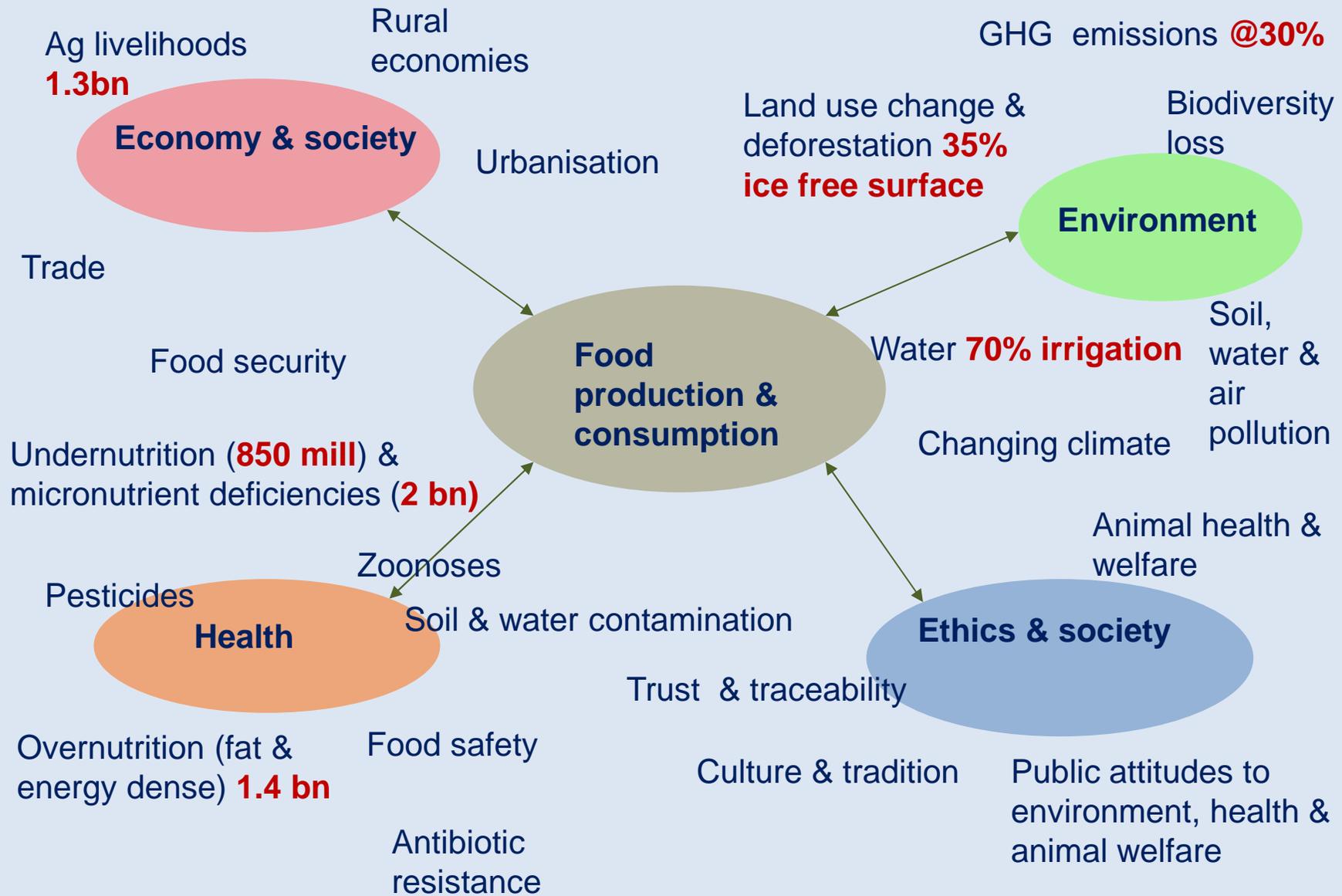
How do we move forward?

And what does transparency have to do with it?

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Food sits at the heart of multiple concerns



The 'food sustainability' problem is well rehearsed...

- We have
 - Demand side pressures: Population growth, demographic changes, shifting diets... *interacting with*
 - Supply side pressures: resource scarcity, environmental degradation, climatic instability
- Within the context of insufficient, ineffective or perverse governance ... *leading to*
- Increased risk of climatic & other environmental change & food insecurity (insecurity of excess and insufficiency)
- Harming poor people most – today and tomorrow

We all want a sustainable health-enhancing food system!

- We (nearly) all agree that we need to feed more people, better & more sustainably, while adapting to and mitigating environmental (including climatic) change
- But we have different perspectives on what ought to be done
- **Why?** (and what's the relevance to transparency?)

What do we disagree about & why?

- We have different views on:
 - How the **world works** - ie. what it is *like*
 - What is '**inevitable**,' what is '**possible**' & what is **desirable** - ie. how far the status quo can & should be challenged
- We have different visions of what a **good life** looks like
 - What does a sustainable food system look like?
 - What is progress?
- And we differ in the extent to which we 'lump' issues together or separate them out
- Values – ethics and aesthetics - underpin them all

This talk

- Describes 3 broad approaches * caricaturing, generalising & simplifying * to the food problem
 - Supply side challenge **Efficiency**
 - Demand side challenge: **Demand restraint**
 - Equity challenge: **System transformation**
- In relation to 3 areas:
 - GHG emissions
 - Human nutrition & food security
 - Animal welfare
- Identifies values underpinning these perspectives – and the lack of transparency wrt these values
- Offers some concluding thoughts-in-progress

1. Efficiency perspective

- The problem: **More food needed**
- The solution: **Produce it with less environmental impact**
- Focus: Production – producers
- Geographical perspective: Macro - global markets
- Key stakeholders: Policy makers, ag producers & farming unions, food industry
- **Dominates** food security & mitigation discourse

Efficiency & GHG mitigation

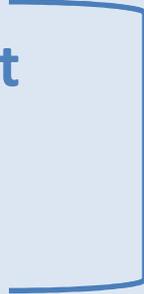
Deliver *more for less* through technologies & techniques

Agriculture: sustainable intensification / land sparing

- **Optimise inputs relative to outputs:** nutrients, crop protection, water, breeding & feeding strategies for livestock
- **Turn negative outputs into positives:** eg. methane & AD
- **Take up carbon:** soil carbon sequestration; avoid land use change; offset fossil fuel use via biofuel production
- **Post farm gate: decarbonisation**
 - Energy efficiency, renewables, waste avoidance and mgt
- **LCA thinking v influential** - highlights **relative** improvements ie. kg product/kg CO₂eq

Efficiency, food security & nutrition

- **Food security** = *'More food to meet demand'*
 - Hunger a **supply side** problem.
 - Demand **unchallengeable**.
 - Solution: **more** grains, more livestock.
- **Plus nutrition** = *'inevitable'* consumption trends healthier
 - Breed **leaner** animals
 - **Product reformulations** : less fat, fewer calories, enhanced nutrients (probiotics, added vitamins etc);
 - **Biofortification & fortification (eg. HarvestPlus)**
 - **Labelling** & information
- **Environmental goals: more food for less impact**
- **Food security : meet demand**
- **Nutrition: make status quo healthier**



**Addressed
separately**

Efficiency & animal welfare

- Good welfare is possible in highly intensive systems
 - “You get good and bad welfare in any system”
 - “Do cows really ‘like’ fields? Don’t anthropomorphise...”
- Focus on physical health & stockmanship
- Emphasises potential for ecological & health *effectivenesses* as well as economies of scale
- *Framing of priorities*: “hungry children” vs pig & chickens

Underlying moral values?

- Decoupling (of consumption from impact) is possible – thanks to human ingenuity: “green growth”
- Optimistic (we can innovate)... *and* pessimistic (human nature can't change)
- Better material quality of life for all & ‘feed the world’
- Freedom = *freedom to consume*
- Approach: Innovation with informed choice

2. Demand restraint perspective

- Problem/challenge: Excessive consumption of high impact foods.
- Solution: More sustainable diets
- Focus: Consumption – consumers.
- Geographical perspective: Developed / rich world origins and focus
- Stakeholders: Environmental & animal welfare organisations, vegetarian & vegan groups, animal rights activists

Dem. restraint & GHG mitigation

- Targets high impact meat & dairy products
- On SI: “If we ate a more sustainable diet we wouldn’t need to intensify production/expand agri land”
 - I.e. an SI/ *efficiency of diets* approach
- **LCA thinking** highlights **absolute** impacts of livestock products compared with plants

Dem. restraint, food security & nutrition

- Food security:
 - Contraction & convergence: *“there is enough food to feed everyone”*
 - Highlights obesity problems: *“more fat people than thin people”*
 - Meat *‘wasteful’* wrt **protein & land** use – ‘feeding grains to livestock undermines food security’
- Nutrition:
 - Emphasises **negative** qualities of animal products (eg saturated fat, calories) (fat rich people focus)
 - Underplays **positives**: iron, calcium, B vitamins, zinc, protein
- Livestock farming = ‘source of all evil’ (**lumps** issues)
 - ie. **nexus** of health, ethics (eg. animal welfare), environment

Demand restraint & animal welfare

- Critique of CAFOs/ intensive systems
'commoditisation' & 'industrialisation'
- Animal welfare: emphasises natural living
'freedom to express natural behaviour',
- Animal rights: often ambivalent about rearing
animals for food at all
- *"Cows belong in fields!"*

Underlying moral values?

- “Limits to growth”
- “Greed” narrative; insatiability of human desire
- Freedom = *freedom from consumption* - ‘Live better by consuming less’
- Production side approaches an (immoral?) “techno-fix”
- Approach: regulation needed to change context of consumption

3. Food system transformation perspective

- Problem/challenge: **not production, not consumption but *inequitable* power structures.**
- Solution: **More equitable *access* to food & means of production**
- Focus: *Interactions* among food system actors
- Geographical focus: Developing plus “alternative” developed country – generally rural
- Stakeholders: Wide spectrum (alternative food mvt through to elements of FAO). Strong representation from international devt and civil society
- How dominant? Vocal.. but impact on practice?

Sys. transformation & GHG mitigation

- Focus on socio-economic systems & institutions; on smallholders & (often) developing countries
- Appropriate technologies & multifunctionality of land & livelihoods
- Adaptation more of a focus than mitigation
- Environmental sustainability often assumed to follow → ie. outcome of more equitable systems
- LCA? Hasn't yet engaged properly with envtl metrics

Food security as an *outcome*

- ...ie. Not just *supply* but *other dimensions*:
 - Can you *afford* it? Livelihoods, institutions, markets, empowerment
 - What *kind* of food is it? Nutrition
 - What are the *conditions* within which you are consuming? eg. disease, sanitation, cooking facilities
 - Do you have *stable* access? Temporal dimension
- Nutrition *part of* food security:
 - Not 'more' or 'less meat' but...
 - *dietary diversity* for micronutrients (meat, veg, legumes, local foods)...
 - and the transformative role of *empowered production*

Syst trans & animal welfare

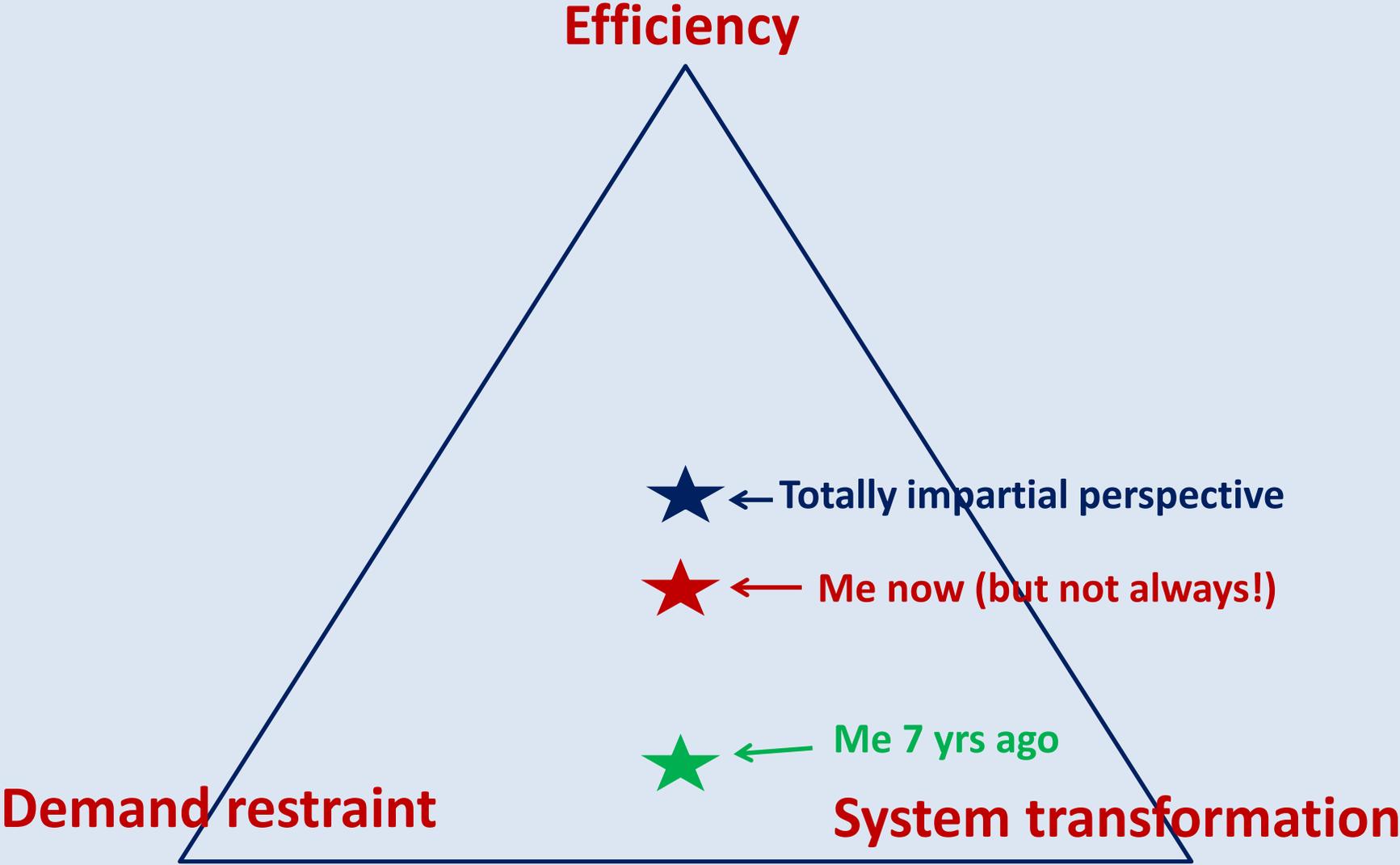
- “Well-cared for livestock are good for farmers” ie. *One Health* approach
- Often developing country focused → ‘Intensification’ from a very low base = win-win-wins for animal welfare, productivity & environmental efficiency (tipping points?)
- ‘Industrialisation’ critiqued as fostering unequal power structures rather than AW focus per se

Underlying moral values?

- Equity & justice
- “Small is beautiful” (Agrarian? Romantic?)
- Not “*green growth*” or “*limits to growth*” but “*capacity building*”
- Not freedom *to* consume... or freedom *from* consumption but *freedom to self determine*
- **Approach:** Fairer terms of production & trade

We all have our biases

(although they change by day/context/time)



Conclusions about food

- No one approach will do the job. Each on its own is **too simplistic**
- Efficiency perspective is **overly dominant** in policy & practice
- We need to draw upon all three perspectives and **balance them better**
- Need to recognise that food sustainability is **not (just) a “scientific” or technical** problem...
- ...**Values matter** – they influence the choice of metrics, assumptions re baselines, counterfactuals, visions etc
- Not necessarily ‘unscientific’ but **extra** -scientific

On being transparent about transparency...

A man that looks on glasse,
On it may stay his eye;
Or if he pleaseth, through it passe,
And then the heav'n espie.

George Herbert

We need to be **transparent** about the values we bring

Thoughts on how??

- Clear up factual accuracies: some evidence is simply wrong
- Identify real uncertainties in evidence & attitudes to uncertainties: how important is the uncertainty to my assessment of the truth?
- Consider assumptions re. baselines, framing conditions, counterfactuals what's starting point, what's the alternative?
- Consider how different values give rise to different ranking of priorities: **A** ranks economic development over animal welfare but **B** ranks animals over economics)
- Consider how diff values generate differing convictions as to what constitutes, eg. good nutrition or welfare: ie. my definition of good welfare is different from yours
- Identify commonalities of value among individuals who may argue for different solutions & inconsistencies within individuals highlight the simplistic nature of a 'three perspectives' approach... kick away ladder...

“Empathy occurs when we suspend our single-minded focus of attention, and instead adopt a double-minded focus of attention... to identify what someone else is thinking or feeling, and to respond to their thoughts and feelings with an appropriate emotion.”

Baron-Cohen S (2012). Zero Degrees of Empathy

Thank you

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