



The Evolving Global Nutrition Situation: Why Forests and Trees Matter

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Areas of Changing Understanding:

1. Forests and Conservation vs. Food Production
2. The importance of Animal Foods:
Protein vs. micro-nutrients
3. Income necessarily improves nutrition



Food Security:

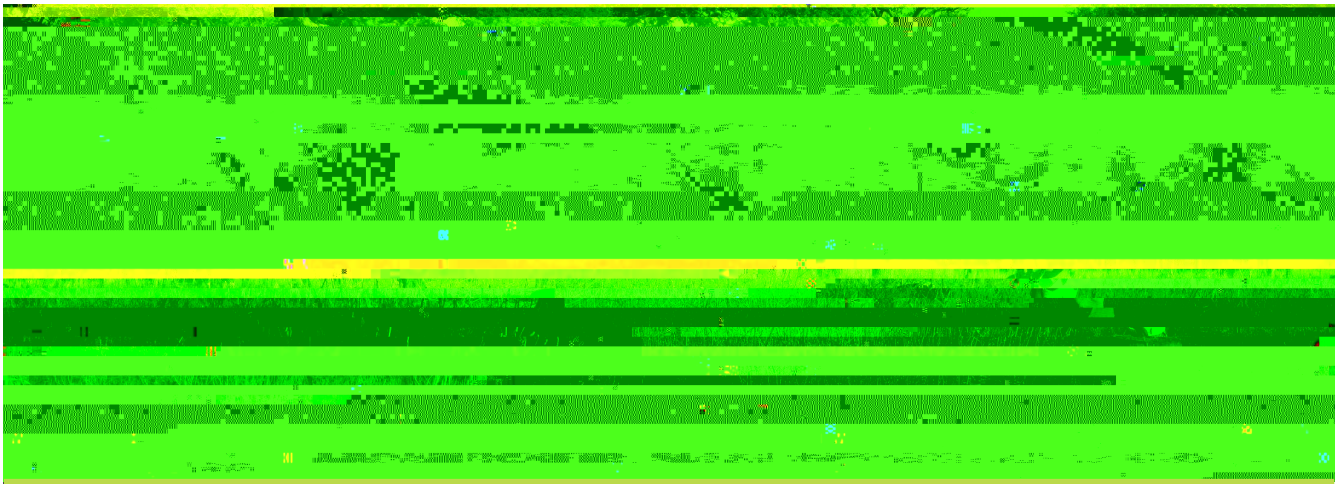
World Food Summit (1996) definition:

"Food security exists when all people, at all times, have physical and economic access to sufficient safe and *n r o s* food to meet their dietary needs and food preferences for a healthy and active life."

- Food Security: 4 pillars (availability, access, stability, utilization)... don't capture nutrition well

Malnutrition and Health:

- Infection increases requirements for many
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Common Measures of Food Security - "Hunger":

- Most often "available calories"
- Also experiences of food shortage (but rarely/ limited attention to diet quality/ nutritional quality)

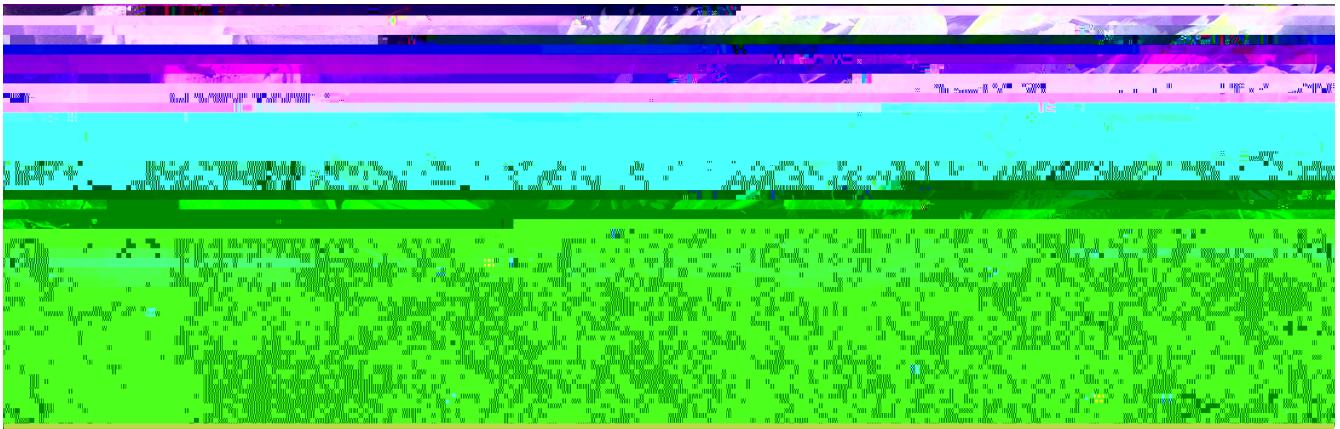
Common Measures of Malnutrition:

- Stunting and Wasting (which are also due to infection)



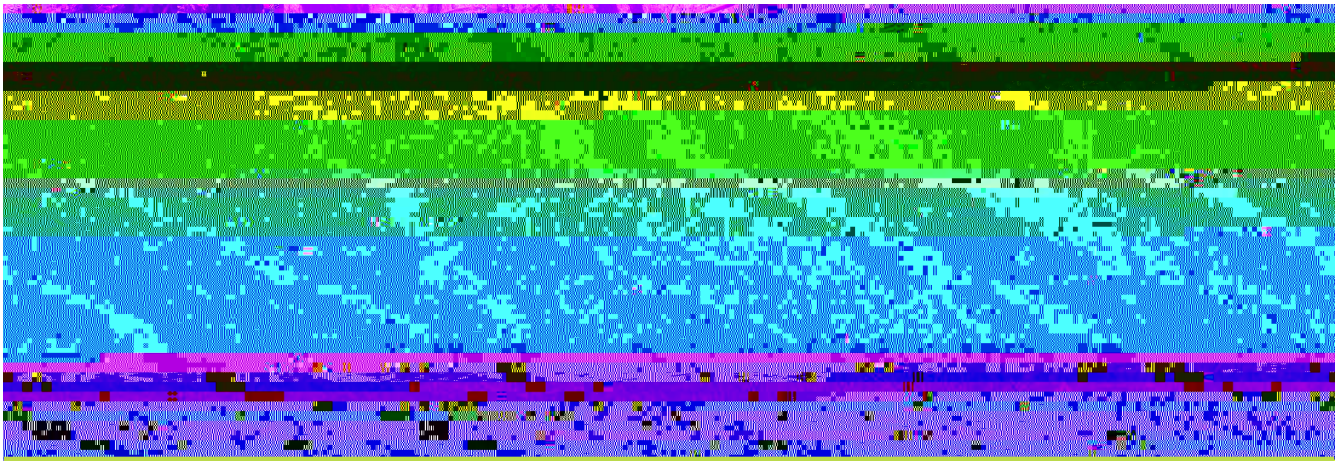
Diet Quality:

- Most measures of food security, and even measures of malnutrition, fail to adequately include diet quality
- Diet quality is essential for both over-nutrition and chronic disease prevention and adequate intake of micronutrients



Diet Quality – Fruits and Vegetables

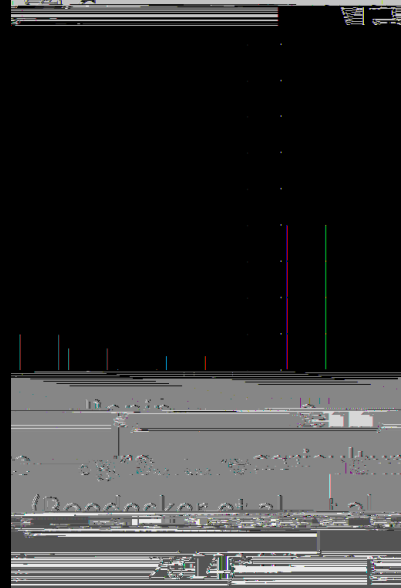
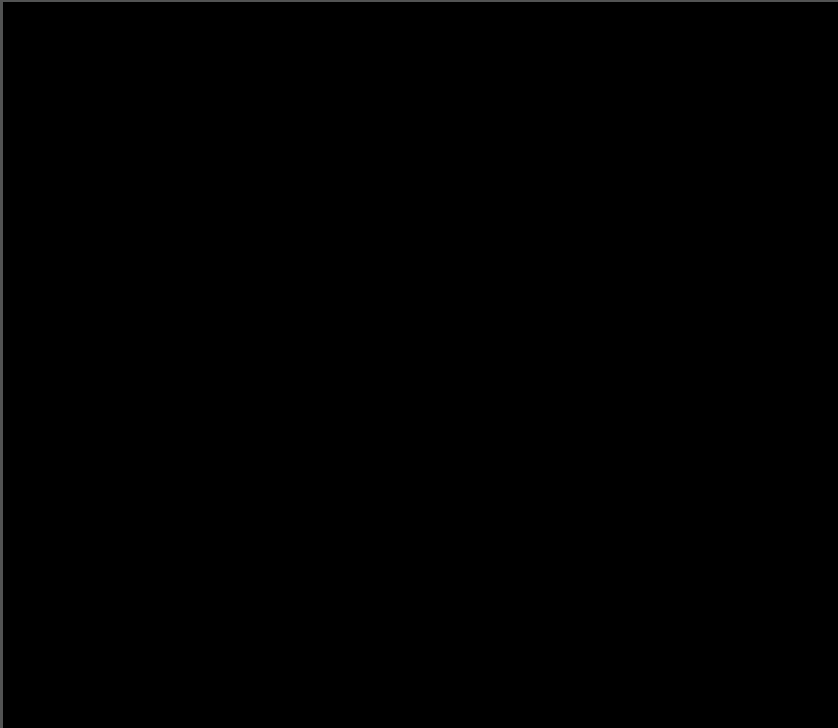
- **Fruits and vegetables are listed by WHO as one of top 10 risks of**



The Protein Myth:

- 30 years ago, severe undernutrition was thought to be due to inadequate protein intake "protein-energy-malnutrition"
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from wild



Forest foods and healthy diets: quantifying the contributions

BRONWEN H. JELLES*, ROBERT M. SHAW, AND



Forest foods and healthy diets: quantifying the contributions

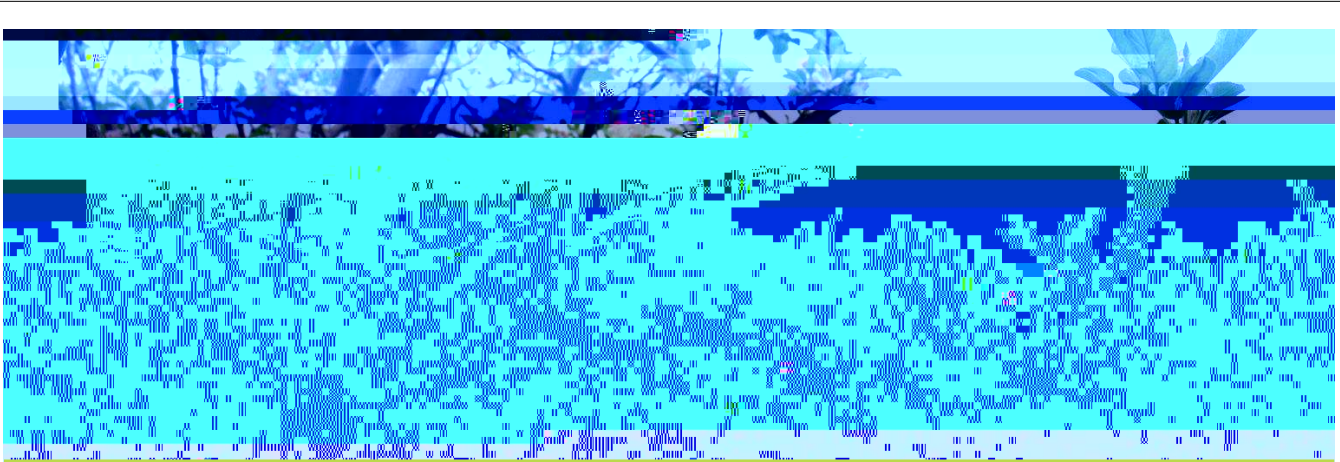
Foster

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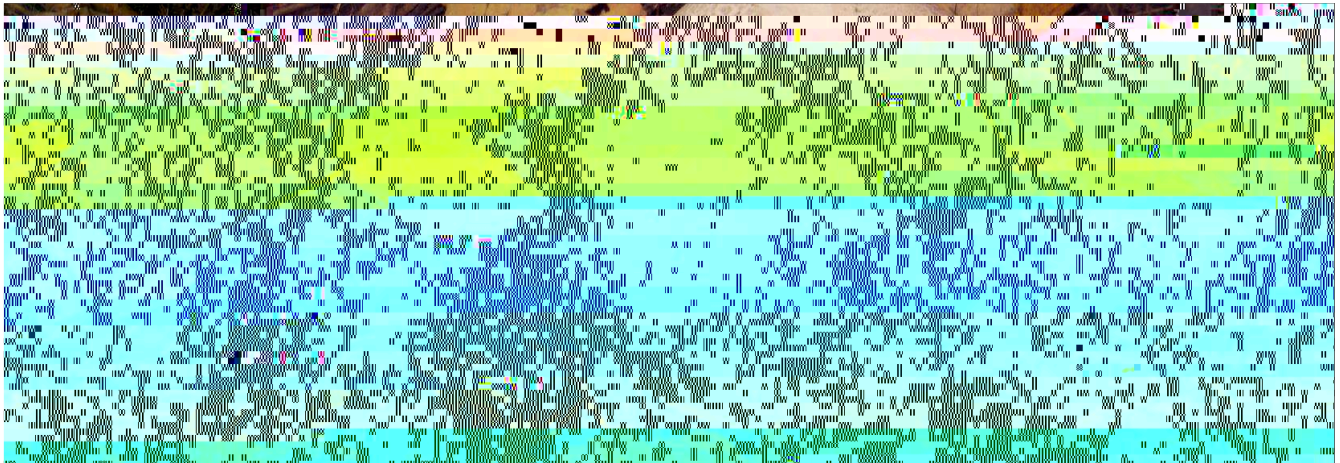
“More than half of the households in our sample collected forest foods for their own consumption, though consumption patterns were skewed towards low-quantity users.”

“Our results suggest that while forest foods do not universally



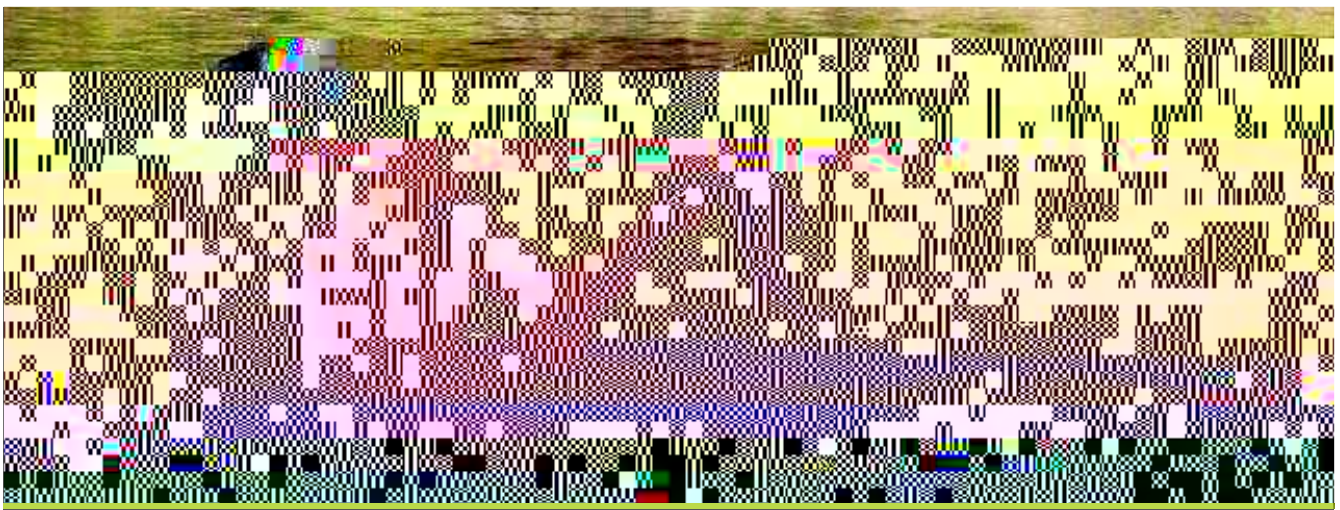
Why Forests and Trees Matter:

- The majority of the global vitamin C, vitamin A (RAEs), calcium and much of the folic acid are supplied by animal (and insect) pollination dependent crops (Eilers et al. 2011)
- Vegetables and fruits are the leading crop categories in value provided by insect pollination services Gallai et al. (2009)
- ... and many more Ecosystem Services for Sustainability of Agricultural Landscapes



Income and Diet Quality

- Income is often reported as one of (if not the) most important ways forests contribute to food security and nutrition
- For communities practicing traditional livelihoods, market integration can mean a diet and nutrition transition and lower dietary quality (Popkin 2014, Kuhnlein and Receveur 1996)
- FAO 2012 State of Food Insecurity: "Economic growth is necessary but not sufficient to accelerate reduction of hunger and malnutrition"



“Economic Growth is a Double-Edged Sword for Nutrition”

- 10% increase in GDP = 6% decrease in child stunting
- 10% increase in GDP = 7% increase in over-weight and obesity in women

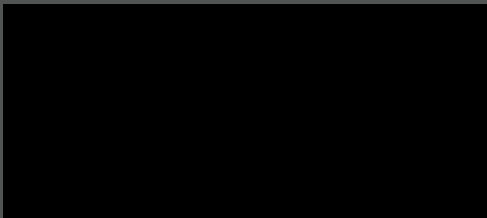
(IFPRI 2013)

n Yo

C o o n n p s – Kiswahili proverb

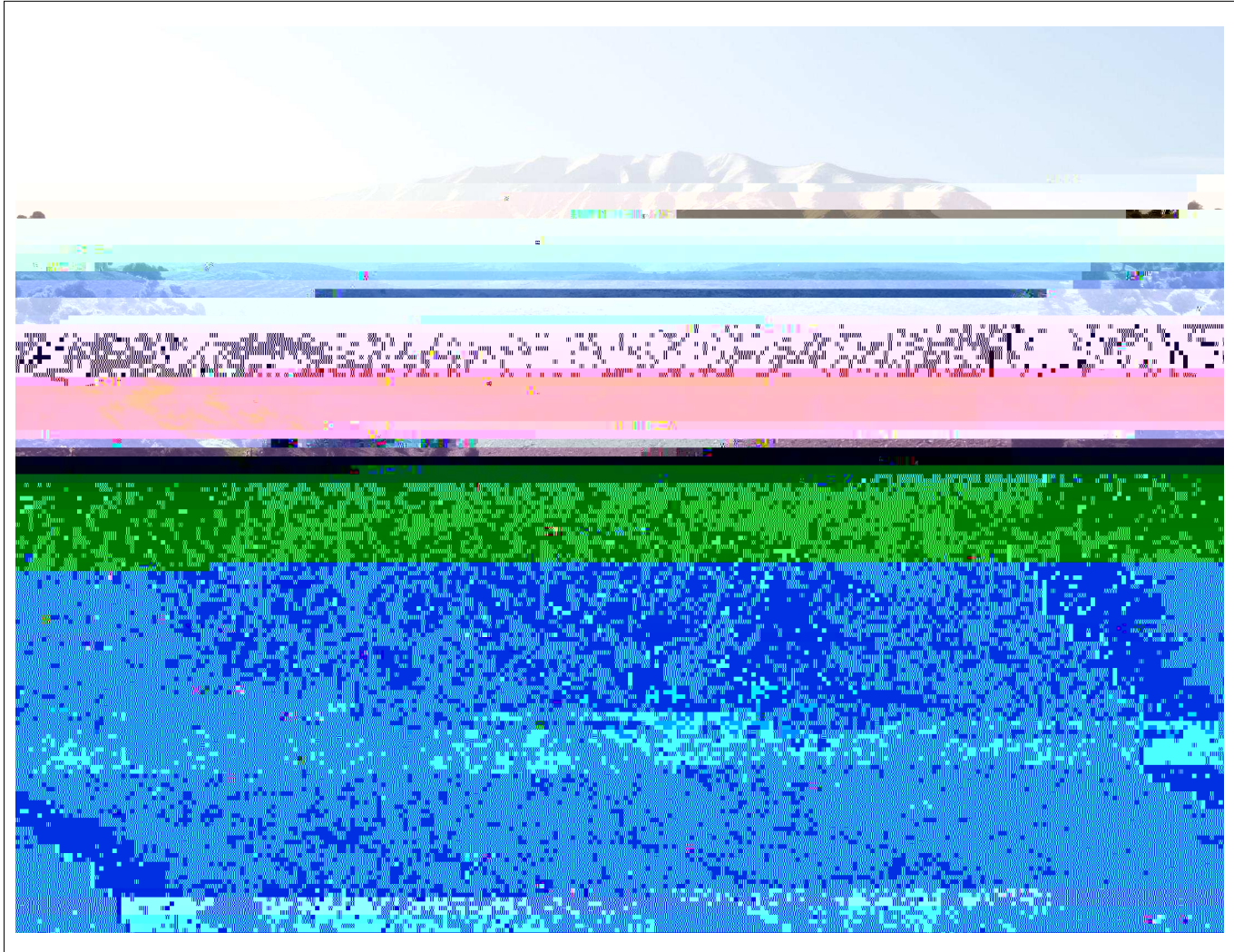
The boat does not get anywhere if each person rows in their own direction/manner

(i.e. To achieve change we must work together)



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SDG 2: More than just Hunger

2.1 - End hunger (ensure access by all people to safe, nutritious and sufficient food all year round)

