



International Scientific Symposium on
Food and Nutrition Security Information:

*From valid measurement to effective
decision-making*



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Agricultural transformations and food security

Assessing potential linkages

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Setting the scene

- Agricultural transformations are underway in all parts of the world
- High poverty and food insecurity are often associated with some farming systems or agricultural holdings
- How to better formulate policies which trigger transformations so as to enhance long-term food security?
- What are the requirements for this change:
 - Data and assessment methods ?
 - Stakeholder involvement ?

Agribusiness production

- Higher input levels
- Larger fields
- Commercial oriented production

Implications?

- Employment
- Environment
- Food security & nutrition
- etc

Family farms

- Lower input levels
- Smaller fields
- Some commercial production

Thika
KENYA

Why we need to know more about Agricultural Transformations?

1. Important implications for development goals – local to global
 - *Food security - MDG1, WFS including poverty and employment*
 - *Environmental integrity – MDG7*
2. Polarized Policy debates between small to large scale models, concern for small farmers.
3. Informed policy dialogue needed on the future paths of agricultural transformations

Key research issues in assessment of linkages

- Does the « structural dimension » of farms affect food and nutrition security status of households? If so, to what extent?
- Need to determine
 - « Structural dimension » and changes
 - Who are affected?
 - Which indicators are best to assess and monitor food and nutrition security?

- « **Farm size** » matters, but **not enough**
- **Sustainable Rural Livelihoods** framework allows to consider:
 - « Non-farm » activities and related incomes, including remittances
 - « Non-market » productions as strategic components of livelihoods strategies
- Classical structure of the farm but also **the structural functioning** of it:
 - Is self consumption a “structural” part of the global food needs of the household(s)? (ie: 25% vs 75%)
 - Is non farm income a “structural” part of the household budget?

- Usually assessed on the basis of:
 - Quantities consumed; Diversity of food consumption
 - Income level; Perception (subjective)
- Caution! The analysis of relationships among indicators is not straightforward
 - Linking production to food security at farm household level is controversial (*Müller, 2010*)

Access: self-production and purchases

- Self provision in quantity and quality (diversity)
- Level of income (whatever its origin: farm or non farm)
- Share of income spent on food

Allowing for complex linkages to food security - I

- Wealth and food security are not 'perfectly' linked
 - Members of many « monetary rich » households consume insufficient calories due to social pressure or other budget constraints
- The role of non-farm income
 - Does food security improve with existing non farm income?
 - Does household with hired labor show better food security?

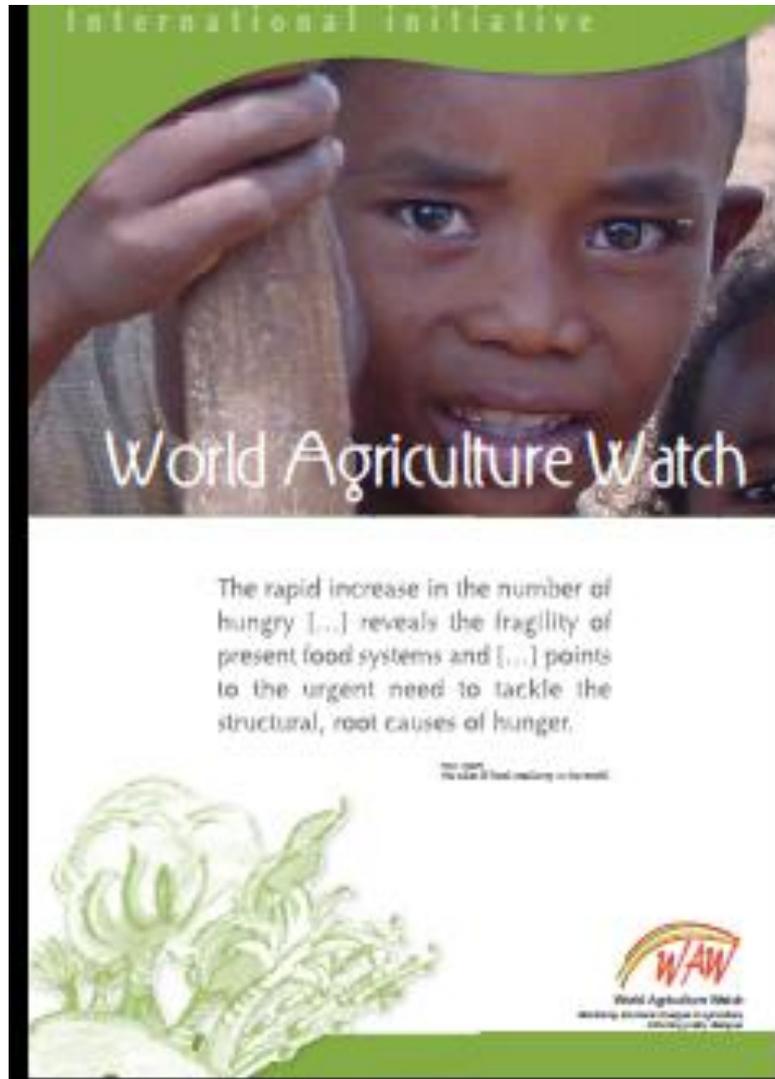
Allowing for complex linkages to food security - II

- Higher quantity of produce does not always imply better food security.
 - Work load (too high sometimes) [Parent, Burkina]
 - Inequality of access to the product in the family
- The nature and diversity of production impact food consumption and nutritional status
 - Children in milk producers' households are healthier than children of cereal producers' (Sahel)
 - Diversified home gardening have a positive impact on food diversity (Rwanda, Müller)

Data availability

- Need to mobilize existing surveys including agricultural census and poverty surveys (LSMS) to make sure the observations at territorial level are statistically valid
- Non-farm households' food security is affected by the way the agricultural sector is structured
- However, need to mobilize other sources of relevant information such as Health, Nutrition or Education

Introducing WAW



Objectives

- **Monitoring** the evolution of agricultural structures
- **Understanding** the multidimensional impacts of the changes including Food Security
- **Improving access of this information** to stakeholders to influence policy making