

Introduction to Urban Planning
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Lecture - 30
Urbanization and Slums

Welcome to the course introduction to urban planning. In today's session, we are going to discuss about slums. And we are going to understand the difference between informal settlements. And then we are going to look at their living conditions and we are going to look at different interventions at the international level, national level and few case studies.

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Coverage	
1	Urbanization and Slum.
2	Slum Population Trend.
3	Slum, Informal Settlement and Inadequate Housing.
4	Reasons of Slum Growth as Explained by Key Organizations.
5	Understand the Life in Slum.
6	Slum Upgradation and Prevention Framework
7	Interventions - International, National and Case studies

So, accordingly, the coverage would include; to start with, we are going to first explore the link between urbanization and slum. Thereafter, we will look at slum population trend how it is happening across the globe. Then we will look at; will further try to understand term slum, where we will try to look at the difference between informal settlement, difference in slum and what does it mean to say inadequate housing.

Further, we will look at what kind of data we use for this purpose. We will also look into reasons of slum growth as explained by the key organizations. We will then try to understand the life in slum how it is really. And thereafter, we will look at slum up gradation and prevention framework given by UN Habitat. Lastly, we will look at various interventions at the international, national level. And we will also look at very briefly look at few case studies.

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Learning Outcomes	
1	Able to explain the link between Urbanization and Slum.
2	Describe and review the Slum Population Trend.
3	Conceptually differentiate Slum, Informal & Inadequate Housing.
4	Review the Reasons of Slum Growth as Explained by Key Organizations.
5	Understand the Life in Slum.
6	Slum Upgradation and Prevention Framework
7	List the Interventions - International, National and Case studies

Accordingly, the learning outcomes would include that after completion of this session, we should be able to explain the link between urbanization and slum. We should be able to describe and review the slum population trend. Further, we should be able to conceptually differentiate between slum informal settlements and inadequate housing. We should be able to identify the source of data which we are going to use for the purpose.

We should be able to review the reasons of slum growth as explained by the key organization. We should be able to review the life in slum. Further, we should be able to comprehend the slum of gradation and prevention framework. And lastly, we should be able to list the interventions uncritically reviewed them at the international, national level with the help of case studies.

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Slum and Sustainable Development Goals

To start with, let us revisit our initial lecture on urbanization and sustainable development and also the lecture where we talked about sustainable development goals. We have discussed on the urbanization trends in our previous lectures, one of the product of urbanization and lapses in planning and governance is slum.

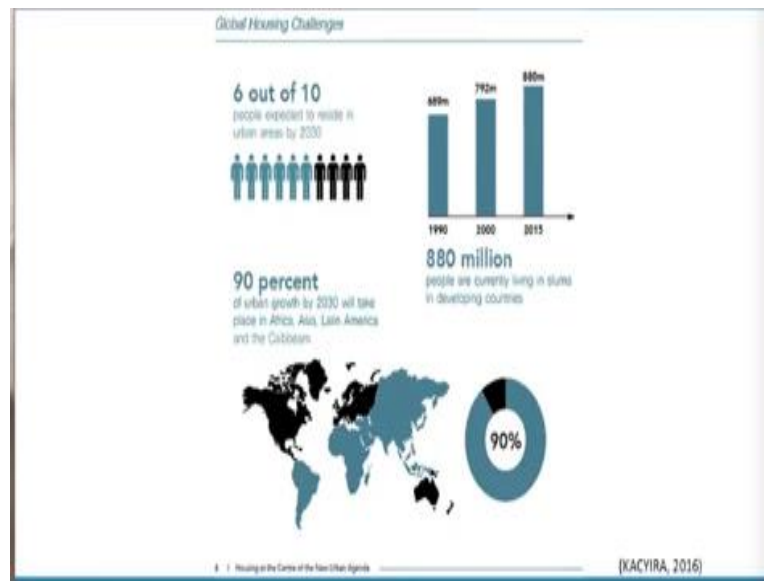
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As per the UN-Habitat report on adequate housing and slum up gradation 2018, we see that they mentioned that the steady trend towards the urbanization is going to influence virtually every face of human work in the coming years, including health, economic, social and environmental. In many parts of the world especially in the developing countries, high rates of urbanization have shown in the context of stagnating economies and poor planning and governance.

Creating a new face of extreme poverty concentrated in the slums or informal settlements in all these major cities.

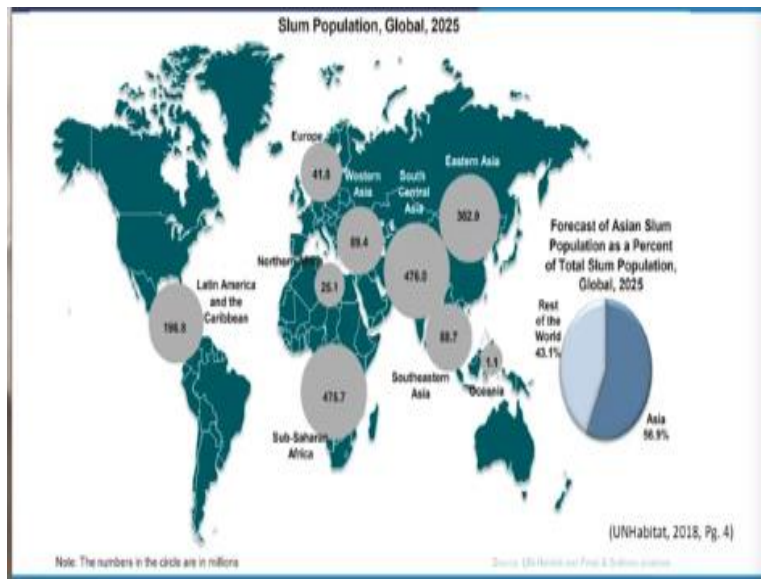
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We see that these slums are rapidly increasing, it has never happened before and this is because of the lack of adequate housing, among many other urban challenges and we also see that in the slums, poverty and inequality is very much evident. We say that as per the report that for next 15 years, it is estimated that more than 3 billion people will need adequate housing.

The housing and slum challenge, therefore remains a critical factor in persistence of poverty in the world, depriving millions of urban residents, their right to an inadequate standard of living and housing, excluding them from the benefits of sustainable urbanization.

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The map shows projected number of global slum population by 2025. The number in circle are in million. It is estimated that Asia will have more than 50% of total slum population by 2025. Today’s sustainability forms basis of a planning objectives.

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SUSTAINABLE DEVELOPMENT GOALS

11 SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

(Cities Alliance, 2021)

The UN explains: “The challenges cities face can be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and poverty. The future we want includes cities of opportunities for all, with access to basic services, energy, housing, transportation and more”.

Looking into sustainable development goals eleven in particular, which commits making cities inclusive, safe, resilient and sustainable. The UN explains the challenges cities face can be overcome in ways that allow them to continue to thrive in grow, while improving resource use and reducing pollution and poverty. The future we want, includes cities have opportunities for all with access to basic services energy, housing, transportation and more. So, this is what UN targets all the nations together target for this.

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Further, we see that UN has defined under this particular goal 10 targets and 15 indicators of SDG 11.

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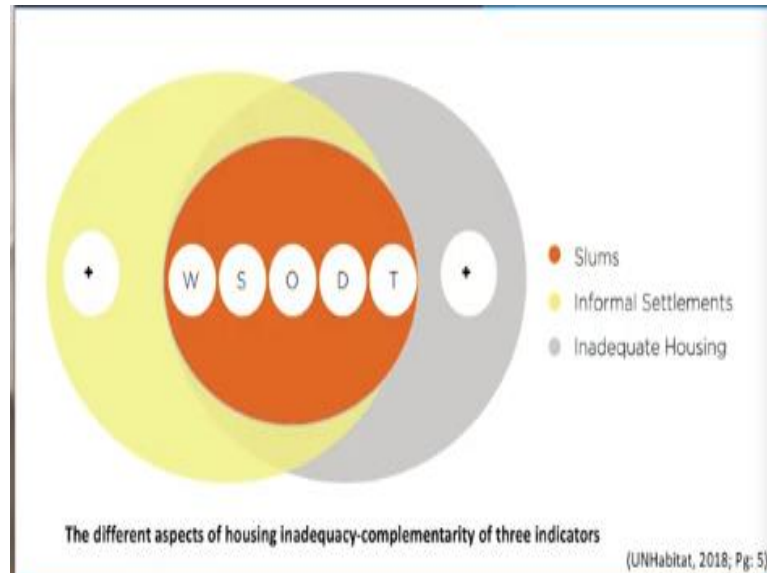


The very first one target 11.1 is to ensure access for all to adequate, safe and affordable housing and basic services and up gradation of slums by 2030. Indicator used to monitor the target is the proportion of urban population living in slums. Environmental settlements are inadequate housing. As per the UN-Habitat report on adequate housing and slum upgrading of 2018, in order to design and implement appropriate policies and programs to respond to the housing challenges worldwide.

It is important to identify and quantify the proportion of the population that lives in slums within urban areas, those living in informal settlements or those who have inadequate

housing. It is explained that the Sustainable Development Goal indicator 11.1 targets that it integrates 2 aspects of poor housing condition, the aspect of slums and informal settlements that UN-Habitat have been monitoring.

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Under the Millennium Development Goals target 70, mostly in developing countries and the new aspect on it inadequate housing that applies largely to the development countries. Integrating these 2 aspects makes the indicator universal, as it helps capturing housing condition in both developed and developing countries thus, addressing the fundamental principle of leaving no one behind.

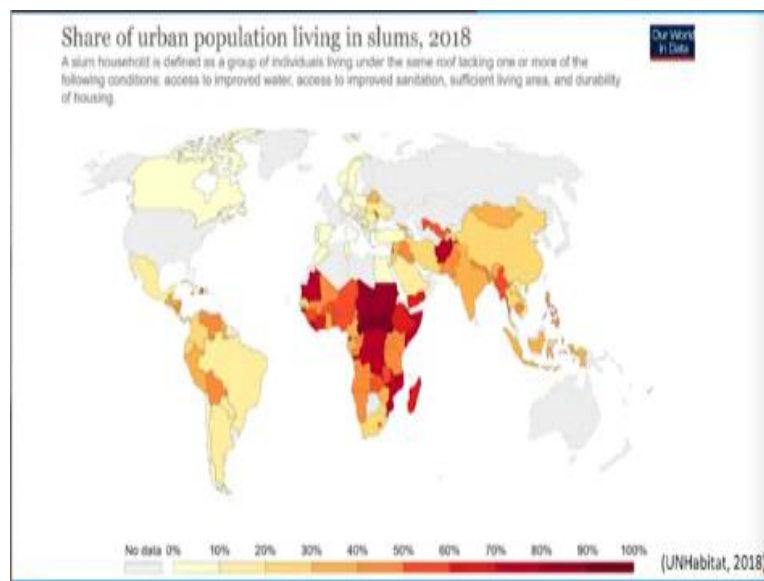
Further for the purpose of the SDG, a slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions such as access to improved water, access to improved sanitation, sufficient living area and durability of house.

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Slum Population and Pattern

Now, looking at this slum population and pattern.

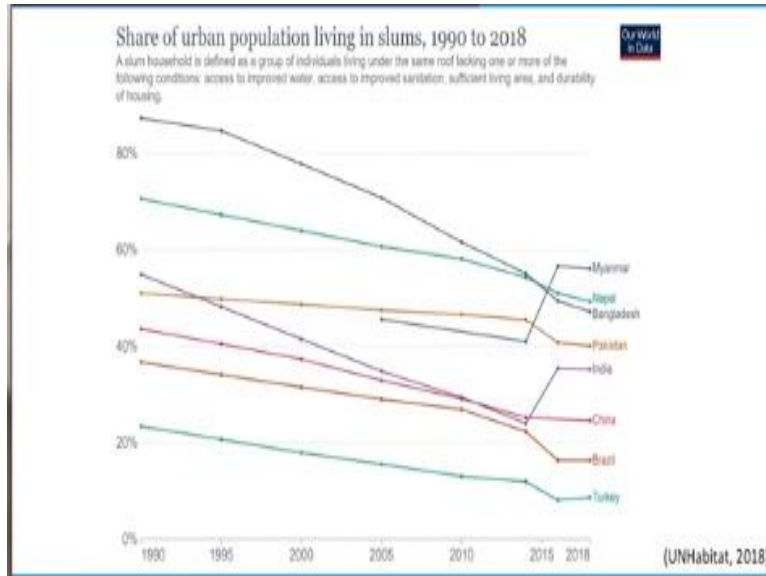
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In the map, we can see the share of urban population living in the slum. You can see light yellow shows 10% of urban population living in slum. To the dark brown, almost indicating 100% of urban population living in slums, you can see where maximum proportion of urban population reside in slum. As per the UN report of General Security of 2021, the number of slum dwellers has continued to grow over the years exceeding 1 billion in 2018.

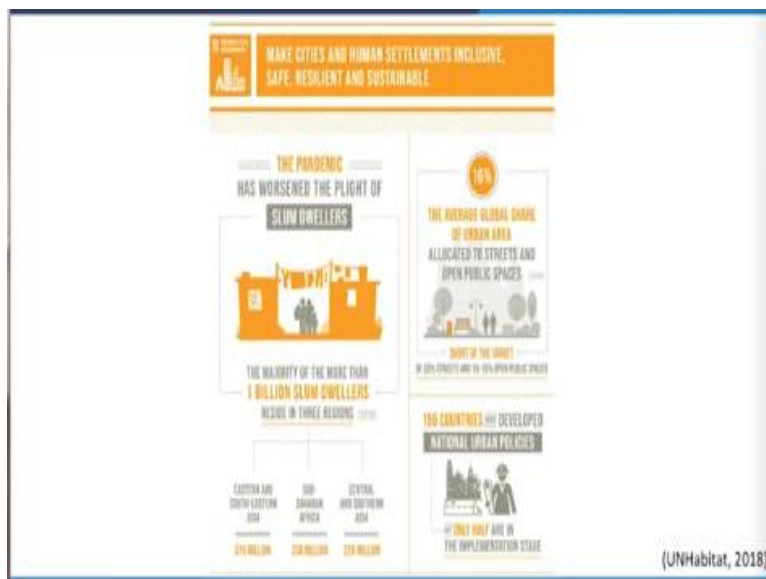
Slum dwellers are most prevalent in the 3 regions of eastern and southern Asia, Sub Saharan Africa and central and southern Asia.

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In this chart, indicating temporal data from 1990 to 2018, you can see nearly 40% of the urban population lives in slum in India. You can also notice that India has considerably brought down its figure from nearly 60% in 1962 to less than 40% in 2018.

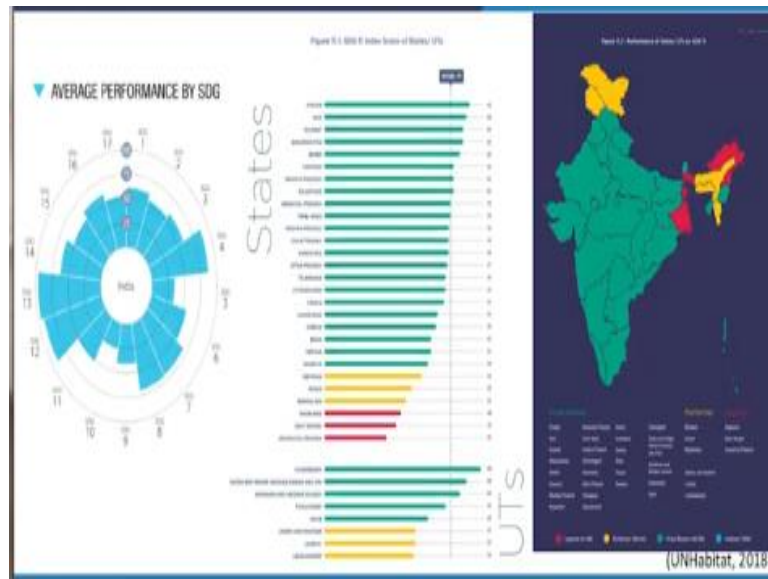
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As per UN report of General Secretary 2021, before the pandemic, cities had rising numbers of slum dwellers, worsening air pollution, minimal open public spaces and limited convenient access to public transportation at the global level. The direct and indirect impacts of COVID-19 pandemic are making it even more unlikely that this goal will be achieved so, probably when not going to achieve this goal in the given time.

With more people forced to live in slums now, their quality of life is deteriorating and vulnerability is increasing.

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In the left hand side of the diagram, you can see India's overall performance with respect to all SDG and in particular SDG level. On the right hand side, you can see the performance of different states for SDG 11. Dark green shows the front runner and yellow showing the performing states and red showing the aspirants states. So, you will locate your state's here how they perform. Looking at Karnataka which is one of the front runner in the SDG 11.1 goal.

We see that as per the strategies and action plan for Karnataka report on SDG 2030 by government of Karnataka, it states that Karnataka is one of the most urbanized states in India with about 40% of its population living in towns and cities with decadal population growth rate of about 25%. These cities in the state have played a role as focal point for working and living developing the economy and technology, education, research and culture.

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SDG 11 – Karnataka Urban Slum

As per the Karnataka SDG report :

- In the last sixty years between 1951 and 2011, Karnataka's urban population has grown by 2.5% per annum with a share of 6.24% in India's urban population.
- Bengaluru- Contributes to about 25% of the total urban population, of which about 15% lives in slums.
- Majority of households reside in Semi-Pucca structures (about 45%).
- 79% of the slums have tap as major source for drinking water.
- 57% access to latrine facility within own premises.
- 68% availing drainage facility.

As per the report in the last 60 years between 1951 and 2011, Karnataka urban population has grown by 2.5% per annum with a share of 6.24% in India's urban population. Of all the urban areas in Karnataka, the most populated one is Bengaluru, which contributes to about 25% of the total urban population of which about 15% lives in slums. Majority of households reside in semi-pucca structure, which 79% of slums have taps as major source of for drinking water, 57% access to toilet facility within on premises and 68% availing drainage facility.

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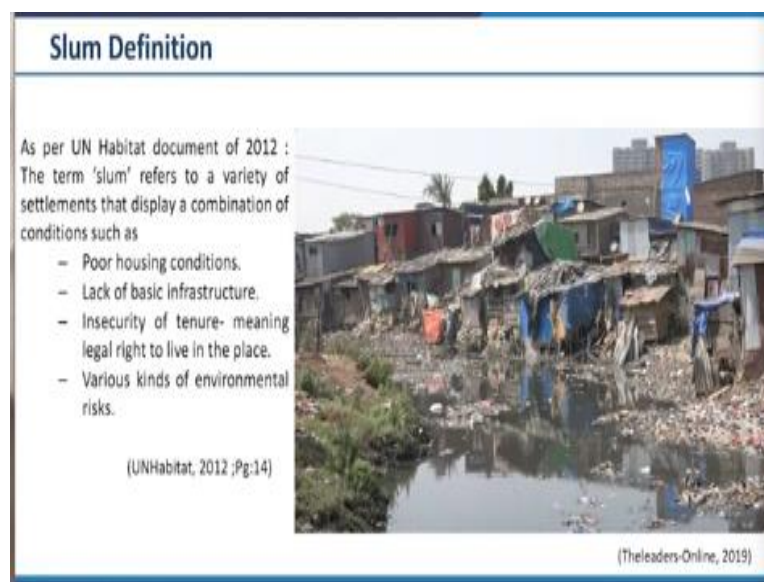
SDG 11 – Karnataka Urban Slum

- About 10% of all slums had no electricity, with 11% for non-notified slums, and 10% for notified slums.
- Only a few slums are reported to have private toilets and the rest do not have a single private toilet; most of them have community toilets shared by many households.
- As community toilets are shared by many households, in terms of hygiene, they are not as good as private toilets because of maintenance issues.
- The proportion of slums where the sanitary conditions are poor: in the sense that most of the households do not possess lavatories.
- In urban Karnataka 43% of slums had no latrine facility within their premises.

In urban Karnataka, about 10% of all slums had no electricity with 11% of non-notified slums and 10% for non-notified slumps. Toilets are the symbol of hygiene and sanitation and human life, whether they are personal or public can be easily accessed by the number of toilets and type of toilet. Only a few slums are reported to have private toilets and rest do not have single private toilets.

Most of them have community toilets shared by many households, so, you can see the condition in our cities. In the table here, we can see how they are targeting to achieve the SDG 11.1 goal. They indicate the baseline value are the targets for 2030. Now, let us try to understand the term slum.

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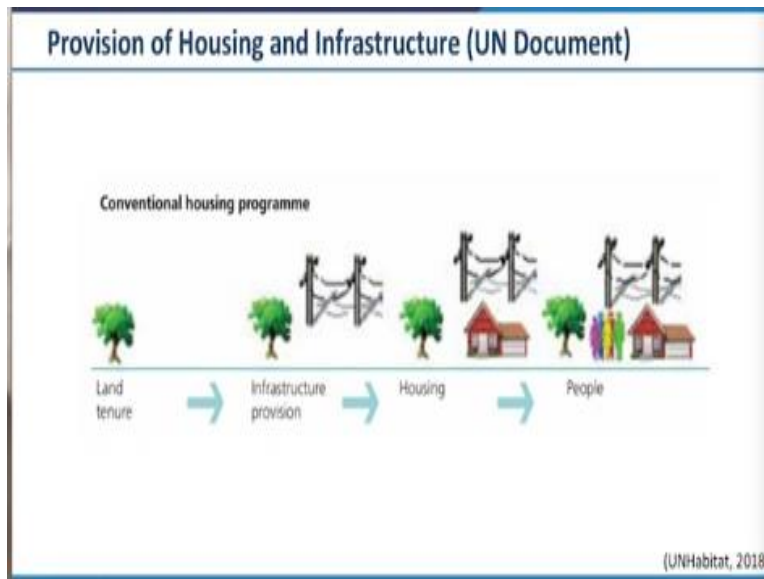


As per the UN-Habitat documents of 2012, the term slum refers to a variety of settlements that display a combination of conditions such as poor housing conditions, lack of basic infrastructure, insecurity of tenure meaning, they do not have legal right to live in the place which they are living in and various kinds of environmental risk are there in the place where they live.

There are multiple topologies of slums and basically an informal model of land development is categorized by the documents for the process of when people occupy built their houses when the infrastructure is accessed and when the planning is done. We see in the figure in the image you can see the process of formal urbanization and informal urbanization how they are reversed process.

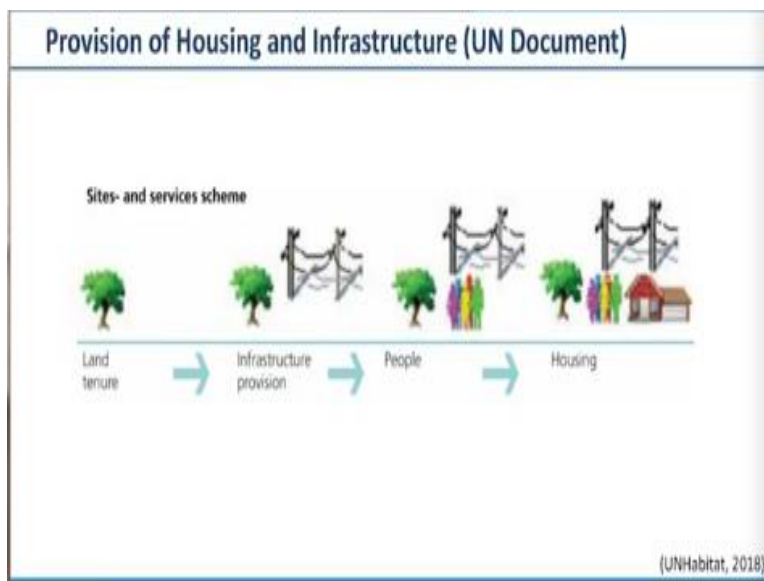
You will see 4 ways in which provision of housing and infrastructure is done as per the study of UN including both formal and informal housing.

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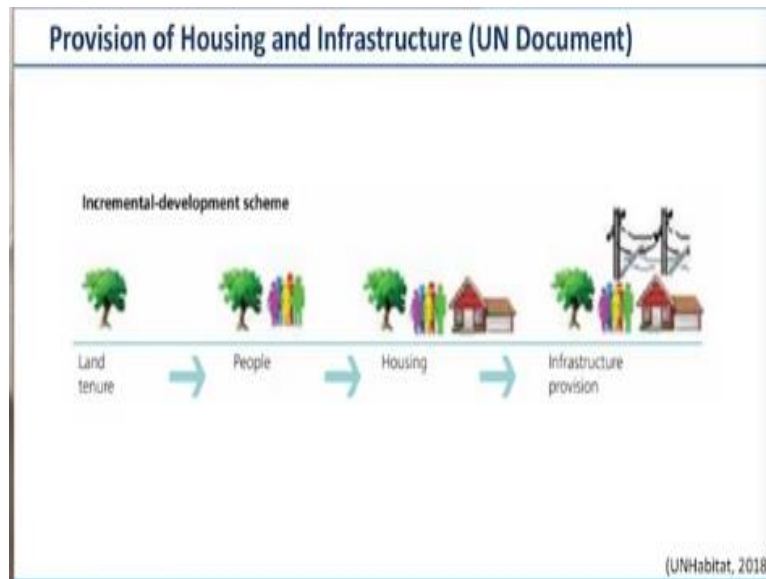
In the diagram, you can see how housing program works. First, you assure land tenure, then infrastructure, then house construction and then people come in.

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Whereas in the site and service scheme, you see that first land is assured, then infrastructure comes in, then people come in and the houses constructed in the process and the settlement up gradation system you see first people are already there and they build the house to accommodate themselves. And then they are assured the land and then infrastructure provision is made for them.

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Whereas, we see in the incremental development scheme first land in tenure, people come in and houses are built and then later infrastructure provision is made. Now, moving ahead, we look at the official definition, which is given by United Nations.

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Slum Definition

Box 1: UN-Habitat definition of a slum household

A slum household consists of one or a group of individuals living under the same roof in an urban area, lacking one or more of the following five amenities:

<ol style="list-style-type: none"> 1. durable housing (a permanent structure providing protection from extreme climatic conditions); 2. sufficient living area (no more than three people sharing a room); 3. access to improved water (water that is sufficient, affordable and can be obtained without extreme effort); 	<ol style="list-style-type: none"> 4. access to improved sanitation facilities (a private toilet, or a public one shared with a reasonable number of people); and 5. secure tenure (de facto or de jure secure tenure status and protection against forced eviction). <p style="text-align: center; font-size: small;">Source: UN-Habitat (2006)</p>
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(UNHabitat, 2012 ;Pg:5)

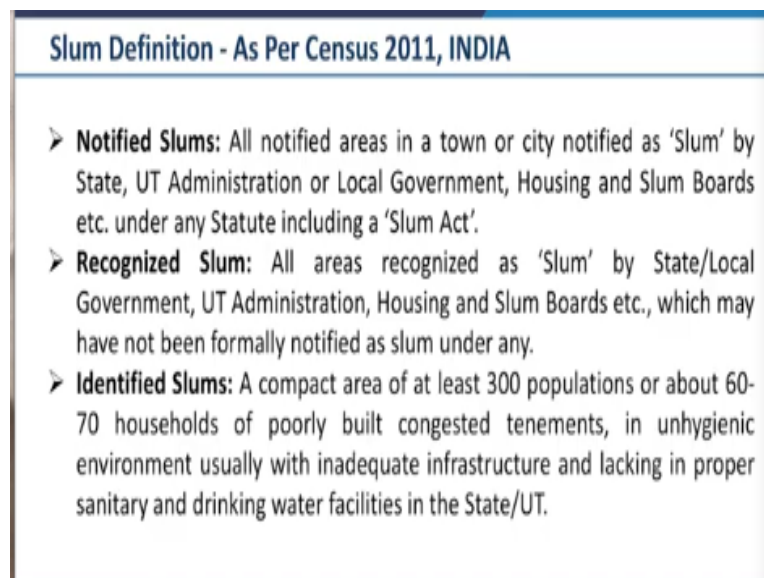
United Nations uses official definition as given in its document of 2006. A slum is one or a group of individuals living under the same roof in an urban area lacking in one or more of the following 5 amenities. So, you need to pay attention here, like if any one of these are lacking or more of these are lacking they would be considered as slum as per the definition of United Nations. We see the first one being durable housing, which means it needs to have a permanent structure providing protection from extreme climatic condition.

Second, we see sufficient living areas. So, it should not be very congested and it should have enough space for all of them who are staying there. Next, we see access to improved water. We need to see that water is sufficient. It is affordable and can be obtained without any extreme effort. We see the 4th element is access to improved sanitation facility. A private toilet or a public shared toilet is available to them at a reasonable number.

Last, we see that secure tenure. Secure tenure which means that it gives them right to the land or the house which they live in and they would not be any forced eviction from that particular place. As per the UN document of 2012, what is considered as slum customarily depends on local and regional perception of housing standards and social conditions. So, we will see that the definition would also vary from place to place.

So, we will see how do we define slum in Indian context. Slum is defined by census of India and national sample survey office NSSO.

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Slum Definition - As Per Census 2011, INDIA

- **Notified Slums:** All notified areas in a town or city notified as 'Slum' by State, UT Administration or Local Government, Housing and Slum Boards etc. under any Statute including a 'Slum Act'.
- **Recognized Slum:** All areas recognized as 'Slum' by State/Local Government, UT Administration, Housing and Slum Boards etc., which may have not been formally notified as slum under any.
- **Identified Slums:** A compact area of at least 300 populations or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities in the State/UT.

As per the census 2011, we see that we have 3 categories of slum. One is notified slum, where all notified areas in a town or a city notified as slum by the state or the union territory, administration or by the local government, housing and slum board or so on under any statute including a slum act. So, within that if it is notified, it will be considered a slum. Other is recognized slum.

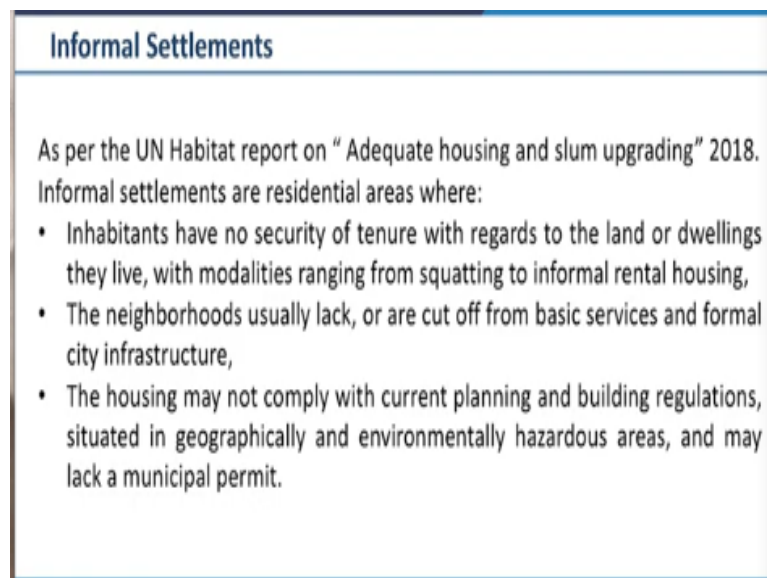
All areas recognize a slum by the state or the local government or union territory administration, housing and slum boards and so on, which may have been not be normally

notified as slum under any statured. So, if they are been recognized by them, it will also be considered as a recognized slum. Last, we see is the identified slum.

So, this involves a compact area of at least 300 population or about 60 to 70 households of poorly built congested tenements and unhygienic environments using the inadequate infrastructure and lacking in proper sanitary and drinking water facility in the state and the territory administrative boundary, we are looking at. So, if the services are not there, then they would be identified as slum.

We see that housing for all, we have been seeing housing issues in our country. So, all PMAY project and other things so, housing for all 2022 program uses the same census of India classification as well as an SSO classification. Now, moving forward, we further see that what is informal settlements. We are trying to now differentiate between slum and informal settlements.

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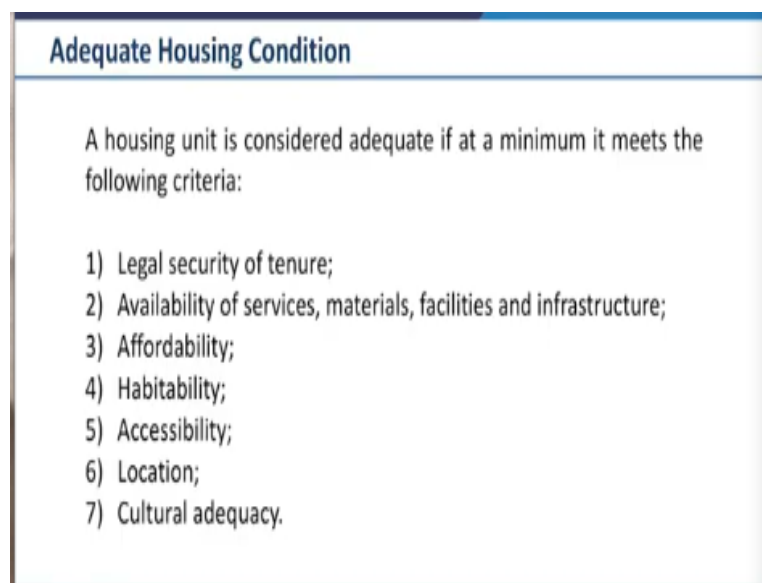
As per the UN-Habitat report on adequate housing and slum upgrading 2018, informal settlements are residential areas where following conditions apply. First, inhabitants have no security of tenure. So, we saw that the tenure is one of the definitions as per the UN. So, inhabitants have no security of tenure with regards to the land or the dwelling they live with modalities ranging from squatting to informal rental housing.

Second, we see the neighborhoods usually lack or are cut off from basic services and formal city infrastructure. So, for example, if all of us get water supply, probably that neighborhood

would not be getting the water supply. So, there is a disconnect of services. Third, we see housing may not comply with the current planning and building regulations situated in geographically and environmentally hazardous area and may lack of municipal permits.

So, these houses might not follow the building by laws. Moving on, we will try to understand what is inadequate housing. A housing unit is considered inadequate if at a minimum, it meets the following criteria.

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Adequate Housing Condition

A housing unit is considered adequate if at a minimum it meets the following criteria:

- 1) Legal security of tenure;
- 2) Availability of services, materials, facilities and infrastructure;
- 3) Affordability;
- 4) Habitability;
- 5) Accessibility;
- 6) Location;
- 7) Cultural adequacy.

So, criteria 1, we see legal security of tenure. So, if they have legal security of tenure which guarantees legal protection against forced evictions, harassment and other threats. Second, we see availability of services materials, facilities and infrastructure including safe drinking water, adequate sanitation, energy for cooking, heating, lighting, food storage or refuse disposal.

Third, affordability, as house is not adequate if it is caused, threatens or compromises the occupants enjoyment of human rights. Fourth, we see habitability. As the house is not adequate if it does not guarantee physical safety of the people who live in or they provide adequate space as well as protection against the cold, damp, heat, rain, wind and any threats to their health and any structural hazards.

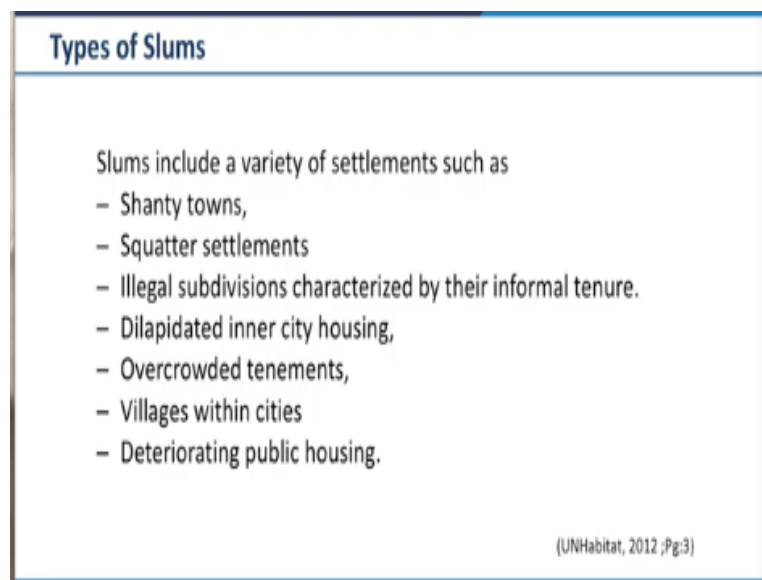
So, that point is considered here that the house should be habitable. Next, we see is accessibility. As house is not adequate if the specific needs of a disadvantaged and marginalized groups are not taken into account, such as the poor, people facing

discrimination, person with disabilities, victims of natural disaster. So, it should be accessible to them. They should be able to avail those facilities.

Further, we see, the consideration is about the location. A house is not adequate if it is cut off from the employment opportunities, healthcare services, schools, child care centers and other social facilities or if located in dangerous polluted sites or an immediate proximity to the pollution source. So, then also it would not be considered adequate. Lastly, we see cultural adequacy.

As housing is not adequate if it does not respect and take into account the expression of cultural identity and ways of life. So, these were how we judge whether the housing is adequate or not. Moving forwards, we may find a variety of settlements which might be considered as slums across the globe.

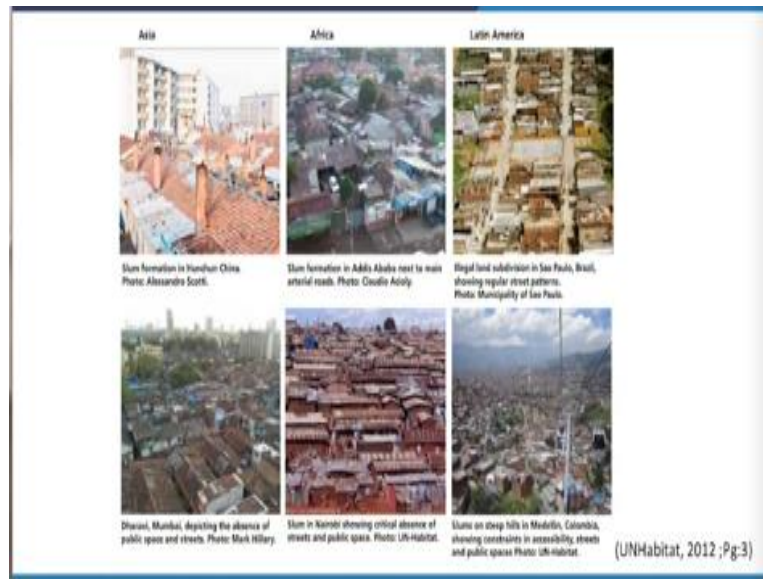
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So, we see shanty towns, squatter settlements and illegal subdivision characterized by the informal tenure. They also include dilapidated inner city housing, overcrowded tenements, villages within the cities and deteriorating public houses. So, all those variety, you can see when you look for the slums. Each of these are originated and grow and develop differently and may vary in size from the slum could be few hot, 2000s of permanent dwellings and may be located in the city or it can be located in the periphery as well.

They are also identified by distinctive terms. So, the terminologies also change about slum what they call in different region peculiar to the given region and countries.

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What is considered as slum invariably depends on the local and regional perception of housing standards and social conditions? So, what conditions are particular of what standard a country adopts depending on that the slum would be defined? So, in the image here, we see slums from various places across the world. Moving on to understanding from where do we really get all these information for your benefit as you would be dealing with data for developing understanding.

The first is National Statistics Office most of the countries keep this and NSOs are responsible for collection and analysis of data in countries. A number of data sources are used to monitor and report on this front from sub national to national and global level.

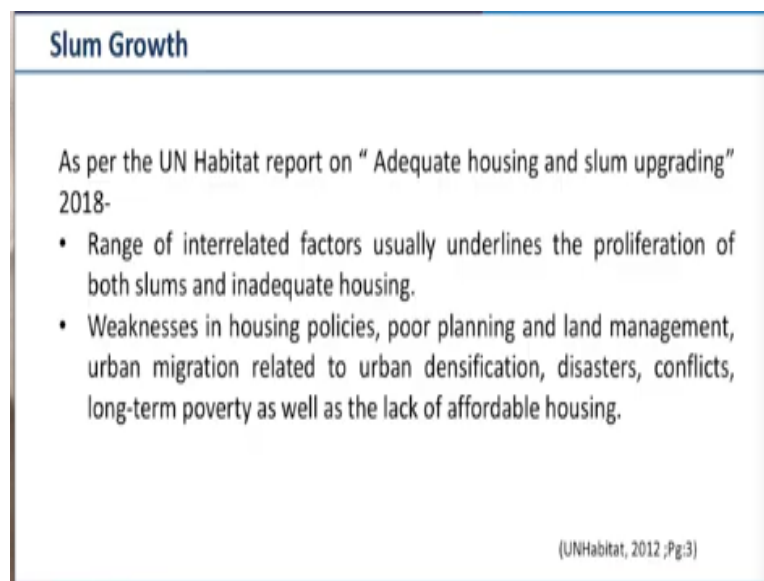
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NSOs collect and validate data from various sources. And you can look at what kind of sources they use. One is major is the census then you also see Demographic and Health Survey. Then there might be cluster service Living Standard Measurement Survey. We have the service level benchmarking service, Urban Inequality Surveys.

So, all these are being mostly done in different countries and so, these are correlated and you can access all these data. Now, trying to understand, what are the reasons for the growth of slum?

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Slum Growth

As per the UN Habitat report on "Adequate housing and slum upgrading" 2018-

- Range of interrelated factors usually underlines the proliferation of both slums and inadequate housing.
- Weaknesses in housing policies, poor planning and land management, urban migration related to urban densification, disasters, conflicts, long-term poverty as well as the lack of affordable housing.

(UNHabitat, 2012 ;Pg:3)

As per the UN-Habitat report on adequate housing and slum upgrading 2018, a range of interrelated factors usually underlines the growth of both slums and inadequate housing. These may vary from weakness and housing policies. So, there might be weakness in housing policy, like how do we really provide housing to the people? It might be related with poor planning and land management, how do we really manage land?

And then how do we really handle urban migration? And how we handle urban densities? And how do we handle when disasters and conflicts and long term poverty happens? So, all these can be the reasons for lack of affordable housing and eventually leading to development and provocation of slums. Now moving on, we will try to understand the life in slum.

It is very important to understand the life in slum because once we understand or we try to understand that it is easier, or it is at least you reach closer to understanding what solutions might work. The UN-Habitat report slum Almanac 2015-16 brings the key facts data related

to successful initiatives together to contribute to understanding. The extreme living conditions of slums and the social, economic and human aspects of slum life.

The report explains that each day, slum residents fight for a better quality of life. So, you see that it is a struggle of every day. If human kind succeeds in understanding their challenges, we will be able to come up with a sustainable solutions that will realize their full potential and help build better and more prosperous cities for all. The report indicates denial or deficiency or lack of things in slum.

At the household level, we see there are deficiencies which continued to reflect the harsh living conditions of slum dwellers.

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Slum Conditions

- Most slum dwellers still have no security of tenure and live under the constant threat of eviction,
- Many are in the overcrowded dwellings. They continuously considered highly dangerous.
- Sanitation is often limited, such as in the case of Kenya's largest slum Kibera, in Nairobi, where open sewer lines empty effluent in front of people's houses and there are only 1,000 public toilets to serve the entire slum population of hundreds of thousands people.
- As a result, open defecation areas are still common.

(UNHabitat, 2012 ;Pg:3)

For example, most slum dwellers still have no security of tenure and live under constant threat of eviction. Many are in the overcrowded dwellings, they continuously considered highly dangerous these, the places where they live. Sanitation is often limited so, they have limited access to sanitation, such as the case in Kenya's largest slum, Kibera. In Nairobi, where open sewer lines empty effluent in front of people's houses and there are only 1000 public toilets to serve the entire slum population of hundreds of 1000s of people.

So, look at the accessibility issue here. As a result, open defecation areas are still common in the slums.

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Slum Conditions

The lives of the people living in slums are also conditioned by other challenges such as

- Health
- Education
- Labor
- Livelihood
- Gender Dynamics
- Mobility And Connectivity
- Access to Public Space and Security.

(UNHabitat, 2012 ;Pg:3)

The lives of the people living in slum are also conditioned by other challenges such as health, education, labor, livelihood, gender, dynamics, mobility and connectivity, access to public space and also security. We further see that slums are often linked to insecurity. Now, moving on, we are going to now, see that what does the slum up gradation and prevention frameworks is and what does it really suggest given by UN-Habitat.

Slum living conditions can be improved based on the evolved and global understanding by UN in the given in the following framework.

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BOX 3. THE KEYS FOR SUCCESSFUL SLUM UPGRADING AND PREVENTION WITHIN THE FRAMEWORK OF THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT AND THE NEW URBAN AGENDA

The grid contains 12 key strategies for slum upgrading and prevention:

- 1 Recognition of the slum challenge:** Acknowledging the need to address the rights and welfare of the people of slums is a prerequisite for any slum upgrading or prevention effort. It is essential to recognize the slum as a place where people live and work, and to address the challenges of slum living in terms of access to services, housing, and the ability to afford living conditions that allow the right to housing to be realized for all.
- 2 People-centred approach:** The first step in any slum upgrading or prevention effort is to ensure that the people living in slums are at the center of the process. This means that the people living in slums should be consulted and their views and needs should be taken into account throughout the process.
- 3 Governance leadership:** National governments have a leading role to play in improving slums. They can provide the enabling environment to develop and implement the appropriate policies and plans for upgrading slums, and a governing role over other bodies, ensuring that they are coordinated and integrated.
- 4 Strengthening of public response:** A robust public response is a key to successful slum upgrading and prevention. This means that the public should be consulted and their views and needs should be taken into account throughout the process.
- 5 Women and girls' leadership:** Women and girls have a leading role to play in improving slums. They can provide the enabling environment to develop and implement the appropriate policies and plans for upgrading slums, and a governing role over other bodies, ensuring that they are coordinated and integrated.
- 6 Integration of slum living and prevention:** Slum upgrading and prevention should be integrated with other urban development and planning efforts. This means that slum upgrading and prevention should be seen as part of a broader urban development and planning strategy.
- 7 Resilient slum living and prevention:** Slum upgrading and prevention should be designed to be resilient to future shocks and stresses. This means that slum upgrading and prevention should be designed to be flexible and adaptable to changing circumstances.
- 8 Addressing land issues and providing slum dwellers with security of tenure:** Land issues are a key challenge for slum upgrading and prevention. It is essential to address land issues and provide slum dwellers with security of tenure.
- 9 Participation approach and community participation:** Community participation is a key to successful slum upgrading and prevention. This means that the community should be consulted and their views and needs should be taken into account throughout the process.
- 10 Urban planning:** Urban planning is a key to successful slum upgrading and prevention. This means that slum upgrading and prevention should be designed to be integrated with urban planning efforts.
- 11 Development of participatory urban, residential and commercial development processes:** Participatory urban, residential and commercial development processes are a key to successful slum upgrading and prevention. This means that the community should be consulted and their views and needs should be taken into account throughout the process.
- 12 Strengthening housing policies:** Housing policies are a key to successful slum upgrading and prevention. This means that housing policies should be designed to be supportive of slum upgrading and prevention efforts.

(UNHabitat, 2012)

We see first, it suggests to recognize the slum challenges. It is important that we acknowledge that and importantly, the urban authorities acknowledge it and make necessary arrangements for it. Next, we see that it highlights the need for people centric approach. For

any kind of up gradation, it is important that it is focused on people and not focused on the environment or the building component or the beauty component.

Third, we see that it highlights the need for government leadership. National governments have a leading role to play in improving the slums. And they can provide the enabling environment to develop and implement the appropriate policies and plans to make the changes which are required in the slum areas. Further, we see that it emphasizes strengthening of policy response.

As for UN-Habitat, a dedicated policy framework to regulate sustainable urban development and upgrading and prevention of slum is precondition for effective sustainable long term and large scale responses. Next, we see it highlights the systemic and city wide at scale approaches. So, the approaches need not been fragmented, but it has the approach has to be taken at the city level.

Next, we see that it highlights the integration of people and systems. So, it suggests that all levels of government concern must develop and coordinate broader integrated policy and planning framework that ensures a more complete understanding of the communities living in slums, their specific priorities and socio economic dynamics and then implementing practical changes that ultimately result in the slum upgrading, linking into the broader urban environment and including in the development plans.

Then we see the framework guides that appropriate long term financial investment and inclusive financing options should also be given. So, that people have choices and they have access to resources. We see that appropriate and sustained level of diversify domestic investments in affordable housing and slum upgrading, public and private, all these sources are critical as well as creative financial mechanism.

Encouraging major financial institutions to provide proper housing plans and financing support for all tiers of government, investment in microfinance housing improvements and incremental auto constructions are also vital. Further, we see you went through the framework suggests to address land issues and provide slum dwellers with security of tenure. Likewise, we see, it suggest to have a participatory approach and a community participation, which is very essential for any kind of development.

Next, we see it suggests to combine slum up-gradation with employment generation and local economic development. According to them, it is necessary not only to acknowledge the slum economic, but also supported beyond expected community contracting during upgrading works. There is need to invest in social capital, present in slums, develop cohesion and associativity among slum dwellers, encouraged local initiatives recognize the important role of women in the household economic.

Further, we see that the document highlights the need for development of participatory robust, standardized and computerized data collection process. UN explains that localized qualitative and quantitative data collection and analysis system is important for better understanding by the local urban bodies as well as the other agencies and interventions can be taken a different level.

So, managing of the data, analyzing that and also keeping ourselves informed is very important. Lastly, we see its highlights the need for creating pure learning platforms. So, one country's learning from the other. One slum learning from the others. So, that pure learning has to be highlights has to be taken care of. So, now moving on, we will quickly look at some of the interventions.

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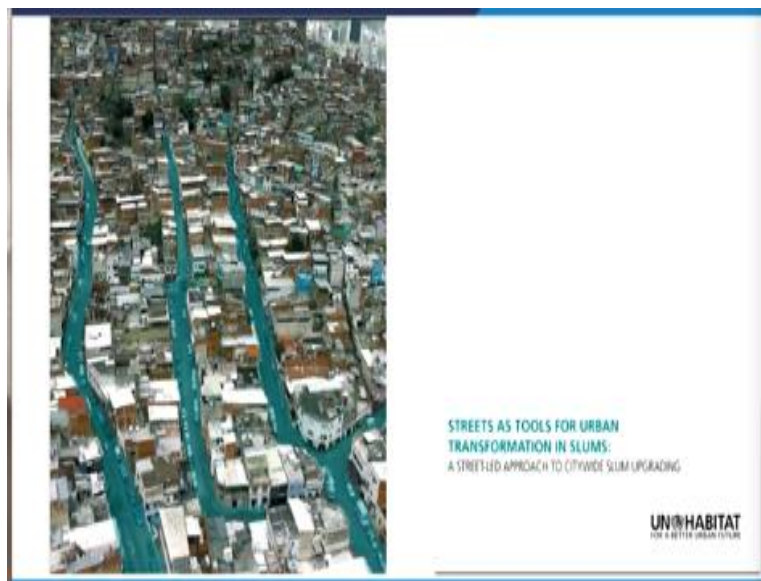


One of the interventions is participatory slum upgrading program PSUP was launched in 2008. As a result of policy dialogue initiative between Africa Caribbean and Pacific ACP group of states, 35 countries implemented PSUP and committed to participatory slum

upgrading, revising policy, legal and financing framework for housing, land and slum upgrading and prevention.

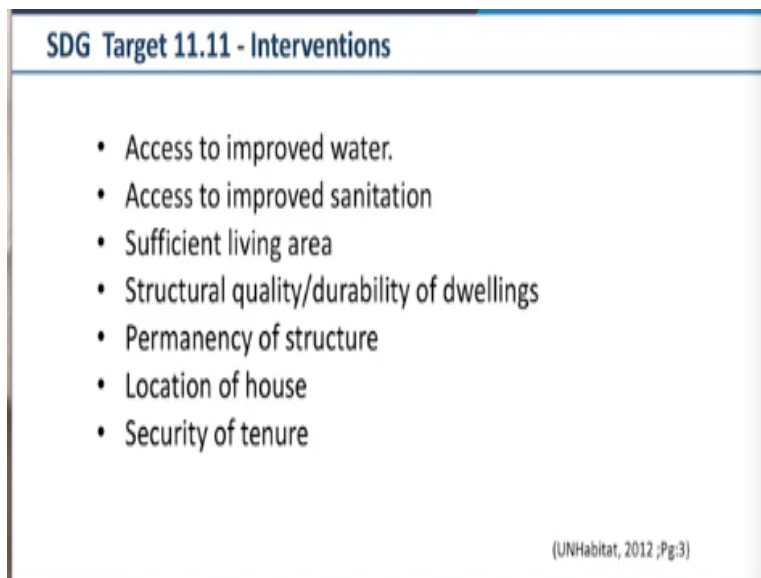
And they also looked into analyzing current living conditions and slums devising participatory responses and enacting them. So, you can see different cases. It is all provided in the suggested readings. You can see cases from Benin, Botswana, you can also see Mozambique, you can also see Namibia, Nigeria, all these examples are provided to you.

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We can also see the street led approach for city wide slum up gradation by UN-Habitat.

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Further, in order to meet the targets 11.1 of SDG following interventions are monitored. We see that they look at access to improved water every. It is believed that household is

considered to have access to an improved drinking water source if the household member use a facility that is protected from outside contamination and a particular form of a faecal matter contamination.

So, it is an important indicator. Then we see access to improved sanitation. Next, we see sufficient living areas. So, as you have seen what are the problems? You have also seen how do we define it. So, these becomes the parameter how do we really see. Our conditions are improving or not. So, we judge the sufficient living area households dwelling unit provide sufficient living area or not to all its member.

If not more than 3 people, share the same habitable room. Then we see the structural quality, durability of the dwellings. While we see this, we look at the permanency of the structure or what kind of building materials are there. We also see how it is located; where it is located. House is not located or on or near toxic waste in the floodplain, not located in the steep slope, not located in a dangerous right of way of rail, highway, airport and power lines.

So, we also evaluate the location of the house. Houses and slums are mostly made of transitory, corrugated iron sheets, shacks, wood and are located on or near toxic waste, steep slope or dangerously in the way of transport lines. Next, we evaluate the security of tenure. Now, we will look into the government intervention in order to understand how do we deal with; how do we improve the slum situation and cities.

We have had seen before. SDG have been adopted in perspective plan of many states and translated on ground program convergence. Major program started by government of India towards inclusive city development with focus on slums including provision of basic services and affordable housing to urban poor include.

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Government Interventions to Ameliorate Slums	
Program	Year
Slum improvement Program	1970s
Slum Rehabilitation Scheme	1995
Valmiki Ambedkar Awash Yojana	2001
Jawaharlal Nehru National Urban Renewal Mission (JNNURM) – Basic Services to the Urban Poor (BSUP) & Integrated Housing & Slum Development Programme (IHSDP)	2005
Rajiv Awash Yojana	2011
Interest Subsidy Scheme for Housing the Urban Poor	2013
Pradhan Mantri Awash Yojna	2015

(MoHUA, 2021)

We see slum improvement program in 1970. Then we had slum rehabilitation scheme Valmiki Ambedkar Awash Yojana. We also see JNNURM. Then we see basic services to urban poor, integrated housing and slum development program. Further, we see Rajiv Awash Yojana. Then interested subsidy scheme for housing the urban poor. Now, we have Pradhan Mantri Awash Yojana.

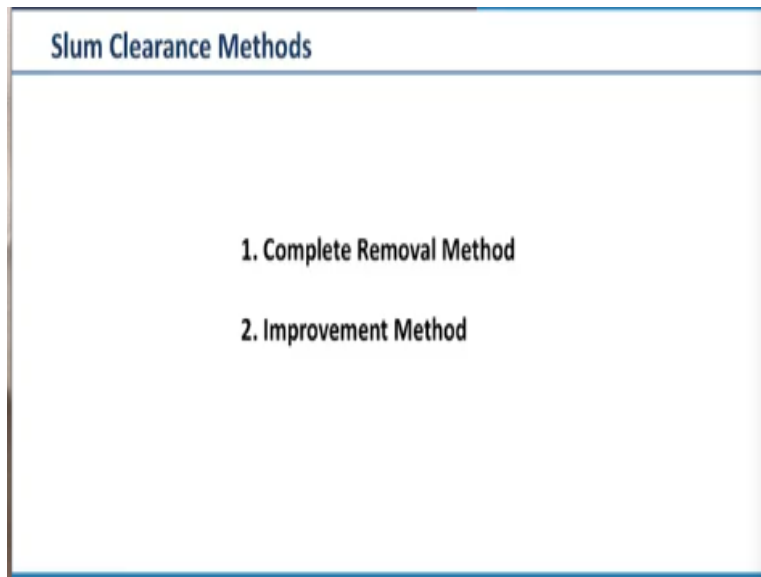
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The Slum Areas (Improvement And Clearance) Act, 1956
<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. To facilitate inclusive growth and slum-free cities. 2. To provide assured security of tenure, basic amenities and affordable housing for slum dwellers. 3. To assign a "legal document of entitlement" to every landless person in a slum area entitled to a dwelling space. 4. To give mortgage able rights to allottees of dwelling space, however, tradability of dwelling space limited to the Government or the slum collectives. 5. To provide compensation for acquisition of land, wherever necessary, in the form of concessional building.

(Rangwala, 2021)

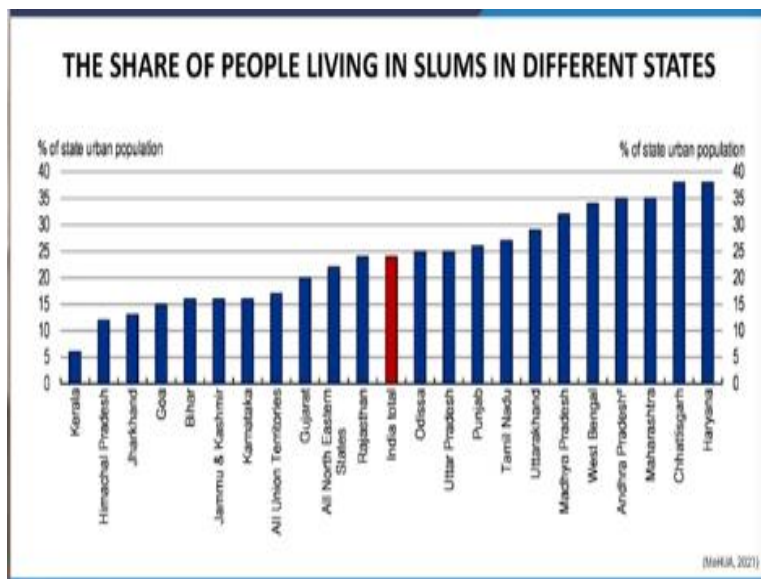
In Indian context, we also have the slum area improvement and clearance act of 1956, which focuses on to facilitate inclusive growth and slum free cities. Then we also focus on slum clearance.

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We see that, there are 2 clear methods of slum clearance, complete removal method and improvement method. We will look at the second method, improvement method. If the houses are fairly good, certain steps are suggested like improvement of the street system, filling up of the low land, modification of the drainage arrangement, removal of obstructing structures and so on.

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There are also options of slum clearance and rehousing. The graph shows as the share of people living in slum in different states of India.

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National Slum Improvement Program

- The central government initiated National Slum Improvement Program for slum upgradation.
- The objective of the program is slum upgrading through the provision of physical amenities, community infrastructure, health care and social amenities.

The central government initiated national slum improvement program for slum up gradation. The objective of program was slum upgrading through provision of physical amenities, community infrastructure, health care and social amenities.

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National Urban Livelihoods Mission (NULM)

THE SCHEME OF SHELTER FOR URBAN HOMELESS (SUH)

- The National Urban Housing & Habitat Policy (NUHHP), 2007 aims at promoting sustainable development of habitat in the country with a view to ensuring equitable supply of land, shelter and services at affordable prices to all sections of the society.

We further see that through National Urban Livelihood Mission as well. There are a lot of components which are taken care of the problems which you saw in life in slum. You can relate to this how these kinds of initiatives would help people. The scheme of shelter for urban homeless is been initiated.

This particular National Urban Housing and Habitat Policy from 2007 aims at promoting sustainable development of habitat in country with a view to ensuring equitable supply of

land, shelter and services at affordable price to all section of the society. And the most vulnerable of these are the urban homeless.

So, the objectives of the shelter for urban homeless components of NULM scheme are to ensure availability and access of urban homeless population to permanent shelter, cater to the needs of specially vulnerable segment of urban homeless like dependent children, aged, disabled, mentally ill, recovering gravely ill by creating special sections with homeless shelters and providing special service linkages for them.

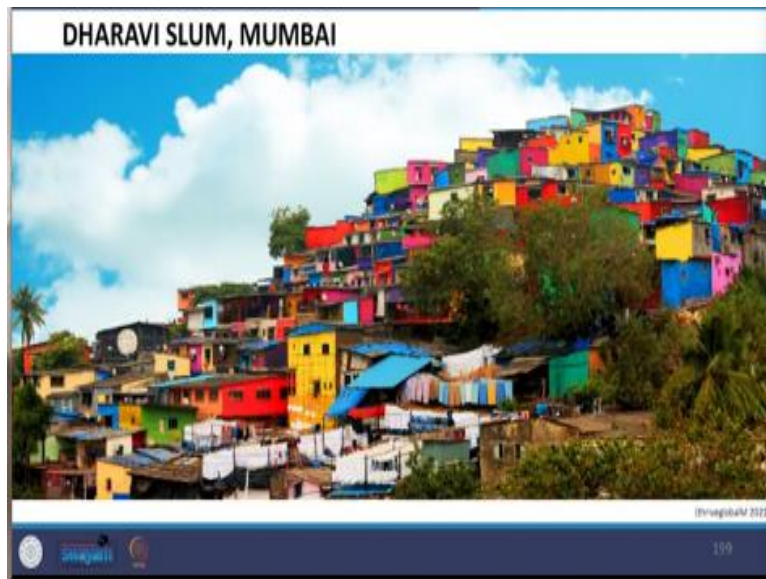
It also provides access to various entitlements. Further it is also formulate structure and framework for engagement for development, management and monitoring of shelter and ensuring basic services to homeless persons.

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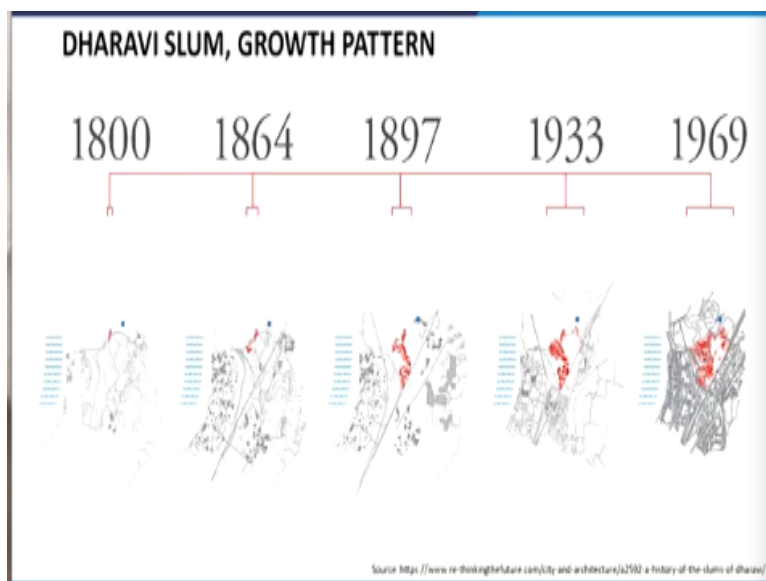
Some of the examples, we look which also got a lot of attention includes Dharavi slum in Mumbai, Nochikuppam slum in Chennai, Basanti slum Kolkata and we see all these examples here.

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The image shows the congestion combativeness in the slum. In the image, how the spatial growth and pattern of slum from 1800 to 1969, the density has gone high within the limited land.

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You can see here. So, you can see the unsanitary condition in the slum.

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DHARAVI SLUM REDEVELOPMENT PLANS			
Project	Year	Salient Feature	Reasons for failure
1 Slum Improvement Project	1972	Provision of basic amenities to the slum like water, electricity, latrines and sewage disposal.	No comprehensive census on number of households and residents obtained.
2 Slum Improvement Project (contd.)	1976	Granting the residents "legitimate status", Photo identities were issued to establish legitimacy of residents.	Administrative issues due to lack of census; factual control of slumlords over parts of the slum in which no redevelopment could take place.
3 Slum Upgradation Project	1985	Leasing out existing slum land to cooperative groups of slum dwellers at affordable rates; granting loans for environmental and housing improvements.	A large portion of the area to be redeveloped was held by private developers and could not simply be redeveloped without adequately compensating them.
4 Slum Rehabilitation Scheme	1995	Transferable Development Rights introduced to attract private developers; central monitoring and clearing agency developed; redevelopment efforts more decentralised than before.	The scheme required consent from 75% of the slum dwellers, which was not obtained due to fragmentation of slum communities.
5 Dharavi Redevelopment Project	2004	Rehousing Dharavi's residents into tower block apartments; freed up slum land would be sold for private development.	Unacceptable to Dharavi residents since livelihood depended on Dharavi's sprawling layout.

(Dzung Petrov, 2020)

Following schemes were taking care in this particular slum and which had different results. Another case, we see, is the slum networking approach to urban development? The idea of slum networking was conceived and developed by Mr. Himanshu Parikh, a consultant engineer based in Ahmedabad. The approach was initially implemented in Indoor where it was highly successful and has since been adopted and developed in many cities.

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Features of The Slum Networking Approach

- Holistic approach in an entire city.
- Costs are reduced significantly.
- Substantial human and material resources are mobilized.
- Community responsibility and control are increased.
- Overall quality of life is improved with a range of physical, educational, health and income generation improvements.

(Slum Networking An Innovative Approach to Urban Development, 1997; Pg:10)

So, the idea behind the approach was holistic approach in entire city. Costs are reduced significantly. You also see substantial human and material resources are mobilized in the process. Community responsibilities and control are increased in such kind of projects. Overall quality of life is improved. So, next case, we see about is from Indonesia, where you can see the participatory approach was adopted. This is from Kampung, where the informal settlement is there.

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The Informal Settlements In Kampung Banyu Urip, Indonesia.

Most Indonesian cities developed through the conglomeration and densification of existing villages. After losing their agricultural land to urban services and higher income housing, the village were transformed into high-density inner city Kampung.



world-habitat, 2021

And you can see that this settlement provide homes for 63% of the population and this was improved. The intervention was taken here.

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And you can see and this particular in the picture, you can see the housing and Kampung before and after how the intervention took place. Here, you can see this. So, how the interventions really bring changes transform the environmental condition and also the life of the people?

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Summary	
1	Able to explain the link between Urbanization and Slum.
2	Describe and review the Slum Population Trend.
3	Conceptually differentiate Slum, Informal & Inadequate Housing.
4	Review the Reasons of Slum Growth as Explained by Key Organizations.
5	Understand the Life in Slum.
6	Slum Upgradation and Prevention Framework
7	List the Interventions - International, National and Case studies

So, summarizing what we studied today. So, we looked at the slums. We looked at the global intention, global problem about slum and how it is linked with the urbanization issue. So, we had covered first, we saw the link between urbanization and the slum, how with urbanization even the slums comes in. And then we looked at what is the population trend, how severe is the problem.

Then we looked at the terminologies. We try to understand and differentiate between slum informal settlement and inadequate housing, when we looked at the sources of data and then we looked at reasons why slum growth happens. And then further we looked into how the life is there in slum; what scenario is there? Then we looked at framework given by UN on the slum up gradation, how the things have to be taken care of.

And then we looked at the interventions at the International, national and we just briefly touched upon few case studies here.

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References

- UN-Habitat (2018). SDG Indicator 11.1.1 Training Module: Adequate Housing and Slum Upgrading. United Nations Human Settlement Programme (UN-Habitat), Nairobi.
- Technology Options for Urban Sanitation in India; Water and Sanitation Program-South Asia The World Bank;
http://mohua.gov.in/upload/uploadfiles/files/Urban_Sanitation.pdf
- WHO/UNICEF, 2008
- Scheme of Shelters for Urban Homeless; Issued in December 2013 under National Urban Livelihoods Mission
- Kampung Banyu Urip, Surabaya. Indonesia participate in inner-city settlement improvement. Building Community: a third world case book, Ed. Bertha Turner, Building Community Book, London, 1988.

These were the references and suggested case studies are also given to you.

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Suggested Reading and Watch

(to contemplate different layers of Urban Slum)

- https://www.youtube.com/watch?v=Uwo5rjilEsQ&ab_channel=AlJazeeraEnglish
- https://www.youtube.com/watch?v=HL5aVYenD8s&ab_channel=RedCardPictures
- https://www.youtube.com/watch?v=D0s7WsoC528&ab_channel=RTDocumentary
- https://www.youtube.com/watch?v=r6dmA8fq2LE&ab_channel=TRACKS
- https://www.youtube.com/watch?v=uq6DR-RNuw8&ab_channel=Encore%2B



Our coverage was limited with the scope to make you aware of the topic. There are enormous readings and movies available to explore. Few are suggested here. This is not an extensive list. You may feel free to suggest more from your experience.

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Please feel free to ask questions. Let us know about your concerns. You have to share your opinion, experiences and suggestions; looking forward to interacting and co learning with you while exploring cities and urban planning. Thank you.