
What are the opportunities and barriers to sustainable housing solutions in Asia-Pacific

- Housing as a Foundation for breaking the poverty cycle
- What are the opportunities and barriers to sustainable housing solutions in Asia-Pacific?

The session will explore policies that:

- help promote social and economic inclusion, enhance the resilience of communities to external shocks
- create vibrant communities that can cope with and addresses risks and the realities that face them.
- look at country experiences as well as the lessons and recommendations from these experiences.
- The session will examine the policy landscape with respect to the promotion of sustainable housing solutions.
- The opportunities and the barriers to the adoption of sustainable housing solutions
- identifying practical measures in the policy and program implementation front.
- Lessons drawn from the experiences of other countries with respect to specific initiatives
- including in the areas of energy efficiency, renewable energy, waste management, water efficiency, among others.
- Success stories that highlight joint initiatives among government, international organizations, multilateral finance organizations, NGOs, and communities and recommendations for action.

Sustainable Housing Solutions should quality,

- Self-sustained communities equipped with Social, Physical and Economic Infrastructure
- energy efficient and affordable housing.

More importantly, affordable housing should be more than just a roof over someone's head — it creates solutions that help residents and strengthen communities.

- The mission of the Sustainable Housing and Communities is to create strong, sustainable communities by connecting housing to jobs, fostering local innovation, and helping to build a clean energy economy.
- In order to better connect housing to jobs, the programs work to coordinate federal housing and transportation investments with local land use decisions in order to reduce transportation costs for families, improve housing affordability, save energy, and increase access to housing and employment opportunities.
- By ensuring that housing is located near job centers and affordable, accessible transportation, one will nurture healthier, more inclusive communities which provide opportunities for people of all ages, incomes, races, and ethnicities to live, work, and learn together.
- In order to foster and encourage local innovation, it would be required to create an unprecedented partnership across federal agencies and provide resources and tools to help communities realize their own visions for building more livable, walkable, environmentally sustainable regions.
- Despite the widely available technology and the many benefits that sustainable housing solutions bring, they continue to remain on the margins of housing provision.
- Main Task: Transport, Energy
- How to reduce existing barriers to mainstream take-up of sustainable housing solutions.
- How to raise awareness of the need for such solutions and how they can ultimately be achieved.
- Approaches for a more rapid uptake that include using regulations, standards and financial incentives, increasing market demand for sustainable housing and creating the capacity and infrastructure for the building industry to deliver it.

Green Building:

- Green building (also known as green construction or sustainable building) refers to a structure and using process that is environmentally responsible and resource-efficient throughout a building's life-cycle: from siting to design, construction, operation, maintenance, renovation, and demolition. This requires close cooperation of the design team, the architects, the engineers, and the client at all project stages.[1] The Green Building practice expands and complements the classical building design concerns of economy, utility, durability, and comfort.[2]
- Although new technologies are constantly being developed to complement current practices in creating greener structures, the common objective is that green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:
 - Efficiently using energy, water, and other resources
 - Protecting occupant health and improving employee productivity
 - Reducing waste, pollution and environmental degradation[2]
- A similar concept is natural building, which is usually on a smaller scale and tends to focus on the use of natural materials that are available locally.[3] Other related topics include sustainable design and green architecture. Sustainability may be defined as meeting the needs of present generations without compromising the ability of future generations to meet their needs.[4] Although some green building programs don't address the issue of the retrofitting existing homes, others do. Green construction principles can easily be applied to retrofit work as well as new construction.
- A 2009 report by the U.S. General Services Administration found 12 sustainably designed buildings cost less to operate and have excellent energy performance. In addition, occupants were more satisfied with the overall building than those in typical commercial buildings.
- Sustainable, vibrant and healthy community ensured by 3 year post development of the community

Informal Settlements:

Source: The Case for Incremental Housing, Cities without Slums

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Informal settlements accommodate more than 50percent of the population of many cities. They are characterized by flexible, responsive, and affordable housing processes that enable families to extend and improve their dwellings overtime. At the same time, their legal status is usually insecure, they are under-served by urban infrastructure, are often unhealthy living environments, and in some cases are physically unsafe.

In addition, sites and services (S&S) programs can redress the growth of new Informal settlements and the proliferation of slums (which are growing by 5 percent per year in many cities) by providing secure access to land and services and enabling households to construct their dwellings incrementally as their resource allow at a significantly lower cost than conventional public housing programs

The case rests on six major arguments:

The numbers case. By engaging house holders in the production and management of their own dwellings and neighborhoods, formal or legal, safe, and healthy dwellings affordable to low income groups can be procured than by conventional approaches.

The financial case. By providing security of tenure and access to services, even poor households are able to invest in housing and neighborhood development through saving and borrowing, thereby sharing the cost of urban development with the government.

The urban management case. By recognizing the most effective levels of decision-making and delegating the authority that is required for incremental housing development, partnerships that enhance the efficiency of urban management and the administration of urban services can be built.

The urban development case. By planning areas of legitimate low-income housing development as part of an integrated urban development strategy, government can set strategic priorities for an entire urban area rather than resorting to ad-hoc measures.

The Governance Case: By engaging households and community leaders in the incremental development to of their housing and neighborhoods, a system of good governance that helps ensure transparency and accountability in decision-making can be created.

The social and economic development case. By encouraging cooperation through incremental development, local communities are built and strengthened. Furthermore, by creating job opportunities through the provision of training and technical support, household incomes can be increased.

Informal Urban Housing Processes:

In general, housing procurement processes for low-income households in the informal sector take place in the opposite order of those in the formal sector there are many variations to each of these stages in the informal process of settlement development.

That said, the stages may be usefully characterized and summarized as follows:

THE CASE FOR INCREMENTAL HOUSING

1. Acquiring land the informal settlement of urban land falls in to two broad categories:
2. Squatting and un-registered land sales.

Squatting: Occurs when households or groups of families settle on vacant land by constructing rudimentary shelters. If they are not immediately evicted, they gradually consolidate their dwellings. Encouraged by the success of the original squatters, other households join them. The settlements usually exhibit a high degree of community cohesion borne out of solidarity during the illegal process of squatting.

The other form of informal land settlement - **unregistered land sales** - differs significantly from squatting. It is based on an exchange of money at a price that is agreed on by both the landowner and the purchaser. What renders this land affordable to the lowest-income groups is that the land use is not legally recognized. This is either because it is unsafe or inappropriate for habitation or otherwise in contravention of official regulations, or because the vendor lacks a recognized title to the land that he is selling.

2. Construction:

The building of houses in informal settlements is invariably an incremental process. Households start with the most basic and affordable shelters. They then invest in the extension and improvement of their dwellings as their circumstances allow and in accordance with their priorities for the investment of their time, energy, and resources and their assessment of the risk of eviction. In many circumstances, the development of a permanent house is a lower priority than investment in other assets, such as a business or a child's education.

3 Infrastructure and Services:

Many new informal settlements have only the most precarious access to water, sewerage, and solid waste disposal, and many illegally hijack power. Utility agencies and service departments are torn between their duty to provide adequate services to all citizens and the implications of giving defacto recognition to illegal settlements by providing them with facilities. Yet overtime—and with political pressure—infrastructure is upgraded and services are provided: waterlines are laid, sewerage disposal systems are installed, access to power is provided, streets are paved and lit, and in some cases school and clinics are built.

4. Secure Title:

Early slum-upgrading projects tended to be confined to the supply, extension, and improvement of physical infrastructure in under serviced settlements. Little or no attention was paid to community development, engagement in local governance, or the legal status of the households' title to their land and property. Increasingly, however, security of tenure has been recognized as crucial to house holders' sense of ownership and stewardship of their neighborhood assets. Unfortunately, where land has been squatted on or sold for development that does not conform to its statutory use category or the prevailing planning standards (such as plot sizes and road widths), formalization of title in the name of the incumbent households or even

the granting of collective title to a community is difficult, particularly when the original occupation took place several years (or generations) back.

Strategic Approaches to Low-Income Urban Housing:

a) Public or Social Housing

The approach is based on the idea that the government must intervene in the formal housing market to enable lower-income decent housing for all of the low-income urban population

b) Slum Upgrading

Slum upgrading encompasses public sector support to households that have been denied access to the formal land and property markets and have instead taken the initiative to house themselves informally (illegally) either individually or through the regulated developers. The upgrading process entails the granting of secure title to land and property to encourage household and community investment; the installation or extension of public infrastructure (such as water, sanitation, and power); the provision of services (such as schools, health facilities, and recreation space); and the development of effective local governance and management mechanisms.

c) Sites and Services

The third approach relies on urban sites and services (S&S) programs, which combine elements of the other two approaches. Conceptually the S&S movement sought to minimize the public costs and subsidies required by conventional social housing programs by providing only those components that individual households could not easily procure for themselves—land, infrastructure, and services.