

UNEP – SBCI 2012 AGM and Symposium
Resource Efficiency and Green Economy: Opportunities for Sustainable Buildings and Cities

Oportunidades para Sustentabilidade em Habitação Social

Sustainable Social Housing Opportunities

*Secretaria de Habitação do Estado de São Paulo
Companhia de Desenvolvimento Habitacional e Urbano*

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Sustainable Buildings and Climate Initiative
Promoting Policies and Practices for Sustainability

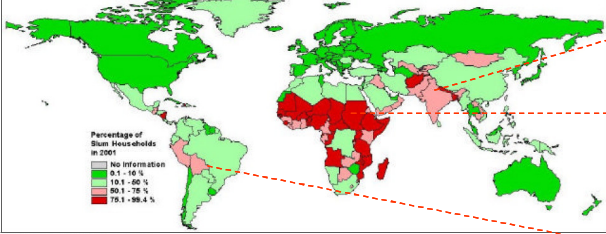


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World Challenges and Millenium Development Goals

(nº 7 – Environmental Sustainability)

Figure 1. Urban slum incidence, 2001



Source: UN-HABITAT, 2003c.



South and Eastern Asia = 400 millions

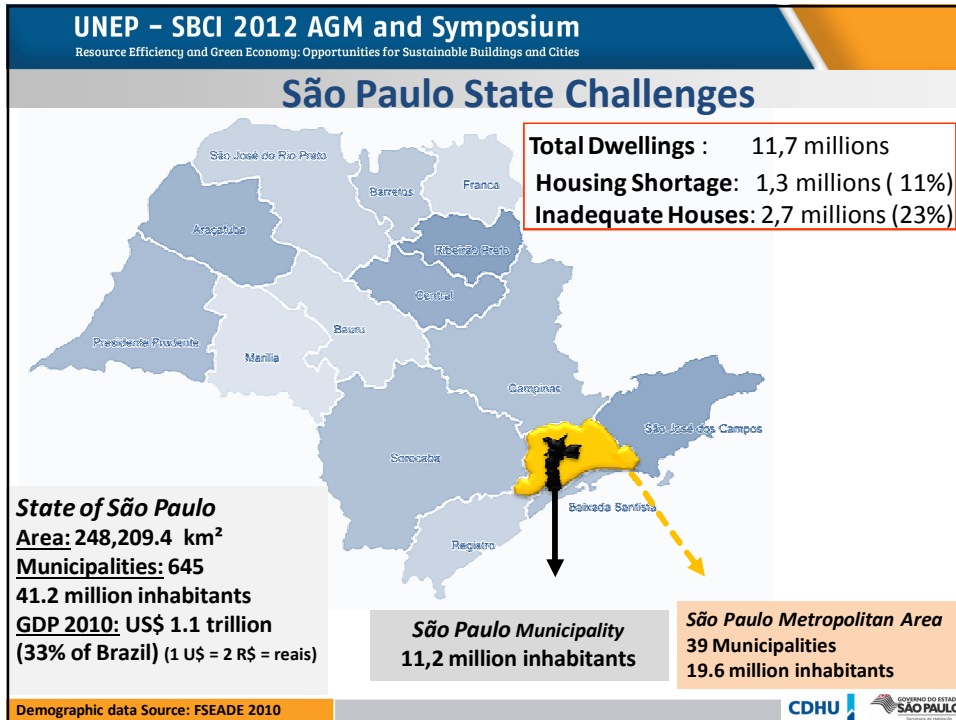
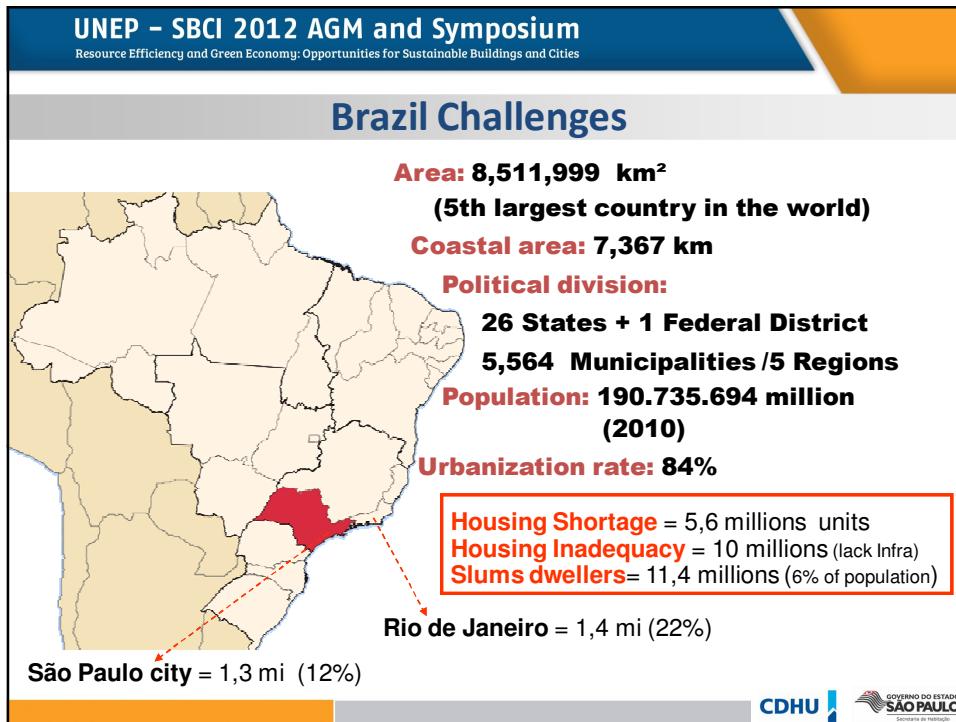
Africa Subsaariana = 200 millions

Latin America = 110 millions

World Population: 7 billions (50,6% urban population)
Slums dwellers : 828 millions (almost 1/3 of urban population)

Source: ONU-Habitat / Metropolis / World Forum







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Brazil Social Housing Policies – Business-as-Usual (BAU) 1964/2003

1. Brazil : BNH / Caixa - long term finance : house + infrastructure
2. São Paulo State : ICMS - State Funds for Housing Construction



3.000 settlements
 450.000 units
 1,5 million beneficiaires
 645 municipalities

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Socio-Economic Approach - Since 2012

NEW POLICY TO SOCIAL HOUSING – 2003/1012



Slum Upgrading

←

- Permanent Resources
- Finance: Flexible to the
poors
- Subsidies to beneficiaries






Affordable Housing Provision

←

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São Paulo State/Social Housing Guidelines 2007/2012

- 1. Urgent Land Tenure Regulation** →
 2 millions households (1/6 total stock)

- 2. Prevention of new urban plans** →
 Infrastructure + equipments


- 3. Priority: Risky Settlements** →
 - Slums in protected areas
 - Squattered Houses



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São Paulo State/Social Housing Guidelines 2007/2012

- 4. Sustainable Constructions Solutions** →
 - Urban and House projects


- 5. Social Inclusive Programs** →


- 6. Capacity Building**

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Affordable Housing and Slum Upgrading : an integrated target to sustainable issues: two experiences at São Paulo State.



7,500 dwellings spread out over informal settlements / natural protected areas




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Affordable Housing and Slum Upgrading : an integrated target to sustainable issues: two experiences at São Paulo State.

Pantanal Project

São Paulo City: Tietê River flooding bank areas
 Total: 8.310 households

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The UNEP - SUSHI Partnership

SUSHI – SUSTAINABLE SOCIAL HOUSING INITIATIVE
 2009/2011 – Two experiences – São Paulo – Brasil - Bangkok - Tailand



sushi
 sustainable social housing initiative



UNEP
 United Nations Environment Programme

Main goal:
Increase the use of sustainable (resource-efficient & energy-efficient) building and design solutions in social housing programs in developing countries.

1st phase :
2011 – Pilot Study and Recommendations
SH/CDHU experiences




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Lessons from São Paulo SUSHI

1. Energy efficiency and thermal confort

- Solar water heating system (WHS) 
- Higher headroom & ceiling: 2,60cm
- Metal structure for roofs:  
- Larger casings/shadowing
- Natural lighting improvement 
- Landscaping

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Lessons from São Paulo SUSHI

2. Water efficiency and rational usage

- Individualization of water measurement 
- Efficient components and building systems
- Alternative sanitation treatment systems 
- Permeable pavement surfaces 
- Green sidewalks 

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Lessons from São Paulo SUSHI

3. Urban plan and house projects: design + construction

- Project modulation
- Electric and hydraulic kits
- Constructive systems
- Building typologies
- Universal Design
- Landscape and bioclimatic solutions





Cozinhas e banheiros com espaço para a movimentação de cadeira de rodas

As portas com 90 centímetros de largura

Pontos de tomadas e interruptores em alturas adequadas para os usuários

Campainhas com sinal sonoro e luminoso

Rampas de acesso à residência

Pisos antiderapantes

Barra de proteção

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Lessons from São Paulo SUSHI

4. Socio-economic impacts

- Leisure and communication
- Green jobs opportunities
 - Green houses
 - Waste recycling
 - School of Arts and Craft
- Community participation







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Lessons and Opportunities on Sustainable Construction

→ Besides reducing the use of natural resources and the impact of pollution, waste, GHG emissions

Can Contribute

- Green Jobs
- Poverty Alleviation

1. Increase health/education + promoting well-being
2. Increase revenues – decrease of water/electricity bills
3. Create opportunities for new jobs
4. Foster training for the workforce
5. Reduce violence and tenure insecurity

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INCIDENCE OF CRIMES OF HOMICIDE AND THEFT BAIRRO DE UNIÃO DE VILA NOVA - 2000 A 2008

YEAR	HOMICIDE	STEALS
2000	22	39
2001	24	12
2002	22	20
2003	19	22
2004	16	16
2005	08	13
2006	03	12
2007	0	06
2008	0	09

FONTE: Sistema de Informações Criminais – INFOCRIM
 OBS: os números apresentados referem-se aos principais logradouros do Bairro de União de Vila Nova.

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Recommendations

- 1. Expand the concept of SUSHI, from building to neighbourhood and city planning**
- 2. MRV – Measure, Report and Validate (performance indicators)**
 - Saving energy consumption**
 - Lowering costs for beneficiaries**
 - Saving GHG emissions**
- 3. Promote new technologies and normalize products**
- 4. Cost benefit analyses/Life Cycle Building Assessment, including socio-economic impacts**
- 5. Adopte a broader scale = reduction costs**

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Recommendations

- 6. Post occupation: Follow up**
- 7. Capacity Building**
 - Stakeholders: awareness and information**
 - Beneficiaries education**
 - Local authorities engagement**
 - Institutional development**

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São Paulo State Governor
GERALDO ALCKMIN

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ANTONIO CARLOS DO AMARAL FILHO

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