

Beyond food availability: exploring the concept of food security

Elisabetta Aurino

Young Lives, University of Oxford

Presentation at Oxfam House, 1 October 2013

Brazil develops 'superfoods' to combat hidden hunger

Zimbabwe faces looming food crisis, says UN

4 Sep 2013: World Food Programme predicts one in four people in rural areas will need food assistance next year

Corporations and the fight against hunger: why CSR won't do

India's food security bill: an inadequate remedy?

Namibia drought: one in three at risk of malnutrition



14 Aug 2013: Climate change fears as 778,000 people face food insecurity amid Namibia's longest dry spell in a generation

Millions of Syrians in need of food aid as war devastates food production

UN says 'one billion undernourished' figure is wrong

Much ado (and confusion) about FS

- Though a commonly accepted definition exists, in practice the focus varies so much across different dimensions/factors that highlights that many different views exist on the meaning of FS
- The variety of terms underscores that FS:
 - Complex
 - Multidimensional
- Confusion also arises because difficult to measure
 - 200+ indicators (*Hoddinnott 1999*)

1974

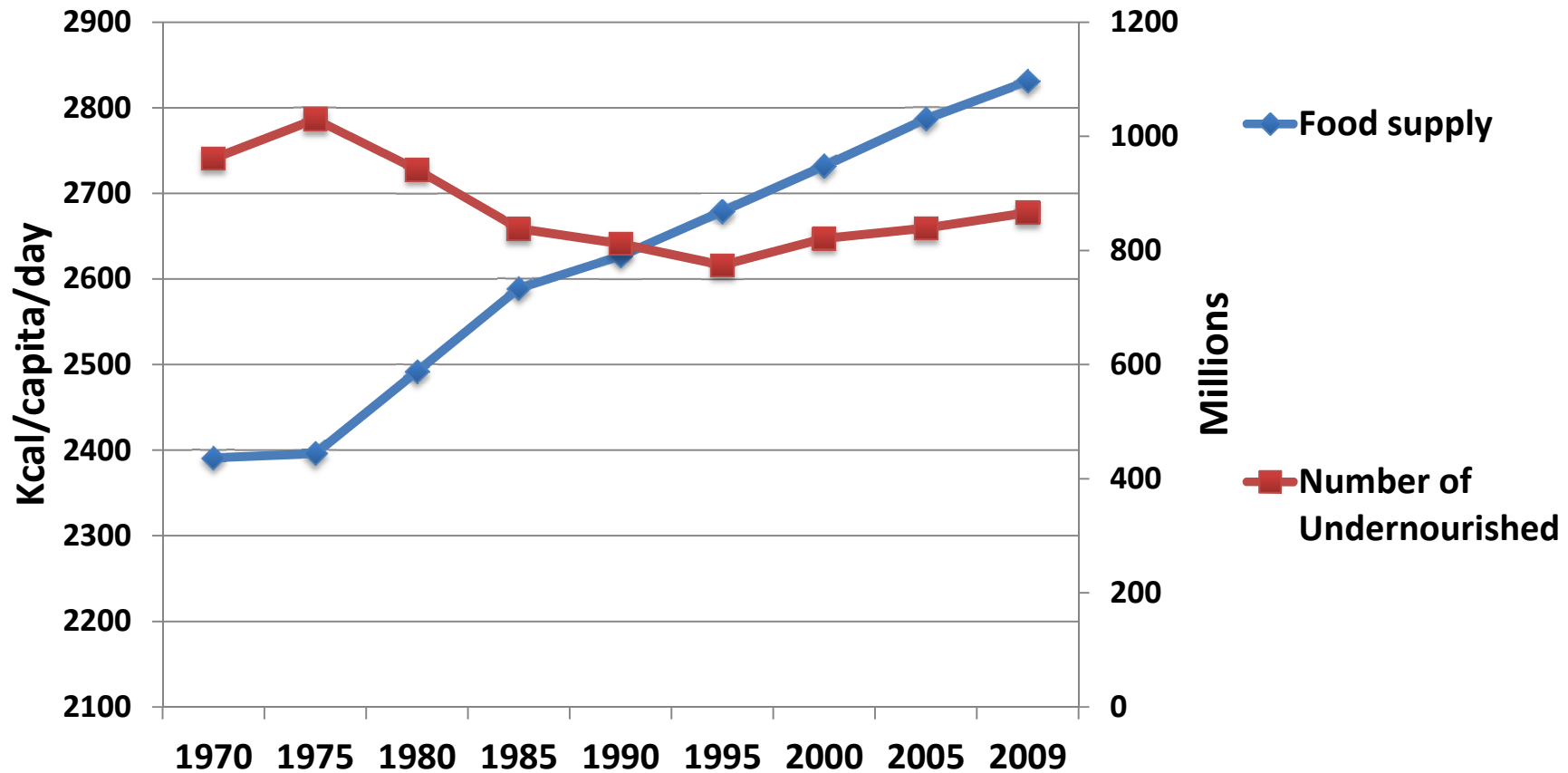
FOOD SECURITY

1st WFS:
Availability of
basic food
supplies

- Progress in increasing worldwide food availability
- Famines 1970s and early 1980s
- Green Revolution did not automatically translate into FS and poverty reduction

Is availability enough?

Global food supply and number of undernourished people (1970-2009)



Source: FAO FAOSTAT and SOFI 2012

Shifting the focus on access to available food

- Even if food is available in the country, some groups can still suffer from hunger and malnutrition if their capability to acquire food collapses
- Sen (1981) Food insecurity as a result of unbalanced power relations which manifest themselves in:

- Resource distribution
- Market structures
- Institutional rules

All these can erode the FS of the most disadvantaged sections of the population

An example from Namibia (*Levine 2012*)

- Food prices increases in 2008
- Decrease in purchasing power among rural subsistence farmers
- Compounded by reduced food availability for own consumption due to agricultural shocks in communal crop regions (-40% from the average)...
- ..and by limited access to salaried wages (unemployment rate of 40%)
- Highly mechanized and commercial farmers reaped abundant harvests (+100%)

1974

1986

FOOD SECURITY

1st WFS:
AVAILABILITY

WB report *Poverty and Hunger*:

Access of all people at all times to
enough food for an active and
healthy life

What did the focus on access imply?

Change in policy approach to FS through an increased emphasis on purchasing power:

- Redistribution of resources
- Social programs to sustain people's entitlements to food against bad events
- Rule of law/institutions
- Analysis of the composition of the distribution of food supply among different groups

Is access enough then?

- Entitlement approach: link between livelihoods, poverty and FS
- Nonetheless, in order to reach FS, other aspects - beyond availability and access - are important :
 - Nutrition
 - Stability over time
 - Social aspects of the food system

1974

1986

1996

FOOD SECURITY

1st WFS:

AVAILABILITY

WB report
*Poverty and
Hunger:*

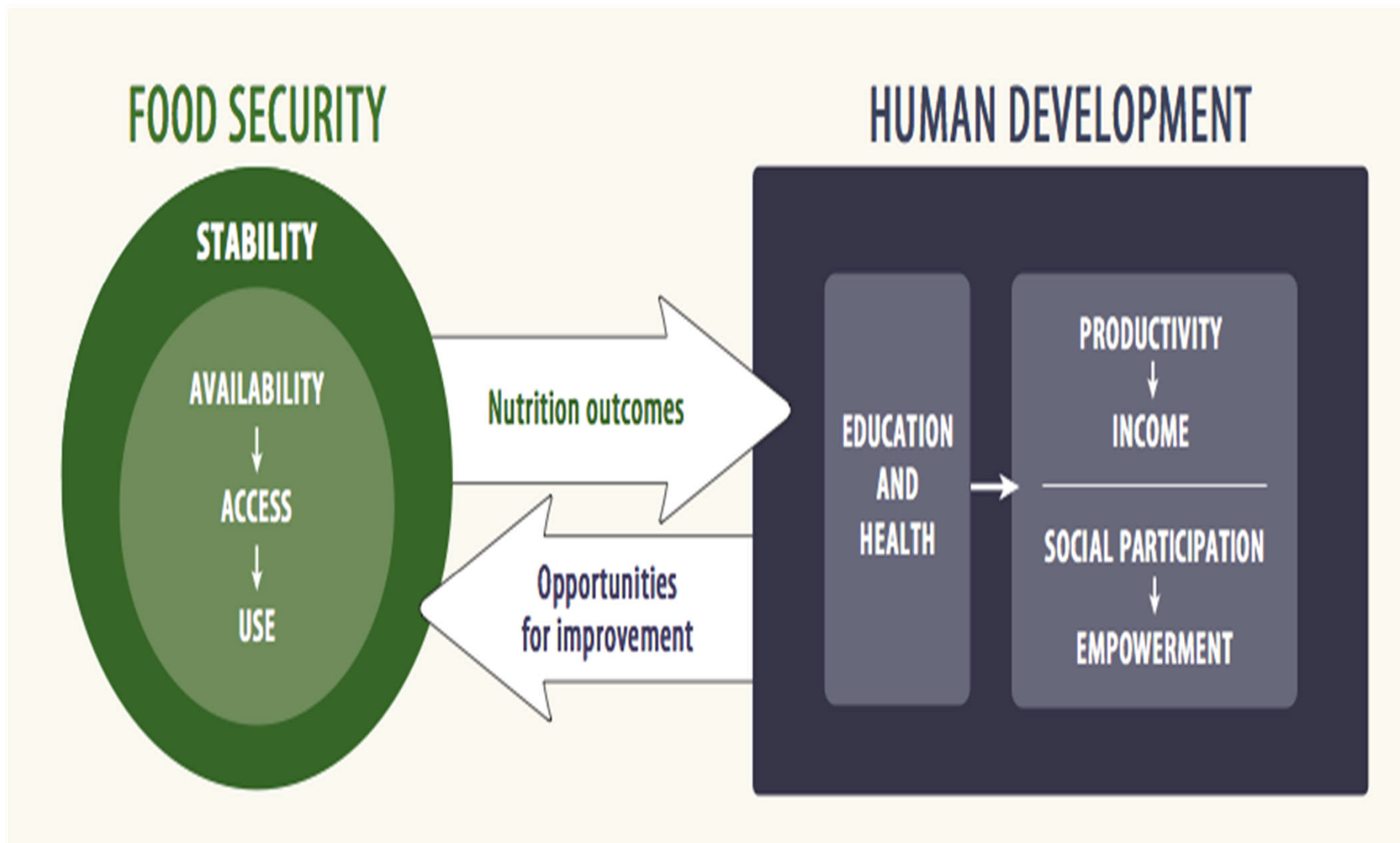
ACCESS

STABILITY

2ND WFS:

**“When all people, at all times,
have physical, social and
economic access to sufficient,
safe and nutritious food which
meets their dietary needs and
food preferences for an active
and healthy life”.**

UTILISATION



Source: UNDP/RBA 2012

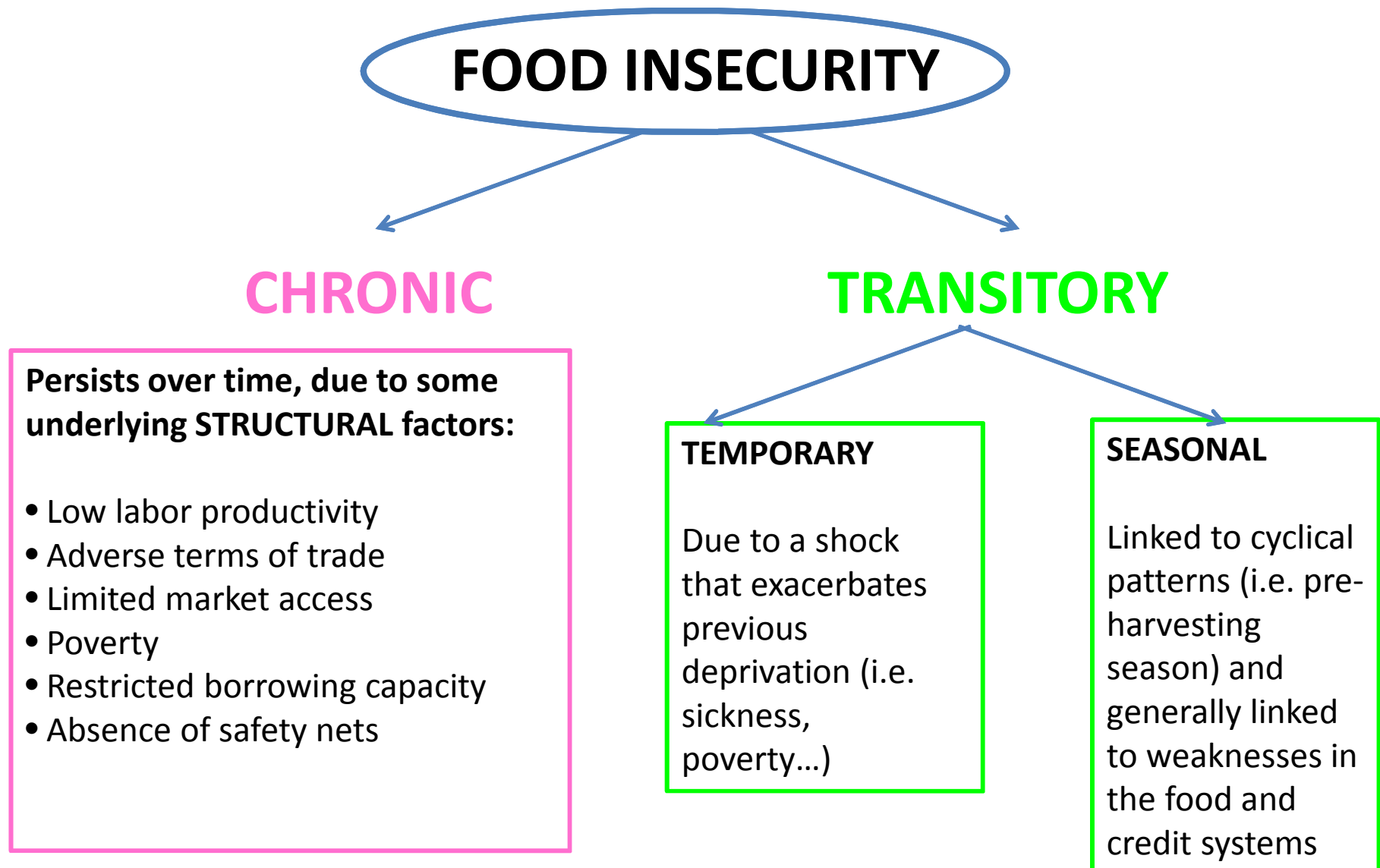
What's the utilisation dimension about?

- Emphasis on nutritional outcomes following the access to food
- These vary depending on:
 - **Individual characteristics** (i.e. age, health status, gender, activity levels...)
 - **Diet composition & feeding practices** (i.e. nutrients, nutritional knowledge, storage, processing...)
 - **Non-food resources** (i.e. health services, basic education, sanitary arrangements, provision of clean water, eradication of infectious diseases)


Example: Women education & Health expenditure for FS

- Aurino (2013)
- 57 low- and middle-income countries (~2008)
- Multidimensional measure of FS
- Health expenditure p.c. and female literacy ratio found strongly and significantly associated to FS levels

Understanding the temporal nature of food insecurity is fundamental for policy purposes



Following the WFS framework , food insecurity may be due to:

- **Lack of food**  No availability
- **Lack of resources:**  No access
- **Barriers to utilisation:**  No 'good' use of
the acquired food
- **Changes in time:**  No stability in
availability, access
and use

Why should we bother about all these complexities?

- These aspects should all taken into account when analysing, measuring and designing appropriate strategies to tackle food insecurity
- Understanding and clearly defining:
 - Who
 - Where
 - When
 - Why

is fundamental in order to devise appropriate policies

- To promote food security
- To mitigate the impact of bad events

Beyond multidimensionality: Resilience

- Relates to the **capability to cope** and adapt to:
 - Natural events
 - Economic shocks
 - Conflicts
- Risk and behavioural responses to bad events matter for policy
- Coping strategies may have long-term effects:
 - I.e. switch to cheaper, though less nutritious food -> impaired growth / micronutrient deficiencies
 - Reduced investments in health, education, productive assets...

Policy responses: social protection programs

- In situations of distress or shocks, public interventions can mitigate hardship and build resilience for the poorest and most vulnerable households, avoiding in this way that the damage would become permanent

“Adverse shocks to an economy rarely affect all people equally. Nature may not discriminate among people, but intermediate social and economic institutions certainly do”

(Barrett 2002, p. 2118)

An example from Young Lives: School feeding in India

- Midday meal scheme in schools in India
- Evaluation of the program for children under 2 years exposed to drought (*Singh et al 2013*)
- Meals compensated for early nutritional deficits



Yet, the focus on availability is still very popular in both academic and policy circles...

*“It is critical that the post-2015 development agenda has an **explicit goal on food security** (...). To sufficiently feed all people by 2050, worldwide **food availability in caloric content** will need to increase by roughly 64%”*

(Hansen 2013, HLPE Post-MDG)

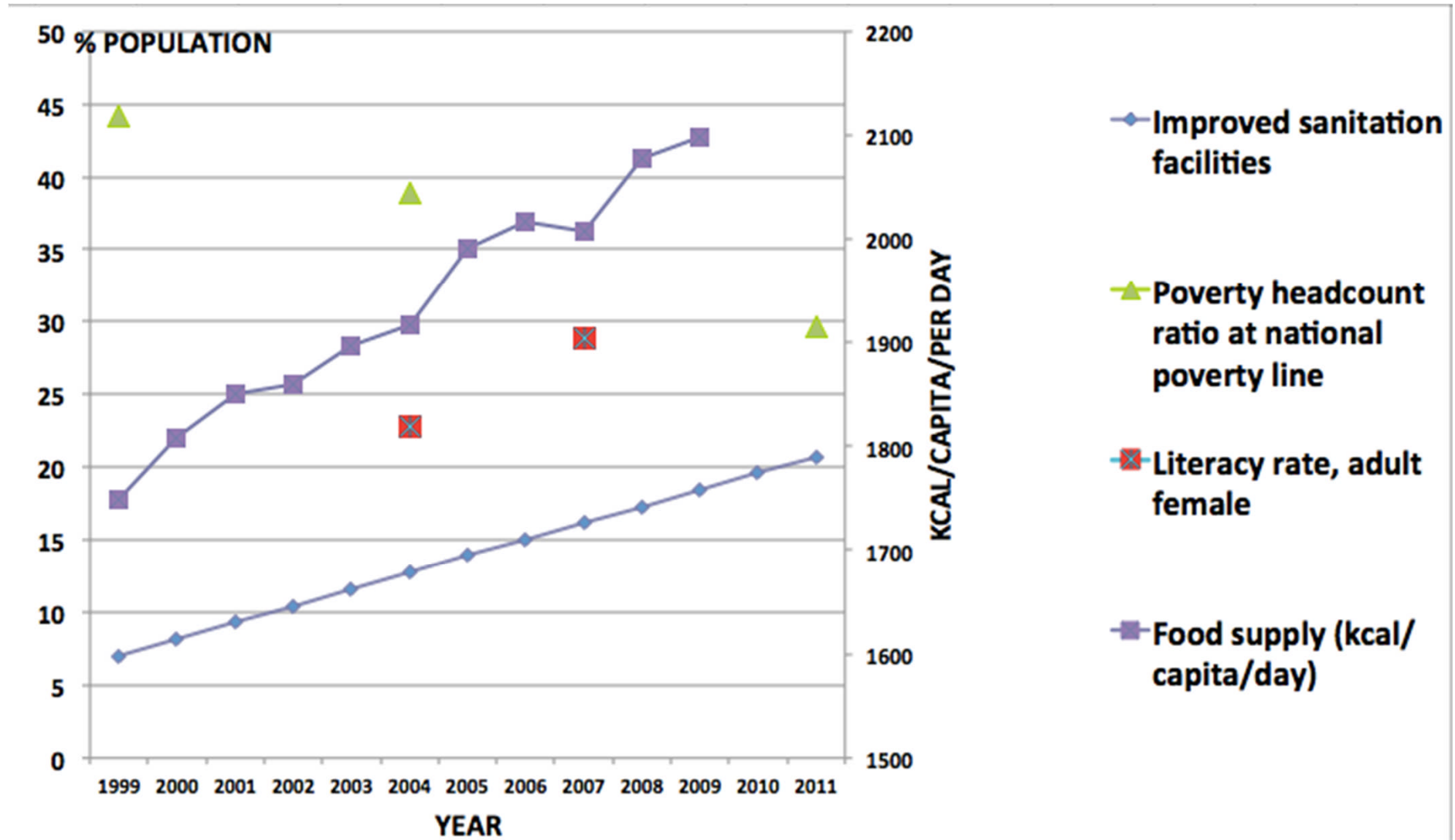
... as well as in the media discourses...



"What are all these famines in Ethiopia? What are they about? They are about too many people for too little land. That's what it's about"

(Sir David Attenborough
@The Guardian,
18 September 2013)

Ethiopia (1999-2011)



Source: FAO FAOSTAT and World Development Indicators

... and in the most common measures of FS

- **FAO Prevalence of Undernourishment**
 - Proportion of population that does not have access to a minimum level of calories
 - Global estimates
 - Resource-based
- Approaches based on estimates of calories from household budget surveys
- Don't take into account of all these complexities as they presuppose a strong relationship between food availability and food security

Conceptual clarity is fundamental

- The continuing evolution of food security as an operational concept in public policy has reflected the wider recognition of the complexities of the technical and policy issues involved
- Having a clear overview of the concept of FS is fundamental
- Concepts drive the way in which we:
 - Think
 - Measure
 - Act

Recognising complexities to improve measurement and policies

- Multidimensional measurement
 - One indicator cannot capture the complexity of the concept
- Multisectoral approaches to policies
 - Policies can not be limited to increasing production, controlling prices or improving quality of food
 - Take into account the interactions between the various dimensions of human development
 - Education
 - Health
 - Empowerment
 - ...
 - E.g. rural development strategies, social protection systems

Thank you!

Elisabetta.aurino@qeh.ox.ac.uk