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Breakout Session 1: Undernutrition

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“Nutrition and Health Outcomes: Targets for Agricultural Research”

A few general observations...

- Disconnect between agricultural and nutrition programs (waste of resources).
- More interaction in program planning and implementation (not only in research).
- Is food security focus of some programs a stumbling block for improving nutrition?
- Impact assessment of agricultural programs needs to be broadened to explicitly include nutrition/health outcomes.
- Not only for interventions with the clear objective to improve nutrition, but for agricultural innovations more broadly.



General observations (continued)

- Include positive and negative impacts
- Not only impact, but also cost-effectiveness
- In terms of methods, economists and nutritionists have to learn from each other (RCTs versus observational data etc.)
- More work on metrics needed
- Need for open data resource to exploit available data more (harmonized survey instruments)
- Quantitative analysis important, but not sufficient to understand the “why” of human behavior

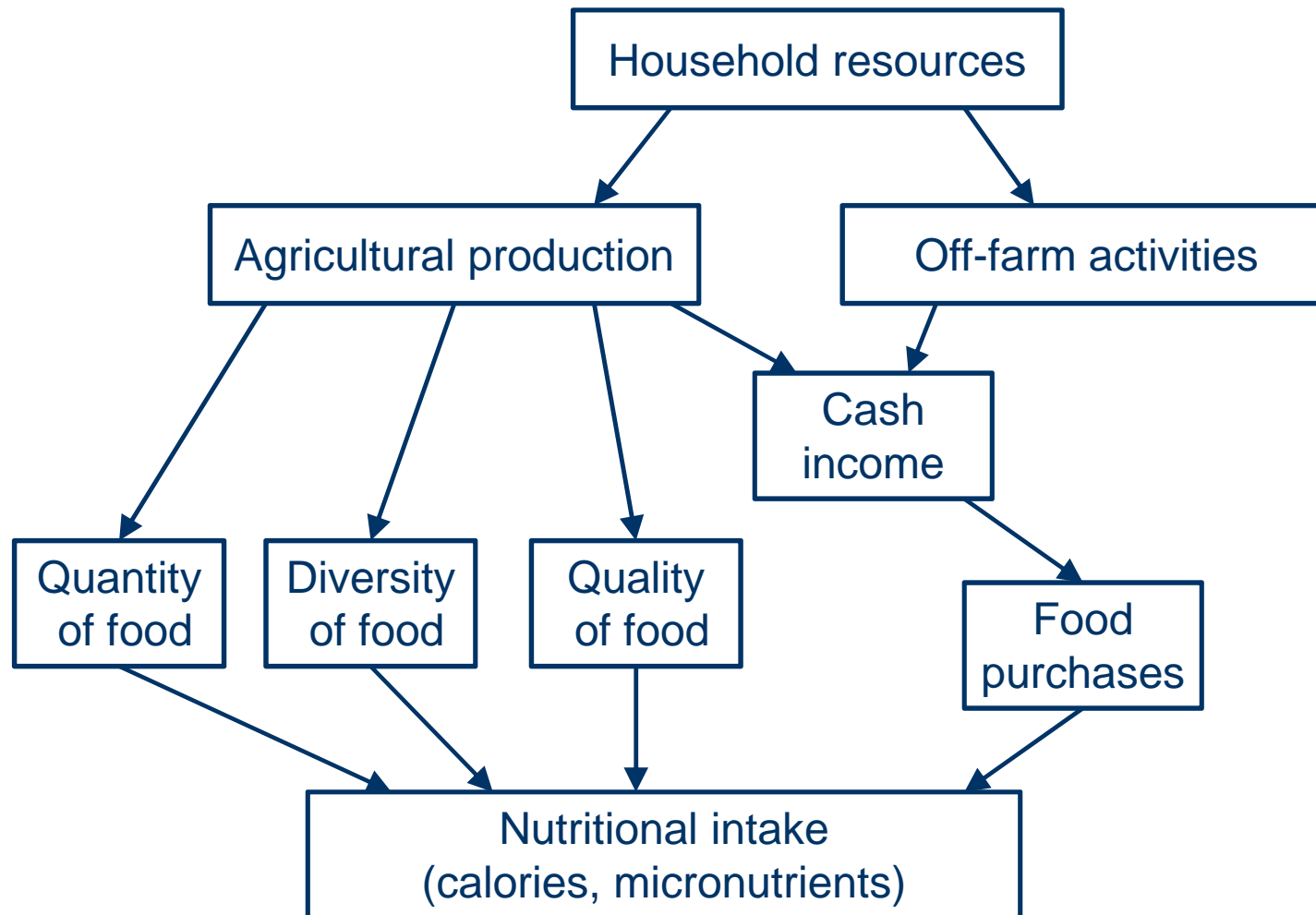


Linkages between production diversity and dietary diversity (quality)

- From a macro perspective, higher dietary diversity requires higher production diversity
- Does this also hold true from a micro perspective?
- Does higher production diversity at individual farm household level always mean higher dietary diversity?
- This view is supported by many.



Agriculture-nutrition linkages



Correlation between on-farm production diversity and household nutritional quality

Sample of 700 farm households from Indonesia (Sumatra)

	Calorie intake	Iron intake	Zinc Intake	Vitamin A intake
Number of all crop/ animal species produced	0.15**	0.12**	0.13**	0.12**
Number of food crop/ animal species produced	0.05	0.02	0.03	0.04

Sample of 400 farm households from Kenya

	Calorie intake	Iron intake	Zinc Intake	Vitamin A intake
Number of all crop/ animal species produced	-0.06	-0.10**	-0.08	-0.14**
Number of food crop/ animal species produced	-0.05	-0.10*	-0.07	-0.14**



Implications

- Negative relationship between production diversity and consumption diversity plausible, if production diversity is associated with foregone income gains from specialization.
- The examples shown relate to smallholder farm households that are connected to markets relatively well.
- In pure subsistence households, a positive relationship is clearly expected.
- The outcome will depend on market access and efficiency, plus various social factors (e.g., who controls cash income?). More research along these lines needed.
- Increasing production diversity in smallholder systems not always the best strategy to improve dietary diversity and quality.

