



# **Urban Health Equity: Health For All in the 21<sup>st</sup> Century**

**Healthy City Colloquium  
World Urban Forum  
Medellin, 5 April 2014**

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# Outline

- 1. Health equity**
  - a) Inequity and social wellbeing**
  - b) The WHO Commission on the Social Determinants of Health**
- 2. Environmental health equity**
  - a) Health inequity in the natural environment**
  - b) Health inequity in the built environment**
- 3. Health equity and the city**
  - a) Social and economic**
  - b) Environmental**
  - c) Democratic, participatory and inclusive**



# Health For All

**A level of health which enables people to lead an economically and socially productive life.**

**WHO, 1977**



# Not ...

- **Health for some**
  - **Health for a few**
- but**
- **Health for ALL!**

**All implies equity**

- **But not equality**





# I. Health equity



# Health inequities defined

**“Differences in health which are not only unnecessary and avoidable, but, in addition, are considered unfair and unjust.”**

**Margaret Whitehead, 1992**

***“The Concepts and Principles of Equity in Health”***

**Int J Health Serv 22:429 - 445**



# Equity and inequality

- **Not all inequality is inequitable**
  - **Inequality (difference) in diseases due to sex or age or other biological differences**
- **Equality may not be equitable**
  - **A disadvantaged community with high needs that receives the same level of service as a neighbouring wealthy community is suffering inequity**



# Equality



# Equity







**“Inequalities can be observed,  
inequity demands action”**

**Carl D’Arcy, 1988**



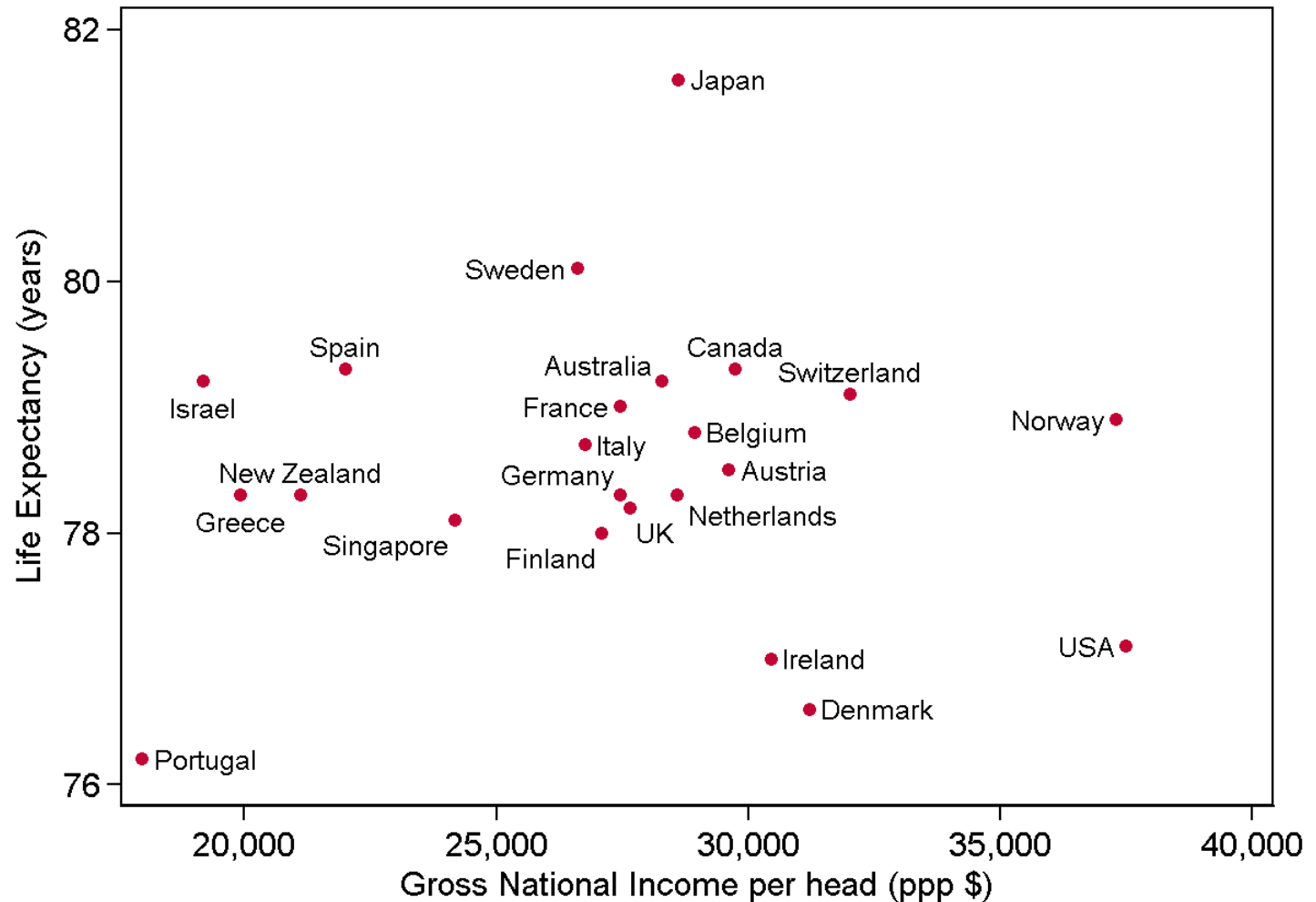


# I a) Inequity and social wellbeing





# Life expectancy in rich countries is no longer related to National Income per head



# Outcomes with social gradients

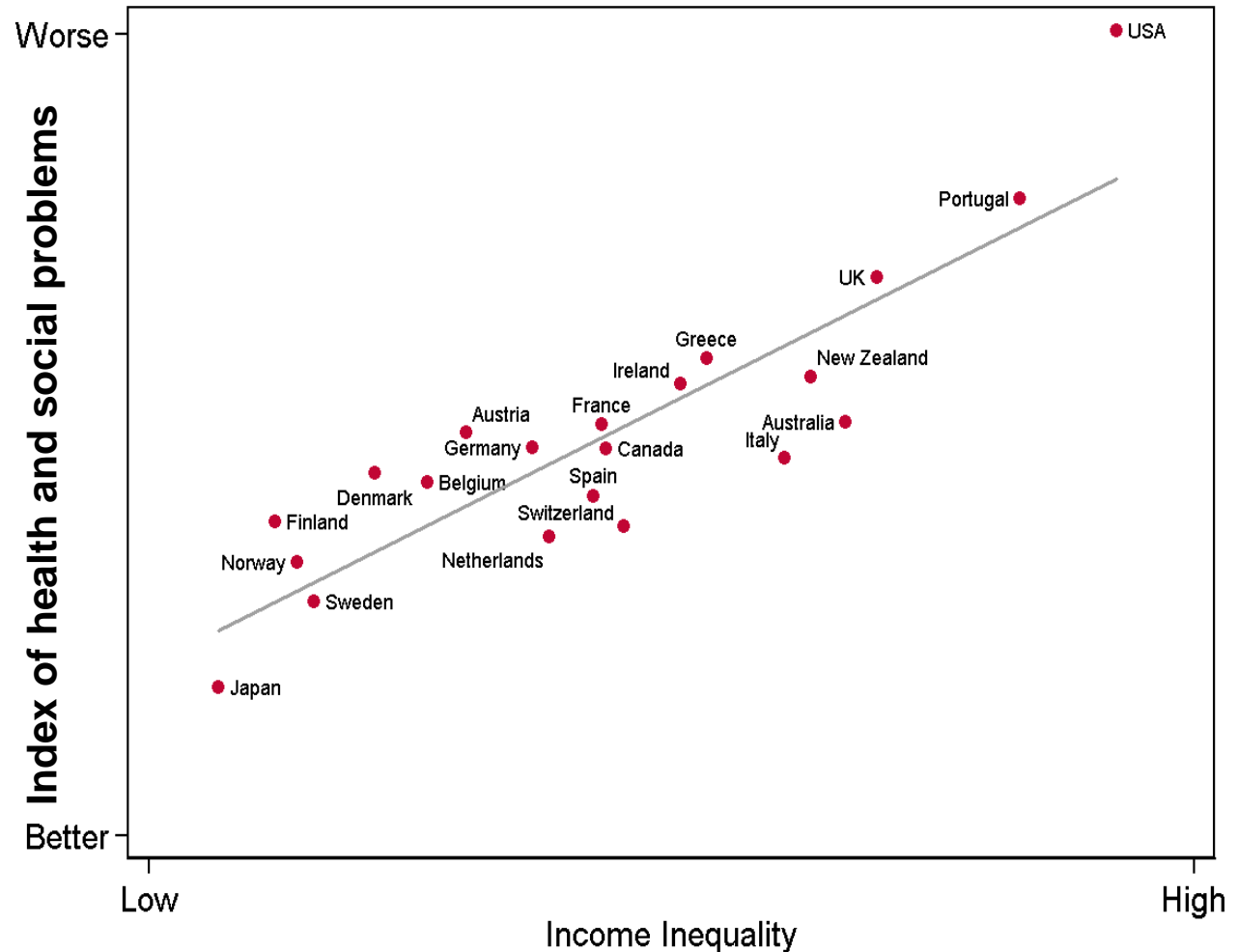
- **Life expectancy**
- **Math & Literacy**
- **Infant mortality**
- **Homicides**
- **Imprisonment**
- **Teenage births**
- **Trust**
- **Obesity**
- **Mental illness – incl. drug & alcohol addiction**
- **Social mobility**



# Health and social problems are worse in more unequal countries

## Index of:

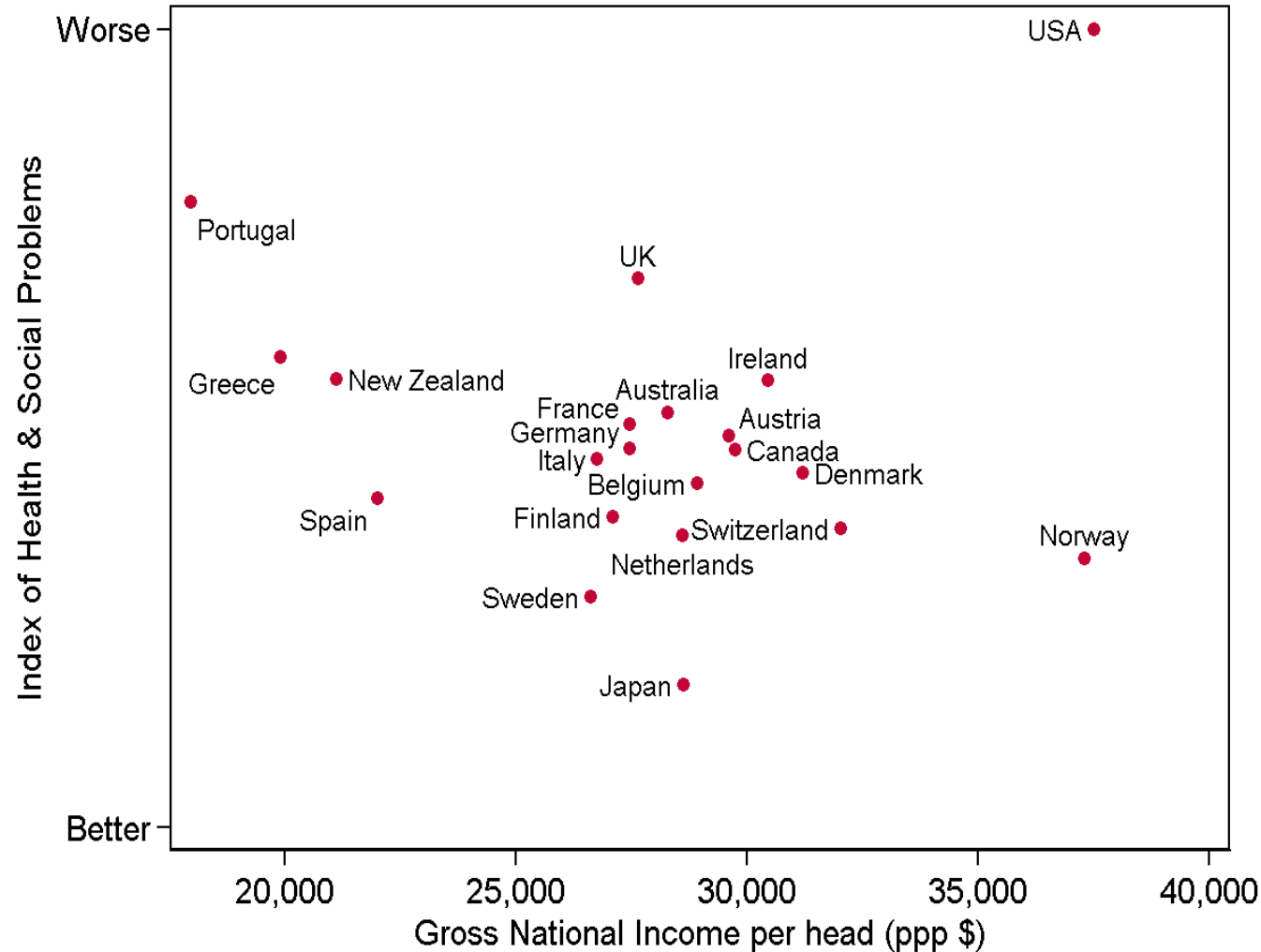
- Life expectancy
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# Neither health nor social problems are related to national income per head

## Index of:

- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness  
– incl. drug & alcohol addiction
- Social mobility



# Bigger income gaps lead to deteriorations in:-

## Social Relations

- Child conflict
- Homicide
- Imprisonment
- Social capital
- Trust

## Health

- Drug abuse
- Infant mortality
- Life expectancy
- Mental illness
- Obesity

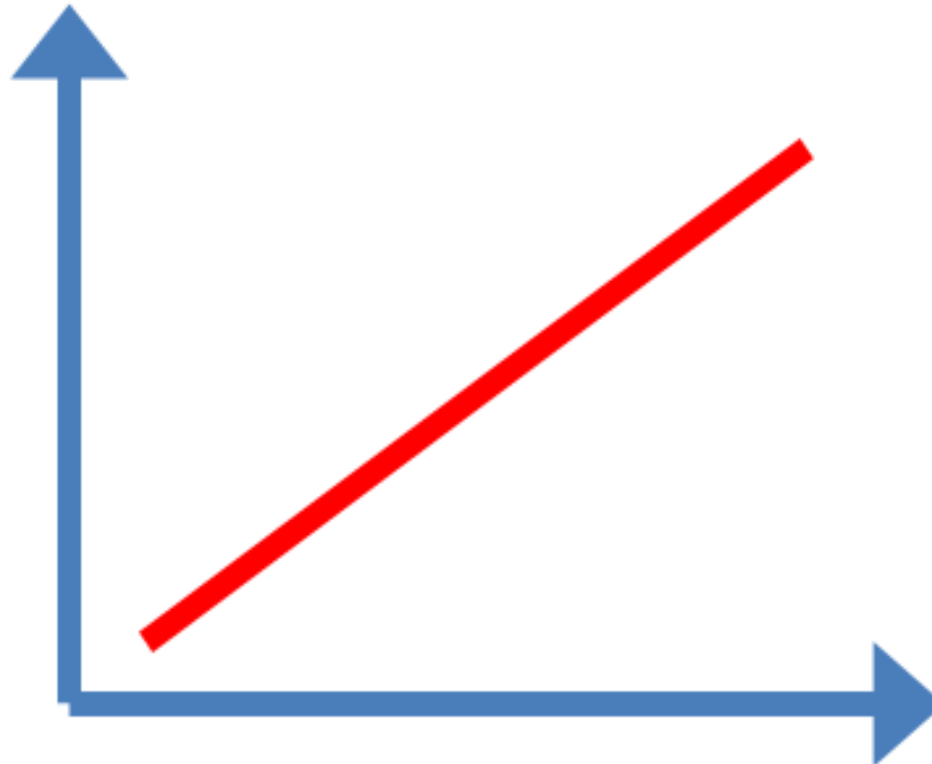
## Human Capital

- Child wellbeing
- High school drop outs
- Math & literacy scores
- Social mobility
- Teenage births






# Problems



# Income inequality





# **I b) The WHO Commission on the Social Determinants of Health , 2008**





**“Social injustice is killing people on a grand scale.”**

**Closing the gap in a generation: Health equity through action on the social determinants of health**

Commission on Social Determinants of Health

FINAL REPORT | EXECUTIVE SUMMARY



University of Victoria | Human and Social Development

School of Public Health & Social Policy

- **“Within countries there are dramatic differences in health that are closely linked with degrees of social disadvantage.”**

**WHO Commission on Social Determinants of Health, 2008**



# WHO CSDH

**“These inequities in health, avoidable health inequalities, arise because of the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness. The conditions in which people live and die are, in turn, shaped by political, social, and economic forces.”**



# WHO Commission on Social Determinants of Health

## Key Recommendations

- **Improve daily living conditions**
  - the circumstances in which people are born, grow, live, work, and age.
- **Tackle the inequitable distribution of power, money, and resources**
- **Measure and understand the problem and assess the impact of action**





# The line between rich and poor - Morumbi and the Paraisópolis favela, São Paulo, Brasil





**“When inequality becomes too great, the idea of community becomes impossible.”**

**Attr. to Raymond Aron**







# 2. Environmental health equity



# The environmental determinants of health

- **We have spent so much time focused on the social determinants of health that we have neglected the environmental determinants**
- **It is not ‘either/or’, it is ‘both/and’**
- **We need to re-establish the balance**



# Environmental justice

1. **A social movement** in the United States whose focus is on the fair distribution of environmental benefits and burdens.
2. **An interdisciplinary body of social science literature** that includes (but is not limited to) theories of the environment, theories of justice, environmental law and governance, environmental policy and planning, development, sustainability, and political ecology.

[http://en.wikipedia.org/wiki/Environmental\\_justice](http://en.wikipedia.org/wiki/Environmental_justice)



# **Environmental health equity**

- **Our vision is an environment where all people have equal opportunity to enjoy healthy, vibrant communities, no matter where they live.**
- **Our goal is to improve the wellbeing of communities burdened by inequitable environmental health conditions.**

**Centre for Environmental Health Equity,  
University of Manitoba**



University of Victoria | Human and Social Development

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# **2 a) Health inequity in the natural environment**



# Ecosystem wellbeing and human health

**Ecosystems - ‘the planet’s life-support systems - for the human species **and all other forms of life**’ are ‘indispensable to the wellbeing of all people, everywhere in the world’**

**WHO’s Millennium  
Ecosystem Assessment, 2005**



# Nature, life and health

**“Nature's goods and services are the ultimate foundations of life and health, even though in modern societies this fundamental dependency may be indirect, displaced in space and time, and therefore poorly recognized.”**

Ecosystems and Human Well-being  
Millennium Ecosystem Assessment

**WHO, 2005**



# Ecosystems are in decline

“Human activity is putting such a strain on the natural functions of Earth that **the ability of the planet’s ecosystems to sustain future generations can no longer be taken for granted...** Nearly two thirds of the services provided by nature to humankind are found to be in decline worldwide.”

Millennium Ecosystem  
Assessment, 2005





# Intergenerational inequity

- ***“We do not inherit the Earth from our parents, we borrow it from our children”***
- **What are we leaving for future generations?**
  - **Climate change**
  - **Depleted resources**
  - **Ecotoxicity**
  - **Species extinction**



# Inter-species equity

**We cannot be concerned only with humanity**

- **We are part of the web of life and we depend on other species for our own survival**
- **We have an ethical duty to preserve life on Earth**



# Some health impacts of climate change

- **Until mid-century, projected climate change will impact human health mainly by exacerbating health problems that already exist (*very high confidence*).**
- **Throughout the 21st century, climate change is expected to lead to increases in ill-health in many regions and especially in developing countries with **low income**, as compared to a baseline without climate change (*high confidence*).**



# Examples include

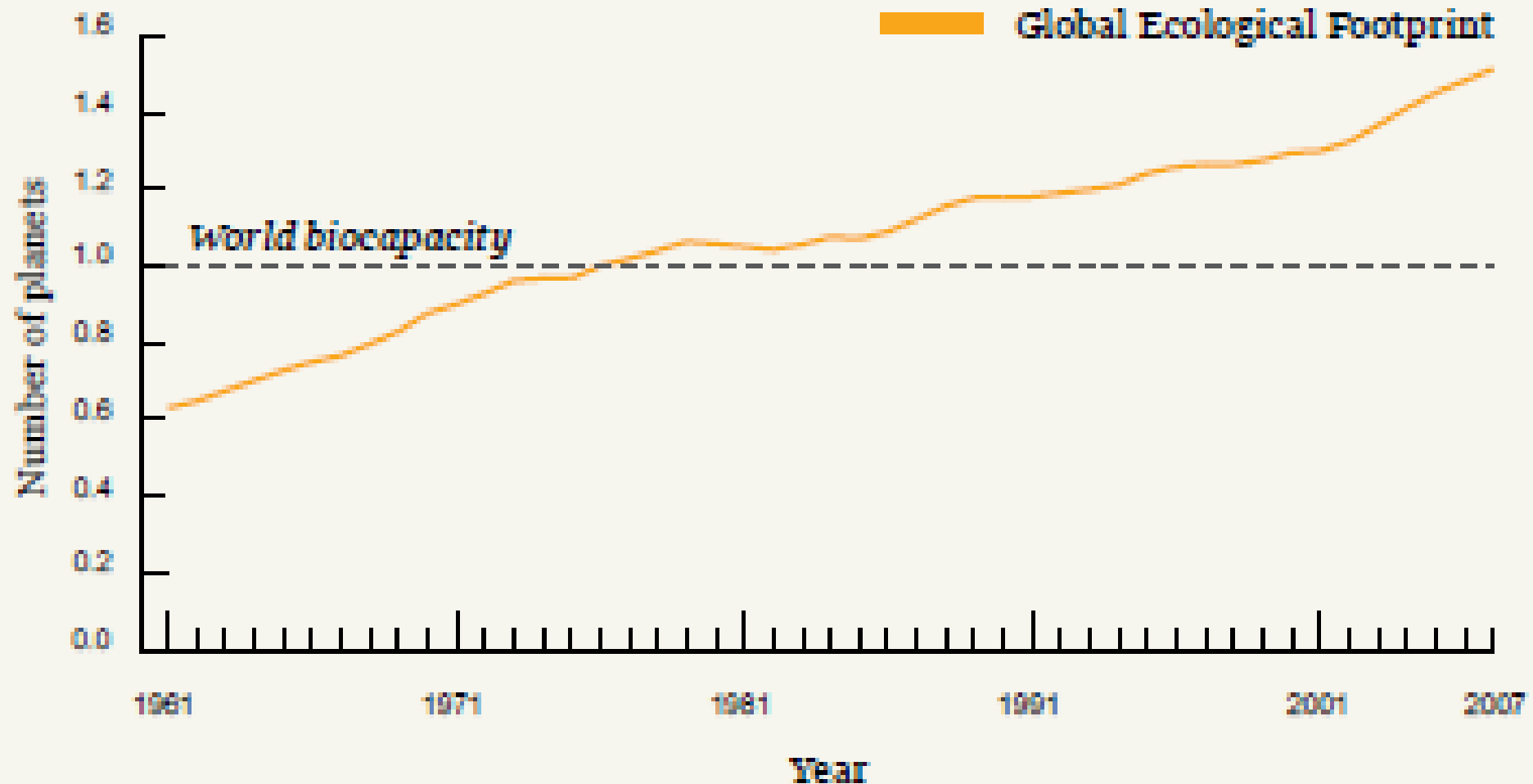
- **Greater risk of injury, disease, and death due to more intense heat waves and fires [very high confidence]**
- **Increased risk of under-nutrition resulting from diminished food production in poor regions [high confidence]**
- **Consequences for health of lost work capacity and reduced labor productivity in vulnerable populations [high confidence]**
- **Increased risks of food- and water-borne diseases [very high confidence]**
- **Increased risks of Vector-borne diseases [medium confidence]**

**IPCC WG 2, March  
2014**

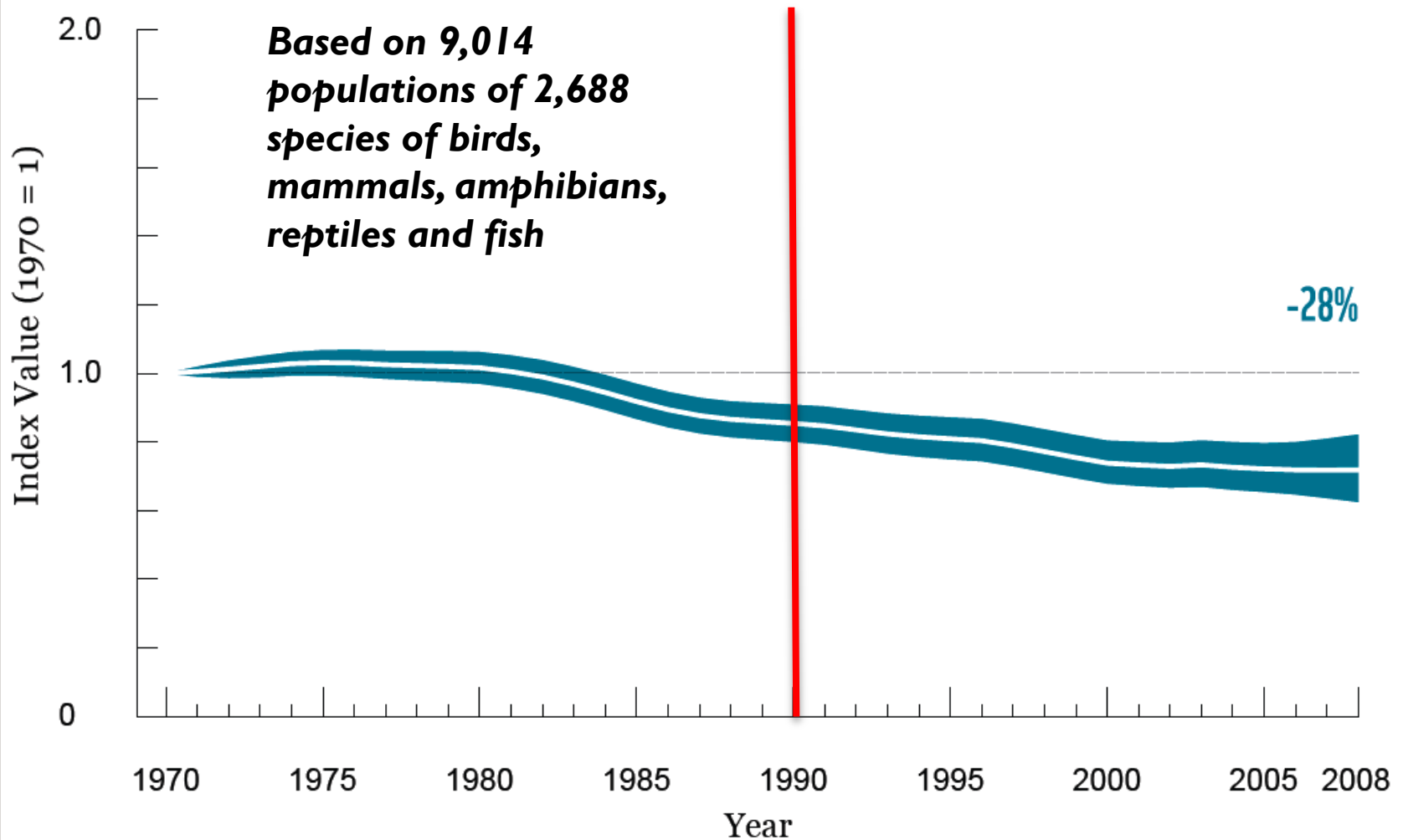
**Chapter 11. Human  
Health**



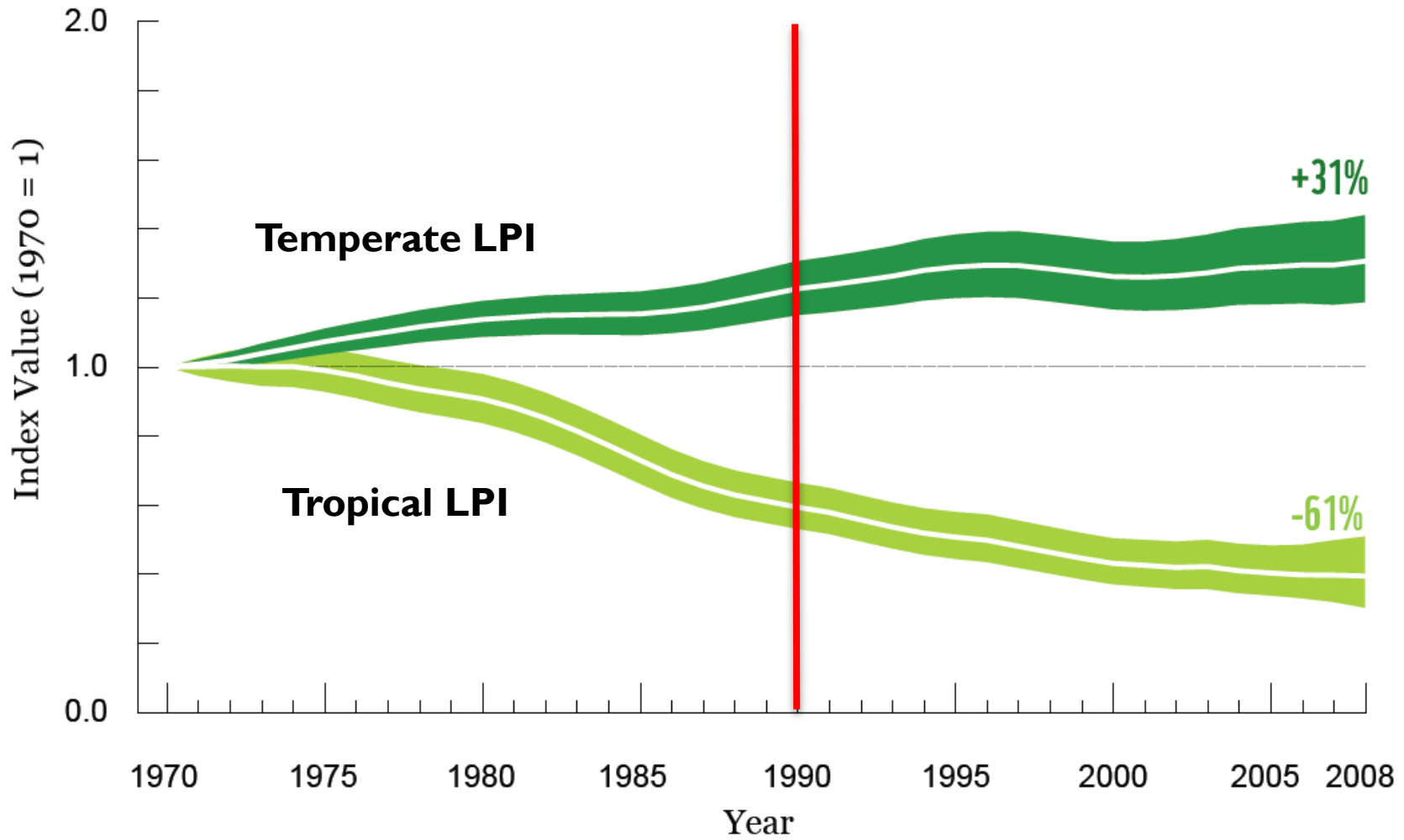
# Depleted resources



# Living Planet Index

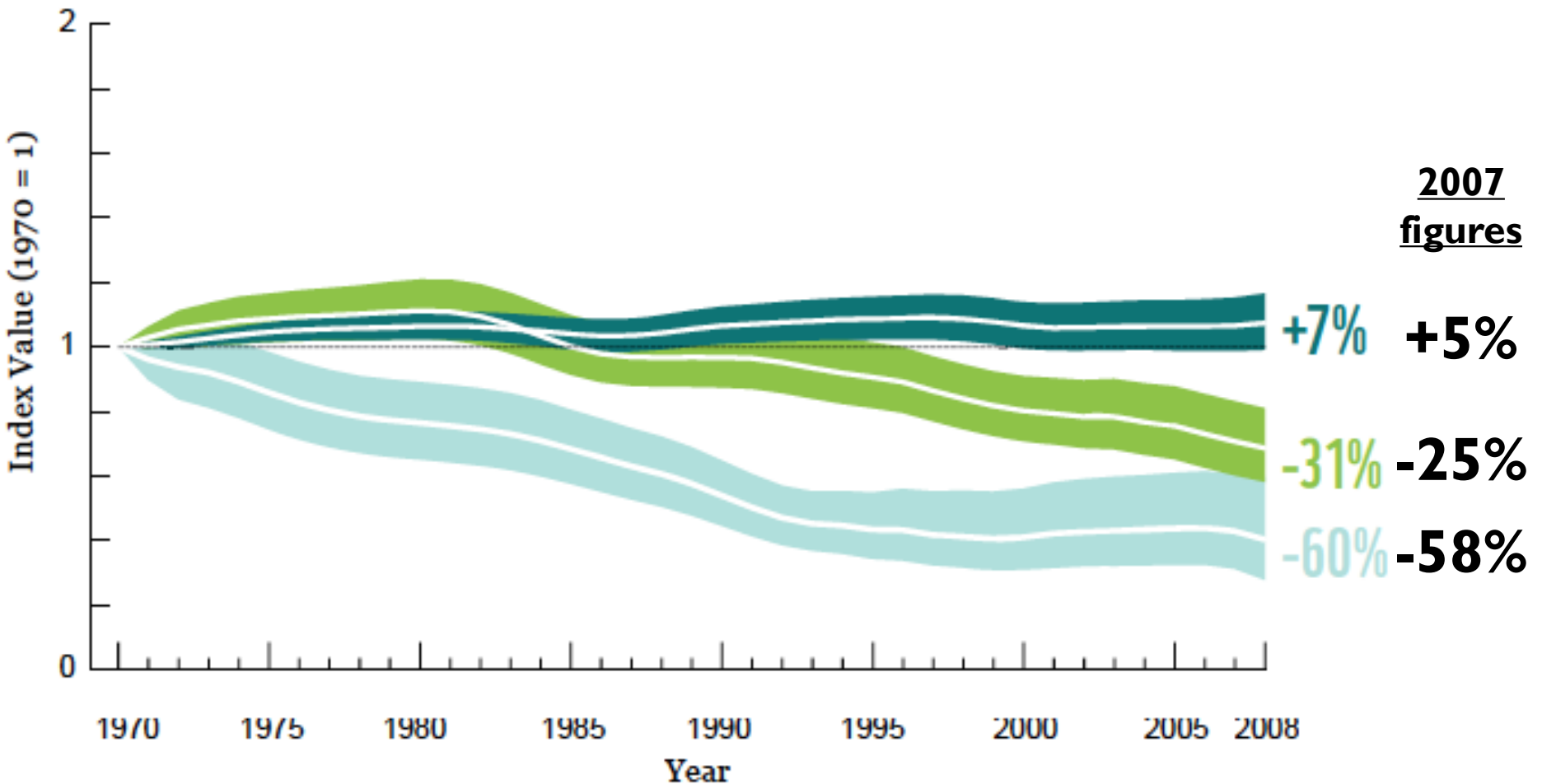


# Temperate and tropical LPI





# Changes in LPI by country income group, 1970 - 2008



Source: Living Planet Report 2012 – World Wide Fund for Nature

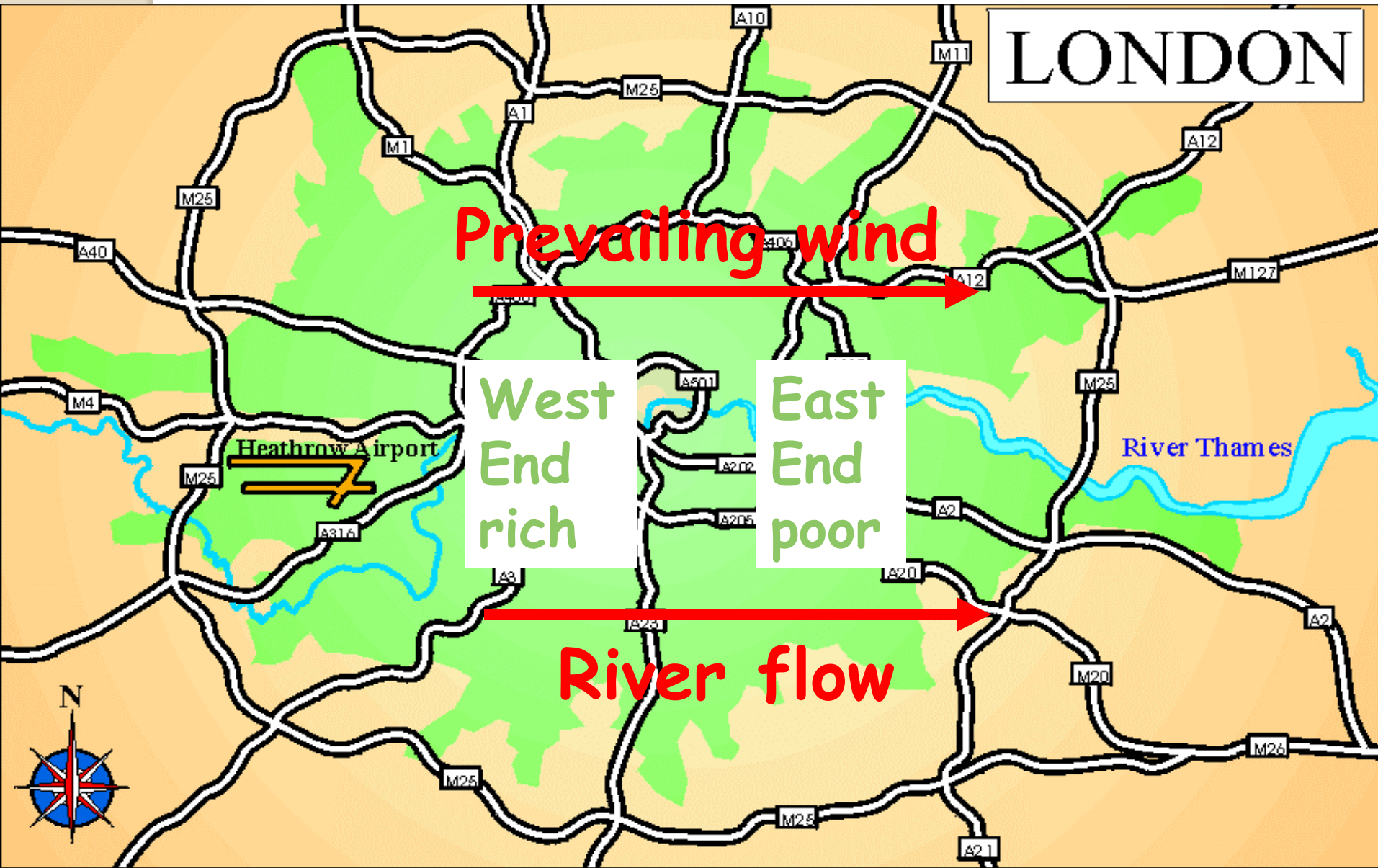




## **2 b) Health inequity in the built environment**



# Why is London's ...





# 19<sup>th</sup> century slums in England



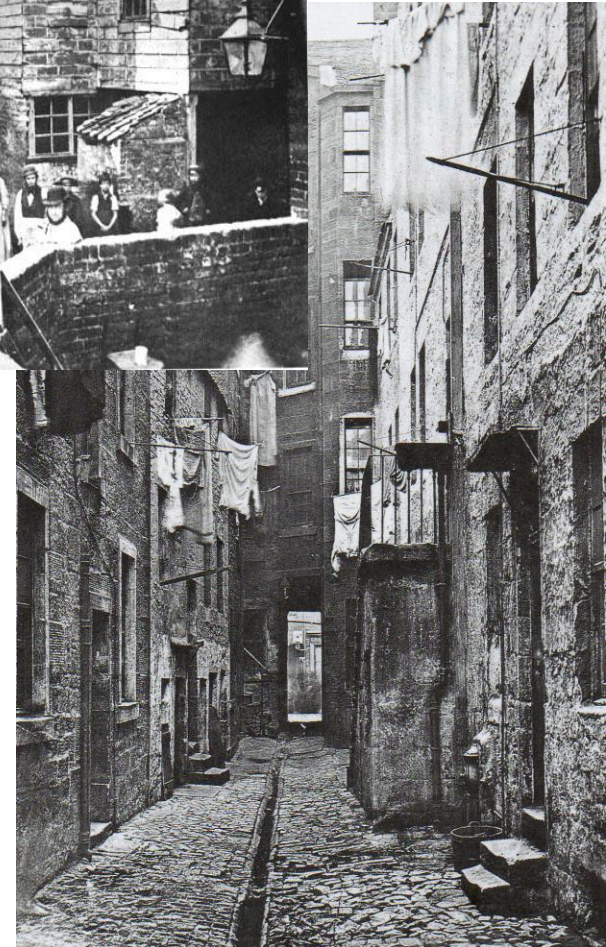
**Sheffield**



**London**



**Manchester**



**Glasgow**

# Manchester, 1845

**The River Irk was:**

- **"...a narrow, coal-black, foul-smelling stream...in dry weather, a long string of the most disgusting, blackish-green slime pools are left standing...from the depths of which bubbles of miasmatic gas constantly arise and give forth a stench unendurable even on the bridge forty or fifty feet above the surface of the stream."**

**Frederick Engels**



# Manchester 1859

- **"Earth and air seem impregnated with fog and soot. The factories extend their flanks of fouler brick one after another, bare, with shutterless windows, like economical and colossal prisons...Through half-open windows we could see wretched rooms at ground level, or often below the damp earth's surface. Masses of livid children, dirty and flabby of flesh, crowd each threshold and breathe the vile air of the street, less vile than that within..."**

**Hippolyte Taine**



# The health impact

- **Life expectancy for mechanics and labourers in Manchester in 1842 was 17 years**





# The poor live . . .

- **Downwind**
- **Downstream**
- **Downhill**
  - **But uphill if the slopes are dangerous**
- **On floodplains and other marginal lands**



- **Near landfills, industrial plants and hazardous sites**
- **In damp, unsafe, unhealthy housing**
- **In dangerous neighbourhoods**
- **And they work in unsafe, unhealthy workplaces**





# Natural hazards faced by cities

## Natural hazards include

- **Cyclones**
- **Droughts**
- **Earthquakes**
- **Floods**
- **Landslides, and**
- **Volcano eruptions**



# For the 63 most populated urban areas (>5 million inhabitants in 2011)

- **39** are located in regions that are exposed to a high risk of at least one natural hazard
  - **Flooding – 30 cities**
  - **Cyclones - 10 cities,**
  - **Droughts - 9 cities, and**
  - **Earthquakes - 6 cities**



# Latin & North American cities at multiple risk

- **Ciudad de México** has a high risk of floods, medium risk of landslides and low risk of droughts;
- **New York-Newark**, is at high risk of floods and medium risk of cyclones
- **Santiago and Valparaíso (Chile), Quito (Ecuador) ... and Managua (Nicaragua)** - all located in areas at high risks of droughts, earthquakes and floods (as well as landslides and volcano in Quito)





# 3. Health equity and the City

- **There is no reason to believe that the link between the degree of inequity and higher rates of health and social problems at the country level is not true for cities**
- **So cities that have high levels of inequity are probably paying a high price –increased social, health and justice system costs and lost human potential**



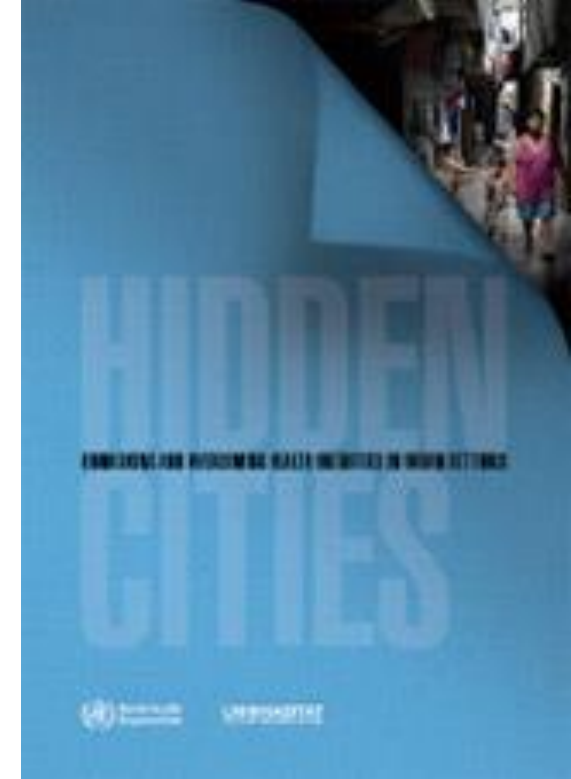
- **In fact, the cost of poverty may be so high that we cannot afford it!**



# Hidden Cities

**Of the worlds 3 billion urban population**

- **1 billion people live in 'Hidden Cities' (slums and informal settlements)**
  - **36% of total urban population globally**
    - **78% in less developed countries**
    - **32% in Latin America and Caribbean**
    - **6% (54 million people) in developed regions**



# A slum is

- a densely populated area with substandard housing and a low standard of living as depicted by **the absence of one or more of the following:**
  - improved water supply,
  - improved sanitation,
  - sufficient living area,
  - durability of construction, and
  - security of tenure.





- **They also**
  - **are more exposed to pollution, transport-related injuries, unsafe neighbourhoods etc.**
  - **Have less access to education, health care etc.**
  - **Are more vulnerable to climate change, extreme weather**

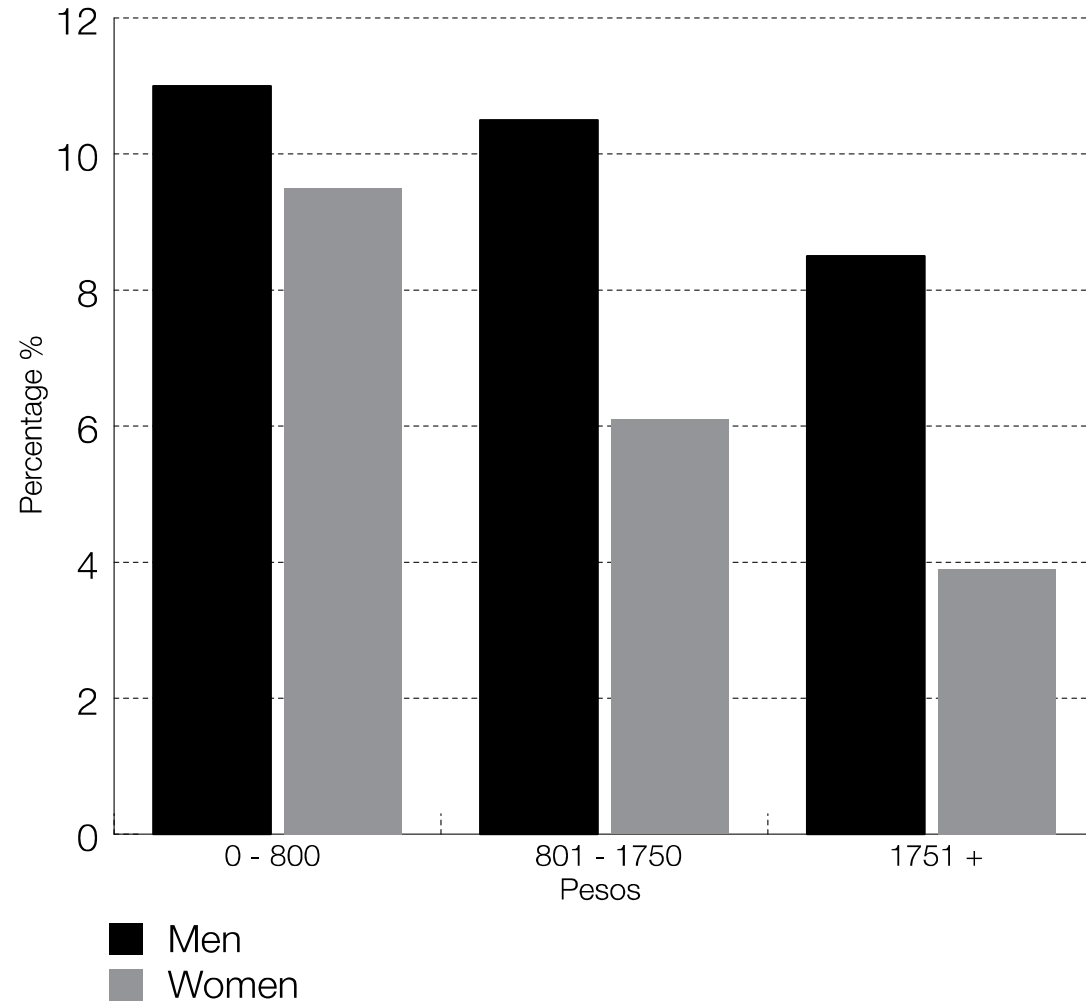


# Some examples of urban health inequity – Chronic diseases

- In LMICs, the prevalence of hypertension is increasing with rates being higher in urban than rural settings (Addo et al. 2007)
- In Accra, Ghana, mortality rates per 10 000 people for diseases of the circulatory system (heart failure, hypertensive heart disease, cardiovascular disease) varied from 7.0 in the least deprived areas to 16.4 in the most deprived areas (Stephens et al. 1997)
- The prevalence of diabetes in Buenos Aires is socially graded and increases with decreasing social status.



# Prevalence of diabetes by monthly income, Buenos Aires, Argentina 2005



# Child mortality in African slums

- **In Sub-Saharan African cities, children living in informal settlements are more likely to die from entirely preventable respiratory and waterborne illnesses than children in rural areas (UN-Habitat 2006).**
- **Child mortality in Nairobi's slums is 2.5 times higher than in other cities in Kenya, and three to four times the Nairobi average (APHRC 2002).**



# Addressing urban health inequity

- **First, meet basic needs for all**
  - **Peace**
  - **Food**
  - **Shelter**
  - **Education**
  - **Income** (Ottawa Charter)

**And add**

- **Clean water and sanitation**



# So what would a system look like that

- **Created a safe neighbourhood and city**
- **Ensured everyone had enough to eat**
- **Ensured everyone had adequate shelter**
- **Ensured everyone has a basic education**
- **Ensured everyone has an adequate income**



# WHO Commission on Social Determinants of Health

## Key Recommendations

- **Improve daily living conditions**
  - the circumstances in which people are born, grow, live, work, and age.
- **Tackle the inequitable distribution of power, money, and resources**
- **Measure and understand the problem and assess the impact of action**



# National and local government action for health equity (WHO CSDH, 2008)

- Progressive building of universal health-care services;
- establish a central gender unit to promote gender equity across government policy-making;
- improve rural livelihoods, infrastructure investment, and services;
- **upgrade slums and strengthen locally participatory healthy urban planning;**
- invest in full employment and decent labour policy and programmes;
- invest in ECD;
- build towards universal provision in vital social determinants of health services and programmes regardless of ability to pay, supported by a universal programme of social protection; and
- establish a national framework for regulatory control over health-damaging commodities.





# WHO CSDH Recommendations for Action to Build a Flourishing Living Environment

- 1. Within cities, new models of governance are required to plan cities that are designed in such a way that the physical, social, and natural environments prevent and ameliorate the new urban health risks, ensuring the equitable inclusion of all city dwellers in the processes by which urban policies are formed.**
- 2. Sustained investment in rural areas – making them viable places for flourishing living – must balance investment in cities in national development plans.**
- 3. Underpinning these areas of action is the development of adaptation and mitigation strategies for environmental change that take into account the social and health equity dimensions.**



# Put health equity at the heart of urban planning/ design - GRNUHE

Through impacting on the physical urban environment, urban planning/ design can impact on health and health equity in various ways, by

facilitating:

- access to shelter and basic services
- access to work and amenities
- physical activity
- food security
- safe living environments (i.e. with low risk of injuries)
- a healthy natural environment
- good mental health
- mobility for people with disabilities, children and seniors
- effective health care



# How? - The Ottawa Charter

- **Build healthy public policy**
- **Create supportive environments for health**
- **Strengthen community action**
- **Develop personal skills**
- **Re-orient health services**



# How? - Healthy City action principles

- **Political commitment**
  - **Set vision and goals**
  - **Bring people together**
    - **Within government – leads to healthy public policy**
    - **Beyond government – private, NGO, academic etc**
- **Intersectoral action & partnerships**
  - **Within and beyond government**
- **Community engagement and partnership**



# How? Engage the community

- **Participation – Porto Alegre**
  - **Budgets and beyond**
- **Democratisation –**
  - **Municipal Deputy Secretary of Democratic Governance, Belo Horizonte**
- **Social enterprise/partnership**
  - **Cali's Carvajal Foundation**
- **Inclusion – Medellin**
- **Internet democracy**
  - **'Crowd-sourcing' policy - Finland, Iceland**

