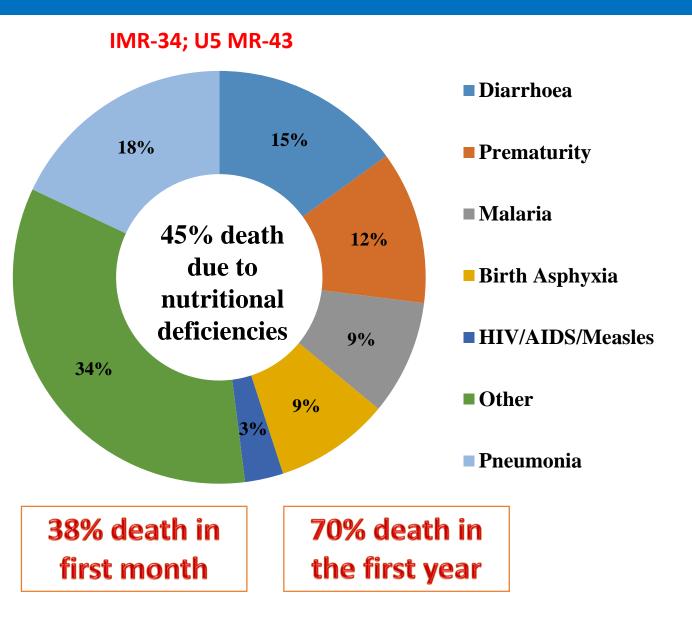
Malnutrition: A Case for Investment

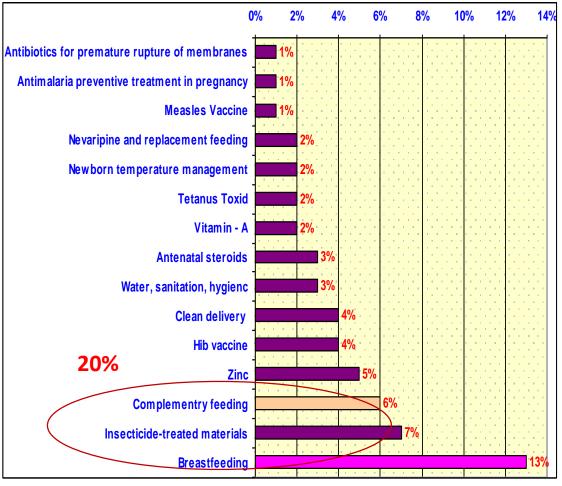


Dr. Laxmi Bhawani Chief UNICEF, Gujarat

Global Causes of Deaths in Children U5



Key intervention to reduce child deaths



Source: Lancet Series on Nutrition, June 2013

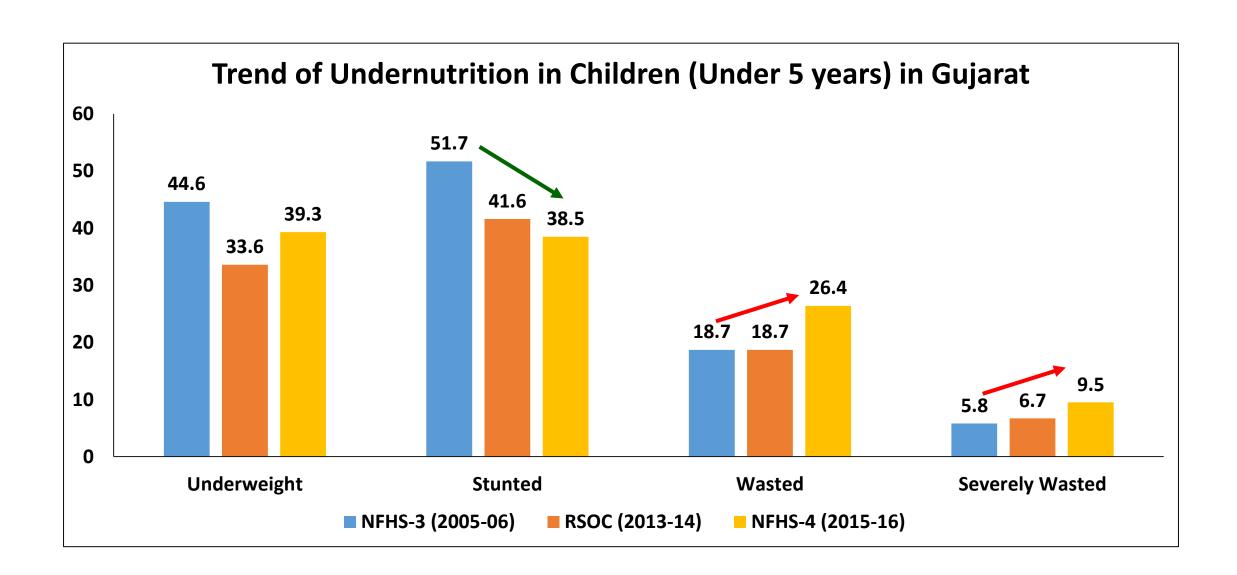


With almost 40% Children Underweight

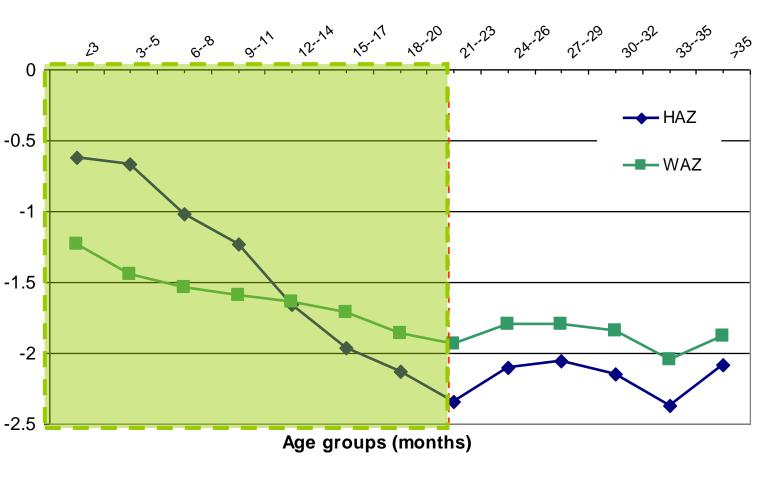
It is a threat to:

- Children's survival, growth and development
- Economic growth and social development

Time Trends in Nutritional Status of Children Under 5y in Gujarat

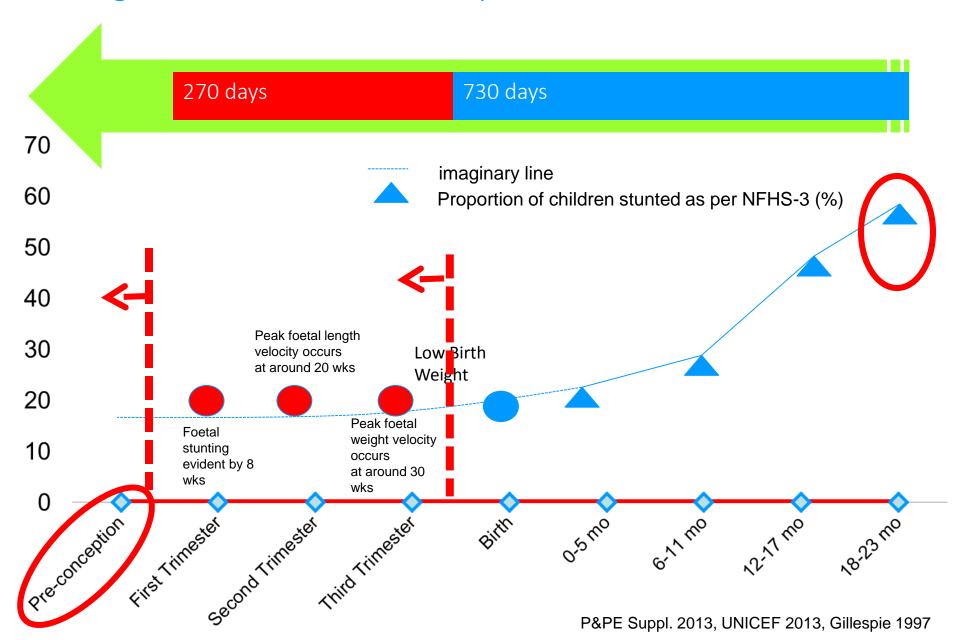


India: Undernutrition happens very early in life



1000 Day Window of Opportunity (-9/+24) to make a Life long Difference

50% growth failure accrued by 24 months, occurs in womb



Undernourished children are at higher risk of death from diarrhea or pneumonia

	Odds ratio					
	Severe undernutrition	Moderate undernutrition	Mild undernutrition	No undernutrition		
Underweight						
Diarrhoea	9.5	3.4	2.1	1.0		
Pneumonia	6.4	1.3	1.2	1.0		
Stunting						
Diarrhoea	4.6	1.6	1.2	1.0		
Pneumonia	3.2	1.3	1.0	1.0		
Wasting						
Diarrhoea	6.3	2.9	1.2	1.0		
Pneumonia	8.7	4.2	1.6	1.0		

^{*} Bangladesh, Ghana, Guinea-Bissau, India, Nepal, Pakistan, the Philippines and Senegal.

Source: Adapted from Black et al., 'Maternal and Child Undernutrition: Globa and regional exposures and health consequences', *Lancet*, vol. 371, no. 9608 19 January 2008, pp. 243–260.

Impact of Undernutrition

Undernutrition and micronutrient deficiencies during the first 1,000 days of life can reduce a child's IQ by up to 10%. Undernourished children are therefore likely to complete fewer years of school and have a reduced earning potential of at least 10% of their lifetime earnings. Collectively the costs of poor nutrition as a result of impaired national productivity represent an estimated loss of 2-3% of a country's GDP, yet these losses can be as high as 16%

(Horton S. el at. The World Bank 2010)

Productivity losses due to undernutrition in India:

	Estimated total annual losses (\$ billions)	Estimated loss of adult productivity (% GDP)	DALYs lost
PEM (Stunting)	8.1	1.4	2,939,000
VAD	0.4		404,000
IDD	1.5	0.3	214,000
IDA	6.3	1.3	3,672,000
Total	16.3	3.0	7,229,000

Source: World Bank 2004c, Horton 1999

Eliminating undernutrition can....

the business case	
1. Prevent more than	2. Redu
1/3 of child deaths per	disabili

uce burden of disability for children under 4 by more than half

3. Increase school attainment by at least one year

4. Boost wage rates by 5% -50%

5. Make children 33% more likely to escape poverty as adults

year

6. Break the intergenerational cycle of poverty: as stunted mothers are 3 times more likely to have

7. Increases **Purchasing power**

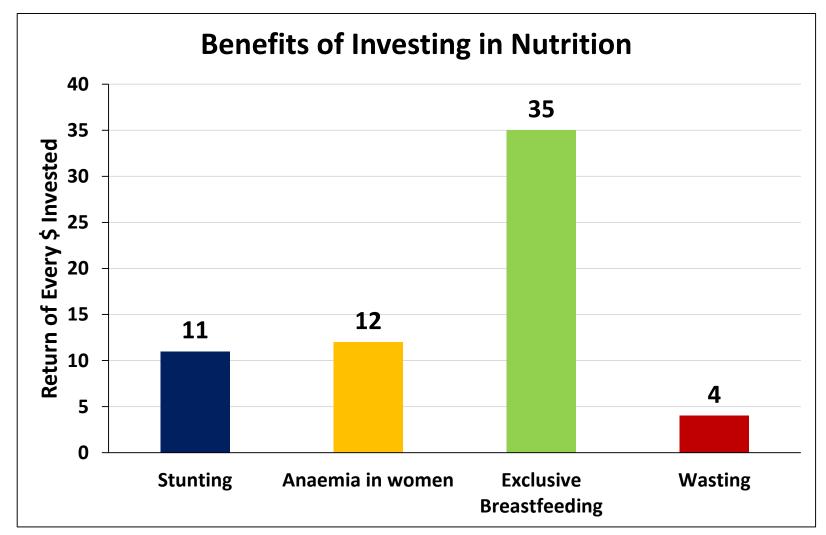
8. Expand Markets

9. Make women 10% more likely to own their own business when they become adults

malnourished infants **10. Boost GNP by 11%** 11. Boost GNP even further by supercharging the demographic dividend

12. Investment comes back with increased returns

Evidence shows very high Economic Returns to Investing in Nutrition

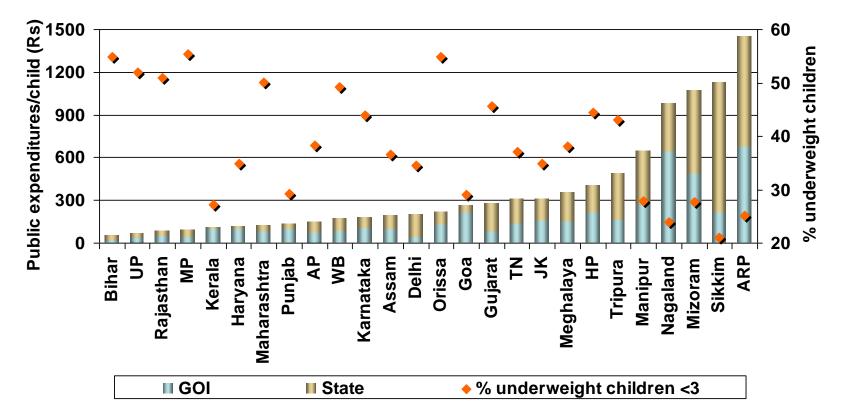


is not only
one of the best
development actions
and 'value for money',
but also lay the
groundwork for the
success of investments
in other sectors.

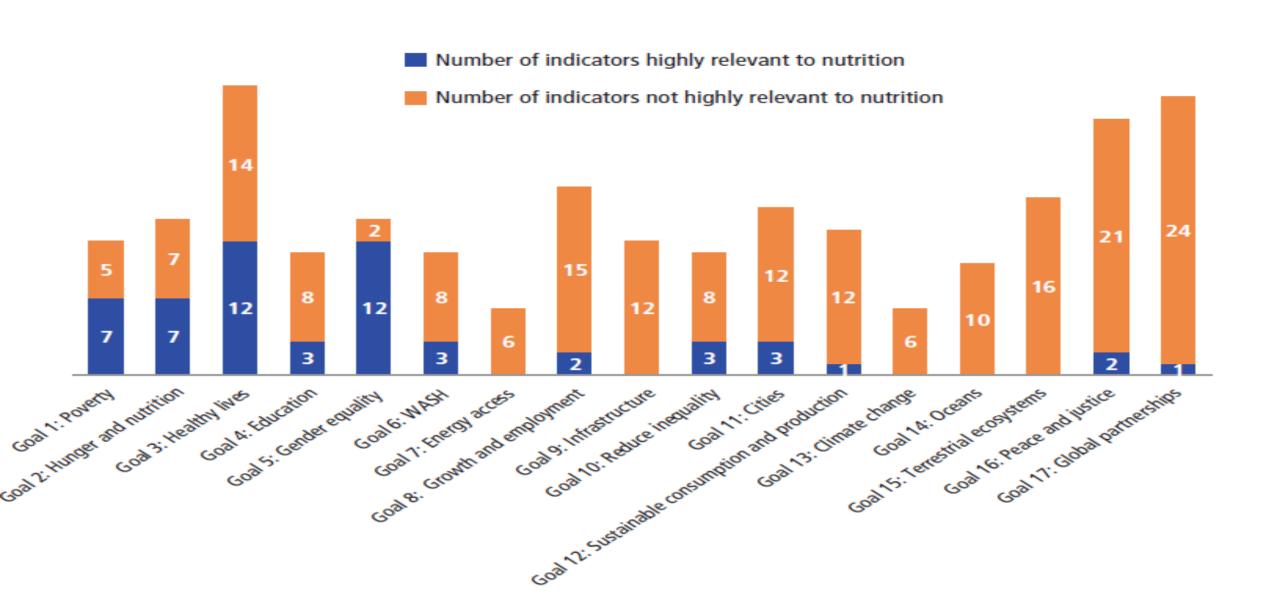
(Alderman, Behrman and Puett 2016; Copenhagen Consensus Center 2015; Hoddinott et al. 2013)

Source: An Investment Framework for Nutrition, World Bank Group

Per capita public expenditure on nutrition decreases with the size of the nutrition problem...



12 of the 17 SDGs have indicators directly related to nutrition

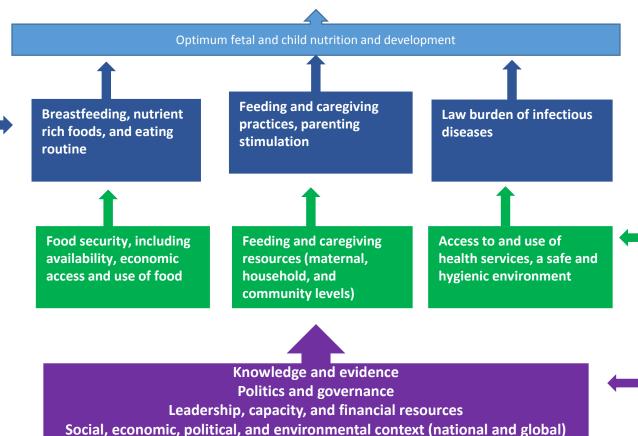


Action to achieve optimum Fetal and Child Nutrition and Development



Nutrition specific interventions and programmes

- Adolescent health and preconception nutrition
- Maternal dietary supplementation
- Micronutrient supplementation or fortification
- Breastfeeding and complementary feeding
- Dietary supplementation
- Dietary diversification
- Feeding behaviours and stimulation
- Treatment of severe acute malnutrition
- Disease prevention and management
- Nutrition interventions in emergencies



Nutrition sensitive programmes and approaches

- · Agriculture and food security
- Social safety nets
- Early child development
- Maternal mental health
- Women's empowerment
- Child protection
- Classroom education
- Water and sanitation
- Health and family planning services

Building an enabling environment

- Rigorous evaluations
- Advocacy strategies
- Horizontal and vertical coordination
- Accountability incentives regulation, legislation
- Leadership programmes
- Capacity investments
- Domestic resource mobilization

Budget Allocations to Nutrition-related Programs In India, 2015–2016

- GOI allocated approximately US\$5.3 billion in total to nutrition-specific programs such as the ICDS Scheme and the National Health Mission in 2016
- \$31.6 billion allocated in total to several programs aimed at improving the underlying determinants of nutrition, such as
 - The PDS, which focuses on food security,
 - The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which focuses on livelihood security in rural areas, and
 - The Swachh Bharat Mission, which is focused on sanitation.
- Although a large amount of money is committed to nutrition-specific interventions, it falls \$700 million short of the \$6 billion per year estimate needed.

It is time for all of us to invest in nutrition because....

Good nutrition is not only an outcome of development but also a driver of economic growth and human development



Thank You