

Housing the seasonal migrants, a challenge for Urban Sustainability: The Case of India.

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Deepashree Choudhury

Professor, Piloo Mody College of Architecture, Cuttack, India, Email: ar.deepachoudhury@gmail.com

ABSTRACT

Cities have served as the cradle of civilization, engine for growth, and fuel for the sustenance of mankind since their inception. With time, they have evolved to be inherently complex urban systems and have attracted various perils to their very existence due to unprecedented growth and expansion, the excessive harnessing of natural resources, economic, social, and cultural fragmentation of society, climate change, etc. Under these conditions, principles, and ideals of sustainable urbanism have emerged as a ray of hope, as there seems to be the key to humanity's future survival. Sustainable urbanism entails the creation of an urban or city environment that functions to foster the long-term viability of social, financial, and environmental systems coupled with being responsible for citizens' mental health and well-being. Among many others, inclusion and ensuring the equal right to the city for all, including those on the margins, is one of the most important pillars on which urban sustainability stands. When looked at from this perspective, seasonal migrants are one of the most unequal citizens in cities worldwide, including India. Their extreme exclusion from urban processes is evident from their wide-scale invisibility in the policy and planning discourses of most urban entities. In addition to the lack of basic facilities like clean water, sanitation, food security, etc. the lack of affordable and adequate housing for seasonal migrants is often the single most dominant obstacle in the path of their equal citizenship which also creates serious roadblocks in the path to the attainment of sustainable development goals for the cities they reside in temporarily. Unless 'Housing for all is made a reality, a sustainable urban future will remain a long-distant dream. In India, The concept of affordable rental housing has been gaining considerable importance in the last decade both in terms of policy and implementation, but their unsuitability to fit in with the seasonal migrants due to their peculiar contextual reality is also becoming increasingly evident. The achievement of sustainability goals of cities and countries is intricately related to their success in solving the perennial problem of housing this segment of the vulnerable city-dwellers and cities must give urgent attention to addressing this concern for ensuring a sustainable urban future.

Keywords: Urban Sustainability, Equality, Sustainable Development Goals, Seasonal Migrants, Affordable Housing.

RESUMEN

Las ciudades han servido como cuna de la civilización, motor de crecimiento y combustible para el sustento de la humanidad desde su creación. Con el tiempo, han evolucionado hasta convertirse en sistemas urbanos intrínsecamente complejos y han atraído varios peligros a su propia existencia debido al crecimiento y la expansión sin precedentes, el aprovechamiento excesivo de los recursos naturales, la fragmentación económica, social y cultural de la sociedad, el cambio climático, etc. En estas condiciones, los principios e ideales del urbanismo sustentable han emergido como un rayo de esperanza, ya que allí parece estar la clave para la supervivencia futura de la humanidad. El urbanismo sostenible implica la creación de un entorno urbano o urbano que funcione para fomentar la viabilidad a largo plazo de los sistemas sociales, financieros y ambientales, además de ser responsable de la salud mental y el bienestar de los ciudadanos. Entre muchos otros, la inclusión y la garantía del derecho igualitario a la ciudad para todos, incluidos los marginados, es uno de los pilares más importantes sobre los que se asienta la sostenibilidad urbana. Cuando se mira desde esta perspectiva, los migrantes estacionales son uno de los ciudadanos más desiguales en las ciudades de todo el mundo, incluida la India. Su exclusión extrema de los procesos urbanos es evidente por su invisibilidad a gran escala en los discursos de política y planificación de la mayoría de las entidades urbanas. Además de la falta de instalaciones básicas como agua potable, saneamiento, seguridad alimentaria, etc., la falta de viviendas asequibles y adecuadas para los migrantes estacionales suele ser el obstáculo más dominante en el camino de su ciudadanía igualitaria, lo que también crea serios obstáculos en el camino hacia la consecución de los objetivos de desarrollo sostenible de las ciudades en las que residen temporalmente. A menos que 'Vivienda para todos se haga realidad, un futuro urbano sostenible seguirá siendo un sueño a largo plazo. En India, el concepto de vivienda de alquiler asequible ha ganado una importancia considerable en la última década tanto en términos de política como de implementación, pero también se está volviendo cada vez más evidente su falta de idoneidad para encajar con los migrantes estacionales debido a su peculiar realidad contextual. El logro de los objetivos de sostenibilidad de las ciudades y los países está intrínsecamente relacionado con su éxito en la solución del problema perenne de la vivienda de este segmento de la población vulnerable de la ciudad: los habitantes y las ciudades deben prestar atención urgente a abordar esta preocupación para garantizar un futuro urbano sostenible.

Palabras clave: Sostenibilidad Urbana, Igualdad, Objetivos de Desarrollo Sostenible, Migrantes Temporales, Vivienda Asequible.

INTRODUCTION

Sustainability has been an important agenda with the city makers from the inception of urban habitats but it received mainstream recognition only with the 'Brundtland report' published in 1987 by World Commission on Environment and Development (Brundtland Commission, 1987). With time, in the face of complex changes and uncertain futures brought about by uncontrolled urbanization, resource depletion, and the threat of climate change,

sustainable urbanism approaches to designing, developing, and managing cities have attained increasing importance. Though a uniform definition of sustainable urbanism across sectors is still elusive and it can be viewed through many lenses as expressed in Figure 1 below, it is widely accepted as a socially responsive, livability-inspired, and environmentally driven approach to place-making which operates at micro-to-macro scale with equal intensity for creating resilient spaces for future human habitation. When viewed through the lens of an inclusive city, a sustainable urban future mandates that cities must make all efforts towards turning into socially inclusive settlements where every citizen is equally empowered. Sustainable cities are functional, complex, safe, and resilient and they function on the principle of urban equity and aspire to garner full-fledged citizens' participation, including those who are on the margins of urban existence. Equal Right to the city for all citizens is a primary requisite for a sustainable urban future as only then the benefits of sustainability discourse i.e. living environmental protection, economic efficiency, and livability enhancement can be equally reaped by all (Roggema, 2016).



Fig 1: Components of a Sustainable City, its enablers, and different lenses of looking at it (European Environment Agency, 2010)

A great challenge to our progress towards a sustainable future lies in the fact that despite the 'right to the city' being emphasized by many of the UN-Habitat SDGs and governments and civic bodies in different parts of the world displaying considerable enthusiasm for promoting equitable urban development, certain sections of our society are yet excluded from the mainstream urban processes. Seasonal migrants are one such category of citizens who because of their peculiar terms of stay in cities are unable to take advantage of the benefits of even those schemes which urban migrants avail. Their disadvantaged urban status is mostly manifested in the shortage of affordable housing for them in the very cities which engage them in their development. Housing seasonal migrants are probably one of

the greatest challenges contemporary cities across the world, including India, are facing. Thus, to achieve a sustainable future devising affordable housing solutions for them is an absolute must, as this is their basic right to the city. With an overview of urban sustainability discourse, this paper branches into an exploration of the housing requirements of seasonal migrants with reference to their contextual requirements. It investigates the present affordable rental housing ecosystems and their inadequacies and puts forward suggestions for structural and policy interventions which could curate the entire ecosystem of affordable housing more suited to them.

MATERIAL AND METHODS

This paper investigates the context-specific housing requirements of the seasonal migrants who come to urban centers for various reasons, lists the inadequacies in present affordable rental housing ecosystems, and puts forwards suggestions for structuring and implementing housing schemes envisaged for them to provide them with a quality life in the cities. The paper uses secondary sources to take forward the discussion. The suggestions listed will complement the ongoing efforts to house the seasonal migrants in urban centers and guide innovation in this area. This paper aims to explore the various facets of seasonal migration with respect to their disadvantaged urban status in the context of Indian cities and investigates how this acts as a major impediment to the achievement of sustainable development goals set by the United Nations of the country as a whole. It then establishes affordable and adequate housing for seasonal migrants as a compulsory prerequisite for the sustainable urban future of any city and studies the context-specific issues and challenges of housing seasonal migrants in cities. The paper also suggests various design, structural and policy-level interventions that can aid in addressing the housing needs of seasonal migrants with the mentions of various best practices in the world and offers a valuable roadmap towards achieving goals of sustainable urbanism. The paper utilizes the study of literature and secondary sources to build its arguments.

INCLUSIVE URBANIZATION: AFFORDABLE SHELTER FOR ALL

The shelter is one of the basic requirements of human survival and the availability of affordable shelter for all citizens is an absolute must for a sustainable urban future of any city. Though for a long time now, India has been referred to as one of the fastest-growing economies of the world, and successive governments at all levels are actively engaged in fulfilling the national goal of overcoming the housing shortage; the country's failure to provide universal provision of basic services, particularly affordable housing, has been stalling the progress of its sustainability goals (Gopalan and Venkataraman, 2015). Technical Group on Urban Housing Shortage for the 12th Plan (TG-12) stated the total housing shortage in Indian cities to be 18.78 million in 2012. The report predicted that the housing shortage will reach 38 million in 2030 due to rapid urbanization (MHUPA, 2017; Patel, 2021). The Census of India, 2011 pegged the number of homeless people in urban India at 0.9 million and the slum population at roughly 65 million (or 17% of urban India) (Rashmi, 2020) The non-availability of adequate and appropriate housing in the city has detrimental effects on the entire citizenry but the worst sufferers are the migrants, who come to urban centers due to various push or pull factors (Kumar, Gupta, Agarwal, & Mehta, 2021). Out of them, seasonal migrants are the most vulnerable

segment as finding adequate housing remains a paramount challenge for them due to the lack of permanent employment and social standing. Non-availability of affordable housing leads them to informal settlements with abysmal living conditions like slums, shanties, etc; at times they are compelled to inhabit footpaths, open spaces, parks, etc. which pushes them further to the margins of urban existence. The threat of forceful evictions, harassment by the police, and lack of basic amenities such as water, electricity, sanitation, and sewage management, adversely affect their well-being and productivity (Nayak and Kumar, 2018; Choudhury and Bhaduri, 2020). This state of affairs is in direct opposition to urban sustainability goals and thus must be addressed with urgency. Providing context and need-specific housing to this segment of the urban citizen can prove to be one of the most effective tools in strengthening the different pillars (i.e. environmental, economic and social) on which the discourse of sustainability stands and can contribute significantly to the achievement of broader national goals.

SEASONAL MIGRATION: THE PHENOMENON

Temporary migration is often termed as circular, seasonal, or short-term migration. Seasonal migration is understood as a temporary movement of a person to another place for a short period for finding employment, earn a livelihood, or any other reason which may include aspiration for a higher quality of life (Zelinsky, 1971; Hugo, 1982; Bilsborrow et al., 1984). Seasonal labor requirement which is the main reason for temporary migration vary according to time and place and the forms of temporary migration follow these variations. Temporary migration is mostly fuelled by the stagnation of the rural economy particularly when agricultural fields do not employ labour. This decreases livelihood opportunities in rural areas and compels people to move to urban areas for employment. Depending on the requirement of skills at the destination they find employment in various industries like construction, garment, manufacturing, etc. Some turn to the informal sector and take up vocations of street vendors, rickshaw pullers, domestic helpers, or waiters and laborers in small hotels. Though in some cases, temporary migration translates to an intermediate step before a permanent change of residence as the migrants settle down permanently in the destination city due to the availability of better employment avenues in long run and perks and amenities of city life, but largely the strong kinship ties and hope for a better life in the villages often prevents the larger section of seasonal migrants from becoming city dweller for life.

SEASONAL MIGRANTS: INDIAN CONTEXT

Short-term migrants in India adopt circular patterns of migration, sometimes corresponding to the cropping season and involving work in multiple destination regions. Despite being, an important and dominant phenomenon in the socio-economic canvas of India, the census of India fails to provide information on seasonal migration. The 64th Round of the 2007-2008 National Sample Survey (NSS) defines short-term migrants as: "persons who moved out of their native village/town for a duration anywhere between one to six months, and have found employment or was engaged in searching employment during the last 1 year " provides data on this type of migration (Keshri and Bhagat, 2012). The Census of India classifies 455 million Indians as migrants, out of which 64% are from rural areas (Patel, 2021) whereas the National Sample Survey (NSS) in 2007-08 reports 28.3% of the Indian workforce as migrants

and estimates the number of short term migrants to 13.6 million (MHUPA, 2017). According to Informal estimates, the number of circular migrants is way the official figure quoted by NSS; and stands at nearly 100 million (Deshingkar and Akter, 2009; Agrawal and Chandrasekhar, 2015). Examples of large-scale temporary intra and inter-state migration are common in India for a long time. For instance, women from the Indian states of Bihar and some parts of West Bengal move to the different districts of the state for getting employment in the transplanting and harvesting jobs of paddy crops; tribal groups from states like Maharashtra, Madhya Pradesh and Gujarat migrate to work in sugar mills; in Tamil Nadu, landless agricultural laborers belonging to lower strata of society and trapped by huge debt burden migrate to nearby cities to work in the sugar cane industry (Bhagat, 2010). In Jammu and Kashmir, with the onset of winters, the nomadic Bakarwal tribe begins to move from the upper reaches to the plains of Jammu to avoid the harsh Kashmir winters and to access the alpine pastures for grazing their sheep and goats (Parvaiz, 2018).

Here, it is to be noted that, seasonal migration is inevitable and in a way beneficial for the urban as well as rural economy. In the aftermath of COVID -19 which saw a large number of seasonal migrants returning to villages, rural economies across India, have become overburdened since they cannot absorb all of them. Seasonal migration also facilitates poverty alleviation by enabling the migrants to sustain consumption and income levels in the face of the transient nature of rural employment and the seasonal nature of agriculture. Migrants carry the required human resource to regions of need and in the process help in the growth of the Indian economy (Korra, 2011). Rural-urban migration has also been a significant reason behind the expansion and growth of urban areas since historical times (Mittra and Murayam, 2011). Most often, despite playing an important role in urban discourses, the seasonal migrants are relegated to the economic, social, and political margins of the cities. Among many others, the lack of affordable housing for seasonal workers has been a major problem in Indian cities which additionally impedes the goal of urban sustainability.

DISADVANTAGED URBAN STATUS OF SEASONAL MIGRANTS: IMPEDIMENTS TO SDG's

Adequate housing, education opportunities, social protection, and availability of basic services for all are the cornerstone of a sustainable city. But the seasonal migrants are denied these basic facilities in most urban settings owing to their lack of affordability and acceptance in urban society. This acts as a setback for the sustainability goals of the city as a whole. The disadvantaged status of seasonal migrants and the ways this is detrimental to the urban future of the city are described below:

- **Insecure livelihood:** In cities, seasonal migrants mostly find work in informal areas with low wages, Network of middlemen and contractors ensures that the worker remains unaware of his/her principal employer. Withholding of wages, underpayment, zero compensation in the event of accidents or death, bondage-like conditions, and physical and sexual abuse at the workplace is commonplace. Furthermore, early entry into labor markets, a shortened work life cycle, and limited skillsets result in the stagnation of workers within labor markets. This negatively impacts the city's targets of achieving goal 1- "No Poverty", goal 2- "Zero Hunger" and goal 8- "Decent Work and Economic Growth" of SDGs among many others.

- **Inadequate and vulnerable Housing:** Housing for seasonal migrants has been a perennial problem and the magnitude of this problem can be fathomed by the fact that the Aajeevika Bureau places the number of seasonal migrants at 140 million (Aajeevika Bureau, nd). Their low rent-paying capacity compels them to take shelter in disadvantaged urban areas like flood plains, informal settlements with, slums, etc. which in turn increases their vulnerability against climate threats, health epidemics, and urban disasters. The inability to provide affordable and adequate housing to this section of society seriously impedes the achievement of targets set under SDG 11 which aims to make cities and human settlements inclusive, safe, resilient, and sustainable.

- **Lack of social protection:** The lack of interstate portability of entitlements such as the public distribution system (PDS), state health benefits, and voting rights has resulted in the growing exclusion of migrant workers from formal social, economic, financial, and political systems. Their invisibility in national-level data and policy debates has further exacerbated their isolation from a host of social protection measures. The informality of their work arrangements also denies them any social protection. This places them in a disadvantaged social position and hampers the achievement of the target under SDG 10 which strives to reduce inequality within and among countries(UNDP, nd).

- **Lack of social acceptance:** Due to their low socio-economic status and lack of foothold in the city, they are socially discriminated against and are subjected to segregation, inequality, and various other prejudices. This is in direct opposition to SDG goals 10 and 11 mentioned above (UNDP, nd).

- **Limited or no avenues for redressal of grievances:-**In India, both at the national and state levels certain steps have been taken towards improving the portability of services such as the Public Distribution System (One Nation, One Ration Card) and some healthcare schemes. However, the portability of the criminal justice system is completely missing from most public discourses. According to Global Workers Justice Alliance 'Portable justice' entails ensuring that the transnational migrant workers can access the justice mechanism in destination countries even though they are not permanent residents of those. Though article 39A and 19(1) of the Indian constitution, provides all citizens the right to access free legal aid across the country and the fundamental right to move freely, reside, and settle down anywhere in the country, respectively, the existing justice infrastructure fails to cater to poor migrant workers who are engaged in the informal sector in most cases(Venugopal and Kidwai, 2021). Unless appropriate policy and institutional structures are formalized, the achievement of SDG 16 which aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels will remain a distant dream(UNDP, nd).

- **Lack of educational opportunities:** Due to the nature of seasonal migration, the education of every migrant child gets highly compromised. 80 percent of children of seasonal workers never accessed education in India; the reason being the absence of an effective system at the community/school level to maintain data on seasonal migrant children. Also, the school in the native location never considers these children as out-of-school children since they join back the school after a few months. Meanwhile, at the destination, these children cannot access education due to their status as migrants, different enrollment procedures/norms, the location of schools, and different curriculum

and language (Girsberger, 2017). Goal 4 of the UN Sustainable Development Goals (SDG) comprising universal education cannot be achieved unless it becomes mandatory for each state government to provide education to migratory children by collaborating with different stakeholders, setting up interdepartmental convergence, easy school migration, and encouraging & motivating parents, establishing work-site education centers, seasonal hostels (India Today Desk, 2018; (UNDP, nd).

- The lack of basic amenities like access to sanitation, clean water, health infrastructure, etc. faced by seasonal migrants is steering the cities away from meeting the targets set under SDG-6 which professes to ensure the availability and sustainable management of water and sanitation for all as well as SDG 3 which promises to ensure healthy lives and promote well-being for all at all ages (UNDP, nd). The urgency to address the needs of female seasonal migrant laborers has been stressed in media and public discourse again and again along with the need for maternity and other women's health and nutrition-related schemes that do not even consider female seasonal migrants as one of their intended beneficiaries. The lack of toilet facilities for migrant female workers and other concerns for safety and dignity are largely ignored in cities where they migrate in large numbers.

HOUSING NEEDS OF SEASONAL MIGRANTS: CONTEXT-SPECIFIC UNDERSTANDING

Though in the recent past, many efforts have been undertaken at the government as well as the private level to address the housing requirement of migrants and they have been successful to some extent, the case of seasonal migrants requires special attention. Seasonal migrants' housing needs are very different derived from peculiar circumstances of their employment conditions and cannot be catered to by conventional housing models prevailing in the existing ecosystem. They often have low income, insecure jobs, and irregular salary payments and suffer a complete lack of social security. At present, without any major exception, the urban seasonal migrants depend on a weak and broken ecosystem of Affordable Rental Housing (ARH) which fails to address their needs and fallouts of their socio-economic conditions (Joseph and Shukla, 2018). Concerning their particular needs, housing models must take into account the following factors before formalizing policies, designs, and other associated aspects:

- Community networks tap jobs: Seasonal migrants often come to the city in groups and they like to reside in along with others in the community
- Monthly rentals to be affordable: Seasonal migrants of both gender sometimes come to the city alone whereas at other times they come singly leaving families behind. Single members often prefer savings over the quality of living with a common sanitation facility whereas a family might be ready to spend a little more for better amenities. So, a choice in the type of accommodation and rent must be proved in housing models to cater to this differential.
- Low documentation needs: Housing models must incorporate mechanisms where documents can be issued by on-site verification for easy allocation of units to them
- Flexible rent payment systems: Innovative financial instruments which support flexibility in rent payment are required for seasonal migrants.

- Renting near the workplace: Accommodation must be provided near work place for saving on recurring commute costs to seasonal migrants for their acceptability.

In short, seasonal migrants in the intervention sites had multiple needs, including access to health services, food, shelter, and basic amenities such as water and sanitation, child-care facilities, schooling for children, livelihood opportunities and skills, and access to financial security. They need a complete ecosystem, a living environment, not just a house unit.

EXISTING URBAN HOUSING POLICY ECOSYSTEM: INADEQUACIES

At present, urban housing policies exclude seasonal migrants almost entirely as

- Current urban housing policies are focused on permanent residents of the city.
- Access to housing programs for the urban poor generally use eligibility criteria that include the submission of documents (such as a ration card, election card, or Aadhaar card¹⁵) bearing their residential address in the city.

- Often, municipal governments also base the eligibility for these housing programs on a certain 'cut-off' date, which requires a person to be living in the city or even in a particular settlement before a certain date, thus tying entitlement to public housing in the city to the duration of stay. Since these documents of seasonal migrants generally bear their village address, they are deemed ineligible for these housing programs. e.g. The Gujarat Construction Workers' Welfare Board (GCWWB), a state-level government agency, gives a housing subsidy to construction workers who are registered with GCWWB if they are allotted a house under a government urban housing program (Desai and Sanghvi, 2018). However, since seasonal migrants are ineligible for these programs, they are unable to avail of this subsidy. Only those construction workers who are permanent residents of the city can avail of the subsidy.

- Seasonal migrants are often not sheltered by ARHs as though they fall in the affordable category. Rents demanded by ARHs are often higher than the paying capacity of seasonal migrants. Seasonal migrants also cannot resort to credits for paying rent due to the temporary nature of their employment tenure. Non-occupancy risks during the transitory phase of the seasonal migrants negatively impact the profits of the ARCs, which makes them shy away from accommodating seasonal migrants (Choudhury and Bhaduri, 2021). Also, the migrants are unable to find rented accommodation in the city, because of a general lack of trust among house owners due to cultural differences and perceived safety risks associated. Moreover, the existing rent control regime has reduced the rents and made eviction of tenants a complex task causing an acute shortage of affordable rental housing in many urban centers of India (Rana and Rana, 2016). This compels the seasonal migrants to take shelter in squatter settlements often built on encroached public land, homeless settlements in public spaces like in the open on roadsides, on footpaths, and under flyovers, or rental accommodation provided by private landlords in slum-like areas. Government-led formal rental housing projects often fail to match the offerings of the informal markets i.e. lower rents, proximity to workplaces and existing community networks, short duration, procedures, less documentation, flexible eligibility conditions, etc.

HOUSING MODELS FOR SEASONAL MIGRANTS: THE PREREQUISITES

A sustainable urban future can only be ensured when all citizens' basic needs are satisfied which includes marginal people like seasonal migrants. As discussed above given their seasonal nature of work, their ability to pay low rents, and their low socio-economic status among the city-dwellers, housing policies and models envisaged for them must incorporate the following to ensure their access to decent living standards :

INTERVENTIONS PRIMARILY BY DESIGN PROFESSIONAL

Site Suitability: A judicious balance between the cost of land (cheaper in the urban peripheries) and transportation costs to the nearest employment hub

Design intervention: Indoor-Required facilities in minimum area-Adherence to minimum area requirement, Flexibility and choice in the housing unit, Incorporation of cost-effective climate tempering techniques , Allowance for certain space appropriation and expansion with changing needs.

Outdoor: Public spaces/open spaces-multifunctional, balanced allowance for space appropriation-permanent or temporary , Indoor and Outdoor Interrelation

INTERDISCIPLINARY INTERVENTIONS

Infrastructure: water supply, electricity, sanitation, sewerage management, etc. maintainable at low per-head cost

Amenity: Lighting, paved pathways, common recreational space

Comfort: Minimization of Climatic discomfort etc.

Supportive policy: Policy mandating worker's accommodation at the site of work e.g.(Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 ('BOCW Act'), Allowance of portability of documents for accessing Urban services

Supportive financial instruments: Accessible and formal credit system suited to requirements , Low cost of initial access(i.e. waiving of advance rent and security deposit), low rent and pay-as-you-go mechanism, flexible payment options.

Fig 2: The prerequisites for housing models designed for seasonal migrants (Author)

HOUSING THE SEASONAL MIGRANTS: THE ROADMAP

Devising appropriate and adequate housing for seasonal migrants must be prioritized for speeding up our journey towards a sustainable urban future. Keeping in mind, the prerequisites for housing them, the following approaches can be adopted as a roadmap for the same:

- Appropriate urban land use planning is important for designating sites for building migrants' housing. Distance of house from their work clusters and affordable connectivity must be the deciding factors. Urban land use must adopt policies that will ensure optimum density for the operation of various infrastructural services also as this will keep the living cost, commuting cost, and cost of basic services like healthcare affordable for migrants.

- Affordable Rental Housing (ARH) must be designed with special attention to migrants' context-specific needs. Flexible payment plans, pay-as-you-go payment mechanisms, flexible rental plans, payment terms with

different time frames, etc. must be adopted for making them truly affordable to the target population. Housing must adopt passive climate control strategies to increase their acceptance. Putting unoccupied housing units built under previous government missions to use can also aid in overcoming the housing shortage for the seasonal migrant population. Clear-cut policies for beneficiary selection and clear guidance on different debatable issues like recurring costs, ownership, and documentation must be adopted for rental housing. Ministry of Housing and Urban Affairs, an entity affiliated with the Government of India, has floated a scheme of building Affordable Rental Housing Complexes (ARHC) as a part of Pradhan Mantri Awas Yojana (Urban)(Ministry of Housing and Urban Poverty Alleviation, 2017). To provide a healthy living environment with adequate infrastructure within proximity of work clusters to urban migrants and poor citizens at affordable rates is the mission of the scheme. Attracting public-private investment and ensuring efficient use of vacant land by developing affordable rental units are other objectives of the scheme. In 2006, Chandigarh, a union territory in India launched a Rent-to-Own scheme of housing for the urban poor and migrants under which a special-purpose software application, namely Srishti (Slum Rehabilitation for Improvement, Security, and Hygiene of the Inhabitants) was developed. In 2016, another scheme called Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was implemented by the Indian Government under which basic civic amenities like water supply, sewerage, urban transport, and open spaces were provided to the poor and the disadvantaged sections of the society.

- Mandating organizations employing seasonal labor to provide them accommodation with adequate infrastructure on-site, facilitating portability of social security and entitlements, and government support for ARHs by treating them as service entities and providing them with rebates on electricity and water tariffs to offset business risks are some policy interventions which might help to address the problem of housing the seasonal migrants.

- Adopting the social urbanism approach to planning can ensure adequate infrastructure and amenities reaches the housing clusters planned for seasonal migrants. These approaches to urbanism can change the social dynamics of migrant housing and significantly assist in the goal of achieving social equality in the city. Social urbanism stresses top-down and bottom-up planning, design, and implementation process for improving the quality of life of low-income and disadvantaged communities by purposefully employing public resources and directing investments to create amenities for marginal communities in cities to integrate them into mainstream urban life (Bellalta, 2021). This approach, For example, in the Columbian city of Madelin changed the social dynamics by difficult-to-reach communities with high numbers of low-income residents to the city center by building low-cost transportation systems in steep hills and allocating a major portion of public money to developing world-class libraries and green spaces in disadvantaged areas (Maclean, 2014).

- Any housing scheme devised for the seasonal migrants must actively involve local governments, civil society organizations, private sector participants, etc. for addressing complexities that arise in a different stage of managing the housing. Adopting approaches like participatory planning, tactical planning (Lydon & Garcia, 2015), do-it-yourself urbanism, and magical urbanism (Davis, 2001), etc. which bases themselves on locally-led adaptation, can play a key role in developing and implementing affordable housing strategies for marginal communities like seasonal migrants.

This can ensure that housing prototypes designed for them are responsive to their resource needs, service delivery, and community dynamics and complement the sense of individual and collective ownership and agency. Thailand's Baan Mankong Program empowers poor communities to take ownership of their housing development by facilitating a process that is entirely community driven. This program emphasizes community-driven upgrading, not relocation, and puts communities in charge of identifying land and building their own homes.

- At present, in the context of Indian cities, existing credit mechanisms have proved to be useful for urban migrants they fail to help seasonal migrants working in informal sectors as they often do not possess the documents required for credit assessment. So, it is necessary to innovate and design financial instruments that consider the actual monetary status of the seasonal migrants and has built-in features to mitigate the risk involved in lending to them (D'Souza, 2019; Squires, 2017). Customizing the credit instruments and developing an assessment system, which is not based on conventional documents, but collects field-based information and assesses the financial capability of the borrower has been worked out under Pradhan Mantri Rojgar Yojana (PMAY) in India as an alternative that is particularly suited to the profile of seasonal migrants (D'Souza, 2019). Chile, Brazil, and the US issue 'rental vouchers' to low-income groups like seasonal migrants which can be exchanged instead of cash for renting private houses. This makes a plethora of housing options available to the holder of vouchers and also absolves the landlords from the risk associated with non-payment of rent.

- Impact investing based on the idea that social welfare can generate financial returns, may be lower than other investments, must be adopted to make ARHCs sustainable. The benefit of this particular approach is that the target group gains certain respect and socio-economic status in the overall framework as the amenities they get are not provided to them as a charity. This also supports the cause of social sustainability by establishing a certain amount of social equality. The affordable housing scheme needs to foresee the potential of impact investment and must formulate strategies for developing a suitable mechanism for its implementation (Vigneswaran and Truebestein, 2022).

- Technology must be adopted to solve the housing problems of seasonal migrants. India's first 'Migration Monitoring Systems' was inaugurated by Maharashtra, a state in India (News Service Division, 2022). The website-based Migration Tracking System is designed to track the movement and other dynamics of vulnerable seasonal migrant beneficiaries. In the state of Kashmir, in India, remote sensing technology and geographic information system have been used to map routes and the migration pattern of the nomadic Bakerwals tribes and their livestock (Parvaiz, 2018).

- The housing schemes targeted at seasonal migrants must engage in volunteer service, private donations, philanthropic resources, and civil societies for achieving greater reach. Labor costs can be reduced through sweat equity i.e volunteers engaging in construction works and the use of low-cost materials and technology. Campaigns to attract volunteers to such projects, institutionalizing volunteering efforts for career gains, and marketing them as an image-building exercise can go a long way in finding support for building low-cost housing. The ACCA Program (Asian Coalition for Community Action) is an example of such an initiative that aimed to transform development

options for Asia's urban poor by supporting a process of community-led change in 150 cities in 15 Asian countries (World Bank,2014). Urban poor communities are empowered with the required skills and tools to address problems related to land allocation, infrastructure planning, social and economic development, and housing at various scales. In India, non-governmental organizations like the Aajeevika Bureau, Hunnarshala Foundation, various corporate social responsibility programs , and a group of women from the migrant community in the Assam state of India working together as masons for constructing toilets thereby fostering a rare kind of social mobilization and unity are a few examples of citizen-led campaigns for empowering the migrant community(H.I.C., 2018).

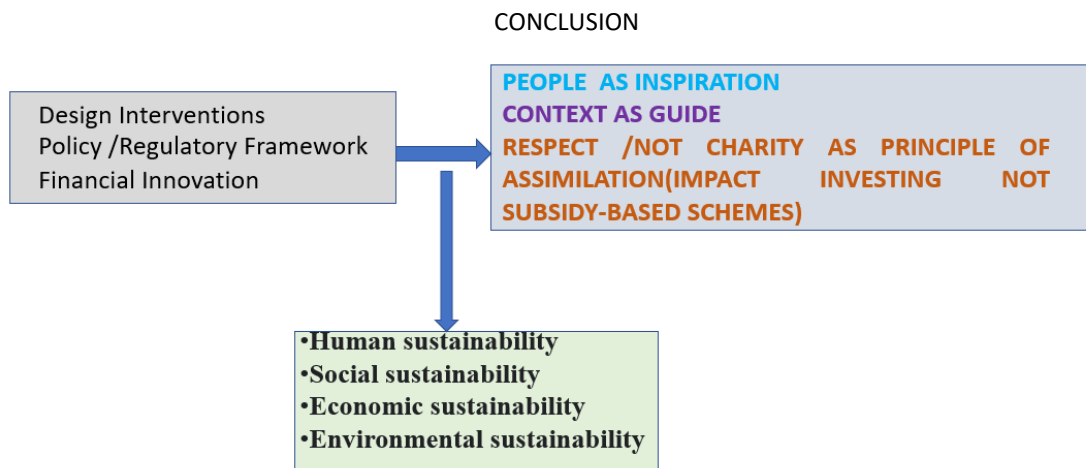


Fig 3: Affordable Housing and sustainability: The connection (Author)

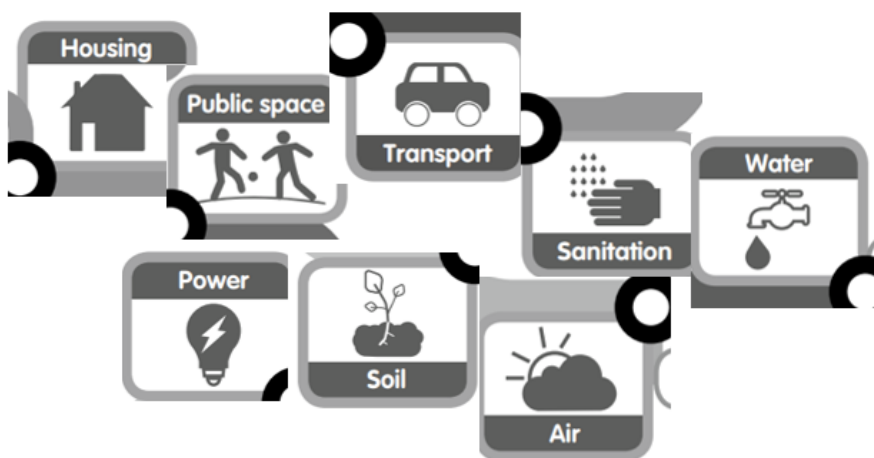


Fig 4: Affordable Housing as a complete living environment solution (Author)

SDG 11 of UN-Habitat aims to make cities and human settlements inclusive, safe, resilient, and sustainable, and the provision of affordable housing for seasonal migrants is an important step to achieve it. To strengthen the four pillars of a sustainable city; i.e human, social, economic, and environmental tailormade design interventions, policy guidelines and financial instruments must be formulated which are inspired by the needs and guided by the contextual realities of urban seasonal migrants. The approach to housing them must change from a charity-based one to impact based and delivering not only a residential unit but a quality living environment with adequate infrastructure and amenities must be the aim of such initiatives. Undoubtedly, success in making vulnerable groups like the seasonal migrants equal citizens and providing them with adequate housing will be one of the greatest milestones towards the journey of ensuring a sustainable urban future for Indian cities and this aspiration demands high commitment from all stakeholders involved.

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