

An aerial photograph of a city, likely Port of Spain, Trinidad and Tobago. The foreground shows a mix of residential and commercial buildings, including a prominent white building with a red roof. The middle ground features more dense urban development. In the background, a range of mountains is visible under a cloudy sky. A semi-transparent white box is overlaid on the center of the image, containing the title and date.

Role of Building Regulatory Framework for Effective Risk Reduction in the Built Environment

Kobe, March 14th, 2018

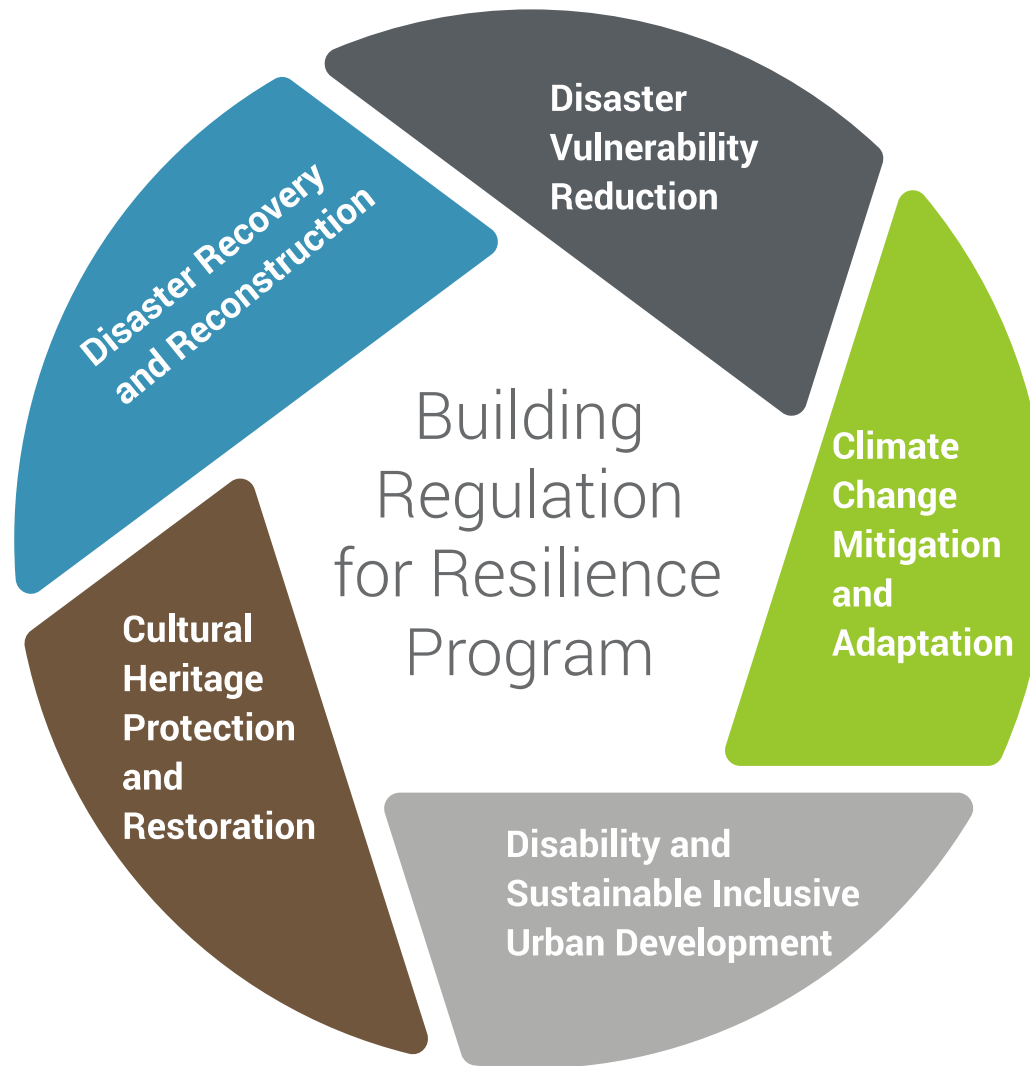


WORLD BANK GROUP



GFDRR
Global Facility for Disaster Reduction and Recovery

BENEFITS OF EFFECTIVE BUILDING REGULATORY FRAMEWORKS



COST-EFFECTIVENESS OF REGULATORY INVESTMENT

DISASTER & CHRONIC LOSS REDUCTION

Ethiopia:
Compliance with
building code
provisions would
reduce AAL by 30
per cent by 2050

CONTINUITY & GROWTH OF PUBLIC REVENUES

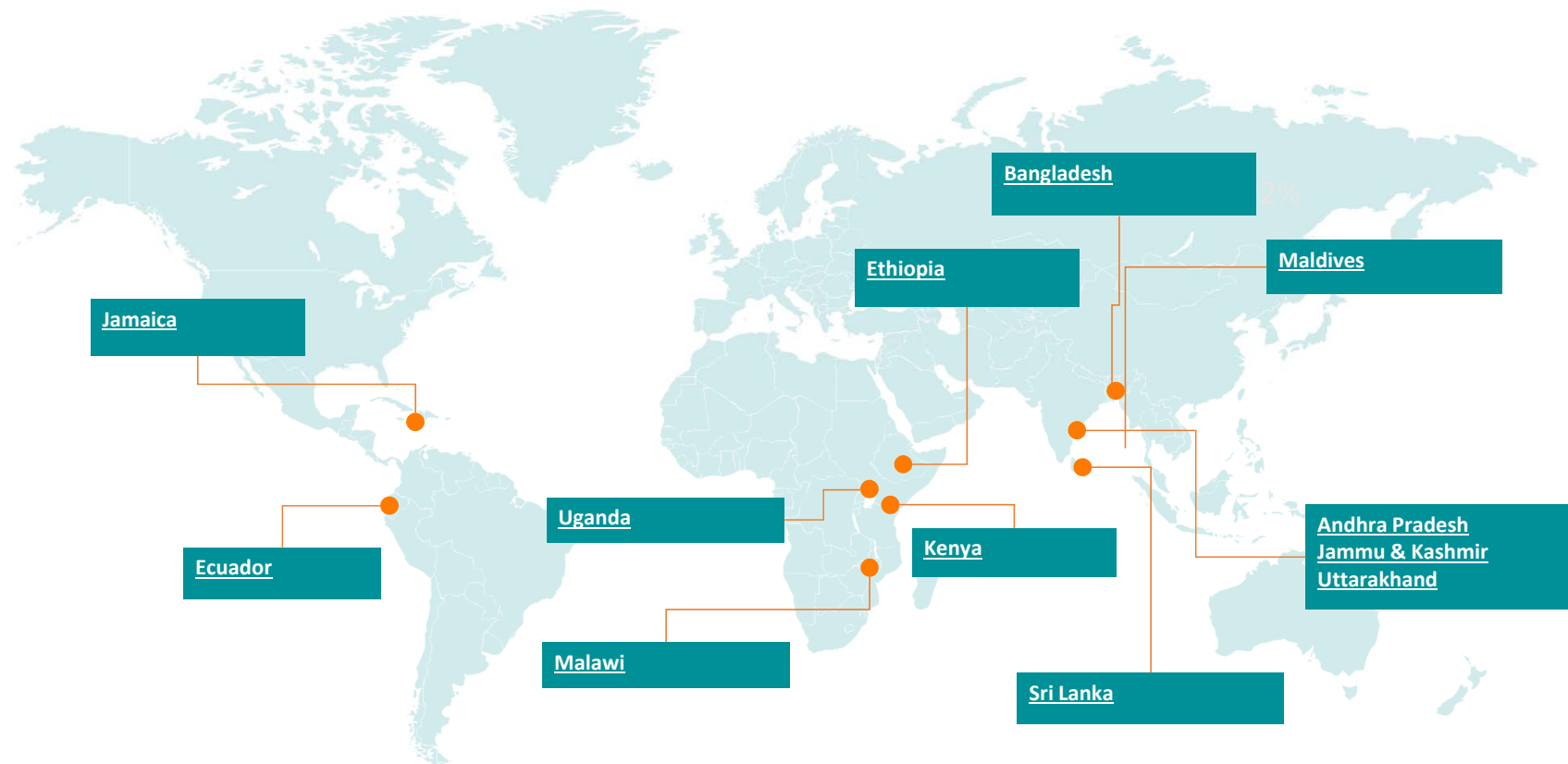
**Mexico, Honduras,
Dominican
Republic:** property
tax revenues make
up less than 0.50
per cent of GDP (as
opposed to 2-3 per
cent of GDP in
high-income
countries)

IMPROVED INVESTMENT ATTRACTION & COMPETITIVENESS

**Cost of compliance
and regulatory
infrastructure is on
average 1% of
construction cost
in Japan .**

The Building Regulation for Resilience Program

4



OVERALL STRATEGIC GOAL:

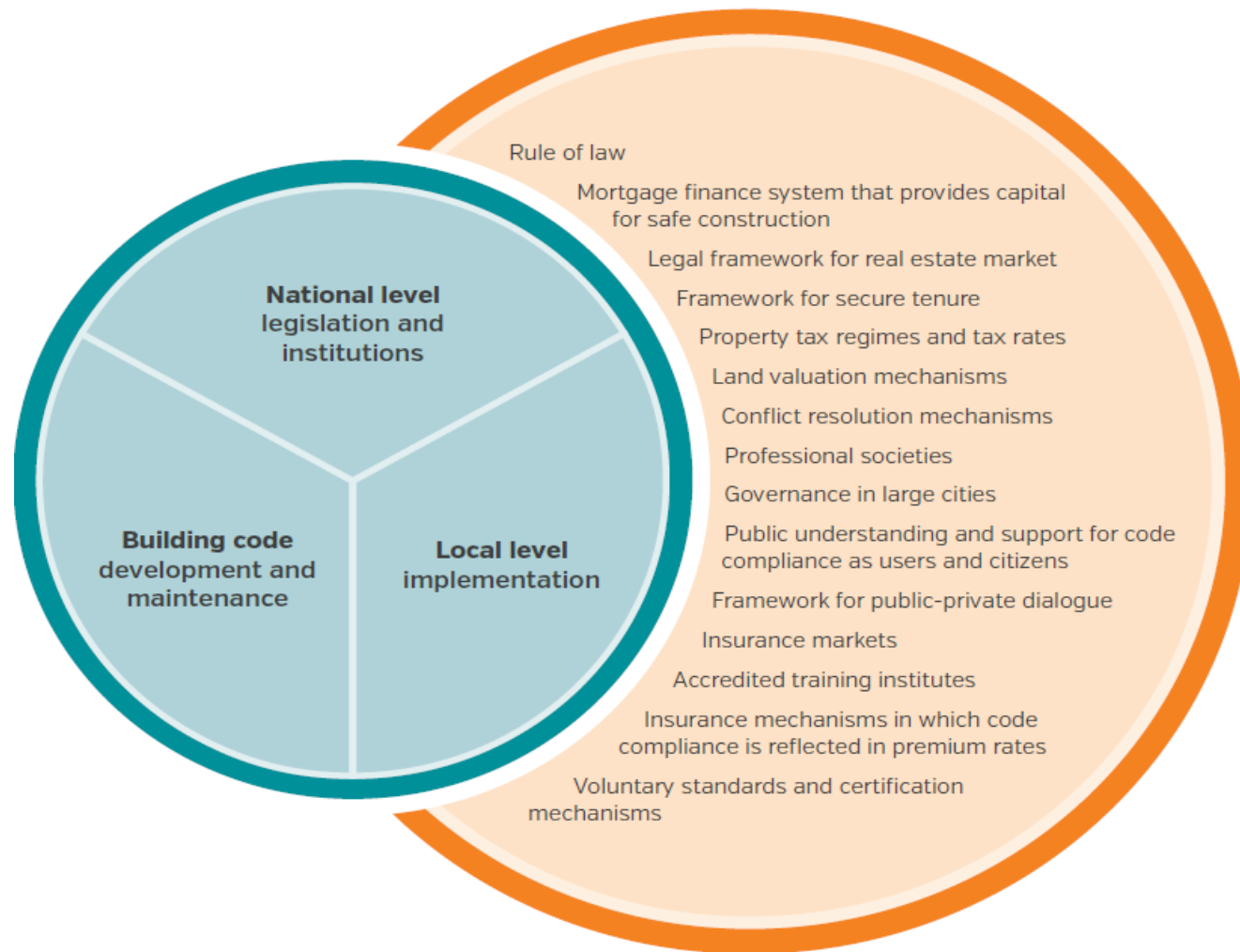
**CREATING A BUILT ENVIRONMENT TO SUPPORT PUBLIC
SAFETY & HEALTH**



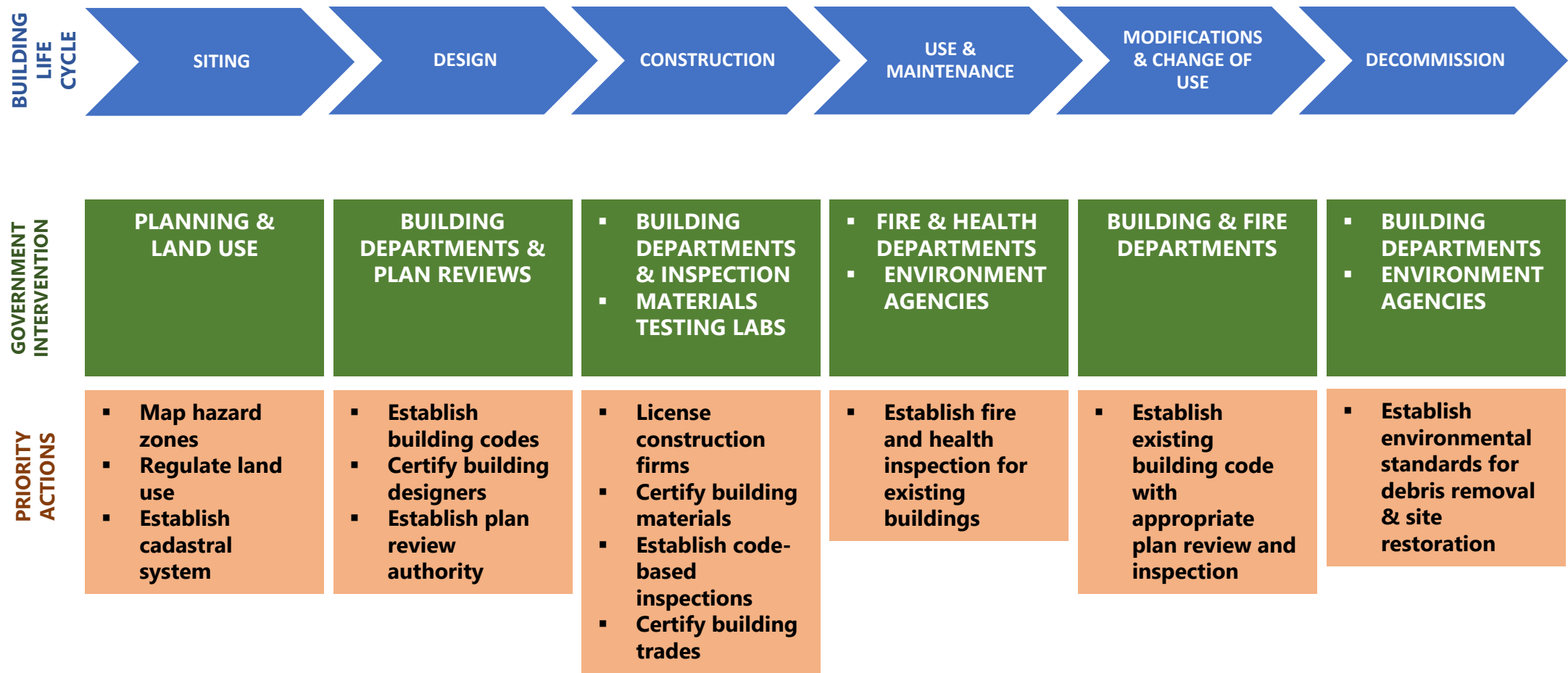
MAJOR OBJECTIVES:

- ❖ **STOP THE EXPANSION OF DISASTER AND CHRONIC RISK IN THE SITING
AND CONSTRUCTION OF NEW SETTLEMENTS**
- ❖ **REDUCE ACUTE AND CHRONIC RISKS IN HAZARDOUS EXISTING
SETTLEMENTS**

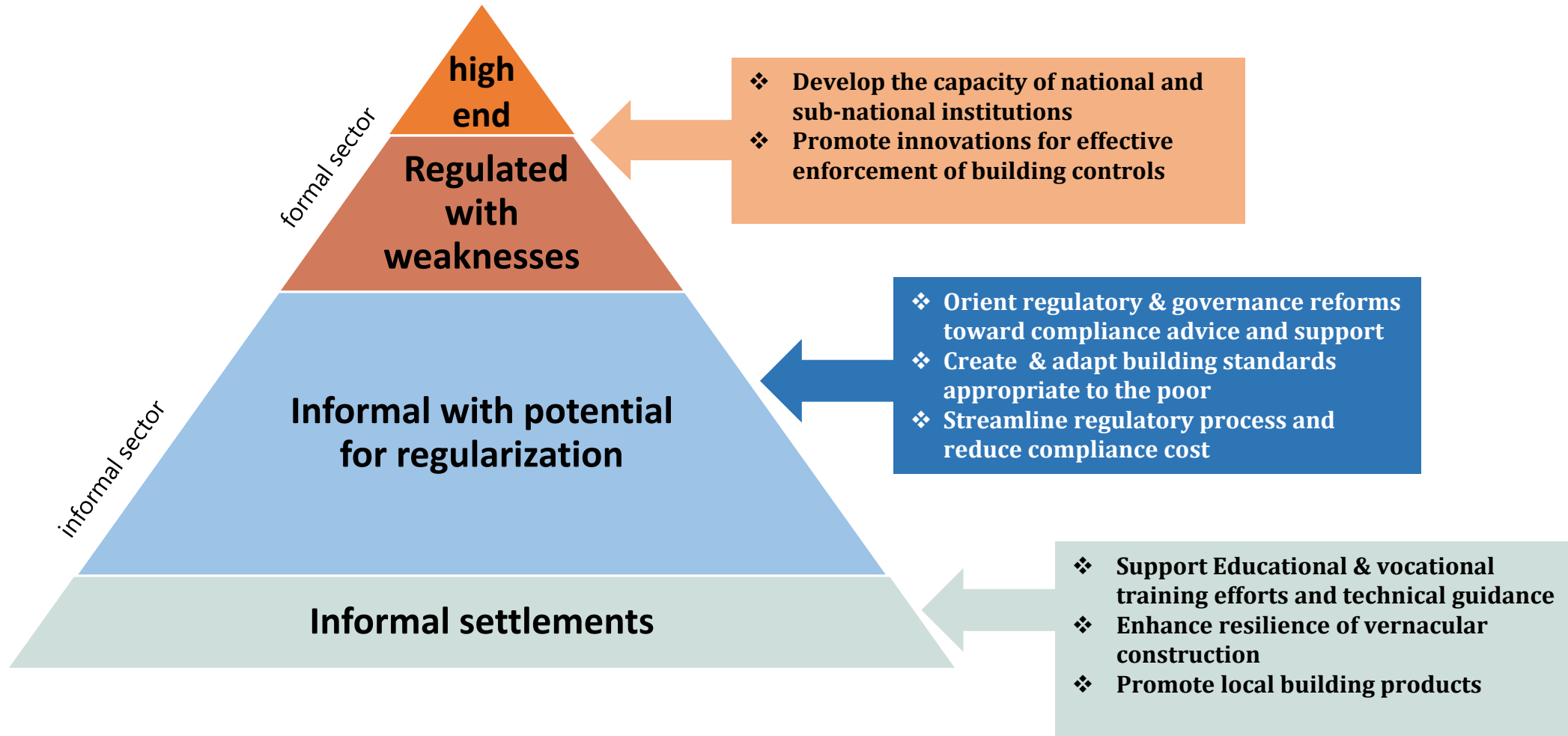
AREAS OF PROGRAM'S INTERVENTION



BUILDING LIFE CYCLE & GOVERNMENT POINTS OF CONTACTS



PRIORITIES FOR BUILDING REGULATORY REFORM AGENDA



Country example – Serbia

Before the reform (2014)

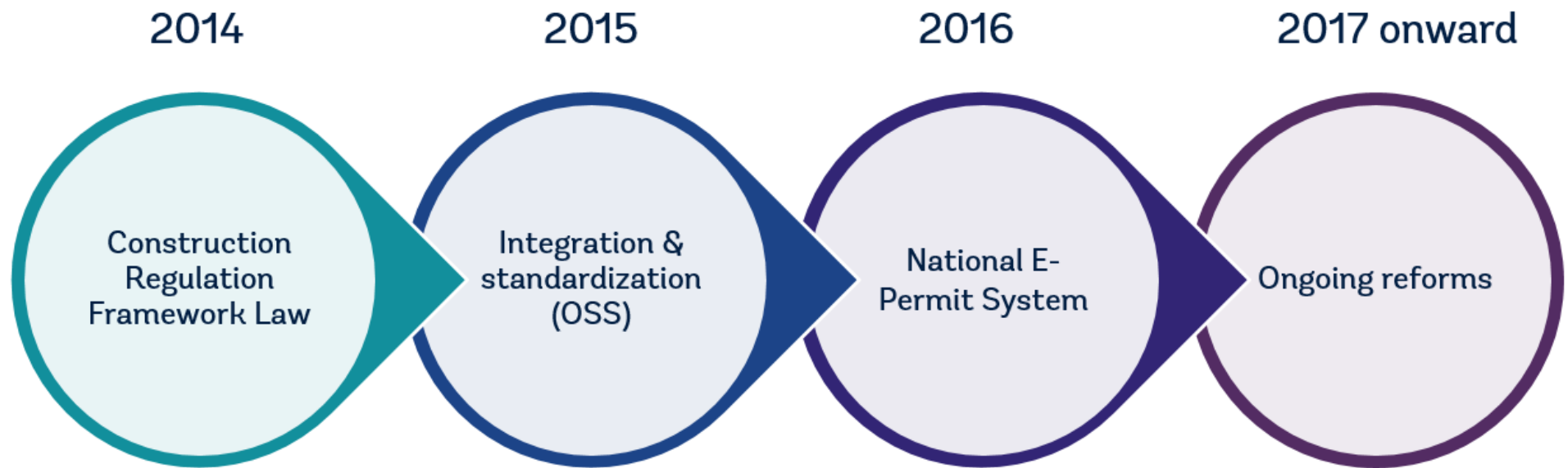


3-storey building with 5 illegal floors in the Municipality of Zemun (Belgrade)

- 📍 Unclear zoning
- ⌚ Long complicated procedures
- 🏠 Lack of standardization
- 💰 High costs
- 🔧 Lack of capacity
- 💵 High degree of discretion
- 🏢 Lack of compliance ←

Country example – Serbia

The reforms



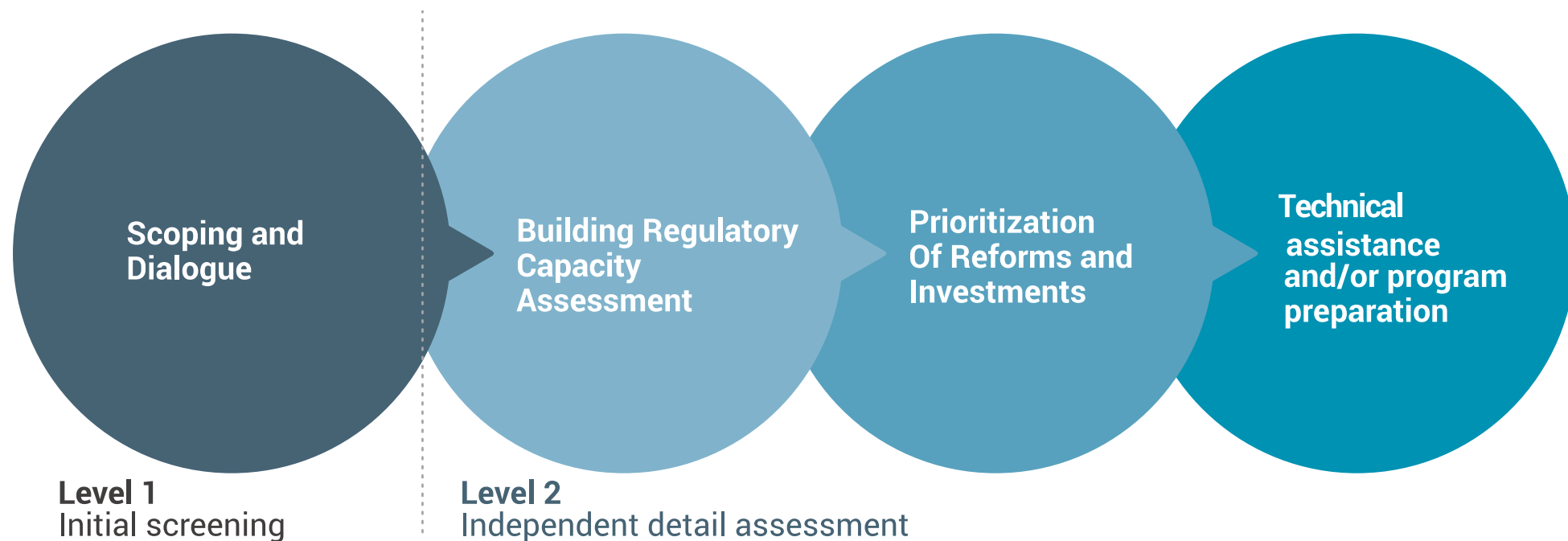
After the reform



Results

- Over 200 Municipalities are now connected to the National E-Permit System
- New standardized process across the country with lower complexity, faster processing times and **reduced compliance costs**
- Electronic OSS system fosters **transparency & predictability** for investors as well as accountability for the public authorities
- Inspectors' increased competency** helps the Municipalities improve compliance
- Land planning and zoning regulations are currently under implementation

HOW TO INITIATE REGULATORY REFORMS?



BRR: PRODUCTS & SERVICES OFFERING

Technical Assistance

Functional Diagnostics & Capacity Assessment

- Projected physical damage & loss estimations in the built environment
- Evaluation of risks in existing buildings structures
- Building Regulatory Capacity Assessment (BRCA)

Legal & Regulatory Foundations for Building Safety

- Legal advice and technical review for building legislation and building codes (participatory process and local relevance)
- Qualification requirements, plan reviews, inspection, permitting, certification & accreditation of building professionals and testing laboratories
- Support to enabling environment (insurance, incentives, mortgage finance, etc.)

Capacity Building of Regulators, Building professionals & Builders

- Accreditation of control organizations, incl. building departments and soil, building materials testing facilities
- Development of training for building professionals & construction workforce.
- Development of informal sector strategy

Investment

Instrumentation & Laboratories

- Instrumentation for monitoring of seismic, wind and flood events
- Laboratories & testing equipment for building materials, building products & assemblies
- Equipment for on-site inspection and nondestructive testing

ICT Infrastructure

- Improved efficiency in communication with permit applicants and effective and transparent record keeping
- ICT infrastructure & software equipment to support automation of building departments and multi-agency approval processes

Retrofitting of Critical Facilities

- Evaluation and retrofit of vulnerable facilities critical to disaster response and recovery
- Developing of retrofitting solutions



DISCUSSION

1) Have you implemented/how do you plan to encourage land use and building code compliance?

- Builders, construction workers: Training/advisory targeting building designers: training, simplification of permitting process incl. e-permitting
- Home owners: tax return, property insurance, subsidy/grant, security of tenure

2) What are the measures that you have/could explore to augment the capacity of the local municipal Government for land use and building control?



Jamaica

Supported the passage of the Building Act

- Facilitation of discussions with various interest groups and stakeholders

BUILDING ACT WAS APPROVED IN
JANUARY 2017

Helps national Bureau of Standards in adapting building code to local circumstances

- Incorporate updated information on coastal hazards
- Support in adaptation of foreign building code to Jamaican context
- Streamlined & consistent presentation of Jamaica Building Code

Assists in developing effective local government implementation

- Training Needs Analysis for regulators
- Process mapping & re-engineering of permitting & inspections
- Developing curriculum for training of regulators and informal builders



Focus on management of urban expansion and the informal sector