

Introduction

Global food systems are transforming in ways that a generation ago would have seemed fantastical.

Today there are more overweight and obese people in the world than underweight and undernourished ones. For some, dietary diversity has reached spectacular heights, with food from every culture and nation on offer daily. The search for a healthier diet is a source of endless research and debate, with moves to reduce the level of salt, sugar and some fats consumed. For the first time in modern society, malnutrition has become a health problem affecting every society, and all generations and classes, rich and poor alike.

Underlying this is a process of massive transformation of the food industries, of seeds and input technologies and global trade in food, and a continuing marginalisation of billions of poor consumers. The food and agriculture sector is dynamic and diverse, from smallholder farmers to large multinationals. We will need them all if we are to feed a population of nine billion by 2050 on the same land, without exacerbating climate change or degrading the planet.

In this debate on how to feed the planet in a more sustainable and healthy way, one area of the transformation has been overlooked - the move to cities. By 2030 five billion people will be urban citizens, not just in the megacities but hundreds of cities or towns with a population of a few hundred thousand to a few million. The majority of this five billion will be from low and middle income countries, many living in slums or informal dwellings.

This challenge can only be met if we see it as a set of opportunities, to shorten supply lines, build a partnership between the food producers and consumers which is local and innovative, utilising new technologies, and making diets more diverse, healthier and sustainable. Larger farms, more specialisation, longer supply lines and more intensive farm inputs may be part of the solution, but this paradigm on its own cannot succeed.

Policy makers need to act fast to ensure cities are designed in a way that enables the production of healthy, sustainable and nutritious urban food systems. Furthermore urban nutrition security can no longer be ignored. Youth engagement, especially adolescent girls, will be crucial. We must not let cities become bottlenecks for nutrition security but instead must take advantage of the powerful tool it can be in producing positive externalities if managed right.

Essential tools will be the regulatory environment, private sector engagement, technology, and demand creation. It is critical that urban infrastructures and local supply chains are optimally implemented taking into account climate change risks and trade, which does not only benefit the rich. Improved global data on consumption patterns of city dwellers and urban dynamics would provide useful insights to produce effective context specific urban nutrition policies. However, urban interactions are not static and urbanization is happening so rapidly that policy makers do not have time to not take immediate action to do what they can in integrating urban nutrition sensitive strategies within their frameworks.

What is the #UrbanNutrition problem?

URBANIZATION IN THE 21ST CENTURY (TRENDS)

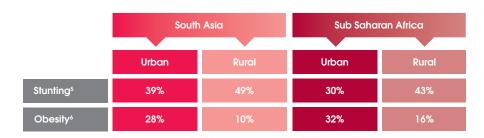
By 2030 the world will be 60% urban¹ and 90% of this growth will occur in low and middle income countries in Africa and Asia¹ where the brunt of malnutrition is already felt. Urbanization is associated with

economic growth but also home to high inequality. Rapid urbanization, if unplanned, could lead to disaster. However much of the infrastructure of these growing cities will be built in the next 15 years which means there is a huge opportunity to plan cities now for better nutrition?



URBAN NUTRITION PROBLEMS

Malnutrition affects every country and their cities.



Many low and middle income countries, and particularly their cities, now face the double burden of malnutrition.

The poorest quintile of urban children under five are three times more likely to become stunted than their wealthier urban counterparts, and in some countries, fair worse than their rural counterparts⁷.

Cities have become obesogenic environments; but they don't have to be.

Two in three people who suffer from Type II diabetes, which is largely associated with obesity, live in cities⁸.

By 2030 almost two thirds of city dwellers will be less than 18 years old°. Considering how critical the first 1,000 days are of a child's life in determining their nutritional status and income earning potential it is critical that we invest in nutrition for poor urban residents now. If we don't, generations of young people will be disadvantaged and denied an equal start in life.

Who should care? Everyone.

GLOBAL LEADERS

Improved nutrition and inclusive and sustainable cities are both global priorities under the Sustainable Development Goals (SDGs) framework.



End hunger, achieve food security and improve nutrition and promote sustainable agriculture



Make cities and human settlements inclusive, safe, resilient and sustainable

MUNICIPAL LEADERS

Over 100 global cities have signed up to the Milan Urban Food Policy Pact, encouraging urban policy to address food systems and nutrition.

THE NEW URBAN AGENDA

In October 2016 the United Nation's conference, dubbed Habitat III, will formulate the New Urban Agenda. It is critical that the New Urban Agenda reflects the importance of nutrition and building better food systems.

MULTI-STAKEHOLDERS

Urban people purchase the majority of the food they consume and the urban poor spend up to spend up to 70% of their income on food¹⁰.

It is not just the government that has a role to play in building an enabling environment for improved urban nutrition. The private sector, civil society, non-governmental organizations, academia, individuals all provide critical components of the solution.

How do we improve #UrbanNutrition?

1 >> URBAN FOOD SYSTEMS

Local urban food systems need to be strengthened particularly in small and medium cities¹¹



a) Food markets: Informal,
Formal and Urban Food Deserts
The majority of urban poor still purchase their food from and are employed in informal markets; these markets need to be supported to become more nutritious and safe. However supermarket chains have rapidly increased in Asia and Africa and should improve their affordability and accessibility. Urban food deserts should



b) The Urban Food Supply Chain
Distribution and storage mechanisms
are particularly weak in low and middle
income countries and should be
strengthened. If low and middle income
nations had the same technological
level of cold chains as in the global
north they would be able to save
200 million tonnes of perishable foods
a year¹².



c) Roads, Traffic and Transport
A major cause of post-harvest loss in
low and middle income countries is
inadequate road infrastructures and
traffic congestion, particularly in dense
megacities. Roads, in low and middle
income countries, particularly those
connecting rural areas with small and
medium size cities can be poorly
constructed; sometimes they are just
dirt roads and can become
unnavigable during monsoon seasons.

How do we improve #UrbanNutrition?

2 >> DEMAND CREATION

Creating demand for nutritious food is an essential piece of the puzzle and mechanisms to do this include:



a) Regulatory tools such as food labels, taxes and subsidies In the first year since Mexico implemented their soda tax, sales of sugary soft drinks decreased by 6%13.



b) Education through schools and health systems on the importance of good nutrition

Many people do not know what a healthy diet looks like or may have misconceptions



c) Marketing and creation of aspirational products that are nutritious

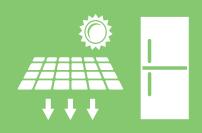
US fast food restaurants spend around \$4.6 billion dollars a year on advertising 14. Can we make healthy foods trendy?

3 >> WASH



Improving water, sanitation and hygiene (WASH) facilities is a proven nutrition sensitive intervention¹⁵. However, less people in the world have a toilet than a mobile phone¹⁶. WASH infrastructure is especially poor in urban slum areas.

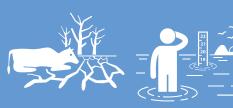
4 >> TECHNOLOGY



Can cities in low and middle income countries leapfrog to **new technologies and innovative approaches to improve the food system?** For example solar powered fridges.

What about climate change, sustainable consumption and the environment?

1 >> EFFECT OF CLIMATE CHANGE ON URBAN FOOD AND NUTRITION SECURITY



Climate change is having and will have devastating effects on urban food security.

It is commonly accepted that climate change leads to an **increased risk of droughts**, **floods** and other **natural disasters** that can severely damage agricultural production and productivity and thus inevitably also raise food prices.

It is estimated that **80% of people** who suffer from **chronic hunger** live in **disaster prone areas** already feeling the brunt of climate change!

Overcrowded slum settlements are often at particular risk because they tend to be built in more disaster prone areas.

This can affect a household's ability to purchase food as their **livelihoods** have deteriorated.

Secondly, they are also more at risk of contracting diarrhoea due to poor water and sanitation facilities. Climate change can increase the rate of diarrhoea by 10% by 2030 in some regions 18.

2 >> EFFECT OF CHANGING DIETS ON CLIMATE CHANGE



Unfortunately, climate change cannot just have damaging effects on the nutrition security of poor urban populations but in fact **urban** residents trying to attain better nutrition can be a driver of climate change. Cities themselves are the largest contributor of greenhouse gasses. Though they only occupy 2% of land globally they are responsible for 70% the world's greenhouse gas emissions¹⁹.

3 >> FOOD WASTE

Globally, 30-40% of food is wasted or lost annually²⁰ while **795** million people still go hungry²¹.

Get in touch





f www.facebook.com/GAINalliance

www.gainhealth.org

References

- UNHABITAT (2016) World Cities Report 2016-Urbanization and Development: Emerging Futures.
- The World Bank Group (2015) East Asia's Changing Urban Landscape -- Measuring a Decade of Spatial Growth. doi: 10.1596/978-1-4648-0363-5
- UN-Habitat (2012) Prosperity of Cities: State of the World's Cities 2012/2013. State of the World's Cities. doi: 10.1080/07293682.2013.861498
- Un-Habitat (2003) The Challenge of Slums -Global Report on Human Settlements. London Earthscan. doi:
- http://dx.doi.org/10.1108/meq.2004.15.3.337.3 5. UNICEF (2013) improving child nutrition. The achievable imperative for global progress. doi: 978-92-806-4686-3
- Popkin BM, Slining MM (2013) New dynamics in global obesity facing low- and middle-income countries. Obes Rev 14:11-20. doi: 10.1111/obr.12102
- WHO, UNHABITAT (2010) Chapter 4: Urban Health Inequities Revealed. In: Hidden Cities Unmask, adn overcoming Heal, inequities urban settlings, pp 39–56
- Novo Nordisk; Steno Diabetes Center; UCL (2015) Urban Diabetes: Undesrtandign the Challenges and Opportunites.
- UNHABITAT (2014) YOUTH AND THE NEW URBAN AGENDA: World Urban Youth Assembly WUF 7 concept note.
- Mohiddin L, Phelps L, Walters T (2012) Urban malnutrition: a review of food security and nutrition among the urban poor.

- Bloem S, de Pee S (2016) Developing approaches to achieve adequate nutrition among urban populations requires an understanding of urban development. Glob Food Secur J. doi: http://dx.doi.org/10.1016/j.gfs.2016.09.00113.
- Dearman, NCCD, Carbon Trust, University of Birnmingham (2015) Sustainably Meeting the Global Food Crisis- Why we need to "green" cold chains: Report and findings from House of Lords Panel discussion, 14th July 2015.
- 13. Boseley S (2015) Mexican soda tax cuts sales of sugary soft drinks by 6% in first year. Guard.
- Boseley S (2014) The Shape We're In: How Junk Food and Diets are Shortening Our Lives. Faber and Faber
- SUN Movement (2012) Scaling Up Nutrition (SUN) Movement Strategy (2012-2015). 1:7-10. doi: 10.1596/978-0-8213-8077-2
- Water.org (2015) Global Water Crisis: Water And Sanitation Facts. In: Water.org. http://water.org/water-crisis/water-sanitation-facts/. Accessed 8 Feb 2016
- 17. WFP (2015) A World With Zero Hunger Needs Disaster Risk Reduction.
- Hallegatte S, Bangalore M, Bonzanigo L, et al. (2015) Shock Waves: Managing the Impacts of Climate Change on Poverty. Clim Chang Dev Ser. doi: 10.1596/978-1-4648-0673-5
- Habitatlll (2015) The New Urban Agenda. https://www.habitat3.org/the-new-urbanagenda. Accessed 1 Feb 2016
- FÃO Key facts on food loss and waste you should know! In: 2016. http://www.fao.org/savefood/resources/keyfindings/en/. Accessed 5 Jul 2016
- IFPRI (2016) Global Nutrition Report: From Promise to Impact-Ending Malnutrition by 2030. Washington DC