Submission to Academia Letters

Housing and Living off the grid in an era of Urbanisation

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Introduction

This is a critical discourse of how urbanisation in the Global South is shaping people's housing needs and their increasing reliance on off-grid systems. The authors propose an alternative research agenda that embed local specificity into how the challenges of off-grid living is tackled.

Critical Discourse

Housing is becoming ever more elusive for low-income urban dwellers in developing countries. It is estimated that close to 30% of urban dwellers in the Global South countries live in informal settlements or poor quality housing (UN-Habitat, 2016). Housing is central to the relationship between people and their physical and psychosocial environments. It is a key determinant of healthy living and crucial to sustainable urbanisation (Winston and Pareja Eastaway, 2008). The sustainability of cities largely depends on how mass urban housing needs are met (Balla et al., 2017). In this discourse, we take housing to represent not just formal and physical structures, but to include informal settlements, temporary living arrangements and spaces where people live and interact, and through which people access the services of the grid systems.

A grid system is conceptualised as services necessary for urban housing and sustainable livelihood including clean water, safe sanitation, electricity supply, community health and social services. Our point of departure is that housing is at the centre of human-infrastructure interactions, and it is often the medium through which urban dwellers connect to the grid systems. 'Off-gridders' are

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people who live in dwellings not connected to clean water, proper sanitation, 'grid' electricity, and may have to arrange their own means of transportation and communication (Vannini and Taggart, 2014). Most urban dwellers in the Global South currently reside 'off-grid' in suboptimal living environments in cities that are overcrowded, resource-scarce and often experiencing a range of social, economic and political crises. Living off-grid has been historically linked to rural settlements, where there is a natural ecosystem within which people interact with their habitat and nature. However, that people are connected to a central or national grid is not just a binary case of urban-rural dwellers. For many people in the Global South, living off-grid is not a matter of choice.

The world is also facing an unprecedented rate of urbanisation. Currently, more than half of the world's population is living in urban areas (UN Habitat, 2020). By 2050 it is anticipated that about two-third of the world's population will live in cities. In the decades to 2050, most of the world's urban growth will take place in Africa, Asia and Latin America (United Nations, 2019). The global urban dweller nowadays is distressed by noise nuisances, environmental degradation, inadequate transportation, decreasing access to public spaces and natural environment, social segregation and congestion. All these factors have negative impacts on human health and the sustainability of cities. This is even more significant in the fast-growing cities of the developing world where a lack of basic infrastructure, caused by limited human and financial resources often lead to greater challenges such as health inequality, poor sanitation, and a lack of clean and safe water.

From good quality housing, to clean water and safe sanitation, there are variations and local-specificity in the way people attempt to survive off-grid. For the most marginalised people living in urban areas where the formal grid systems are not available, and when they are, are often not affordable, people make do with what is immediately within reach in order to sustain their livelihoods. However, restricted access to urban infrastructures can contribute to poor public health, affecting low-income groups with greater severity. In developing countries, attempts to improve off-gridders' situations are challenging, largely because newly proposed measures may ignore the complexity of everyday life in favour of more simplistic unidimensional solutions.

For many people living in precarious housing conditions in developing coun-

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tries, their livelihood often forms an intrinsic part of their living arrangements. This may manifest through the dual function of housing as a dwelling space and a trading space or through the social connectivity that enables or enhances livelihood. Low-income groups in urban areas often depend on their social networks, familial relationships, and community support to maintain daily living. This is because many low-income countries lack the safety net offered by the social systems in developed countries. Hence, when people's livelihood is threatened by ill-health or a lack of economic opportunities, their dependence on 'informal safety nets' and off-grid systems increases.

Urbanisation and, increasingly, unsustainable living arrangements is forcing people in large cities in the Global South to live in precarious conditions creating grievous consequences for people and the environment. Within the complex process of rapid urbanisation, structural inequality, marginalisation and exclusion from social services and infrastructure are some of the global challenges low-income groups are facing in developing countries. In the Global South, these challenges are often compounded and their cumulative effects become overwhelming when individuals are subjected to multiple sources of structural inequality in urban areas. This may be due to a combination of age, disability, ethnicity, gender, race, religion and spatial and temporal factors. However, the concept of structural inequality arising from any these factors is contextual and has to be defined differently in different urban settings (Francis et al., 2020).

Urbanisation, however challenging, is essential and beneficial for a country's sustainable development (UN Habitat, 2020). It supports socioeconomic transformation, wealth generation, prosperity and human capital development (Sridhar, 2016). However, a growing number of urban dwellers in low-income countries are being excluded from these benefits and having to rely on off-grid infrastructures.

Conclusions

Most extant research have explored the factors that underpin the development of informal settlements and have advocated for measures that support the integration of off-grid urban residents into formal grid systems (Palit and Bandyopadhyay, 2016). However, as more cities become urbanised, there is an increasing body of evidence to suggest that competition for access to these formal grid systems will increase and more people will be forced into off-grid ar-

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rangements and solutions. Hence questions could be raised why research should focus on urban areas, when there are millions of poor and marginalised people in developing countries living off-grid in rural and remote areas. In our view, people living off-grid in rural settlements are often connected to the natural ecosystems, hence the negative consequences of human practices on the environment in those settings are less severe compared to the impacts of the activities of people living in urban areas in developing countries. It is recognised that in the face of climate emergencies, it is simply not sustainable to attempt to build more formal and physical infrastructures to accommodate the increasing needs of the urban dwellers of today to get on, and/or remain within, the grid systems. Alternative and nuanced arrangements and provisions are possible within the variability of local contexts. The argument being promoted in this critical discourse is to spur a debate, create an effective knowledge-sharing platform and initiate the cross-fertilisation of ideas, that could emerge and benefit urban communities in both developing and developed countries.

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