Addressing the global affordable housing challenge

McKinsey Global Institute
Dr. Jan Mischke

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McKinsey&Company

Overview
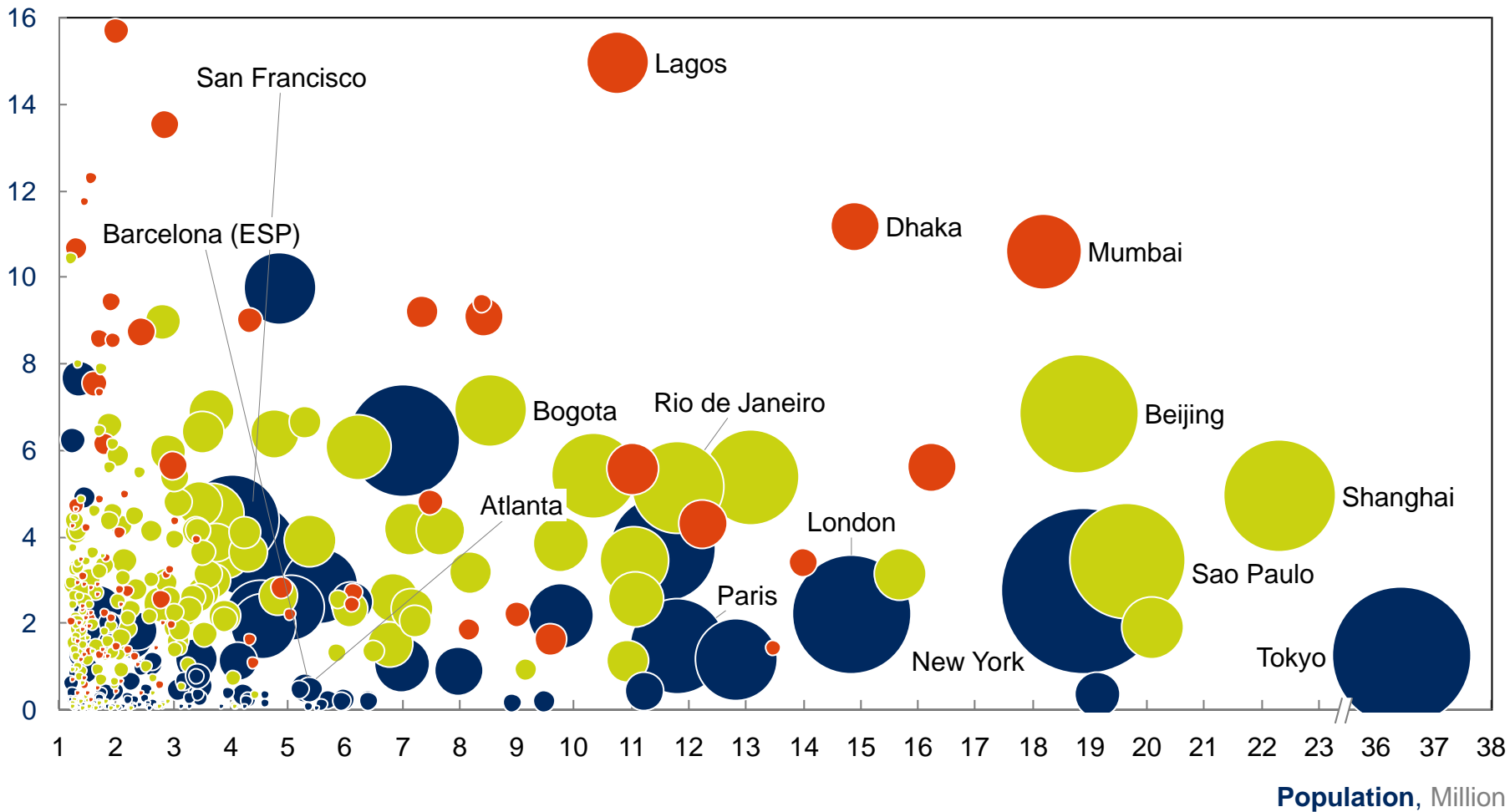
I. Recap of the affordable housing gap and how to bridge it

II. Thinking about housing finance, supply, and the journey to decent housing in an integrated way

III. How to move things forward in practice

I. The affordability gap in 2400 cities

Affordability gap $ billion

Country income group[1]
- High
- Low
- Mid

Affordability gap, % of GDP

Population, Million

Cities labeled: San Francisco, Lagos, Barcelona (ESP), Dhaka, Mumbai, Bogota, Rio de Janeiro, Atlanta, Beijing, Shanghai, London, Paris, Sao Paulo, New York, Tokyo

1 As defined by World Bank.

I. Four levels can narrow the affordability gap

Annualized cost — 100

Land — 8-23

Development — 12-16

Operations and maintenance — 2

Financing[1] — 0-7

Optimized cost — 52-78

Subsidies & non-standard housing[2]

30%   50%   80%   **Area median income**
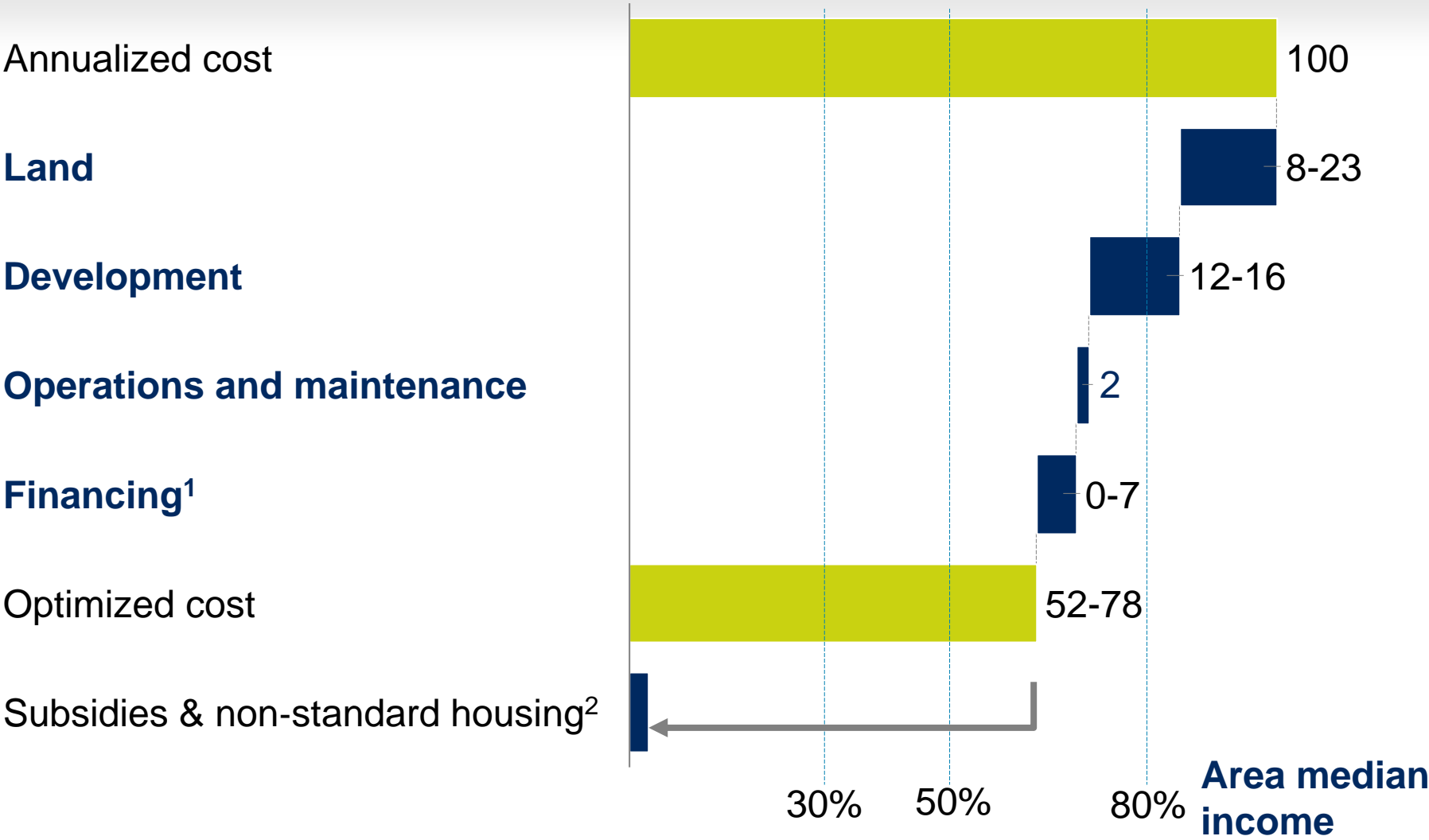
1 Impact of reduced origination and funding costs is quantified; impact of increased access to financing is not
2 Transitional use of basic housing (with communal toilets and kitchens, for example) to serve very low-income households

I. $8 trillion investment could be unlocked from low income people via financing – if complemented with land and poverty support measures

USD trillion

Total investment	16
Land value	5-7
Construction capital outlay	9-11
Private investment	~8
Viability gap funding required	1-3

II. Clear opportunity to improve access to and cost of finance for owned and rented property

■ High income ■ Low to moderate income

Reducing mortgage rates – Rate break-down; %

United States[1]

	High income	Low to moderate income	Total
Prevailing mortgage rate with fees	4.3	0.7	5.0
Fees	0.1		
Risk costs and margin[3]	0.7	0.8	1.5[4]
Operating cost	0.2		
Cost of funds	3.3[5]		

Mexico[2]

	High income	Low to moderate income	Total
Prevailing mortgage rate with fees	8.9	4.6	13.5
Fees	0.1	0.1	0.2
Risk costs and margin[3]	2.1	2.7	4.8
Operating cost	1.7		
Cost of funds	6.9[6]		

Improving conditions for developers and landlords

- **De-risking development**
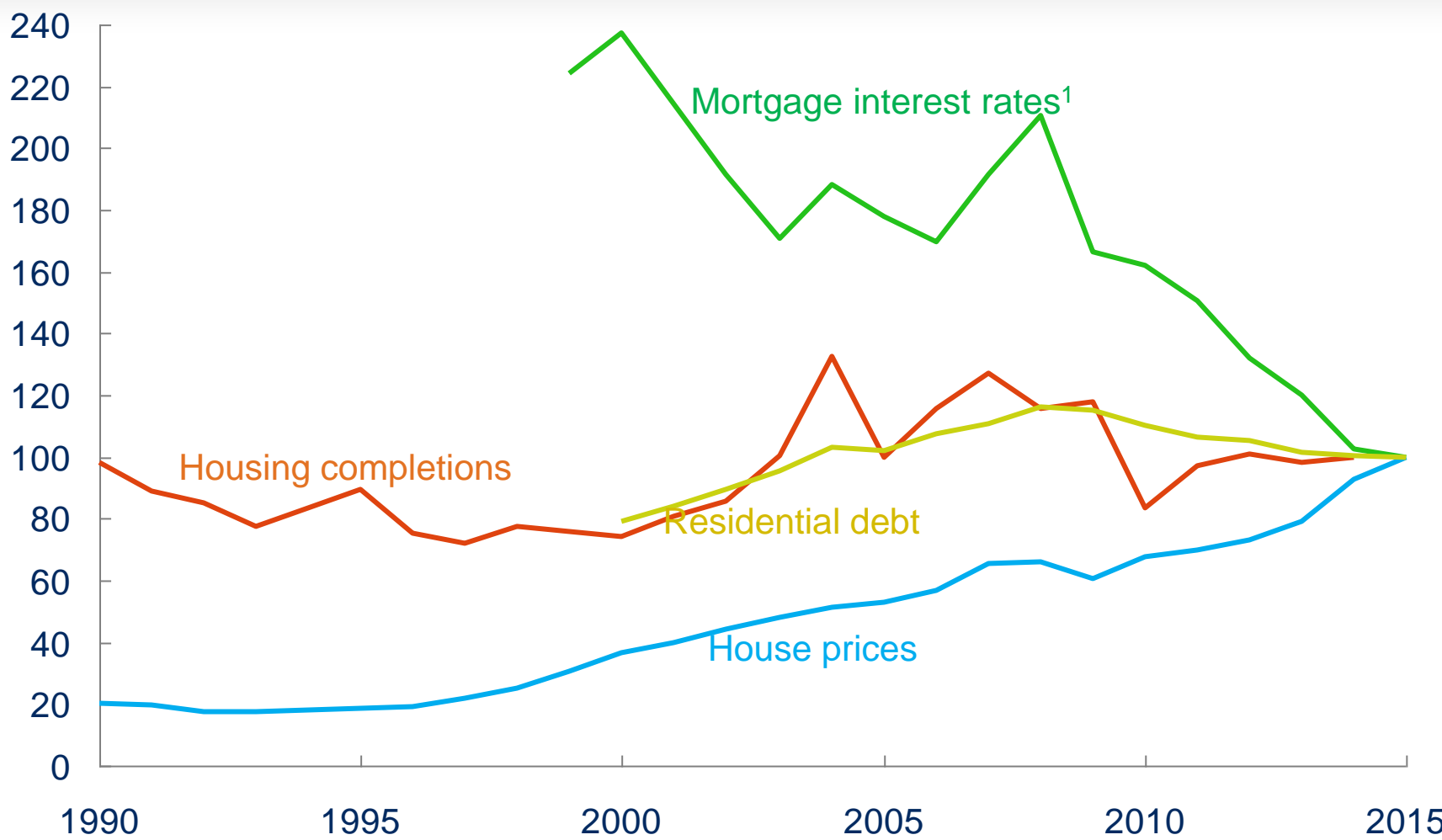- **Increasing equity**
- **Improving debt terms**
- **Providing tax relief**
- **Balance of pro-tenant vs. pro-landlord regulation**

1 Prevailing rate for high income households is 4.3% and for low and moderate income households is 5.0%   2 Prevailing rate for high income households is 8.9% and for low and moderate income households is 13.5%   3 Includes margins charged for risk premium and economic profit.   4 Includes mortgage insurance risk premiums and Federal Housing Administration subsidies   5 Reflects 30-year Treasury note rate with negligible capital charge due to the prevalence of securitization in the American mortgage market   6 Blended seven- and 10-year bank note rate plus a capital charge of 50 basis points

II. Critical to also resolve supply constraints in sync – example London

London; Index, 2015 =100[2]

240
220
200
180
160
140
120
100
80
60
40
20
0

Mortgage interest rates[1]

Housing completions

Residential debt

House prices
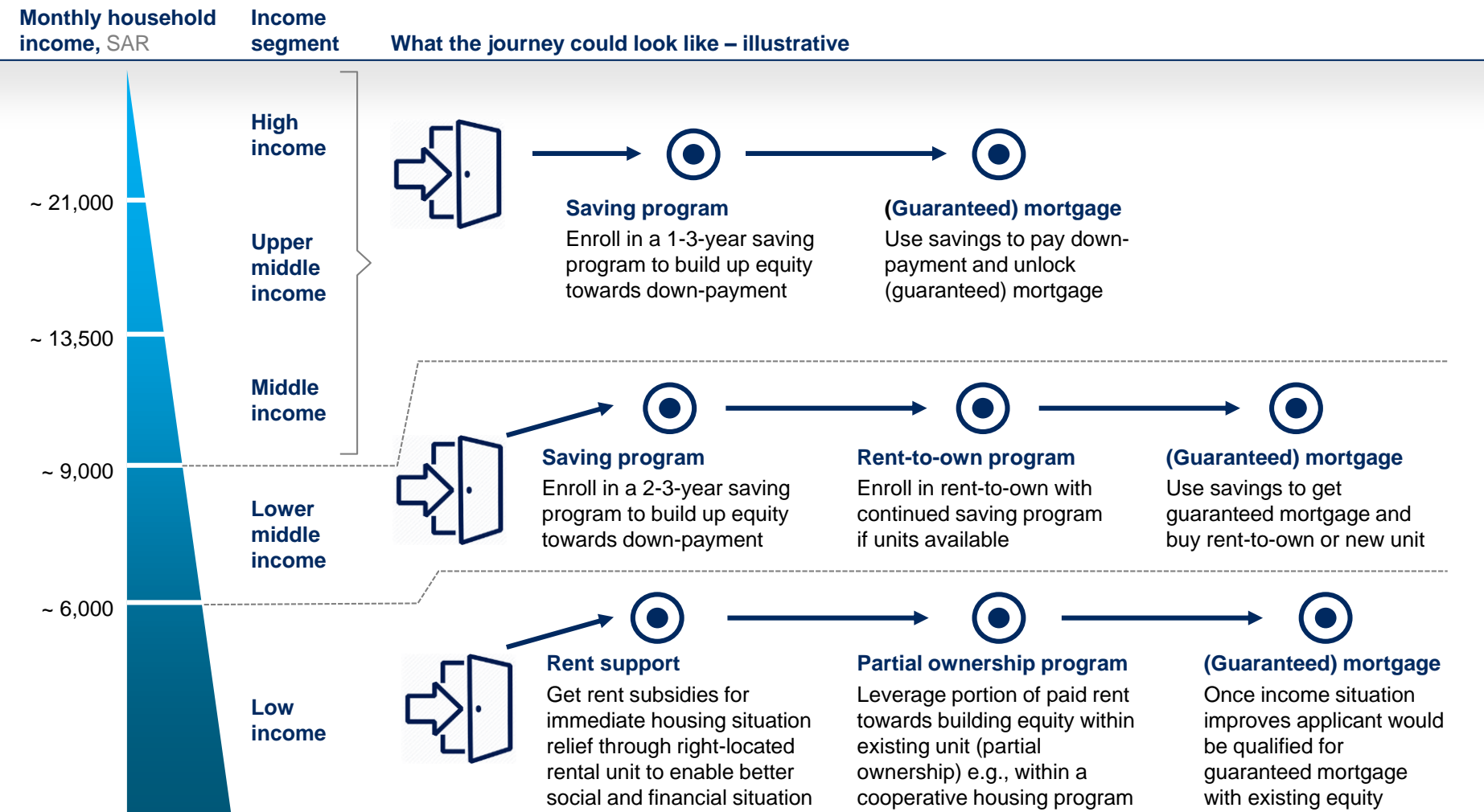
1990   1995   2000   2005   2010   2015

1 3y fixed, 75% LTV, January
2 2014=100 for completions

II. Tailored products needed for different income segments to improve the housing situation for all and provide a ladder up – example Middle East

● Housing ownership journey   ⇨| Applicant enters MoH program

Monthly household income, SAR	Income segment	What the journey could look like – illustrative

~ 21,000

High income

Upper middle income

⇨| → ● → ●

Saving program
Enroll in a 1-3-year saving program to build up equity towards down-payment

(Guaranteed) mortgage
Use savings to pay down-payment and unlock (guaranteed) mortgage

~ 13,500

Middle income

⇨| → ● → ● → ●

Saving program
Enroll in a 2-3-year saving program to build up equity towards down-payment

Rent-to-own program
Enroll in rent-to-own with continued saving program if units available

(Guaranteed) mortgage
Use savings to get guaranteed mortgage and buy rent-to-own or new unit

~ 9,000

Lower middle income

~ 6,000

Low income

⇨| → ● → ● → ●

Rent support
Get rent subsidies for immediate housing situation relief through right-located rental unit to enable better social and financial situation

Partial ownership program
Leverage portion of paid rent towards building equity within existing unit (partial ownership) e.g., within a cooperative housing program

(Guaranteed) mortgage
Once income situation improves applicant would be qualified for guaranteed mortgage with existing equity

III. 'Housing delivery labs' methodology as an approach to mobilize all stakeholders and achieve fast track impact

Elements of success

Interdisciplinary teams and experts	Delivery labs call for interdisciplinary teams and experts to work together over a duration of ~8 weeks to co-create comprehensive but also pragmatic solutions to the problems at hand	
Effective stakeholder involvement	From day 1, stakeholders from the public sector (e.g., other Ministries) and the private sector (e.g., banks, developers) have been involved to be part of the solution	
Implementable plans	The focus of the delivery lab is not only to identify the solution but to plan the solution in such a detail – 3-foot planning – that allows its easy implementation	

Thank you!

The full report is available at
McKinsey Global Institute
www.mckinsey.com/mgi

7ᵗʰ Global Housing Finance Conference

Sriram Kalyanaraman

Managing Director & CEO

NATIONAL HOUSING BANK

Wholly Owned by Reserve Bank of India

India Economy

- India - The Fastest Growing Major Economy
- GDP growth seen at 7.3 – 7.4 per cent for the current fiscal year 2016-17
- The Reserve Bank of India cut the key rate last year besides tweaking monetary policy to boost liquidity and encourage credit growth
- Total Population: **1.2 billion**
- No. of States/UT's: **29 States/7UT's**
- No. of Urban Agglomerations with Population more than 1 million (% of Total Population): **14**

Real GDP Growth (%)

	2013	2014	2015E	2016F	2017F	2018F
India					7.9	7.9
China					6.5	6.5
BRICS					5.3	5.4
World					3.1	3.1
United States					2.4	2.2

World — BRICS — China — United States — India

National Housing Bank

- Issuing directions and guidelines for development of stable and sound housing finance system
- Supervision through onsite and off-site inspections
- Consumer awareness and consumer interests protection
- Inter-regulator coordination
- 73 Companies

REGULATION & SUPERVISION

PROMOTION & DEVELOPMENT

FINANCING
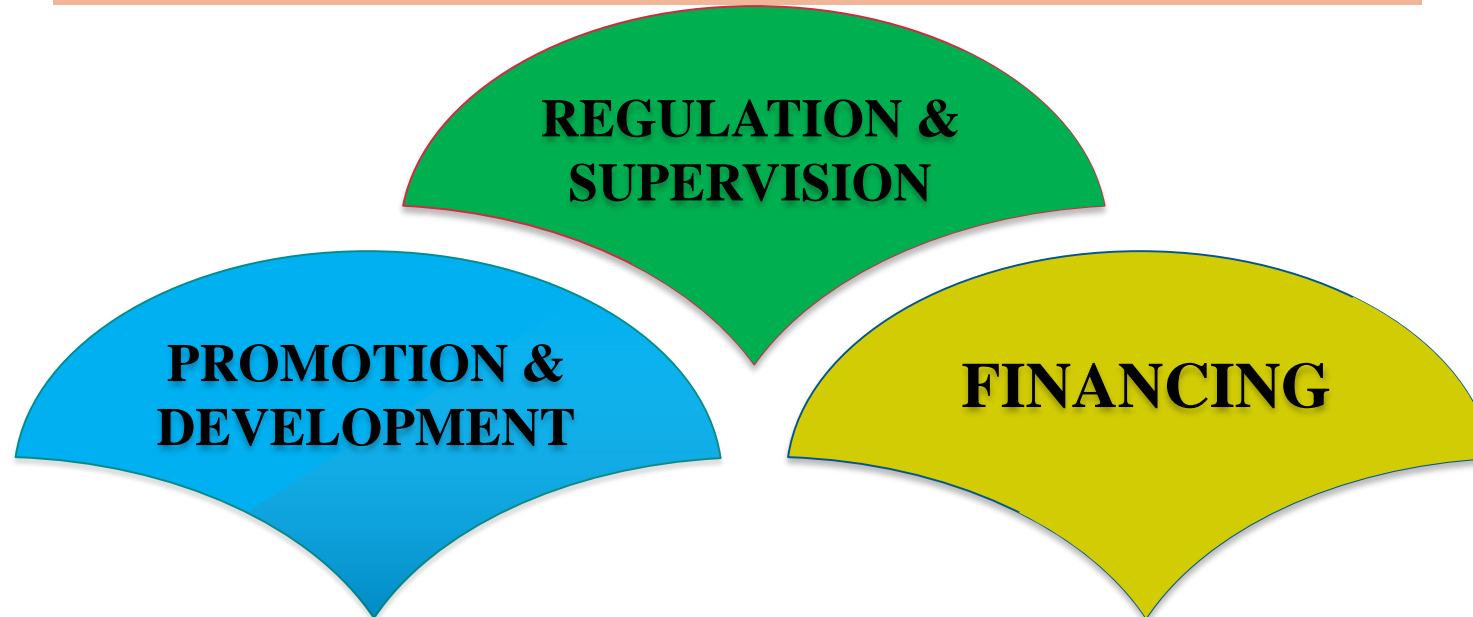
RHF: $3.8 billion | 1.5 million units

UHF: $0.93 billion | 0.8 million units

TOTAL: $4.73 billion | 2.3 million units

- Creation of new players through equity participation
- Strengthening existing network of lending Institutions
- Capacity Building for the sector
- Consumer awareness through training & seminars, etc.
- Knowledge partners to various stakeholders

- Sustainable housing finance system through refinance
- Project Financing to Public agencies
- PPP projects for targeted segments

3

Housing Finance - India

Trend in Yearly Outstanding Individual Loans of PSB's and HFC's

NHB Estimates a Provisional Annual Growth of 19%

In billions

- 31-03-2012: $73 — Housing Finance Companies $30, Public Sector Banks $43
- 20%
- 31-03-2013: $88 — Housing Finance Companies $39, Public Sector Banks $49
- 20%
- 31-03-2014: $106 — Housing Finance Companies $47, Public Sector Banks $59
- 18%
- 31-03-2015: $125 — Housing Finance Companies $56, Public Sector Banks $69
- **31-03-2016: $149 — Housing Finance Companies $67, Public Sector Banks $82

■ Public Sector Banks   ■ Housing Finance Companies

90+ Delinquency = 1.50% | Total Amount of New Bookings = $42 billion

The Challenge

Estimated Urban Housing Shortage* in India: 2012-2017

> 95% in EWS & LIG Segment

In million units

EWS: 11, LIG: 7, MIG & Above: 1, Total: 19
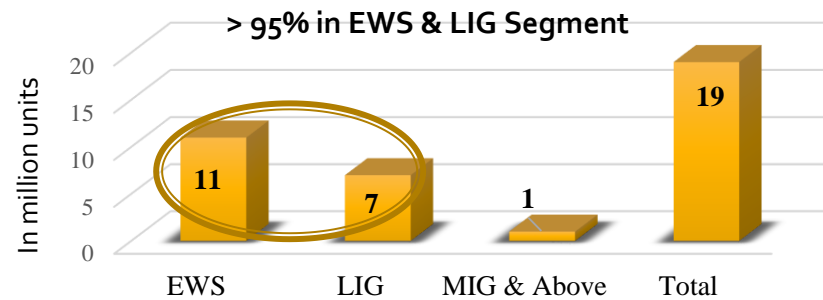
* Report of the Ministry of Housing and Urban Poverty Alleviation
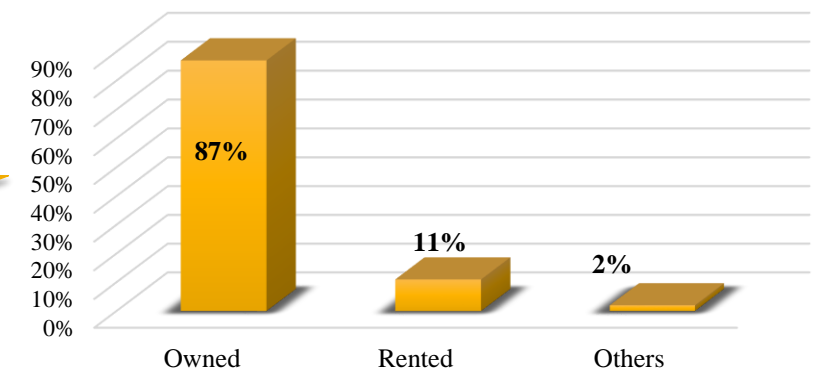
Estimated Rural Housing Shortage** in India: 2012-2017

> 90 % in BPL Segment

In million units

BPL: 39, APL: 4, Total: 43
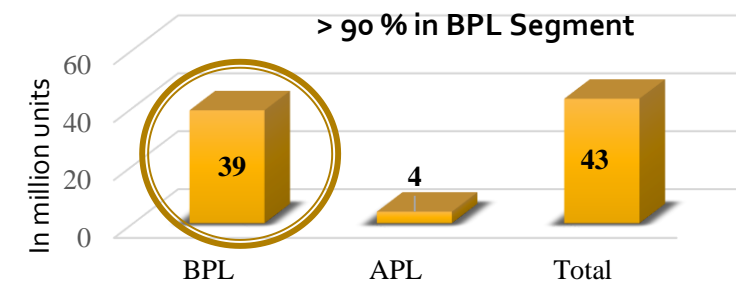
** Working Group Report on Rural Housing

Household By type of Housing Conditions –
Census 2011

Percentage

Permanent: 62, Semi-Permanent: 26, Temporary: 12
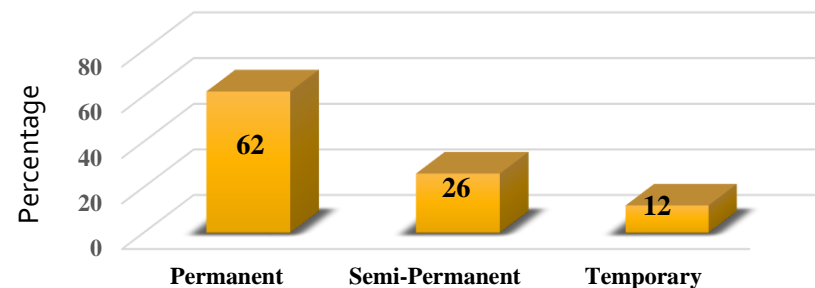
***Source: State of housing in India a statistical compendium, Government of India, Ministry of Housing and Urban Poverty Alleviation, National Buildings Organisation 2013

% HOUSEHOLDS BY TYPE OF OCCUPANCY-Census 2011***

Owned: 87%, Rented: 11%, Others: 2%

60 Million Houses by 2022

Estimated Annual Investment USD 150 billion

5

Housing For All - Urban

"In situ" Slum Redevelopment

Using land as a resource
With private participation
Extra FSI/TDR to make projects financially viable

Central Sector Scheme – NHB as a Central Nodal Agency

Subsidy for beneficiary-led individual house construction

For individuals of EWS category requiring individual house
-State to prepare a separate project for such beneficiaries
-No isolated/ splintered beneficiary to be covered

1

4

2

3

Affordable Housing through Credit Linked Subsidy

Interest subvention subsidy for EWS and LIG for new house or incremental housing
All 4041 statutory towns as per Census 2011 would be covered under the Central Sector Scheme

1, 3 & 4 implemented through State & UTs

Affordable Housing in Partnership

With private or public sector, including Parastatal
Central Assistance per EWS house in Affordable Housing Projects

Rural

- 2.83 million Beneficiaries Identified
- Average Ticket Size of $4000
- Subsidy of $2000

Physical & Financial Progress

No of Cities Considered for Funding: **658** | Project Proposals Considered: **903** | EWS Houses: **610,519** | Central Assistance Involved: **$1.42 billion** | Total Value of The Projects: **$3.55 billion**

Speed Breakers

Shortage of Land Availability — 1

Unaffordability Due to Cost Escalation — 2

Regulatory Approvals — 3

High Risk Perception — 4

Housing

Financing

1 — Limited Credit History Profile

2 — Risk Avoidance Attitude and Irregular Income and Unstable Cash Flows

3 — High Cost - to - Service

4 — Leveraging Effect of Subsidy

Government Interventions Through Subsidy Schemes

Credit Risk Guarantee Fund is Managed by NHB

SUPPLY & DEMAND MISMATCH

SUPPLY

- Land cost
- Infrastructure provision
- Housing construction
- Availability of housing units by market players
- Role of Public agencies and Pvt. developers
- Credit availability and delivery

DEMAND

- Increasing cost of dwelling units
- Availability of Credit
- Affordability of Credit
- Loan eligibility
- Subsidy component
- Risk Mitigants/ Subsidy

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Sustainable Housing Finance System

Availability of Land & Infrastructure

Affordability & Credit Accessibility

Institutional Mechanism for Housing

Involvement of Market Players to Supply Finance
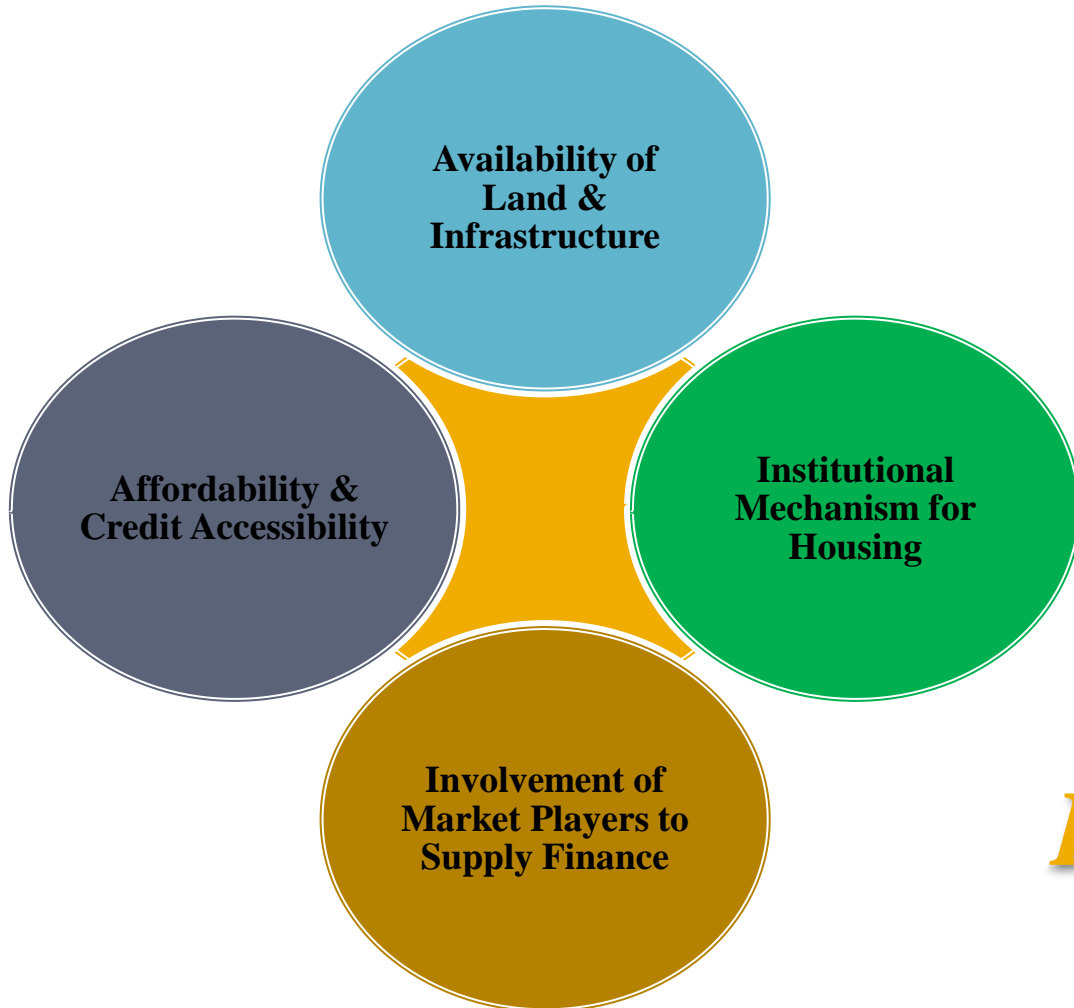
Habitat For All

Housing For All

NHB Project Highlights – Financial Inclusions

2001 Gujarat Earthquake | Kutch | Gujarat

2004 Tsunami Relief | Andhra Pradesh

2015 Chennai Flood Relief | Chennai | Tamil Nadu

Dharavi Slum Re-development | Mumbai | Maharashtra

Rural Housing | Udaipur District | Rajasthan

CLSS Workshop | Bhopal | Madhya Pradesh

Annexure 1

Trend of Total SCB's & HFC's Credit to Outstanding Housing Finance
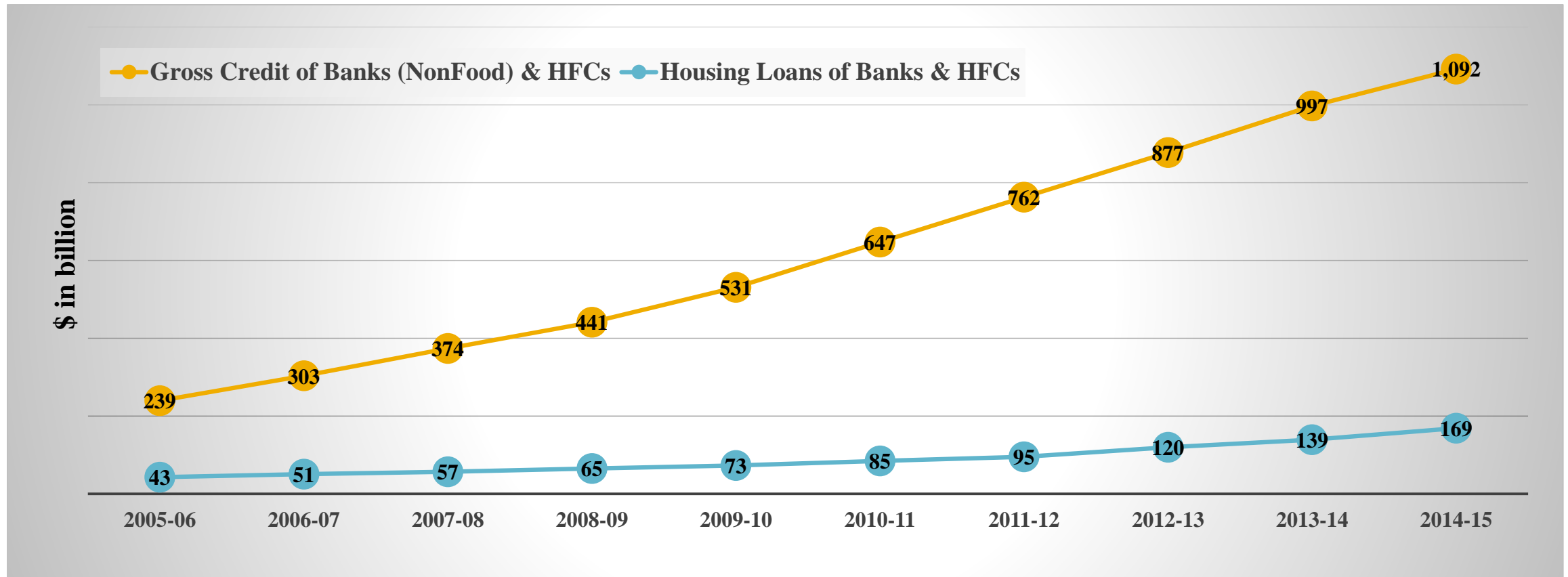
Overall Financial Credit Increases at 10% (2015) | The Housing Credit Increases at 22% (2015)

Annexure 2 – Home Loan Penetration
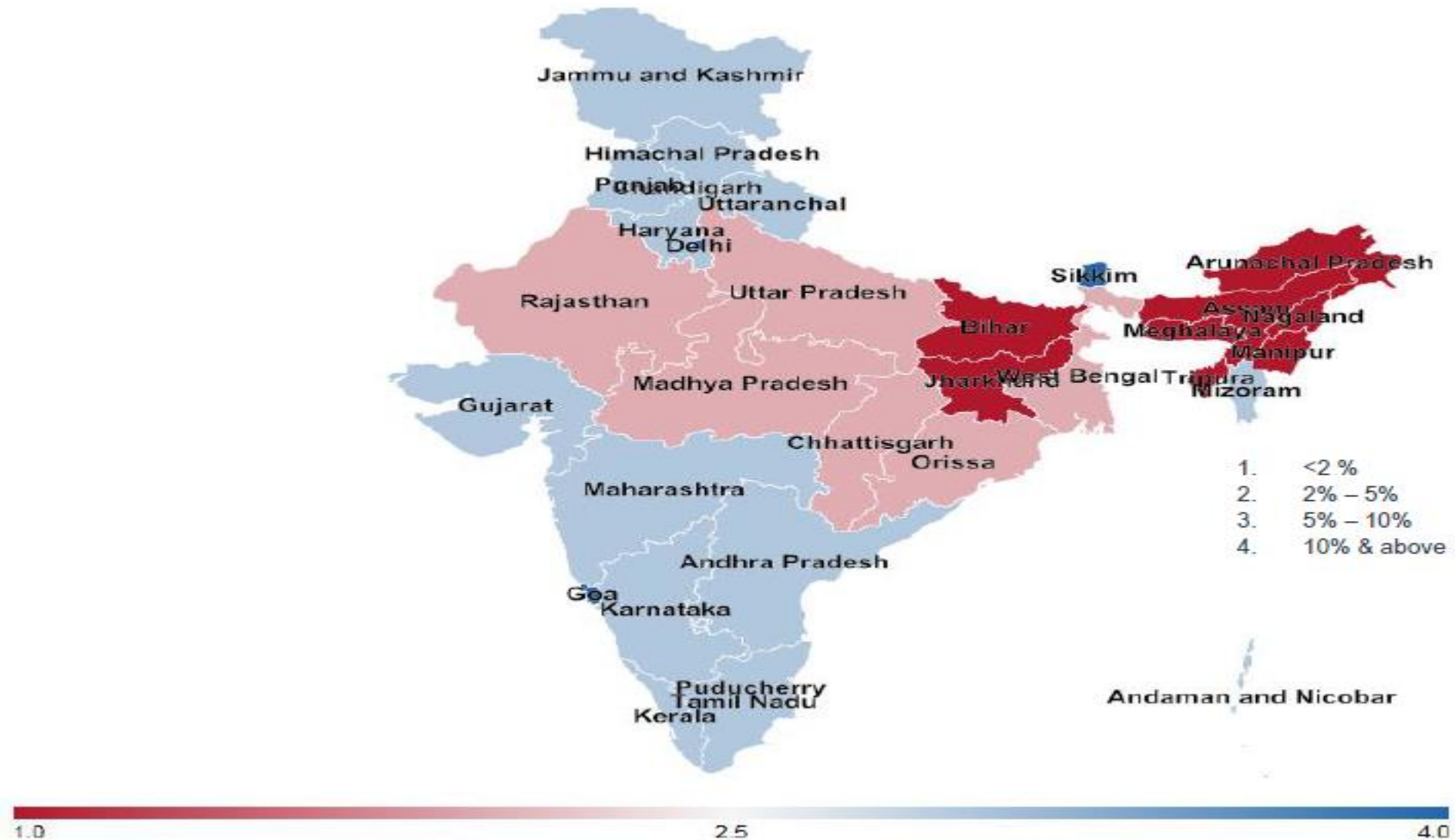
Thank You

7TH Global Housing Finance Conference Housing 2030

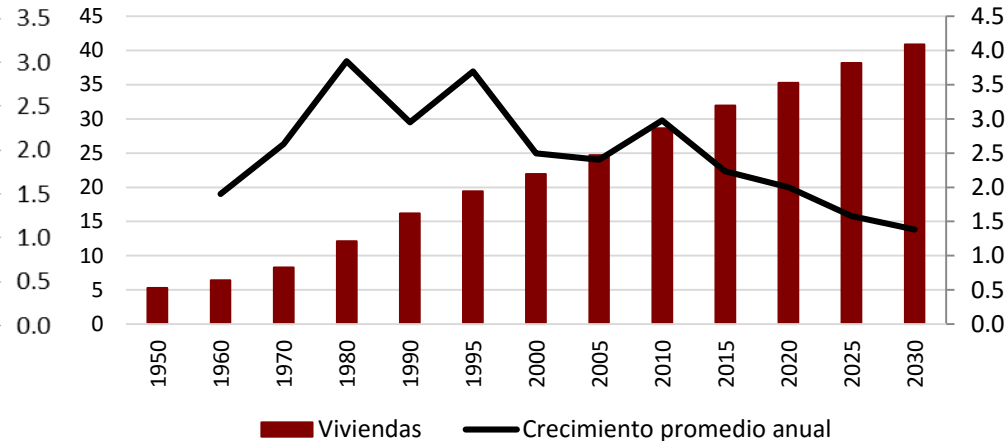## *Session 1: Adequate, Safe and Affordable Housing*

CONAVI

MAY 2016

The next 15 years, Mexico 's Population and Housing will increase 15% and 28%, respectively

México's population (millions & %)
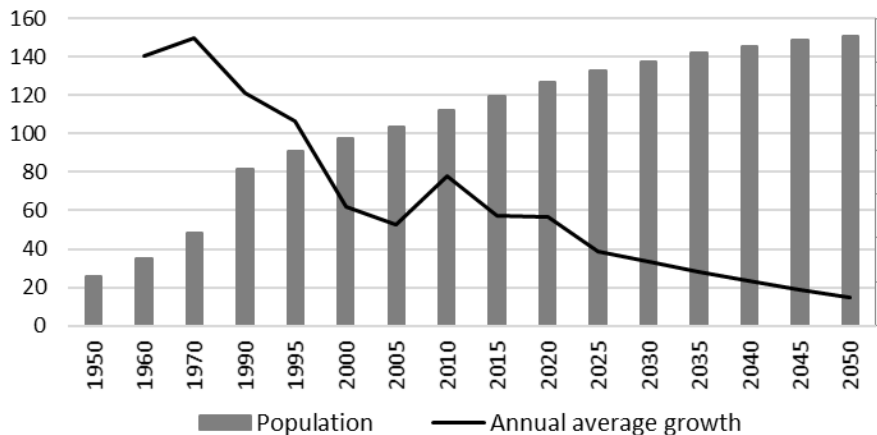
CONAVI, INEGI (1950-2015) & CONAPO (2020-2050) data

Housing units (millions & %)

CONAVI, INEGI (1950-2015) & CONAPO (2020-2030) data

- During the 60's & 70's, the highest population growth rate was observed, as a result of the natural (fertility policy) and social (migration) states.
- Regarding Housing, the highest growth was registered during the 80's and 90's.
- For the following 15 years, an annual average growth is expected as of 594 thousand housing units.

SEDATU
SECRETARÍA DE
DESARROLLO AGRARIO,
TERRITORIAL Y URBANO

ESTADOS UNIDOS MEXICANOS

COMISIÓN
NACIONAL
DE VIVIENDA

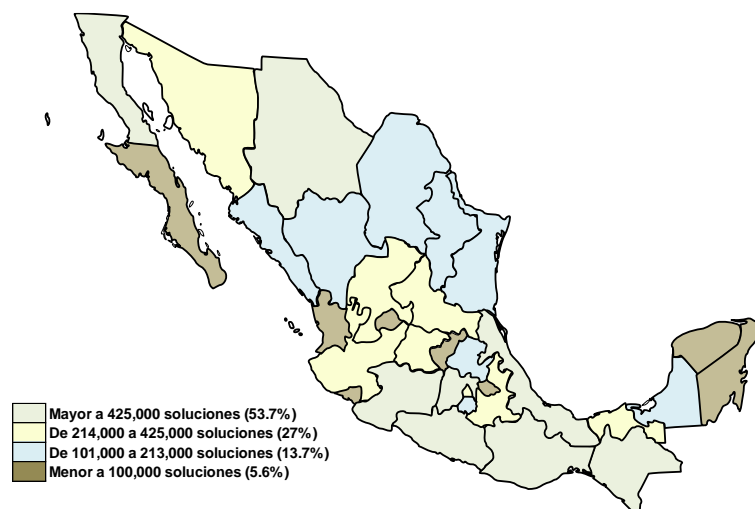# Housing Deficit in Mexico: Potential Market

According to the National Household Income and Expenditure Survey (ENIGH, in Spanish) 2014, in Mexico there is a **housing deficit of 8.96 million dwellings**, which require housing solutions: **Extension/Improvement, and replacement**.

Housing deficit by type of housing solution, 2014

Improvement and extension 13.5

Replacement 9.0

Extension only 10.1

Improvement only 67.4
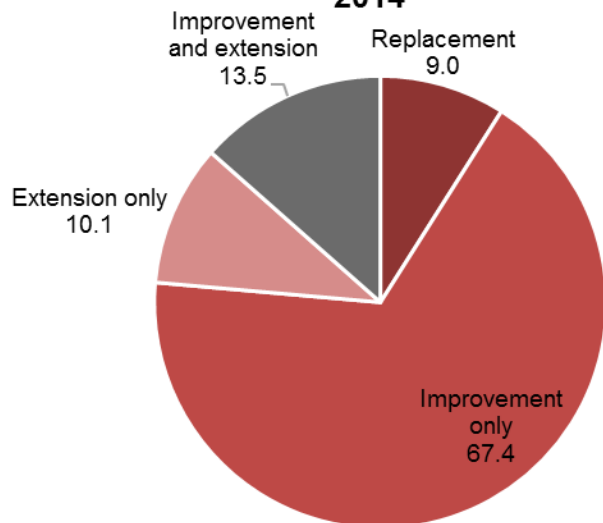
Source: CONAVI with information of INEGI 2014. Socioeconomic Conditions Module.

Demand for housing solutions required

Mayor a 425,000 soluciones (53.7%)
De 214,000 a 425,000 soluciones (27%)
De 101,000 a 213,000 soluciones (13.7%)
Menor a 100,000 soluciones (5.6%)

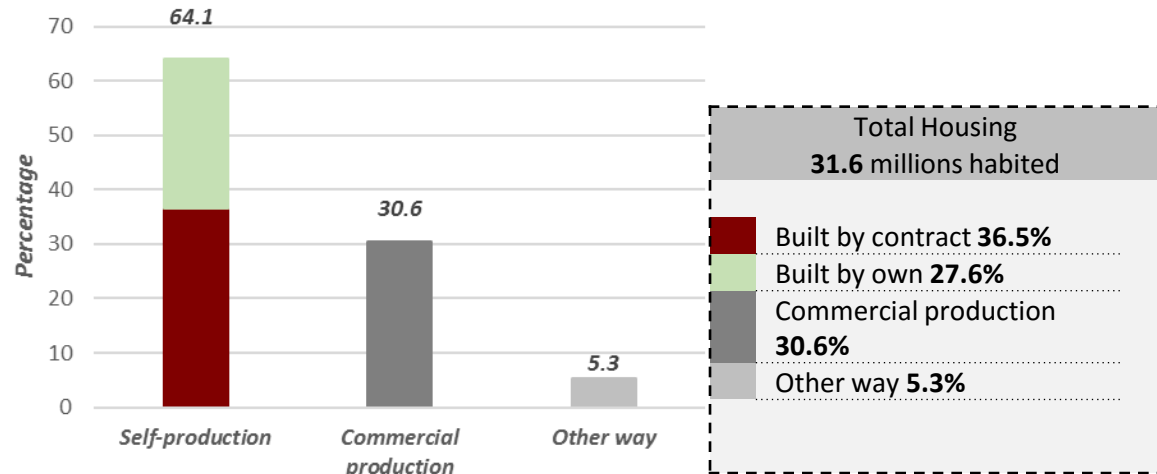**Historically in Self-production, Homes are built with a range of value between USD $7,300 and USD $9,100 for people with net incomes from USD $360 (approx. 3 MW) and USD $600 (approx. 4.9 MW).**

Housing Deficit in Mexico: Potential Market

In Mexico, 64.1% of the total housing stock has been built through a process of self-production; households in urban areas correspond to 51.3%, while households in rural areas correspond to 83.2%.

Source: : CONAVI with information of INEGI 2014. Socioeconomic Conditions Module.

Total Housing
31.6 millions habited

Built by contract **36.5%**
Built by own **27.6%**
Commercial production **30.6%**
Other way **5.3%**

The self-production of housing is the process of construction and distribution of housing under the direct control of its members: individually or collectively, which may be developed by outsourcing or through processes of self construction.

Self-Production Vs. Self-Construction

IMPROVEMENT	EXTENSION	SELF-PRODUCTION	SELF-CONSTRUCTION
• Repairing • Structural reinforcement • Redistribution of spaces • Eco-technics, Eco-Technologies. • Housing Finishing	• Increase of built area.	• Direct user control • A comprehensive technical assistance by an Executing Construction Organism (OEO, in Spanish) • The beneficiary does not necessarily builds.	• Direct user control • Not a comprehensive technical assistance. • The beneficiary constructs itself the way he wants.

Self-Production – Regional Materials

Regional Materials: Mayan House, Campeche