Cities with Affordable Housing: Fulfilling the New Urban Agenda

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1. Introduction

Shelter is a necessity of life and the building block of cities. Cities cannot be inclusive without affordable housing near transportation, jobs, and necessary public services like safety, health care, and education. Housing is the most important asset for the majority of households and anchors economic activity. Moreover, homeownership is key for building wealth. Housing is also fundamental in the construction and expansion of cities and the main driver that catalyzes sustainable and resilient territorial development through the land-use, infrastructure, and transport sectors. Location of housing relative to employment and other service centers has a direct implication for transport and mobility, and hence energy consumption and greenhouse gas emissions. The location and design of dwellings affect their vulnerability to natural disasters. Ultimately, housing policies and interventions are an integral part of a holistic vision of urban areas contributing to inclusion, resilience, and sustainability.

But, housing cannot be viewed in isolation. There is an interlinked triangle of land use, transit, and housing to provide access to job markets. Housing is expensive in good locations where there are plentiful jobs, which is made worse by an inadequate provision of developable land caused by natural factors, like water and topography, and man-made scarcity from regulations. Hence simple policy solutions of building affordable housing wherever it can be done at low cost will not be effective.

In light of the importance of housing, the New Urban Agenda recognizes the need for adequate and affordable housing within the framework of sustainable urban development. The New

Urban Agenda provides an opportunity to achieve the overarching Sustainable Development Goals (SDGs), including Goal 1, which calls for eradication of extreme poverty by 2030 (currently measured as people living on less than $1.25 per day) and Goal 11, which calls for access to adequate housing and basic services and the upgrading of slums. The challenge is how to implement the recommendations of the New Urban Agenda. This is not the first effort to address the global housing agenda, as an earlier attempt, Habitat II, the Second United Nations Conference on Human Settlements held in Istanbul, Turkey, in 1996, did in fact lay out many of the requirements for progress in this sector in the Habitat Agenda. However, the extent to which housing goals were reached in the intervening 20 years has not been clearly identified. To make a real difference this time, we need clarifying principles, better strategies, and measurable outcomes. To that end, the plan for New Urban Agenda implementation can be improved. The document provides a list of principles and anticipated outcomes but lacks an implementable vision that can bring all parts together and inspire action across and within sectors to achieve the "provision of affordable housing options with access to quality basic services and public spaces for all" (New Urban Agenda, par. 99).

A major gap is the absence of a discussion on financing. No meaningful implementation of the housing component of the New Urban Agenda is possible without reference to housing finance, which is mentioned briefly and in a cursory fashion. Since housing finance is an integral component of the financial system, the linkages to the financial sector and capital markets are essential. Also, implementable strategies should specify who will do what and by what means. In this regard, the division of responsibilities between markets and government, and among the different layers of government, needs to be identified.

This chapter will elaborate on the housing component of the New Urban Agenda and suggest ways to ensure its effective implementation. The rest of the chapter is organized as follows: Section 2 looks at the structure of the housing component of the New Urban Agenda. It compares the New Urban Agenda with the Habitat Agenda from the Habitat II Conference in 1996 and explains how housing inequality is an even greater challenge for its implementation than it was 20 years ago. Section 3 provides guiding principles for achieving the goal of adequate housing for all through an integrated approach of urban management and land use mechanisms, expanded access to housing finance, and subsidy programs. Section 4 discusses how effective implementation of the housing component of the NUA can be strengthened with systematic data collection and analysis using indicators. Section 5 concludes the chapter.

2. Housing in the New Urban Agenda

The housing sector is central to the process of urbanization. Many people in the burgeoning cities of the global South are afflicted by severely substandard housing and a lack of basic public services associated with housing, such as clean water and proper sanitation (see figure 11.1 below). Responding to this is one of the goals of the New Urban Agenda, and how the NUA deals with housing in relation to urbanization is particularly vital to its successful implementation.

2.1 Comparing the Habitat Agenda of 1996 and the New Urban Agenda of 2016

In order to put into historical perspective the way housing is treated in the New Urban Agenda (NUA hereafter), it is useful to revisit its predecessor, the Habitat Agenda (HA hereafter) adopted at Habitat II, and compare the housing component of both. This comparison demonstrates that housing is not as central to the NUA as it was to the HA.

One notable difference in the structure of the two documents is the amount of space devoted to the discussion of housing and its details. The words "housing" and "shelter" appear 128 times and 207 times, respectively, in HA, but 46 times and only once, respectively, in NUA. This is a marked difference even considering that the former is a much longer document at 109 pages (about 44,000 words), versus the more recent document's relatively concise 29 pages (about 15,000 words). As for a more specific discussion of housing and housing policies, the terms "finance," "housing finance," and "mortgage," and the phrase "housing market" are scarcely mentioned in the NUA, unlike in the HA.

The results of this simple word counting exercise reveal that the housing component is not as much at center stage in the New Urban Agenda as it is in the Habitat Agenda. A major reason for this was the formal treatment of the topic. "Adequate shelter for all" and "sustainable human settlements development in an urbanizing world" were considered "two themes of equal global importance" at Habitat II. On the other hand, the NUA focuses on cities and treats housing as part of broad urban planning strategies. To be more specific, the NUA (par. 99) includes the following language: "We will support the implementation of urban planning strategies, as appropriate, that facilitate a social mix through the provision of affordable housing options with access to quality basic services and public spaces for all, enhancing safety and security and favouring social and intergenerational interaction and the appreciation of diversity."

UN-Habitat's (2017) Action Framework for Implementation of the NUA (AFINUA) refers to the UN Habitat position paper *Housing at the Centre of the New Urban Agenda* and states: "Implementing the principles of *Housing at the Centre of the New Urban Agenda* can help relate adequate and affordable housing strategies and interventions with inclusive land use that supports integrated socioeconomic groups, promote investments in infrastructure and provide proximity and equitable access to employment, services, facilities and transport." This framework views access to housing and mobility as a bundle, and while this appropriately emphasizes the importance of promoting the provision of housing in locations accessible to jobs and other facilities, it leaves out many other critical aspects of the housing agenda. It further places the provision of affordable housing solely under the responsibility of local urban planning authorities.

When the HA defines the scope of government intervention, it explicitly recognizes markets as the primary housing delivery mechanism and highlights the important role of government, both central and local, in creating an enabling framework for a well-functioning housing market to ensure housing delivery. The HA also calls for government actions to improve the effectiveness of existing housing finance systems in order to mobilize more resources for housing finance and extend credit to more households, as well as to create new housing finance mechanisms as necessary to address the financial needs of people with limited or no access to credit. Central governments typically take responsibility for such complex financial needs. There is little discussion of such a division of responsibilities in the NUA.

This comparison is not to say that the division of responsibilities laid out in HA was implemented to produce successful outcomes. The "Enabling Strategy" was prepared at a time of euphoria about the power of markets. Experts considered housing a private good that could be adequately supplied by the private sector given a supportive policy environment. Upgrading and community-based approaches would address the housing problems of the poor. Some countries misinterpreted the emphasis on the enabling role of government, and the lack of detail on the roles of local and national governments, to the extent of neglecting those roles, especially in the case of local government.

The NUA provides another opportunity to address the need for affordable housing and to overcome housing inequality. The AFINUA document breaks down the content of the NUA into five specific implementation categories, and lists all relevant articles of the NUA under each category: 1) national urban policies, 2) urban legislation, rules and regulation, 3) urban planning and design, 4) urban economy and municipal finance, and 5) local implementation. While these supplementary documents make it easier to embrace the various components of the NUA, citations from the main NUA document on the housing sector under these categories are evidence that a holistic vision for housing is still missing.

Moreover, the AFINUA identifies only local government entities as implementing institutions for housing. This choice reveals a lack of acknowledgement or understanding of the complementary roles of markets, central and local governments, and NGOs in the development of inclusive, innovative, and sustainable housing solutions.

This complementarity is particularly important in the role of housing finance in implementing the housing agenda. Without access to finance, markets cannot deliver housing and most households have no choice other than to construct or improve their houses over a very long time. Yet, the NUA makes few references to financing in general and housing finance in particular. The one paragraph dealing with housing finance in the NUA shows up under the "Urban Economy and Municipal Finance" category in AFINUA; and housing finance is discussed but misplaced under the heading of "Help local authorities understand and adapt their respective economic development policies, mechanisms and financing models to a wide range of housing options…"

2.2. Housing Challenges and the New Urban Agenda

Housing is the single largest form of fixed capital investment in most economies. The infrastructure and services necessary to construct housing create the footprint of urban expansion. Housing is also the single largest asset owned by most households, and housing expenditures generally comprise the largest part of household spending.

Housing investment, however, has not kept pace with urbanization in many developing countries. A recent study by the World Bank confirms that investment in urban housing as a percentage of GDP, by public and private sectors and including both formal and informal structures, lags behind what is needed to accommodate urbanization in low- and lower-middle income countries (Dasgupta, Lall, Lazano-Garcia, 2014). Low levels of investment in housing are partly due to the lower levels of per capita income at which urbanization is occurring (Glaeser 2013) and growing income inequality in many countries. The outcome of these trends is a persistent deficit in affordable housing and an increase in and densification of informal housing areas in low- and lower-middle income countries, which puts a heavy burden on infrastructure provision, transport systems and the environment, and limits the building of housing assets (or wealth) by lower- income households, increasing housing inequality.

There is growing economic inequality within many countries; less understood is its relation to the housing sector. In *Capital in the 21st Century* (2014), Piketty argues that the share of capital income as a percentage of total income in the major advanced economies has been rising in recent decades, worsening income distribution in these economies. Although Piketty himself did not recognize the point, Rognlie (2015) demonstrates that the long-term rise in the share of capital income consisted exclusively of the rise in the return on housing, whereas the rate of return on non-housing capital has remained stable. One of the reasons for the share of income from housing to increase is that housing in many markets became scarce, which in turn led to house-price appreciation to offset the decrease in the quantity of housing capital. A further analysis by La Cava (2016) reveals that the increase in income from housing accrued disproportionately to homeowners and that supply constraints played an important role in making housing scarce in the U.S. The rise in housing's share of capital income may have implications for intergenerational inequality in income and wealth through transfers across generations.

Indeed, housing plays a critical role in compounding intergenerational inequality due to its inextricable link to social mobility (Acolin and Wachter 2017). At the local level, where one lives defines a household's access to job opportunities and amenities, including both public and private goods and services. Because education and employment opportunities are dependent on location, housing can have a positive or debilitating impact on intergenerational mobility. Since location fundamentally determines the dispersion and accessibility of these opportunities, the value of land reflects the desirability of a particular location within an urban system. Because locational desirability is priced into real estate, access to such favorable conditions has disproportionately favored households of adequate financial means. The result is a feedback loop in which low-income households are priced out of the very areas that provide the necessary factors for upward social mobility. This cycle heightens the economic and physical divide in urban areas, as only skilled, high-wage workers can gain entry to such markets and enjoy the benefits of house-price appreciation.

Particularly prevalent is the adverse effect of housing exclusivity on young people, who fall victim to the aforementioned feedback loop due to stagnant wages and rising housing costs. In some developed countries, the impact of this price exclusion is reflected by the historically low and continually falling rate of homeownership among young households (Acolin, Goodman, and Wachter 2017). Housing is indeed situated at the core of this widening wealth and income gap, as rising rents and home prices restrict the upward mobility of existing populations and limit opportunities for new entrants into flourishing housing markets.

In developing countries, housing inequality is an even more severe problem. As noted, insufficient public and private investments in housing in the face of rapid urbanization over the years has resulted in the development of crowded informal settlements, sometimes in vulnerable areas, often without title or ownership rights. Ownership rights become a problem as house prices increase with economic development. The potential is for the creation of a have-not class of urban dwellers who do not benefit from rising house prices.

The UN estimates that 1.6 billion people live in inadequate housing (UN News 2017), in places which lack access to basic infrastructure (transportation, electricity, water, sanitation), urban services (education, health) and public space (space for parks and community facilities such as schools, health care centers) with negative consequences for human development. Going forward, the UN estimates that there will be 2.5 billion new urban dwellers by 2050 (UN 2014). Without sufficient public and private investment in housing, many of the new residents will end up living in substandard conditions. This demographic pressure and the compound effect of housing inequality on wealth inequality is why the effective implementation of SDG 11 -- which calls for access to adequate housing, basic services, and the upgrading of slums -- and the housing component of the New Urban Agenda are imperative, and why housing policy and its implementation must be a focal point in the NUA.

3. Principles and Implementation Strategies for Affordable Housing for All

Achieving the goal of adequate and affordable housing requires clear guiding principles and effective implementation mechanisms. This section lays out the principles regarding key components of policies that will contribute to the fulfillment of this goal. We identify an integrated approach that comprises housing supply, housing finance, and subsidies.

3.1 Affordable Housing Supply and Urban Infrastructure Provision

Affordability of a house is determined by its price, household income, and the availability and cost of financing. Since a household can spend a limited share of its income, say 30 to 50 percent, on housing, both the cost of financing and the cost of the house itself are important for affordability. The cost of a house consists of building costs and serviced land costs. The former depends on wages, building materials, and techniques and tends to be lower in developing economies. The latter depends on the supply of developable land and transport to provide access to jobs. The cost of infrastructure in turn depends on the nationally determined costs of capital, labor, and materials. The provision of serviced and developable land is the responsibility of both central and local governments with a complementary role for the private sector.

In many low- and middle-income countries, housing provided in the formal sector is unaffordable for the majority of households. Poor quality housing is a problem not just for the poor, but for a much larger proportion of the urban population. According to a recent World

Bank (2018) report on poverty in East Asia and the Pacific, poor quality housing affects 75% of the extreme poor as an indicator of non-monetary poverty, perhaps as expected, but also a full quarter of the economically secure population in selected countries. These figures are considerably larger in Sub-Saharan Africa.

See figure 11.1 below

Government policies, both at the national and local levels, are critical to the efficient functioning of the supply side of the market. The NUA correctly emphasizes the important role of governments in land management; the provision of trunk infrastructure for residential and other developments; and the reform of restrictive planning and building regulations, including cumbersome permit procedures that have proven to increase local house price-to-income ratios (Fischel 1995; Hilber and Vermeulen 2016; Glaeser and Gyourko 2008 and 2017) as well as the potential for the application of innovative construction methods for housing. While land management and planning are mostly local government responsibilities, national governments have extensive powers of taxation over land and own large urban landholdings in some developing countries. The necessary role of national urban policy in setting up incentives and financial capacity to deploy land locally is lacking in most developing countries as well as in the NUA. Rather, national and local governments impose regulations that restrict the availability of land for development. Informal housing settlements, in turn, violate those rules.

In addition, urban infrastructure investment is extremely inadequate in most developing countries, which often forces private developers to provide bulk and trunk infrastructure services. The developers pass these costs on to consumers in the price of houses, while governments would be able to recover the cost of infrastructure investment over much longer periods through user fees, property taxes and other financing mechanisms. Governments are in a better position to develop different types of financial instruments for infrastructure provision through both the public and the private sector. Land value capture and land sale are some such instruments. With the enabling of land value capture mechanisms, the availability of such land can lead to incentives for local governments to provide and finance the provision of infrastructure and well-serviced, developable land.

Public investments, such as the provision of transportation infrastructure, can increase land values for private landowners. These can be financed by capturing the differential value of non-serviced and serviced land from private sector developers through various mechanisms. Land value capture can generate private investment targeted to affordable housing provision and the infrastructure that will link affordable housing to jobs. For this virtuous cycle to happen, municipalities need the authority, incentive, and capacity to plan for and finance pro-poor development and redevelopment.[i] This need is at the heart of the subsidiarity principle advocated by the NUA to assign the governance task to the right level of government (UN 2017). Municipalities can deploy local planning and land-value capture mechanisms to finance inclusive and sustainable projects for housing and infrastructure and entice private developers to come into the affordable market, assemble land, and develop housing units for sale.

Municipalities can also operate as pro-poor developers or redevelopers themselves and capture gains by using public land or buying private land at pre-development values while selling publicly serviced land at a price that incorporates the cost and value of providing infrastructure. Alternatively, municipalities can continue to own the land and charge for the infrastructure costs or establish a property tax for this purpose. Since investment in capital improvements to land can synergistically generate capital investment in other nearby locations, which further increases land value, it is important for municipalities to put these mechanisms in place over a large area. Municipalities can achieve that goal by engaging in joint development (or redevelopment), assessing infrastructure impact fees, or establishing special assessment improvement districts. Localities where property taxes already exist can use tax increment financing. The key is to enable municipalities to capture the gains from the provision of infrastructure and to do so for the housing of those who cannot afford privately supplied housing.

3.2 Affordable Housing Finance

Access to affordable housing finance is crucial for facilitating home purchases. Developers build houses only for those who can pay cash (or by installments) or have access to credit. Housing is too expensive relative to income to be paid from income or savings alone for all but the wealthiest groups, while access to credit necessitates functioning housing finance markets, which are not universally available.

Affordability of housing finance is the product of three components: the mortgage interest rate and amortization conditions, the house price to income ratio, and the ratio between the loan amount and the house price. In other words, housing finance becomes more affordable the lower the interest rate and the house price to income ratio, given the loan amount the lender is willing to provide relative to the value of the house.

The mortgage interest rate is determined by the lender's cost of funds as well as the efficiency of the mortgage industry and its regulation. The cost of funds in turn is determined by the interplay of savings, domestic and foreign, and investment. It is also influenced by the central bank's monetary policy and by fiscal policy since government deficits affect market interest rates. Sound monetary and fiscal policies will help keep inflation and nominal interest rates at low levels, and hence lead to low interest rates on mortgage loans. In fact, price stability is a prerequisite for a well-functioning mortgage market.

The interest rate and overall cost of mortgage lending can also be lowered by improving risk management, origination and servicing procedures by lenders, utilizing innovative technology, lowering taxes on financial products and other transaction costs, and by making the mortgage industry more competitive. For example, a large margin between the mortgage lending rate and the cost of funds can be sustained only if the mortgage market is not exposed to competition. Government policies and regulations are critical in this respect. In countries with a well-functioning primary market, another way to lower the mortgage lending rate is to tap the capital markets to mobilize funds, possibly at a lower cost, and to improve lenders' ability to manage financial risks imbedded in long-term mortgage lending. Securitization of mortgages, the issuance of mortgage bonds, or the use of liquidity facilities as capital market intermediaries are examples of the use of capital markets for mortgage funding. Governments have to provide the legal and regulatory framework for these instruments and institutions to work.

There are many countries where government subsidizes mortgage interest rates to make housing finance more affordable. But often times, interest subsidies are provided to compensate for poor monetary and fiscal policies or an inefficient mortgage industry. Such subsidies exacerbate inefficiencies and hinder the expansion of sustainable housing finance. They are neither transparent nor equitable. The ministry in charge of conventional housing policy needs to work closely with the central bank and the finance ministry in order to lower and stabilize the country's interest rates and agree on an equitable and efficient subsidy regime for housing finance.

A large proportion of the population must have access to credit in order for a discussion of the terms of housing finance to be relevant. Broad credit access requires that fundamental building blocks are in place for credit markets to function. These include a trusted property rights and property registration system; a legal and regulatory framework to facilitate the functioning of housing finance systems and the enforcement of mortgage laws; availability of credit and housing market information; and willingness by lenders to serve creditworthy low-income households or make small loans.[ii] The absence of those requirements is the reason that mortgage markets as a percentage of GDP are still very small in many developing countries and do not reach low-income groups or those who are informally employed.

See figure 11.2 below.

Although governments need to make housing finance more affordable along the lines discussed above, there is a limit to what can be done on the finance side if housing itself is not affordable. If housing demand increases due to rising incomes, improved macroeconomic fundamentals or financial system expansion, while land management and supply of other inputs in the housing market lag behind, extreme land- and house-price increases may result. The low-income and informal market is particularly vulnerable under these circumstances since the market will apply resources first to higher income segments and because informal housing dwellers lack property rights. In sum, access to finance and housing are necessarily interlinked because expansion of housing finance will have the desired effects only if the supply side of the housing market works efficiently.

3.3 Housing Subsidies

It is not uncommon, even in middle-income countries, that half to two-thirds of households who enter the housing market each year are unable to acquire or rent a house in the formal housing market and cannot obtain a housing loan. That estimate does not take into account the large proportion of households in established cities that have inadequate shelter, particularly in developing countries. No government can solve the housing problems of such a large segment of the urban population by itself. Therefore, any pro-poor housing policy aimed at improving housing quality and access must include innovative measures to ensure that as many underserved households as possible will be able to buy, build, or rent a house in the private formal housing market or through participatory approaches. This may, initially, require government support to housing market institutions and agents, particularly to improve access to mortgage finance. In addition, there may be a role for relatively small down-payment subsidies to improve access to mortgages for households at the margin of the mortgage market depending upon the stage of development and the capacity of government to tax for such funds. Expanding access to credit markets to low- and middle-income households will free up scarce government resources and will allow governments to devote the bulk of their fiscal allocation to assist the truly disadvantaged for whom formal housing markets do not work and for whom different types of subsidies are needed in the form of rental and ownership housing programs.

Government subsidy policy must therefore look at the entire range of underserved urban households and provide efficient and equitable incentives and subsidy packages to each segment, both for rental and ownership housing. If subsidies are targeted exclusively at the extreme poor, for example by building new low-cost housing or rebuilding slum areas, misallocation is nearly unavoidable in situations where a large proportion of the urban population has no access to formal housing markets. Similarly, if subsidy programs focus only on middle-income segments, for example through mortgage-linked subsidies, it is very unlikely that positive housing outcomes will ultimately trickle down to the poor. The scale of urbanization, patterns of income inequality, and the lack of access to housing finance by the urban poor would prevent such positive outcomes.

In many, if not most, countries, housing subsidies are disproportionally focused on the middle-income segment of the market and linked to mortgage lending through subsidized interest rates through provident funds or government housing finance institutions, caps on interest rates, and tax advantages to mortgage interest payment. Such subsidies are often inefficient—they are costly, discourage primary mortgage market lenders from expanding mortgage credit, and prevent the leveraging of the mortgage portfolio through capital markets. Most such subsidies are also inequitable because they increase with the size of the loan and disproportionately benefit higher income groups. In developing countries, such finance-linked subsidies are frequently complemented by deep supply-side subsidies to land and infrastructure because of inefficiencies in those sectors. This approach increases the total subsidy amount required per household and hence limits the number of households that can be served within a given budget.

In order to expand formal housing supply gradually to middle- and lower income groups, therefore, governments must give the highest priority to improving the legal and regulatory framework for mortgage markets to work. This includes the expansion of innovative property rights and registration systems acceptable to mortgage lenders and regulators.[iii] The national housing ministry must collaborate closely with the finance ministry in order to reform housing subsidy policy as discussed above. Countries that have gone through such institutional and subsidy reforms, such as Thailand, Korea, and Chile, and countries that are in the midst of such reforms, such as India, Indonesia, Mexico and Egypt, have seen access to housing credit and formal housing markets expand in scale and depth. The most successful approaches coordinate national government housing finance policies and subsidies with local government inputs in making suitably located, serviced land available and facilitating appropriate land use and innovative building standards to ensure that formal affordable housing can be made available for an increasing segment of middle- and lower-income households. If the price of housing is too high, relative to household income levels, or housing is built in the wrong locations, increasing demand through housing finance will not have the intended positive results.

The lowest income segment and the informally employed, for whom formal land and housing markets are not yet accessible, require other types of support to improve their housing conditions. Theirs is mostly a problem of poverty or low and uncertain incomes. Subsidy approaches for low income households differ widely across regions and countries according to available resources, the efficiency of housing markets and scale of the housing problem. In rapidly urbanizing developing countries, this segment of the population is currently mostly dependent on the informal housing market (Birch, Chattaraj, and Wachter. 2016).

Because of urban demographics in developing countries, a high priority must be given to preventing further growth of informal areas with all related negative social and health externalities. The difficulty is that new construction of formal low-income housing is expensive relative to incomes, made worse by costly and constraining regulations, and, in the case of rental housing, unfavorable rent laws and tax systems. The first priority for national and local governments is to address these regulatory and tax constraints in order for the private and NGO sectors to be able to enter this segment of the market. However, government programs to incentivize private developers to build affordable ownership housing through regulatory facilitation and deep finance-linked demand subsidies to low-income households may backfire.

Developers will seek out cheap peripheral land to make these housing developments profitable, but they often compromise on access to employment, transport and other amenities, leading to affordable housing marooned from social and economic opportunities. This misguided approach leads to vacancies, loan defaults and social instability. Mexico, Brazil, Chile and India are among the countries that have experienced such outcomes (Hoek-Smit and Cirolia 2016; Acolin, Hoek-Smit, Magalhaes Eloy, 2019). Governments must guide the locational choices, facilitate mixed income developments and be involved in the provision of services and infrastructure. The combined supply and demand side subsidies needed for successful and affordable new housing developments will, however, easily overwhelm available budgets in poor countries. The alternative model of direct housing construction for the poor by governments at no or very low costs to households, as followed by South Africa, Brazil and Columbia, is equally unsustainable and distorts housing markets even if they contribute substantially to economic growth because of their scale (Gardner, Pienaar, Lockwood, 2019).

An alternative way to encourage supply for low-income households is to stimulate private rental markets. Different approaches are evolving and being piloted in several countries (Brueckner and Selod, 2019; Dilollo, 2020 analyze the booming private rental developments in formal housing areas in South Africa). One option is to provide loans and regulatory and/ or tax facilitation to owners of existing well-located buildings and homes in order to transform or extend these for the low-income rental market. A limited rental payment subsidy program may make such units available for very low-income households. In some countries (e.g., Chile, Brazil, Mexico) such programs are part of an urban densification program.[iv] It has, however, been difficult to bring these programs to scale. Another approach is to stimulate new private rental construction through a mix of landlord incentives and rental demand subsidies. This option has so far proven to be too expensive to reach the lowest-income segment in developing countries. Newly built formal rental housing for the lowest income segment is, therefore, still mostly done by governments, but at a small scale because of the cost. New models are piloted for public rental housing to be operated in a more commercial way, using independent management companies and monthly payment subsidies to guarantee adequate maintenance.[v] In summary, while there is a growing agreement on the importance of decent rental housing for the lowest income households, and cheap rental housing is provided successfully in the informal sector, few developing countries have been able to bring either private or public formal rental schemes to a relevant scale. More than anything else, successful rental housing strategies require coordination and commitment of many different parts of government to create the right tax incentives, balanced tenant-landlord regulations, access to credit for small- and larger-scale landlords, practical development regulations and sustainable rental subsidies for the poorest households.

The second and well documented set of subsidy policies to improve housing conditions for the poor is through the upgrading of infrastructure in existing slums and possibly titling of land in existing informal settlements[vi], or the provision of loans or grants for home-improvement.[vii] Several countries in Latin America, which are already fully urbanized, including Colombia and Mexico, are implementing large-scale credit-based subsidy programs for home-improvement including for informal housing areas eligible for titling (Infonavit, Sedatu & BID, 2019).[viii] Similarly, the on-site building of new housing to resettle occupants of slum areas has produced some positive outcomes. This approach may be costly, however, depending on the land costs, and it has proven difficult to resettle all inhabitants of a slum area and to establish whether shack owners or their tenants are the qualifying beneficiaries.

In summary, both national and local governments must take the lead in exploring and adopting the least distortionary and most effective ways to subsidizing the underserved segments of the market and need to coordinate their efforts closely in order to respond to the most urgent types of housing problems in different localities. A flexible national housing-grant system that allows local governments to set their own priorities on housing subsidy programs within national guidelines is preferred over standardized national programs. This approach requires competent local governments to exist. It would be ideal if local governments were able to raise local funds for infrastructure and affordable housing to complement national programs.

Mechanisms for the monitoring and evaluation should be built into the design of all subsidy programs. Measuring of outcomes, reporting of results, costs, and processes to adjust programs should be made a standard practice. Particular attention should be paid to process evaluation, especially when private sector or non-governmental/ community-based organizations administer government subsidy programs. The following section discusses the need for monitoring more generally.

4. Monitoring implementation of the New Urban Agenda

The ultimate goal of implementing the New Urban Agenda is to make cities inclusive, safe, resilient and sustainable. The NUA is supposed to guide urban policies for the next 20 years, with a mid-term in 2026. In light of this timeline, we need a sound mechanism for monitoring progress and identifying gaps with respect to specific goals and targets. The Agenda does not have its own set of indicators. It is therefore important to establish national and global progress measurements toward the housing goals.

As in the NUA monitoring process in general, there are several practical questions regarding the monitoring process in housing. What quantitative and qualitative measures should be put in place to measure the success of housing goals? How should commitments and goals be monitored, not just nationally but globally? Is there an agreement on standardized global outcome indicators? Who should monitor? How can monitoring efforts go beyond assessment exercises, increase accountability, and feed back into policy debates and discussions at the local level? Finally, how can alternative and innovative types of data complement government statistics?

The most important requirement is accurate data at the national and local levels. This need is especially pertinent for the housing component of the NUA. A well-functioning housing market requires timely information on demand and supply characteristics. Such information must include data on house prices, rents and incomes; housing finance and subsidy programs; the quantity and quality of the housing stock by housing type; building permit applications and approvals; construction costs; the volume and the value of new construction; housing transactions, etc. Some of these data are local and have to be combined at the national level, and some, such as housing finance and subsidy data, are national in nature.

Such housing sector data are crucial for decision making by market players as well as for various policy-makers, from the central bank dealing with monetary policy and macro-prudential policies and other financial stability issues linked to the housing sector, to ministries of housing and construction, which set production targets and develop and administer household subsidy programs and private sector production incentives, and local governments which must ultimately guide and integrate land, transportation and housing development in their jurisdictions. Monitoring of the housing sector is impossible without data. Comprehensive housing sector data are not systematically collected or compiled and distributed at the national level in many countries, specifically in emerging markets and developing countries. Even in OECD countries, housing data are often not standardized or widely shared.

Over the past few decades, international efforts have been made to assist countries in putting in place a system of housing data collection, and to do so in a globally standardized way to allow for international comparisons and analysis of housing sector conditions. The joint UN Centre for Human Settlements and World Bank "Housing and Urban Indicator Program" of the mid-1990s, which was meant to be rolled out at a large scale at the 1996 Habitat II Conference, was the most comprehensive global attempt to achieve broad national and global coverage of the urban and housing sectors. Its implementation has suffered from lack of resources, and indicators on housing finance were not included. Several other smaller attempts by the Inter-American Development Bank and Habitat for Humanity suffered the same fate.

The recognition of the need for a standardized set of indicators for the implementation and monitoring of both the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) led to the adoption of 60 indicators for the former and 230 indicators for the latter. But there were only a few indicators related to urban development and housing. Target 7.D of the MDGs aimed "By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers," and the indicator for monitoring progress was 7.10, 'Proportion of urban population living in slums.'[ix] A similar SDG target is 11.1, which aims to "by 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums." It is measured by the "proportion of urban population living in slums, informal settlements or inadequate housing" (UN ECOSOC 2016).

The fact that almost identical indicators were included in the MDGs and SDGs suggests that the lack of adequate shelter with basic services in slums and informal settlements is recognized as a continued challenge. But the target itself is not specific, and hence it is unclear how the indicator will be used to make a judgement on progress. The other SDG 11 indicator related to housing is the "ratio of land consumption rate to population growth rate," which measures if per capita land consumption keeps pace with urbanization. However, this figure does not account for the possibility that increased densification could allow for areas to absorb a growing population without consuming a proportional amount of land. While national databases are necessary, the information for monitoring housing outcomes will necessarily be local. There are now new methods for tracking informal housing using remotely sensed data. Integrating these data operations with local information is important to learning where progress is occurring and to learning from the exemplars of this progress for others.

Data collection on the housing and housing finance sector has received renewed attention since the global financial crisis. The International Monetary Fund, the Bank for International Settlements, and the World Bank are assisting countries to develop house price indices.[x] There are other initiatives led by the United Nations as well as the academic and research communities.[xi] These data efforts need to be strengthened.

In summary, a concerted effort is needed to establish and consolidate national and local level urban and housing indicator systems in as many countries as possible and to develop a process of timely and regular compilation, review and dissemination of such data at the global level.

Such a system will facilitate the implementation of the NUA, with outcomes analyzed and knowledge shared to achieve sustainable and equitable housing policies. The NUA needs to acknowledge the current data gap and put in place a system to support countries and cities that face technical, financial, and political constraints to data collection, in order to ultimately achieve a consistent framework to measure urban housing outcomes.

5. Conclusion

The main purpose of this paper is to fill the gap in the New Urban Agenda with regards to the guiding principles, implementation strategies, and monitoring of the goal of adequate and affordable housing for all. Given the crucial importance of housing in achieving inclusive, safe, resilient, and sustainable cities, efforts should be made to elaborate what needs to be done to achieve this goal, by whom, and with what resources.

As for the question of "what needs to be done?" while we agree that housing should be placed in the context of urban land use and infrastructure planning, we need to look at the way housing is financed and focus on the expansion of sustainable financing mechanisms for both housing and urban infrastructure to secure needed investment in housing with adequate infrastructure. There are several key steps: fix the supply side of the housing market to make housing more affordable, strengthen housing finance systems, and rationalize housing subsidy programs to encourage purchase or rental of adequate housing. Implementation of finance and subsidy policies requires collaboration between the ministry of finance, the central bank, and the ministry of housing. This coordination is necessary because a well-functioning mortgage market requires sound macroeconomic policies to determine interest rates and the depth of capital markets. A particular concern is that interest rate subsidies may impair the development of a healthy mortgage market.

As for the division of responsibilities, we emphasize the need for a clear and complementary assignment of roles for national and subnational governments as well as for the private sector and civil society. Lessons must be learned from the reasons that the well-intended and logical framework of the "enabling markets to work" strategy advocated by the Habitat Agenda of 1996 did not deliver the expected outcomes. The enabling approach remains valid; well-functioning markets can reduce the needs for subsidies and allow the government to devote scarce resources to assisting those who really need help. But the enabling approach should not be misinterpreted as a pass for governments to pull back from the housing sector and leave housing issues to be resolved by markets. Each country should take a practical approach to the division of responsibilities and consider the constraints that each face, such as nascent institutions of ownership rights and property registration, inadequate urban planning laws and policies, a small financial sector, and structural weaknesses in the housing finance system. The right division of responsibilities between national and local (or subnational) government and the alignment of their objectives and incentives is crucial. As the subsidiarity principle emphasizes, much of the implementation of government policies falls on local governments, and local government is also responsible for land use regulations and building permits for residential housing as well as nonresidential real estate.

As for the means of government intervention, both national and local government must find ways to take advantage of land value capture and other land management mechanisms to finance housing and infrastructure developments. We also recommend the reform of housing subsidy policies and programs in many countries to consider the needs of all income groups that deserve government assistance.

Finally, we note that effective implementation of the NUA requires systematic data collection, analysis of data, and practical indicators as well as the capacity to measure and monitor progress within a relevant time frame. Housing indicators carefully designed and field-tested for the Habitat Agenda were not utilized. Efforts should be made to install a workable data collection and monitoring system at local, national and global levels.

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Endnotes

[i] In addition, land value capture requires land titling and registration as well as valuation systems to be in place, which is not the case in many developing countries.

[ii] Microfinance for housing can offer an alternative source of credit. However, microfinance has been unable to reach the required scale to finance home purchases for the underserved segments of the population for a variety of reasons. Some promising cases, particularly from Latin American countries, show the possibility of using microfinance for individual home construction and improvement, the extension of homes with rooms for rental, as well as experimentation in the granting of property rights.

[iii] Several countries (e.g., Zambia, Ruanda) are implementing property titling and registration systems based on satellite imaging techniques rather than land surveys, which speed up the process and reach scale. When these systems are legally approved, they can be the bases of lien registration for mortgages.

[iv] Sao Paulo Participatory City Master Plan 2014, Brazil; The Consejo National de Desarollo Urbano, Government of Chile. Densificación equilibrada. Grupos de Trabajo. 2019.

[v] Egypt's Social Housing and Mortgage Finance Fund successfully operates a modest number of rental housing units through management companies using this model (World Bank, 2020). Similar models are being developed for Mexico, Indonesia, India amongst others. The challenge is to bring such programs to scale.

[vi] The Philippines' Social Housing Finance Corporation operates a communal mortgage scheme for households of selected upgradable slum areas to receive a subsidized communal mortgage to jointly buy the land they occupy from the private landowner. Once that loan is paid off, individual land titles can be obtained. The program has received sustained government support for many years and has reached an impactful scale.

[vii] Social and health impacts of upgrading projects are well documented. An example of a successful grant program for home-improvement that does not require the household to take out a micro loan is the Piso Firme Program in Mexico. The program provided small grants that allowed beneficiaries to build a cement floor in their houses, irrespective of where the house was located. An evaluation, using an experimental design with control groups, showed a positive impact of the program on households' wellbeing.

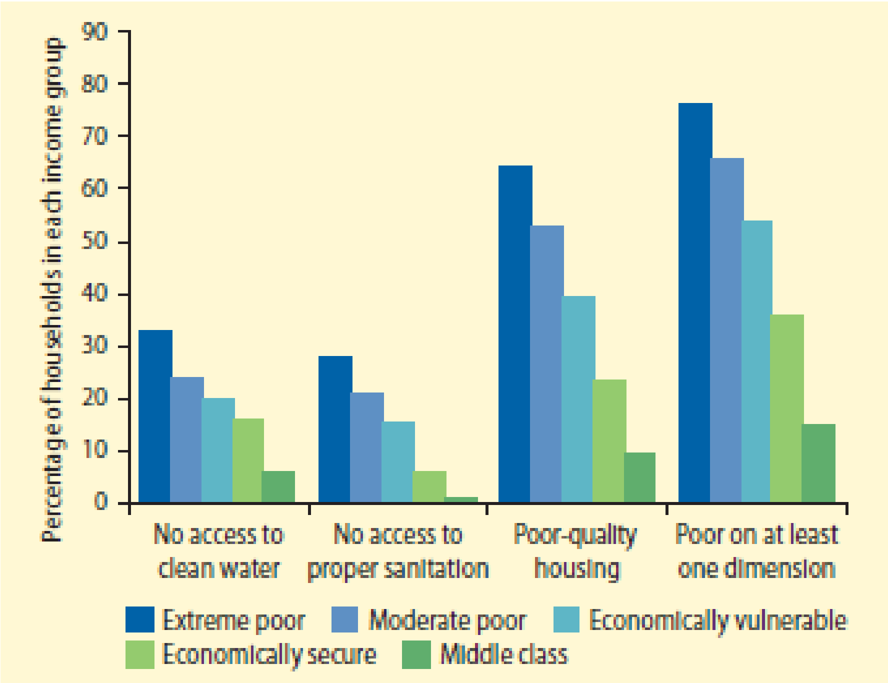
[viii] The Ministry of Housing, City and Territory, Government of Columbia initiated a large-scale home improvement program "Casa Digna, Vida Digna" (CDVD) to assist vulnerable

families living in selected areas with the resources they need to upgrade their homes and improve their living conditions. The program receives World Bank support to extend its scale. Similarly, INFONAVIT, the large housing provident fund in Mexico, initiated a large-scale home-improvement lending program specifically focused on low-income earners.

[ix] The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of non-durable material. Progress on the proportion of slum dwellers was achieved mostly because of China's large-scale housing programs. As a result, the indicator says little about progress in the remainder of the developing world.

[x] Now roughly 60 countries have a house price index, but data comparability is low.

[xi] The Wharton School's International Housing Finance Program established a standardized global data collection system for housing finance data and selected housing demand and supply data called the Housing Finance Information Network or HOFINET.



Source: Wai-Poi and others 2016.
Note: Access to clean water denotes piped water, a protected well, or water sold by a vendor. Access to proper sanitation denotes a flush toilet or an improved pit latrine. Good housing quality means the roof is concrete, cement, brick, stone, wood, or tiles; the walls are concrete, cement, brick, or stone; the floor is nonsoil. The sample includes Cambodia, Indonesia, Lao PDR, Mongolia, the Philippines, Thailand, and Vietnam.

Figure 11.1. Non-Monetary Poverty by Class, Developing East Asia and Pacific 2012. Source: Riding the Wave, An East Asian Miracle for the 21st Century, World Bank East and Pacific Regional Report, p.71, 2018.

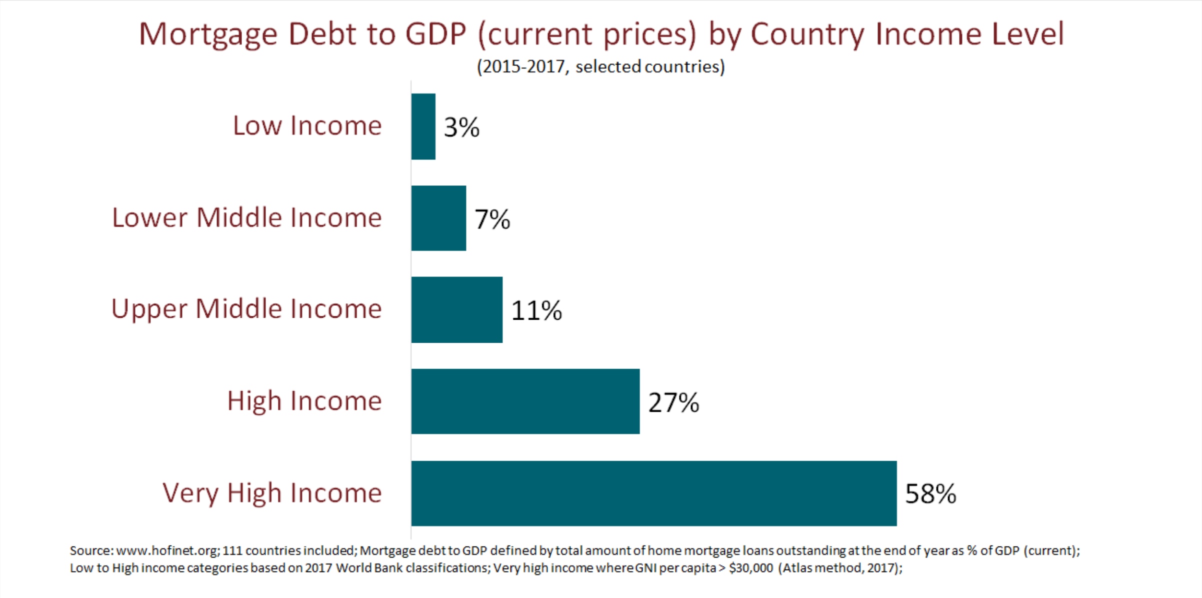


Figure 11.2 Mortgage Debt to Gross Domestic Product