Participatory Systems Mapping: Implications for Improving Urban Maternal and Child Outcomes

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THRIVE NETWORKS

International Organization for Migration (IOM)
The UN Migration Agency

URBAN INSTITUTE

Building Healthy Cities Project

- **Five Year Learning Project** (2017 – 2022)

- **Partner Smart Cities:**
  - Indore, Madhya Pradesh, INDIA
  - Makassar, South Sulawesi, INDONESIA
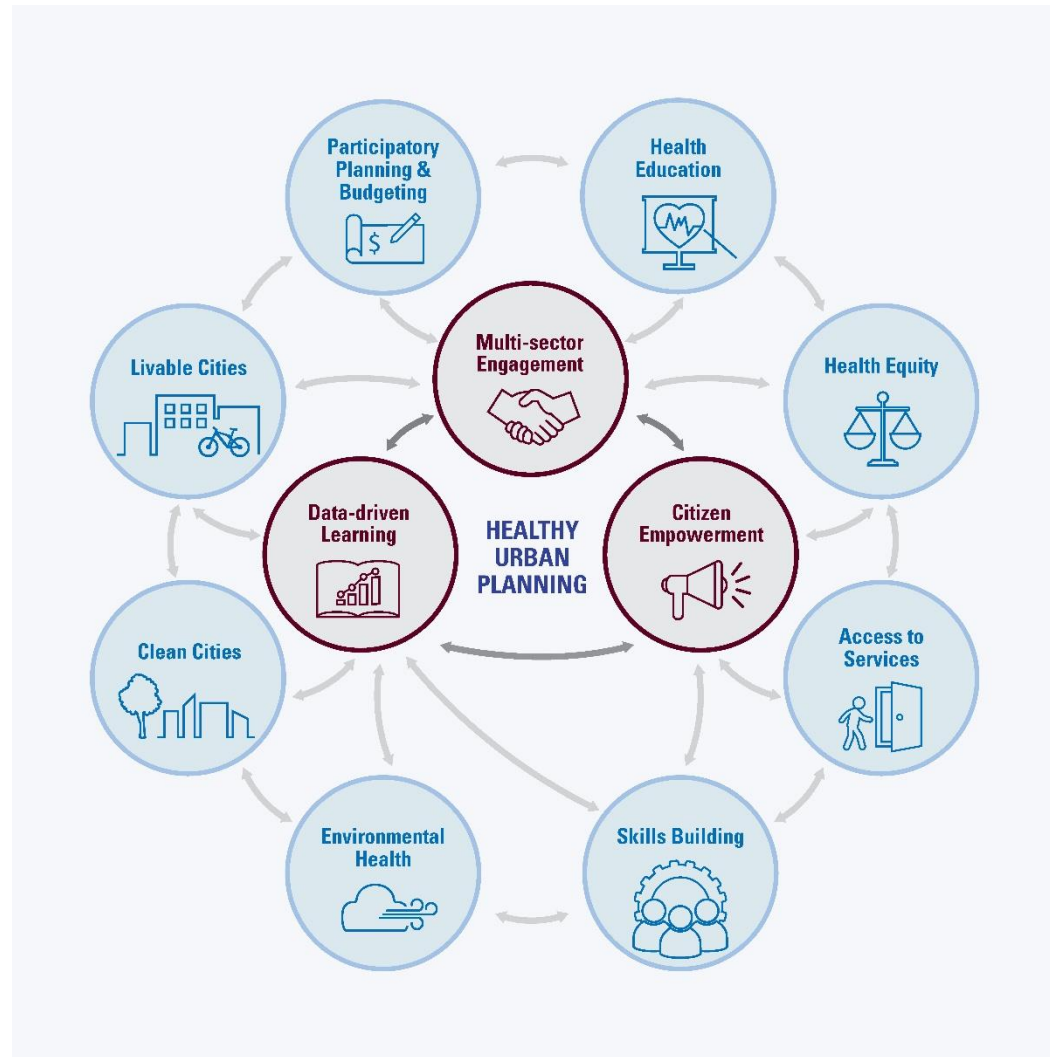 - Da Nang, VIETNAM
  - Kathmandu, NEPAL

Evaluating and Documenting a New Model for Urban Health
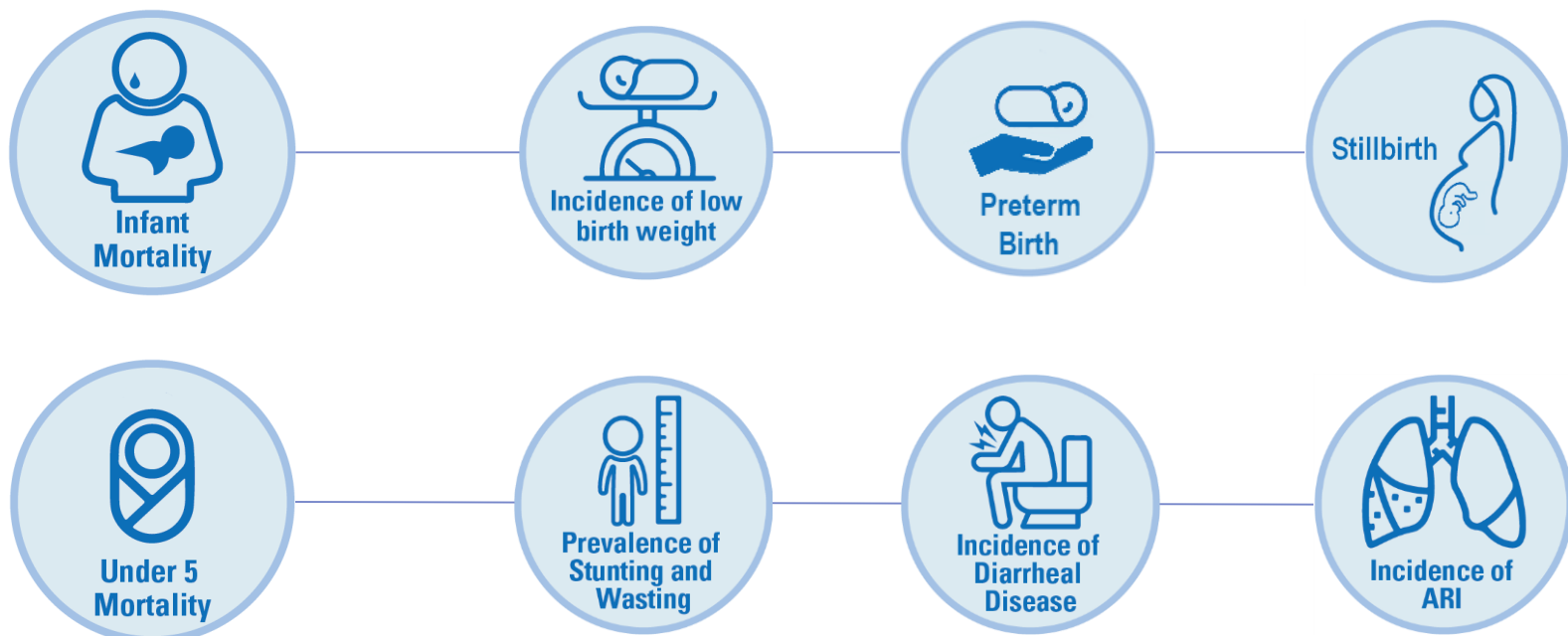
BHC's Overall Approach

- Health
- Urban Planning & Development
- Information & Communications
- Women & Children
- Nutrition & Food Safety
- Education
- Water & Sanitation
- Waste Management
- Environment & Natural Resources
- Transport
- Tourism & Commerce

Linkages with Child Health

Addressing social determinants of health* can improve the following child health outcomes:

Infant Mortality

Incidence of low birth weight

Preterm Birth

Stillbirth

Under 5 Mortality

Prevalence of Stunting and Wasting

Incidence of Diarrheal Disease

Incidence of ARI

*includes air/water quality, food safety and hygiene, tenancy, school environments, multi-sector resource/data coordination, equitable distribution of services

The Case of Indore, India

One of four BHC partner cities

BHC Engagement in Indore

Challenges to Systems-Level Projects

- Needed to **index** all our and others research across a wide range of social determinants, specific to each city context.

- Needed to **create buy in and real-time feedback** mechanisms into the entire process.

- Needed to **produce practical, actionable guidance** from the applied research process to make it worthwhile for participants.

Solution: Dynamic System Mapping

- This map can organize a huge amount of information, acknowledging inter-connections.

- It is a participatory process that pulls in every level of stakeholder from the beginning.

- It develops a transparent, visual framework of where "best buys" interventions might be and how they should be implemented.

Steps of Systems Mapping

1. **Theory of Context**
2. **Theory of Change (Leverage)**
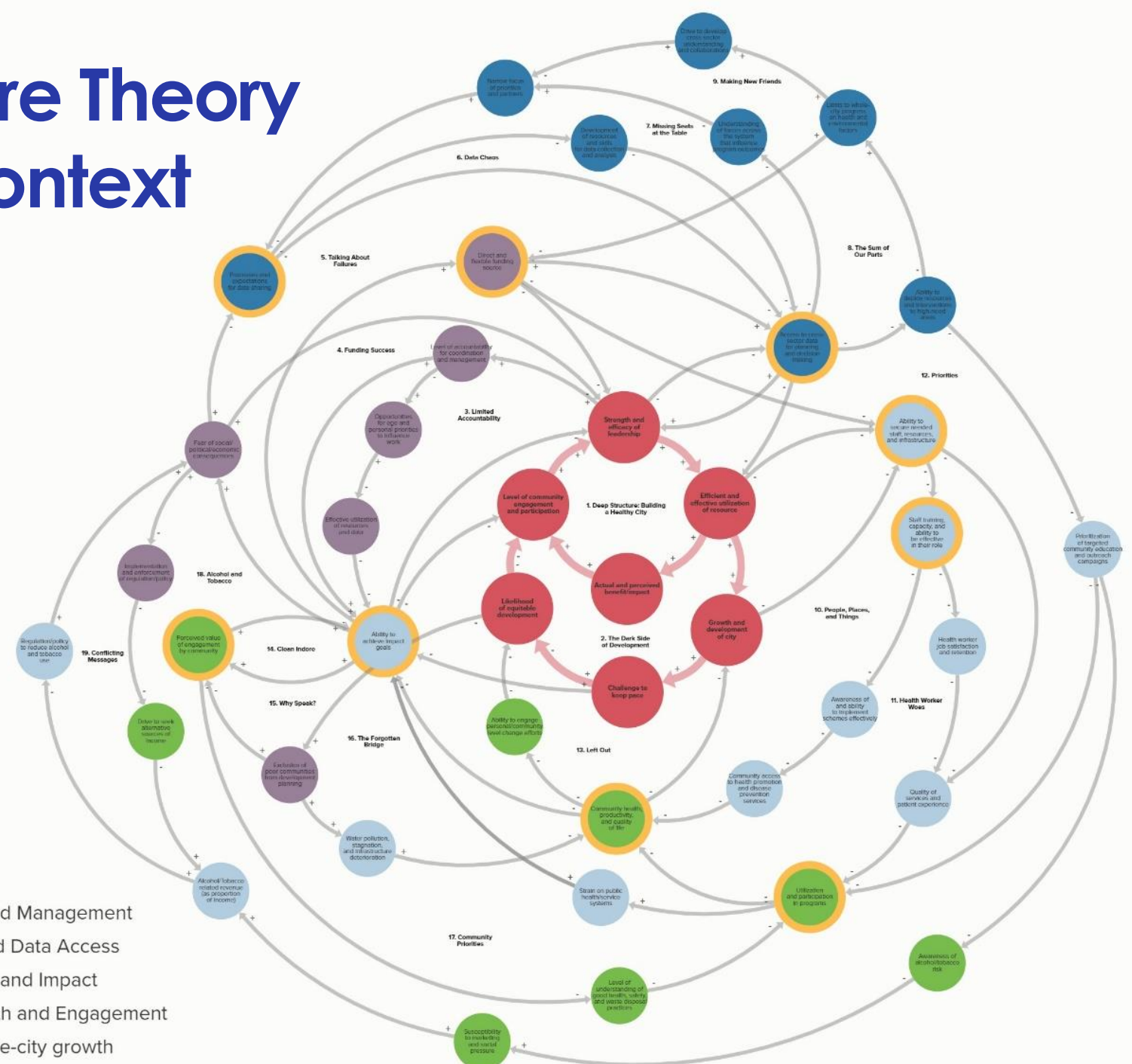3. **Theory of Action**
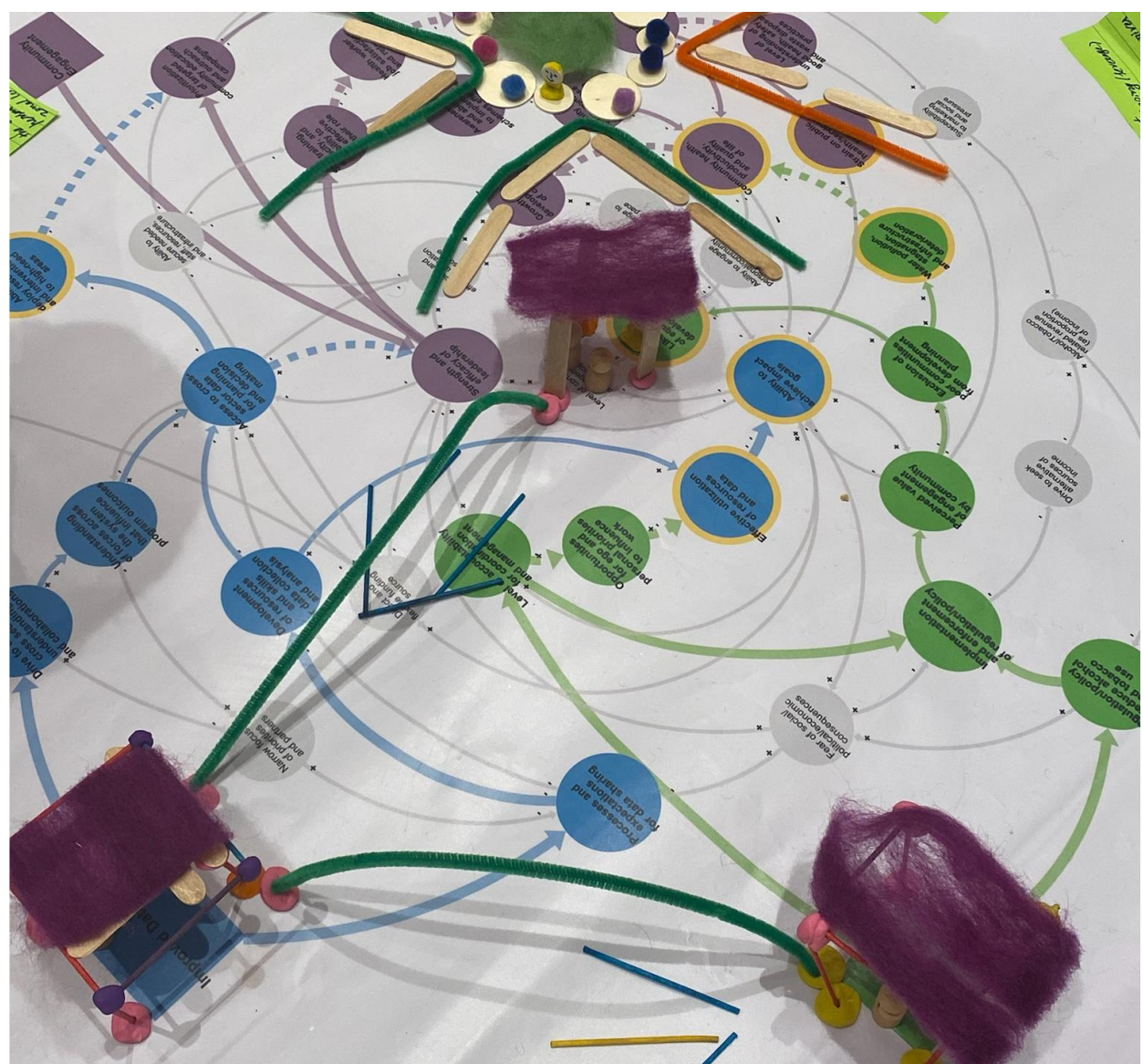
Accessing Maps

So far, you can:

- Navigate to read narratives for each loop.
- Look at connections between loops.
- Flow of obstacles and opportunities.
- See leverage hypotheses.

- Indore Systems Map (available in **English** and **Hindi**), and the accompanying **Leverage Map**. Action mapping done.
- Makassar Systems Map (available in **English** and **Bahasa**), and the accompanying Leverage Map (available in **English** and **Bahasa**). Action mapping done, and Bappeda has received a training on using maps for prioritization.
- Da Nang has a draft context map, heading into leveraging.
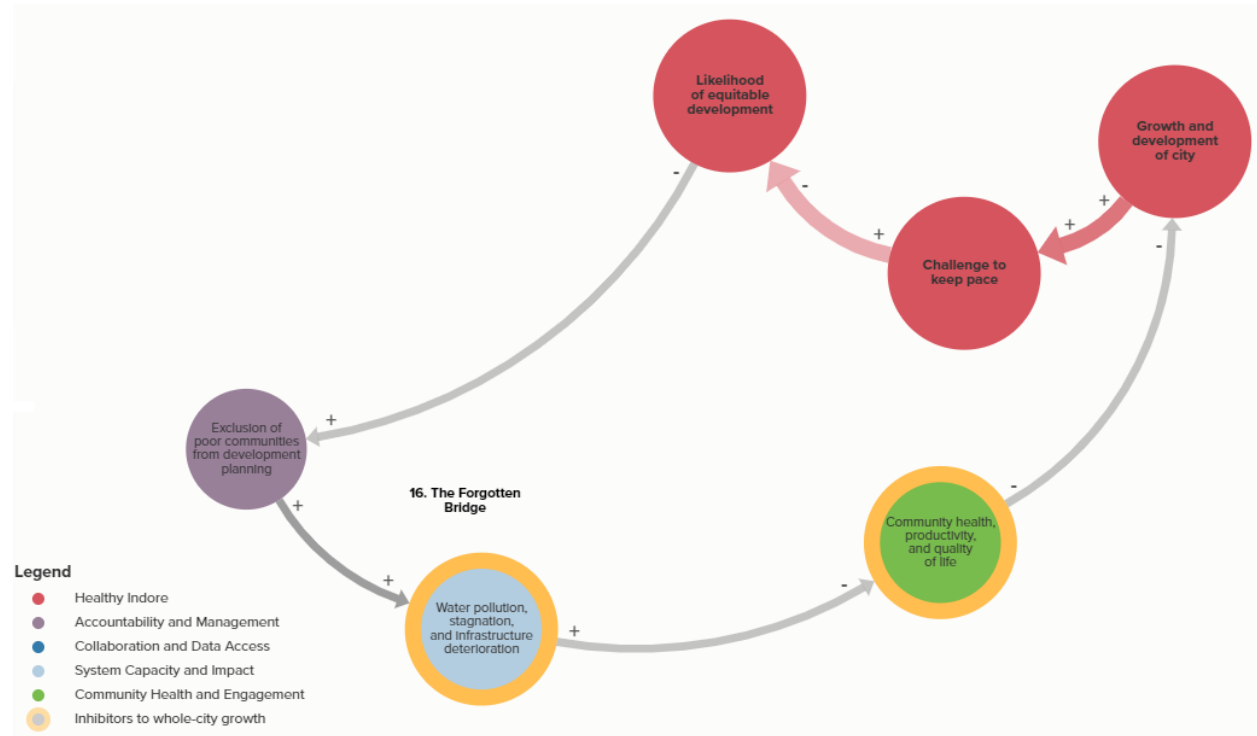- Kathmandu will do modified approach.

Indore Theory of Context Map

Legend

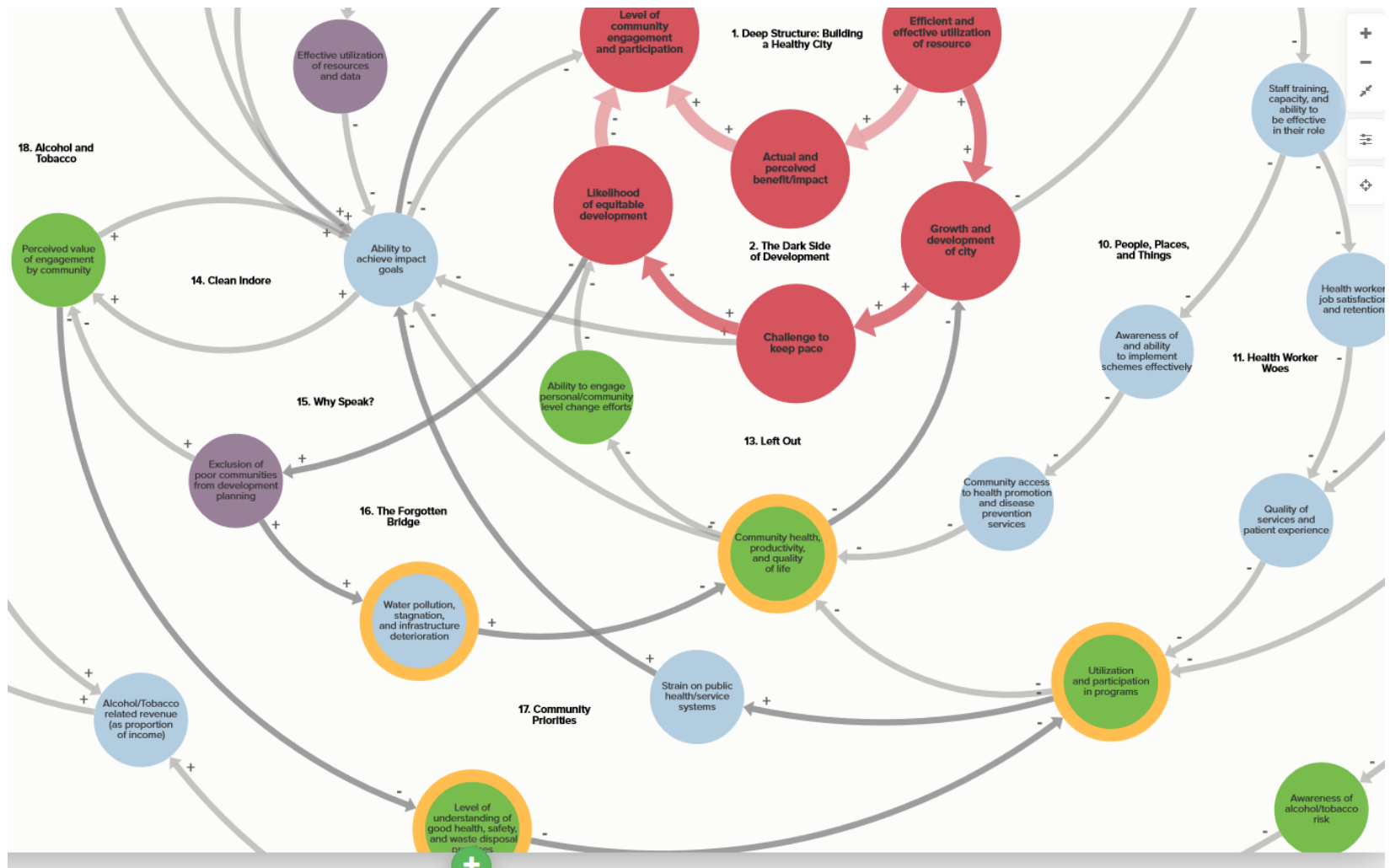- 🔴 Healthy Indore
- 🟣 Accountability and Management
- 🔵 Collaboration and Data Access
- 🔵 System Capacity and Impact
- 🟢 Community Health and Engagement
- 🟠 Inhibitors to whole-city growth

Context Example

Forgotten Bridge

Context Example Contd.

Indore Theory of Change Map

Legend

— Direct and Proximal Effects

○ Key Impacts

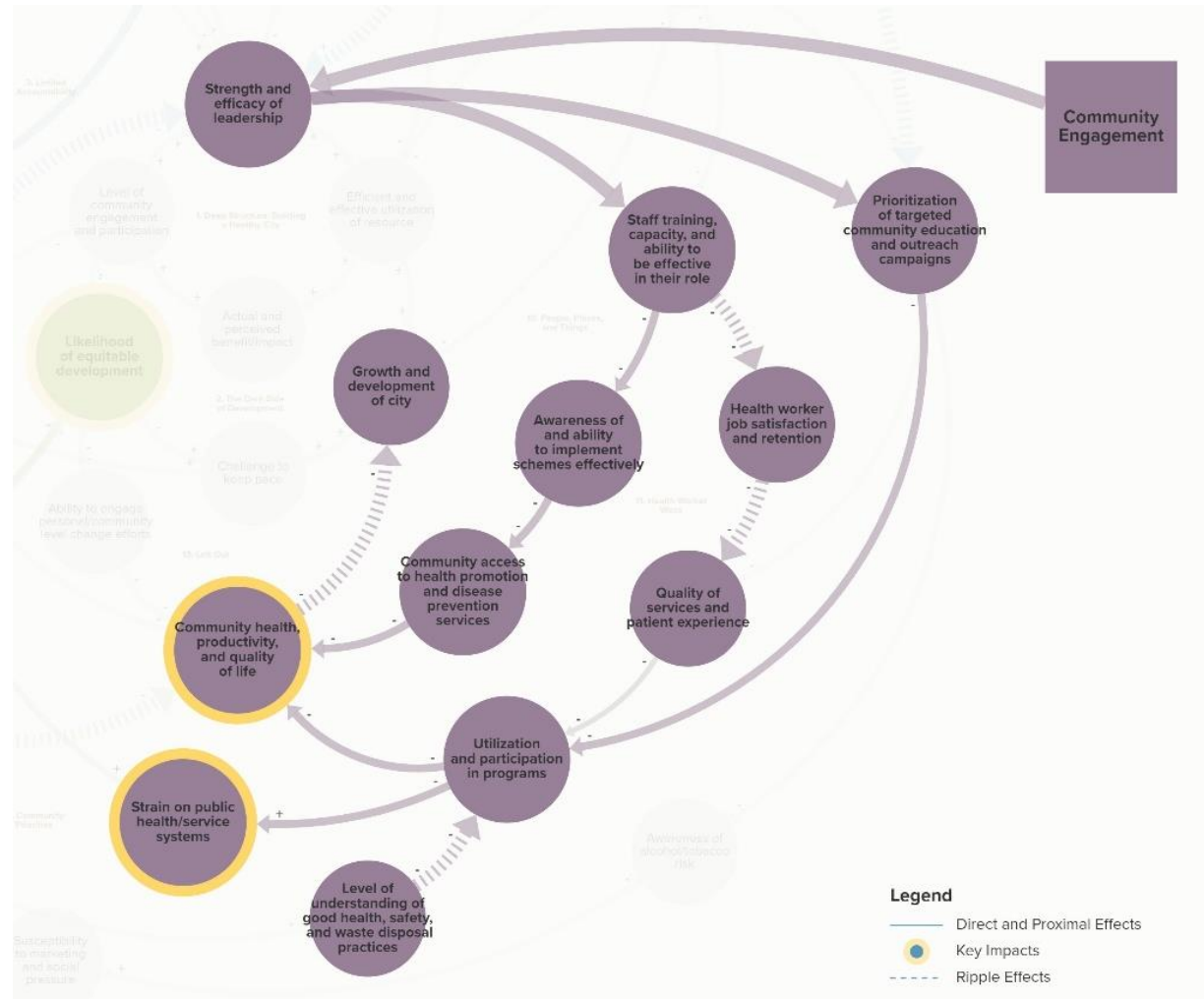--- Ripple Effects
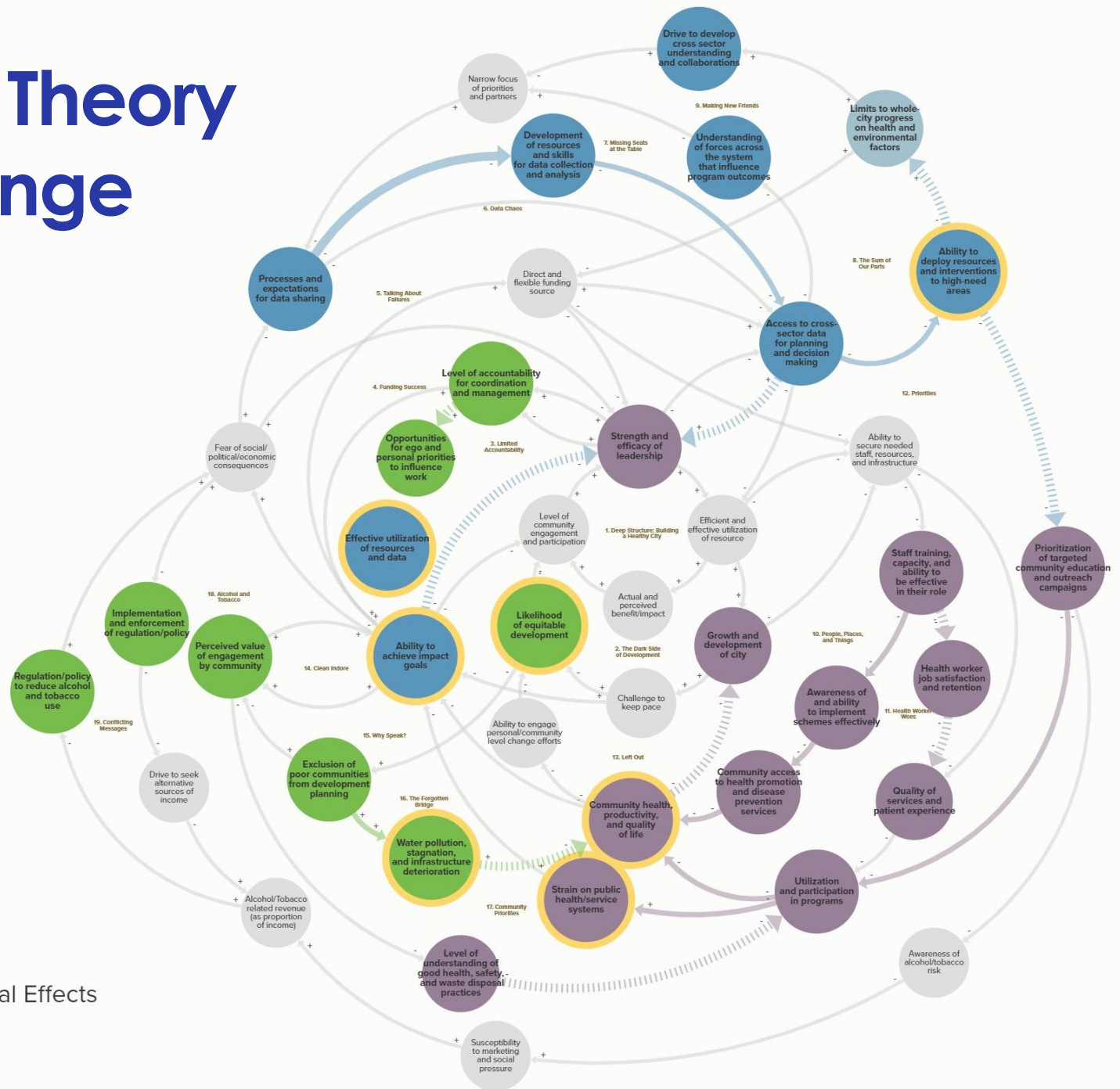
Leverage Example

Three Hypotheses:
- Data driven decisionmaking
- Policy and leadership
- Citizen participation

Action Example

"Child Friendly City"

PURPOSE: The purpose of this activity is to build Indore a child friendly city, creating a safe, healthy and livable environment for children coming from all sections of society.
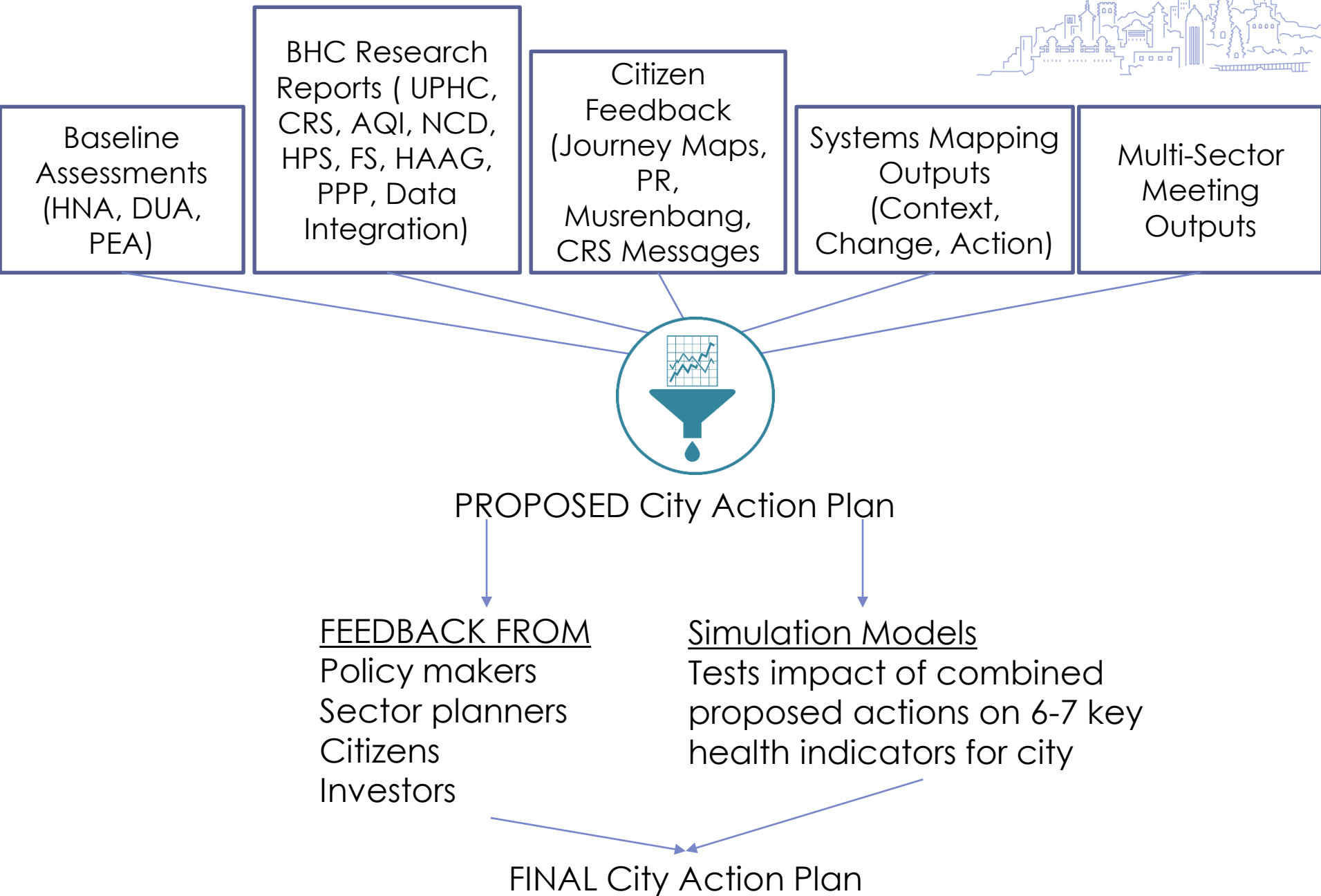
BACKGROUND: Though it is now renowned as the cleanest city of India, Indore is lagging behind in child health indicators.

PROPOSAL: Tackles awareness, workforce, infrastructure (both buildings and green space), supply chains and service delivery (esp delivery, nutrition, immunization, and education services).

RESPONSIBLE PARTIES: ISCDL, Education, Women and Child Development (WCD), Health and other departments

COST: in process

ESTIMATED IMPACT: X% in child mortality if implemented across 90% of city.

Baseline Assessments (HNA, DUA, PEA)

BHC Research Reports (UPHC, CRS, AQI, NCD, HPS, FS, HAAG, PPP, Data Integration)

Citizen Feedback (Journey Maps, PR, Musrenbang, CRS Messages

Systems Mapping Outputs (Context, Change, Action)

Multi-Sector Meeting Outputs

PROPOSED City Action Plan

FEEDBACK FROM
Policy makers
Sector planners
Citizens
Investors

Simulation Models
Tests impact of combined proposed actions on 6-7 key health indicators for city

FINAL City Action Plan

Engage with BHC

- **Check out our webpage**: 30+ English language BHC products online, about half translated into city languages.
- **Join our weekly resource bin** on key topics.
- **Read our journal articles** in Cities & Health, Environmental Health Insights, and others.
- **Watch our videos** on YouTube.
- **Join our webinar series** in each country semi-monthly – recordings available on our YouTube channel.
- **Join Facebook live series** in partnership with JSI Urban Health Group.
- **Read our blogs** on JSI.com and Apolitical.
- **Follow and share** our progress on Facebook, Twitter, LinkedIn, Instagram.

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THANK YOU