





TOWARDS HEALTHIER & SUSTAINABLE FUTURE FOOD SYSTEMS

Emerging Insights from Food System Innovations

Ruerd Ruben







Food System Approach

- ☐ Linking production to consumption/nutrition
- ☐ Dovetailing technical with behavioural change
- ☐ Focus on critical drivers of change
- ☐ Involving public, private & civic actors
- ☐ Matching local to globlal outcomes
- → From problem-solving to systems solutions









Country

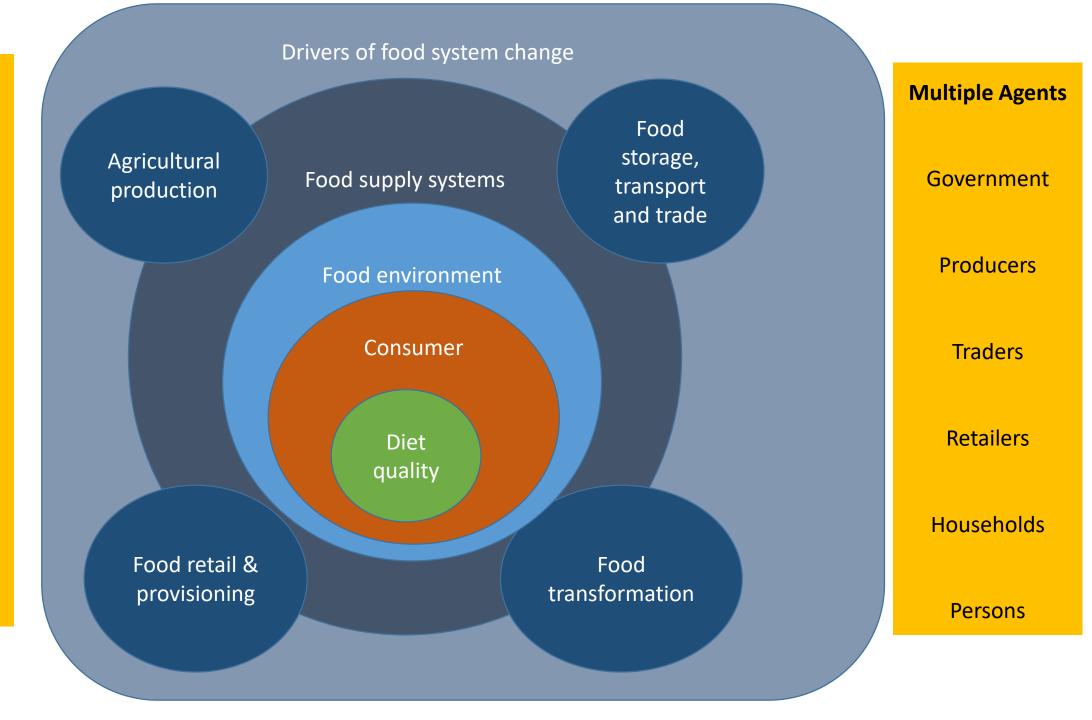
Region

Village

Neighbourhood

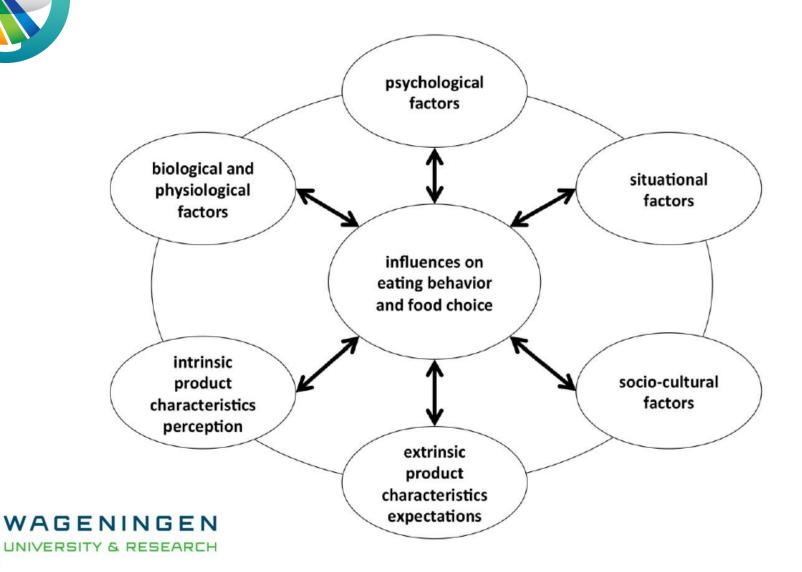
Family

Intra-household





Diverse Motives for Food Choices

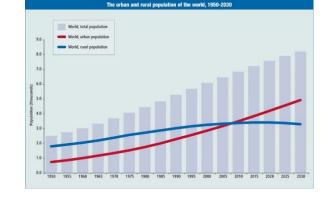


Eating Motivations

- Liking
- Habits
- Needs
- Physical well-being
- Convenience
- Pleasure
- Tradition
- Nature concerns
- Sociability
- Price
- Physical appeal
- Weight control
- Affect regulation
- External demands
- Social image



Main trends & challenges



Connectivity

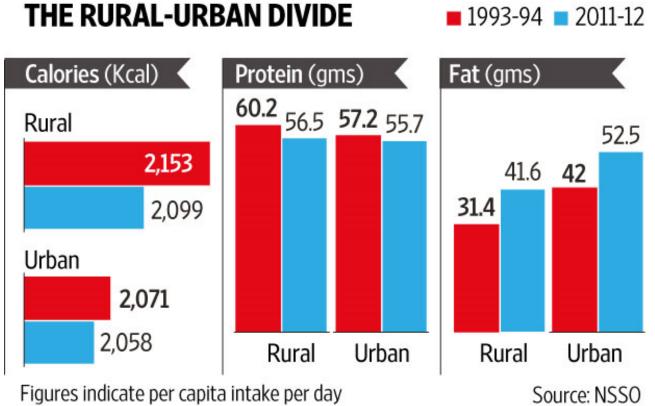
- Supermarket expansion & outof-home consumption
- Food prices & market volatility
- ICT revolution in agri-food value chain

Resource intensity

- Rapid urbanization & growth of megacities
- Climate change and yield gaps
- Dietary changes & protein transition



Changing Rural & Urban Diets



Slowly reducing share of staples

Strong increase intake of (ultra)processed food

Moderate increase in fruit & vegetables

Rising demand for animal-based food



India: more calories, less proteins, more fats & sugar



Multiple Markets





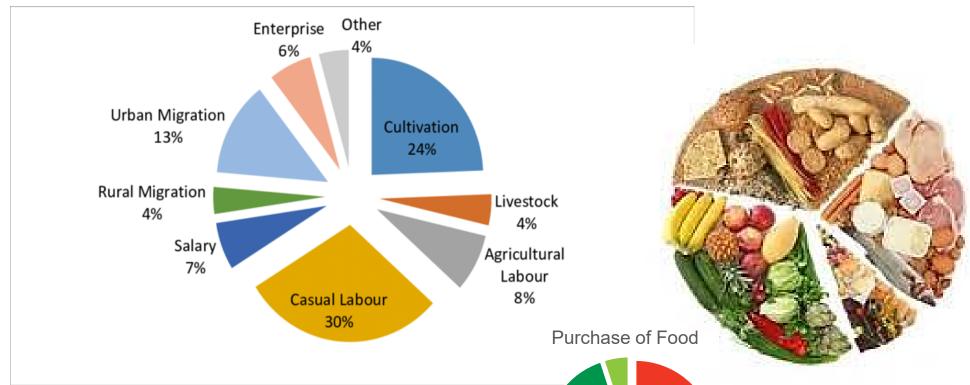








Food purchase from multiple income sources



Income & market diversification may support dietary diversy





Nutrition-sensitive & circular Value Chains

- Packaging & storage for reducing loss and maintaining quality
- Reducing lead time & extending shelf life
- Efforts at the start of the value chain give returns at the end
 agency coordination required
- Also promising for local vegetables varieties with high nutrient content







From institutional to home consumption

- School meals , hospital & prison canteens, company restaurants
- Support school enrollment and workplace attendance
- Direct nutritional effects (social protection; rapid hospital recovery)
- Spillovers to household behaviour









Personalized nutrition

- Nutritional labelling (Organic, Sustainable, Fair, GMO)
- ICT opportunities: internet shopping & home delivery (+ gender empowerment)
- Tailoring food supply to individual demands and needs (vouchers; Veg-on-Wheels)
- Individualized messages: Bar / QR codes in health apps, prompting healthy food











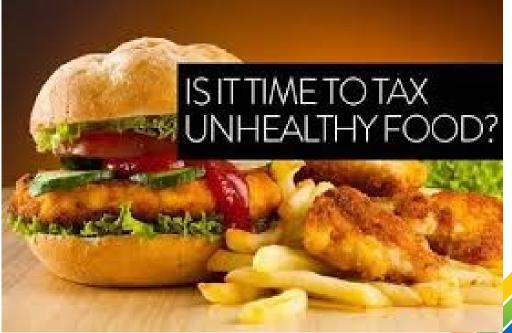
Pull & push policies

Nudging consumers towards healthier food choices

- Retail environment influences 'easiness' of food choices
- Moderating intake of candies and soft drinks (barriers)
- Taxing sugar and fat content (or: provider-get subsidies)









Public – private partnerships

Public Policies

- Price & non-price support for healthier food
- Focus on availability, safety & easiness
- Community platforms for procurement of healthy foods

Private Contracts

- Long-term contractual delivery agreements
- Involvement of all supply chain agents
- Mainstreaming sustainability & fairness (living wage)



Outlook & Future Challenges

- 1. Tailoring food supply to consumer's motives & social norms
- 2. Public role for shaping a conducive (urban) food environment
- 3. Business partnerships to uplift food standards
- 4. Citizen platforms to enhance neighbourhood participation
- 5. Experiments towards food systems co-innovation



Thanks for your attention

