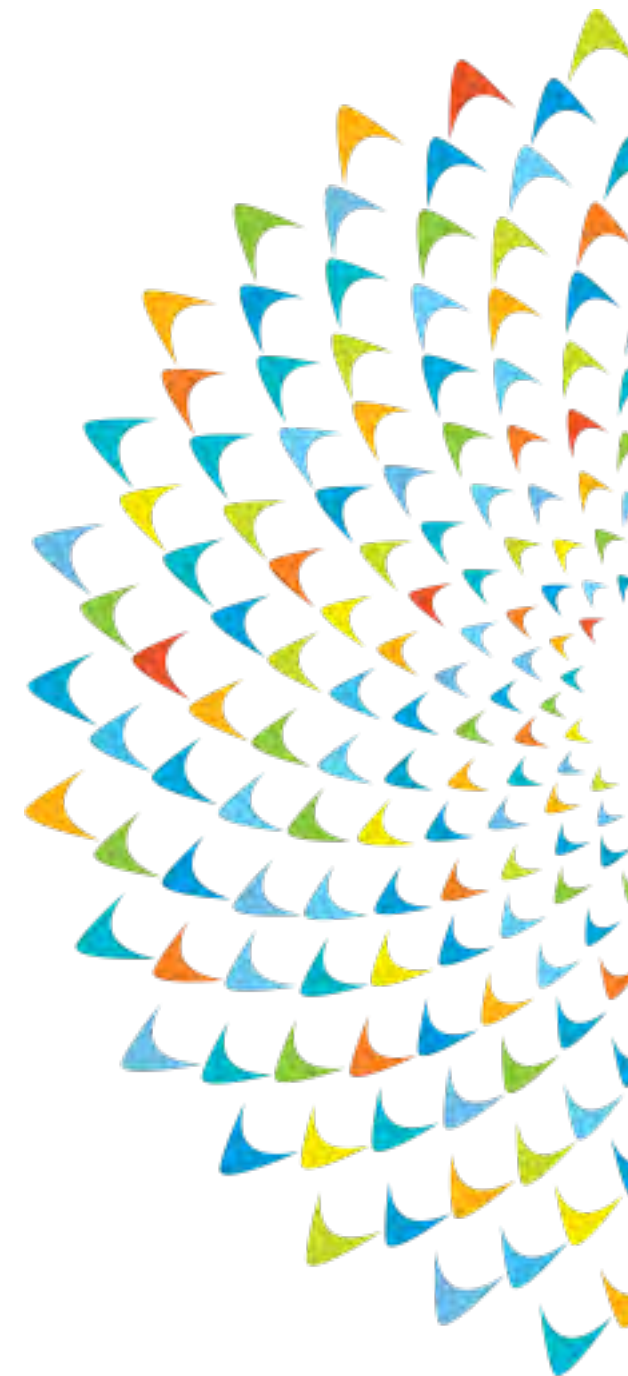# Healthy and Age-Friendly City Development and ADB partnership in addressing Health Security in the PRC and Mongolia

Sangay Penjor, Director, Urban and Social Sectors Division, EARD
Stefan Rau, Senior Urban Development Specialist, EARD
Najibullah Habib, Health Specialist, EARD

Lecture at the AFDI Shanghai
Delivered Virtually
9 September 2020, 14:00 – 16:00

Outline

a) 1. ADB Strategy for livable cities and Post-COVID-19 New Normal

b) 2. Healthy and Age-friendly Cities: ADB's New Integrated Approach

c) 3. Health Security in the PRC and Mongolia

d) 4. Q&A

1. ADB Strategy for Livable Cities and Post-COVID-19 New Normal

a) ADB's Strategy 2030 acknowledges the importance of urbanization and includes as 1 of 7 operational priorities "Livable Cities"

b) ADB's key strategic operational activities and approaches to make cities more livable

c) Asia and Pacific's key urbanization challenges

d) ADB's total investments in urban development by subregion since 2010

e) Key opportunities for future ADB's urban operations

f) Post-COVID19 Pandemic New Normal in Livable Cities

ADB

STRATEGY 2030

PROSPEROUS
INCLUSIVE
RESILIENT
SUSTAINABLE

ASIA AND THE PACIFIC

Addressing remaining poverty and reducing inequalities

human development and social inclusion, quality jobs, education and training, better health, social protection

Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability

low greenhouse gas emissions development, approach to building climate and disaster resilience, environmental sustainability, water–food–energy security nexus

Promoting rural development and food security

market connectivity and agricultural value chain linkages, agricultural productivity and food security, food safety

Fostering regional cooperation and integration

connectivity and competitiveness, regional public goods, cooperation in finance sector, subregional initiatives

Accelerating progress in gender equality

scaled-up support for gender equality; women's economic empowerment; gender equality in human development, decision-making, and leadership; reducing time poverty for women; strengthening women's resilience to shocks

Making cities more livable

integrated solutions, funding for cities, inclusive and participatory urban planning, climate resilience and disaster management

Strengthening governance and institutional capacity

public management reforms and financial sustainability, service delivery, capacity and standards

Operational Priority 4
Making Cities More Livable

Strategic Operational Priorities

1 Improve coverage, quality, efficiency, and reliability of services in urban areas

2 Strengthen urban planning and financial sustainability of cities

3 Improve urban environment, climate resilience, and disaster management of cities

Operational Approaches

- Build capacities and strengthen institutions
- Foster integrated city development
- Combine policy reforms, capacity development, institutional strengthening, and knowledge management
- Develop pilots and leapfrog to the latest technologies
- Prepare and implement smart city plans
- Enhance city competitiveness and productivity
- Support localization and implementation of Sustainable Development Goals

- Support infrastructure and services in urban areas
- Scale up the use of proven digital technologies
- Ensure water security and adequate waste management
- Provide energy security
- Promote public mass transport
- Support pro-poor and inclusive cities with social services, and safe and healthy urban environments

- Prepare integrated urban plans
- Support inclusive and participatory planning
- Use differentiated approaches to different categories of cities

- Support cities to maximize their internal financial resources
- Promote land-based financing
- Develop innovative external sources of financing
- Support utilities and service providers to develop public–private partnerships
- Support urban governance improvement of utilities

- Support environment improvement projects
- Promote energy-efficient and environment-friendly technologies and processes
- Support risk-sensitive land use management
- Promote circular economy practices
- Adopt nature-based solutions

- Support resilient cities
- Strengthen disaster preparedness and emergency response plans
- Support cities to localize nationally determined contributions
- Adopt a systems approach to urban infrastructure resilience

Sub-pillars

- Performance of urban and social services service providers improved

- Provision of urban infrastructure and services improved

- Regulatory, legal, and institutional environment for more inclusive planning improved

- Reforms and policies for improved financial sustainability of cities implemented

- Urban environment improved

- Capacity of cities for climate resilience and disaster risk management improved

Urban Sector Challenges in the Asia and Pacific Region

Challenge	Key Statistics	Description
Urban Population Growth	• Urban population expected to be 1.95 billion (48%) in 2020; 2.35 billion (54%) in 2030; and 2.95 billion (64%) in 2050. • About 120,000 migrate daily to Cities	While bringing economic opportunities, the rate of urbanization and uncontrolled urban growth are compounding the existing challenges of infrastructure deficits, inadequate services, and social inequality
Infrastructure Deficits and Overstretched Public Services	• 75% of municipal waste collected but less than 60% treated • Less than 90% people have access to safely managed water supply • less than 20% of wastewater treated	ADB estimates that Asia and the Pacific will need to invest $1.7 trillion per year for infrastructure up to 2030.
Environmental Stress and Degradation, and Climate Change, Disaster, and Pandemics Risks	• 80% of energy consumption is in cities • 75% of carbon emissions are from cities • 40% of global disasters and 84% of people affected are in the region • 4.5 million annual deaths in the region due to air pollution • 90% of COVID-19 cases occur in cities	Uncontrolled urbanization, lack of effective planning, and excessive use of natural resources exacerbate the existing levels of environmental degradation in cities. The region is the most disaster-affected in the world and vulnerable to climate change impacts. Impact of COVID-19 is felt more in slums and informal settlements in cities in the region.
Social Dimensions, Aging Societies, and Labor Market Disparities	• 564 million of the world's 881 million (>60%) slum dwellers are in the region • Many countries will have more than 20% of population aged 65 or older by 2050 (ROK: 35%, Singapore: 34%, Thailand: 30%, PRC: 28%, Viet Nam: 21%)	Slums and informal settlements and the poor are disproportionately affected in terms of benefits of urbanization. Increasing elderly population and youth unemployment coexist. Urban labor markets reflect informal jobs with low wages, underemployment, and in-work poverty.
Governance and Institutional Capacity		Cities and urban regions frequently face governance challenges, including weak institutional structures, overlapping legal and regulatory frameworks, lack of coordination, corruption, poor public services, lack of own-source revenues, and capacity constraints, despite the increasing level of decentralization

6
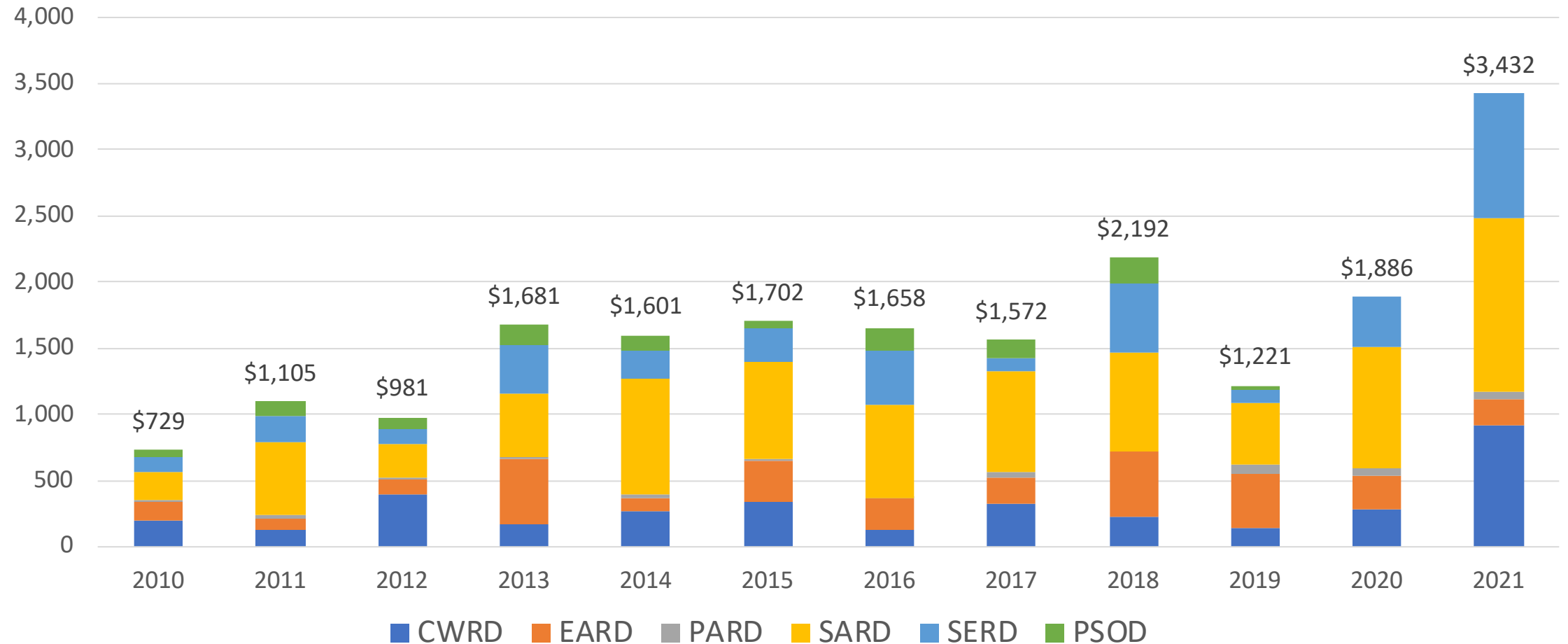
Opportunities for ADB's Urban Sector Operations

- Increase **focus on new subsectors** such as affordable housing, environment (air quality, fecal sludge and solid waste, etc.), waste-to-energy, slums improvement, sustainable tourism, heritage conservation, etc.

- **Support ocean health action plan** through specific and targeted interventions to address sources of land-based pollution (solid waste, plastic, wastewater, etc.) in cities

- Increase focus on mainstreaming **G20 principles of quality infrastructure investments**

- **Support integrated solutions**: various sectors and thematic areas (e.g., Economic Corridors projects in India and PRC and tourism clusters in Georgia and Greater Mekong Subregion), infrastructure support with reforms (Dhaka and Rajasthan), sovereign with nonsovereign (solid waste management/waste-to-energy in PRC and Viet Nam)

- Mainstream in **design of urban projects**: building urban institutions, improving urban governance, supporting integrated urban planning (e.g., getting intricate interrelationship right between transport modes, land uses, and business and labor markets), citizens engagement, urban climate change resilience and circular economy principles

- Support cities to prepare and implement **city-specific plans** and projects

- Support cities **implementing SDGs+ NDCs locally** (e.g., Low Carbon Transformation Project for GHG reduction through improving energy efficiencies of buildings, transport and infrastructure and services)

Livable Cities: Post Covid-19 New Normal

FILE PHOTO: People try to keep social distance as they enjoy a warm day during the outbreak of the coronavirus disease (COVID-19) at Domino Park in Brooklyn, New York, U.S., May 16, 2020. REUTERS/Eduardo Munoz/File Photo

Urban Sector Group

Post Covid-19: Issues and Challenges

1. Inadequate urban & social Infrastructure in DMC's developing cities
- Cities face inadequate basic urban and social infrastructure and services.
- Already a big challenge before COVID-19, inadequate urban services caused more severe impact.

2. Intensified impact on vulnerable people living in overcrowded informal settlements
- Risk of exposure is greater in high-density environments like informal settlements and slums.
- Social distancing difficult for vulnerable people living in overcrowded, unsafe, and unhealthy places
- Problems are aggravated by substandard housing and insufficient water and sanitation facilities

3. Segregated & inefficient ICT systems
- Incomplete and asymmetric information triggers citizens' anxiety and creates panic reactions.
- Availability of reliable data from public and private service providers remains a challenge.

4. Economic crisis in urban sector
- Cities, especially small and medium, lack economic resilience and face financial shocks
- Cities' revenues dropped due to lower taxes and tariff collection, reduced transfers; and costs increased due to COVID-19 crisis management
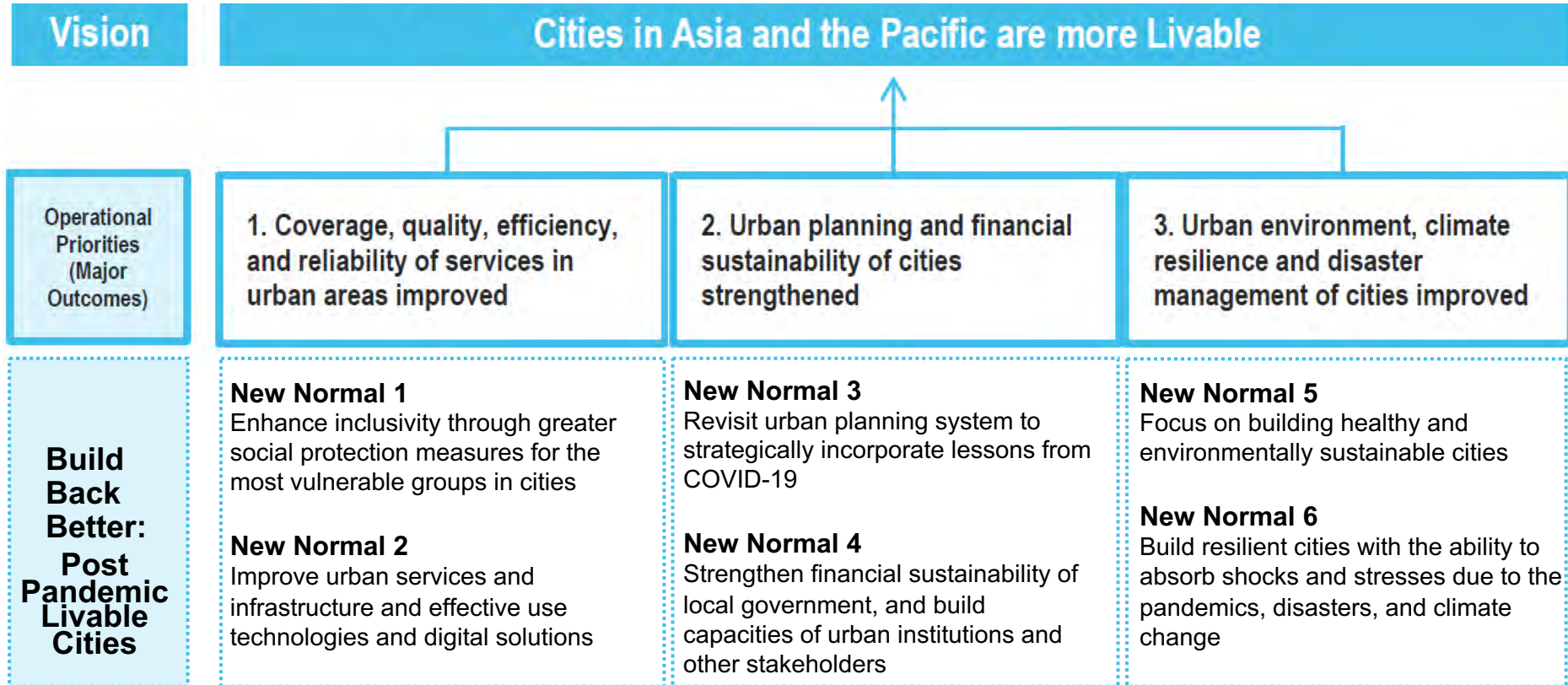- Inadequate social protection systems for vulnerable people, MSMEs and workers

5. Stressed local governments
- Local governments are overwhelmed to tackle the crisis on the ground.
- Increased demands for emergency preparedness, crisis management, and operational readiness.

Post Covid-19: Short and Medium Actions for the New Normal

Vision	Cities in Asia and the Pacific are more Livable

Operational Priorities (Major Outcomes)	1. Coverage, quality, efficiency, and reliability of services in urban areas improved	2. Urban planning and financial sustainability of cities strengthened	3. Urban environment, climate resilience and disaster management of cities improved
Build Back Better: Post Pandemic Livable Cities	**New Normal 1** Enhance inclusivity through greater social protection measures for the most vulnerable groups in cities **New Normal 2** Improve urban services and infrastructure and effective use technologies and digital solutions	**New Normal 3** Revisit urban planning system to strategically incorporate lessons from COVID-19 **New Normal 4** Strengthen financial sustainability of local government, and build capacities of urban institutions and other stakeholders	**New Normal 5** Focus on building healthy and environmentally sustainable cities **New Normal 6** Build resilient cities with the ability to absorb shocks and stresses due to the pandemics, disasters, and climate change

SMART CITY COMPONENTS

2. Healthy and Age-friendly Cities: ADB's New Integrated Approach for the PRC

a) Urbanization + demographic transition (aging) + high ages = four-generation urban society.

b) Demands a rethinking of urban planning and management and we envision health and aging as opportunities to plan and design better cities in an emerging four-generation urban world.

c) Health and well-being are not traditionally considered drivers of urban development investments, but now certainly can be value-additions in urban development investments, especially in high-income and in upper-middle-income countries, including PRC.

d) Non-communicable diseases can be addressed by clean environments and basic infrastructure and through enabling healthy lifestyles by green and clean urban environments with public green parks and linear green spaces with footpaths, bicycle lanes and public transport, among others, which also contribute to making cities livable, low-carbon and climate-resilient.

Key challenges? Health and ageing as opportunities in an urbanizing four-generation world

1. **Health and wellbeing** will be central for people and communities, and city competitiveness

2. **Urbanization and ageing:** most people will live in cities, many will be above 60, and many of these will grow to high ages**,** requiring changes in policies and public health perspectives

3. **Urbanization challenges:** social and demographic inclusion, community cohesion, social protection systems'- and urban fiscal sustainability, environmental- and climate change.

4. **Four-generation society:** small families, small households and singles, more elderly, fewer babies, children and young adults require more vibrant and interconnected community life.

5. **Technology and work-life patterns:** "smart cities" apps to improve age-friendly interactions, changing work-life patterns and self-fulfillment in 'future of work' scenarios.

Background: Health and city planning have been intrinsically linked throughout history

- Even before ancient **Greek and Roman times** planners considered variety of health dimensions for location and layout of cities

- They had access to food and methods for safe food storage

- water supply systems, sewers, latrines, public baths, water, and downstream dilution of sewage and stormwater,

- Good natural ventilation, sun exposure and shadow for housing, public space

- **Middle ages**: Plague, cholera, other epidemics, land use along urban rivers, hospitals, animal markets outside city walls, rules of hygiene, bath houses
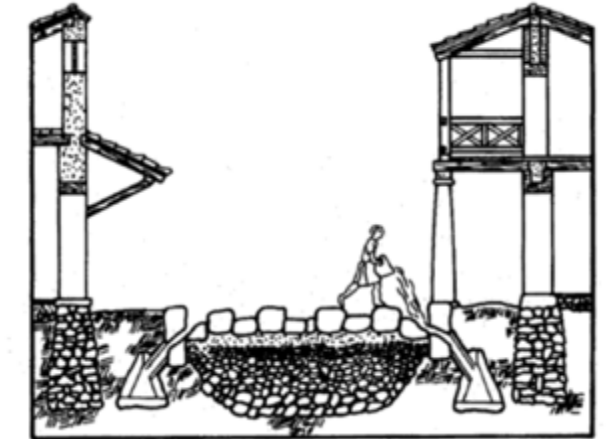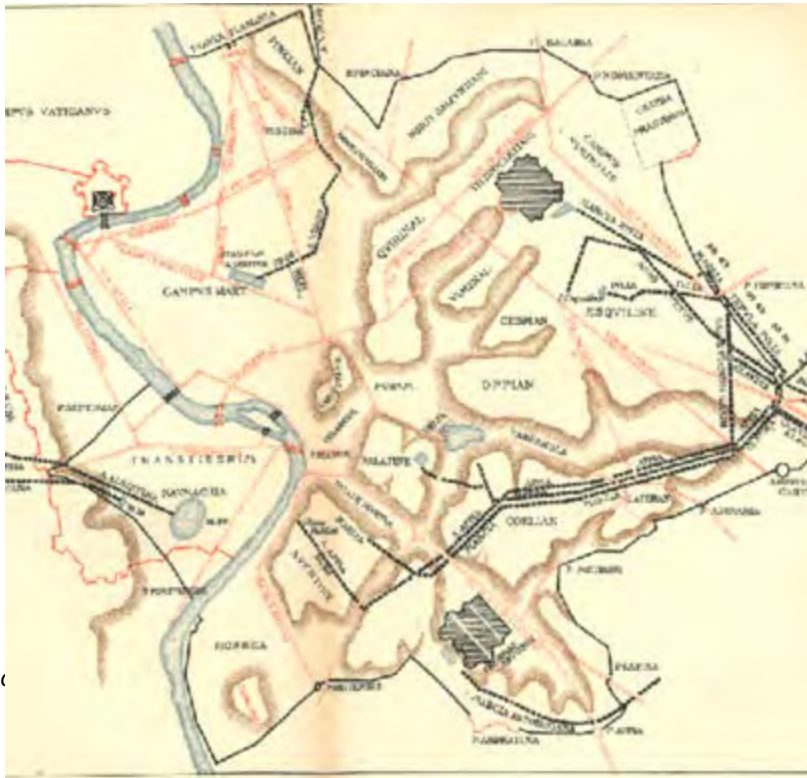
Referals: Leonard Duhl, Evelyn de Leeuw, Vitruvius, Thomas Morus, Frederick Law Olmsted Ebenezer Howard, Patrick Geddes, Daniel H, Burnham, Jane Jacobs, Lewis Mumford, Leonardo Benevolo, Peter Hall, Jan Gehl
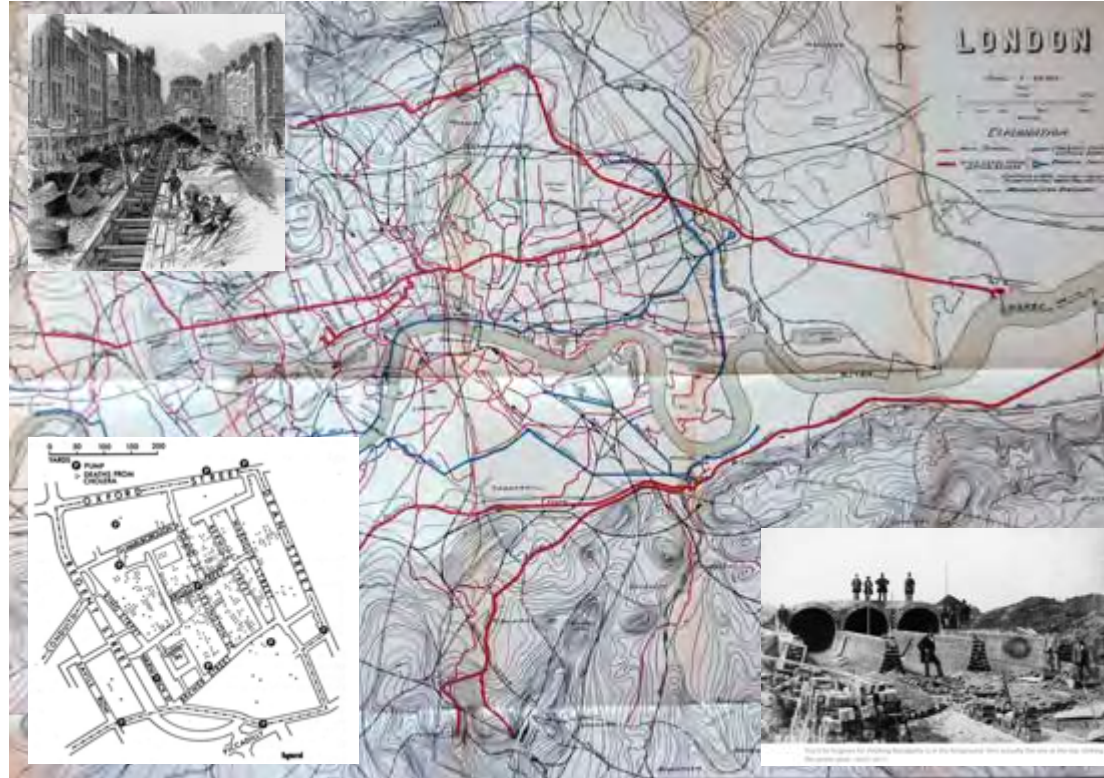
Background: Health and city planning have been intrinsically linked throughout history

Industrialization and urbanization in **1800s**:

- John Snow map in London links cholera outbreak to polluted water source and 'Great Stink' in London (1854 and 1858) prompt sewer and embankment works

- Large urban expansions in Europe and United States integrate sewer and wastewater treatment (i.e. Berlin, Barcelona)

- Chicago: slaughterhouses and heavy industries pollute lake Michigan, cholera outbreak, change of flow of river in 1900

- Critique of urban conditions leads to Garden Cities and City Parks

Referals: Leonard Duhl, Evelyn de Leeuw, Vitruvius, Thomas Morus, Frederick Law Olmsted, Ebenezer Howard, Patrick Geddes, Daniel H, Burnham, Jane Jacobs, Lewis Mumford, Leonardo Benevolo, Peter Hall, Jan Gehl

WHO Europe: Healthy Cities Programs

Definition of *Health* from constitution of WHO: **Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.** *The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief or economic and social condition.*

"Healthy cities are places that deliver for people and the planet. They engage the **whole of society**, encouraging the participation of all communities in the pursuit of peace and prosperity. Healthy cities lead by example in order to achieve change for the better, **tackling inequalities and promoting good governance and leadership for health and well-being. Innovation, knowledge sharing and health diplomacy** are valued and nurtured in healthy cities." [WHO]

Integrating Sustainable, Healthy and Age-Friendly City Planning in Europe promoting healthy lifestyles and healthy vibrant communities

Healthy Cities Programs since 1985:
WHO Europe Healthy Cities Project Early Principles

11 Qualities of a Healthy City

1. Clean, safe, high-quality environment
2. **Stable and sustainable ecosystem**
3. Strong, mutually supportive and non-exploitative community.
4. **Public participation (life, health wellbeing)**
5. Meet basic needs for all people (food, water, shelter, income, safety, work)
6. **Variety of experiences and resources, contacts, interaction and communication**.
7. **Diverse, vital and innovative economy.**
8. **Encourage connections with cultural and biological heritage**
9. City form and design that enhances the above parameters and forms of behavior.
10. Public health and sick care services for all.
11. High health status (high positive health status and low disease status)*.
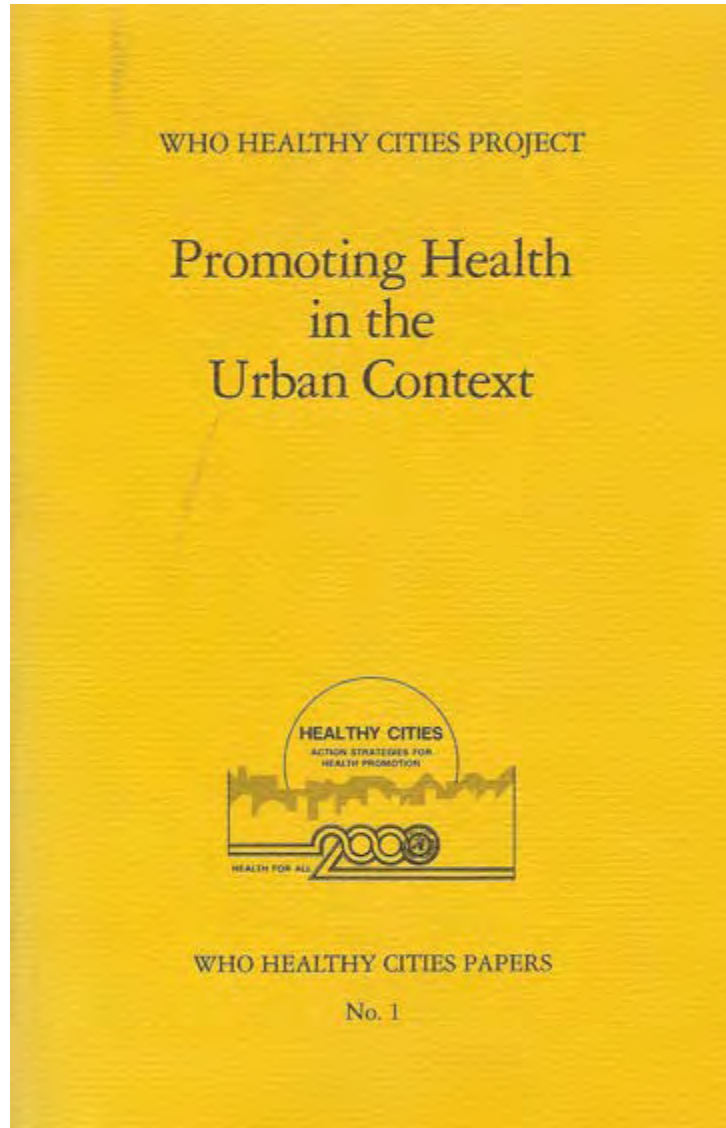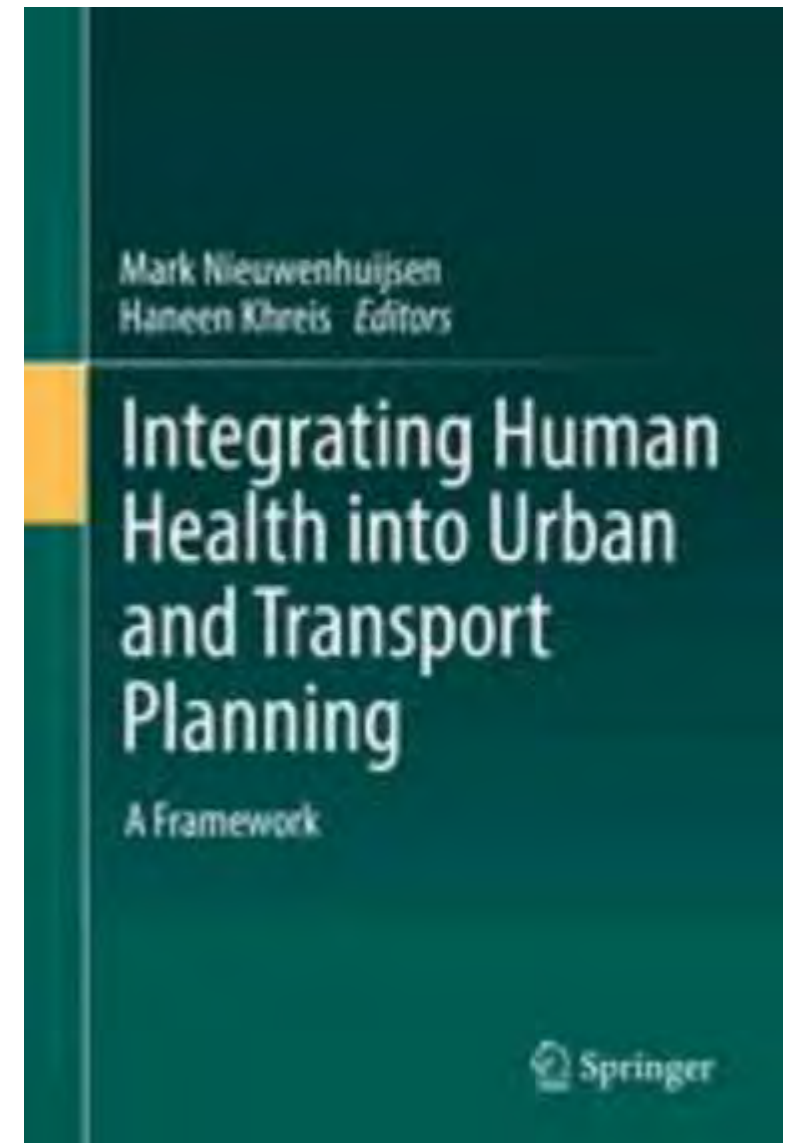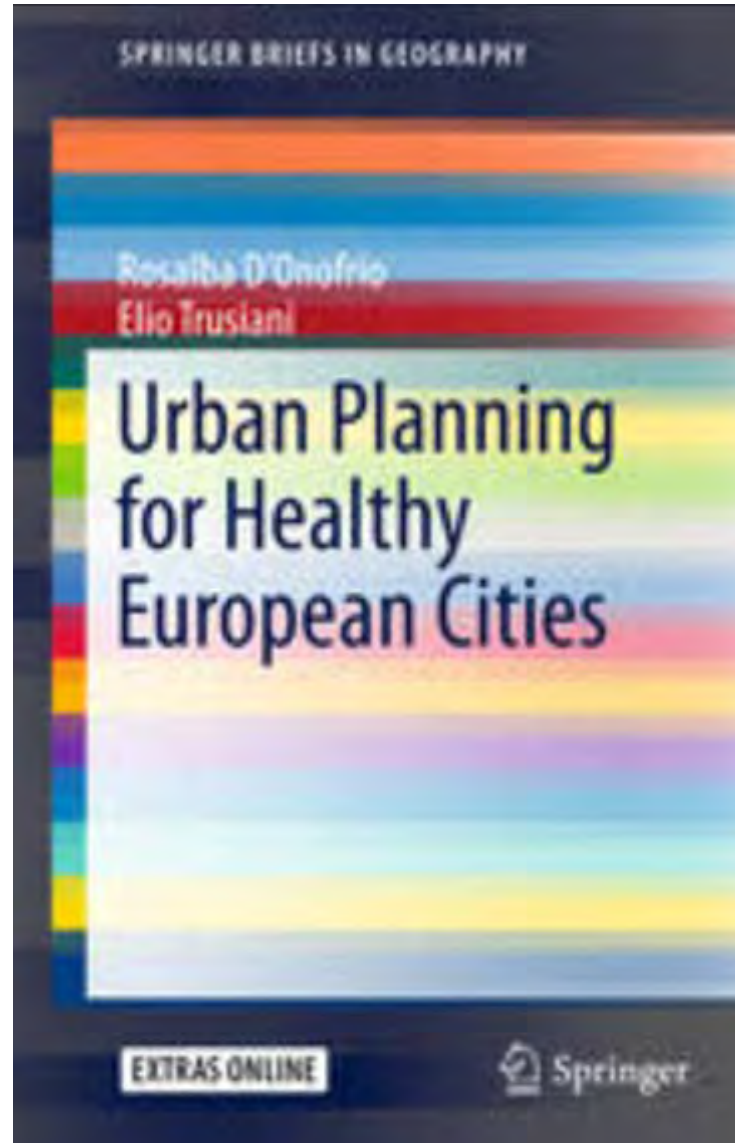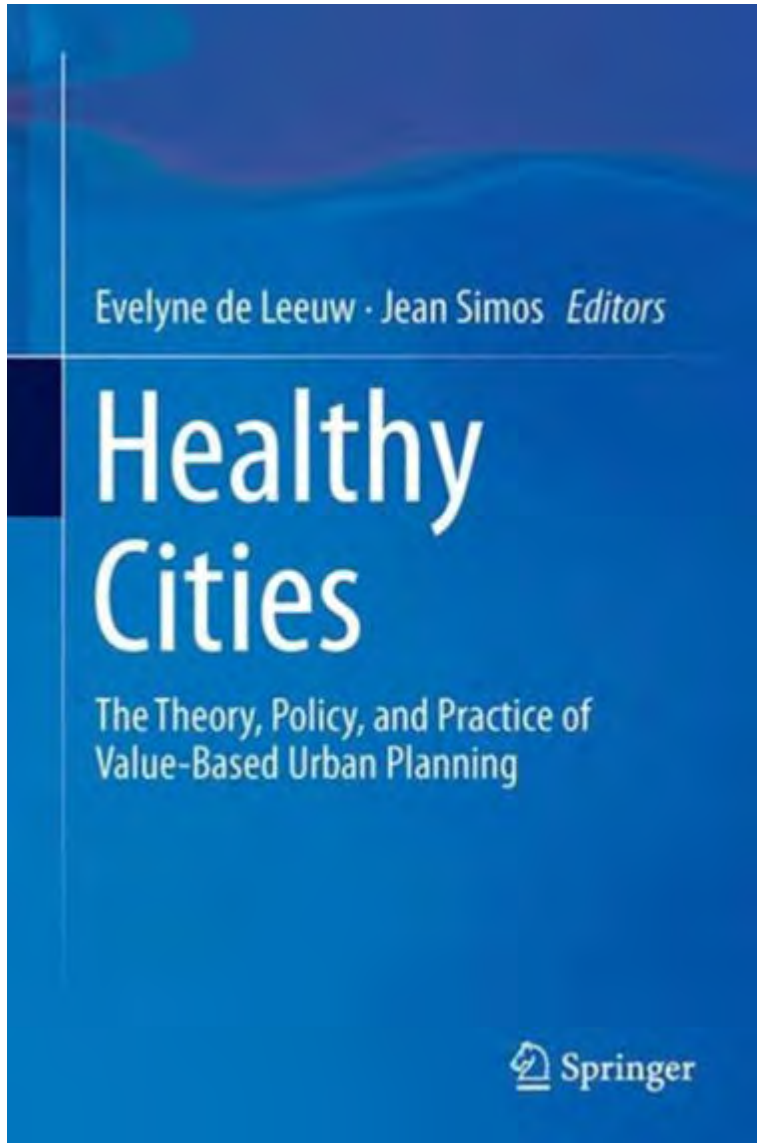
(Hancock and Duhl, 1986)

WHO HEALTHY CITIES PROJECT

Promoting Health
in the
Urban Context

HEALTHY CITIES
ACTION STRATEGIES FOR
HEALTH PROMOTION

2000
HEALTH FOR ALL

WHO HEALTHY CITIES PAPERS

No. 1

Table 1 Possible Indicators of a Healthy City

Parameter	Possible Indicator
1. Physical environment quality	- overall index
- pollution	- air pollution index
- urban design	- per cent green space
- housing	per cent national/international standards
2. Ecosystem sustainability	
- viability	- local survival of sensitive species
- sustainability	- ratio of non-renewable energy imports to local renewable energy production
3. Community strength	
- mutuality	- coherence (Antonovsky, 1979)
	- self-esteem perceived social support
4. Participation & Control	- municipal democracy index (Morris 1982)
5. Basic human needs	- POLI index
- food and water	- per cent hungry
- shelter	- per cent homeless
- income	- per cent below poverty line
	- relative distribution of income
	- violent crime rate
- safety	- per cent employed (formal and informal economies)
6. Access to variety	
- access	- perceived and objective
- variety	- scope and variety reported
- experiences	
- resources	
- contact/interaction	
7. Diverse city economy	
- variety	
- types of enterprise	
- size of enterprises	
- innovation	
- level of wealth	
- distribution of wealth	
8. Sense of connectedness	
- history	
- culture	
- other people	- social ties, networks
- nature/biology	
9. City form	
- fit /Lynch)	- stability
	- adaptability
10. Optimum public health & health care services	
- appropriateness	- extent of primary care, home care
- accessibility	- per cent not covered by »insurance«
- health protective legislation	- non-smoking by-laws
	- community prevention index (Irvine)
11. High Health Status	
a) High positive health	
- preventive behaviour	- diet or exercise
- perceived well-being	- happiness, satisfaction with health
- social well-being	- support perceived
- overall	- coherence, self-esteem
b) low negative health (disease)	
- risk behaviour	- per cent smoking
- stress	- life events
- morbidity	- days of reported disability
- mortality	- life expectancy at age 40

Healthy Cities Scientific Approaches and Practice Guides

Evelyne de Leeuw · Jean Simos *Editors*

Healthy Cities

The Theory, Policy, and Practice of Value-Based Urban Planning

Springer

SPRINGER BRIEFS IN GEOGRAPHY

Rosalba D'Onofrio
Elio Trusiani

Urban Planning for Healthy European Cities

EXTRAS ONLINE

Springer

Mark Nieuwenhuijsen
Haneen Khreis *Editors*

Integrating Human Health into Urban and Transport Planning

A Framework

Springer

9th Global Conference on Health Promotion
SHANGHAI 2016

Shanghai Consensus on Healthy Cities 2016

Healthy Cities
MAYORS FORUM
健康城市 市长论坛

We – more than 100 mayors from around the world – have come together on 21 November 2016 in Shanghai, China – united in the knowledge that health and sustainable urban development are inextricably linked, and steadfastly committed to advancing both. We also recognise that health and wellbeing are at the core of the United Nations Development Agenda 2030 and its Sustainable Development Goals.

Our governance principles

As mayors we commit to five Healthy Cities governance principles:

1. **Integrate health as a core consideration in all policies:** prioritize policies that create cobenefits between health and other city policies, and engage all relevant actors in partnership-based urban planning;
2. **Address all – social, economic and environmental – determinants of health:** implement urban development planning and policies which reduce poverty and inequity, address individual rights, build social capital and social inclusion, and promote sustainable urban resource use;
3. **Promote strong community engagement:** implement integrated approaches to promoting health in schools, workplaces, and other settings; increase health literacy; and harness the knowledge and priorities of our populations through social innovation and interactive technologies;
4. **Reorient health and social services towards equity:** ensure fair access to public services and work towards Universal Health Coverage;
5. **Assess and monitor wellbeing, disease burden and health determinants:** use this information to improve both policy and implementation, with a special focus on inequity – and increase transparency accountability.

Our ten priority Healthy City action areas

As mayors we commit to ten Healthy Cities action areas which we will integrate fully into our implementation of the 2030 sustainable development agenda. We will:

1. work to deliver the **basic needs of all our residents (education, housing, employment and security)**, as well as work towards building more equitable and sustainable social security systems;
2. take measures to **eliminate air, water and soil pollution in our cities, and tackle climate change** at the local level by making our industries and cities green and ensure clean energy and air;
3. **invest in our children**, prioritize early child development and ensure that city policies and programs in health, education and social services leave no child behind;
4. **make our environment safe for women and girls**, especially protecting them from harassment and gender-based violence;
5. **improve the health and quality of life of the urban poor, slum and informal settlement dwellers, and migrants and refugees** – and ensure their access to affordable housing and health care;
6. **address multiple forms of discrimination**, against people living with disabilities or with HIV AIDS, older people, and others;
7. **make our cities safe from infectious disease** through ensuring immunization, clean water, sanitation, waste management and vector control;
8. **design our cities to promote sustainable urban mobility**, walking and physical activity through attractive and green neighborhoods, active transport infrastructure, strong road safety laws, and accessible play and leisure facilities;
9. implement **sustainable and safe food policies** that increase access to affordable healthy food and safe water, reduce sugar and salt intake, and reduce the harmful use of alcohol including through regulation, pricing, education and taxation;
10. **make our environments smoke free**, legislating to make indoor public places and public transport smoke-free, and banning all forms of tobacco advertising, promotion and sponsorship in our cities.

Jan Gehl Technical Guides

1. **Inclusion is outcome**: All people who use a public space feel welcome, respected, safe, and accommodated, regardless of who they are etc.
2. **Inclusion is a process**: Inclusionary public space processes recognize and respect needs and values and actively engaging and cultivating trust allowing all community members to shape, achieve, and sustain a common vision.
3. **Inclusion is a tool**: Can reduce and ultimately eliminate health inequities stemming from long-term systemic discrimination and other barriers.
4. **Healthy inclusive public places can support health equity**: Accessible and welcoming to all; Reflect shared social values (i.e. dignity, respect)

Inclusive Healthy Places

A Guide to Inclusion & Health
in Public Space: Learning
Globally to Transform Locally

etplace in Burlington, Vermont (Photo: Steve Mease via Ch

Gehl Institute

Jan Gehl Technical Guides

Principle 1: Context
Recognize community context by cultivating knowledge of the existing conditions, assets, and lived experiences that relate to health equity.

Principle 2: Process
Support inclusion in the processes that shape public space by promoting civic trust, participation, and social capital.

Principle 3: Design & Program
Design and program public space for health equity by improving quality, enhancing access and safety, and inviting diversity.

Principle 4: Sustain
Foster social resilience and capacity of local communities to engage with changes in place over time by promoting representation, agency, and stability.
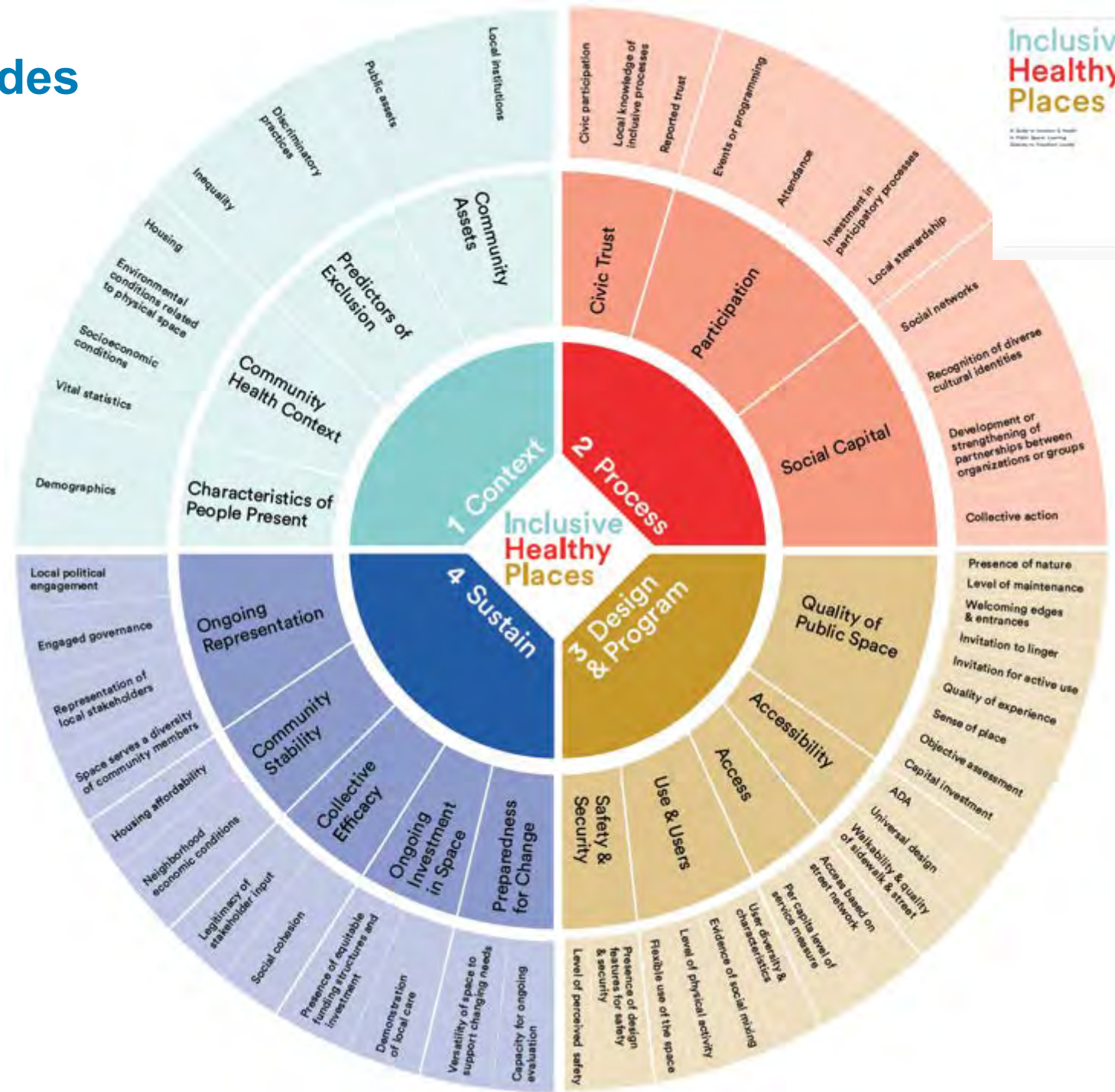
Age-Friendly Cities: WHO Concept of Active Ageing

Active ageing optimizes opportunities for health, participation and security to enhance quality of life as people age.

Age-friendly cities enable active aging:
1. recognize capacities and resources of older people;
2. anticipate and respond flexibly to ageing-related needs and preferences;
3. respect their decisions and lifestyle choices;
4. protect most vulnerable; and
5. promote inclusion in and contribution to all areas of community life.

Global Age-friendly Cities: A Guide
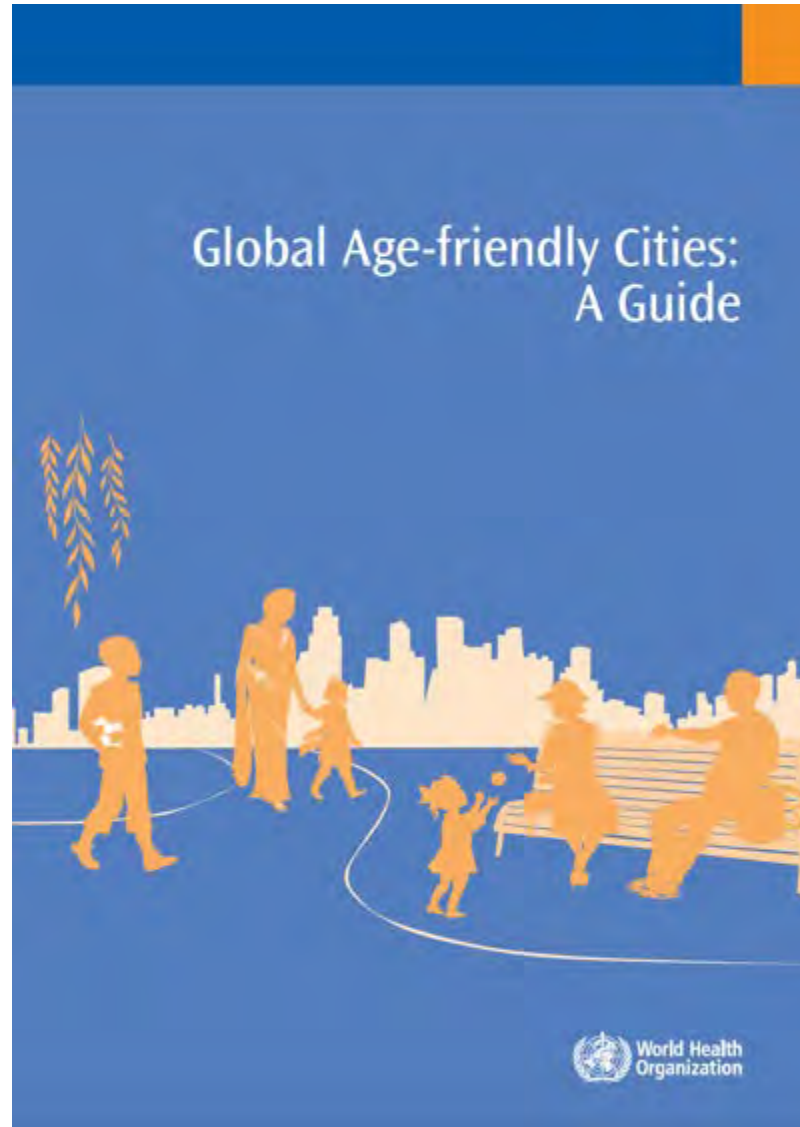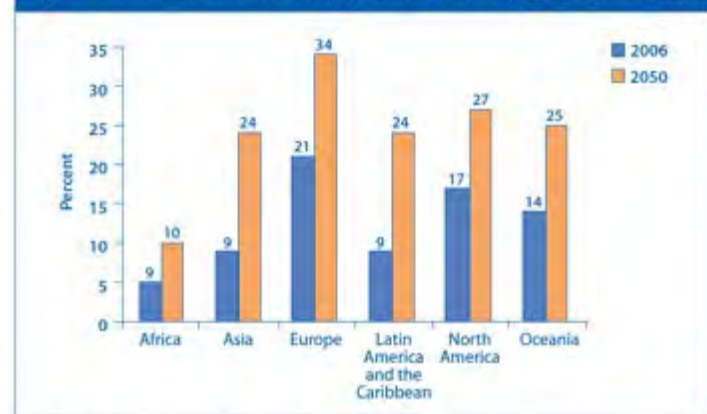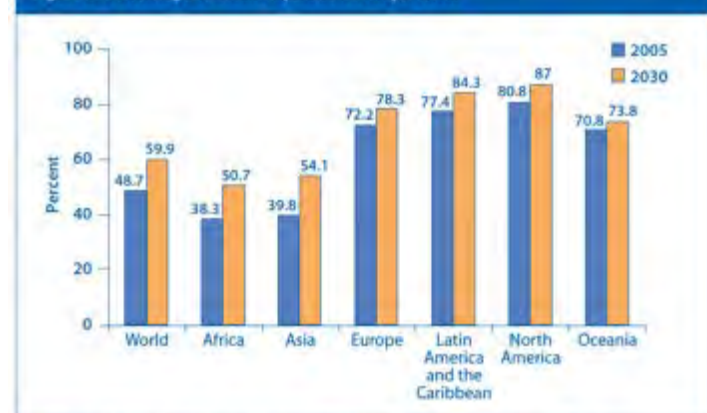
World Health Organization

Figure 1. Percent distribution of world population 60 or over by region, 2006 and 2050

Source: United Nations Department of Economic and Social Affairs (1)

Figure 2. Percentage of Urban Population in Major Areas

Source: United Nations Department of Economic and Social Affairs, Population Division (6)

WHO Age-Friendly Cities Checklists

Age-friendly outdoor spaces and buildings checklist

Environment

- The city is clean, with enforced regulations limiting noise levels and unpleasant or harmful odours in public places.

Green spaces and walkways

- There are well-maintained and safe green spaces, with adequate shelter, toilet facilities and seating that can be easily accessed.
- Pedestrian-friendly walkways are free from obstructions, have a smooth surface, have public toilets and can be easily accessed.

Outdoor seating

- Outdoor seating is available, particularly in parks, transport stops and public spaces, and spaced at regular intervals; the seating is well-maintained and patrolled to ensure safe access by all.

Pavements

- Pavements are well-maintained, smooth, level, non-slip and wide enough to accommodate wheelchairs with low curbs that taper off to the road.
- Pavements are clear of any obstructions (e.g. street vendors, parked cars, trees, dog droppings, snow) and pedestrians have priority of use.

Roads

- Roads have adequate non-slip, regularly spaced pedestrian crossings ensuring that it is safe for pedestrians to cross the road.
- Roads have well-designed and appropriately placed physical structures, such as traffic islands, overpasses or underpasses, to assist pedestrians to cross busy roads.
- Pedestrian crossing lights allow sufficient time for older people to cross the road and have visual and audio signals.

Traffic

- There is strict enforcement of traffic rules and regulations, with drivers giving way to pedestrians.

Cycle paths

- There are separate cycle paths for cyclists.

Safety

- Public safety in all open spaces and buildings is a priority and is promoted by, for example, measures to reduce the risk from natural disasters, good street lighting, police patrols, enforcement of by-laws, and support for community and personal safety initiatives.

Services

- Services are clustered, located in close proximity to where older people live and can be easily accessed (e.g. are located on the ground floor of buildings).
- There are special customer service arrangements for older people, such as separate queues or service counters for older people.

Buildings

- Buildings are accessible and have the following features:
  – elevators
  – ramps
  – adequate signage
  – railings on stairs
  – stairs that are not too high or steep
  – non-slip flooring
  – rest areas with comfortable chairs
  – sufficient numbers of public toilets.

Public toilets

- Public toilets are clean, well-maintained, easily accessible for people with varying abilities, well-signed and placed in convenient locations.

Linking communities across oldest and youngest: organizing communities for four generations with fewer children and more elderly

6. Take collective responsibility for children

What if every child is the community's child? Parents in cities can often feel isolated, exhausted, and lacking in support for what is an around-the-clock job, especially during the first critical years of their children's lives. Courtyards, parks, streets, and plazas that are intentionally designed to be both shared and child-friendly offer opportunities for families and caregivers to connect and foster a support network with one another. Parents and city staff can work with communities to create culturally specific programming that meets the desires of children and adults of all ages. These spaces not only promote social interaction and improve connections between individuals, but also strengthen the larger system of community which can provide collective support to those who need it.

Space to Grow

Ten principles that support happy, healthy families in a playful, friendly city
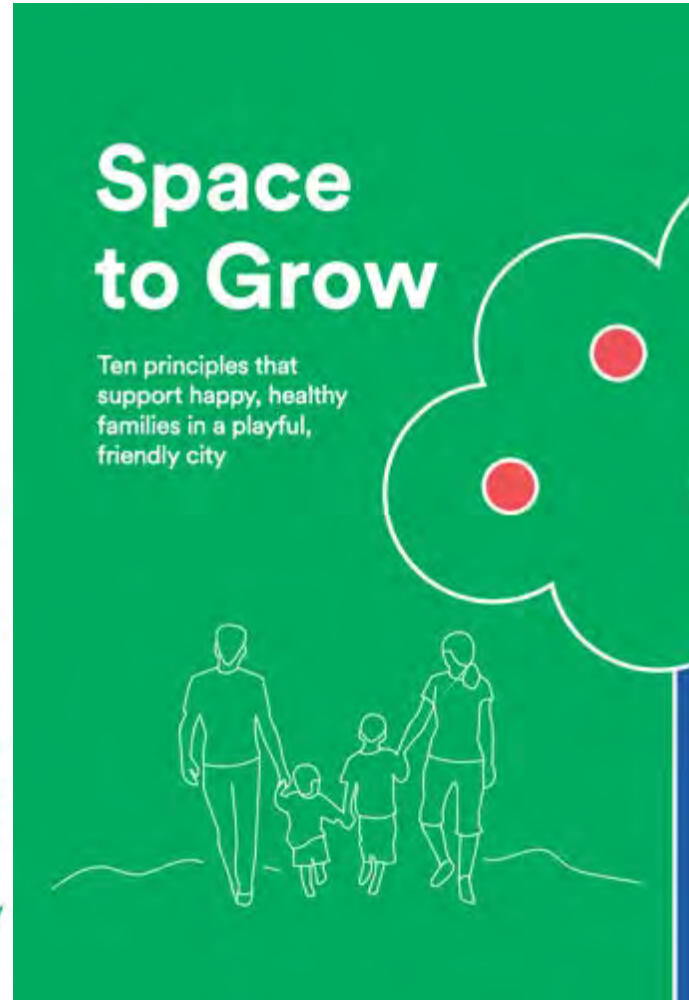
Referals: Maria Montessori, Remo Largo, Ken Robinson, Manfred Spitzer, Martina Leibovici-Mühlberger, Michael Winterhoff, Jan Gehl, Sweden Elderly-Youth Housing

Urban Health Challenges and Health Outcomes in Urban China: *Healthy China 2030* and *Lancet Commission on Healthy Cities in PRC*
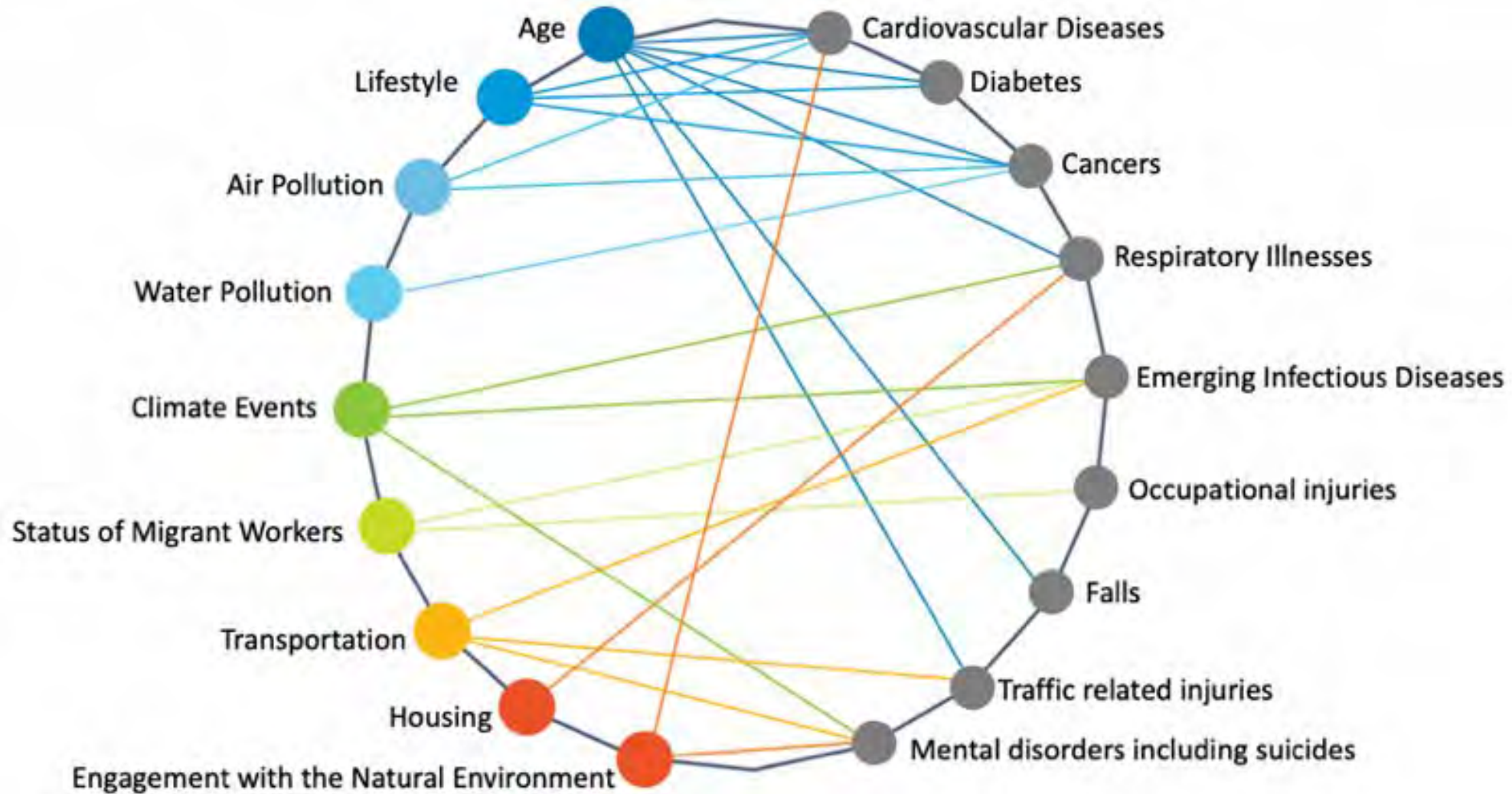
ADB's New operational tool integrating sustainable urban planning and management with health and age-friendly outcomes and care systems to achieve Strategy 2030 outcomes

1. **HIA: Health Impact Assessment** (including needs / challenges of specific age-groups)

2. **HACAMP: Healthy and Age-Friendly City Action and Management Plan**

- *Mainstreaming for cities and projects analogous to EIA and EMP;*
- *Building on historical and recent evidence-based scientific and piloting work;*
- *Integrating urban, health and ageing aspects promoting positive outcomes;*
- *Adding some innovative new aspects;*
- *Aligning with sustainable urban planning principles with many co-benefits for health, aligned with OP4 and Strategy 2030.*

Health Impact Assessment (HIA): Definition and Process

- How an event, policy or project can *influence health and determinant of health outcomes*
- Systematic, evidence-based *decision and management support tool*
- Focused on health promotion and protection to *achieve maximum benefits at the local level*

HEALTH IMPACT ASSESSMENT
A GOOD PRACTICE SOURCEBOOK
OCTOBER 2018
ASIAN DEVELOPMENT BANK
ADB

ENGAGEMENT

| Scoping health issues needing attention | Profiling/ Data Collection to fully understand | Risk assessment to prioritize issues | Develop & implement management measures | Surveillance (monitor) & Respond |
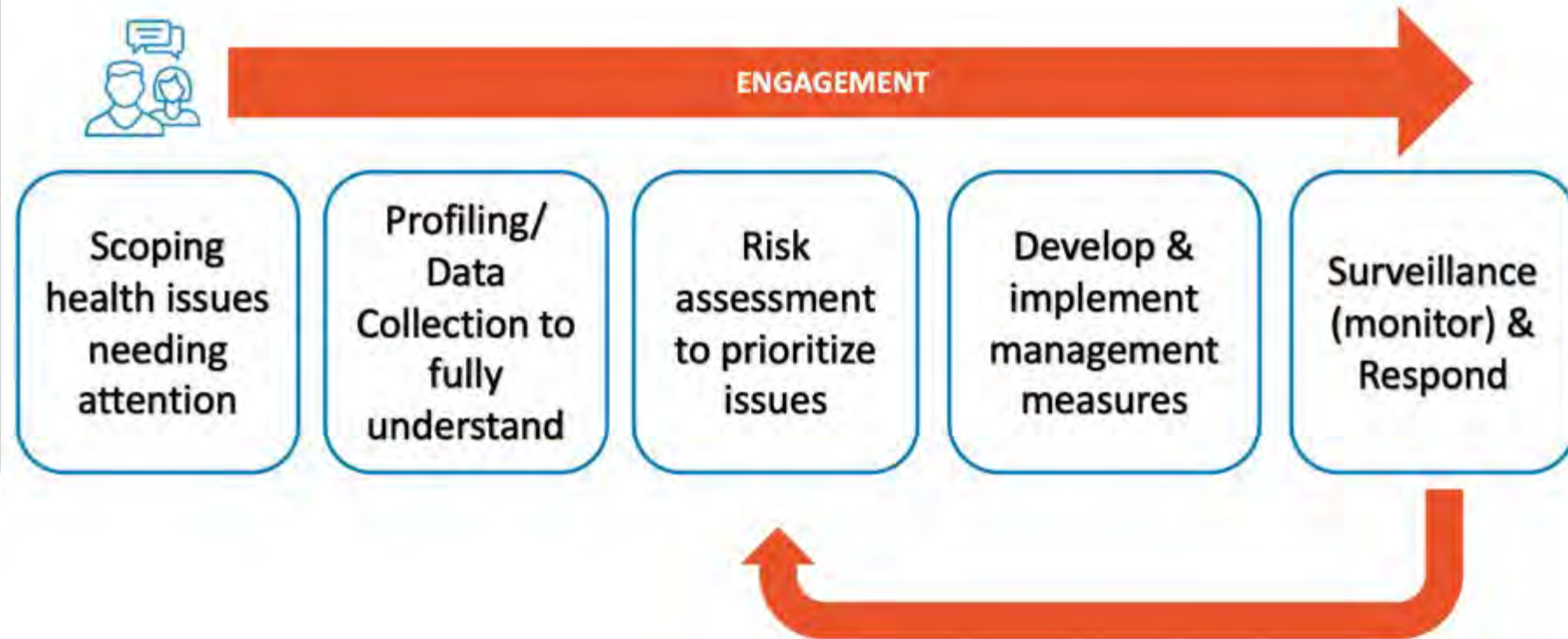
HIA and HACAMP: Basic Concept: Public health needs and objectives in cities may follow hierarchy of needs principle

- *Cover basics first for lesser developed cities*
- *address more advanced health needs associated with lifestyle options in more developed cities*
- *ultimately achieving a high level of wellbeing for all residents*

Pyramid levels (top to bottom):

High-Quality Healthy City
Achieve full potential, public art, lifelong learning

Urban Culture
Urban beauty, culture, higher education, healthy lifestyle communities

Healthy Urban Community
Communities, education, social services, attractive public spaces, physical health, healthy lifestyles

Urban Governance and Environment
Safety, security, welfare, health services, attractive public transport, green parks, jobs

Urban Infrastructure and Basic Services: Basic Health
Clean air, water, food, shelter, sanitation, transport, electricity, solid waste management

Arrow labels (bottom to top): Health → Urban Livability → Well-Being

Source: Authors. Based on the theory of a hierarchy of needs by A.H Maslow. 1943. A Theory of Human Motivation. *Psychological Review*. 50. pp. 370-96.

HIA and HACAMP Process

Healthy and Age-Friendly Cities
Multidisciplinary and Participatory Process

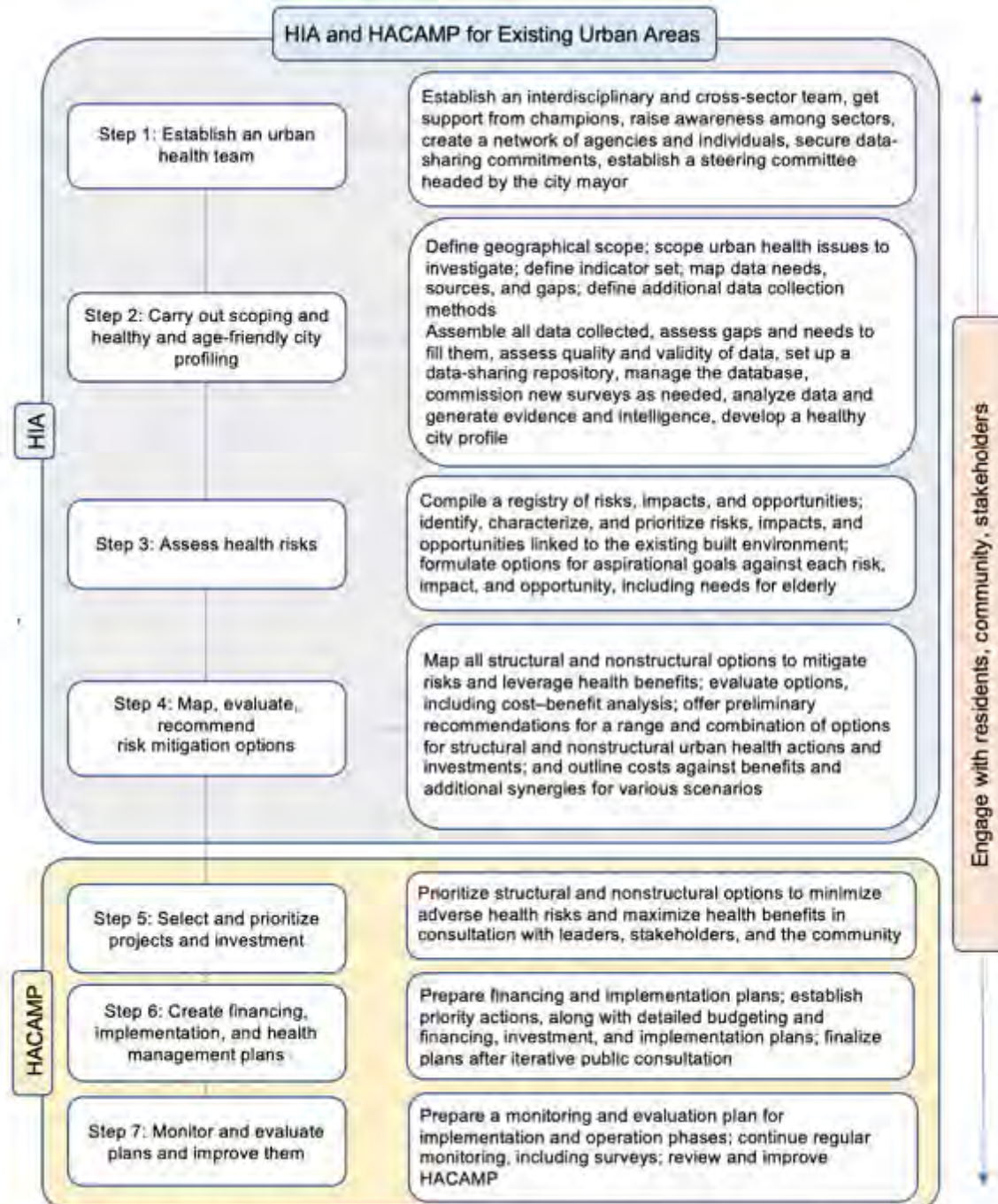| Retrofit existing urban areas	Health- and age-positive urban development, project
HIA	**HIA**
Establish urban health team	Establish urban health team
Scope and profile healthy and age-friendly cities	Scope and profile healthy and age-friendly city project area
Assess health risks	Assess health risks
Map, evaluate, recommend risk mitigation options	Map, evaluate, recommend risk mitigation options
HACAMP	**HACAMP**
Select and prioritize projects and investment	Select and prioritize projects and investment
Prepare financing, implementation, and health management plans	Prepare financing, implementation, and health management plans for added health actions
Prepare a monitoring and evaluation plan and improve it	Monitor and evaluate HACAMP

Engage with residents, community, stakeholders

HACAMP = healthy and age-friendly city action and management plan, HIA = health impact assessment.
Source: Authors.

HIA and HACAMP:

Step-by-Step

HIA and HACAMP for Existing Urban Areas

HIA

Step 1: Establish an urban health team

Establish an interdisciplinary and cross-sector team, get support from champions, raise awareness among sectors, create a network of agencies and individuals, secure data-sharing commitments, establish a steering committee headed by the city mayor

Step 2: Carry out scoping and healthy and age-friendly city profiling

Define geographical scope; scope urban health issues to investigate; define indicator set; map data needs, sources, and gaps; define additional data collection methods
Assemble all data collected, assess gaps and needs to fill them, assess quality and validity of data, set up a data-sharing repository, manage the database, commission new surveys as needed, analyze data and generate evidence and intelligence, develop a healthy city profile

Step 3: Assess health risks

Compile a registry of risks, impacts, and opportunities; identify, characterize, and prioritize risks, impacts, and opportunities linked to the existing built environment; formulate options for aspirational goals against each risk, impact, and opportunity, including needs for elderly

Step 4: Map, evaluate, recommend risk mitigation options

Map all structural and nonstructural options to mitigate risks and leverage health benefits; evaluate options, including cost–benefit analysis; offer preliminary recommendations for a range and combination of options for structural and nonstructural urban health actions and investments; and outline costs against benefits and additional synergies for various scenarios

HACAMP

Step 5: Select and prioritize projects and investment

Prioritize structural and nonstructural options to minimize adverse health risks and maximize health benefits in consultation with leaders, stakeholders, and the community

Step 6: Create financing, implementation, and health management plans

Prepare financing and implementation plans; establish priority actions, along with detailed budgeting and financing, investment, and implementation plans; finalize plans after iterative public consultation

Step 7: Monitor and evaluate plans and improve them

Prepare a monitoring and evaluation plan for implementation and operation phases; continue regular monitoring, including surveys; review and improve HACAMP

Engage with residents, community, stakeholders

HACAMP = healthy and age-friendly city action and management plan, HIA = health impact assessment.
Source: Authors.

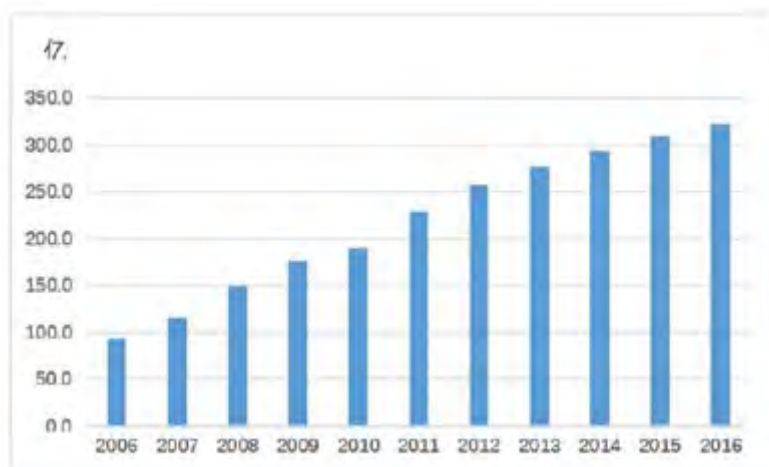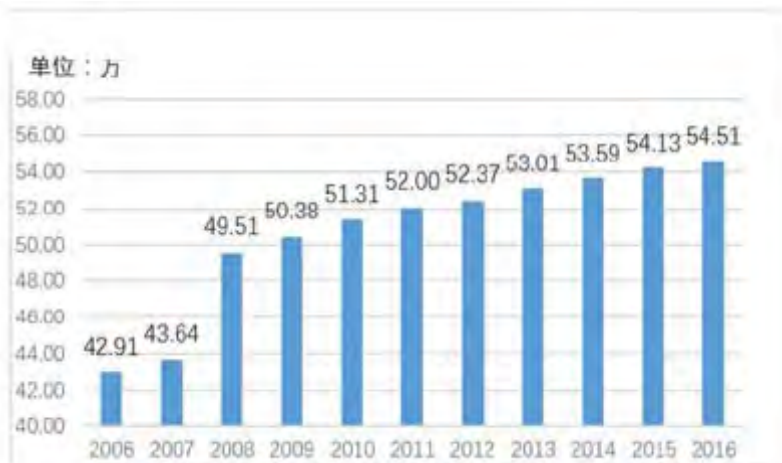# Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project

Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
LOCATION: NORTHEAST, PERIPHERY, SLOW GDP GROWTH

- POP: 429,000 to 545,000 (2006 to 2016)
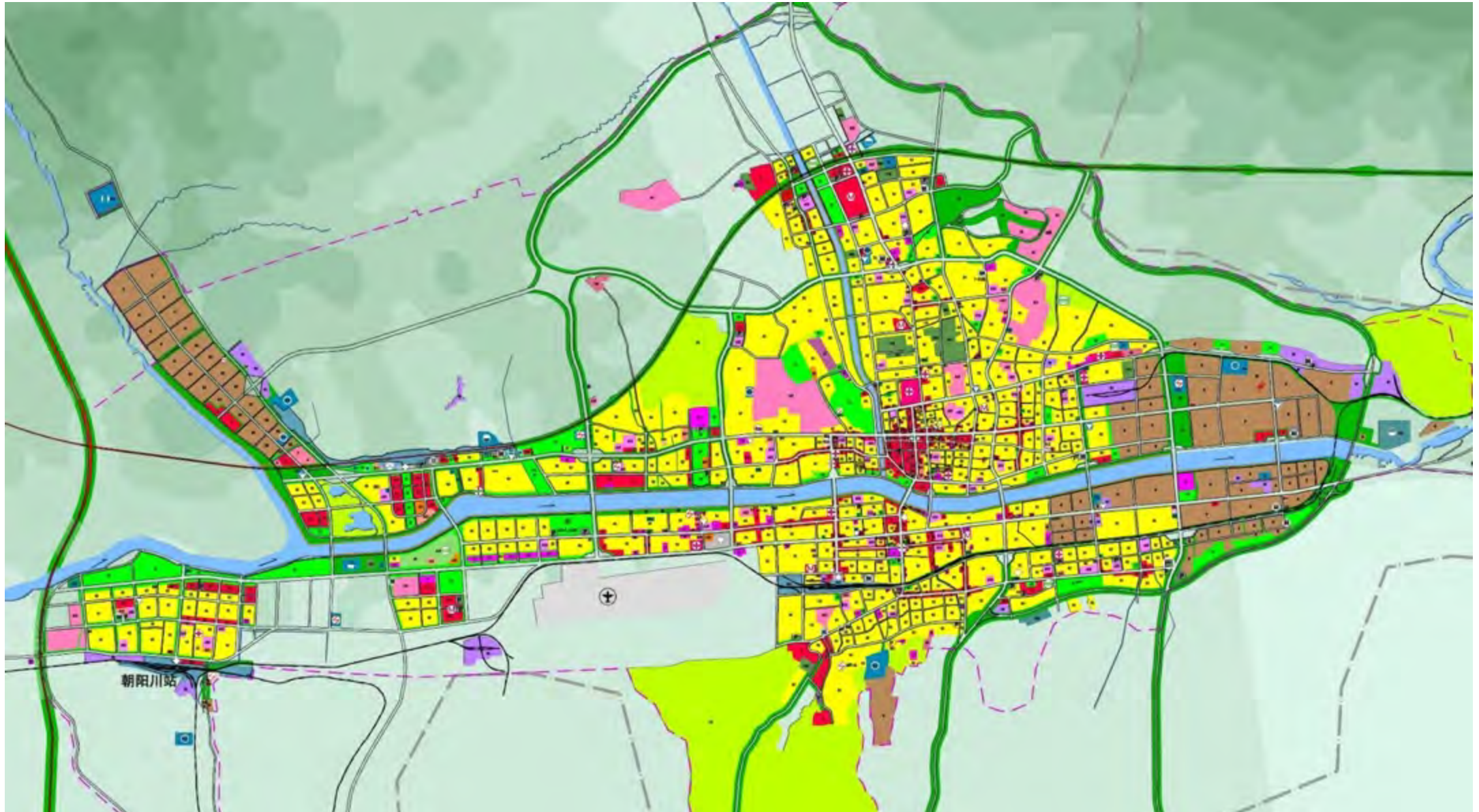- GDP: 32.13 billion RMB (2016)
- GDP growth: 2.8% av. (2006-2013)

URBAN FORM: FROM COMPACT CITY TO LINEAR CITY

Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
LAND USE MASTER PLAN TO 2030 – SEPARATION AND SUPERBLOCKS

Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
KEY CHALLENGES

- Yanji is affected by economic decline of northeastern PRC

- Inadequate urban infrastructure and services cause inconvenience and disruptions to daily life like:

- Traffic congestion

- inefficient and insufficient public transport

- Lack of safe pedestrian and bicycle lanes

- pedestrian-unfriendly urban pattern and missing road network links (small roads)

- urban and river flooding,

- inefficient water supply and wastewater management

Photos at PM of 2nd April, 2019

Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
INTEGRATION OF LOW-CARBON, CLIMATE-RESILIENCE AND HEALTH

- Project approach: Integrated solution to make Yanji more livable, transforms city promotes low-carbon urban mobility and physical activities that enhance public health.

- First bus rapid transit (BRT) line in city and PRC's Northeast

- integrates with improved bicycle and pedestrian networks and environments and new small streets and green links

- Connects major urban functions areas a following principles of "compact city" and "transit-oriented development"

- New and completed river greenways are "sponge city" green infrastructure, enhancing climate resilience.

- Improve water supply and wastewater management.

OP1   OP2   OP3   OP4

Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
HIA and HACAMP: SYSTEMATICALLY INTEGRATE AND IMPROVE HEALTH

HIA: health impact assessment includes baseline assessment of health determinants and risks and adverse impacts of project, challenges and opportunities for improved health outcomes

HACAMP: healthy and age-friendly city action and management planning to control communicable diseases and significantly reducing non-communicable diseases and promote healthy lifestyles, including:

- environmental health factors
- basic urban services associated with health
- specific health care services and access to them
- urban actions that enable healthier and safer lifestyles; and
- urban and building design features like universal accessibility of public spaces and facilities and public transport by people of all ages (four generations).

BRT + TRANSIT-ORIENTED DEVELOPMENT + NON-MOTORIZED TRANSP

BRT integrating with Yanji Masterplan

TOD: mix of uses, dense, walkable

BRT Station, Pedestrian safety

Sponge Infrastructure at BRT

Small roads, NMT connections to BRT

Project Map

- Bus rapid transit (BRT) corridor and stations with 5 and 10 minute walking radii
- Transit-oriented development at BRT stations: high density, mixed use, pedestrian-friendly
- Health/Education Facilities with improved safe pedestrian connections to BRT stations
- Small roads with green, bicycle, and pedestrian lanes connecting to BRT and river greenway
- River greenway for pedestrians and bicycles, relaxation, and exercise
- Chaoyang River rehabilitation with bioengineering as ecosystem based adaptation
- Catchment areas of creeks north of Buer-Hatong River
- Sponge city green infrastructure and creek rehabilitation improving resilience
- Sponge city green infrastructure and creek rehabilitation improving resilience (part of project masterplan)
- Sponge city green infrastructure and green space contributing to stormwater management in residential urba
- Green public urban park

38

BRT DESIGN INTEGRATE WITH WATER-SENSITIVE DESIGN (SPONGE CITY)

Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
COMPLETE SMALL STREET NETWORK FOR NON-MOTORIZED TRANSPORT
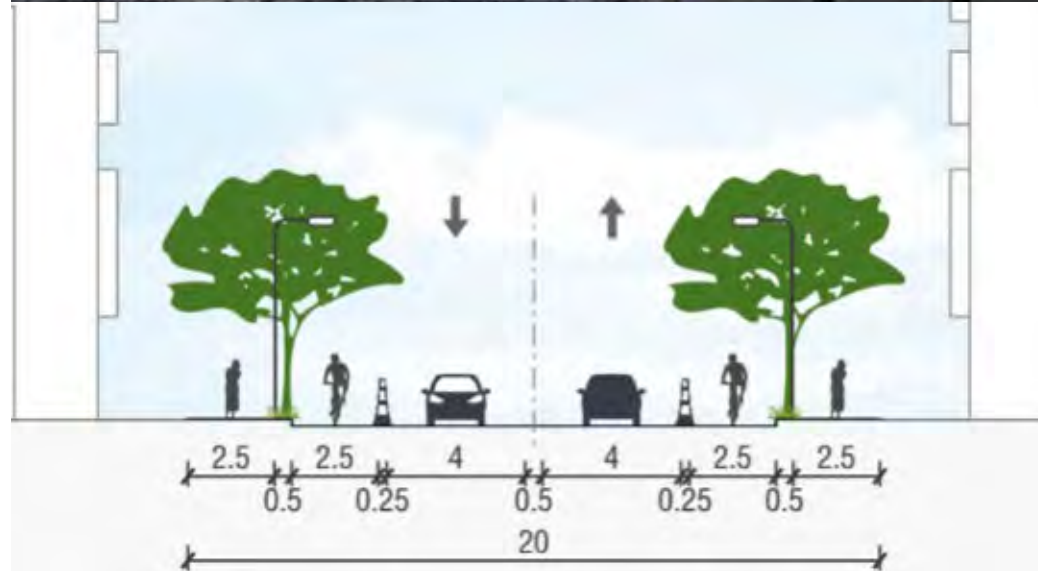
Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
TOD: MIXED-USE HIGH DENSITY CENTERS AROUND STATIONS
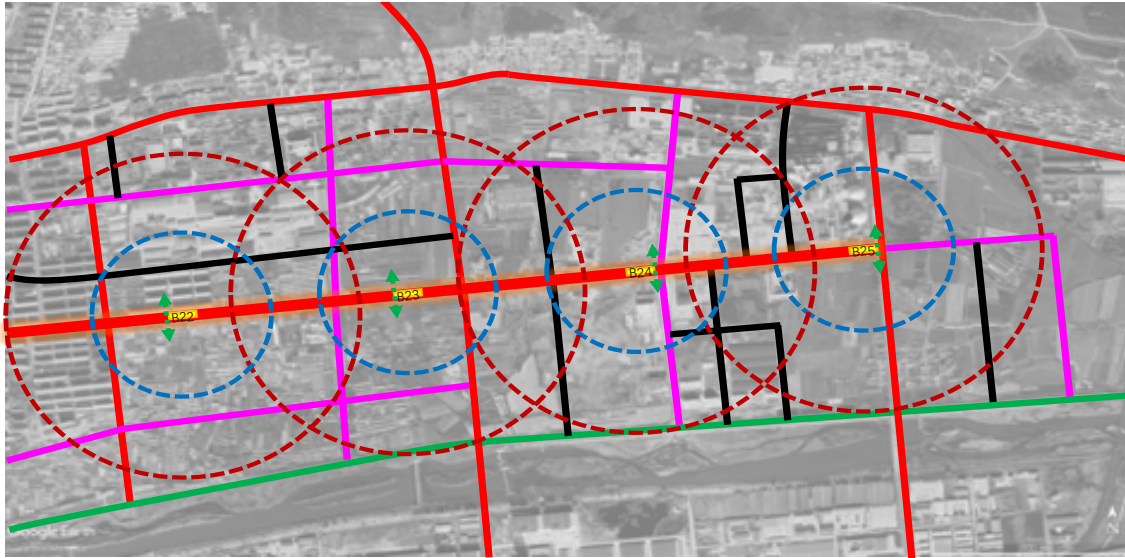
Legend

- – – – – 350m radius- 5mins walking radius
- – – – – 700m radius- 10mins walking radius

━━━━ commercial retail, restaurants, offices, e.g., tea houses, farmer restaurants and market local farm products

━━━━ Residential use, e.g., dormitories for workers
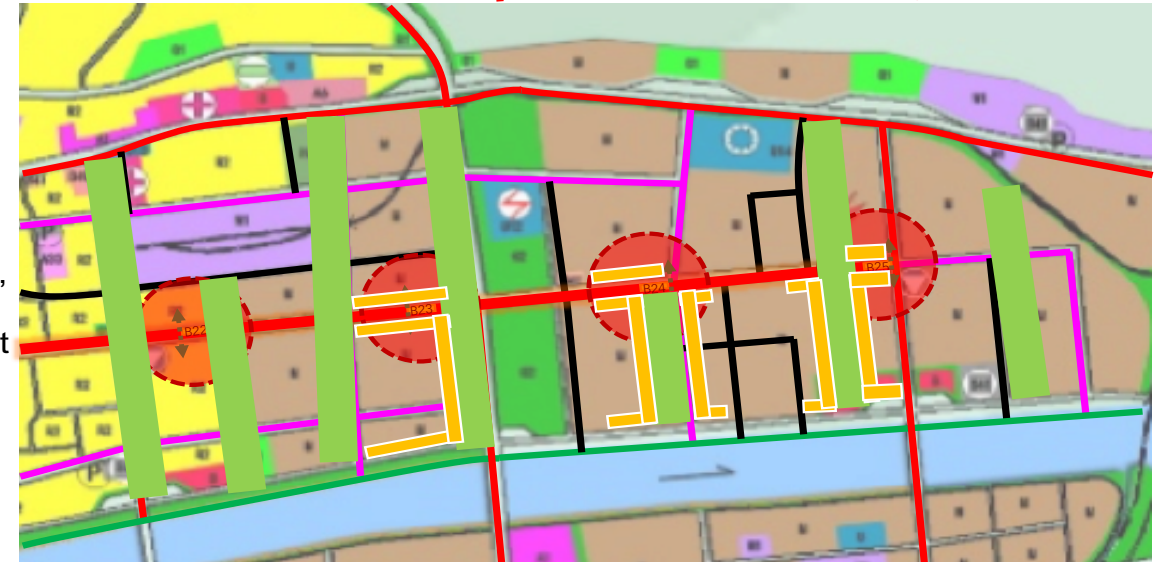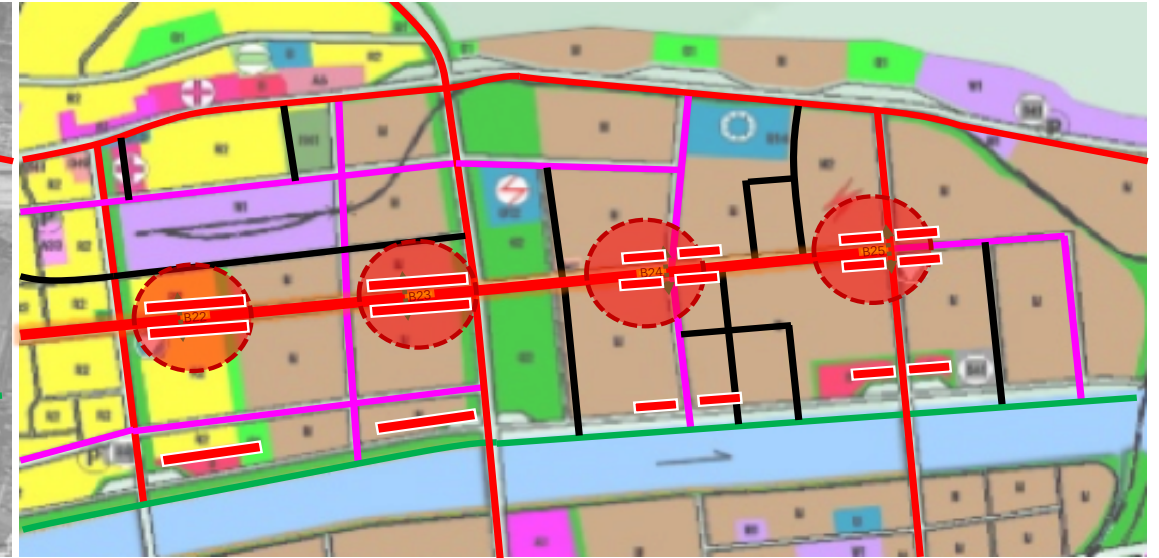
PLUVIAL (URBAN) FLOODING: MANY AREAS IN CENTER AFFECTED

FLUVIAL (RIVER) FLOODING AND WATER QUALITY (POOR DOWNSTREAM)
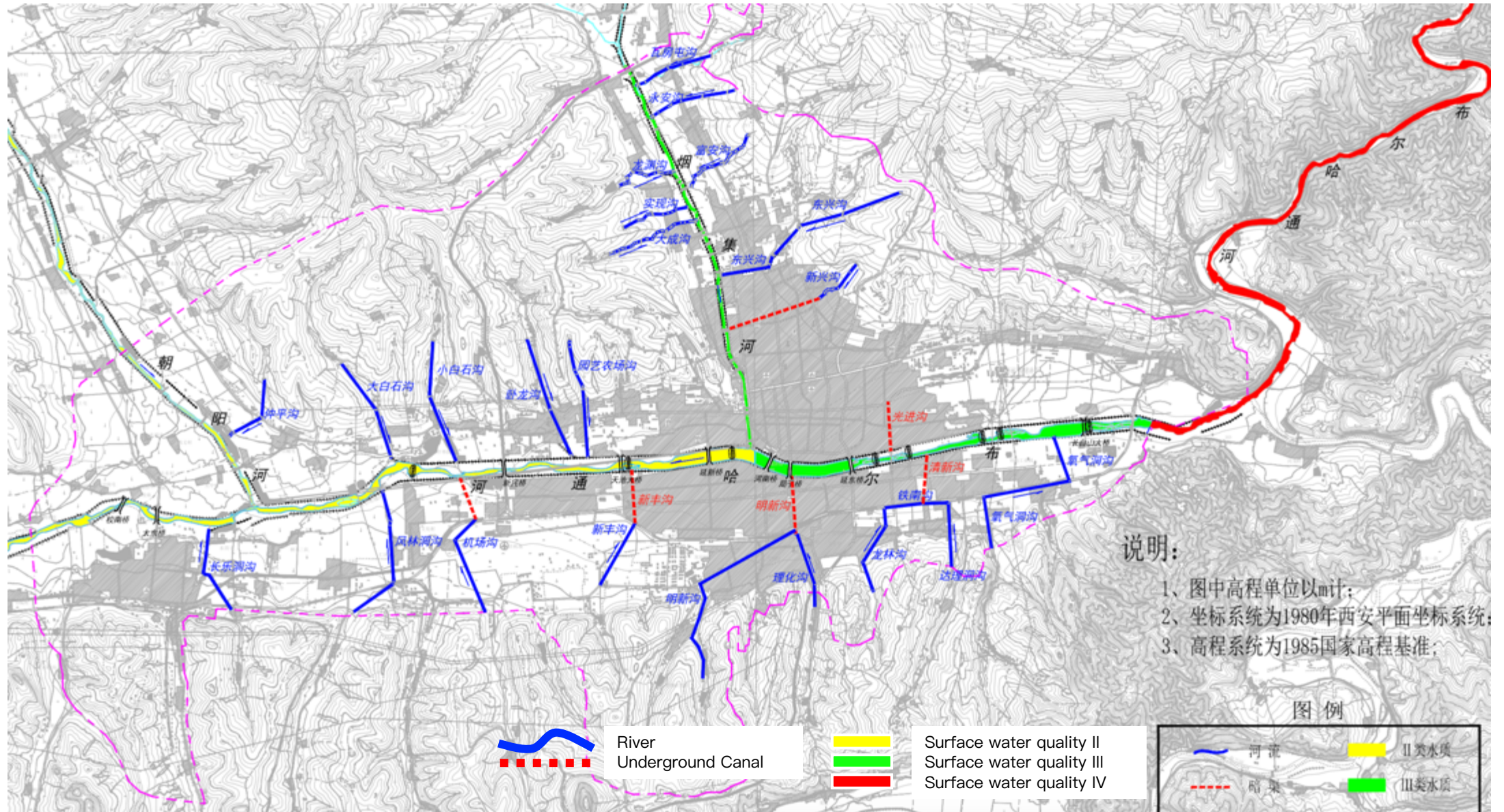
INTEGRATION OF BRT WITH GREEN SPACES ALONG RIVERS AND CREEKS

Bus rapid transit (BRT) corridor and stations with 5 and 10 minute walking radii

Transit-oriented development at BRT stations: high density, mixed use, pedestrian-friendly

Health/Education Facilities with improved safe pedestrian connections to BRT stations

Small roads with green, bicycle, and pedestrian lanes connecting to BRT and river greenway

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Chaoyang River rehabilitation with bioengineering as ecosystem based adaptation

Catchment areas of creeks north of Buer-Hatong River

Sponge city green infrastructure and creek rehabilitation improving resilience

Sponge city green infrastructure and creek rehabilitation improving resilience (part of project masterplan)

Sponge city green infrastructure and green space contributing to stormwater management in residential urban areas

Green public urban park

New separate drainage pipes

End of drainage pipe sponge city storm water cleansing

Water supply system improvement area

New separate wastewater pipes

Interceptor pipes

Wastewater treatment plant

IMPROVE DRAINAGE PIPE SYST + SPONGE CITY END-OF-PIPE

To improve and transfer from combined sewer system to separated sewer system, the new stormwater management concept is watershed-based, improved. The new storm water pipeline is 22.902 km long with diameters between DN600 and DN2000。

ADB Project: Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
ADVANCED FLOOD SIMULATION: GRAY + GREEN = EFFECTIVE

No of flooding node – 2
Max duration – 3 hours
Flood water vol: 0.298 ml

No of flooding node – 1
Max duration – 2.75 hours
Flood water vol: 0.04 ml

No of flooding node – 4
Max duration – 3 hours
Flood water vol: 0.2 ml
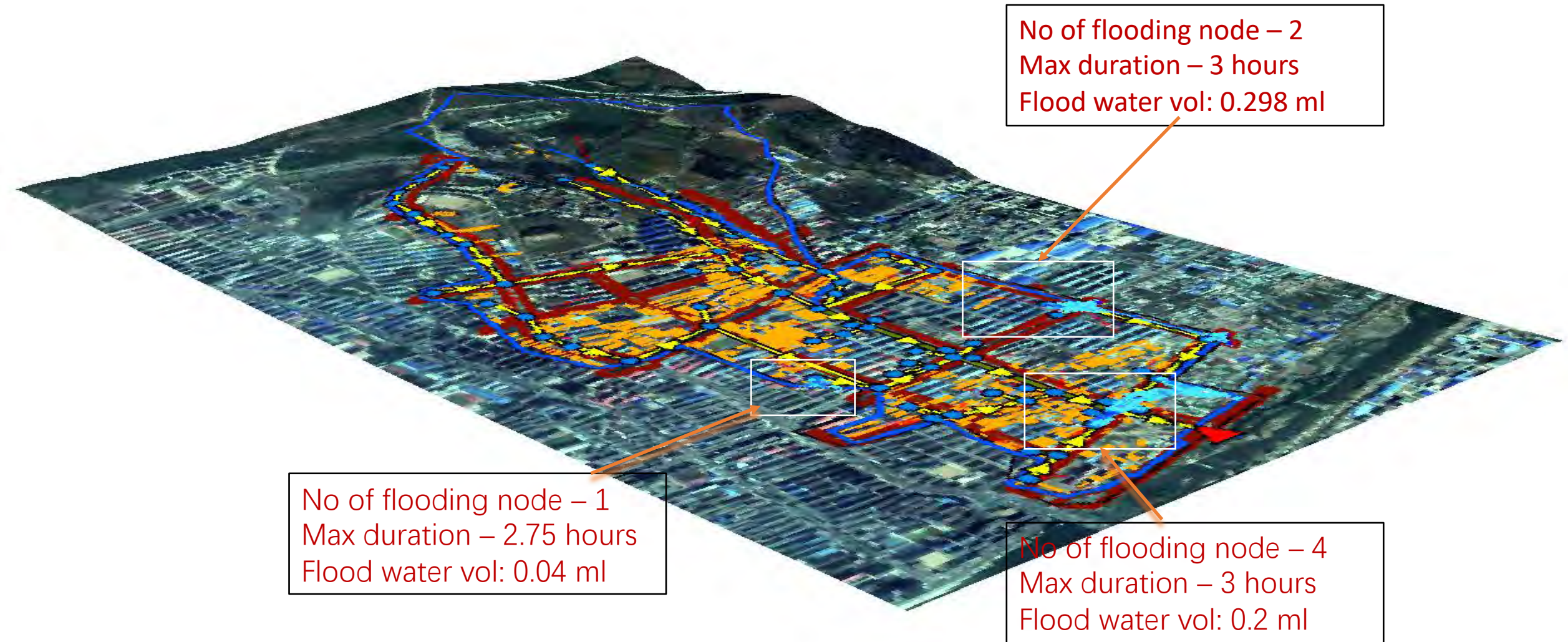
ADB Project: Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
HEALTH AND FOUR GENERATION ADDITIONAL PROJECT FEATURES

(i)   public health monitoring and management program development;

(ii) world-class standards in Healthy and Age Friendly City planning and management, including inclusion of ICT, internet of things, participatory approaches, intersectoral collaboration and others as needed;

(iii) development of a standardized monitoring framework to assist city officials track progress of Healthy City initiatives making us of existing monitoring and review processes;

(iv) contribution with health-related data to the project and city's GIS base;

(v)   implementation of universal design principles and healthy environments in the infrastructure planning components of the project;

(vi) stakeholder consultations and public awareness raising campaigns on public health management, healthy city and universal design, healthy lifestyles and others as needed;

(vii) knowledge products and knowledge sharing events to share lessons from the pilot

ADB Project: Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project
EXPECTED HEALTH BENEFITS FROM THE PROJECT

Grand total health-related economic benefits by 2050: more than CNY6 billion

Transport related health benefit streams:
- travel time savings - more time (for work or for themselves) and reduce stress and economic benefit estimated at about CNY 500 million per year by 2050.
- Road safety benefits with saved lives and injuries from reduced accidents have an estimated annual economic benefit of about CNY160 million by 2050.
- Increased exercise associated with public transport usage were based on World Health Organization health economic assessment tool, amounted to about CNY 200 million per year by 2050.
- GHG emission reduction of 60,000 tons of carbon dioxides.

Sponge city green infrastructure health benefits streams:
- increased physical activity,
- improved air and water quality and microclimate, and respite.
- willingness to pay for green space which accounts for an accumulated estimated economic benefit of about CNY600 million by 2050, most is associated to health.

Water supply component improved service provision economic benefits cumulative total is estimated to be about CNY1 billion by 2050, some of which to health.

WHO Europe: Health benefits of Green Spaces

Green space characteristics

Availability and accessibility
(Location, distance, size, quantity, quality, security...)

Aesthetic
(Landscape, quality, perception...)

Amenities / equipment
(Infrastructure, services...)

Management
(Frequency, pesticides, watering...)

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Green space impacts

Use and function
- Active mobility
- Food production
- Gardening
- Physical activity and sports
- Relaxation and leisure
- Social exchange

Setting features
- Impact on land price and rent levels
- Modification of living environment and residential quality

Environmental regulation service
- Biodiversity support
- Carbon storage
- Pollution regulation
- Soil protection
- Temperature regulation
- Water regulation

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Pathways to health

Individual status
- Healthy lifestyle
- Immune system function
- Mental state
- Physical fitness

Physical environment
- Air quality
- Climate change adaption
- Diverse natural micro-organism and antigens
- Neighbourhood quality
- Noise
- Temperature
- Traffic emissions
- Water quality

Socialenvironment
- Living expenses
- Safety issues
- Social cohesion, interaction and participation

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Health status and well-being

Physical health
- Allergies
- Cardiovascular effects
- Injuries
- Mortality rates
- Obesity
- Pregnancy outcomes
- Vector-borne diseases

Mental health
- Cognitive functions
- Depression
- Psychological well-being
- Stress

Social well-being
- Isolation
- Life satisfaction
- Quality of life

Health inequity
- Socially determined health differentials
- Spatially determined health differentials

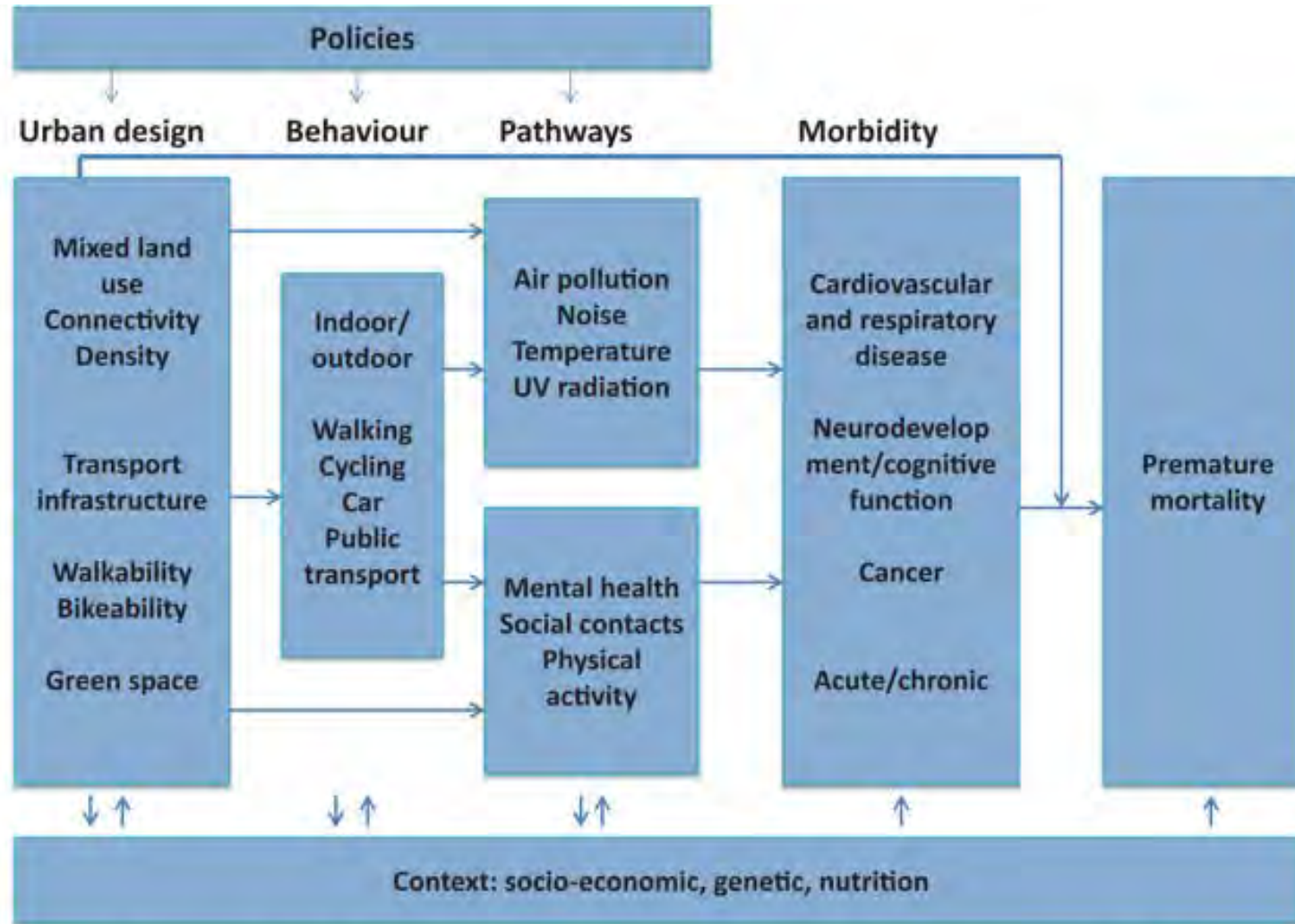World Health Organization
REGIONAL OFFICE FOR Europe

Urban green spaces:
a brief for action

WHO Europe: Urban and Health Links and Pathways

Source: Nieuwenhuijsen MJ. Urban and transport planning, environmental exposures and health new concepts, methods and tools to improve health in cities. Environ Health. 2016;8;15 Suppl 1:38. doi: 10.1186/s12940-016-0108-1.

3. Health Security in the PRC and Mongolia and ADB support to respond to COVID-19

The COVID19 pandemic has shown how vulnerable the world and the region is to outbreaks of infectious diseases.

COVID-19 has shown that countries need strong health systems, innovative solutions, and approaches that combine different sectors to respond to these dangers.
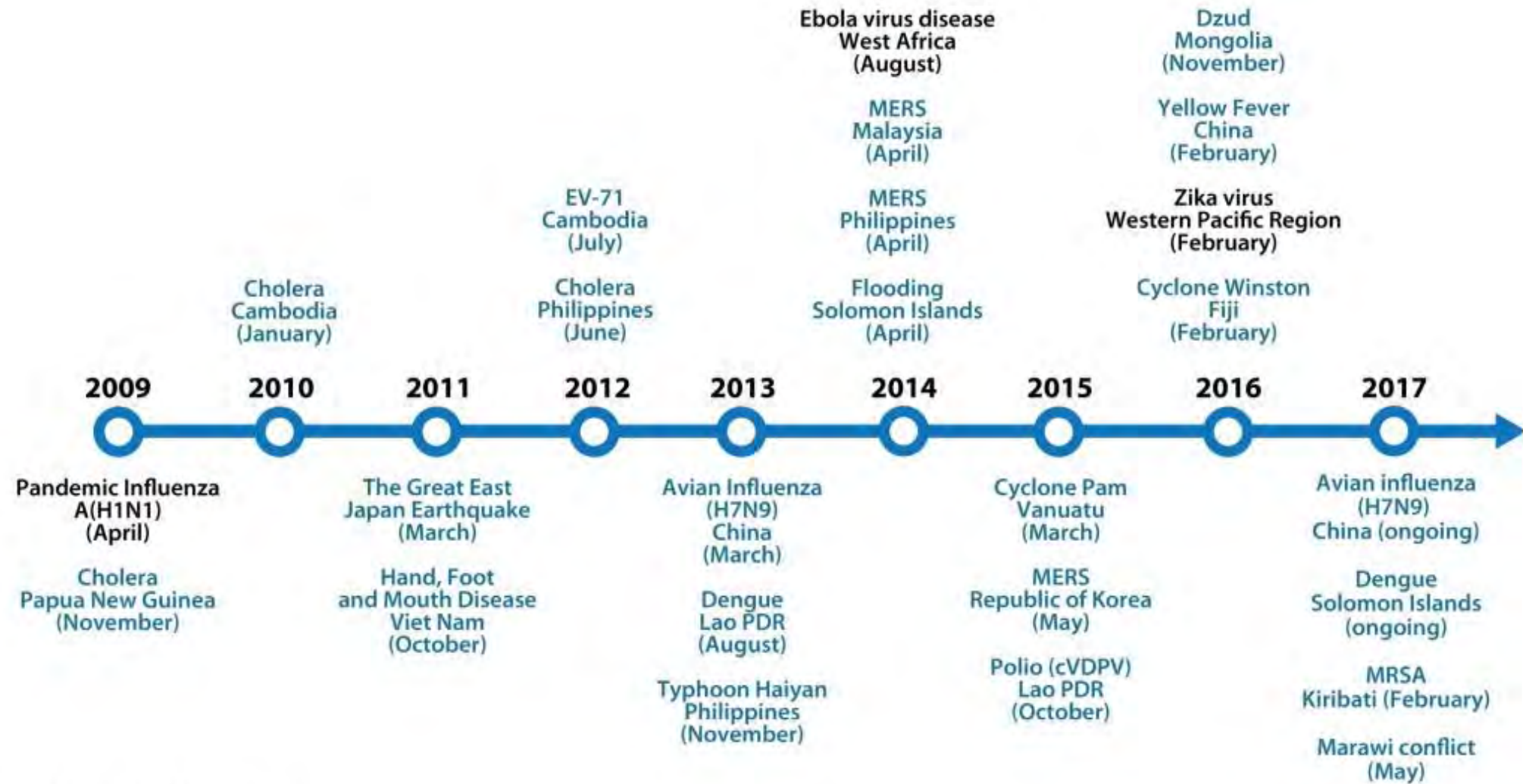
ADB has responded quickly and is providing significant support to its developing member countries including the PRC and Mongolia in this difficult time.

As an increasing number of the world's population reside in cities, innovations in health- and elderly care service provision, urban development, design and health promotion can help city-dwellers become more healthy and communities to become more resilient against health risks.

And cities and their physical arrangements and environments as well as urban communities play an increasingly important role to brace against and help make manage pandemics.

Disease Outbreaks and Emergencies in the Region

Ebola virus disease
West Africa
(August)

Dzud
Mongolia
(November)

MERS
Malaysia
(April)

Yellow Fever
China
(February)

EV-71
Cambodia
(July)

MERS
Philippines
(April)

Zika virus
Western Pacific Region
(February)

Cholera
Cambodia
(January)

Cholera
Philippines
(June)

Flooding
Solomon Islands
(April)

Cyclone Winston
Fiji
(February)

2009   2010   2011   2012   2013   2014   2015   2016   2017

Pandemic Influenza
A(H1N1)
(April)

The Great East
Japan Earthquake
(March)

Avian Influenza
(H7N9)
China
(March)

Cyclone Pam
Vanuatu
(March)

Avian influenza
(H7N9)
China (ongoing)

Cholera
Papua New Guinea
(November)

Hand, Foot
and Mouth Disease
Viet Nam
(October)

Dengue
Lao PDR
(August)

MERS
Republic of Korea
(May)

Dengue
Solomon Islands
(ongoing)

Typhoon Haiyan
Philippines
(November)

Polio (cVDPV)
Lao PDR
(October)

MRSA
Kiribati (February)

Marawi conflict
(May)

BLACK: GLOBAL EVENT
BLUE: REGIONAL EVENT

Regional Health Security in Asia and the Pacific

- Asia is a hotspot for emerging infectious diseases and is at high risk for emerging animal-borne diseases

- Some of the world's most serious pandemics have originated in Asia

- Economic consequences extend beyond health sector
  - 2013 Avian Influenza (H7N9) outbreak in PRC infected 131 people
    - Caused over $6.5 billion in losses in the agriculture sector
  - 2015 MERS outbreak in South Korea infected 186 people
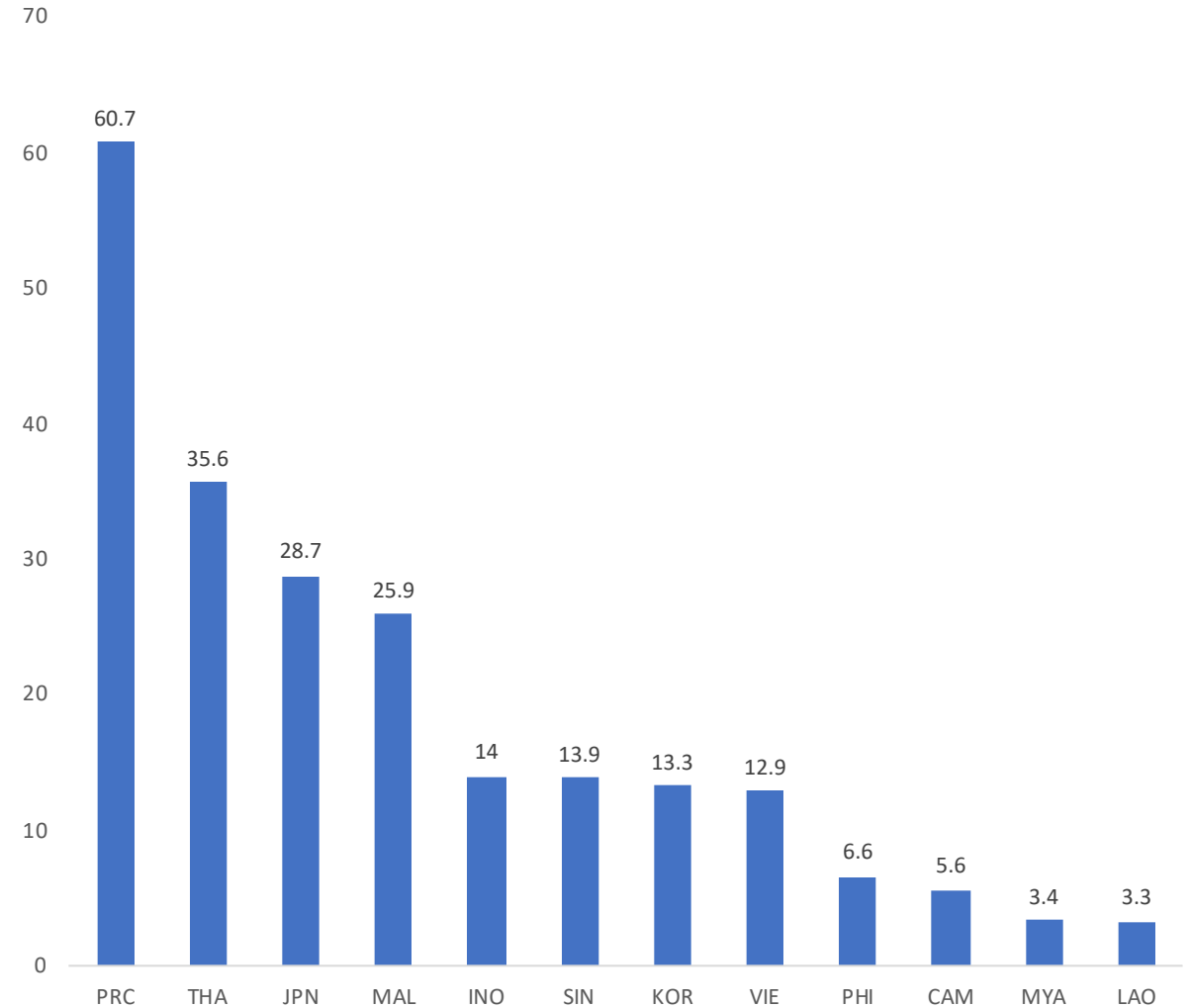   - Resulted in a 41% loss in tourism sector

Source: World Health Organization

Cross Country Movements Presents Challenges

- Over 200 million tourist arrivals per year in the region

- 500,000 to 1 million chickens cross the China-Vietnam border every day

- Other sources of cross-border migration present challenges;
  - Migrant workers
 - Health records
  - Health insurance

Millions of Tourist Arrivals Per Year (2017)

Country	Arrivals
PRC	60.7
THA	35.6
JPN	28.7
MAL	25.9
INO	14
SIN	13.9
KOR	13.3
VIE	12.9
PHI	6.6
CAM	5.6
MYA	3.4
LAO	3.3

Health Security: Asia and the Pacific remains unprepared

- Gaps remain in the region's capacity to respond to health security threats

- Health security is usually underfunded
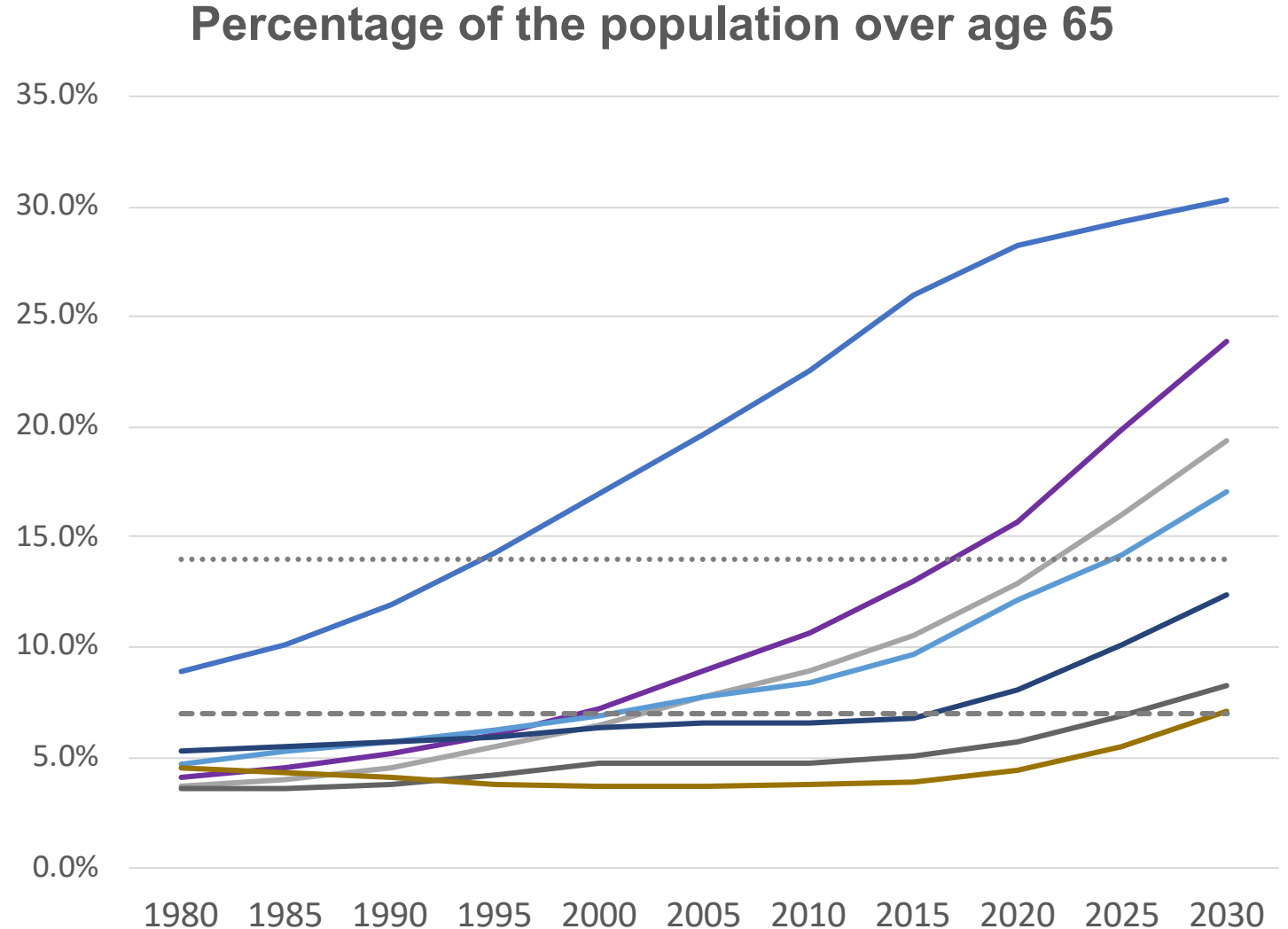
- No regional coordinating mechanism exists

Joint External Evaluation Scores for ADB DMCs
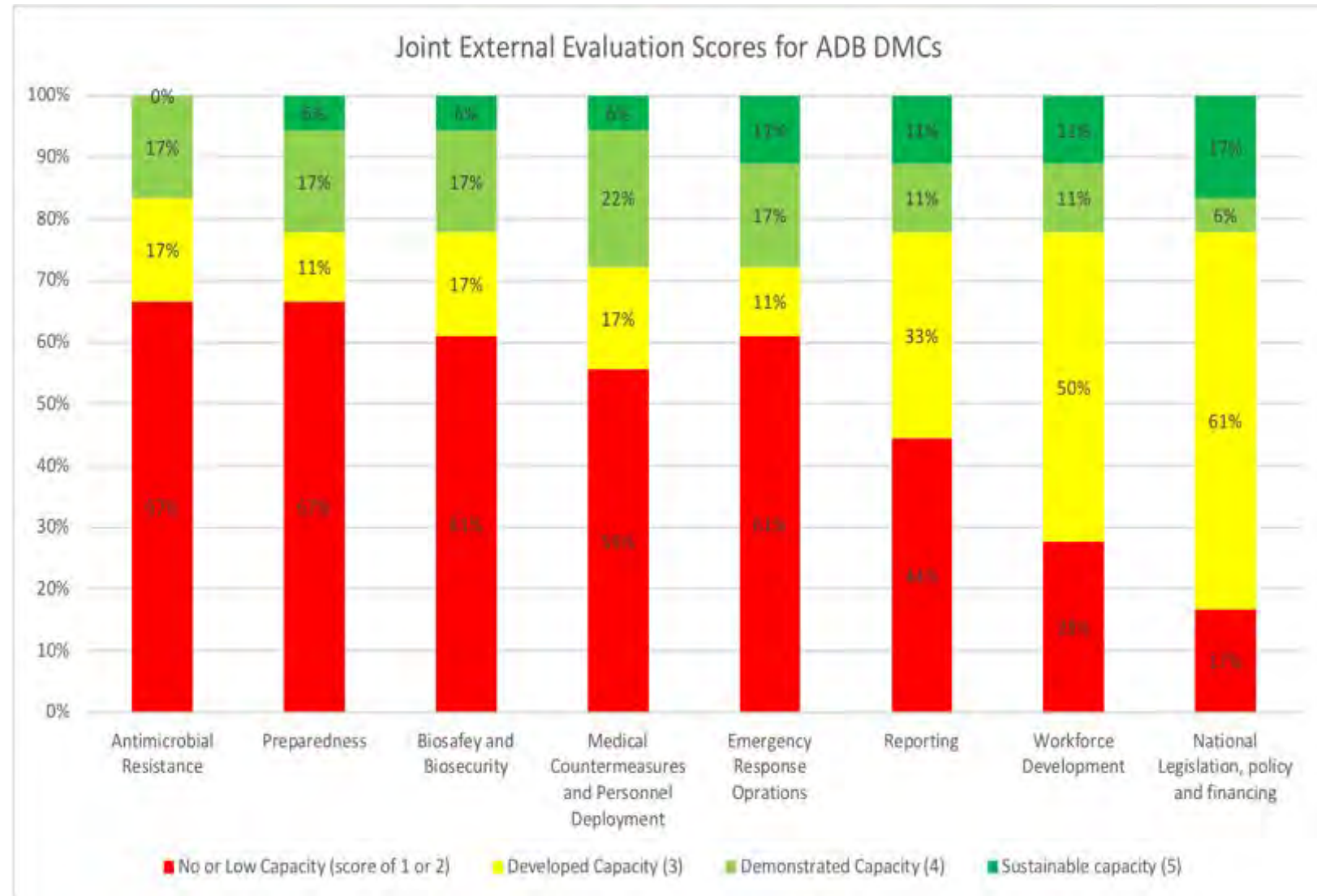
Source: World Health Organization

Addressing Priority Issues: Non-Communicable Diseases and Ageing

From 2010 to 2030, in
PR China, Japan, and South Korea
NCDs (Non-communicable
Diseases) will cost over

US $23 trillion

Percentage of the population over age 65

Current Situation in PRC

- PRC has made significant health gains despite relatively low levels of public expenditure in health.

- Healthy China 2030 Plan places health at the center of all future economic and social development.

- Rapidly increasing elderly population; by 2020, 17.6% population above 60 years;   by 2053 expected to rise to 35%.

- Disease burden is shifting to noncommunicable diseases (NCDs), with rapid urbanization

Health Sector Challenges in PRC

- **Addressing the long-term care needs of aging population:** provision of high-quality elderly care in a cost-effective manner

- **Reducing the burden of NCDs:** NCDs account for 85% of all deaths in the PRC and are costly to treat. City infrastructure often lacks human-centered design features that promote healthy lifestyles.

- **Hospital-centric healthcare:** Quality of primary healthcare services often remains low particularly in rural areas

- **Persistent threats of pandemics:** Increasing risks of cross-border and domestic health threats such as flu pandemics and livestock diseases which have historically occurred in PRC

Healthy China 2030 Plan

Strategic goals	Fields	Core indicators
Continuously improved population health Key health risk factors under effective control Increased capacity for healthcare service delivery Expanded healthcare industry Better developed institutional arrangements for health promotion	1. Health level	Life expectancy at birth Infant mortality rate Under-5 mortality rate Maternal mortality rate Proportion of people meeting the national physical fitness standard
	2. Healthy life	Level of health literacy in the population Number of people taking physical exercise
	3. Health services and security	Premature mortality from main non-communicable diseases Number of registered doctors and nurses per 1000 population Percentage of out-of-pocket expenditure in total health expenditure
	4. Healthy environment	Percentage of days with good air quality in cities at the prefecture level or above Percentage of surface water at or above level III
	5. Health industry	Total size of the healthcare industry

Wei Fu et al. BMJ 2018;360:bmj.k234

Policy Options: alignment with Healthy China 2030

1. **Improve Elderly Care Services:** Establish a well-functioning three-tiered elderly care system; strengthen financing for Long-Term Care; improve coordination of medical, elderly care, and social care services; and ensure adequate human resources for long term care needs

2. **Develop Healthy & Age Friendly Cities:** Address NCDs by promoting healthier lifestyles through infrastructure development; encourage public-private mix for city developments; involve city inhabitants in planning and design

3. **Strengthen Health Service Delivery:** Extend high quality primary health care towards NCDs; improve integration of primary, secondary and tertiary health services; improve quality of health care services particularly in rural areas

4. **Achieve Health Security:** Invest in human and animal health preparedness; develop measures for migrant workers' health; strengthen food and drug safety

Healthy and Age-Friendly City Development and ADB partnership in addressing Health Security in the PRC and Mongolia

Sangay Penjor **spenjor@adb.org**

Stefan Rau **srau@adb.org**

Najibullah Habib **nhabib@adb.org**