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Measuring and Mapping the Prevalence and Patterning of Multiple Malnutrition in Young Children

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shaping society

Overview

- Measuring and Mapping the Prevalence and Patterning of Multiple Malnutrition in Young Children in West and Central Africa
- Failure to grow and develop along expected trajectories
- National and time distribution
- Factors behind changes and lack of change

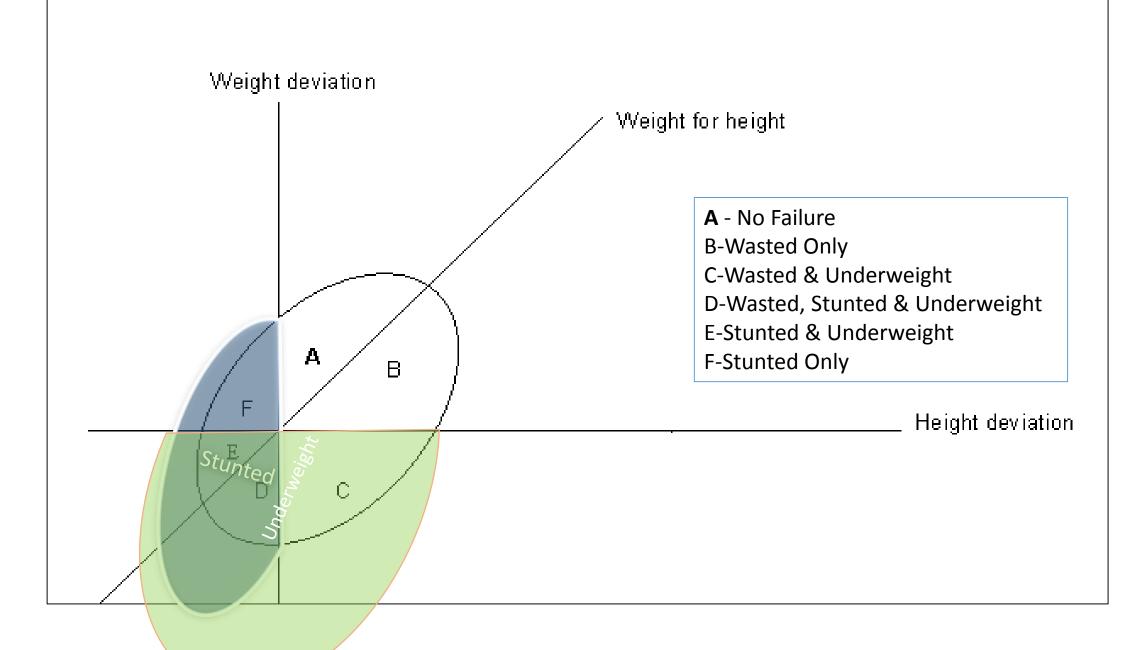


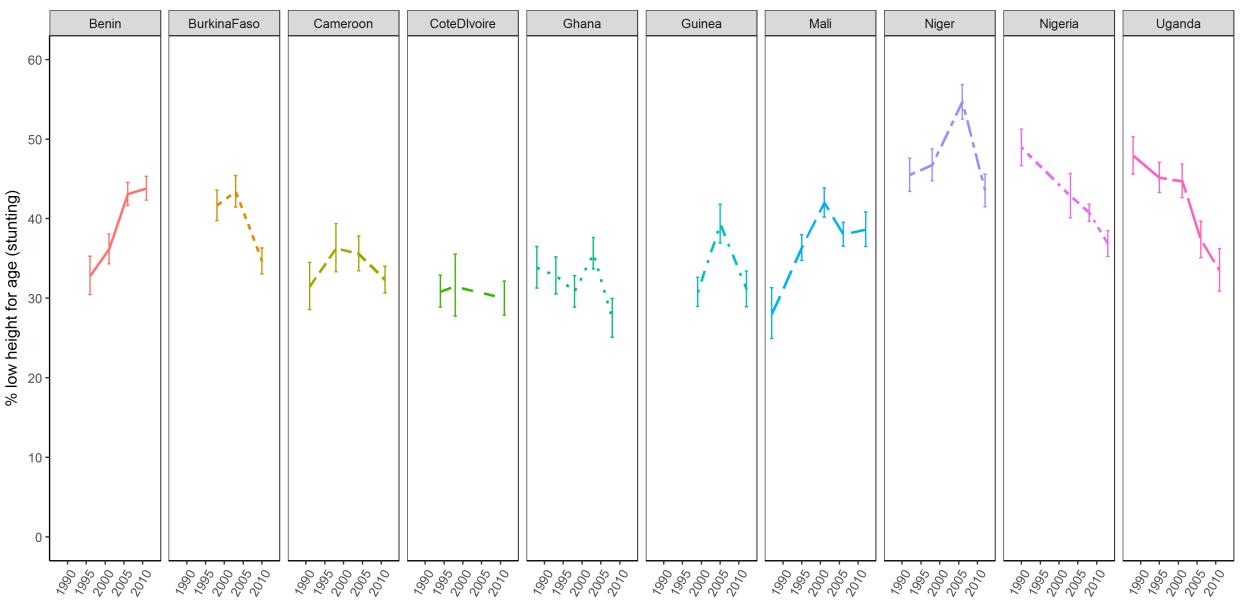
Conventional Indicators of (child) undernutrition

- Wasting low weight for height (W/H)
 - Reflects recent/acute undernutrition

- **Stunting** low height for age (H/A)
 - Reflects longer term/chronic undernutrition

- Underweight low weight for age (W/A)
 - MDG1 target indicator

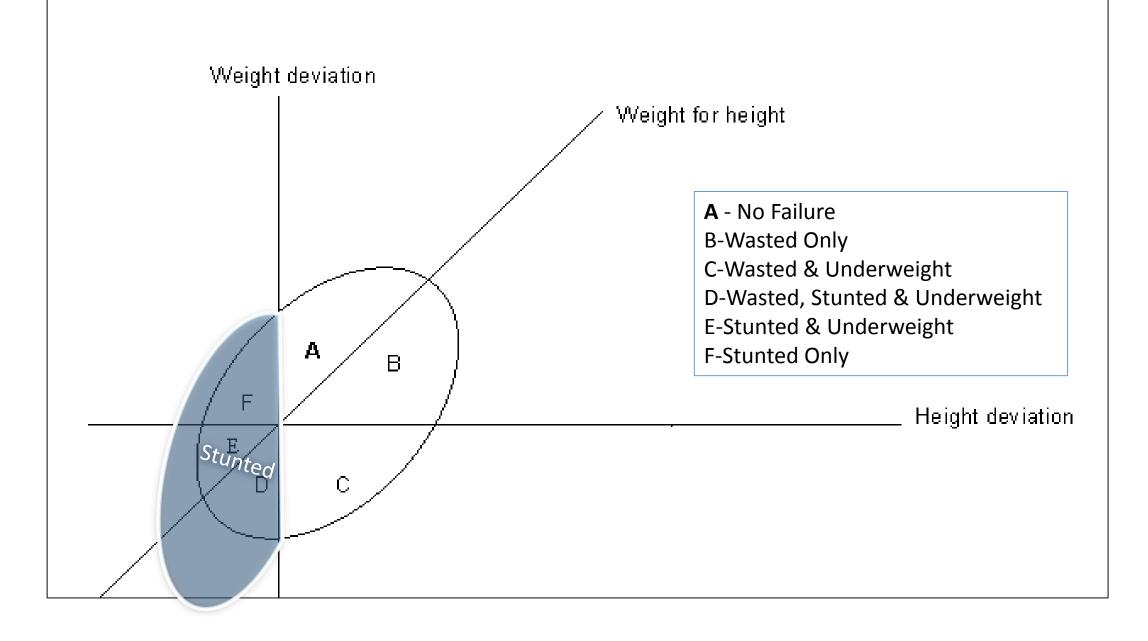




Year

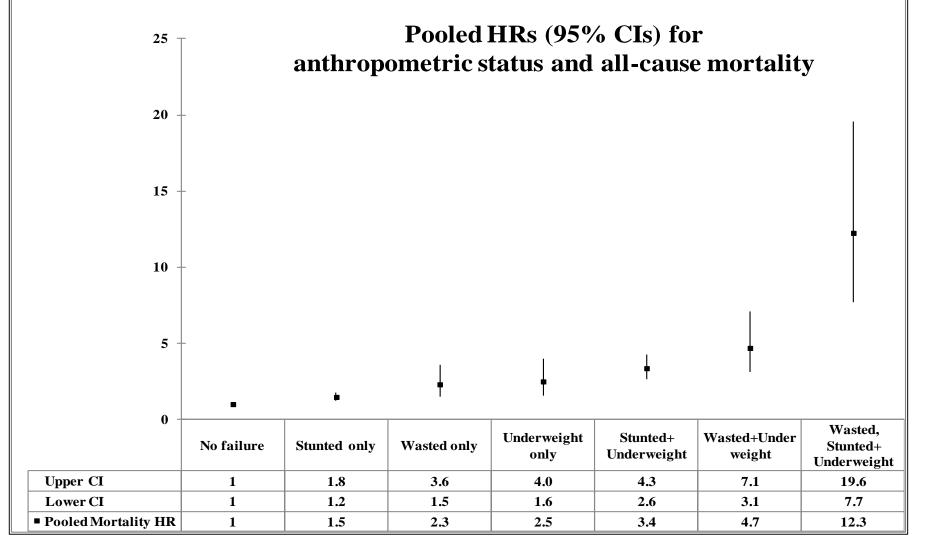
Benin BurkinaFaso Cameroon CoteDlvoire Ghana Guinea Mali Niger Nigeria Uganda 70 60 % low height for age (stunting) 50 40 1 T 🖊 . 30 20 10 0. ⁷⁹ ²⁰⁰⁰ ²⁰⁰⁵ ²⁰¹⁰ ⁷⁹ ²⁰⁰⁰ ²⁰¹⁰ ²⁰¹⁰ ⁷⁹ ²⁰⁰⁰ ²⁰⁰⁵ ²⁰¹⁰ ⁷⁹⁹ ²⁰⁰ ²⁰⁰ ²⁰⁰ ²⁰¹0 7990 2000 2010 2010 ⁷⁹ ²⁰⁰ ²⁰⁰ ²⁰¹0 7980 2000 2010 7980 2000 - 2000 ⁷⁹ ²⁰⁰ ²⁰⁰ ²⁰¹0 ²⁰¹0

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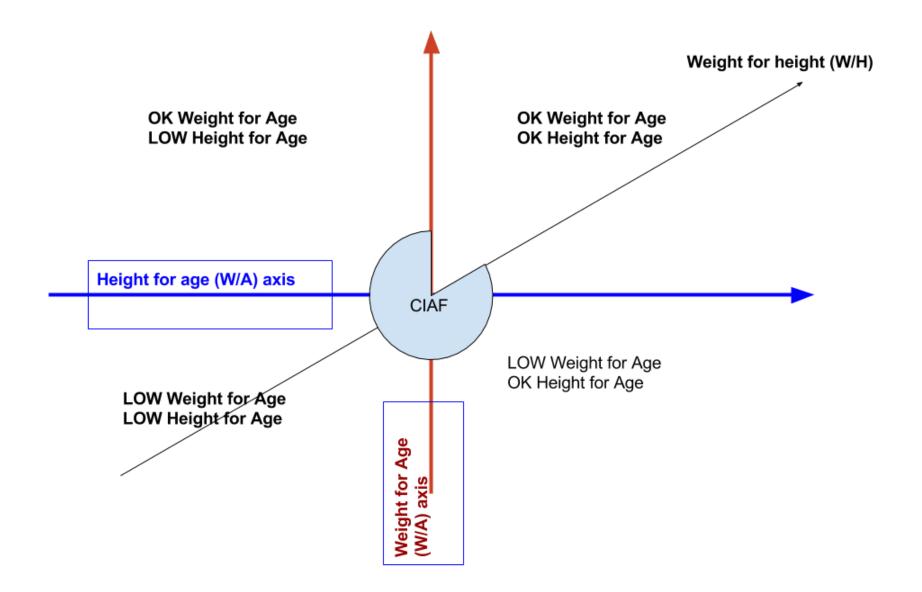
Multiple Malnutrition and Mortality

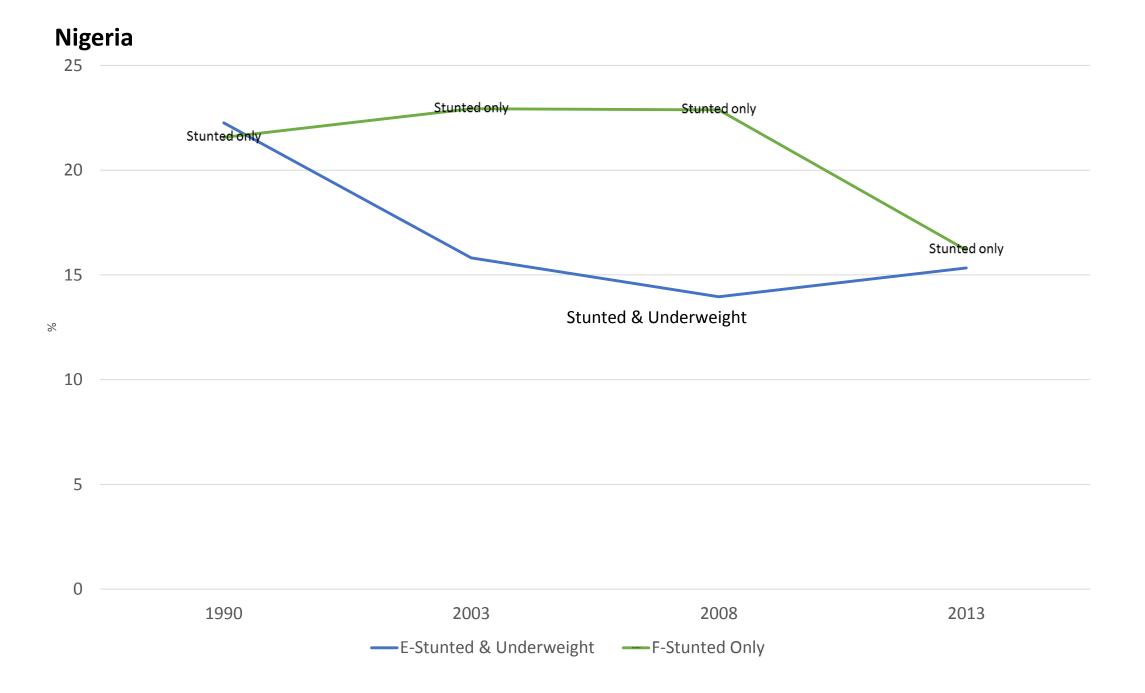
McDonald et al. (2013) show experience of multiple anthropometric deficits has a raised mortality risk, up to 12x for triple failure (compared to no failure).

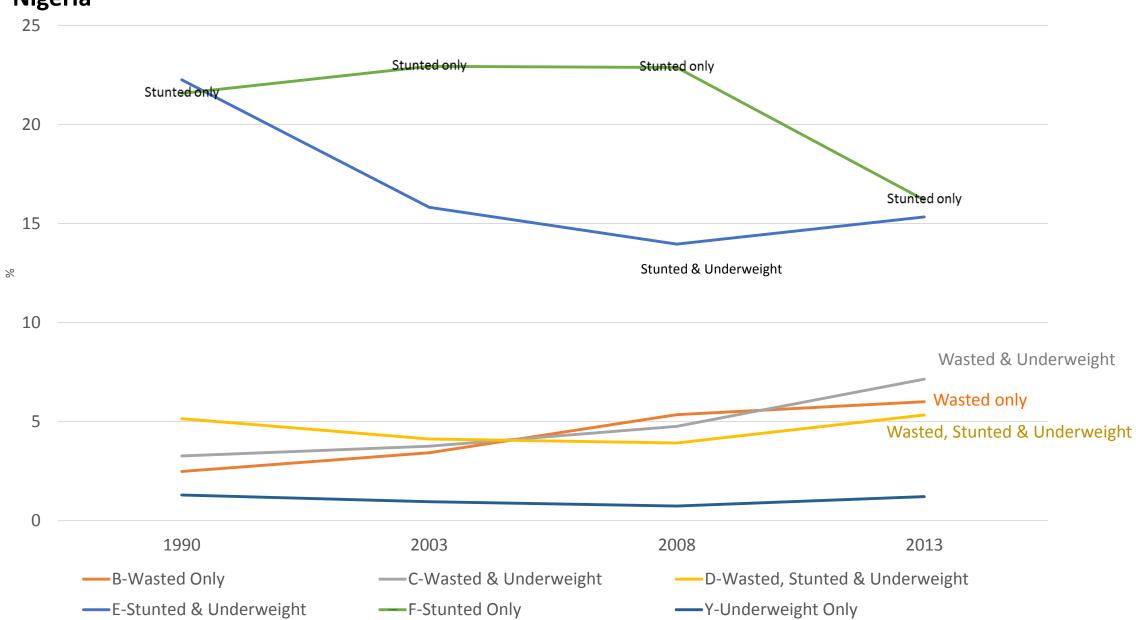


Source: McDonald, C.M., et al. (2013), The effect of multiple anthropometric deficits on child mortality: meta-analysis of individual data in 10 prospective studies from developing countries. American Journal of Clinical Nutrition, 97(4): p. 896-901.

Svedberg, 2000

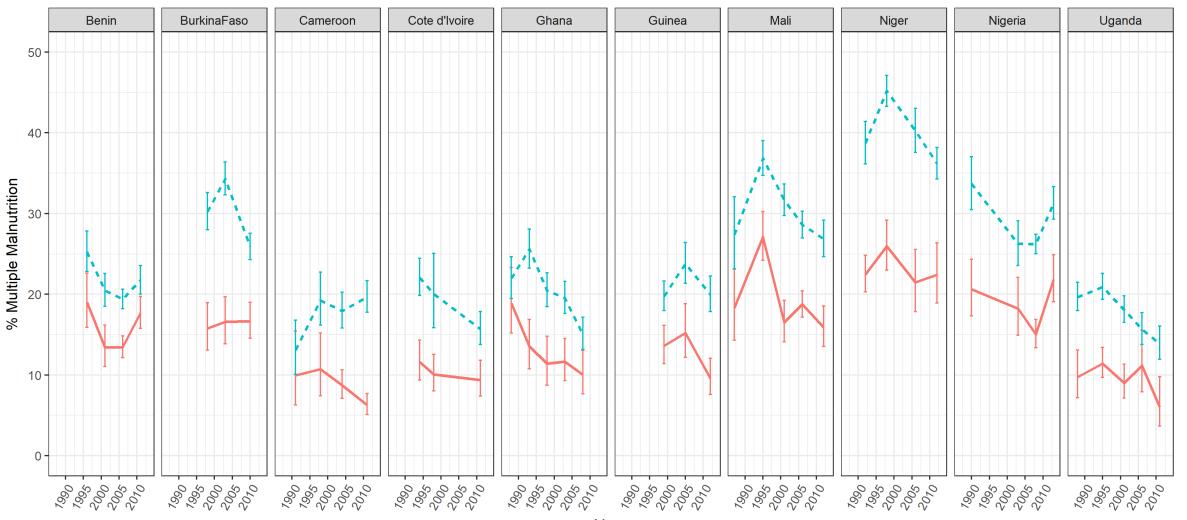




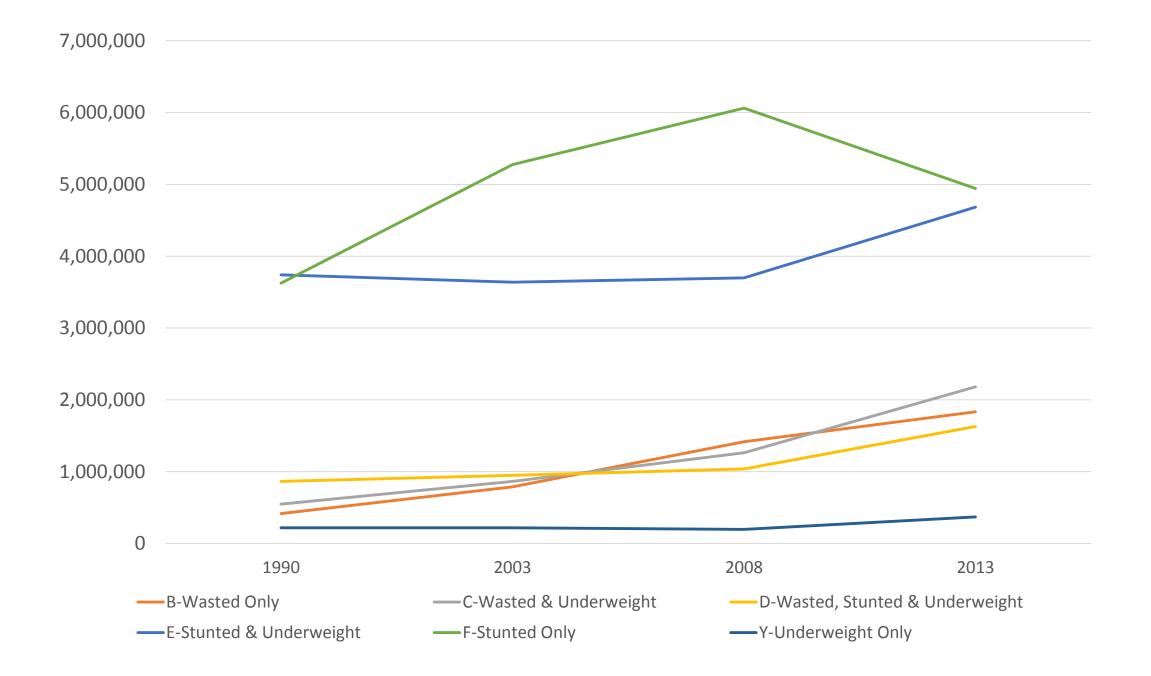


Nigeria

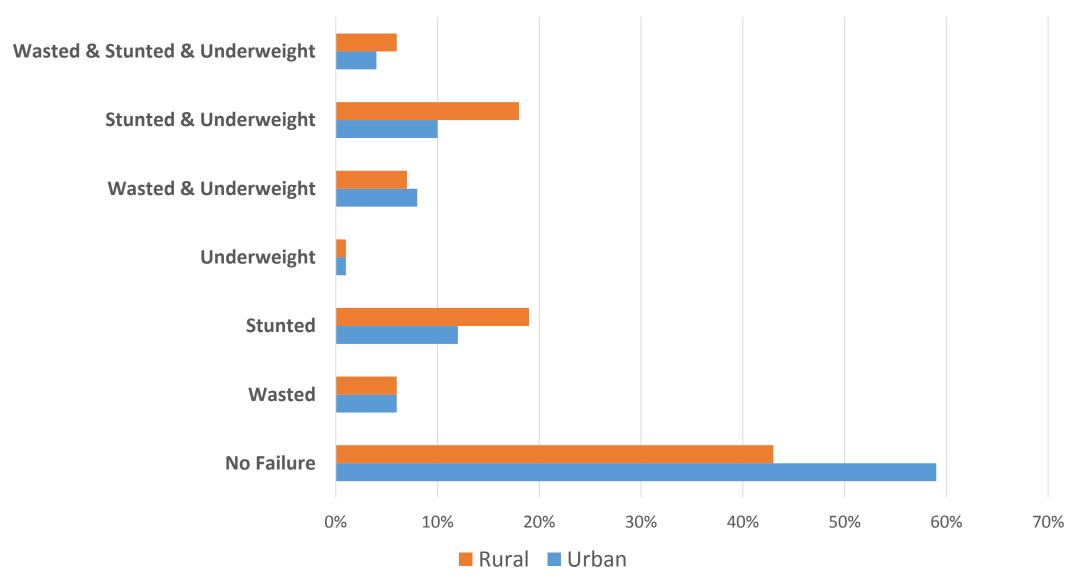
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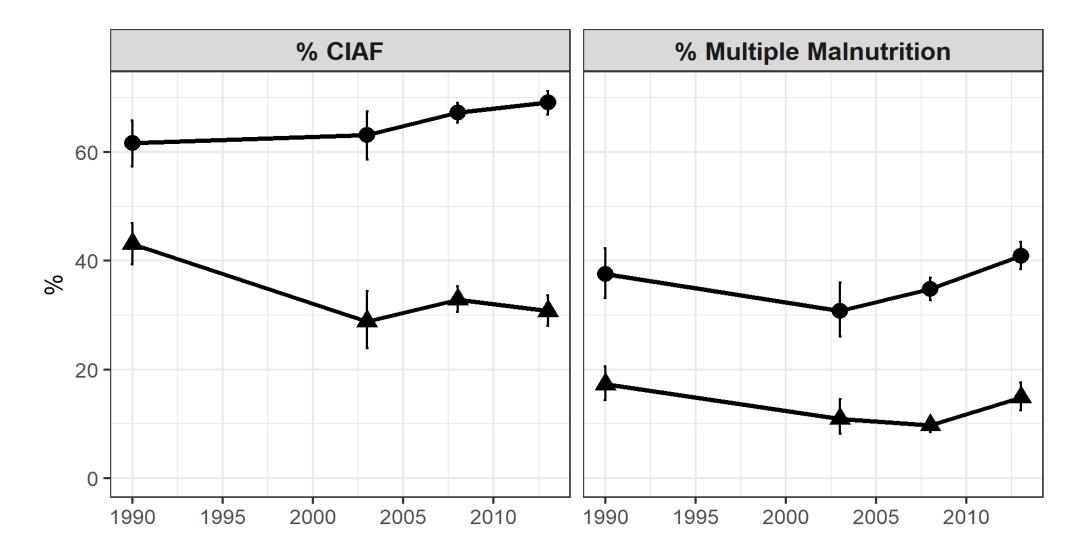
- Urban - Rural



Nigeria (2013)



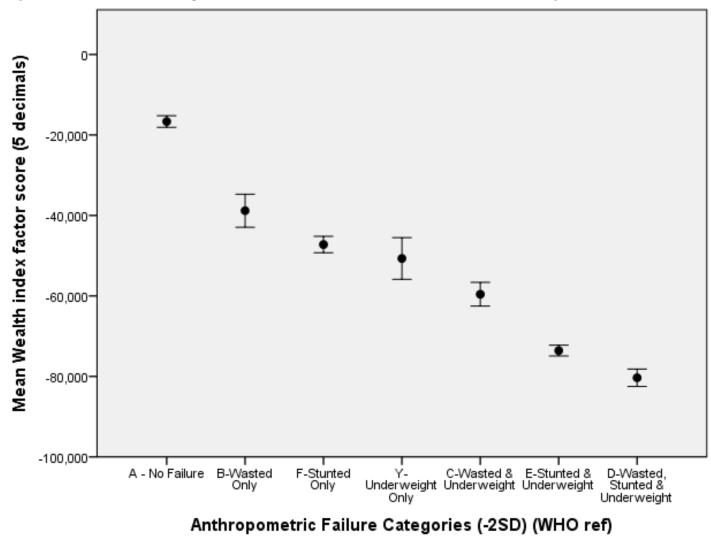




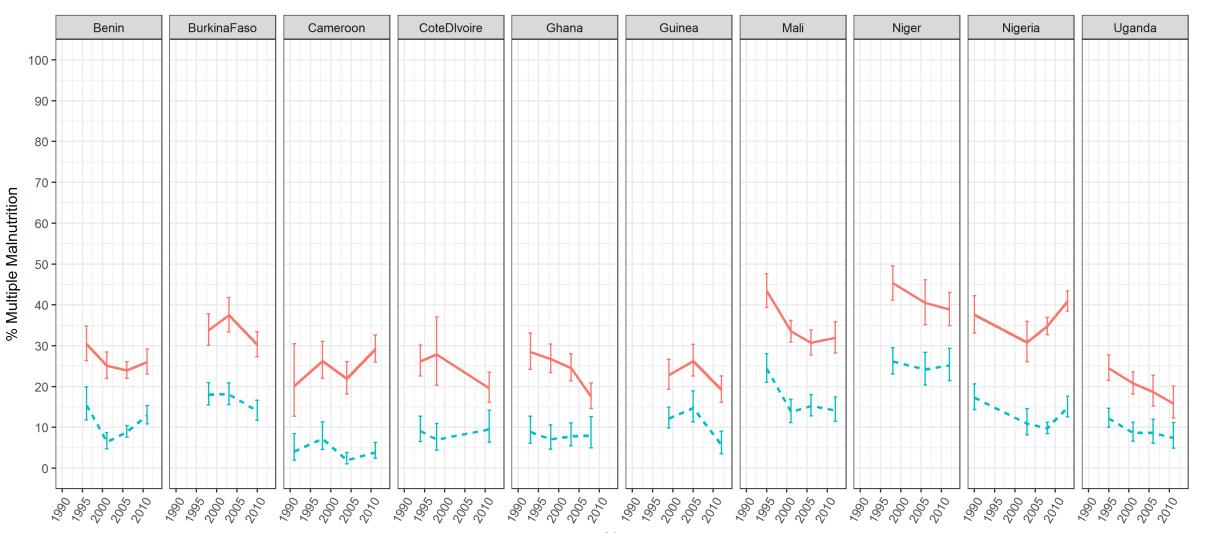
95% confidence intervals Authors' calculations using survey data for Nigeria 1990, 2003, 2008, 2013

Multiple malnutrition (MM), poverty, morbidity and mortality

Clear relationship between poverty and pattern of malnutrition (Children U5 yrs, India NFHS, 2005 data)

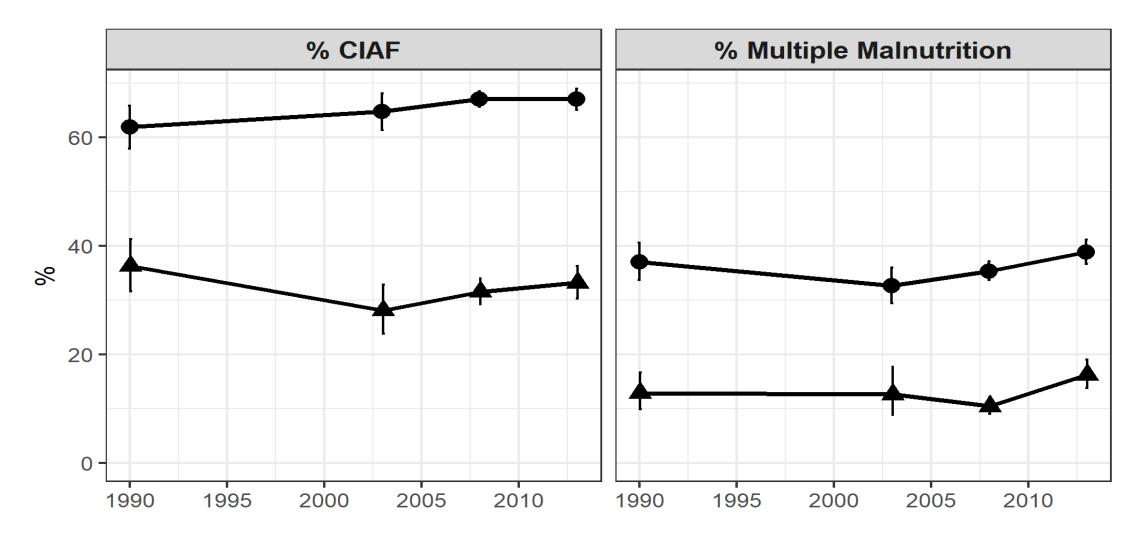


Error Bars: 95% CI

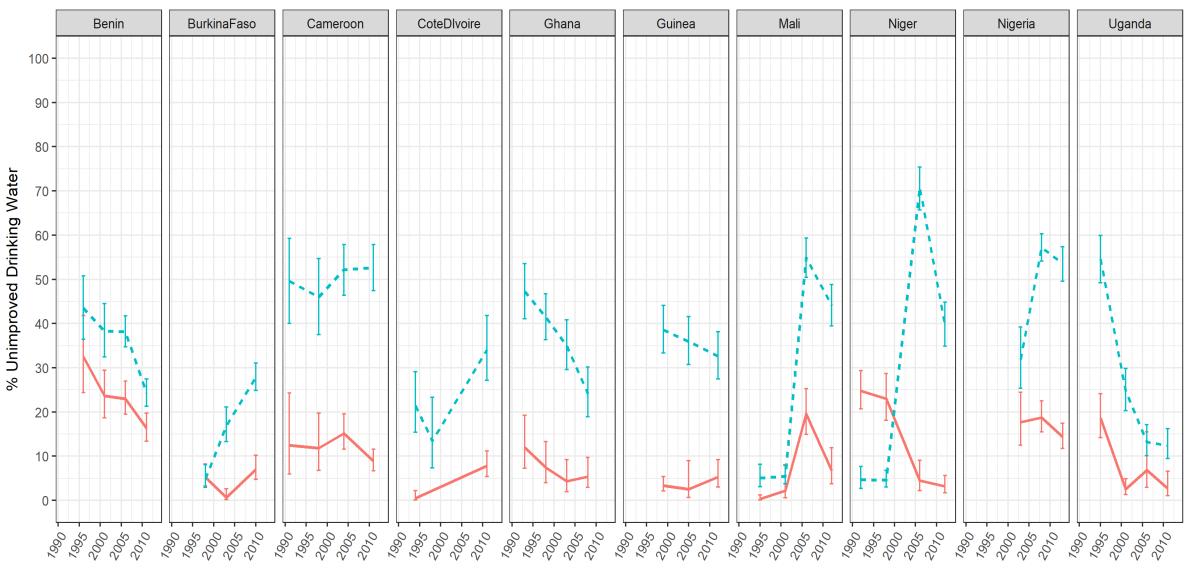


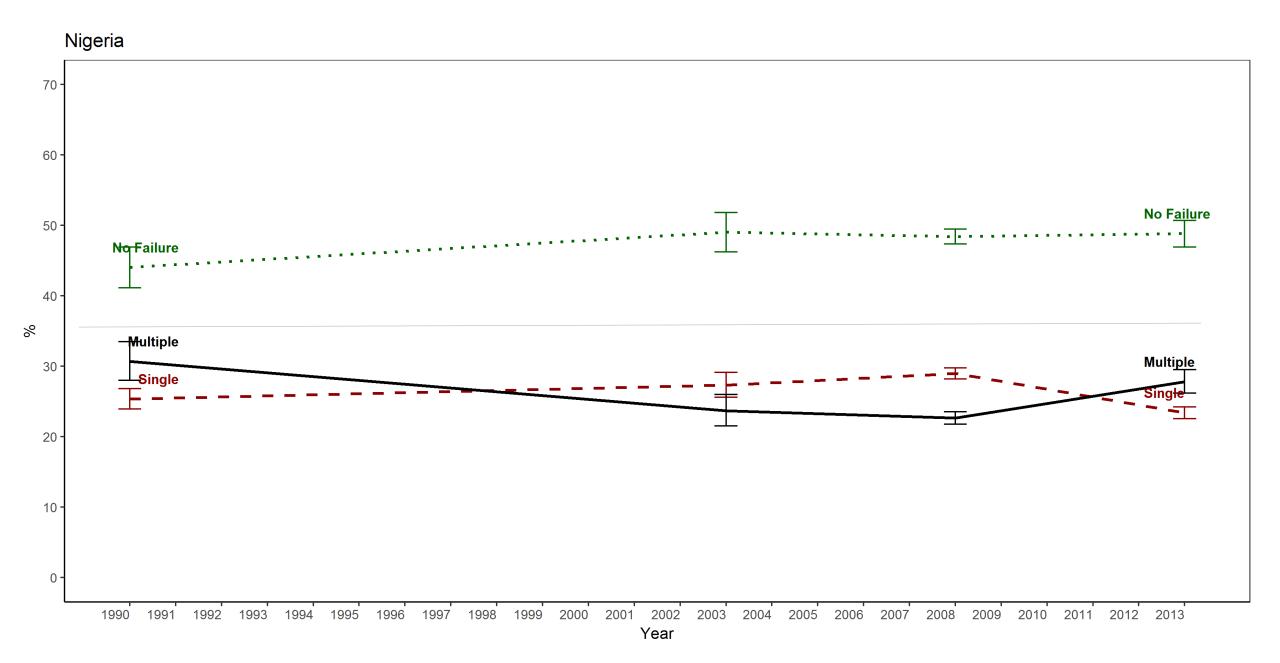
---- Poorest - - Richest

No formal education and rural A Secondary or higher and urban



95% confidence intervals Authors' calculations using survey data for Nigeria 1990, 2003, 2008, 2013







	Benin	BurkinaFaso	Cameroon	Cote d'Ivoire	Ghana	Guinea	Mali	Niger	Nigeria	Uganda
6,000,000 -	-									
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Total Multi 2,000,000 -	-									
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Conclusion

- Focus on occurrence of multiple forms of anthropometric failures at the same time
- Aim:
- Give overall balanced view of improvements and lack of
- > Decompose changes in multiple malnutrition