Agriculture and Nutrition

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IFPRI

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MICRODEVELOPMENT RESEARCH IN THE LAST 20 YEARS: WHAT HAVE WE LEARNED?

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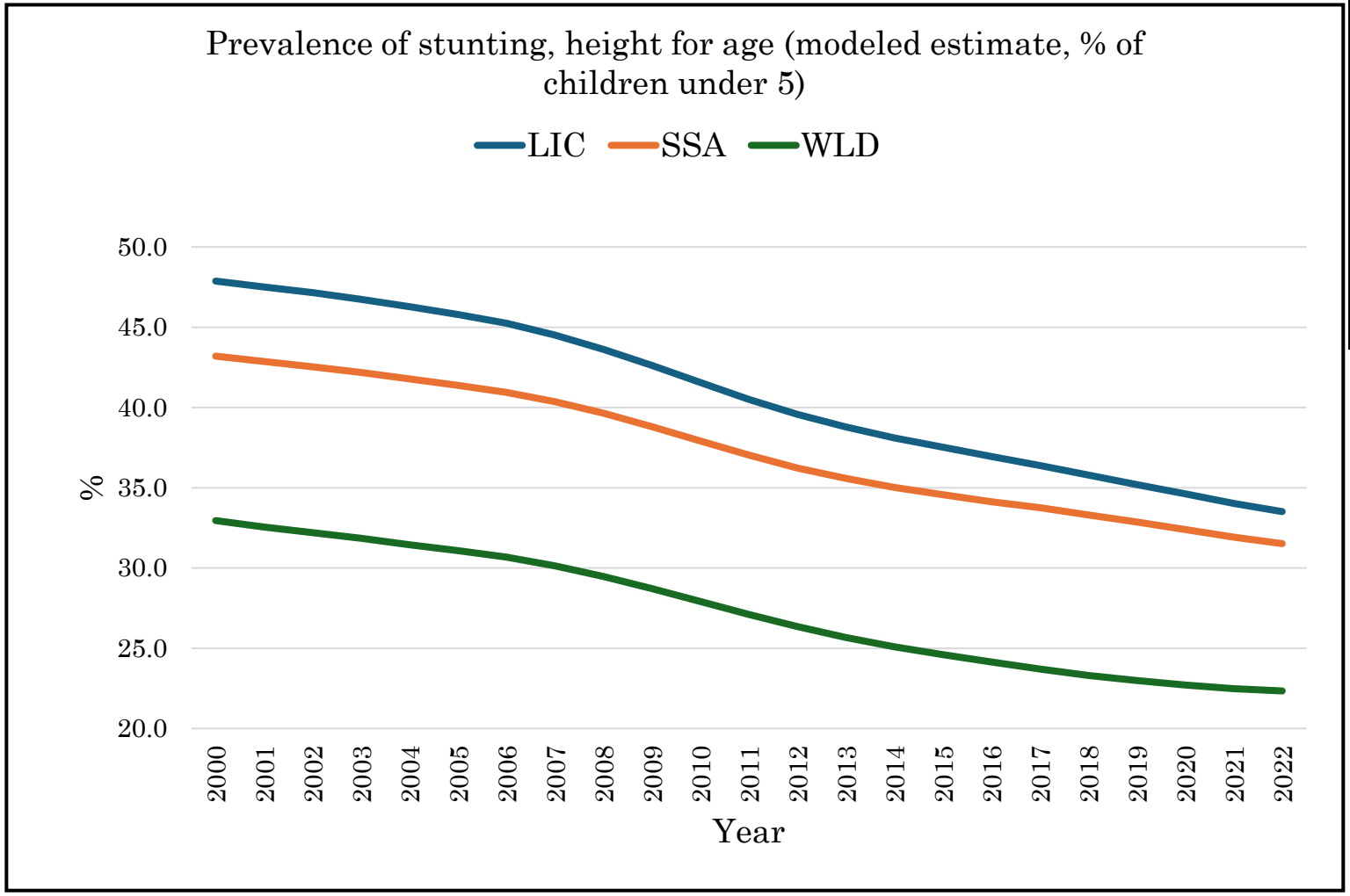
Outline

- Nutrition-sensitive agriculture
- Women empowerment in agriculture (measurement)
- Footnote:
  - Psychosocial influences on technology adoption in agriculture;

Malnutrition

- ***Malnutrition*** – stunting, wasting, overweight, and micronutrient deficiencies – a major problem



Source: WDI

Estimated global levels in 2022:

- 149 million children under 5 were stunted,
- 45 million were wasted.

Source: WHO.

Average rate of change per year (%)		
LIC	SSA	WLD
-1.4	-1.3	-1.5

More effective approaches needed to address the problem of undernutrition (Sharma et al. (2020)).

Nutrition-sensitive Agriculture

[Ruel and Alderman (2013), Webb and Kennedy (2014), Herforth and Ballard (2016), Ruel, Quisumbing, and Balagamwala (2018), Sharma et al. (2020), …]

- ***Potential***: pathways via which agriculture can contribute to nutrition outcomes :
  - improve availability of and access to nutrient-rich foods (production),
  - increase purchasing power (income)
  - food prices (supply and demand), and
  - empowering women to improve their nutrition outcomes and those of their children (agency).

- ***Realization*** – ***increasing food production*** through conventional agricultural interventions alone ***inadequate to significantly improve nutritional outcomes***;

- ***Nutrition-sensitive agriculture (NSA) – incorporate specific nutrition objectives and actions*** in the design and implementation of agriculture interventions. Include ((Ruel and Alderman (2013)):
  - biofortification,
  - homestead food production systems,
  - livestock transfer for nutritious foods.

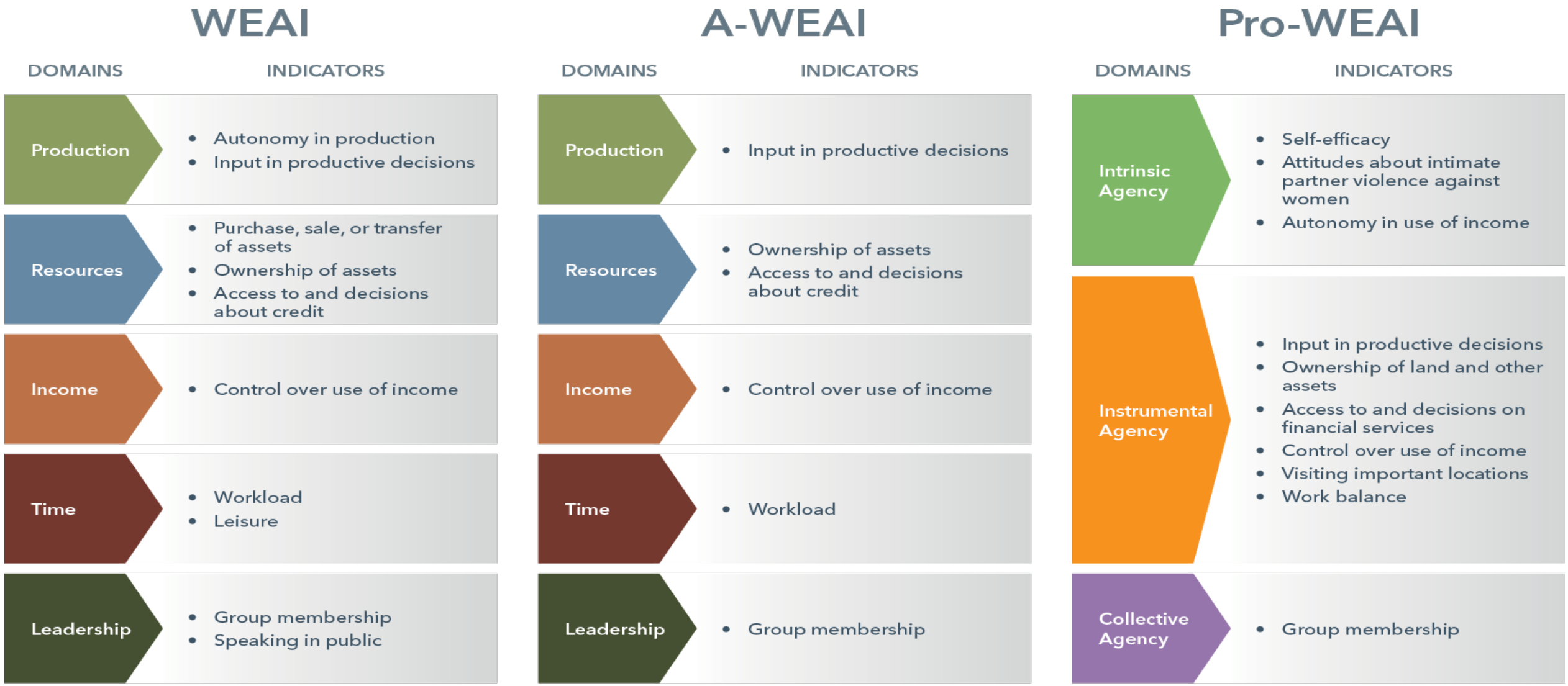
Nutrition-sensitive Agriculture

- ***Evidence***
  - ***weak impact*** of NSA interventions on nutritional status, with the lowest impact on stunting and wasting.
    - studies did not focus adequately on the ***underlying causes of undernutrition*** beyond food access (intersectoral coordination)
    - most interventions did not have ***implementation period long enough*** to led to improvements in stunting;
    - research/evaluation ***design shortcomings*** including inadequate power inadequate
  - ***Better intervention and evaluation design and implementation to generate/detect impact***.
  - cover ***sustainability***, ***scale-up***, and ***cost-effectiveness.***
  - explore how evidence generated inform broader ***agriculture policy and investment decisions***

Women Empowerment in Agriculture

- **Women empowerment**
  - ***intrinsic value*** – Sustainable Development Goal (SDG5) – '*Achieve gender equality and empower all women and girls*')
  - ***instrumental value*** –central to improving nutritional outcomes – particularly for women and children – including through nutrition sensitive agriculture
  - ***challenge***: measurement – "absence of a common quantitative metric for women's empowerment"
  - ***Women Empowerment in Agriculture Index*** (***WEAI***)
    - introduced in 2011/12 (IFPRI, Oxford Poverty and Human Development Initiative (OPHI), and USAID's Feed the Future in February)
    - ***validation***, ***refinement***, ***customization*** since 2011.

Women Empowerment in Agriculture Index



Quisumbing, Agnes, Steven Cole, Marl`ene Elias, Simone Faas, Alessandra Gali`e, Hazel Malapit, Ruth Meinzen-Dick, Emily Myers, Greg Seymour, and Jennifer Twyman (2023) "***Measuring Women's Empowerment in Agriculture: Innovations and evidence***," *Global Food Security*, 38, 100707.

Footnote

- ***Limited adoption of improved agricultural technology in some parts of the world (paricularly SSA)***
  - '**external circumstances**' and '**opportunities**' – the key reasons discussed already.

Observation: opportunities *– existent (exploit), new (create)*

  - **constraints associated with the *manifested attributes*** of decision makers
    - *psychosocial characteristics/issues:* sense of self, impatience, commitment, procrastination, aspirations, locus of control,

(Duflo *et al.* (2011), WDR (2015), Taffesse and Tadesse (2017), Tanguy et al (2023), …);