WORLD OBESITY

Webinar series is supported by a grant from the European Union's 3rd Health Programme

Community-level interventions to address obesity: A World Obesity Federation Webinar

Wednesday 11th December 2019

Agenda

Chair: Dr Olivia Barata Cavalcanti, World Obesity Federation

14:00-14:05 – Welcome
Dr Olivia Barata Cavalcanti, World Obesity Federation

14:05-14:30 – Child Friendly Cities Initiative
Jens Aerts & Jo Jewell, UNICEF

14:30-14:50 – Addressing childhood obesity in urban environments: A case study of the London boroughs of Lambeth and Southwark
Sarah Hickey, Guy's and St Thomas' Charity

14:50-15:10 – Built environment, levels of physical activity and obesity prevention: Lessons to be learnt from India
Dr Shifalika Goenka, Public Health Foundation of India

15:10 – 15:20 World Obesity Federation's recommendations
Margot Neveux & Lesly Vejar, World Obesity Federation

15:20-15:30 – Q&A

Supported by a grant from the European Union's 3rd Health Programme

Webinar housekeeping

- ❑ You should be muted (please double check)
- ❑ Feel free to ask questions throughout
- ❑ Type any questions in the chat box
- ❑ Note that the webinar will be recorded

Supported by a grant from the European Union's 3rd Health Programme

Policy dossiers

The dossiers were launched in 2018. They provide a summary of evidence and resources to help policymakers, NGOs and others when seeking to implement a policy in their country.

You can access all of our dossiers here: https://www.worldobesity.org/resources/policy-dossiers

Sugar-Sweetened Beverage Tax

SSB TAX

Digital Marketing

DIGITAL MARKETING

School-Based Interventions

SCHOOL-BASED INTERVENTIONS

City-Level Interventions

CITY-LEVEL INTERVENTIONS

Pregnancy & Obesity

PREGNANCY & OBESITY

Childhood Obesity Treatment

CHILDHOOD OBESITY TREATMENT

Front-of-Pack Nutrition Labelling

FRONT-OF-PACK NUTRITION LABELLING

This web page was produced with the support of an operational grant under the European Commission's Third Health Programme (2014-2020). The European Commission is not responsible for any use that may be made of them.

WORLD OBESITY

FOR EVERY CHILD, A CHILD-FRIENDLY CITY

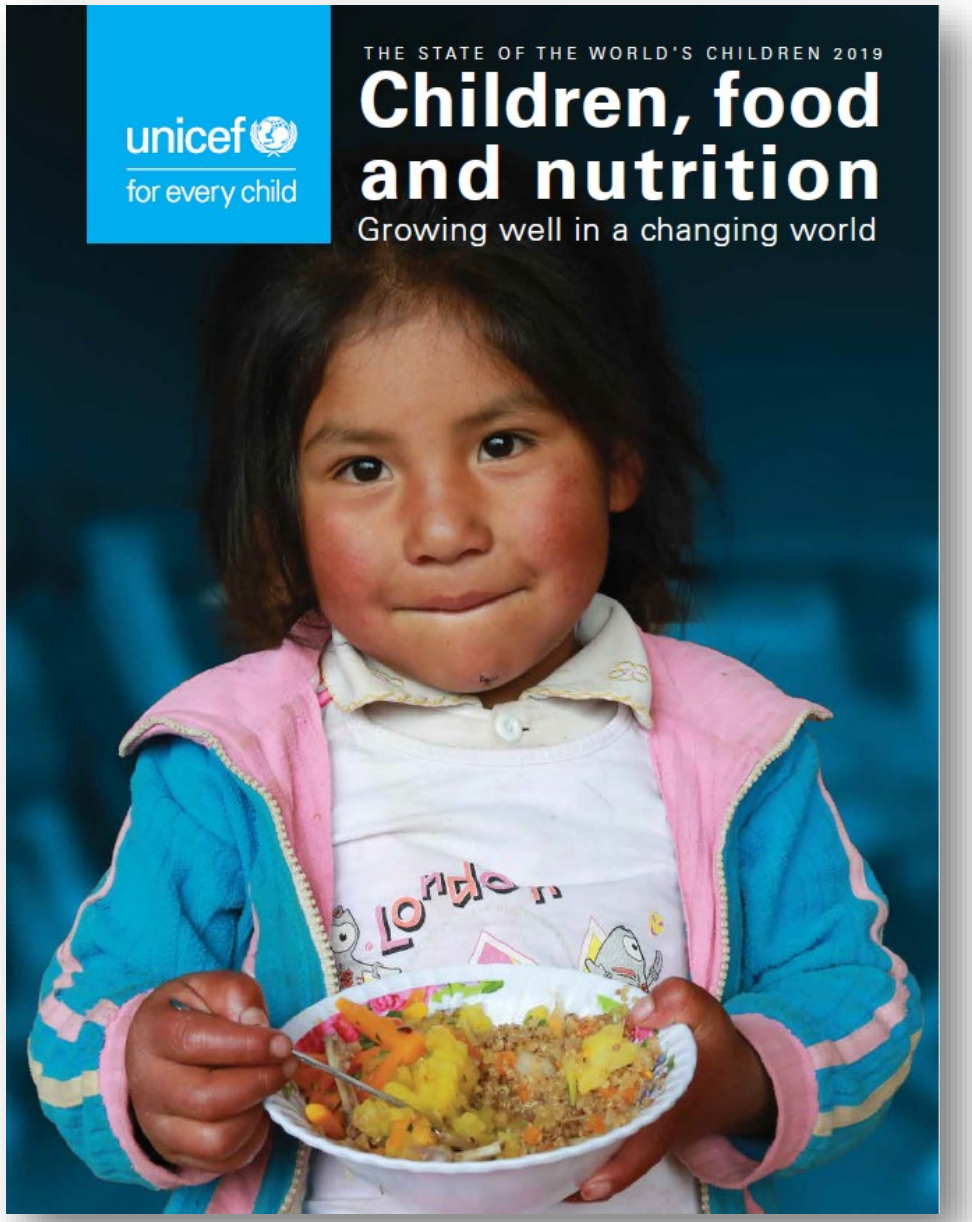
Jens Aerts, Urban Specialist
Jo Jewell, Nutrition Specialist

Child Friendly Cities Initiative

unicef
for every child

1. UNICEF work on nutrition and food
2. UNICEF work on urban
3. Child rights and the urban environment
4. Child Friendly Cities Initiative
5. Collaboration with partners

UNICEF work on nutrition and food



- Child malnutrition in a changing world
- Responses to malnutrition
- An agenda to put children's nutrition rights first

UNICEF work on nutrition and food

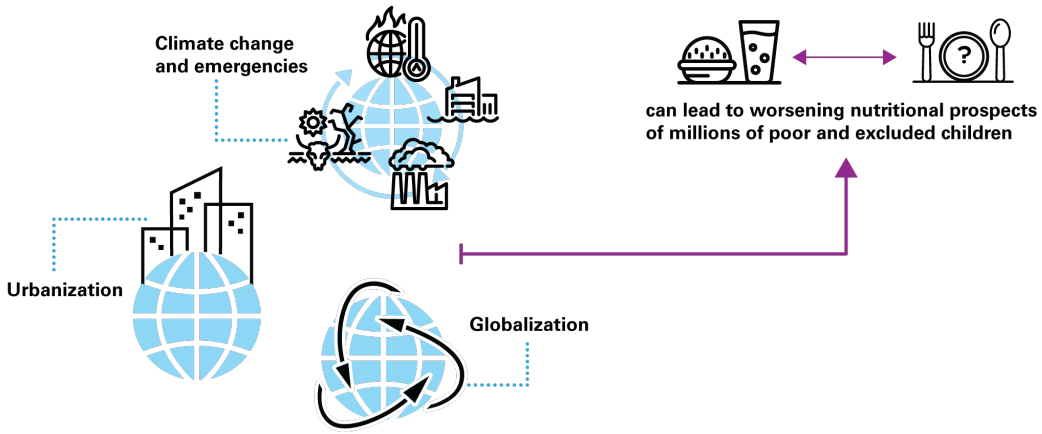
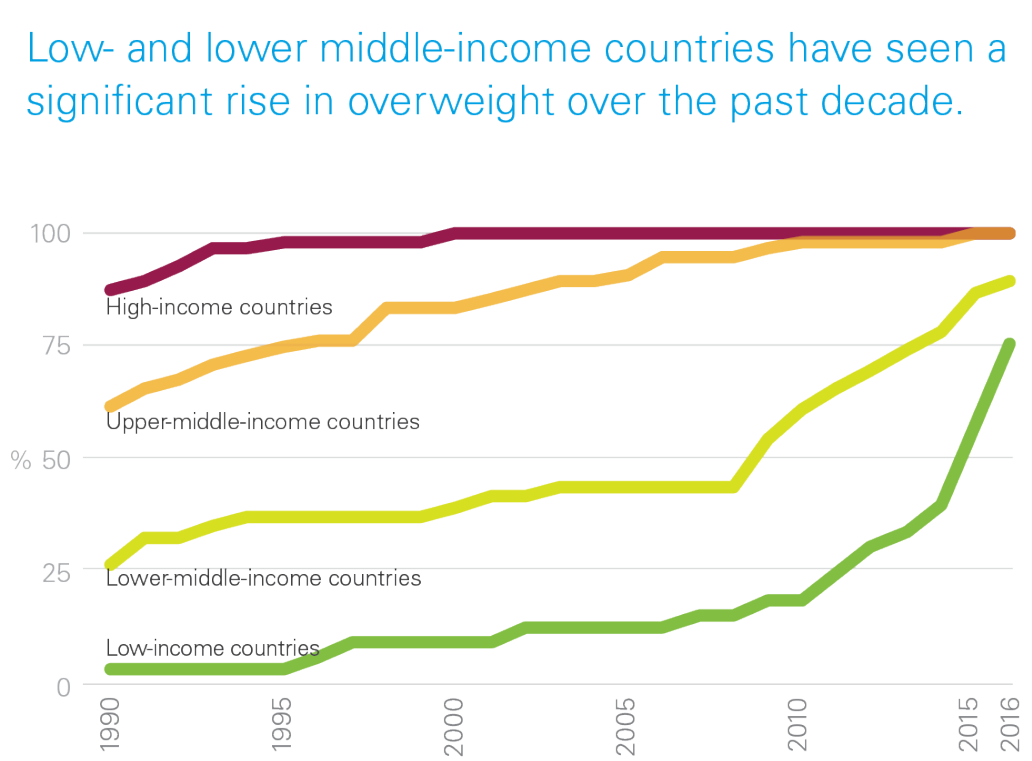


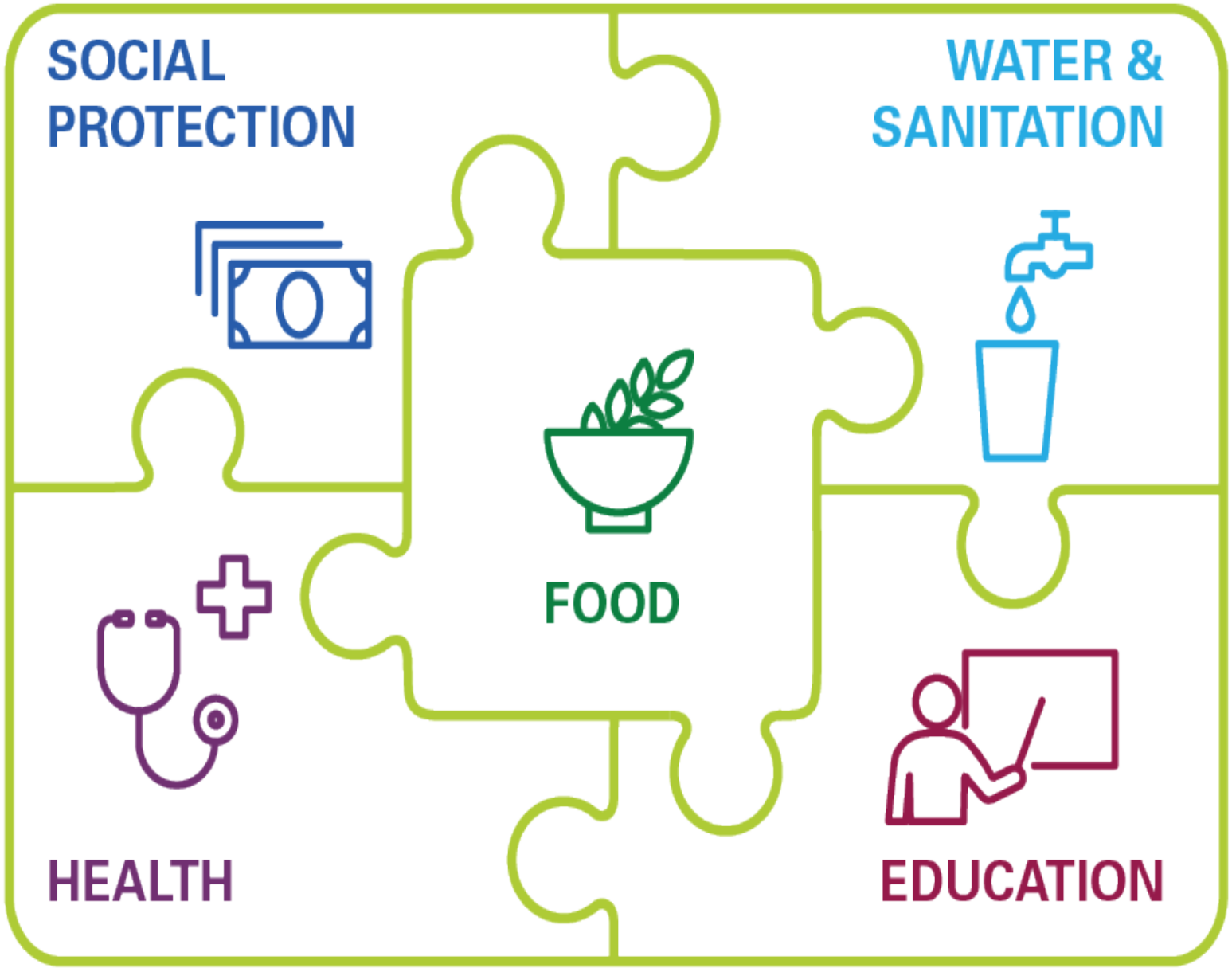
FIGURE 1.6 | **Trend in percentage of countries by World Bank income group where at least 10 per cent of children aged 5–19 years are overweight**



UNICEF work on nutrition and food

Putting children at the heart of food systems

Innocenti Framework on Food Systems for Children and Adolescents



UNICEF and Urban

Strategic Plan 2018-2021

GOAL AREA 1

EVERY CHILD SURVIVES AND THRIVES

urban immunization
urban food systems
NCDs
child care

GOAL AREA 2

EVERY CHILD LEARNS

secondary school
urban live skills

GOAL AREA 3

EVERY CHILD IS PROTECTED FROM VIOLENCE AND EXPLOITATION

safe cities,
road safety

GOAL AREA 5

EVERY CHILD HAS AN EQUITABLE CHANCE IN LIFE

urban poverty,
decentralisation

GOAL AREA 4

EVERY CHILD LIVES IN A SAFE AND CLEAN ENVIRONMENT

Output statement

Countries have initiated action towards ensuring that urban settings are child responsive

4.d.1. Number of countries with data on intra-urban disparities, including girls and boys in informal settings;

+

4.d.2. Number of countries where urban/local government development plans and budgets and urban planning standards are child-responsive and involve participation of children.

UNICEF and Urban

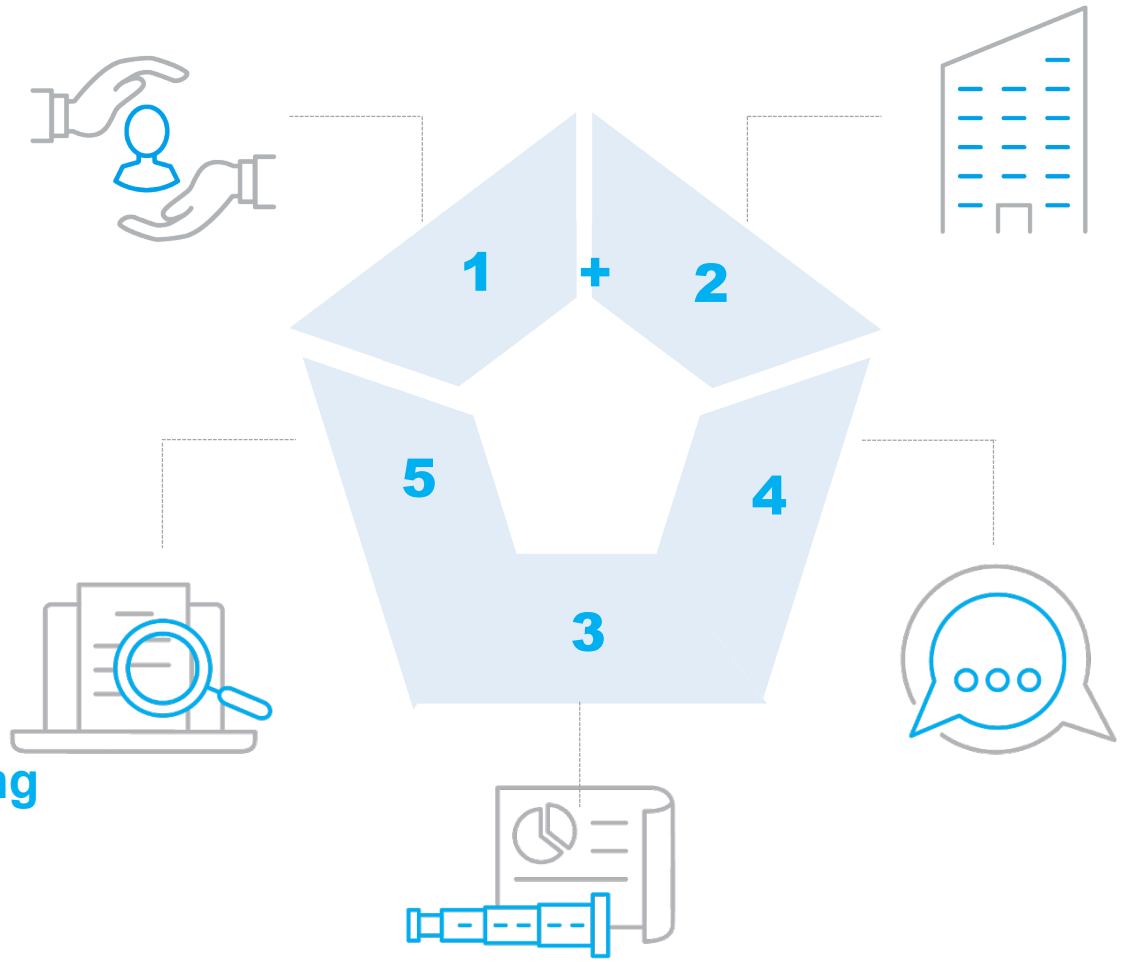
Strategic Note on Urban

Quality social services

Reducing equity gaps in cities through technical support on child poverty analysis, social protection

A safe and clean environment

Promoting a safe and clean urban environment for children



Participation of children and other stakeholders

Enhancing the voice and participation of urban poor children and youth, and strengthening partnerships with urban communities and organizations.

Evidence strengthening

Strengthening the evidence base on children in cities, in data, policy and research

Adapted urban planning and budgeting

Investments for urban children, particularly the most disadvantaged

10 Child Rights and Urban Planning Principles

By committing to 10 Child Rights and Urban Planning Principles, urban stakeholders ensure that cities are child-responsive and thrive as homes for healthy, safe, inclusive, green and prosperous communities.

health · safety · citizenship · environmental sustainability · prosperity

1. Investments in urban planning

Urban spaces, systems and networks, that offer a safe and clean environment for children and allow them to adopt sustainable behaviors

2. Housing and Land Tenure

Affordable and adequate housing and secure land tenure

3. Public Amenities

Infrastructure for health, educational and social services

4. Public Spaces

Safe and inclusive public and green spaces

5. Transportation Systems

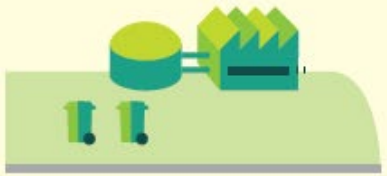
Active transportation and public transit systems that ensure independent mobility

6. Water and Sanitation Systems

Safely managed water and sanitation services that ensure an Integrated Urban Water Management

7. Food Systems

Urban food systems with farms, markets and vendors, that give access to healthy, affordable and sustainably produced food and nutrition



8. Waste Cycle Systems

Zero waste systems that ensure sustainable resource management

9. Energy Networks

Clean energy networks that ensure reliable access to power

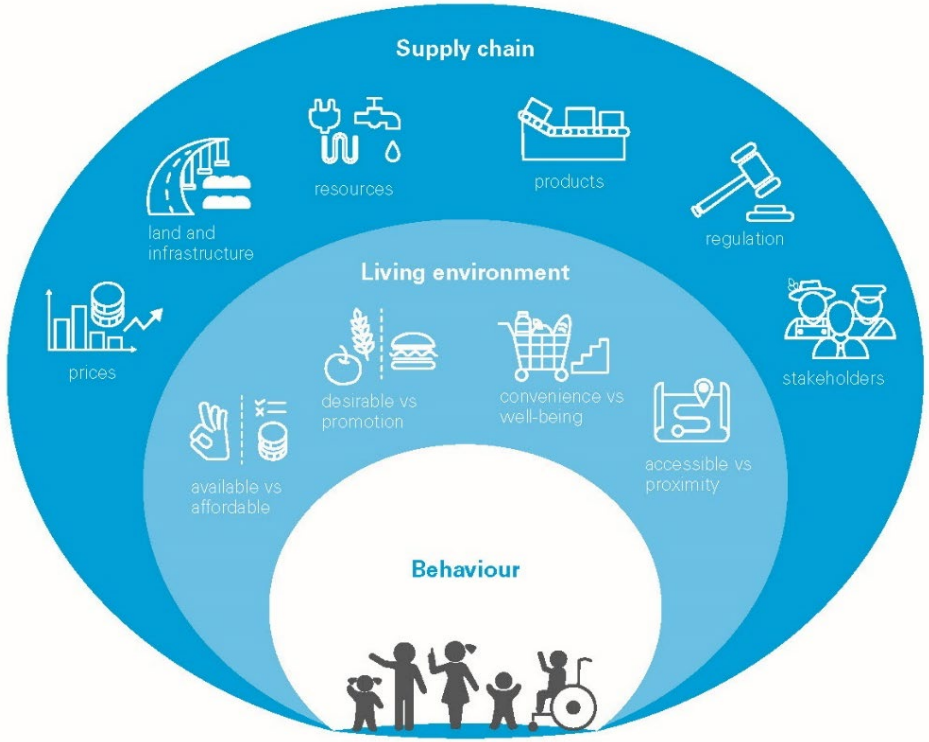
10. Data and ICT Networks

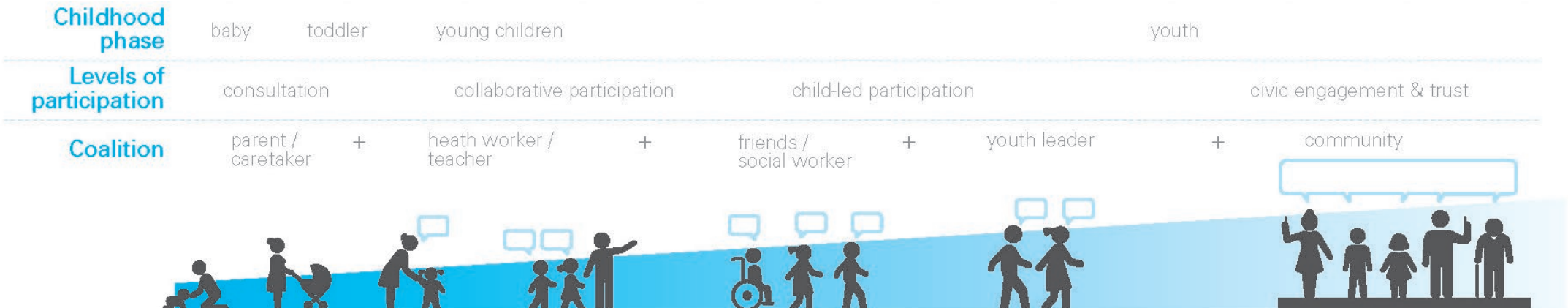
Integrated data and ICT networks that ensure safe and reliable digital connectivity

Source: UNICEF, Handbook on child-responsive urban planning, 2018

UNICEF and Urban

The city as an eco-system, that supplies an environment for sustainable behaviours





UNICEF and Urban

Principle 1 ***Investments*** – Invest in child-responsive urban planning that ensures a safe and clean environment for children.

What and how to plan cities for children?

- Provide **urban space** on different scales for children and the community
- Include children in the **design process** to translate their lived experience in community design
- Provide and use data for evidence-based and **people-centered decision-making**

Develop norms and standards for planning, building and management

Develop guidelines & tools for participatory planning & design

Provide urban data for monitoring and evaluation for children

Child-responsive city planning

Principle 7 ***Food Systems*** – Children have permanent access to healthy, affordable and sustainably-produced food and nutrition.

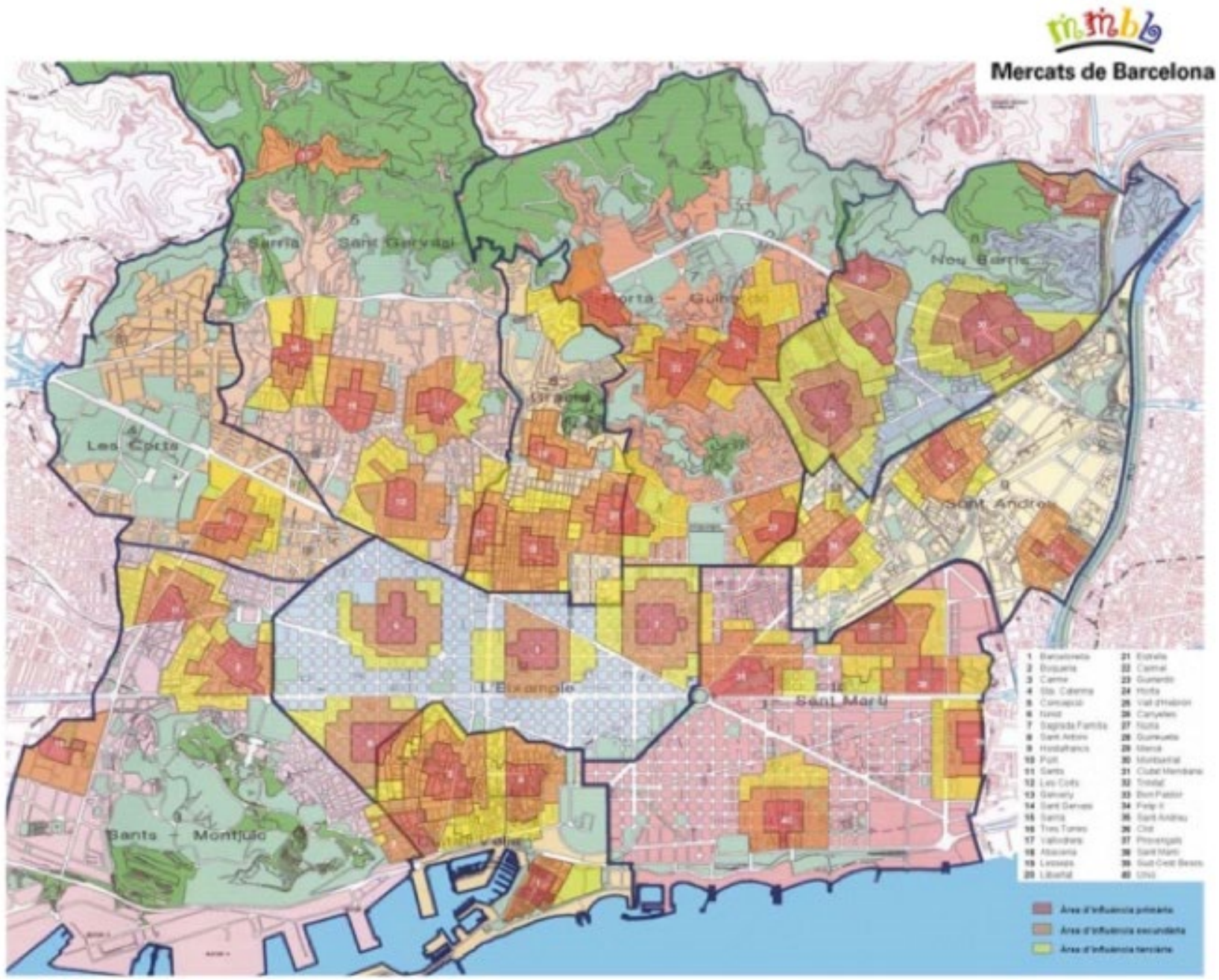
Foodmet, Cultureghem, Brussels, Belgium

Why?

- nutritious, balanced and diversified diet
- less food stress
- community engagement and livelihoods
- less food waste and ecologic conservation
- less public health costs, local business

Concepts and strategies

- Plan sustainable urban food locations
- Plan urban and peri-urban agriculture (UPA)
- Foster community supported agriculture
- Schools & surroundings as healthy zones
- Private partnerships to create healthier food landscapes (retail; marketing)



Fresh market plan, Barcelona, Spain

Farming Kindergarten, Dong Nai, Viet Nam

Principle 5 ***Transportation Systems*** – Public transit that gives children equal access to all services and opportunities in their city.

Training Child Road Traffic Injuries Prevention Programme, Manila, Philippines

Why?

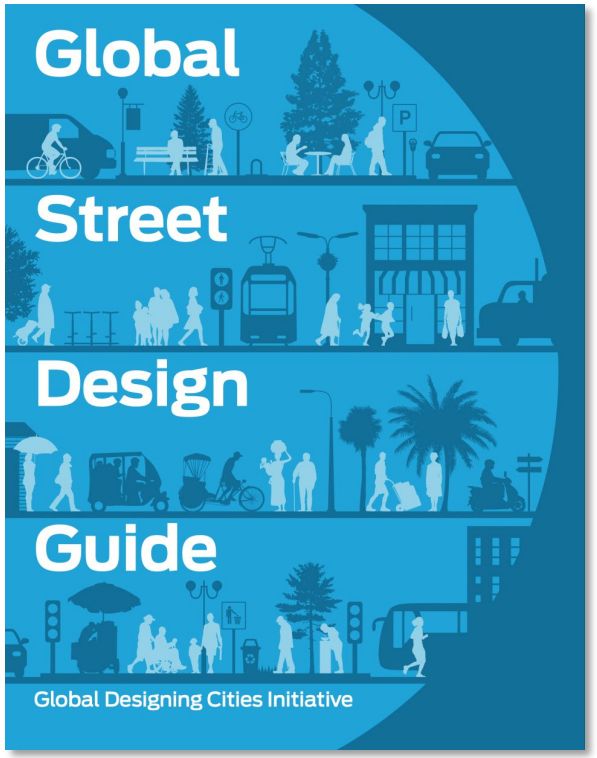
- physical activity and air quality streets
- road safety and social control
- connectivity, children's independent mobility
- clean air, soil and water and GHG reduction
- more local commerce and less health costs

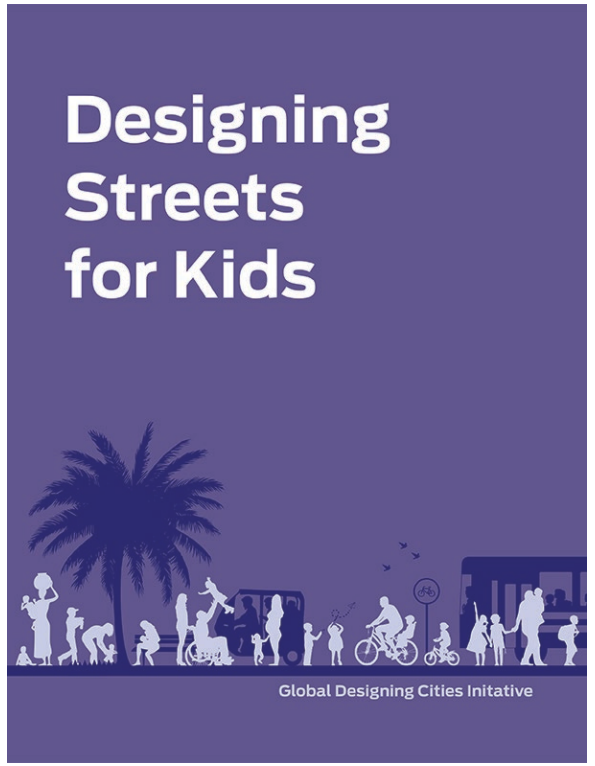
Concepts and strategies

- Give priority to non-motorized transport
- Improve walkability and street connectivity
- Invest in public transit and intermodality
- Develop safe schools zones and traffic plans
- Invest in events to promote urban health

Cyclovia, Bogota, Colombia

Global Street Design, Addis Ababa, Ethiopia





Launch February 2020!

Initiation bike course for toddlers, Tirana, Albania


Child Friendly Cities Initiative
unicef
for every child
About
Building a CFC
Initiatives
Stakeholders
2019 Summit
Resources
News & Events
Make your city child-friendly!
Every child has the right to grow up in an environment where they feel safe and secure, have access to basic services and clean air and water, can play, learn and grow and where their voice is heard and matters.
Mayors commit to action for children at the CFC Summit
More than 100 cities and communities committed to action for children at the Child Friendly Cities Summit.
LEARN MORE
What is a Child-Friendly City?
LEARN MORE
How to Build a Child-Friendly City
LEARN MORE


Child
Friendly
Cities
Initiative
Vision
‘Every child and young person **enjoys** their **childhood and youth** and reaches their **full potential** within their cities and communities’.
© UNICEF/UN0213440/Viet Hung

Child Friend
Cities
Initiat

Definition

A “Child Friendly City” is a **city, town, community or any system of local governance committed to fulfilling child rights** as articulated in the Convention on the Rights of the Child.

It is a city or community where **the voices, needs and priorities of children** are an integral part of public policies, programmes and decisions influencing their lives and future.

Strategy

CFCI is a **transformative process** through which local commitment to advancing child continues to evolve.

The CFCI is about **improving the lives and well-being of children**, **not about creating perfect cities.**

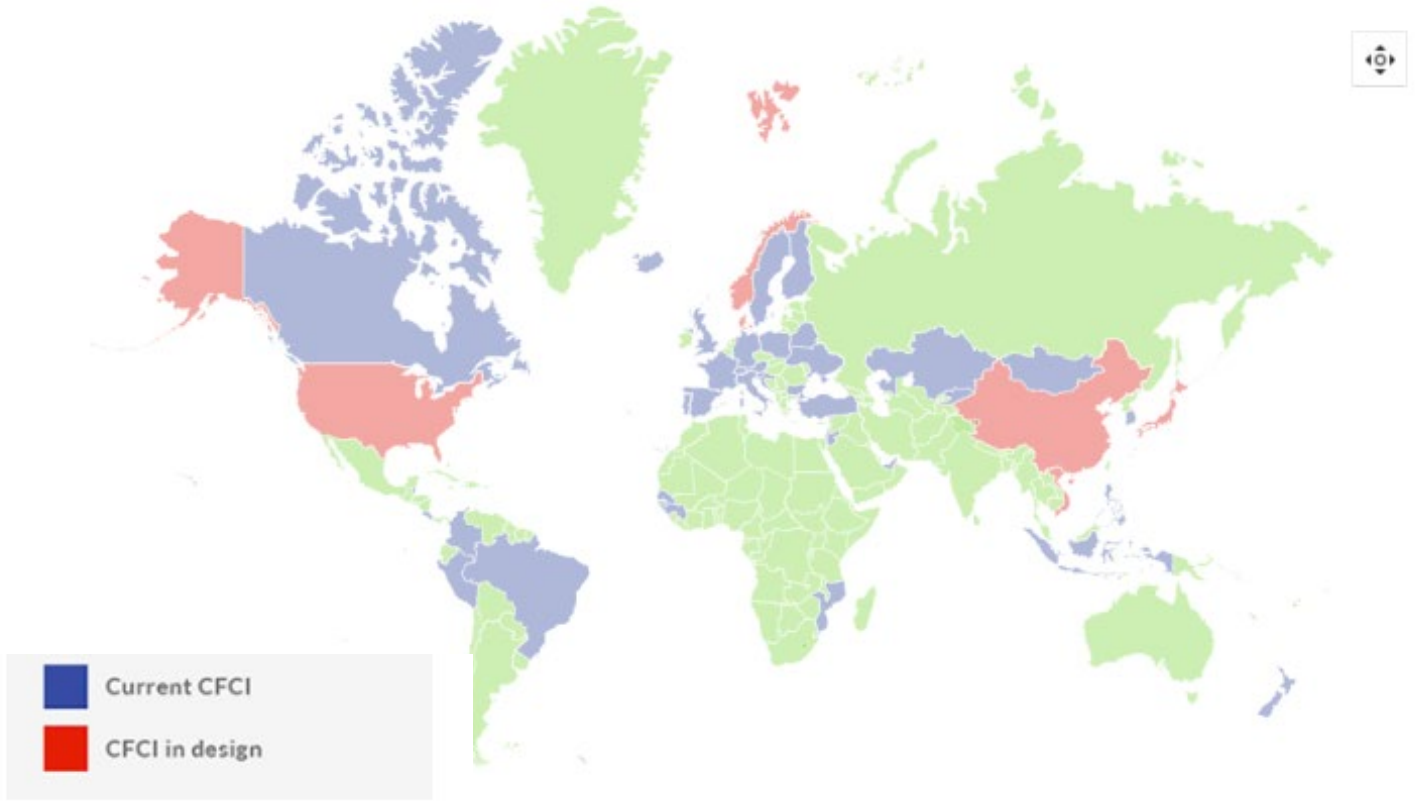
- Positive message
- Local commitment and ownership
- Adaptable and flexible = relevant
- Strong political value
- Multi-stakeholder platform

Child Friendly Cities Initiative

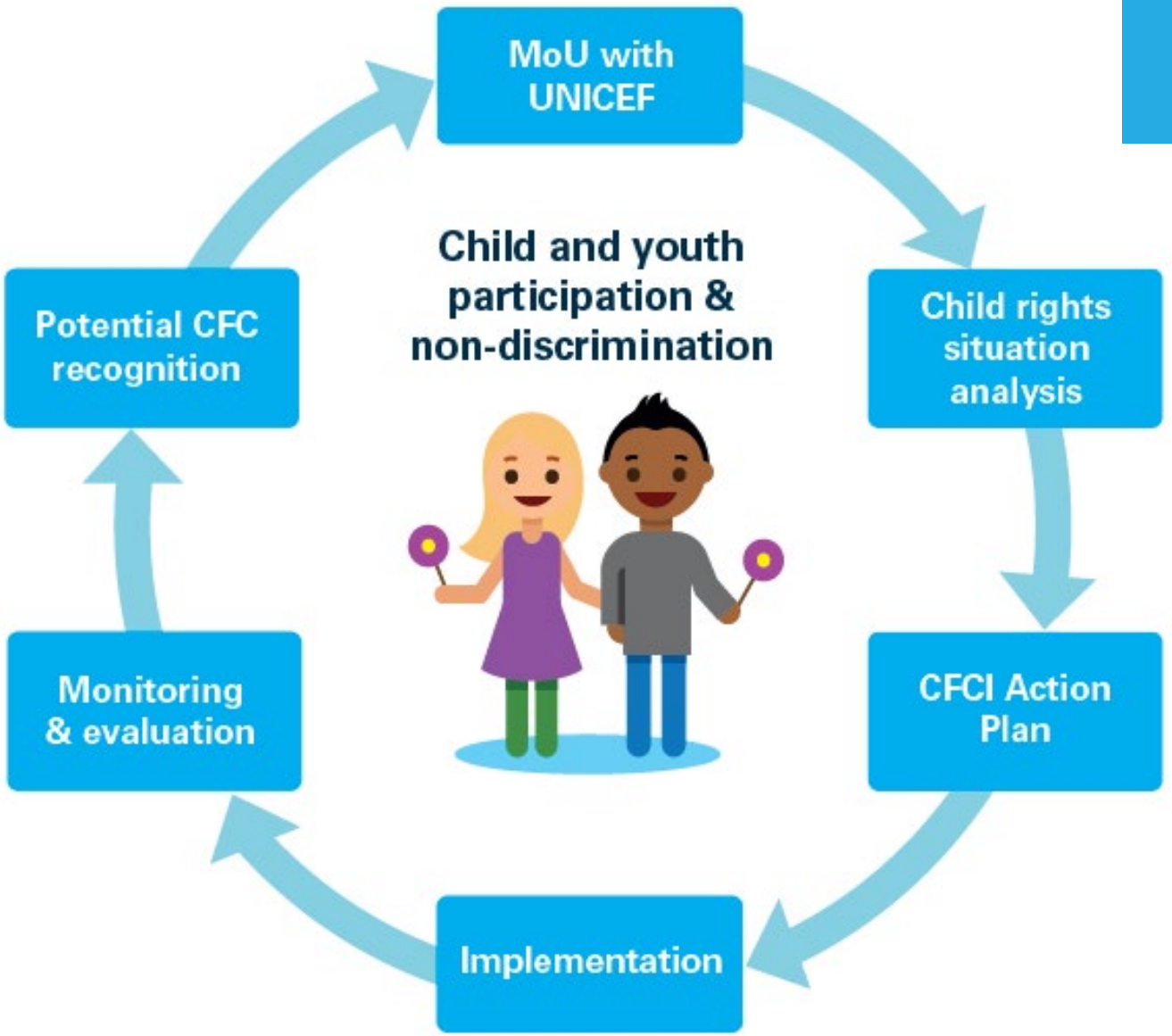
Child Friendly Cities Initiative

The CFCI today

- **40+** countries globally
- **25%** growth over the past three years
- **3,300+** cities and communities
- **40+ million** children and young people



Child Friendly Cities Initiative



How UNICEF plans to work with our partners on an urban food agenda for children

Enhanced knowledge and knowledge-sharing

Among policy-makers and decision-makers as to what works to prevent childhood overweight and obesity in low- and middle-income countries

System thinking

A shift in the conversation from one that emphasizes individual responsibility to one that recognizes systemic drivers, such as urban planning

System strengthening

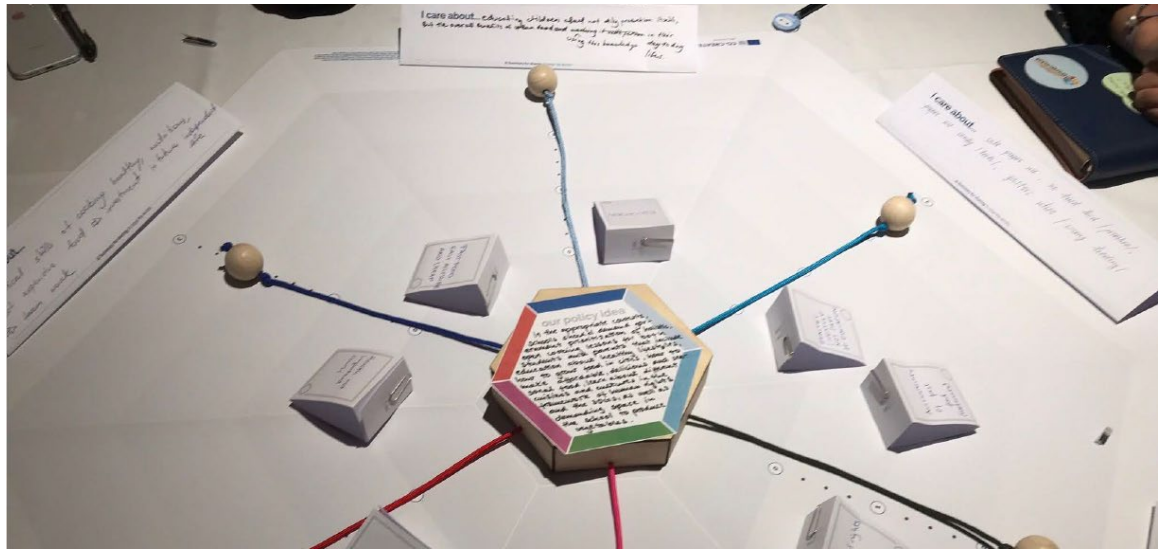
Multi-sector and scalable overweight prevention interventions and policies

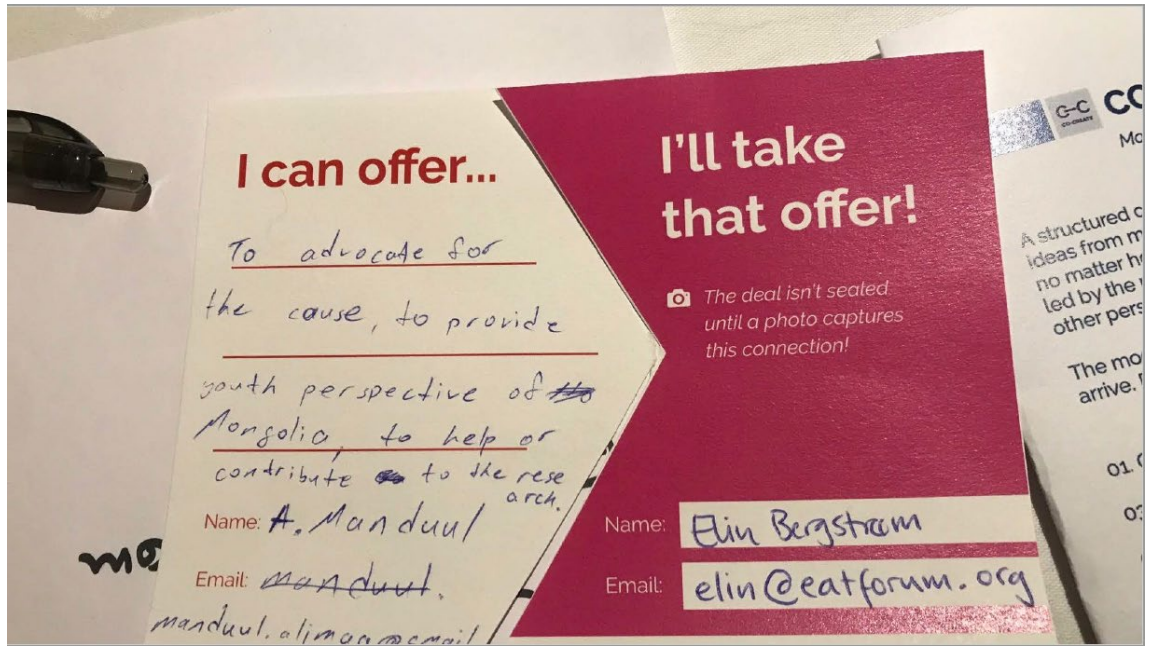
To do this via the urban setting we will:

- ✓ Work with partners to integrate **child perspectives** into their approach
- ✓ Develop **new tools** to identify gaps and to generate healthy food environments
- ✓ Leverage existing **platforms** to scale up work at city level

How UNICEF plans to work with our partners on an urban food agenda for children

Co-create session with youth at Child Friendly Cities Summit 2019





How UNICEF plans to work with our partners on an urban food agenda for children

Brief with policy recommendations for cities on urban food environments

E A T

unicef

Making urban food environments fit for children

All children have the right to adequate nutrition and good health to reach their full potential within their cities and communities. Urban food environments need to provide children, their families and communities with permanent access to nutritious food that is healthy, affordable and sustainably produced.

For the past four decades, significant global trends including globalization, urbanization, economic development, and technological progress have led to a predominance of food systems that greatly increase the availability of 'food energy', or calories, but not necessarily access to healthy food. Citizens in urban food environments eat more processed foods laden with salt, sugar and saturated fat than those in rural settings, and often have a greater demand for animal-source foods. At the same time, current food systems are contributing to climate change, food waste and loss, environmental degradation and economic inequality.[1]

UNICEF's *State of the World's Children Report 2019*,[2] highlights the challenges faced by children in urban settings, where fast food and packaged snacks are readily available and outdoor spaces to gather and play are limited. The need to transform the food environment in cities is clear and urgent. While every city is unique, all cities can generate and inspire the changes needed to make healthy and sustainable eating a reality for all children.

Together, EAT and UNICEF are seeking to improve urban food environments for healthy and sustainable diets among children and adolescents, to the benefit of entire communities. The content in this brochure highlights the vital elements of a child rights approach[3] to creating healthy food environments that are so important to securing healthy diets for all, now and in the future.

Key facts

Of the 4 billion people living in urban areas today, nearly one third are children. By 2050, an estimated 70% of the world's children will live in urban areas.

Undernutrition continues to exert a heavy toll globally. In 2018, almost 200 million children under 5 suffered from stunting or wasting while at least 340 million suffered from hidden hunger. At the same time, 40 million children under 5 are affected by overweight. Among older children (5 to 19 years old), the world has seen a dramatic increase from 10% to 18% from 2000-2016, such that 337 million children of this age are now overweight. The triple burden of malnutrition – undernutrition, hidden hunger, and overweight – threatens the survival, growth and development of children, young people, economies and nations. It is driven by the poor quality of children's diets. To illustrate, only 2 in 5 infants under six months of age are exclusively breastfed, as recommended, while 2 in 3 children are not fed the minimum recommended diverse diet for healthy growth and development. Many school-going adolescents follow unhealthy diets that include frequent consumption of highly processed foods such as carbonated soft drinks and unhealthy fast foods.

Source: UNICEF (2019). *The State of the World's Children 2019. Children, Food and Nutrition: Growing well in a changing world.* UNICEF, New York.

Child Friendly Cities Summit
Cologne, October 2019

What can cities do?

1. Build a sustainable and resilient food supply system at the local scale

2. Foster a healthy food environment for all children in their cities and communities

3. Nurture the empowerment of children, young people and caregivers in demanding healthy and sustainable food

Tackling childhood obesity in inner cities

Introduction to Guy's & St Thomas' Charity Childhood Obesity Programme

Sarah Hickey, Programme Director

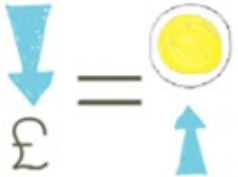
December 2019


We’re an urban health foundation
We work to tackle the major health challenges affecting people in inner-city areas
Evidence-led and evidence-creating

Our area exemplifies global trends in childhood obesity

London has more overweight and obese children **than any other major global city**. Rates in Lambeth & Southwark are even higher.

1 in 4 children aged 4-5 in Lambeth and Southwark are obese or overweight. The number rises to **2 in 5** when they reach secondary school.



Obesity rates are higher in poorer areas. Our boroughs rank **among the most deprived** in the country, and obesity is more prevalent in the worse off local areas.

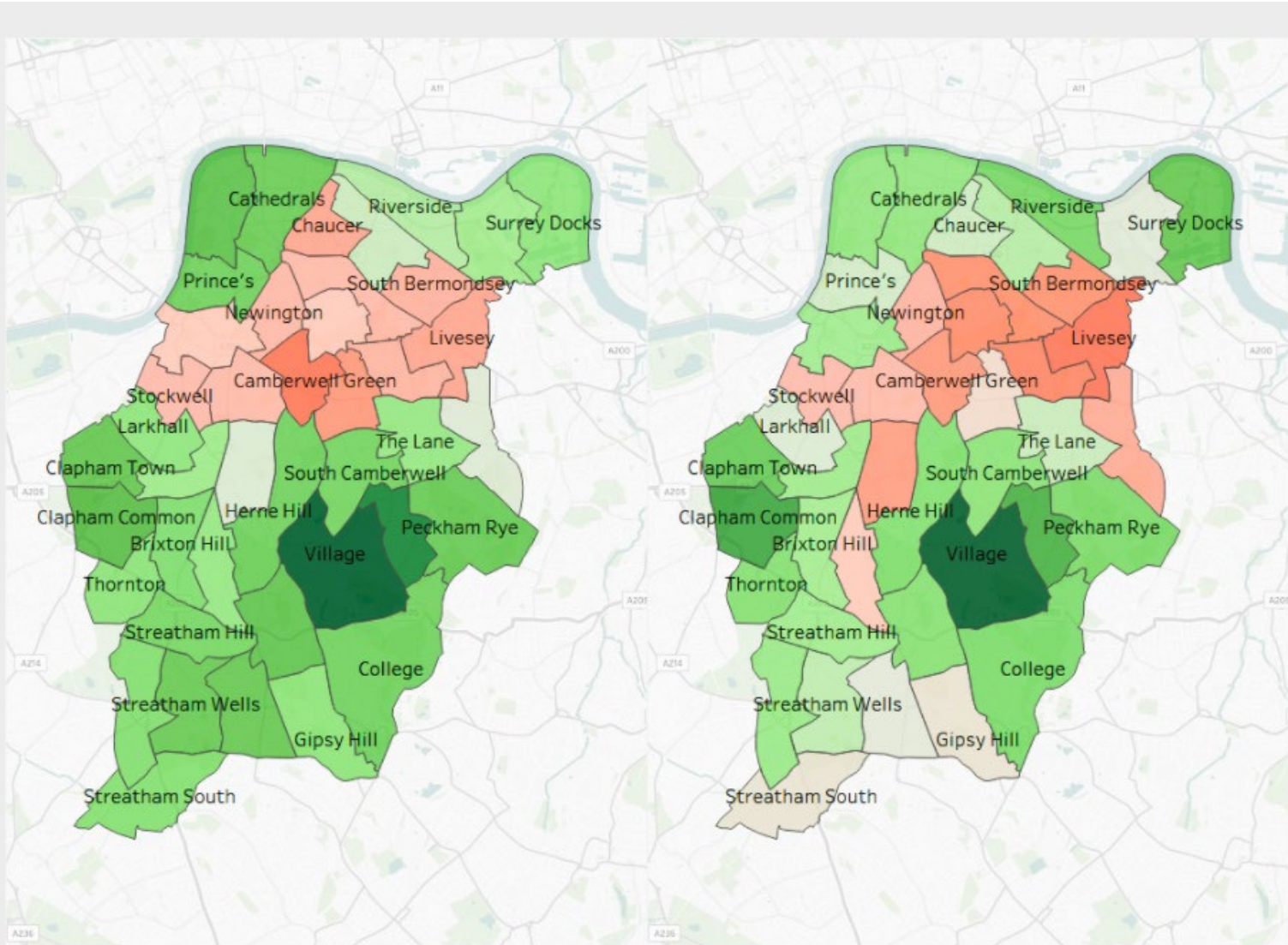
In 2011 the **cost of childhood obesity** to London economy - including projected costs for those who will be obese as adults - was estimated as **£886m**

Our goal is to tackle the ‘childhood obesity inequality gap’

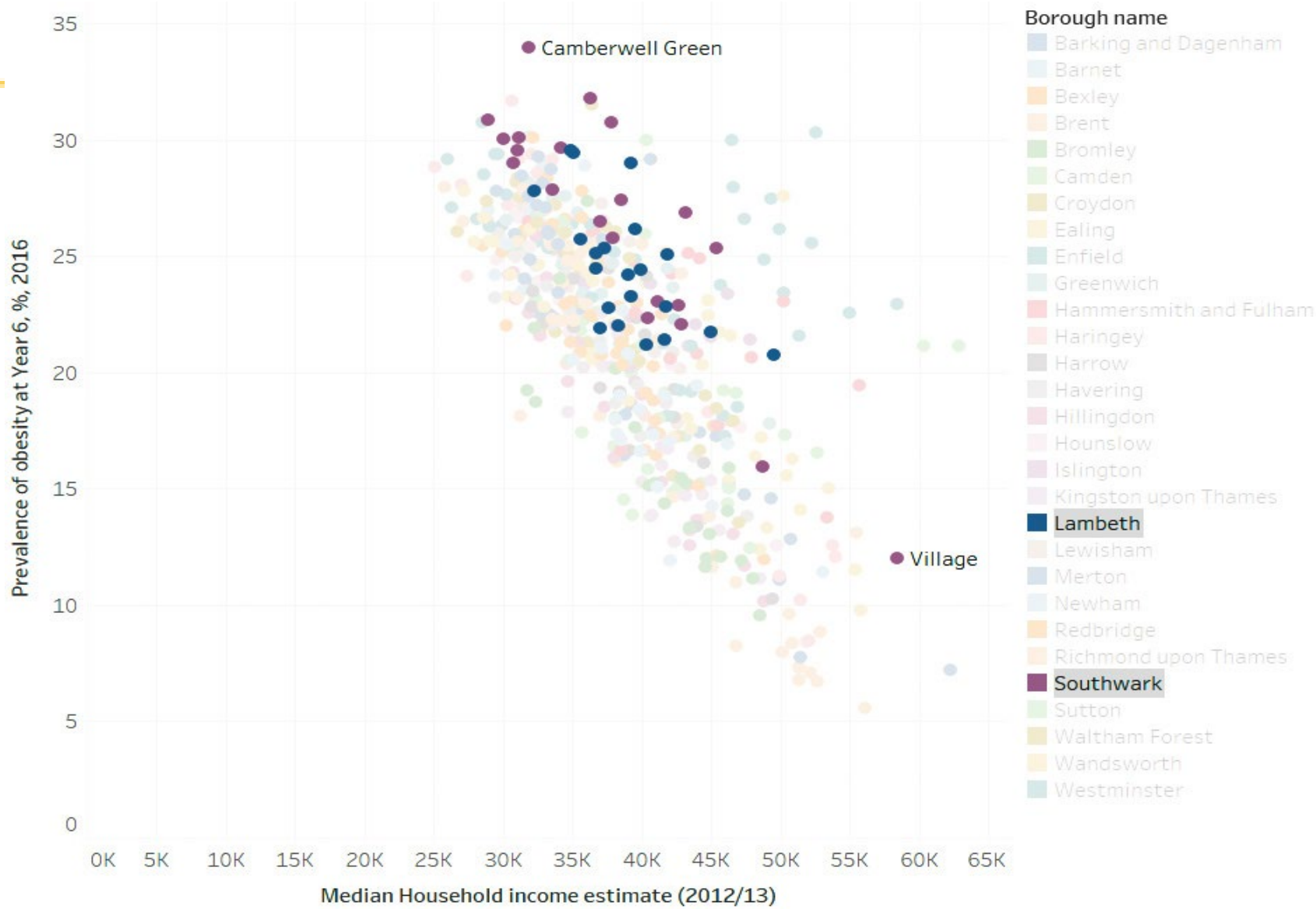
Childhood obesity

Our goal:

To close the childhood obesity inequality gap by bringing the high rates of childhood obesity in neighbourhoods with the lowest incomes down to the level of the more affluent ones



Left map: Prevalence of obesity among children in Year 6 (age 10-11 years) - 2013/14 to 2015/16
Right map: Median Household income estimate (2012/13)


Prevalence of obesity at Year 6, %, 2016
35
30
25
20
15
10
5
0
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5K
10K
15K
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25K
30K
35K
40K
45K
50K
55K
60K
65K
Median Household income estimate (2012/13)
Camberwell Green
Village
Borough name
Barking and Dagenham
Barnet
Bexley
Brent
Bromley
Camden
Croydon
Ealing
Enfield
Greenwich
Hammersmith and Fulham
Haringey
Harrow
Havering
Hillingdon
Hounslow
Islington
Kingston upon Thames
Lambeth
Lewisham
Merton
Newham
Redbridge
Richmond upon Thames
Southwark
Sutton
Waltham Forest
Wandsworth
Westminster

Our focus is on positively transforming food environments

Childhood obesity

Our goal:
To close the childhood obesity inequality gap by bringing the high rates of childhood obesity in neighbourhoods with the lowest incomes down to the level of the more affluent ones

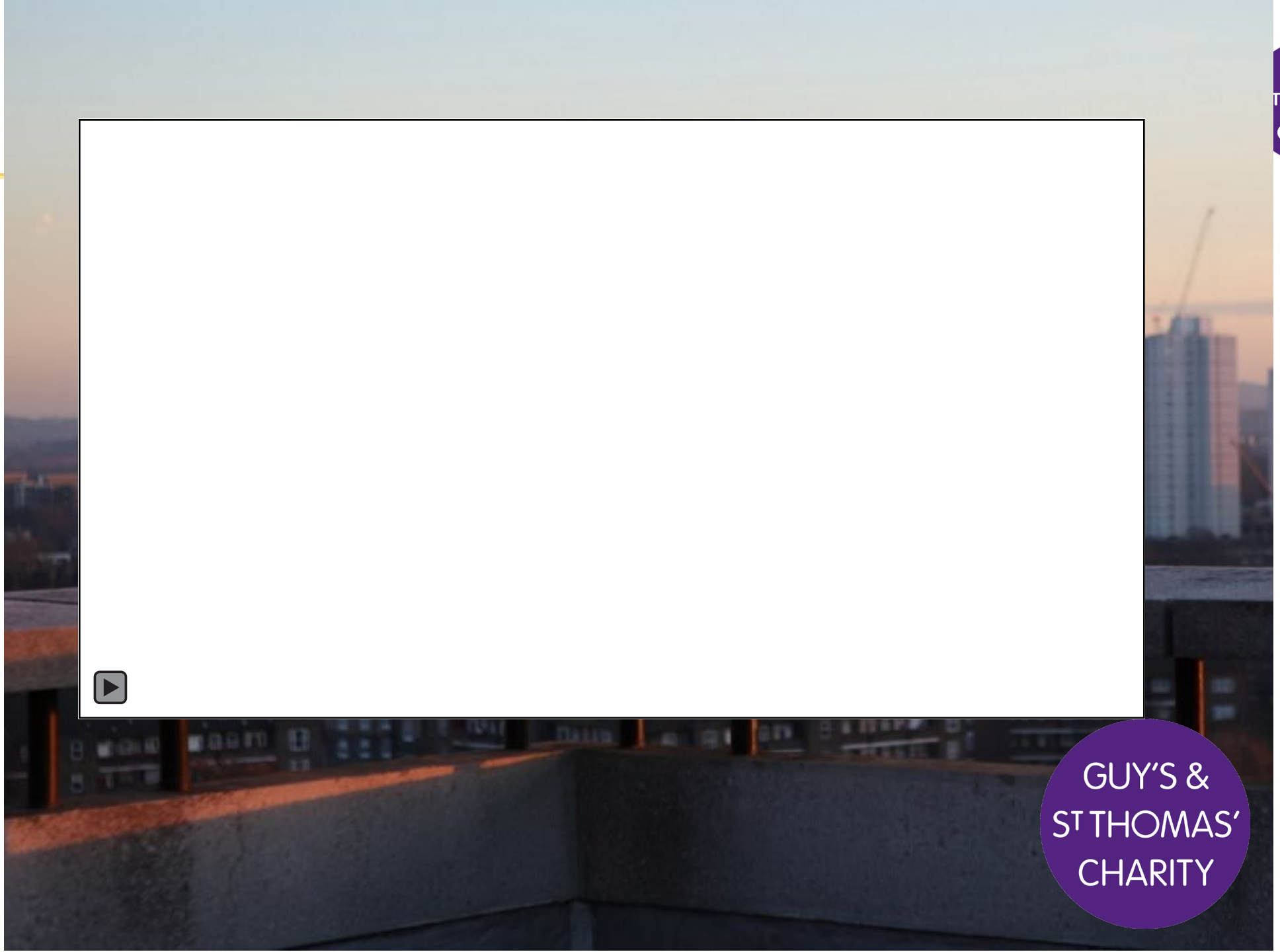
Our approach:
To create equal access to food environments that make nutritious diets the easiest option.

This means positively transforming the food options in the spaces that children and families spend their time:

Homes

Schools

Streets


GUY'S &
ST THOMAS'
CHARITY

We seek partnerships that can help drive global action

By demonstrating what the evidence base means in practice

Childhood obesity

Our goal:
To close the childhood obesity inequality gap by bringing the high rates of childhood obesity in neighbourhoods with the lowest incomes down to the level of the more affluent ones

Our approach:
To create equal access to food environments that make nutritious diets the easiest option.

This means positively transforming the food options in the spaces that children and families spend their time:

- **Build on, and create new, evidence.**
- **Explore and demonstrate shared value.**
- **Take an agile and user-centred approach to project development.**

In practice, this means building a diverse project portfolio

Spread across a large range of partnership, risk, and impact profiles

NEIGHBOURHOOD

BOROUGH

LONDON

NATIONAL

Partnership example

Building a neighbourhood HealthSpace

Project partners

Oasis hub waterloo

Battersea Power Station Foundation

Project scope

- Local neighbourhood – 500m circumference around local church, including schools, nursery and other community assets
- 5 years

Project vision

- To design, test and demonstrate a neighbourhood approach to tackling childhood obesity
- To scale the approach through Oasis' national chain (and beyond)

Partnership example

Creating healthier shopping baskets

Project partners

The Consumer Goods FORUM

Project scope

- 100+ supermarket sites across our boroughs
- 2 years

Project vision

- To design, test and demonstrate how to change in-store environments to incentivise healthier food shopping baskets.
- To scale the approach across the UK's main supermarket chains.

Partnership example

Catalysing city-wide action on childhood obesity

Project partners

MAYOR OF LONDON

LONDON'S CHILD OBESITY TASKFORCE

Project scope

- Decision-makers across the city of London
- 2 years+

Project vision

- To create a platform that showcases and grows action in London so that every child has every chance to grow up eating healthily, drinking plenty of water and being physically active.
- To make London a global leader in tackling childhood obesity.

Partnership example

Using shareholder dialogue to influence industry

Project partners

ShareAction
the movement for Responsible Investment

ACCESS TO NUTRITION INITIATIVE

Project scope

- UK food manufacturers and retailers
- 5 years+

Project vision

- To create a standardised reporting tool for food retailer action on supporting children's nutritious diets.
- To use increased transparency and shareholder dialogue to increase industry action to tackle childhood obesity.

GUY'S & ST THOMAS' CHARITY

News > Education

Young people tell Instagram influencers to stop promoting junk food which puts children's health 'at risk'

'Junk food is being given a starring role in our minds by people like you, and our health is at risk as a result'

GUY'S & ST THOMAS' CHARITY

itv NEWS

> This analysis clearly demonstrates how the food industry makes sure their sugary and high calorie food products are kept firmly centre stage in children's minds.

Obesity Health Alliance

Partnership example

Changing the conversation on childhood obesity

Project partners

FRAME WORKS INSTITUTE

Project scope

- UK-wide, targeting anyone communicating about childhood obesity
- 8 years

Project vision

- To reframe the issue of childhood obesity as a structural issue requiring better food environments, rather than an individual issue of willpower and education alone.
- To divert more energy towards evidence-based solutions to childhood obesity.

We have established some guiding principles for evaluating impact

Reducing childhood obesity in Southwark and Lambeth is a **complex challenge**, requiring complex **solutions**.

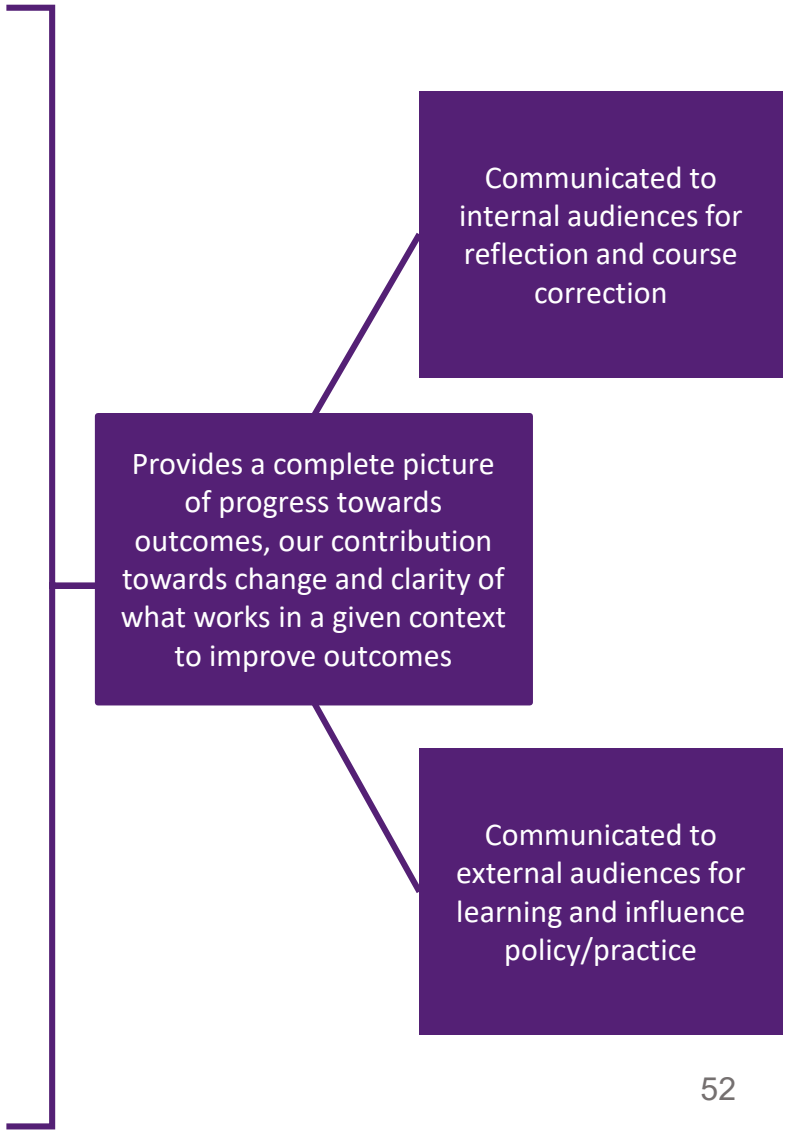
As such, our approach to evaluation requires considerable thought. We have based our thinking around **four guiding principles**:

- We seek to measure **contribution**, not attribution
- We monitor the cumulative **inputs, activities and outputs to the programme level** – we focus on collective impact
- We do not expect individual projects to measure their contribution to the impact goals – we focus their efforts on **rigorously measuring project outputs and outcomes**
- We **define project measures/metrics in collaboration** with project leads and partners.

The impact management strategy is what we found hardest in the programme!

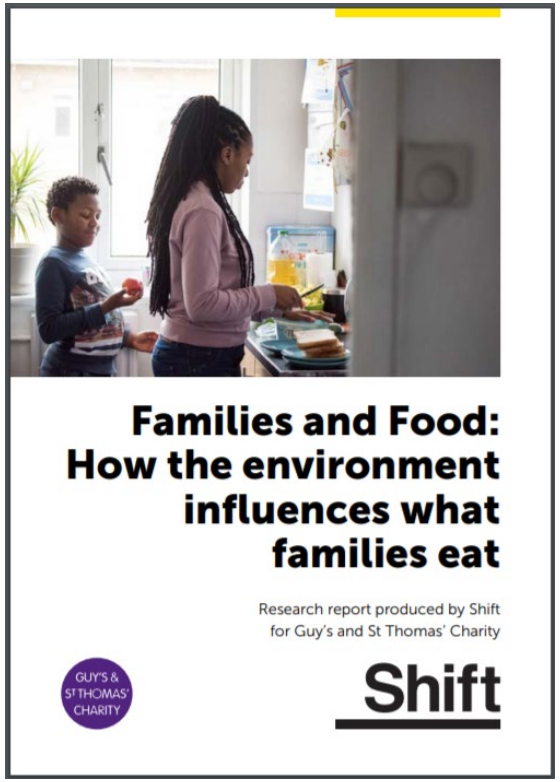
Our overall approach includes three layers of impact measurement

- **Population level**
- **Programme level**
- **Project level**



To find out more

Bitesize: breaking down the challenge of inner-city childhood obesity



Families and Food

Healthy Returns

www.gsttcharity.org.uk
@GSTTCharity

Built environment, levels of physical activity and obesity prevention: Lessons to be learnt from India

Shifalika Goenka

Professor

India Institute of Public Health, Public Health Foundation of India

Head, Social Behavioral Sciences

Center for Chronic Disease Control

Head, Physical Activity and Obesity prevention, Centre for Chronic Disease Control (CCDC)|

D Prabhakaran on behalf of the CARRS, GEO Health Team

CCDC has been Accorded the status of 'Centre of Excellence (CoE) in Clinical Research' by the Clinical Development Service Agency (CDSA), Department of Biotechnology, Government of India| CCDC has been recognized as a Scientific and Industrial Research Organization (SIRO) by Department of Scientific & Industrial Research (DSIR), Ministry of Science and Technology, Government of India

CENTRE FOR ENVIRONMENTAL HEALTH

INDIAN INSTITUTE OF PUBLIC HEALTH DELHI

PUBLIC HEALTH FOUNDATION OF INDIA

Centre for Chronic Disease Control

WHO Collaborating Centre for Surveillance, Capacity building and Translational Research in Cardio-Metabolic Diseases

> 50% of the people worldwide live in cities

over the next 20 years

>70%

All global population growth from 2016 to 2030 will be absorbed by cities , about 1.1 billion new urbanites over the next 14 years

50 years back there were 3 mega cities(>10 million inhabitants, Tokyo, Osaka, New York-Newark)

28 cites (today)

41 cities (2030)

Source: United Nations 2014

Built environment – profound impact on the population Physically activity levels ⇧

Simultaneously decreases

- Decreases obesity
- Decreases Air pollution
- Decreased fossil fuel consumption
- Heat island effect
- Climate change

City Paradigms- healthy, sustainable, liveable

- United Nations Habitat New Urban Agenda (UN- Habitat 3)
- Sustainable Development goals (SDG 2015) provided new impetus

To the urban development agenda (C-40 cities www.C40.org)

The ‘Wonder drug “ Primary prevention _ diabetes, hypertension, strokes, heart attacks

Majority effects through prevention of Obesity

Land mark – global trials

Diabetes can be prevented for life by 58%

1. **30- 45 minutes** of brisk recreational walking **5** times a week
2. **To lose 5-7%** (approx. **2-3 kgs)** of **body weight.**

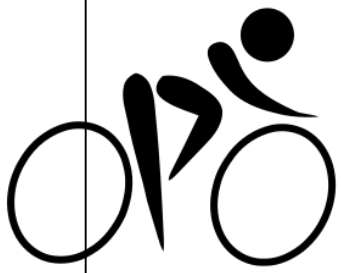
Avoid calorie dense foods

Source: Knowler WC, Fowler SE, et al l. 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study. Lancet 2009 Nov 14 374;1677-1686

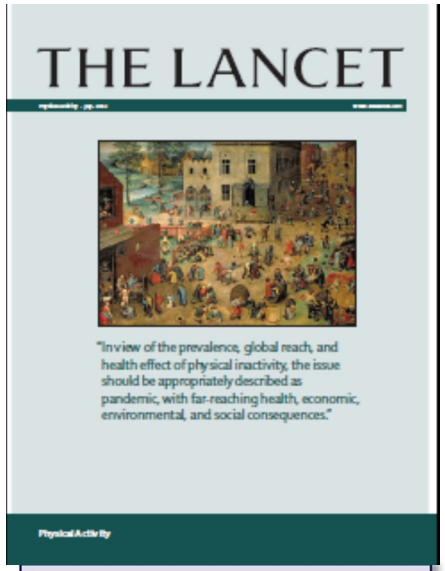
- **Physical activity decreases the unhealthy fat in the blood by**
- Cholesterol
- Triglycerides
- LDL

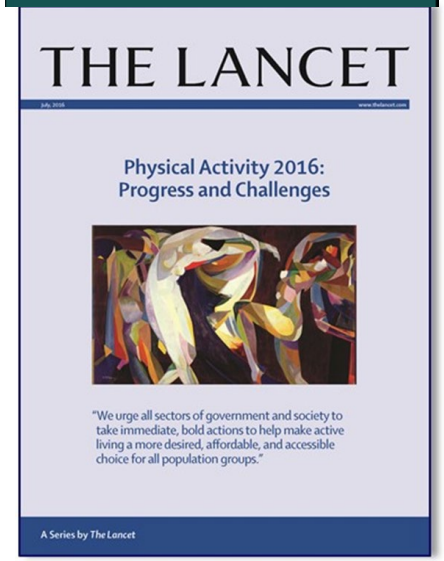
- Improves the protective cholesterol (HDL)

- Physical activity prevents diabetes
- Physical activity improves glucose metabolism
- Physical activity blood pressure
- Physical activity body fat



“Miracle drug” -Physical activity in daily living will prevent obesity and tackle key environmental, health burdens





- Physical activity risk of
- Osteoporosis
- Osteoarthritis
- Breast cancer
- Colon cancer
- lower back pain
- stress, anxiety , depression
- falls in old age,
- Increases strength and fitness

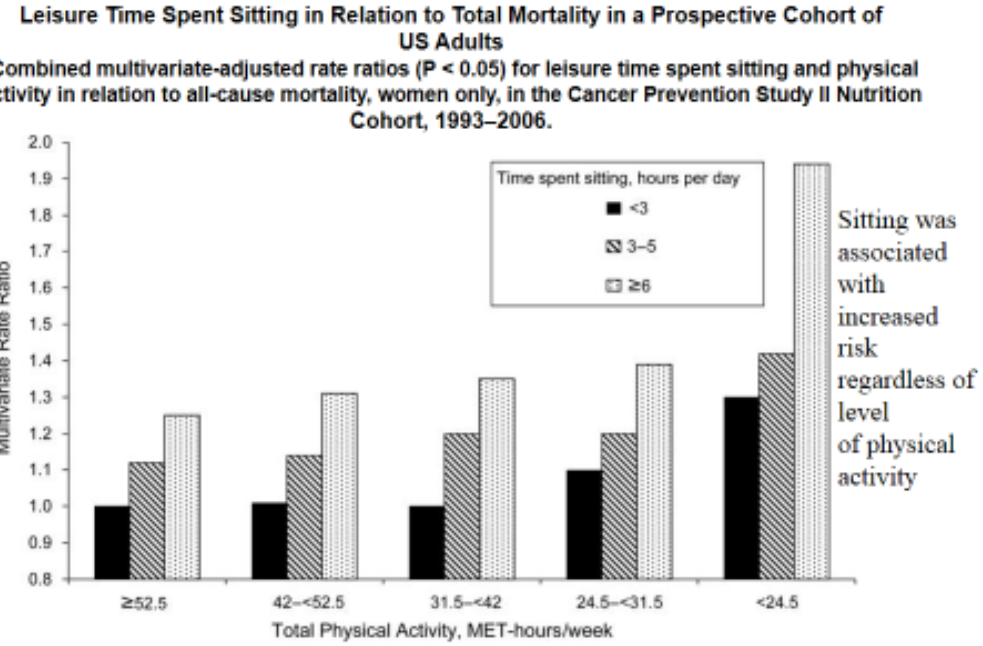
Author: Shifalika goenka

Sitting

The new risk factor -excessive sitting, independent of physical activity, is harmful to health, sitting in traffic jams

60-80 minutes of moderate vigorous activity can negate the sitting

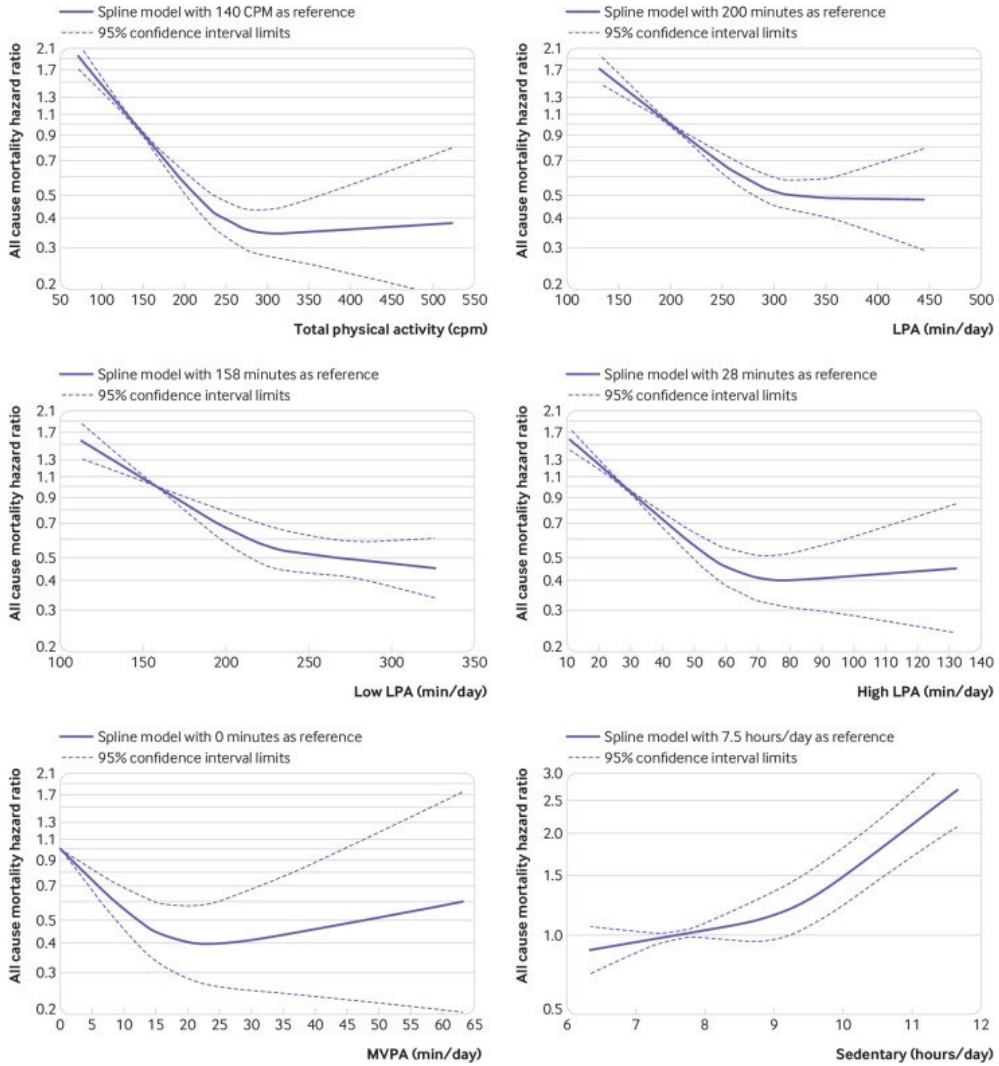
Source: Ekelund, et al, Physical Activity 2016: Physical Activity, Sitting time and Mortality



Sitting was associated with increased risk regardless of level of physical activity

Every minute counts, every additional minute benefits

- Higher levels of total physical activity,
  - at any intensity,
  - and less time spent sedentary,
- are associated with substantially reduced risk for premature mortality, with evidence of a non-linear dose-response pattern in middle aged and older adults.
- Even beyond recommended 30-45 minutes per day



Ekelund et al, BMJ. 2019; 366: l4570.

Built Environment and Physical activity

Four built environments factors
were positively and linearly associated with higher
physical activity levels in 14 countries through objective measurements

1. **More Green public parks within walking distance (0.4-0·5 km) from residence, which were free and open to all; (>0.3 hect)**
2. Higher density of public transport such as number of bus, rail, or ferry stops and stations divided by the land area; higher
3. Net residential density; compactness
4. Intersections, street intersections that are pedestrian accessible.

All this assumes the presence of wide useable pedestrian paths and roads for traffic which are not more than 2 lanes on each side.

Lancet, 2016, Sallis et al, and Goenka S , Andersen L

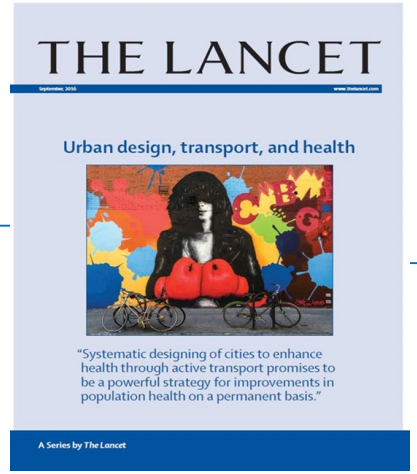
Lancet series on urban design and transport for health- recommends- 8Ds (Macro)

Macro level

1. **Density- Cities compact**
2. **Diversity- mixed land use,**
3. **Distribution of employment- equitable across cities**
4. **Destination access- within 30 minutes- access to markets, other facilities**
5. **Demand management- attractive of alternative travel modes of travel,**
6. **Distance- public transport**
7. **Design**
8. **Desirability**

Micro level

- **Make active transport(walking)** safe, attractive, affordable, and desirable; -
- **Prioritise wide pavements** and non-motorised transport/cycling lanes over motorised transport; **With periodic water fountains and benches**



A measure of development of a country is how well you treat and respect your pedestrians and other active transporters

Lancet series recommendations on urban design and transport for health(micro)

- **Ensure sufficient separation of** pedestrian/non-motorised and motorised transport preferably with greens
- **Green spaces and parks and** make neighbourhoods safe, attractive, destination accessible,
- Policies are also needed to protect and support agriculture in urban and peri-urban settings
- **Schools, educational institutes, and homes should be located away from high-traffic routes.**

Lancet, 2016, Goenka, Andersen

Public Transport Increases Population Physical Activity

- Use of public transport, is an established booster of population physical activity levels.
- A systematic review by Rissel et al, elucidated an increased walking time of **8–33 minutes** per day in public transport users.
- This also saves fossil fuel lowering the carbon emissions.
- **All public transport needs to be age and disabled sensitive, climate sensitive and in the LMIC context should restore the dignity of public transport users in all human habitations.**

Rissel C, et al. *Int J Environ Res Public Health.* 2012;9(7):2454-2478

India: Third highest number of obese people in the world- 41 million obese
15 million children overweight /obese India.
20-29% of private school children in India obese
10% of overweight/obese children have of dysglycemia. Most urban schools don't meet recommend (report card of PA for schools, Katpally, Goenka et al

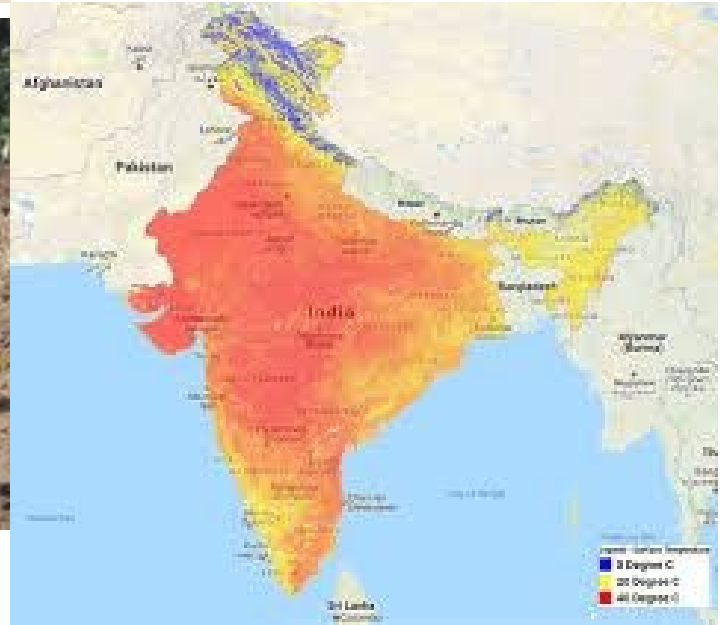
In India, 38% of the children under 5 are stunted (too short for their age; chronic undernutrition); 21% are wasted (too thin for their height; acute under nutrition); and 36% are underweight and 58% are anaemic (haemoglobin levels below 11.0 g/dl). NHFS(4)

Sources: NHFS(4) Goyal J, 2011; Jagadesan S, 2014 Jain, 2010; Marwah a, 2006

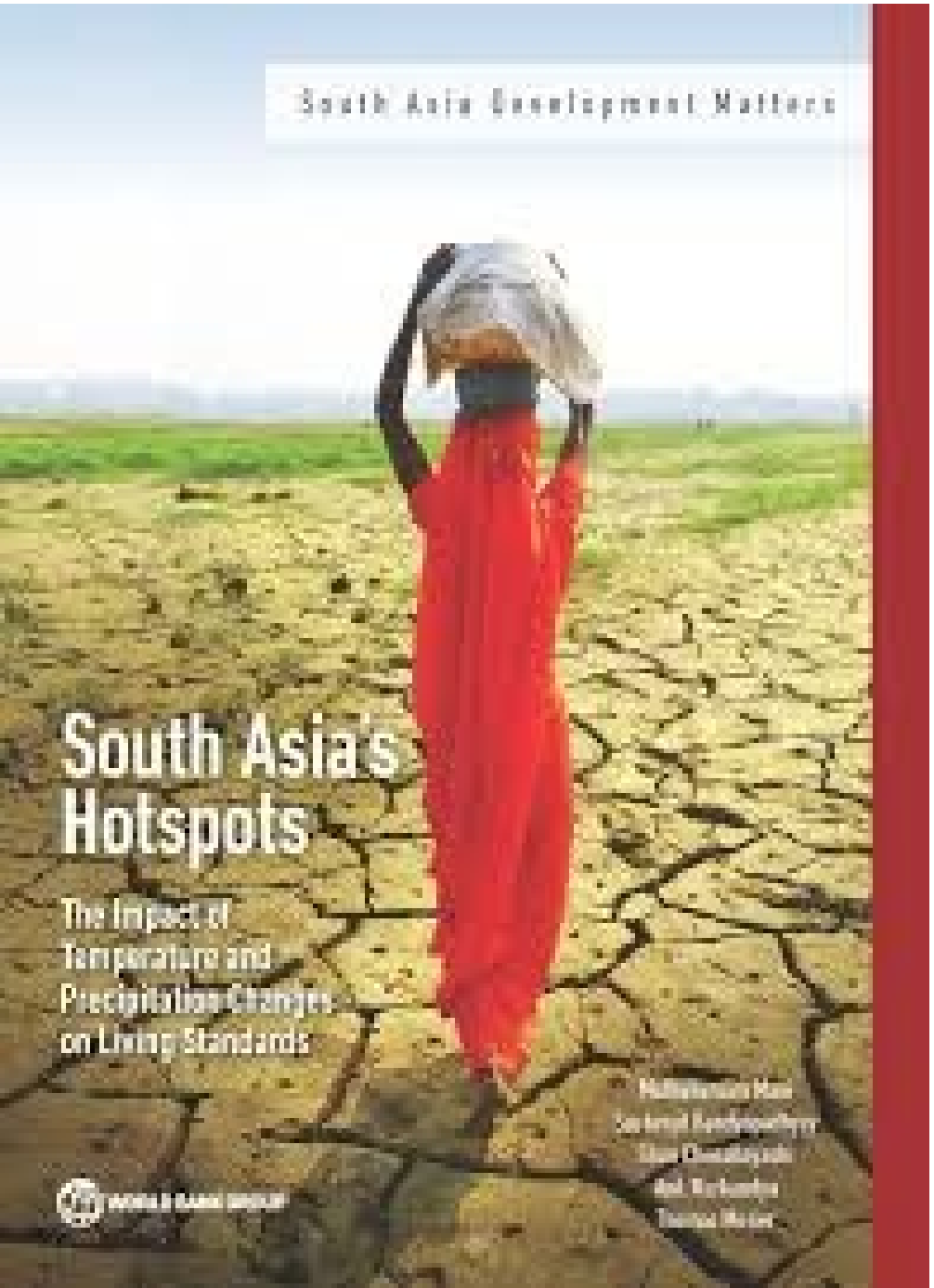
Barriers in being physically active in India and LMICs

1. **In-appropriate city planning, built environment**
2. **Disappearing green spaces , urban forests, parks**
3. **High temperatures , high dust levels.**
4. **High density- mixed land use- Land mafia , increasing the density of built environment, over construction, over commercialization,**
5. **PAVEMENTS-- vanishing useable pedestrian paths, non-user friendly crossings, absence**
6. **‘Sitting’ in traffic, absence of appropriate crossings**
7. **Inadequate density and compromised safety for women public transport.**
8. **Absence of ‘last mile walkability”**
9. **Safety concerns**

3. High temperatures, heat islands and built environment



- Most of the LMICs, face scorching high heat most of the year around, posing a huge barrier to the pedestrian, elderly and differently abled. The temperatures could vary from 34 to 47 degree Celsius for majority of the months in a year with consequential high heat related morbidity

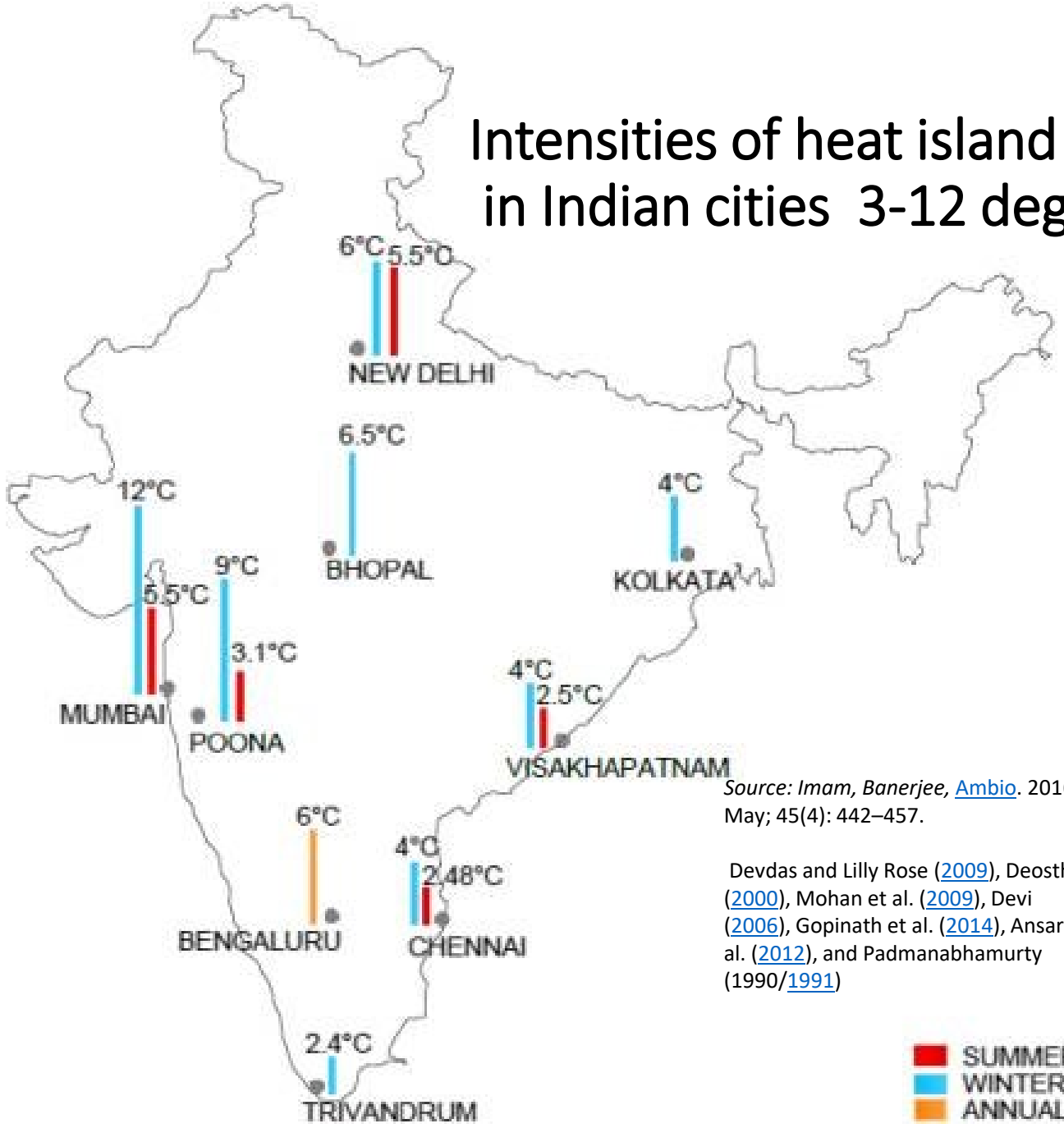


Morbidity, mortality, standard of living and heat

- Mortality rose by 2% for every degree rise beyond 36.2 degree celsius and the effect was greater when minimum temperature were >26.5 degrees.
- Recent world bank report: High heat to have major negative impact of health, economics and standard of living in India

1. Dutta A, et al, At which temperature do the deleterious effects of ambient heat "kick-in"? *Int J Environ Health Res.* 2019:1-11
2. Muthukumara M. *South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards.* 2018

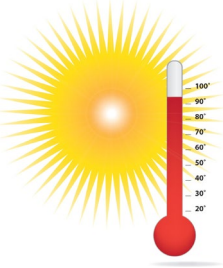
Intensities of heat island effects in Indian cities 3-12 degrees C

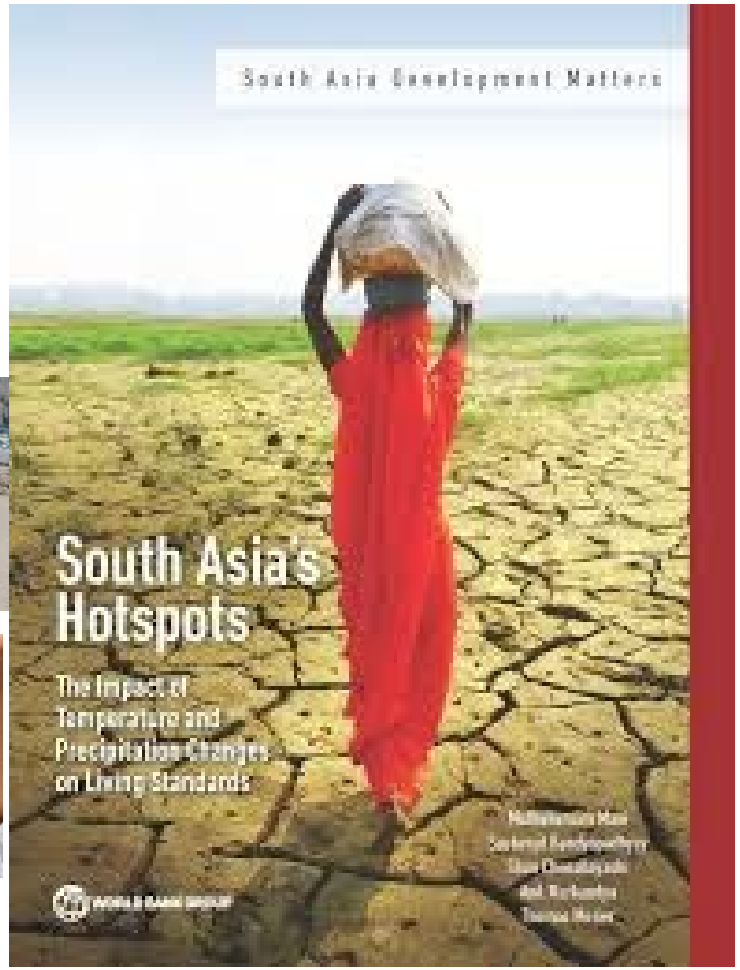


Source: Imam, Banerjee, Ambio. 2016 May; 45(4): 442–457.

Devdas and Lilly Rose (2009), Deosthali (2000), Mohan et al. (2009), Devi (2006), Gopinath et al. (2014), Ansar et al. (2012), and Padmanabhamurty (1990/1991)

Recent world bank report: High heat to have major negative impact of health, economics and standard of living in India





Tree canopy(Greenery) on either side of the road --- natural air-conditioner and air purifiers

- **Street segments with trees had on average lower temperature, humidity, pollution, with afternoon ambient air temperatures lower by 5.6 °C,**
- **Road surface temperatures lower by as much as 25- 27.5 °C, and**
- **SO2 levels reduced by as much as 65%.**
- **Suspended Particulate Matter (SPM) levels were very high on exposed roads, with 50% of the roads showing levels approaching twice the permissible limits, while 80% of the street segments with trees had SPM levels within prescribed limits**

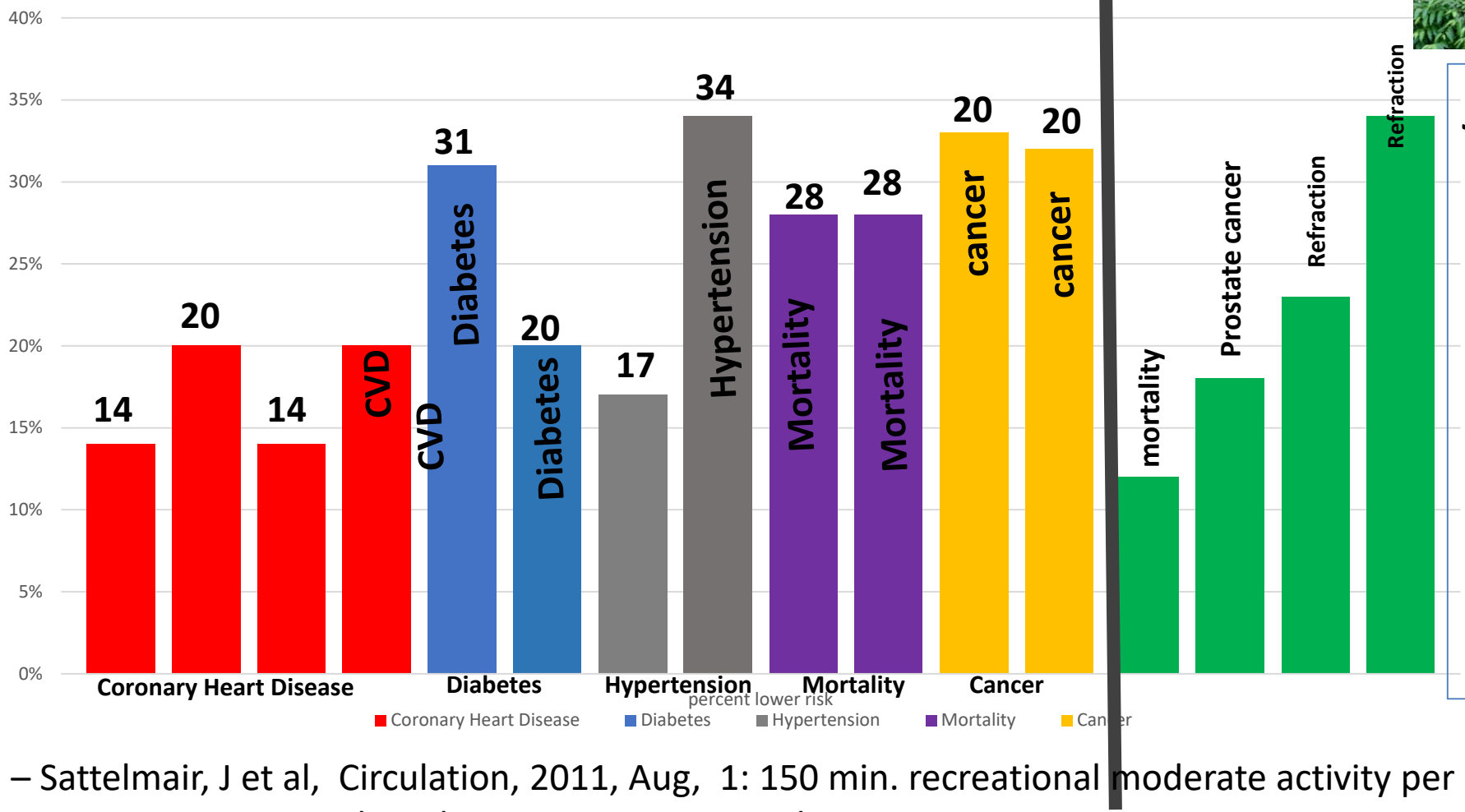
***Source : Effect of street trees on microclimate and air pollution in a tropical city*.** Lionel Sujay Vailshery, Volume 12, Issue 3, 2013, Urban Forestry and Urban Greening

https://www.researchgate.net/publication/275014855_Effect_of_street_trees_on_microclimate_and_air_pollution_in_a_tropical_city

Green spaces proximity lowers mortality and disease

Greenery lowers mortality

Percent lower risk: derived from RR/HR



Greenery in built environment lowers mortality and disease-percent lower risk derived from RR/OR

Bar : 1, 2 – Sattelmair, J et al, Circulation, 2011, Aug, 1: 150 min. recreational moderate activity per week; 300 minutes recreational moderate activity per week

Bar 3: Lee IM, lancet 2012,

4. High (and ever increasing) density in Indian cities – leading to increased sitting time, decreased PA

Mumbai, Kolkatta and Delhi, are among the most highly populous and dense cities in India and the world

Populous cities in the world

- Mumbai's population is 18.41 million (2011)
- Delhi. _ 16.75 million (2011
- 75,000 people come to Delhi, every year, according to the Economic Survey.

Density

- **Mumbai**, population density is approximately 20, 000 (19,652 average) per sq. km area
- **Delhi** 11,320 people stay per people per sq. km area.
- **Some areas of Mumbai have as many as 101,066 people packed in a single square kilometre.** In such situations, **besides compromised living conditions there is another lurking peril which is less documented and less realized- 'Increased Sitting'.**
- **Mixed land use – factories in congested small rooms , emitting toxic chemicals mix with children playing**

Road Design, transport and Health

- Road traffic and transport related injuries are the leading causes of preventable deaths among the youth globally
- Majority (93%) of these fatalities are reported from LMICs and LICs and involve pedestrians and motorised two-wheelers (cyclists and motorised)
- Countries who don't invest in wide-pavements, sidewalks, pedestrian priority and other active transport facilities and safe road designs could eat-into 7-22% of their per capita GDP growth over a 24-year period

Sources: Mokdad AH, Forouzanfar MH, Daoud F, et al. Global burden of diseases, injuries, and risk factors for young people's health during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet.* 2016;387(10036):2383-2401

The World Bank. Road Deaths and Injuries Hold Back Economic Growth in Developing Countries. https://www.worldbank.org/en/news/press-release/2018/01/09/road-deaths-and-injuries-hold-back-economic-growth-in-developing-countries. Published 2018. Accessed June 2019.
World Health Organisation. Fact sheet- Road traffic injuries. https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries.
Corazza MV, Di Mascio P, Moretti L. Managing sidewalk pavement maintenance: A case study to increase pedestrian safety. Journal of Traffic and Transportation Engineering (English Edition). 2016;3(3):203-214.

5. Pavements

User friendly pavements

Non- user friendly pavements

Countries who don’t invest in wide-pavements, sidewalks, pedestrian priority and other active transport facilities and safe road designs could eat-into 7-22% of their per capita GDP growth over a 24-year period

Source The World Bank. Road Deaths and Injuries Hold Back Economic Growth in Developing Countries. https://www.worldbank.org/en/news/press-release/2018/01/09/road-deaths-and-injuries-hold-back-economic-growth-in-developing-countries. Published 2018. Accessed June 2019

5. Roads get widened then people need to walk on roads between upcoming traffic and cars

Source : http://www.ccdcindia.org/wp-content/uploads/2015/12/Powering_Indias_growth.pdf

5.Non-user friendly crossings- India has one of the high rates of road traffic accidents

DIGNITY

Loss of dignity as a pedestrian

When it comes to dignity, you cant make compromises

Safety first

Its not about last mile connectivity,

Its about last mile walkability,

Safety and comfort in walking and crossing,

Dignity of the pedestrian

Framework Convention on Built Environment and Physical Activity', needs to be taken up by WHO and the UN for uptake and implementation by Member Countries

For

- Obesity prevention,
- Lowering of air-pollution,
- Climate change mitigation,
- SDGs,
- Disabled and age inclusiveness,
- Dignity, and prevention of non-communicable diseases at the ground level,

Interventions which will increase physical activity through the built environment will also help to lower air-pollution, decrease fossil fuel consumption, enhance dignity in elderly, and disables and pedestrians

Measureable indicators have been outlined in
Devarajan R, et al, 2019, doi: 10.1111/obr.12938


Built environment for physical activity—An urban barometer, surveillance, and monitoring

Raji Devarajan[1] | Dorairaj Prabhakaran[2,3,4] | Shifalika Goenka[1,3,5]

Sustainable Development Goals- Physical activity, city planning and health

1. **SDG 10**- Reduced inequities
2. **SDG 11-** Sustainable cities and communities
3. **SDG 13**, climate action, promoting health through low carbon development and protecting health from climate risks
4. **SDG 15**, Life on land
5. **SDG 16** peace and justice- develop implement, monitor strong SDG national response
6. **SDG 4** – Support high quality education for ‘all’ to improve health and health equity
7. **SDG 5**- promoting gender equity , fighting violence against women

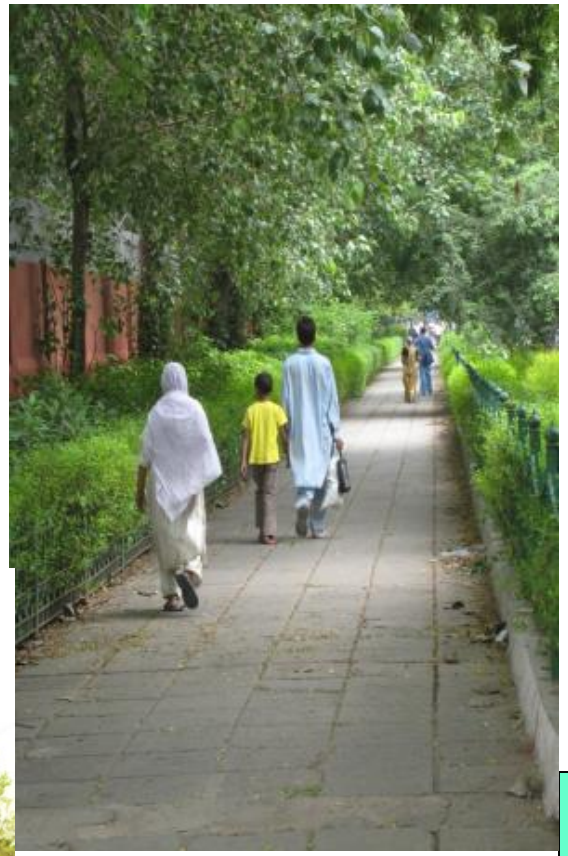
Economic costs of inactivity in daily living

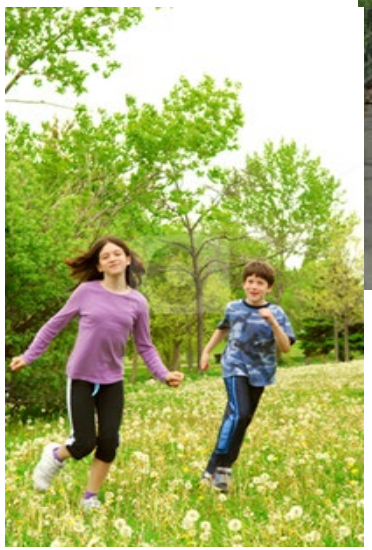
- Physical inactivity is 67.5 billion USD$,
- Diabetes 612-1099 billion USD$ and
- Non-optimal blood pressure 100 billion USD, annually
- Countries especially LMICs, squander upto 5% of GDP, through road-traffic deaths and injuries
- NCDs are estimated to cost India 6.2 trillion USD (2012-2030)

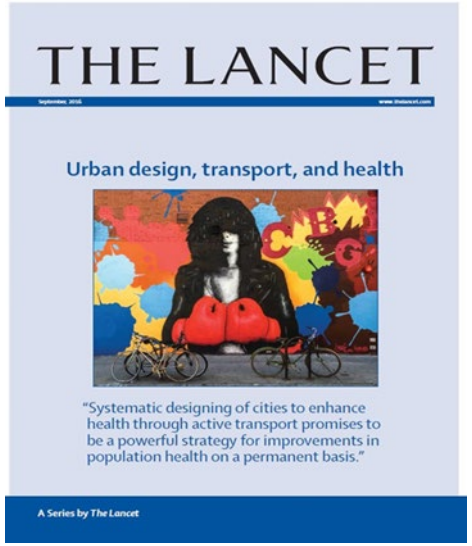
Enhancing physical activity levels in daily living through appropriate urban design, built environment and transport systems can provide a powerful anti-dote to obesity, diabetes, hypertension, stroke, cancers and air pollution

(Sources: Ding D, 2016, lancet, da Rocha FJ, Diab, Res Clin Pract 2016, Gaziano T, hypertension-2009,Global status report road safety, WHO 2015, Bloom DE 2013,

This is in your hands



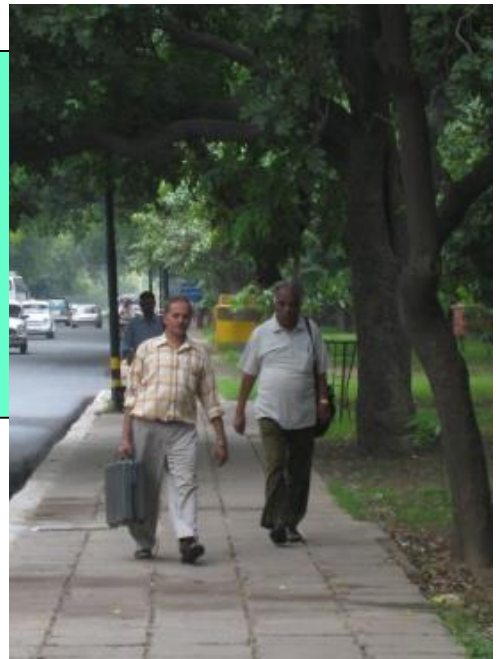




MORE PEOPLE WALK
- Less Obesity, Diabetes
- Less High blood pressure
- Less Strokes
- Less Heart attacks
- Less Accidents
- Longer lives
- More productive lives
- Healthy lives
- Prevent accidents

Pleasant and comfort is walking
Less sun + Lower temperatures
Lesser accidents

1) More shaded, dedicated wide pedestrians paths,
2) 1-2 carriageway roads only, for easier crossings



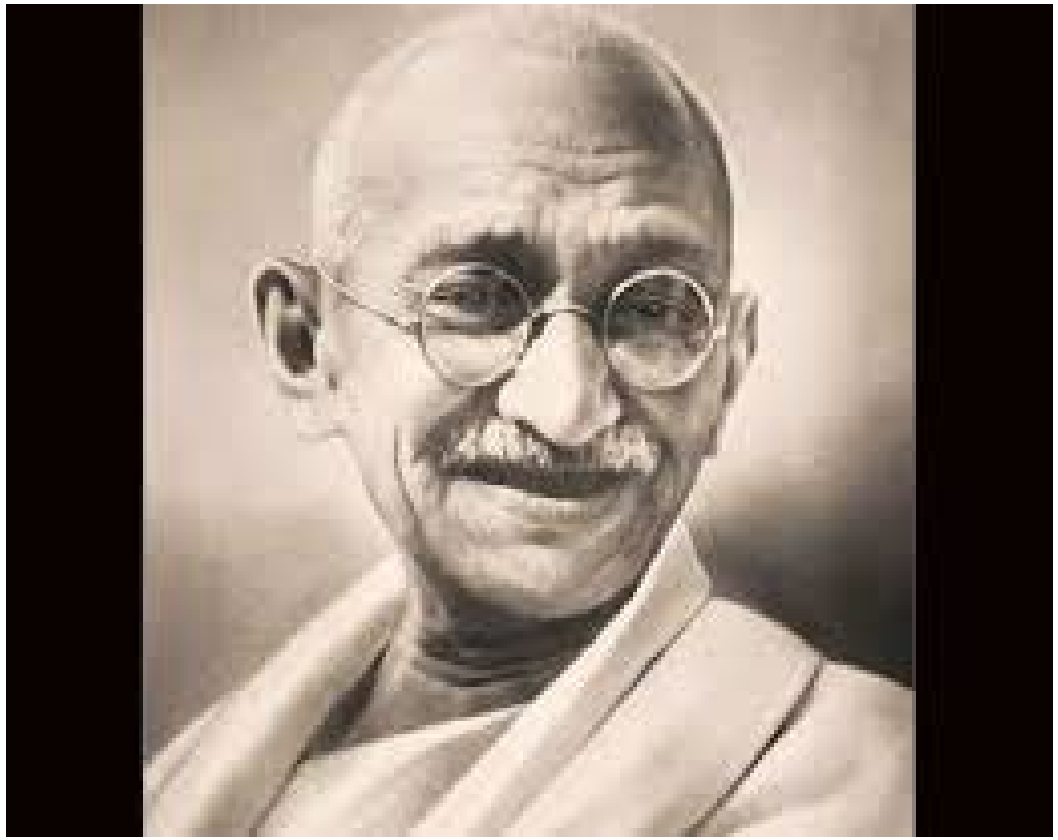
Dedicated tree-canopied shaded walking and cycling paths will promote physical activity, prevent diseases, save fuel and promote safety of entire communities and populations, and lower air pollution

Shaded pedestrian paths increases physical activity, promotes health, prevents diseases and decreases accidents

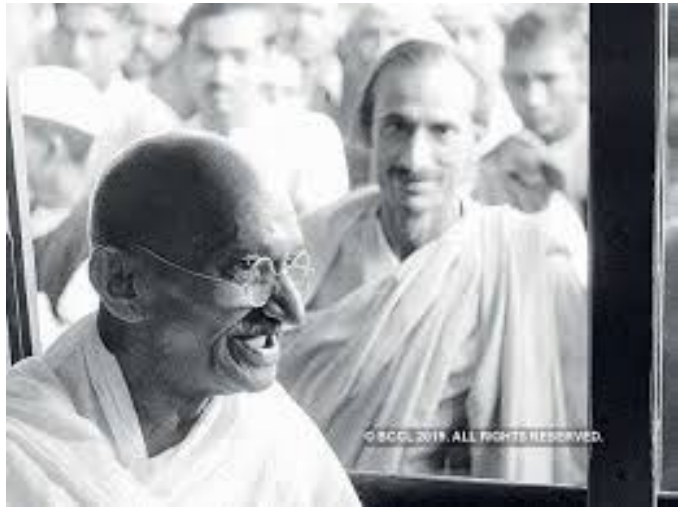
City planners can prevent obesity steer the population's health, economic savings and the environment

Open green spaces promote communities and people of all ages and backgrounds to be physically active

Source Goenka S, Powering India's Growth



“The difference between what **we do** and what we are capable **of** doing would suffice to solve most **of** the **world's problems**.”



Mohandas Karamchand Gandhi

Indian lawyer, anti-colonial nationalist, and political ethicist,

Thank you- Team, Mentors and Stakeholders

- **Dorairaj Prabhakaran, MD, DM, MSc**
- **Nikhil Tandon (CCCC, CCDC, AIIMS)**
- **Pankaj Shah (Chair Diabetes- Mayo)**
- **Jeemon Panniyammakal (PHFI, CCCC)**
- **KS Reddy, MD, DM, Msc (PHFI, CCCC)**
- **Ajay VS (CCCC, CCDC)**
- **Safraj S**
- **Poornima Prabhakaran**
- **Entire Chronic Disease Team**

Community-level interventions to address obesity: Considerations for European policymakers

Margot Neveux
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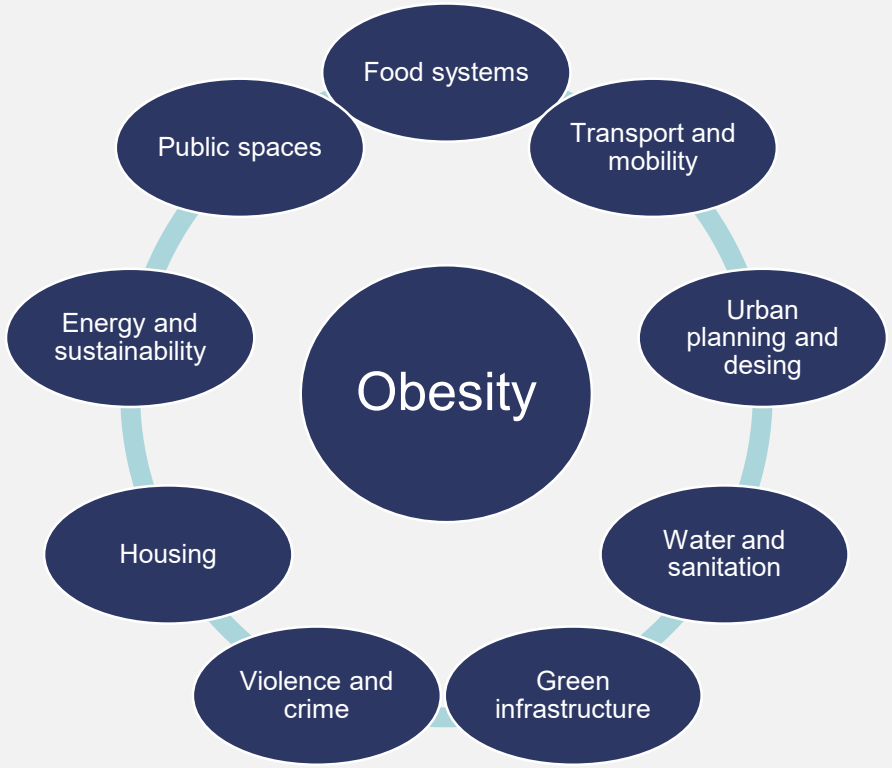
Lesly Vejar Renteria
lrenteria@worldobesity.org

External determinants of obesity



Well planned cities have an important role to play in addressing unhealthy diets, physical inactivity, obesity, NCDs and climate change.

Source: Giles-Corti et al. (2016), Pollack (2016)

What are community-level interventions?

- Include any programme that requires community engagement or participation.
- Take place at a national or sub-national level.
- Focused on policies and actions ranging from citywide interventions to those within smaller institutions such as neighbourhoods, schools, churches, worksites or other organisations.

Community engagement has been defined as "*involving communities in decision-making and in the planning, design, governance and delivery of services*."

Levels of community engagement

Source: O'Mara-Eves et al. (2015)

Cities: A growing intervention setting

Cities today contain **more than half** of the world's population.

In the European Union, around **75%** of the population lives in urban areas

Considerations for community level obesity interventions across the EU

- Undertake a situation analysis of the current health situation
- Consider budget
- Use frameworks and theories
- Adopt an integrated approach
- Develop several and multi-component interventions
- Engage stakeholders, but safeguard processes from conflict of interests
- Ensure political engagement
- Set benchmark indicators
- Seek community groups participatory mechanisms
- Ensure that the interventions are sustainable

Thank you!

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Questions?

Email mneveux@worldobesity.org after the webinar with any comments or further questions for our speakers.

Do you have some interesting webinar ideas? Fill out our follow-up survey and include your suggestions!

Supported by a grant from the European Union's 3rd Health Programme