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SHI
SUSTAINABLE
HOUSING INITIATIVE

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DE DÉVELOPPEMENT

HOUSING for SDGs

Access to housing
for the achievement of sustainable
development goals



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11 SUSTAINABLE CITIES
AND COMMUNITIES



Housing as a key lever for action in the 2030 Agenda for Sustainable Development

Goal 11 of the 2030 Agenda for Sustainable Development aims at «making cities and human settlements inclusive, safe, resilient and sustainable».

Housing is the main pillar of this goal through its first target, which aims to ensure, by 2030, «**access for all to adequate, safe and affordable housing** and basic services, and upgrade slums».

The urbanization in the Global South has been accelerating in the early 21st century, leading to fragmentation of cities, deterioration of living standards for many city-dwellers and to **increasing inequalities in access to decent housing**.

Housing is at the heart of sustainable cities' challenges. On the one hand, adequate housing adapted to needs and close to employment areas and essential services helps to reduce inequalities, particularly gender inequalities and economic exclusion. On the other hand, improving energy efficiency of buildings supports climate change mitigation and adaptation.

Hence the housing sector is inextricably linked to the achievement of Sustainable Development Goals.

The housing sector **accounts for 40% of global greenhouse gas (GHG) emissions**.

In addition, there is currently a housing shortage of **330 million residential units worldwide***. Coupled with accelerated urbanization, this trend has slowed progress in terms of living conditions and contributes to the artificialization of land and pollution.

Deteriorating housing conditions often result in insecure tenure, construction in high-risk areas, substandard housing and extremely high financial burdens. While it seems obvious that housing is **a lever for action to achieve SDG11, it is just as important for several other SDGs**.

In 2023, AFD and Agence Phare carried out a literature review highlighting the major role of housing in the 2030 Agenda for Sustainable Development, which goes well beyond the subject of Sustainable Cities.

The study established a direct impact between access to housing, improved housing conditions and ten SDGs. This booklet presents a summary of this research. The full report is available on the AFD website.



*Housing affordability : a supply-side toolkit for cities, s.l., Mc Kinsey Global Institute, 2017

1 NO POVERTY



Housing as a key lever in the fight against poverty

Promoting good housing conditions
for the population helps reducing poverty



Better access to financial resources
with housing close to jobs and
services



Upgrading of informal settlements
Increase in households' available
income



Easier socio-economic
integration

55%

of households
in sub-Saharan Africa
spend more than **30%** of
their budget on housing¹

15 to 30%

of informal settlement
residents' income
is spent on **home
improvements**²



In Mexico, a proactive housing public policy with mixed results

In Mexico, improved access to low-cost mortgages for low-and middle-income households **has led to urban sprawl**, along with inadequate infrastructure and services. **Ownership-oriented policies have contributed to new vulnerabilities for the population**, such as access to jobs, facilities and resources. As a result, any policy designed to promote access to affordable housing must be linked with sustainable and high-quality urban development.³⁴⁵

3 GOOD HEALTH
AND WELL-BEING

Access to adequate housing as a major factor in residents' health and well-being

Improving housing conditions has a direct impact on residents' physical and psychological health



Reducing health inequalities



Decreasing infant mortality
Reducing infectious disease transmission and the risk of chronic diseases



Mitigating the risk of domestic accidents

3.2M

deaths in 2020 were linked to **indoor air pollution** caused by cooking fuels⁶

50%

of deaths that were linked to injuries in 2016 resulted from **domestic accidents**⁷⁸



In situ relocation in India, a practice that benefits health

Studies have established a direct link between poor housing conditions (layout, construction materials and techniques, ventilation, type of energy used, etc.) and cardiovascular disease, respiratory pathologies and injuries, as well as infectious diseases and mental health. In India, for example, positive impacts on residents' physical and mental health in a poor neighborhood, particularly women, were observed several months after they were rehoused in situ as part of a neighborhood improvement project⁹.

Related
SDGs



4 QUALITY
EDUCATION

Better housing for young people and children to encourage their education

Granting young people and children access to better housing conditions supports their education



Increased investment by families
in their children's education



Stable school careers
Better study conditions



Better-quality
educational system

6%

more likely for 19-20
year olds in Taiwan to
go to university when the
household **owns their
home**¹⁰

9

additional minutes of study
time per day and 0.72 years
of schooling are gained by
children in rural areas of
Bhutan when their **homes
are electrified**.¹¹



In Morocco, public policies have multiple impacts and require integrated approaches

The «Cities without slums» (“Villes sans Bidonvilles”) program in Morocco **has improved housing conditions for families**, with a **significant drop in poverty rates** and an **improvement in health conditions**. However, the increase in the household asset value has been accompanied by a **reduction in household spending on food and health**. The effects on school attendance among young people are mixed, with some living further away from educational facilities. **Integrated and cross-functional public housing policies** are therefore needed to improve all aspects of residents' lives.¹²

Related
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5 GENDER
EQUALITY

Housing at the heart of gender issues

Granting access to affordable and adequate housing is essential to gender equality



Improved women's health and well-being



Reduced domestic violence by fighting overcrowding and providing alternative accommodation for victims



Easier access to paid work and home ownership for women

10%

lower likelihood of psychological violence within a married couple if they co-own their home¹³

23%

Increase in the proportion of women working outside their home thanks to the electrification of rural homes in Nicaragua¹⁴



The effects of public policy on domestic violence in South Africa

Since 1994 in South Africa, a vast state-subsidized housing program has sought to **support women by allocating them the majority of developed housing**. In the Hammond's Farm neighborhood north of Durban, almost all the women interviewed in 2014 said they **felt safer** in their new homes, and explained that the **extra space and privacy had reduced domestic violence**.¹⁵

Related
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6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



Housing as a quality factor in access to essential services

Housing helps to provide efficient and secure access to water, sanitation and energy



Improved living conditions and habitability



Greater efficiency of essential urban services

16M

hours a day spent by women **collecting water** in sub-Saharan Africa¹⁶

26M

African households have access to electricity via decentralized forms of energy production¹⁷



In Kenya, effects of poor access and remoteness of private sanitation facilities, particularly for women. The Mathare Valley district of Nairobi, Kenya, has an average of **one toilet for every 85 residents**. Only 15% of residents have access to a private toilet. **These constraints have a specific and significant impact on women's health.** Moreover, 68% of the women surveyed in this neighborhood said they had been **physically assaulted on the way to the communal toilets**. Access to decent housing that guarantees the use of private toilets therefore has a direct effect on reducing the risk of violence for women.^{18 19 20 21}

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8 DECENT WORK AND
ECONOMIC GROWTH

Housing as a major catalyzer of access to employment and economic growth

Decent housing close to employment areas offers better opportunities for socio-economic integration and supports growth



Easier access to employment and higher incomes



Improved financial inclusion



Development of a local and highly labor intensive economy

72.1%

of households are able to **work more** thanks to improved **access to water in their homes**, which saves time²²

10.5%

more economic growth thanks to access to **affordable and sustainable housing** in informal settlements²³



In the Philippines, impacts of improved housing conditions on jobs and growth

With 13% of the world's gross domestic product growth dependent on the housing sector, it serves as a driver for activities with high local labor intensity and economic dynamism²⁴. Improving access to essential services in housing also enables residents to increase their incomes. In Manila, for example, in an informal neighborhood that has benefited from the installation of private access to water, the cost of the service is lower for residents and 72.1% of households have been able to devote more time to paid activities.²⁵

**Related
SDGs**



10 REDUCED INEQUALITIES



Access to affordable housing to reduce inequalities

Effective public housing policies help to reduce inequalities for all and in all areas



Impact on all socio-economic inequalities



Reducing housing inequalities in urban and rural areas



Facilitating residential development and mobility

56%

of the urban population of Sub-Saharan Africa lives in **informal housing**²⁶

90%

of city dwellers living in **precarious neighborhoods** live in a poor country²⁷



Skyrocketing of informal rental and its consequences in Brazil

In the 2000s, favelas grew eight times faster than the rest of the city. **Informal rental housing development** in favelas is a response to a **growing demand for affordable housing** that is not being met by the formal sector. The proportion of rented accommodation in three favelas around Florianópolis increased fourfold between 2006 and 2010, with a new category of owners emerging, older than their tenants and living in accommodation that is twice as spacious and better equipped.²⁸

**Related
SDGs**



13 CLIMATE ACTION



More resilient and sustainable housing to cope with climate change

Improving housing supply and conditions must be at the heart of strategies to combat climate change and adapt to its effects



Adoption of **more efficient, lower-emission** construction techniques



Reduction of **climate vulnerability** of precarious neighborhood residents



Sustainable urban planning in line with the specific characteristics of the area

9°C

rise in **temperature felt** by pedestrians due to **variations in urban form** in New Aswan, Egypt²⁹

18%

cost reduction through the use of local materials for **flood-resistant housing** in Gorakhpur, India³⁰



The vernacular house model in the province of Manabí (Ecuador)

In Ecuador, the **vernacular house model** is proving to be particularly **resistant to floods and earthquakes**, as well as being **highly sustainable**. At present, little use is made of this type of housing to inspire new construction techniques, even though its hybridization with current processes would make it possible to **develop innovative and sustainable «bio vernacular» housing at a controlled cost**.³¹

Related SDGs



Improving housing conditions and providing access to affordable, inclusive and sustainable housing are essential levers for achieving the Sustainable Development Goals, and must be given particular attention in development initiatives and public policies.

Promoting access to housing has a positive impact on households, development of sustainable towns and cities, reduction of vulnerability and environmental footprint, and local economic development.

Consequently, housing is an essential vector for improving all aspects of people's lives and must therefore be at the heart of urban and social development strategies.

→ The diagram opposite illustrates the interaction identified by academic research between housing and Sustainable Development Goal targets.

Interaction established

several sources document the interaction

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STRONG Interaction

the interaction is mentioned systematically

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1 NO POVERTY 	1.1 Extrême poverty	1.2 Poverty	1.4 Access to ressources	1.5 Vulnerability			
3 GOOD HEALTH AND WELL-BEING 	3.2 Neonatal and infant mortality	3.3 Communicable diseases	3.4 Non-communicable diseases	3.9 Health and environnement			
4 QUALITY EDUCATION 	4.3 Vocational training and higher education	4.a Accessibility of schools	4.1 School education	4.2 Pre-school care and education	4.5 Equal opportunities	4.6 Fundamental learning	
5 GENDER EQUALITY 	5.6 Sexual health and reproduction	5.b Technology and empowerment	5.1 Combating discriminations	5.2 Violence and exploitation	5.4 Promoting and sharing housework	5.a Rights and access to resources	5.c Equality policies
6 CLEAN WATER AND SANITATION 	6.1 Access to drinking water	6.2 Access to sanitation and hygiene services					
7 AFFORDABLE AND CLEAN ENERGY 	7.1 Access to energy	7.3 Energy efficiency					
8 DECENT WORK AND ECONOMIC GROWTH 	8.1 GDP growth	8.2 Economic productivity	8.5 Full employment and decent work				
10 REDUCED INEQUALITIES 	10.1 Income trends for the poorest	10.a Special and differentiated treatment	10.b Official development assistance	10.2 Autonomy and integration	10.3 Equal opportunities	10.4 Targeted public policies to promote equality	10.7 Migration
11 SUSTAINABLE CITIES AND COMMUNITIES 	11.3 Sustainable and inclusive urban development	11.4 Heritage preservation	11.5 Preventing and limiting the impact of disasters	11.7 Access to green spaces and safe public areas	11.b Integrated policies for resilient territories	11.1 Access to decent housing	11.6 Environmental impact
13 CLIMATE ACTION 	13.2 Climate policies	13.3 Education and empowerment	13.b Capacity building	13.1 Resilience and adaptation			

Bibliographic references



- 1 United Nations Human Settlements Programme, Tracking Progress Towards Inclusive, Safe, Resilient and Sustainable Cities and Human Settlements: SDG 11 Synthesis Report - High Level Political Forum 2018, s.l., United Nations, 2018.
- 2 Maina, M.; Braimah, F.; Frediani, A.A.; Kyessi, A.G.; Macarthy, J.; Mwathunga, E.; Oyalowo, B.A.; Tarawally, A.; Turay, A.; and Uduku, O., Rising Costs and Worsening Housing Conditions in Africa's Informal Settlements. African Cities Research Consortium, <https://www.african-cities.org/rising-costs-and-worsening-housing-conditions-in-africas-informal-settlements/>, 2023.
- 3 Emilio Duhau et Céline Jacquin, « Les ensembles de logement géants de Mexico. Nouvelles formes de l'habitat social, cadres de vie et reformulations par les habitants », Autrepart, 2008, vol. 47, no 3, p. 169-185.
- 4 Pauline Geneste et al., « Le sol social mexicain porte-t-il encore des communs ? Ejidos et lotissements d'intérêt social dans la périphérie de Mexico » dans Le sol social mexicain porte-t-il encore des communs ?, Paris Cedex 12, Agence française de développement, 2022, p. 1-56.
- 5 Oyan Solana Osés, Affordable Housing and Urban Sprawl in Mexico: The Need for a Paradigm Shift, s.l., The University of Manchester, 2013



- 6 Donnée publiée par l'Organisation Mondiale de la Santé sur son site le 15 décembre 2023
www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health (site consulté le 22.12.2023)
- 7 Samantha Turner et al., « Modification of the home environment for the reduction of injuries », The Cochrane Database of Systematic Reviews, 16 février 2011, vol. 2011, no 2, p. CD003600.
- 8 WHO Housing and health guidelines, op. cit.
- 9 Uchita Vaid, « Physical and mental health impacts of housing improvement: A quasi-experimental evaluation of in-situ slum redevelopment in India », Journal of Environmental Psychology, 2023, vol. 86, p. 101968.



- 10 Hsien-Ming Lien, Wen-Chieh Wu et Chu-Chia Lin, « New evidence on the link between housing environment and children's educational attainments », Journal of Urban Economics, 2008, vol. 64, no 2, p. 408-421
- 11 Santosh Kumar et Ganesh Rauniyar, « The impact of rural electrification on income and education: Evidence from Bhutan », Review of Development Economics, 2018, vol. 22, no 3, p. 1146-1165
- 12 Olivier Toutain et Virginie Rachmul, Évaluation et impact du Programme d'appui à la résorption de l'habitat insalubre et des bidonvilles au Maroc, s.l., AFD/Gret, 2014.



- 13 Emin Gahramanov, Khusrav Gaibulloev et Javed Younas, « Women's type of property ownership and domestic violence: a theoretical note », Review of Economics of the Household, 2021, vol. 19, no 1, p. 223-232.
- 14 Louise Grogan et Asha Sadanand, « Rural Electrification and Employment in Poor Countries: Evidence from Nicaragua », World Development, 2013, vol. 43, p. 252-265.
- 15 Paula Meth, « The gendered contradictions in South Africa's state housing: Accumulation alongside an undermining of assets through housing » dans Gender, Asset Accumulation and Just Cities, s.l., Routledge, 2015



- 16 United Nations Environnement Programme Global Gender and Environment Outlook (GGE0), 2016
- 17 INTERNATIONAL RENEWABLE ENERGY AGENCY, Roadmap for a renewable energy future, Bonn, Germany, IRENA, 2016.
- 18 S. Chebii, « Menstruation and Education : How a lack of sanitary towels reduces school attendance in Kenyan slums », s.l., 2012 .



- 19 Jason Corburn, « Urban Place and Health Equity: Critical Issues and Practices », International Journal of Environmental Research and Public Health, février 2017, vol. 14, no 2, p. 117..
- 20 Louisa Gosling et al., « Nowhere to go: How a lack of safe toilets threatens to increase violence against women in slums », Sverige, Stockholm: WaterAid, 2015..
- 21 Samantha Cristine Winter et al., « A mixed-methods study of women's sanitation utilization in informal settlements in Kenya », PLoS ONE, 21 mars 2019, vol. 14, no 3, p. e0214114..



- 22 Hirotsugu Aiga et Takusei Umenai, « Impact of improvement of water supply on household economy in a squatter area of Manila », Social Science & Medicine (1982), août 2002, vol. 55, no 4, p. 627-641.
- 23 Alexandre Apsan Frediani, Camila Cociña et José Manuel Roche, Improving Housing in Informal Settlements: Assessing the Impacts in Human Development., Washington, Habitat for Humanity International, 2023.
- 24 HABITAT FOR HUMANITY, Housing and Sustainable Development Goals. The transformational impact of housing, Atlanta, 2021
- 25 H. Aiga et T. Umenai, « Impact of improvement of water supply on household economy in a squatter area of Manila », art cit.



- 26 Patrick Cobbinah et Valentina Nyame, « A city on the edge: the political ecology of urban green space », Environment and Urbanization, 2021, vol. 33, p. 095624782110198.
- 27 UN-HABITAT, World Cities Report 2022, Nairobi, UN-Habita, 2022.
- 28 Fernanda Lonardoní et Jean Claude Bolay, « Rental housing and the urban poor: understanding the growth and production of rental housing in Brazilian favelas », International Journal of Urban Sustainable Development, 2 janvier 2016, vol. 8, no 1, p. 49-67.



- 29 Omar M. Galal, David J. Sailor et Hatem Mahmoud, « The impact of urban form on outdoor thermal comfort in hot arid environments during daylight hours, case study: New Aswan », Building and Environment, 15 octobre 2020, vol. 184, p. 107222.
- 30 Marcus Moench et al., « Transforming vulnerability: shelter, adaptation, and climate thresholds », Climate and Development, 2 janvier 2017, vol. 9, no 1, p. 22-35.
- 31 Raúl Vinicio Hidalgo Zambrano et al., « A Sustainable Proposal for a Cultural Heritage Declaration in Ecuador: Vernacular Housing of Portoviejo », Sustainability, 6 janvier 2023, vol. 15, no 2, p. 1115.

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