Housing Policy for a New Paradigm

45 Years of Lessons from World Bank Housing Reconstruction Projects

JUNE 2025

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Sendai, Japan (March 12, 2011).

U.S. Navy photo for Wikimedia Commons.

International Bank for Reconstruction and Development

Housing: the category most impacted by disasters.

Disasters can erase decades of development.

U.S. Navy photo for Wikimedia Commons.

The Global Challenge

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100 million
People without Secure Housing
fivepointsix for iStock.


1 in 4
People Live in
Substandard Conditions
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TIENDA Y
TORTILLERIA
"JEHOVA ES
MI PASTOR"
Xavier Conesa for The World Bank.


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3 billion
People will Need Adequate,
Resilient Housing by 2030
Xavier Conesa for The World Bank.

Needs Are Increasing

World

2023: Internal Displacements Caused by Disasters > War & Conflict.

United States

Average Yearly Billion-Dollar Climate Disasters Tripled since 1980.


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>1 billion
People at risk of having their homes and lives upended by disasters.
Xavier Conesa for The World Bank.


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Homes, after disasters:
80%-90% of affected buildings.
50% of lost value.
Xavier Conesa for The World Bank.


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The 3rd costliest year for insured disaster losses since 1980!
Global Disaster Losses (2024)
USD 320 billion.
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一日も早く
一人でも多く
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The World Bank & Housing Sector

Yuya Sekiguchi for Wikimedia Commons.

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1980-2024

270+

Housing Projects

83

Projects focused on Disaster Relief

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Where Housing Reconstruction Happened

Housing Recovery Projects FY 1980-2024

Active: 1 | Both | Closed: 7 — Number of Projects

Disaster | Both | War & Conflict

REGION	TOTAL GENERAL
Latin America and the Caribbean	21
South Asia	19
Europe and Central Asia	14
East Asia and Pacific	12
Sub-Saharan Africa	9
Middle East and North Africa	8
Total general	**83**

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1980-2023

340+

Housing Publications

65

Housing Assessments

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Key Takeaways

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For Housing Projects

改善の精神

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Housing Reconstruction Results Impressive, Face New Challenges

(83 World Bank Projects, 1980-2024)

98.7% of the original targets met.

BUT

- **Delivery timelines**
  Closed Projects: **36.7 months**, Active Projects: **53.1 months**.
- **Average cost increased**
  Closed Projects: **USD 10,055**, Active Projects: **USD 32,886**.
- **Resilience and Livability** could receive more attention.

A country’s capacity to deliver housing solutions to everyone, everywhere, matters more than anything else.

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Mike Castelan for Pixabay.

There is a need for stronger alignment between what beneficiaries need **(speed, quality, and affordability)** and what projects define as success.

Speed

Time from the disaster to the delivery of the *first* housing units

Closed projects*: **36.7** MONTHS

Active projects**: **53.1** MONTHS

* Information compiled from 13 projects out of a total of 55.

** Information from 7 active projects that have completed housing units. Out of the other 6 projects that have not completed housing unit, the average time that has passed since the disaster occurred is 53.7 months.

Quality

Indicators included in the Results Framework

55 Closed Projects.

25 Units produced to meet resilient standards.

22 Project support to increase resilient construction.

6 Affected households occupying new or retrofitted units.

4 Affected households satisfied with new or retrofitted units.

Affordability

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Cost per housing solution

Closed projects: USD **10,055**

Active projects: USD **32,886**

Clients needs are evolving as disasters increase

Closed Projects: **64%**

Active Projects: **38.5%**

Housing Reconstruction Projects in Countries among the Top 30 Riskiest.

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Make Resilience a Core Element of Housing Projects!

Xavier Conesa for The World Bank.

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改善の精神

Housing Publications

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1980-2023

340+

Housing Publications.

65

Housing Assessments

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Simone D. McCourtie for The World Bank.

World Bank is Ahead of Our Peers

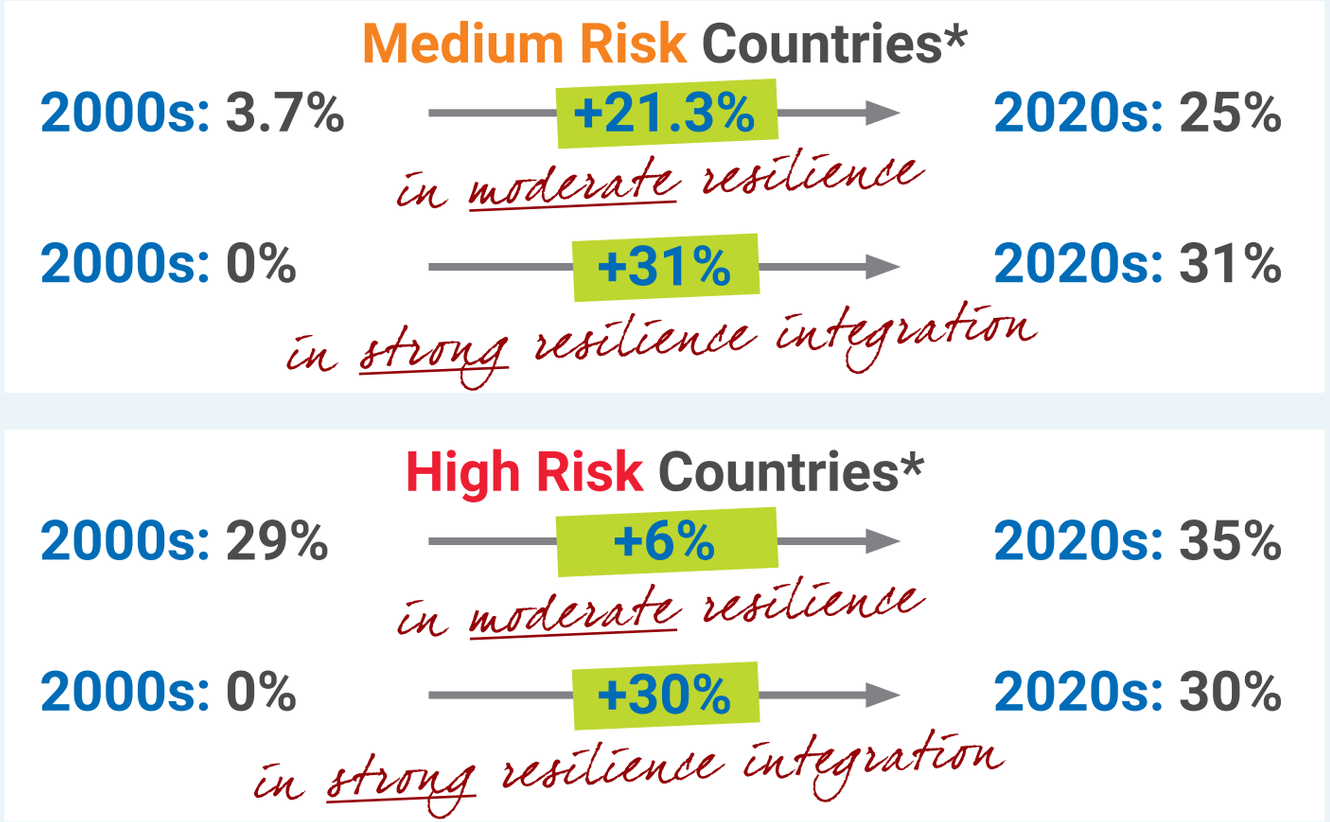
Average Resilience Score* of National Housing Studies (NHS)

World Bank	**3.7/5.0**	Peers	**3.1/5.0**
% of NHS with Moderate Resilience Integration**			
World Bank	**35%**	Peers	**33%**
% of NHS with Strong Resilience Integration**			
World Bank	**8%**	Peers	**4%**

* Peer Institutions include IDB, ADB, AFD, and UN-Habitat.

** This information is based on the manual review of 27 national housing studies published by peer institutions from 2004 to 2023, and 65 national housing studies published by the World Bank over the same period. A standardized framework was used to assign each report a resilience integration score out of 5.

World Bank is Ahead of Our Peers

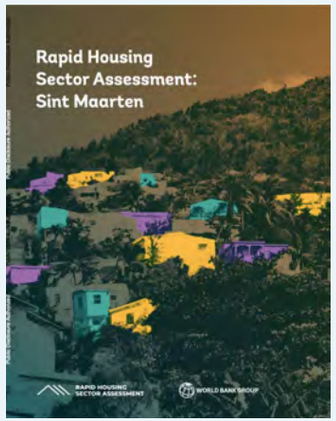


* These results are based on a standardized assessment of all reports published from 2004 to 2023 (228 reports total).

World Bank is Ahead of Our Peers

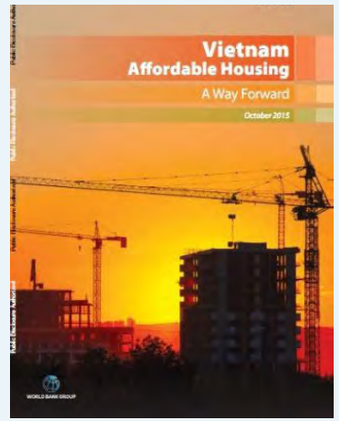
“Gold Standard”: High performance on all categories; includes strong resilience framing and context-specific guidance.

Colombia
DRR, retrofitting, social vulnerability.
(2021)

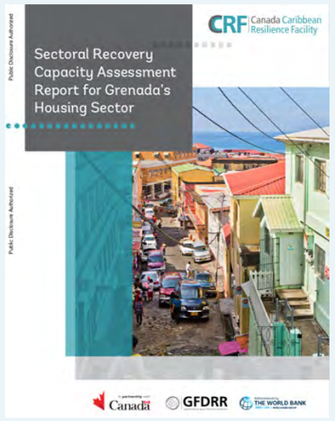


Sint Maarten
Post-disaster (Irma), structural risk, recovery planning.
(2020)

Peru
Preparedness, structural retrofits, resilient housing strategy.
(2021)



Vietnam
Informal risk, flood modeling, self-builds, climate-sensitive upgrades.
(2015)



Grenada
Comprehensive DRR + institutional resilience.
(2023)

Romania
Seismic retrofitting, disaster response, flood mapping, emergency housing.
(2015)

Djibouti
Flood and earthquake risk, includes seismic guidelines and regularization tools.
(2016)

Romania
Aging stock retrofits, radon mitigation, seismic retrofit, and institutional reform.
(2020)

75% of “Gold Standard” Reports (6/8) were in High-Risk Countries.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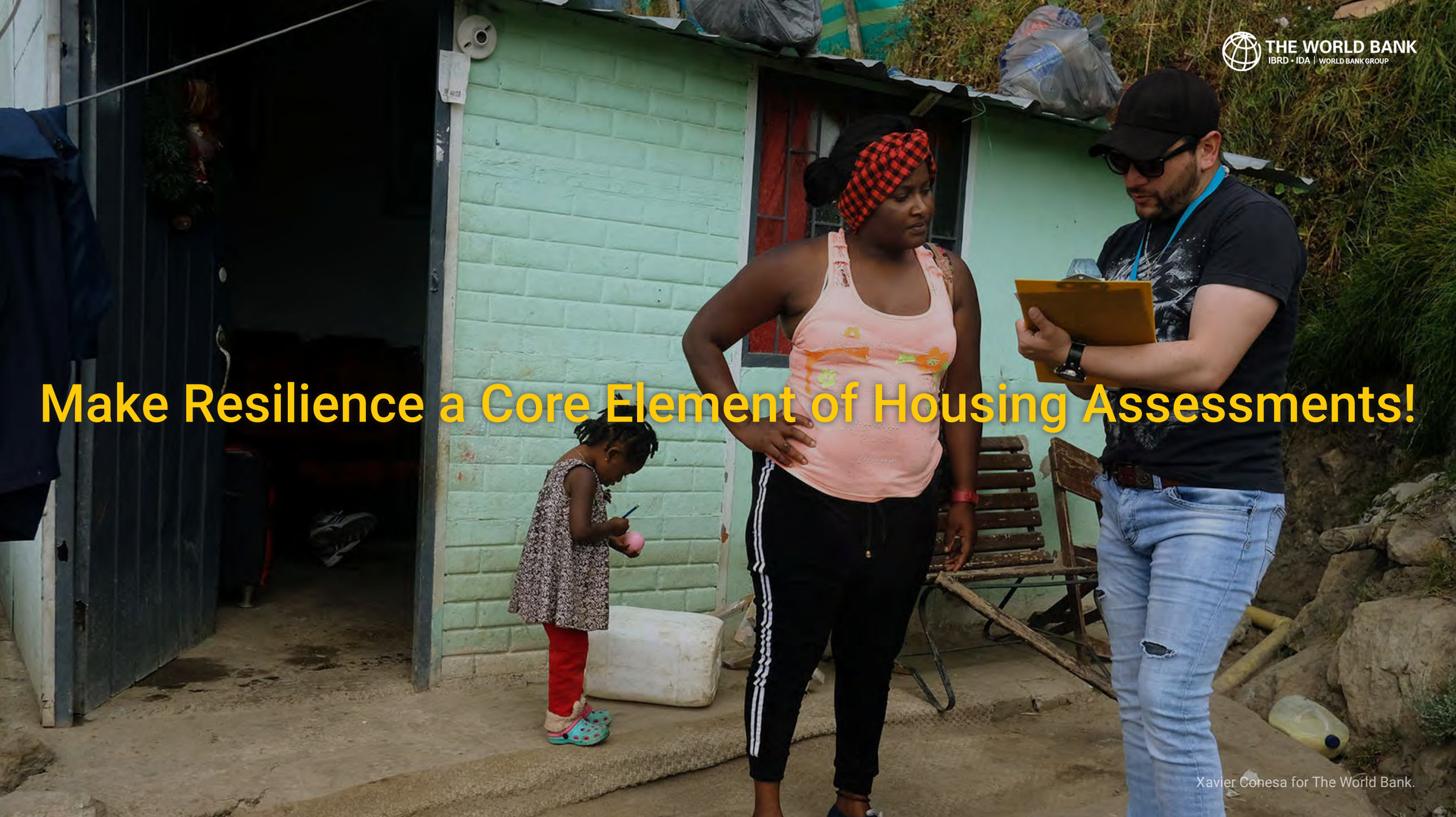
Are we ready to deliver at the level the moment demands?
Nissan Motor Corporation.



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Make Resilience a Core Element of Housing Assessments!

Xavier Conesa for The World Bank.

The Way Forward

U.S. Air Force photo for Wikimedia Commons.

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2025

45
In-Depth Interviews.

500+ Years of Housing Experience.
600+ Years of World Bank Experience.

39
TTLs.

6
Global Experts.

A CONCEPT

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Resilient Housing Capacity: The ability of governments and societies to provide resilient housing solutions to everyone – before, during, and after disasters and climate shocks.

A CONCEPT

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Requires **all stakeholders** to develop a range of competencies and instruments, including policies and programs.

Resilient Housing Capacity: The ability of governments and societies to provide resilient housing solutions to everyone – before, during, and after disasters and climate shocks.

An ability developed **over time**.

Can help close the resilient housing gap during **normal times and** respond effectively in **disaster situations** by providing temporary & permanent resilient housing.

A CONCEPT

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The Five Dimensions of Resilient Housing Capacity

Institutions, Markets, Legal, Community, Monitoring.

1. Institutional and Administrative Capacity

- Local governments' ability to provide suitable land, issue permits, and plan resettlement.
- Effective bureaucracy and clear roles between national and subnational authorities.
- Coordination across public entities, including newly created agencies post-disaster.

2. Housing Markets and Delivery Systems

- Availability of construction materials and skilled labor.
- Existence of local construction firms and self-construction support mechanisms.
- Implementation modalities that range from executors to technical assistance or financial aid.

3. Legal and Property Frameworks

- Clarity of property rights, especially for resettlement and informal settlements.
- Speed of beneficiary identification and eligibility verification.

4. Community Participation

- Involvement of beneficiaries in needs assessment, planning, and implementation.
- Mechanisms to incorporate feedback and respond to the needs of marginalized groups (e.g., renters, informal dwellers, people with disabilities).

5. Monitoring, Evaluation, and Learning

- Capacity to measure time, quality, and resilience.

A TOOL

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The Resilient Housing Snapshot

A Rapid Diagnostic to **Benchmark Resilient Housing Capacity**, identify gaps, and guide intervention pathways.

A TOOL

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The Resilient Housing Snapshot

A Rapid Diagnostic to **Benchmark Resilient Housing Capacity**, identify gaps, and guide intervention pathways.

Based on standardized questions and local validation, it offers a scalable tool to support country engagements because it is:

- **Faster than a full housing assessment,** avoids duplication by building on existing work and involving/informing all relevant teams (URL, FCI, IFC).
- **Contextually grounded,** it offers a **clear entry point** for operations and strategic planning – especially where time and resources are limited.
- **Enables comparability** across countries and informs when deeper work is justified.
- **Helps TTLs rebuild faster after disasters** by clarifying what the country can and cannot do.

A TOOL

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The Resilient Housing Snapshot

A Rapid Diagnostic to **Benchmark Resilient Housing Capacity**, identify gaps, and guide intervention pathways.

Example of Topics Covered by Multiple Teams

Housing Gap & Needs

- Does urban planning incorporate risk mapping to guide future housing growth?
- Has the government undertaken scenario planning for population displacement and urban expansion in high-risk areas?
- Is there a national or subnational inventory of housing vulnerability to hazards?
- Are informal settlements in high-risk areas mapped and prioritized for upgrading?

Land Provision & Regularization

- Is property taxed in a way that discourages land hoarding and promotes development in safe zones?
- Are hazard-prone or high-risk areas excluded from land allocation and regularization plans?
- Are land acquisition tools used to relocate housing from high-risk to safer areas?
- Are public land registries digitized and integrated with hazard maps?

Standards & Technologies

- Are there pre-approved resilient housing typologies available for reconstruction or retrofitting?
- Are there national guidelines for upgrading structurally weak or informal housing?
- Are land acquisition tools used to relocate housing from high-risk to safer areas?
- Are technical standards tailored for low-income and incremental housing?

Institutional Setting, Policies, & Operational Rules

- Do national or local housing policies address both urban and rural needs?
- Do public housing subsidies include provisions for resilience or retrofitting?
- Is there a lead agency coordinating resilient housing across DRM, urban, and finance sectors?
- Are Build Back Better principles formally adopted in post-disaster reconstruction frameworks?

Markets, Products, & Civil Society

- Have construction companies been pre-qualified or trained for pre- and post-disaster housing?
- Has civil society played a strong role in past housing reconstruction efforts?
- Are developers or contractors incentivized to meet resilience and affordability standards?
- Do community-based organizations participate in planning and implementing upgrades?

Public Financing & Private Capital Mobilization

- Is there a robust housing microfinance market serving low-income and informal households?
- Are public subsidy programs available for resilient self-construction or retrofits?
- Are disaster contingency funds or reconstruction budgets earmarked for resilient housing?
- Are private financing tools (e.g., guarantees, blended finance) available for housing PPPs?

Legends:

More than one team
DRM
Urban
Land
FCI/IFC

- **Weak:** Indicator is unmet or minimally addressed; significant gaps in policy, capacity, or implementation.
- **Moderate:** Indicator is unmet or minimally addressed; significant gaps in policy, capacity, or implementation.
- **Strong:** Indicator is fully met with effective policies, systems, and implementation in place.

A TOOL

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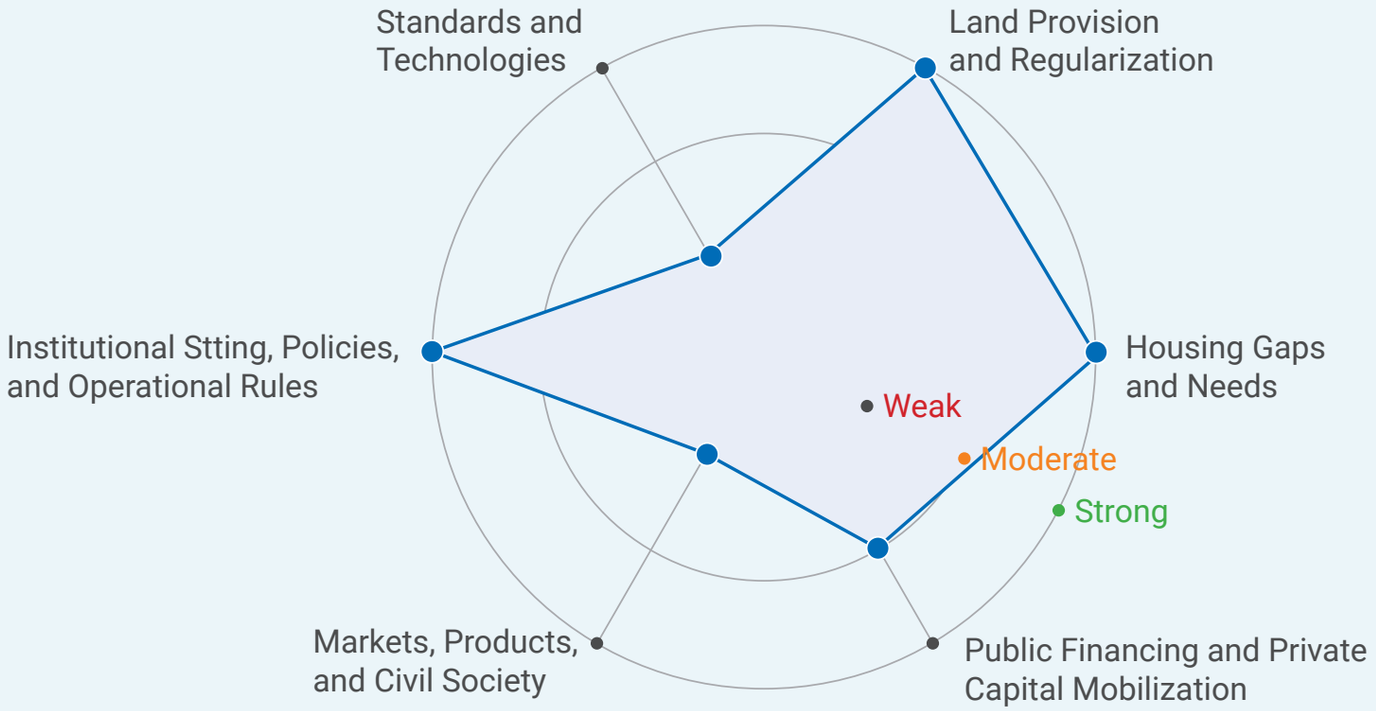
The Resilient Housing Snapshot

A Rapid Diagnostic to **Benchmark Resilient Housing Capacity**, identify gaps, and guide intervention pathways.

Mock country resilient housing snapshot



A POLICY GOAL

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Build Better Before

A PILLAR OF DEVELOPMENT

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Resilient Housing Capacity

Xavier Conesa for The World Bank.

*“We must find a way to be more efficient, more impactful, and more aligned with the **urgency of the moment**… because the truth is, the world is not waiting.”*

Ajay Banga, World Bank President.

The Urgency of the Housing Moment

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A BETTER BANK


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THANK YOU!

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ANNEX 1
Ideas from World Bank Group Staff and Experts

IDEA 1 Identify Vulnerabilities of Existing Housing Stock

Housing assessments can be very useful in identifying weaknesses in stock. By involving architects and engineers, beyond the core policy and finance team, these assessments can help flag major resilience issues in the housing stock, which can be tackled before a disaster occurs.

"Housing assessments are a great opportunity to flag resilience issues and mitigate at low costs before a disaster occurs."

Ashna Singh.

IDEA 2 Scenario Planning can be done as part of a housing assessment

Conduct housing reconstruction scenario planning with governments. Effective post disaster reconstruction depends on identifying the most appropriate recovery approach before a disaster strikes.

Scenario planning with government stakeholders is essential to determine the best form of reconstruction. This could be a requirement to receive CAT DDO financing.

Opportunity: targeted tasks that help define optimal reconstruction mechanisms for both rural and urban contexts.

> *"CAT DDO pre-requisites focus on building codes. But should also include housing reconstruction policies. This could solve many of the issues we face. Once this policy is in place, half the battle is already won."*
>
> Senior DRM Specialist.

IDEA 3 Housing Assessments should recommend Upgrades

Countries face both high qualitative and quantitative deficits – but focus too often on quantitative. Move beyond homeownership and include housing upgrades, as well as rental.

"In Haiti's housing reconstruction, it was assumed that most people in the camps owned a home, but it turned out that the owners lived abroad and the people in the camps were renters. Rental voucher programs turned out to be more successful than reconstruction in the end."

Operations Advisor.

"The allocation of subsidies is around 80 to 90% for new housing units and very little for upgrading. It makes more sense from a policy perspective to focus on upgrades – you get a bigger bang for your buck."

Sameh Wahba.

IDEA 4 Focus on Both Urban and Rural Housing

- Housing issues are both urban and rural, yet housing assessments focus primarily on urban.
- Examine both urban and rural housing value chains. As disasters affect both rural and urban areas, housing assessments could address the full spectrum of needs and challenges to ensure responsive and effective recovery strategies.
  - **Urban Challenges:** Consider complex legal frameworks, land tenure issues, high-density living, and urban infrastructure integration.
  - **Peri-urban Challenges:** Address issues in rapidly expanding cities, with informal settlement growth and often limited infrastructure.
  - **Rural Challenges:** Address issues such as informal settlement dynamics, limited infrastructure, and unique environmental vulnerabilities.
- A dual focused approach ensures that reconstruction policies are context specific and inclusive, supporting resilience across diverse settings.

> *"Develop more localized analysis. While housing assessments are often at the national level, disasters are localized. Having good quality data at the regional level can be very helpful."*
>
> Several DRM TTLs.

IDEA 5 Study Post-Disaster Housing Value Chains

- **Identify post-disaster value chains for housing production.**
- **Stakeholder mapping:** Identify key stakeholders – including government agencies, private sector partners, and civil society – to ensure a comprehensive reconstruction ecosystem.
- **Policy & Mechanism Identification:** Identify existing policies and mechanisms that support both immediate rebuilding and long term recovery, increasing the resilience of housing systems.

"DRM teams may not even know about the existence of housing studies. It's a stressful time and a lot of work has to be done quickly. Extending the housing value chain into post-disaster conditions would be helpful."

Lead DRM Specialist.

IDEA 6 Develop Pre-vetted Housing Typologies

- **Develop pre disaster, community vetted housing typologies.** Developing housing typologies that reflect local needs and conditions is critical for resilience. Designs should be developed and vetted by communities before a disaster strikes.
  - **Community Engagement:** Involve local stakeholders in the design process to ensure that housing solutions are culturally appropriate, affordable, and responsive to local vulnerabilities.
  - **Modular and Adaptable Designs:** Develop housing typologies that can be rapidly deployed and scaled, while also being flexible enough to accommodate post disaster modifications.
- **Community vetted housing designs** foster **local ownership** and ensure that reconstruction is both **efficient** and **sustainable**.

"Picking housing typologies beforehand would save time after a disaster. Getting these designs vetted by the construction industry ahead of time, would be great to choose the fastest, cheapest, and expandable units. Expandable is important as needs will not be the same for everyone."

Sameh Wahba.

"Governments are normally not ready to reconstruct. Having community-vetted housing typologies available, and ex-ante planning of the operational aspects of reconstruction would make the post-disaster recovery process faster."

Suranga Kahadanwa.

IDEA 7 Undertake “Resilient Housing Snapshots”

Develop a ‘housing snapshot’ which can be used during housing assessments. These scorecards can later help Urban and DRM teams quickly identify what needs to be done after a disaster.

> *“After a disaster, a quick existing checklist of information would be valuable. This could include: beneficiary identification, building code assessment, guidance note on reconstruction, private sector capacity, availability of materials and QA/QC.”*
>
> Lead DRM Specialist.

> *“Housing capacity, especially for fragile countries, must look beyond the Government and examine the role of private sector and civil society who often play a big role in reconstruction.”*
>
> Dean Cira

ANNEX 2
Mainstreaming Resilience in WBG Housing Assessments

World Bank Group Housing Assessments

Objective: Develop a diagnostic report using existing data to analyze the housing sector and identify key constraints and opportunities.

Areas of Analysis:

1. **Institutional & Legal Framework**
   - Review laws, roles of key institutions, and sub-national responsibilities.
2. **Housing Supply Value Chain**
   - Examine planning, land access, infrastructure, materials, private developers, and constraints.
3. **Rental Housing**
   - Analyze rental market dynamics, legal framework, and taxation.
4. **Housing & Construction Finance**
   - Assess mortgage market, construction finance, and housing microfinance.
5. **Government Programs & Subsidies**
   - Evaluate past/present housing interventions, performance, and public spending.
6. **Supply & Demand**
   - Quantify housing deficit, market production, affordability, and demand-supply gaps.
7. **Housing Sector & Economy**
   - Estimate contribution to GDP, employment, and economic impact.
8. **Constraints & Opportunities**
   - Identify barriers and propose actionable reforms (short-, medium-, long-term).

Opportunities to Mainstream Resilience in WBG Housing Assessments

Section 1: Institutional and Legal Framework

- Review of the legal framework governing the housing sector, including land-use and urban planning legislation.
- **Evaluation of whether national and subnational housing legislation includes disaster risk reduction (DRR) provisions, reconstruction policies, and scenario-based pre-disaster planning.**
- Identification and short description of the main institutions, their mandates, and their capacity/ constraints in relation to housing, **including DRR and reconstruction readiness.**
- **Assessment of building codes, standards, and enforcement mechanisms, with attention to whether they promote resilient construction practices.**
- Description of the role of sub-national government in housing policies, programs, and delivery, **particularly in disaster response and recovery.**
- **Analysis of the availability and affordability of resilient building materials and infrastructure.**
- **Review of the existence of cost-benefit analysis mechanisms for resilience investments and pre-approved resilient housing typologies.**

Opportunities to Mainstream Resilience in WBG Housing Assessments

Section 2: Housing Supply Value Chain

- **Review of the housing supply value chain across the main areas: (i) urban planning and building regulations; (ii) land access; (iii) infrastructure and services; and (iv) construction and building materials sector.**
- Characterization of prevailing spatial patterns of development (location and density), **including exposure to natural hazards.**
- Characterization of the scale and capacity of the private developer/builder market.
- Identification of the main constraints to the housing supply chain.
- **Assessment of post-disaster reconstruction value chains, including bottlenecks in construction capacity, skilled labor, availability of resilient materials, and emergency procurement coordination.**

Opportunities to Mainstream Resilience in WBG Housing Assessments

Section 3: Rental Housing

- Analysis of the rental market, terms of agreements, rental price, share of agreements officially registered.
- Analysis of the legal and regulatory framework for rental, including taxation of rental income, eviction practices, and tenant protections.
- **Evaluation of tenant vulnerability in high-risk zones and the existence of post-disaster eviction protections.**
- **Assessment of insurance coverage for rental units and landlord types (institutional vs. small-scale).**
- **Analysis of rental voucher programs, especially their relevance and performance in post-disaster recovery contexts.**

Opportunities to Mainstream Resilience in WBG Housing Assessments

Section 4: Finance

- Review of mortgage finance, **including underwriting practices related to disaster risk.**
- Key providers of housing finance (banks, leasing companies, MFIs, cooperatives, developers), and **the extent to which they offer resilient housing products.**
- Analysis of terms, volumes, market penetration, and regulatory framework.
- **Assessment of whether financial institutions use quality assurance mechanisms for resilient housing when lending to developers.**
- **Evaluation of retrofit and upgrade financing availability, particularly for low-income and informal households.**
- Review of the construction finance sector, **including disaster risk considerations in project evaluation.**
- Major mechanisms used, legislation, and key constraints **including barriers to investing in resilient housing.**
- Review of housing microfinance (HMF) loans for incremental and **resilient** construction.
- **Identification of constraints preventing growth of HMF lending for resilient upgrades and post-disaster reconstruction.**

Opportunities to Mainstream Resilience in WBG Housing Assessments

Section 5: Government Program & Subsidies

- A brief chronology of government interventions in the housing sector, **with attention to post-disaster reconstruction programs and their effectiveness.**
- Description and assessment of housing programs, **including whether they incorporate resilience incentives or mandates (e.g., for flood- or earthquake-resilient structures).**
- **Review of rural housing and housing upgrade subsidies with resilience elements, and targeting effectiveness to vulnerable populations.**
- Assessment of past government performance in financing and maintaining **resilient housing,** with a review of capital vs. maintenance spending.

Section 6: Supply & Demand Analysis

- A current snapshot of the housing market, **integrating risk exposure data (e.g., housing in floodplains, seismic zones).**
- **Quantification of housing deficit segmented by risk exposure and resilience status (qualitative deficit due to non-resilient structures).**
- **Estimation of demand for resilient housing, including affordability analysis and willingness-to-pay surveys among households and developers.**
- Estimation of the housing “gap” **accounting for resilience standards.**

Opportunities to Mainstream Resilience in WBG Housing Assessments

Section 7: Housing Sector & the Economy

- Characterization of the housing sector's role within the national economy.
- **Estimation of the economic cost of housing-related disaster losses.**
- **Estimation of the economic gains from investing in resilient housing (e.g., reduced reconstruction costs, employment, GDP contributions).**
- **Assessment of the contribution of the resilient housing sector to macroeconomic stability, fiscal savings, and household asset protection.**

Section 8: Constraints & Opportunities

- Summary and synthesis of constraints across the housing value chain, **including gaps in resilience across institutions, finance, supply, and regulation.**
- Recommendations for increasing access to **resilient and** affordable housing, including:
  - **Regulatory reforms to mainstream resilience**
  - **Financial incentives for resilient construction and retrofitting**
  - **Pilot programs to test scalable resilience interventions**
  - **Guidance on reconstruction and upgrading policies post-disaster**
- Identification of roles and responsibilities of key actors and indicative costs or resource requirements **to improve resilience throughout the sector.**

Opportunities to Mainstream Resilience in WBG Housing Assessments

Resources

- Budgets vary from 50k for high-level diagnostics by IFC to 200k for in-depth assessments with surveys by World Bank.
- Duration is between 6 months and 1 year.
- Typical team: International housing expert, housing finance expert, local urban planning/architect, local engineer, local surveying team.

Little to no additional costs

- Upgrade/repair policy in place.
- Housing policy for rural and urban.
- Retrofitting programs.
- Past examples of post disaster reconstruction in country and lessons learned.
- Insurance mechanisms.
- Capacity of private sector to intervene after disaster.
- Housing microfinance.
- Capacity of civil society.

Some additional costs

- Pre-vetted housing types.
- Key construction technologies and types.
- Vulnerability assessments.
- Post-disaster construction value chain.
- Scenario planning.
- Total estimated additional cost = 50 to 75K (on top of the initial 50 to 200K).
- Additional time: 6 months.
- Additional team members: Local and international architect/engineer.

THANK YOU!

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