

WHO WE ARE

The Global Alliance for Improved Nutrition (GAIN) is a Swiss-based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition.

Working with both **governments** and **businesses**, we aim to transform food systems so that they deliver more nutritious food for all people, especially the **most vulnerable**.



VISION AND MISSION

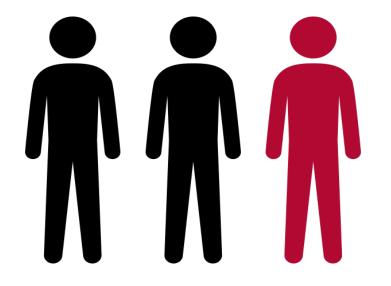
GAIN is driven by a vision of a world without malnutrition, in which all people have access to and consume nutritious and safe food.

The GAIN mission is to advance nutrition outcomes by improving the consumption of **nutritious and safe food for all people**, especially the most vulnerable to malnutrition.



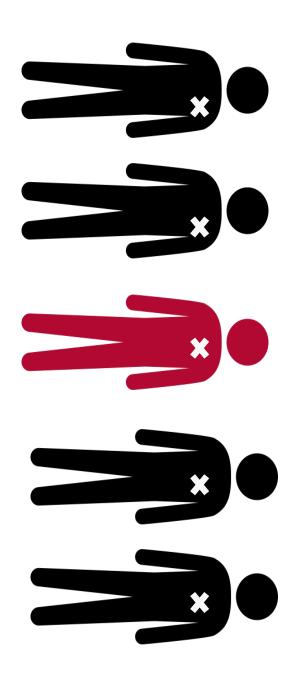


The Global Nutrition Challenge



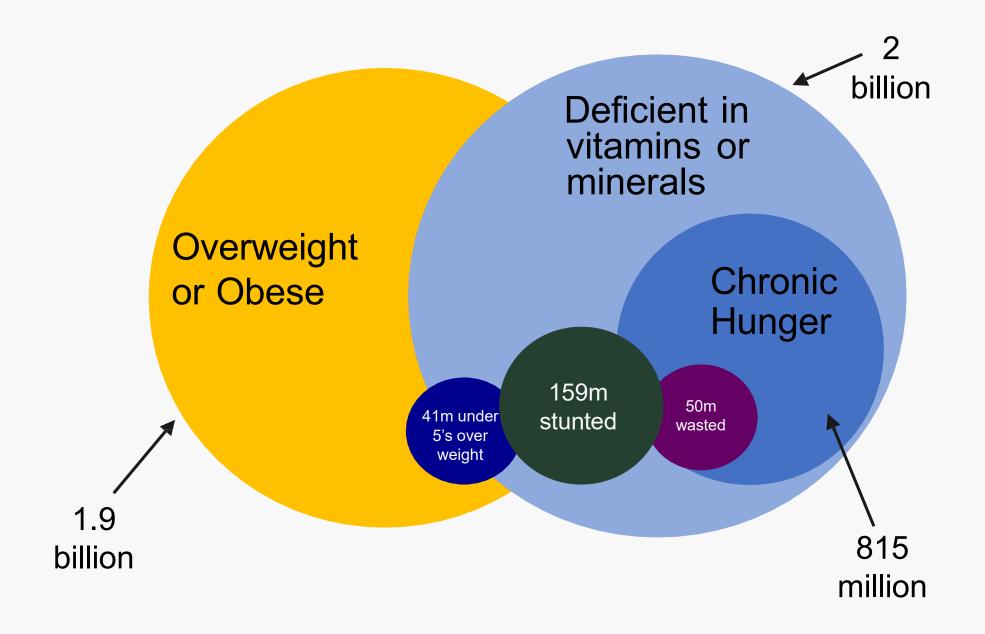
1 in 3 people worldwide are malnourished.



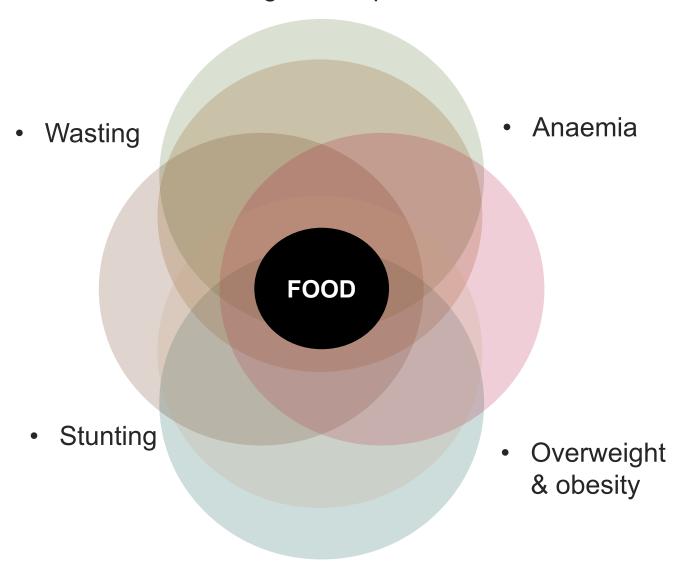


1 in 5 deaths worldwide are linked to poor diets.





High blood pressure



Poor diet is the common denominator in all forms of malnutrition.

Type 2 diabetes

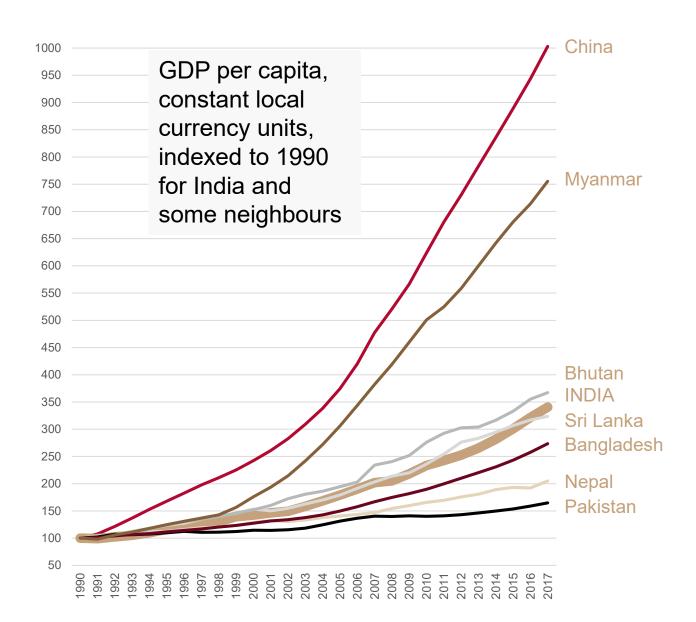




Diet quality does not automatically improve with income growth.



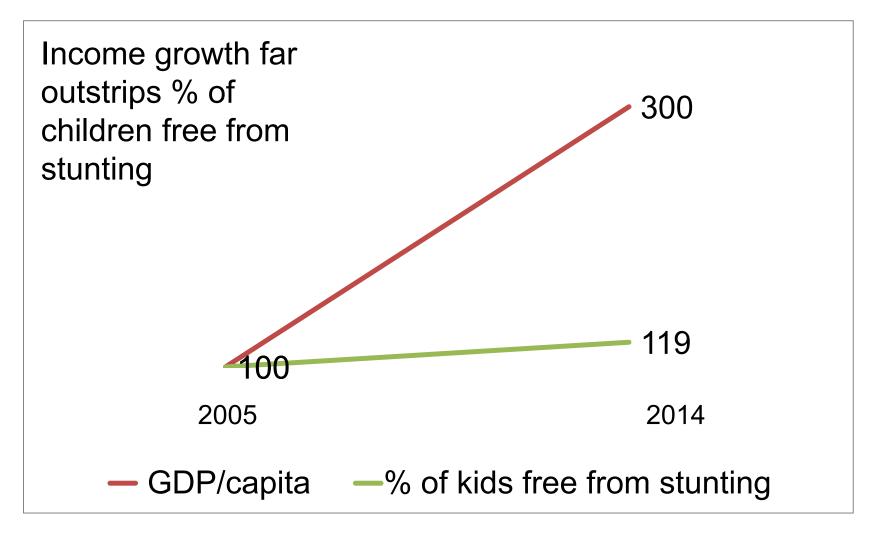
INCOME GROWTH INSUFFICIENT TO DRIVE BETTER DIET QUALITY



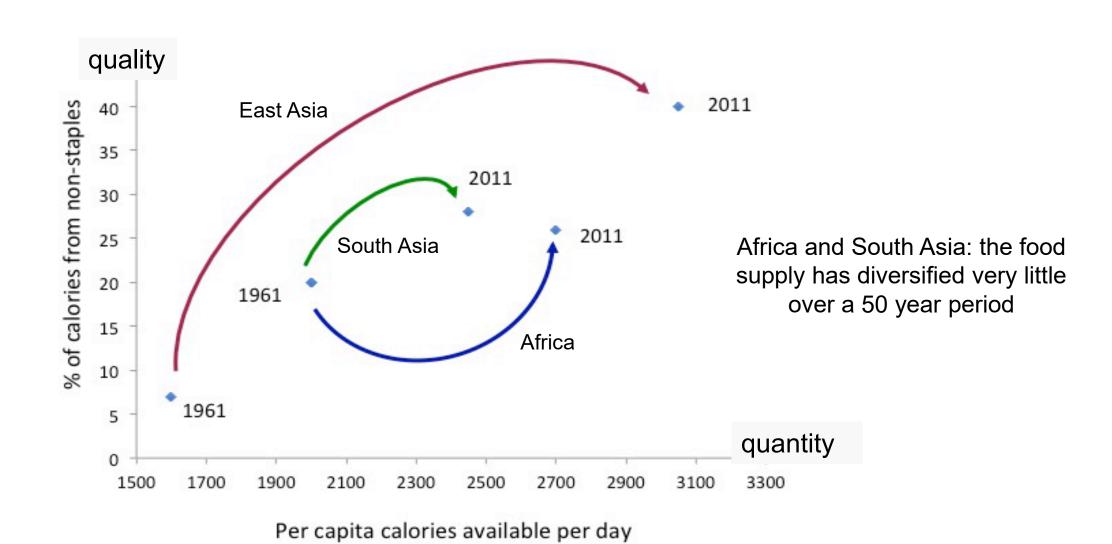
India has seen GDP grow faster than population, with per capita growth more than tripling from 1990 to 2017.

But this has not translated to big improvements in diets.

BUT, ECONOMIC GROWTH DOES NOT FIX MALNUTRITION FAST ENOUGH ...

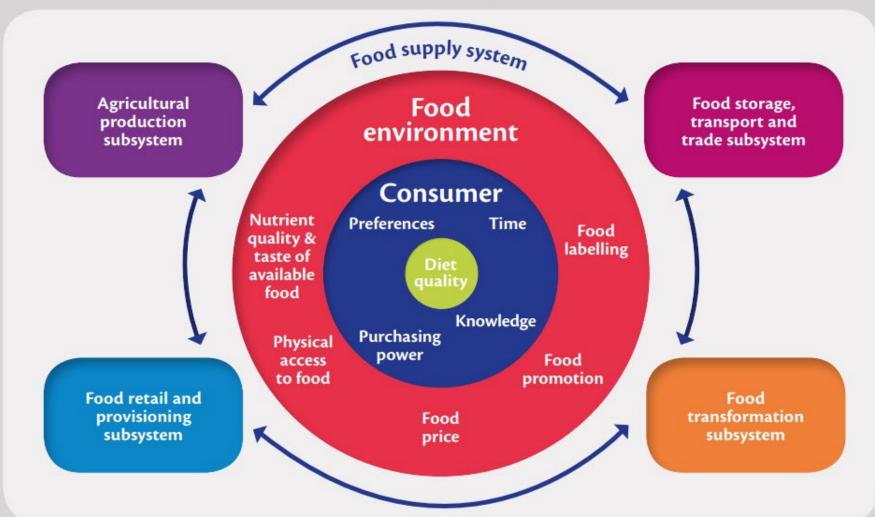


FOOD AVAILABILITY HAS DIVERSIFIED VERY WEAKLY



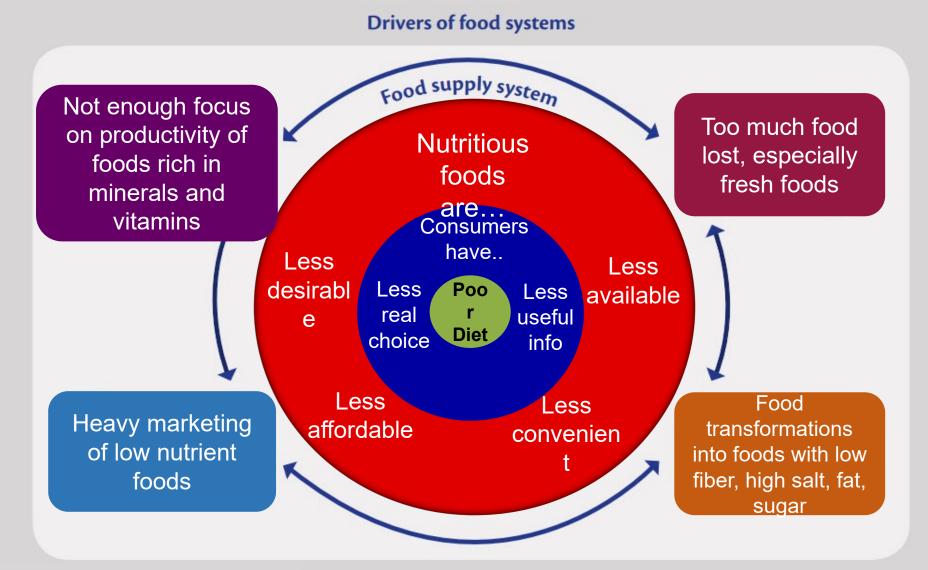
FOOD SYSTEMS SHAPE DIET CHOICES

Drivers of food systems



Source: Compiled by the authors

...AND THEY ARE NOT FOCUSED ON NUTRITIOUS FOODS



HEALTHY DIETS ARE PRICED OUT OF REACH FOR MANY



Share of per capita household income to buy

5 fruits and vegetables per

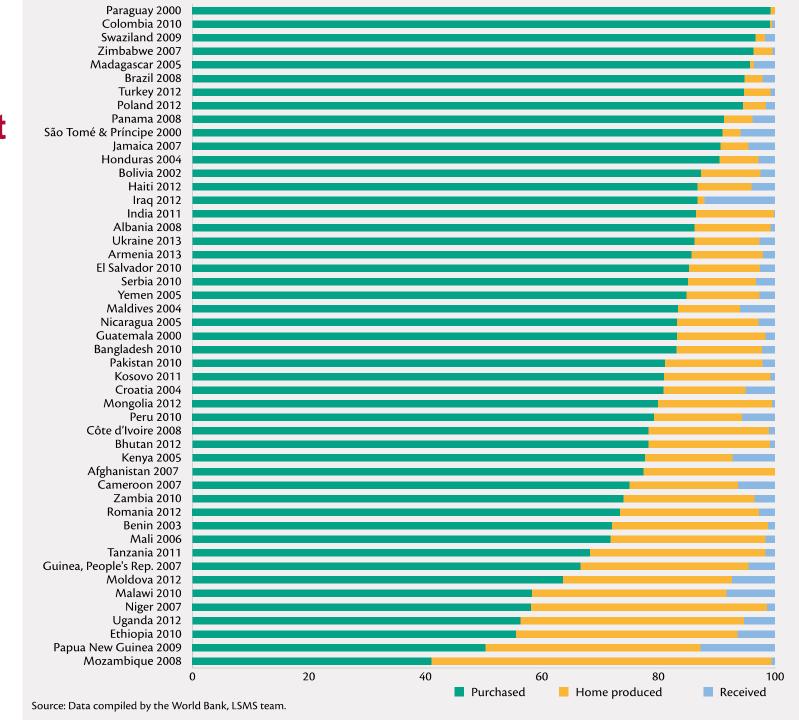
person per day in Bangladesh, India, Pakistan, Zimbabwe

52%

Availability, affordability, and consumption of fruits and vegetables in 18 countries across income levels: findings from the Prospective Urban Rural Epidemiology (PURE) study. Miller, Victoria et al. The Lancet Global Health, Volume 4, Issue 10, e695 - e703

Even in low income countries, most people get food from the market (i.e. businesses)

Percentage of household value of food consumed by source of acquisition:



ENGAGING WITH THE PRIVATE SECTOR

Markets are the most important source of foods in India.

Businesses are a critical part of the solution to deliver nutritious, affordable foods for sustainable nourishment.

For all

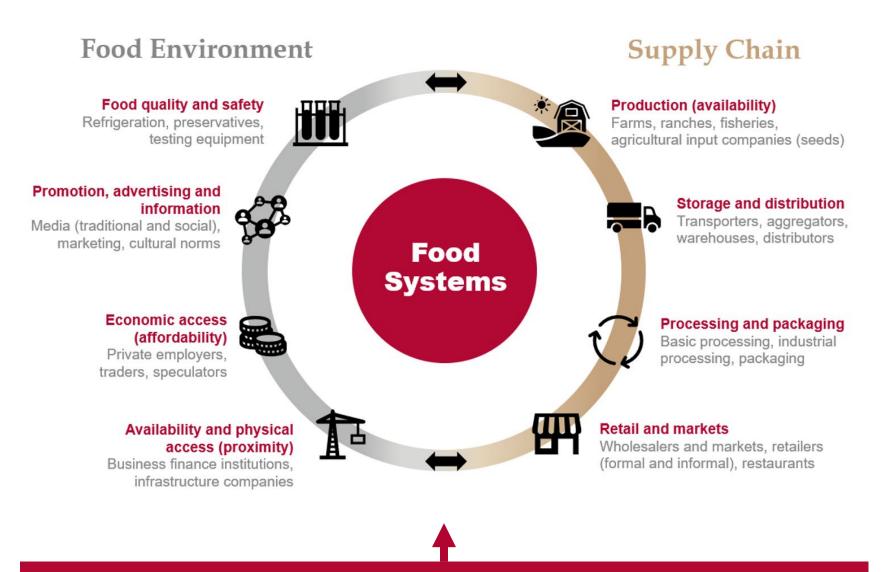
98%

Of food and beverages are purchased by urban households

80%

Of food and beverages are purchased by **rural** households

FOOD SYSTEM - BUSINESS LENS



Drivers: demographic, social, cultural, political, economic, technological, biophysical, environmental

FOOD SYSTEMS SUPPORTING BETTER NUTRITION - EXAMPLES

DRIVERS

Social / cultural

Social and cultural norms favour recommended healthy diets

Political / economic

Government regulation supports affordable nutritious food

Biophysical / Environmental

Environment enables sustainable, nutritious food supply

Innovation / technology

Technology supports improved access to healthy food

Demography

People of all ages throughout the country can access nutritious diets

FOOD SUPPLY CHAIN

Production

Enterprises produce quality, safe, nutritious food sustainably

Storage / distribution

Healthy food stored safely, distributed efficiently, minimising waste

Processing / packaging

Food processing maximises nutritional content while maintaining good food safety

Retail / markets

Retailers stock sufficient healthy & safe food

FOOD ENVIRONMENTS & CONSUMER BEHAVIOUR

Personal / external environment

Children are not exposed to unhealthy food marketing

Personal behaviour

People desire healthy & safe foods for themselves

Caregiver behaviour

Caregivers desire & attain healthy, safe diets for their families

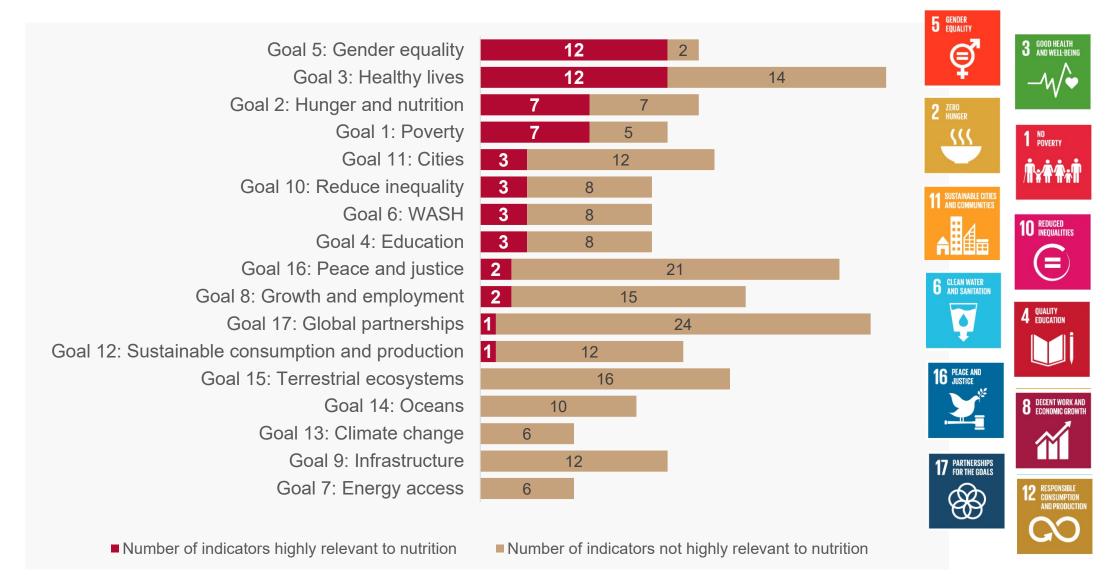




Not just a Marker of progress, It is a Maker of progress!



56 SDG INDICATORS ARE HIGHLY RELEVANT FOR NUTRITION





A GLOBAL FRAMEWORK



HIGHLIGHTS

SDG1: Eliminate Poverty

SDG2: Zero Hunger

SDG3: Health and Wellbeing

SDG17: Partnerships for the Goals

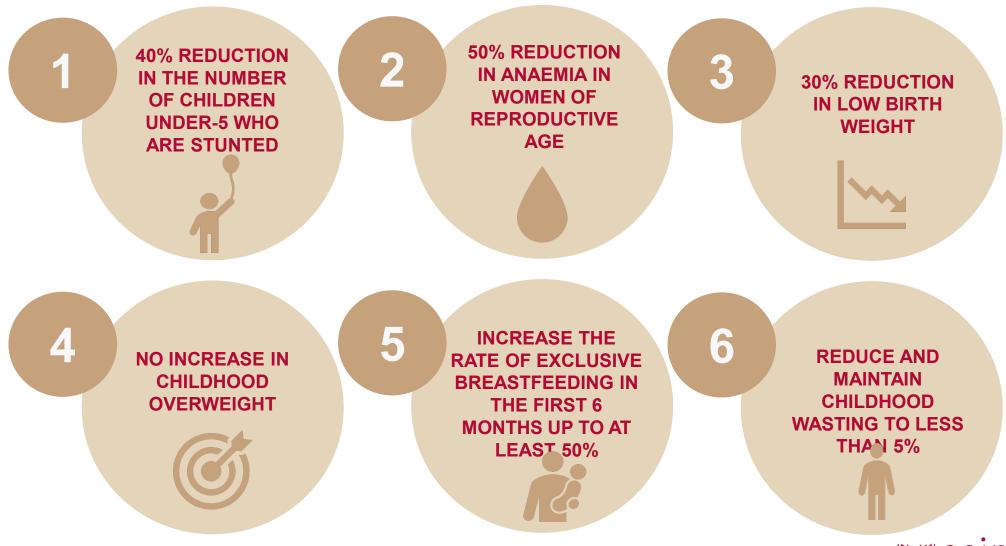
SDG12: Responsible Consumption & Production

GAIN's objectives and activities offer multiple entry points for contributing to Sustainable Development Goals



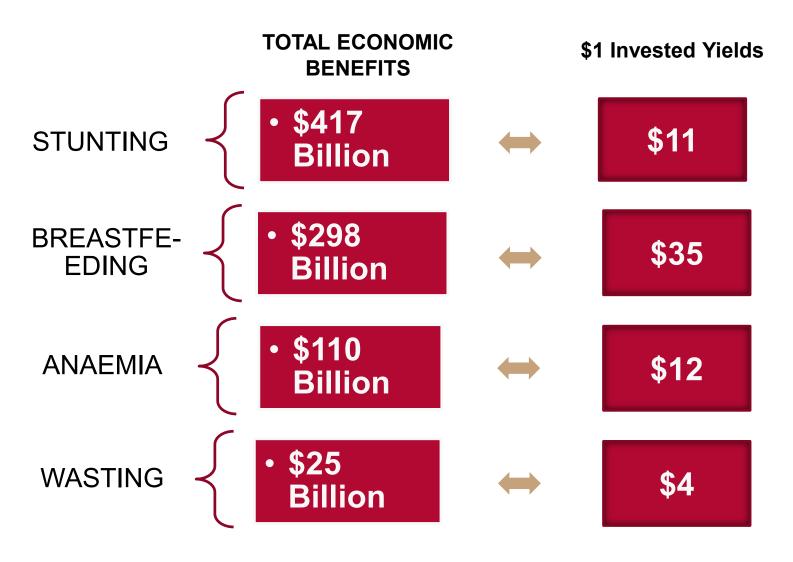
WORLD HEALTH ORGANIZATION (WHO) GLOBAL TARGETS 2025

In 2012, the
World Health
Assembly
endorsed a plan
on maternal,
infant and young
child nutrition,
specifying six
global nutrition
targets to be
met by 2025.





Economic Returns to Meeting the World Health Assembly 2025 Targets



INDIA CONTEXT

INDIA: MALNUTRITION AMONG TARGET GROUPS



MOTHERS

Women have a higher

burden than men

when it comes to

certain forms of

malnutrition:

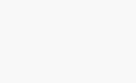
Children under five years of age face multiple burdens:

CHILDREN

38% are stunted

21% are wasted

2.4% are overweight



ADOLESCENTS

Micronutrient deficiencies and anaemia are widespread in low- and middle-income countries.

56% of adolescent girls and 30% of adolescent boys are anaemic



WORKERS

In low and middle-income

countries, many farmers

and industry workers are

despite earning an income.

women who are

nutritionally at risk

LOW-INCOME PEOPLE

People in lower income groups struggle to afford diets with adequate nutrition and tend to have higher incidences of **malnutrition**.

50% pregnant women suffer from anaemia



38% of children under 5 are stunted.

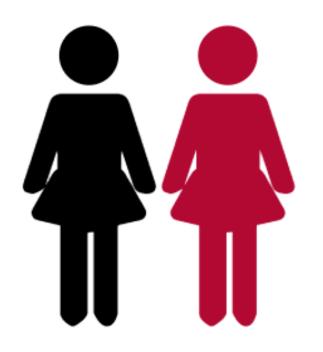






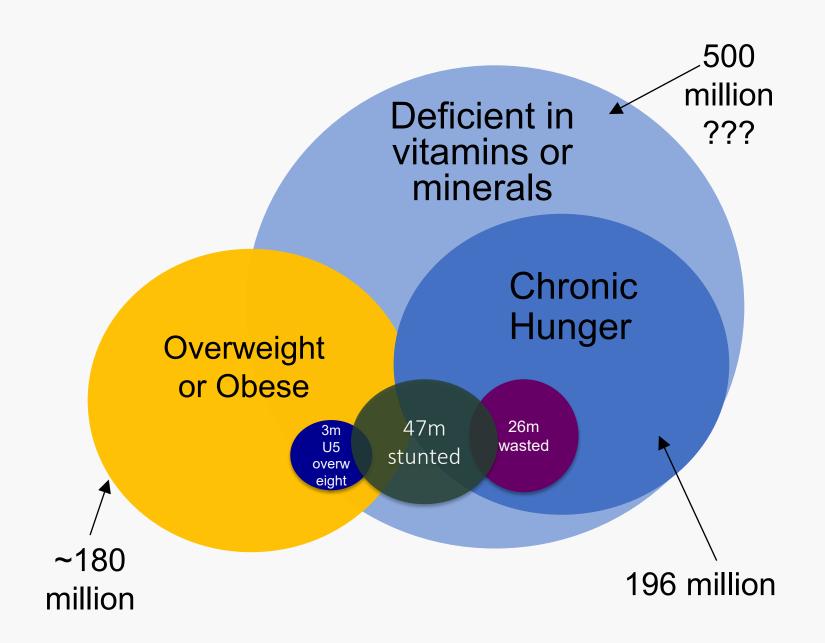
Almost half of children 6-59 months are vitamin A deficient.





1 in 2 women of reproductive age are anaemic.





INDIA: DIETS A KEY FACTOR IN MORTALITY AND MORBIDITY

Poor diet now contributes to six of the top ten burden of disease factors in India (2017, level 2 factors).

Ran k 1

2

4

6

9

10

Child and maternal malnutrition

Dietary risks

High systolic blood

pressure

High fasting plasma glucose

High body mass index

High LDL cholesterol

Including mothers and infants with micronutrient deficiencies, children born with low birth weights, wasting, etc.

Including low consumption of (micro) nutrients, fruit, whole grains, etc.

High blood pressure can be driven by a high-salt, high-fat diet. It increases risks of heart attack and stroke Indicative of diabetes and pre-diabetes, often linked to poor diet.

Overweight and obesity, often linked to poor diet.

LDL is 'bad' cholesterol, known to contribute to coronary artery disease

FOOD GROUP INTAKES - INDIA & SELECT OTHER COUNTRIES

Intake data from 2010 shows Indians on average consume:

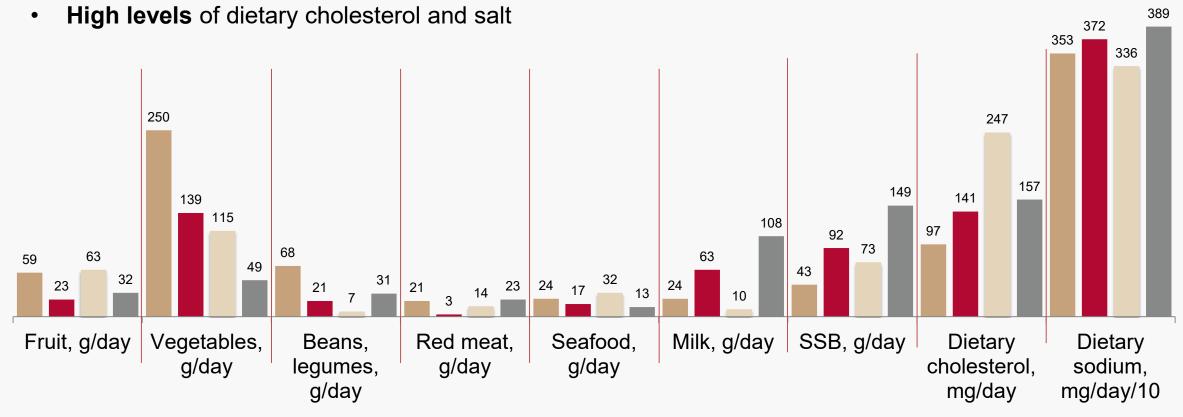
Less fruit, vegetables, and legumes than Bangladesh

Bangladesh

India

More sugar-sweetened beverages than Bangladesh & Indonesia

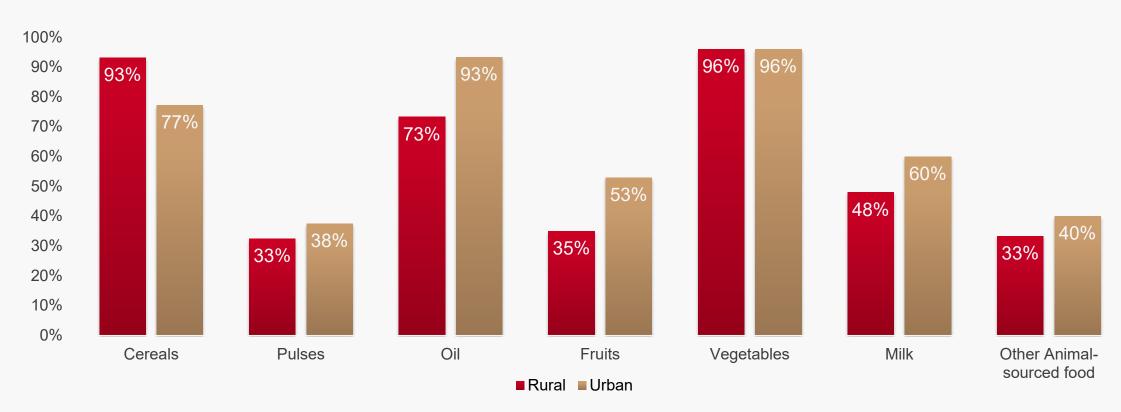
Indonesia



■ Pakistan

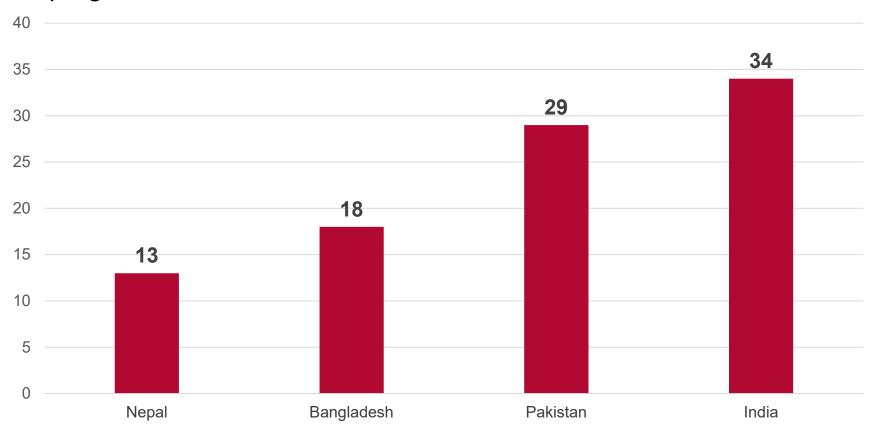
BOTH RURAL & URBAN AREAS HAVE NUTRITIOUS FOOD INTAKES BELOW DESIRED LEVELS

Intake of selected food groups as a % of Desirable Dietary Pattern, 2011-12



FOR INDIA THE RETURNS TO SCALING UP NUTRITION ARE HIGH...

Returns for every Rupee invested in scaling up nutrition programmes



GAIN INDIA

OUR VISION: **BETTER NUTRITION. FOR ALL.**







DEMAND

Increase
consumer
demand for
nutritious and
safe food.

ACCESS

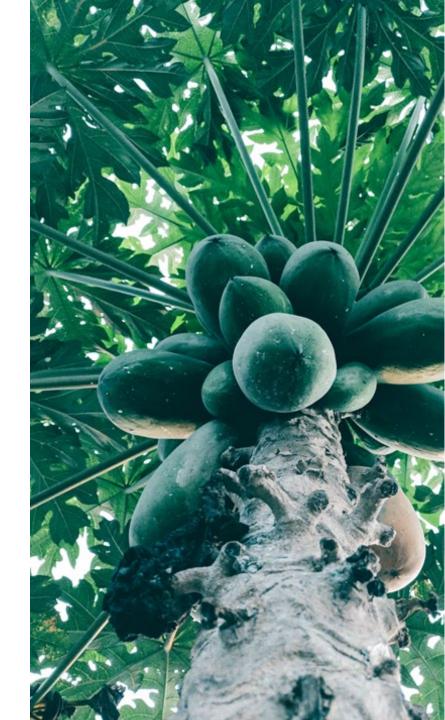
Increase availability and affordability of nutritious and safe food.

ENABLING ENVIRONMENT

Create favourable conditions that encourage the **production** and **consumption** of nutritious and safe food.

GAIN INDIA PROGRAMMES

- LARGE SCALE FOOD FORTIFICATION
- 2 DECENTRALIZED PRODUCTION OF FORTIFIED BLENDED FOOD
- WORKFORCE NUTRITION TEA SUPPLY CHAIN
- COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION
- DOUBLE-FORTIFIED SALT STUDY
- COMMERCIALIZATION OF BIOFORTIFIED CROPS



Large Scale Food
Fortification: Leveraging
Global Moments for Local
Progress

#FUTUREFORTIFIED GLOBAL SUMMIT ON FOOD FORTIFICATION, Arusha, Tanzania, 9-11 September 2015

Goals:

- 1. Review achievements, challenges and lessons learnt
- 2. Understand current evidence
- 3. Align on the way forward

Participants:

- 450 delegates from 57 countries
- 29 developing government delegations
- 11 country case studies presented



THE ARUSHA STATEMENT ON FOOD FORTIFICATION

- Generate new investment in sector
- Improve oversight and enforcement of food fortification standards
- Generate more evidence to guide fortification policy and program design
- More transparent accountability and global reporting
- Continuing advocacy



GLOBAL FORTIFICATION TECHNICAL ADVISORY GROUP (GFTAG)





The objective of the GFTAG post Summit has been to maintain momentum and elaborate on the recommendations of the Global Summit and launch new initiatives, e.g. GFDx.

INDIA LSFF: INFLUENCE AND DELIVERY

Pilot / Models: 2011-2015

Influencing states through a national platform: February 2016 Designing program delivery for Scale: Edible Oil :November 16

Influencing India's Social Protection Schemes: July-August 2017

Recommending mandatory fortification: August 2018

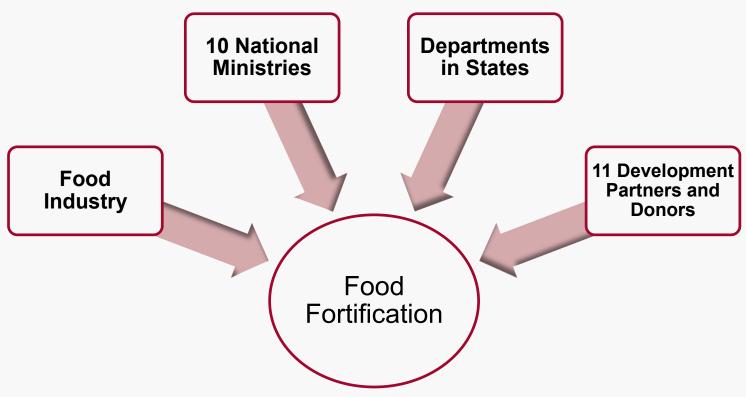
- Demonstration
 n projects in
 open market
 and social
 protection
 schemes in 2
 Indian states:
 Rajasthan &
 Madhya
 Pradesh
- Making the fortification business case to Food Secretaries of all Indian states and policy makers of central ministries
- BMGF+GAIN
- TATA TRUSTS
- FFRC

- Mandatory fortification of edible oil, wheat flour & DFS in MDM & ICDS
- National Consultation by MoWCD, Niti Aayog & MoHFW
- Sensitizing the Prime Minister's Office









Scaling up fortification of staple foods to address micronutrient malnutrition: population with specific focus on vulnerable groups













- Bill and Melinda Gates Foundation
- Clinton Health Access Initiative
- Food Fortification Initiative
- Iodine Global Network
- Micronutrient Initiative
- PATH
- Tata Trusts
- UNICEF
- World Food Programme
- World Health Organization

Industry Partners

GAIN

FFRC

- Oil Millers
- Wheat Flour Millers
- Milk Federations and Processors
- Salt Processors
- Rice Millers

Government

- Ministry of Health and Family Welfare
- Department of Food and Public Distribution
- Ministry of Women and Child Development
- Department of School Education
- Department of Health Research
- Department of Industrial Policy and Promotion
- Department of Animal Husbandry, Dairying & Fisheries
- Ministry of Food Processing Industries
- Department of Biotechnology

FSSAI STANDARDS FOR FORTIFIED STAPLES

9.9µgRE

RE

• **Iron**: 850-1100 mg

• **lodine**: 15 mg

Double Fortified Salt (/kg)



- Edible Oil (/gm)

- Vitamin A: 270 μgRE-450μgRE
- Vitamin D (*Plant Source): 5µg-7.5µg

Milk (Itr)

- **Iron:** 14mg-21.25 mg
- Folic Acid:75μg-125 μg
- Vitamin B12: 0.75μg 1.25μg
- 6 other nutrients as voluntary addition

Wheat Flour (/kg)



• **Iron:** 14mg-21.25 mg

Vitamin A: 6µgRE-

Vitamin D (*Plant

Source): 0.11-0.16µg

• **Folic Acid**: 75 μg-125

μg

• **Vitamin B12:** 0.75 μg-

1.25µg

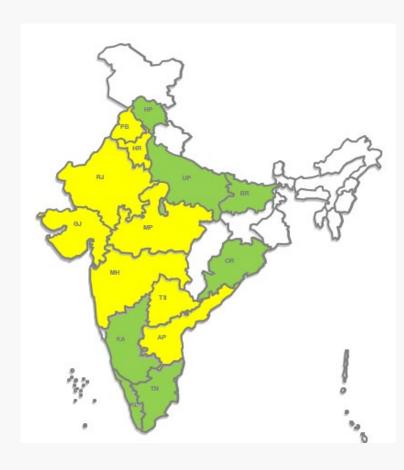
Rice (/kg)



- Zinc: 10 mg- 15 mg
- Vitamin A : 500 μg RE- 750 μg RE
- Thiamine (Vitamin B1): 1 mg 1.5 mg
- Riboflavin (Vitamin B2): 1.25 mg- 1.75 mg
- Niacin (Vitamin B3): 12.5 mg- 20 mg
- Pyridoxine (Vitamin B6): 1.5 mg- 2.5 mg

Optional Micronutrients for Rice and Wheat Flour





*Reach= [(Fortified tonnage in MT/annum)/ per capita consumption of edible oil per person per annum]

g = 0.2

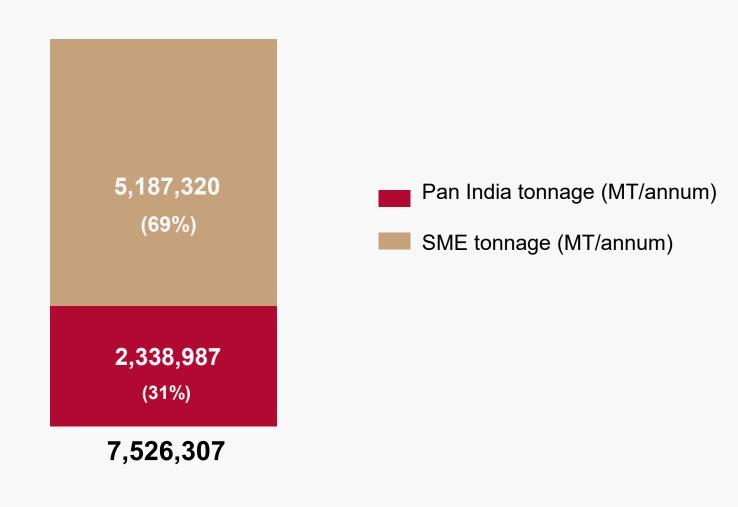
#	States	Edible Oil		Milk	
		Total Fortified Tonnage (MT/annum)	*Persons reached@ consumption level of 25g/ day	Fortified (Litre Per Day)	**Persons reached@ consumptio n level of 200g/ day
1	Rajasthan	568,222	63,135,778	1,552,795	7,763,975
2	Haryana	59,646	6,627,333	250,626	1,253,130
3	Punjab	152,104	16,900,444	220,256	1,101,280
4	Madhya Pradesh	637,645	70,849,444		-
5	Gujarat	3,135,675	350,436,111		-
6	Maharashtra	1,113,550	123,727,778	420,000	2,100,000
7	Telangana	94,900	10,544,444	340,000	1,700,000
8	Andhra Pradesh	667,536	74,170,667		-
9	Delhi			115,000	575,000
10	Uttar Pradesh	526,859	58,539,889	15,666	78,330
11	Bihar	1,370	152,222		-
12	Karnataka	98,800	10,977,778		-
13	Kerala	69,000	7,666,667	10,000	50,000
14	Tamil Nadu	401,000	44,555,556	_	-
	Total	7,526,307	838,284,111	2,924,343	14,621,715

Status as on October 2019

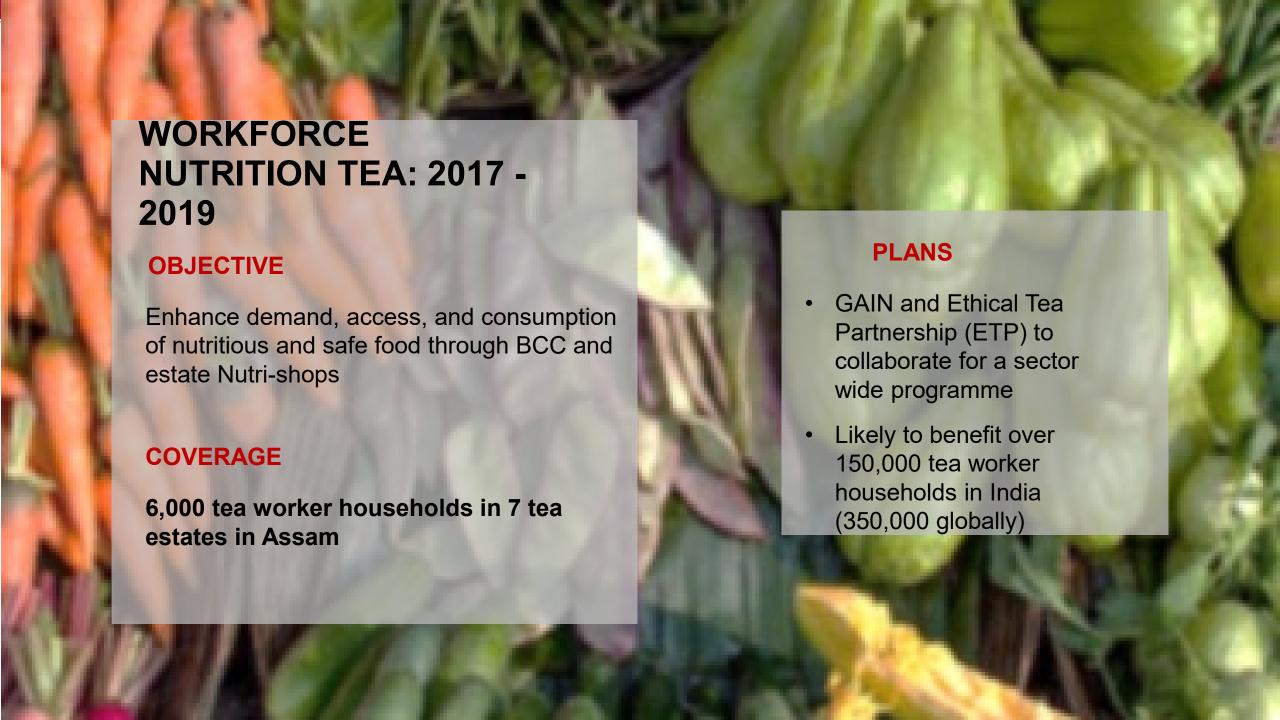
Per capita consumption of edible oil per person per day = 25 g Per capita consumption of edible oil per person per annum= 25g*365 days= 9125g or 9.125kg or 0.0091 M

^{**} Reach= [(Fortified tonnage in Litre Per Day)/ per capita consumption of milk per person per day (in Litres)]
Per capita consumption of milk per person per day (in Litres) = 200g/1000

FORTIFIED EDIBLE OIL TONNAGE DISTRIBUTION: PAN INDIA AND SMES







Community based Management of Acute Malnutrition: POSHAN

- 622,000 Children screened in 20 Districts of Rajasthan, India
- 1,320 Medical Health sub-centres
- 5000 Villages; 8,700 front line workers
- 16,500 children cured





COMMERCIALIZATION OF BIOFORTIFIED CROPS

- GAIN + Harvest Plus: Partnership for projects in 6 countries
- Crops in focus for India:

1.Iron Pearl Millet

Potential states: Rajasthan,
 Maharashtra, Karnataka and Uttar
 Pradesh

2.Zinc Wheat

Potential States: Uttar Pradesh,Bihar, Punjab



Leaving no one behind...

THE KATHMANDU DECLARATION, 4 – 7, NOVEMBER 2019
Nourishing people and planet together

Commitment from the SUN Movement stakeholders:

- From planning to practice: Delivering throughout the policy cycle
- Advocating and mobilizing for mass change: Making nutrition everyone's business
- Strengthening capacity for impact at scale: Multi-stakeholder action on universal challenges
- Equity, equality and empowerment: Leave no one behind



SECOND GLOBAL SUMMIT ON FOOD FORTIFICATION, 21-23, March 2020 Bangkok, Thailand

Summit Agenda:

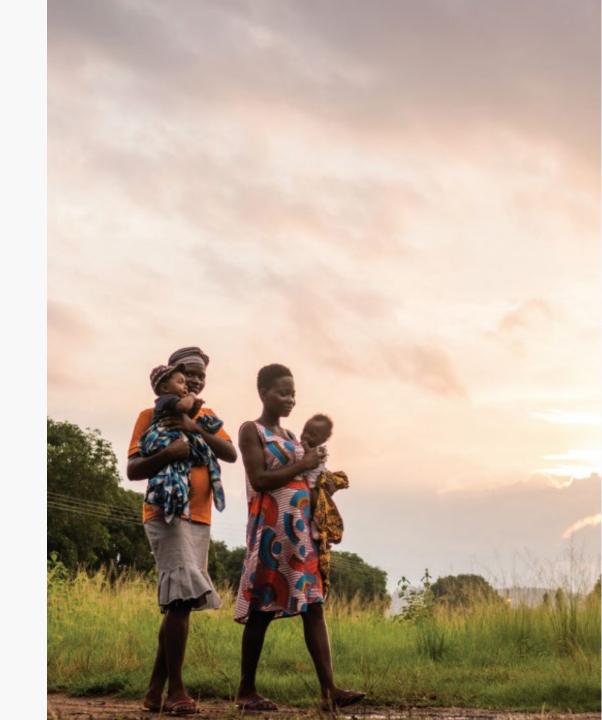
- Assess progress made over the past 5 years since the first summit in Arusha,
 Tanzania
- Explore complementarities between industrial fortification and biofortification
- Garner new commitments from donors, governments, and the private sector
- Align participants on tangible tasks
 which must be completed over the next
 five years to ensure that food
 fortification and biofortification programs
 are expanded, improved and sustained



TOKYO NUTRITION FOR GROWTH SUMMIT December 2020

Four thematic areas:

- Integrating nutrition into Universal Health Coverage (UHC)
- Transforming the food system, so it promotes safe, sustainable, and healthy foods to support people and planet
- 3. Effectively addressing malnutrition in fragile and conflict affected contexts, supporting resiliency
- Securing new investments and driving innovation in nutrition financing





Thank you