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Informal settlements in a COVID-19 world: moving beyond upgrading and envisioning revitalisation

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ABSTRACT

The COVID-19 pandemic represents a turning point in the way things are done, globally and across sectors. We reflect on approaches to informal settlements and argue for a turn from 'upgrading' to 'revitalisation'. We conceptualise revitalisation as encompassing three core tenets: planetary health, transdisciplinarity, and a people-centred approach. In our vision, revitalisation approaches would take a big-picture view of informal settlements that recognises the inter-connectedness of people and nature within complex urban systems; integrates perspectives from various academic disciplines, non-academic sectors, and communities for knowledge generation; and centres informal settlement residents and communities as experts and partners in urban praxis.

Introduction: a protracted problem needing a transformational turn

Informal settlements are emerging as the epicentre in the global battle against COVID-19. Almost one billion people call these neighbourhoods home, representing the majority of the urban population in many low- and middle-income countries (LMICs). Also known as slums or squatter settlements, informal settlements face significant deprivations, including poor water and sanitation conditions, insufficient living area, low durability of housing, and insecurity of land tenure (UN-Habitat 2003). Occupation and construction take place simultaneously, over many years or decades, as the urban poor meet their housing needs in the absence of affordable alternatives (Acioly and French 2012). Many of these characteristics of informal settlements act as socio-environmental determinants of health, increasing risk of morbidity and mortality from common diseases such as diarrhoea and, increasingly, from COVID-19 (Lilford *et al.* 2017, Wilkinson 2020).

COVID-19 is compounding the severe health vulnerabilities and inequalities facing the urban poor, prompting a re-evaluation of the contemporary approach to settlement upgrading. Even the most basic COVID-19 prevention measures, such as hand washing (limited water supply), social distancing (high density living), and working from home (informal sector employment), are not possible for informal settlement residents (Corburn *et al.* 2020). Many

upgrading projects are now on hold and upgrading funding may reduce given constrained government and aid budgets and competing demands from other sectors. The pandemic has also starkly highlighted the interconnectedness of the health of all urban residents, bringing into consciousness the plight of the urban poor who are disproportionately suffering.

In this current context and moving forward, we advocate that tweaking current upgrading approaches is insufficient; rather, a transformation is needed. We articulate a vision for a transformational approach and then scope the conceptual scaffolding, comprising three core tenets – planetary health, transdisciplinarity, and a people-centred approach – to stimulate theoretical and critical reflection. Our aim is to reconceptualize entrenched approaches that perpetuate urban poverty and vulnerability, toward a more just informal settlement revitalisation practice in a COVID-19 world.

Limitations of current upgrading approaches

Poor health in informal settlements results not only from spatial and environmental conditions but from structural inequalities that are created and maintained by systems and institutions. Population-level inequalities are replicated and reinforced within informal settlements; hence, the elderly, women, children and people less abled are especially vulnerable. These social and health inequalities predispose informal settlement

residents to high prevalence of co-morbidities, resulting in multifactorial susceptibility to COVID-19. Additionally, informal settlement residents struggle to access the typically overburdened and under-resourced local health services. Therefore, alongside the risk of direct COVID-19-related deaths, vulnerable populations are also prone to experiencing excess all-cause mortality related to disruptions in health infrastructure (Corburn et al. 2020).

Alleviating the chronic and acute human health and wellbeing problems in informal settlements is a key motivation for upgrading interventions. Learning lessons from previously-failed attempts to eradicate, evict, replace and relocate slum dwellers to formal housing, the contemporary global paradigm centres on *in-situ* upgrading to improve environmental quality, health, wellbeing and livelihoods (Satterthwaite et al. 2020). Upgrading programs include a standard set of components: providing safe water and sanitation, paving streets, improving stormwater drainage, formalising electricity and solid waste collection, and land tenure regularisation, all delivered through a community-based approach (UN-Habitat 2015). While there is diversity across countries in how it is framed and implemented, the contemporary upgrading model has been in operation for several decades. It is guided by the (de-facto) global definition of slums that includes five household-level indicators (UN-Habitat 2003), and is enshrined in global frameworks such as the Millenium Development Goals (Goal 7, Target 7D) and more recently the Sustainable Development Goals (SDG 11, Target 11.1).

Scholars, practitioners and communities are increasingly critiquing the contemporary upgrading model, with concerns falling into four areas. First, current upgrading practice is too piecemeal. Small-scale (settlement by settlement) implementation is slow, cannot address the sheer number of settlements requiring attention, and does not adequately consider city-wide interconnections. Second, upgrading is too often seen as a technical *product*, not a *process* of community empowerment and partnership-building. 'Participation' is often token with residents required to fit into 'top down' project parameters (Satterthwaite et al. 2020). Third, upgrading projects do not adequately respond to the complexity of the human-environment interface. Narrow, 'low hanging fruit' interventions prevail over holistic approaches that could produce more comprehensive improvements. Fourth, the vast majority of upgrading research, policy, and practice is framed from a technical standpoint, i.e. the need to provide water or pave streets. This framing is limited in its engagement with the underlying structural injustices that perpetuate urban poverty and socio-spatial exclusion driving informal settlement formation and expansion, as well as limited in their critical reflection on the history of colonialism, ongoing paternalism and soft-diplomacy exercised by high-income countries on low-income countries in the global South. Overall, then, it seems that business as usual 'upgrading' requires a critical rethink.

From 'upgrading' to 'revitalisation'

We posit that a refreshed approach is needed which has *transformation* as a driving goal of informal settlement research, policy, and practice. Transformation necessitates a critical engagement with the institutional structures and processes that create and sustain inequalities beyond that of the individual, household or community, and beyond a narrow technical 'solutions' focus.

Our vision for a COVID-19 world is to achieve transformation through the comprehensive *'revitalisation'* of informal settlements. To revitalise is to transform, to imbue something with new life and vitality, within a process of growth towards a superior form of being. The label 'revitalisation' signals a step change in thinking and practice beyond the label of 'upgrading' and articulates the type of change needed in theory and practice. Drawing from our experience across many countries, and across research and practice, we propose a conceptual framework (Figure 1) with three core tenets for a revitalisation praxis: (1) planetary health, (2) transdisciplinarity, and (3) a people-centred approach.

Planetary health: the interconnectedness of humans and environment

We posit that planetary health offers an opportune framing for addressing informal settlements. Planetary health is defined as 'the health of human civilisation and the state of the natural systems on which it depends' (Whitmee et al. 2015). It spans interrelated issues of the emergence and spread of infectious diseases, water and sanitation, air pollution, gender equity, climate change, urbanisation, and displacement. This big-picture framing demands comprehensive interventions that address multiple variables in complex urban environments through a systems-level approach (Brown et al. 2018). It positions health as multidimensional and encourages interrogation of systems phenomena across cascading and nested scales: global, regional, country, city, settlement, housing unit and individual. In doing so, it moves upgrading interventions away from a narrow focus on the immediate housing environment to interrogating the location within the city and the socio-spatial inequalities faced by residents related to employment, commuting time, accessibility of health services, etc. Importantly, it is underpinned by an implicit normative and environmental justice agenda that provides space for a (human-rights based) new revitalisation practice for informal settlements, considering impacts
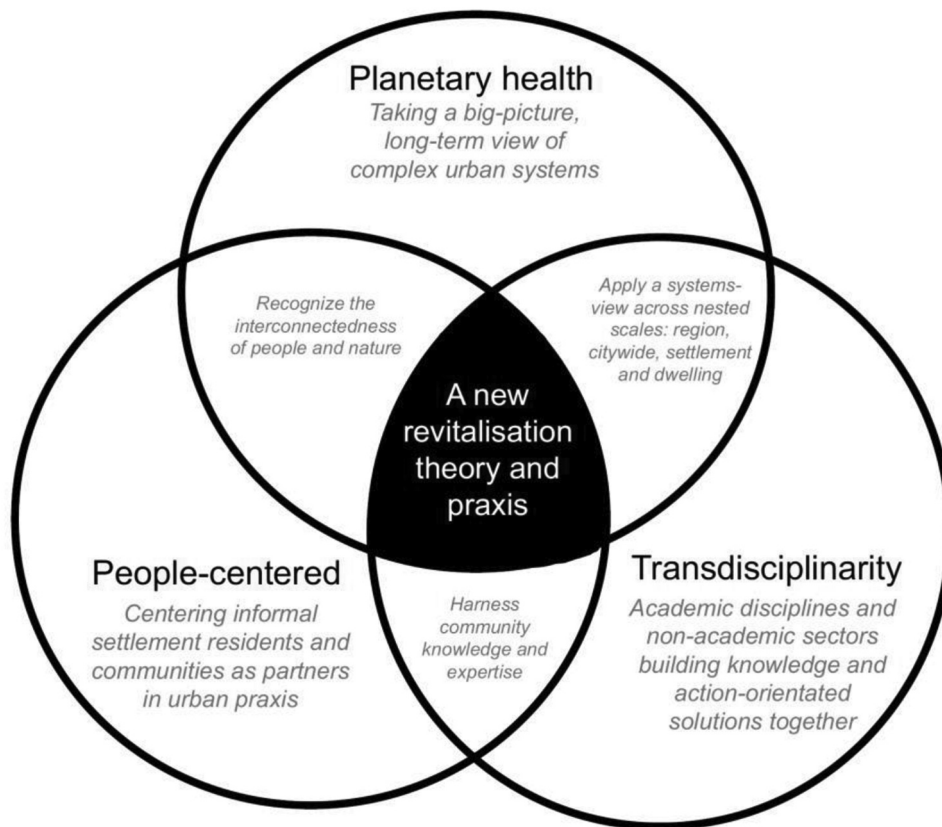
Figure 1. Conceptual framework of revitalization.

on those currently most vulnerable and those of future generations.

Transdisciplinarity: beyond the 'ivory tower', seeking systems change

A planetary health framing lends itself to a transdisciplinary approach. Transdisciplinarity, as distinct from inter-disciplinarity, involves not only various academic disciplines but also non-academic sectors such as industry, government, and communities, to co-define problems and co-deliver integrated solutions (Hoffmann *et al.* 2019). Transdisciplinarity broadens the scope for non-academic knowledge systems and understanding, such as community and indigenous knowledge. It is often linked with practical action to generate new empirical and theoretical knowledge whilst also delivering material changes, especially for the poor, vulnerable, and marginalised, through novel research design and implementation.

Given the complexity of informal settlement environments, transdisciplinarity offers a framework for integrating broad expertise to deliver systems change impact, which may help overcome the limitations of previous 'upgrading'. Furthermore, implicit in the transdisciplinarity approach is the importance of partnerships and capacity building beyond the 'ivory tower' of universities. It can foster spaces to strengthen the voice and agency of those often most excluded, and in doing so it implicitly reshapes the power

dynamics of data generation and knowledge production, upon which informal settlement interventions are designed, decided, implemented and evaluated.

People-centred urban praxis

Our vision requires centring informal settlement residents and communities as key actors in the process of revitalization. We must build on the laudable progress made by informal settlement community groups and federations who, over many decades, have organised, built their capacity, and undertaken pioneering data collection and knowledge generation even in the face of significant obstacles and repression (Satterthwaite *et al.* 2020). We must further fundamentally restructure the partnership ecosystem between community and government, as well as with other sectors such as academia and philanthropy, with a goal of more equal and trusted engagement. This requires deeper consideration of residents' experiences, needs and priorities, especially those often overlooked, such as women and girls, older people, and those less able, and their *intersectional* compounding identities, marginalities and vulnerabilities.

From an urban studies perspective, a people-centred revitalisation approach demands a more nuanced view of the inherent socio-spatial and economic interrelationships between informal settlements and their surrounding city and regional ecosystems. The conceptual 'formal/informal' binary divide which has dominated

thinking to date appears no longer fit for purpose. Rather, we can be better served by considering formality as a continuum which accounts for a more nuanced view of informal settlements in their broader urban ecosystems. Adopting a *citywide* approach to revitalisation, where the planetary health interrelationships between informal settlements and their city as a whole are considered, is essential for moving beyond the contemporary piecemeal, siloed upgrading approach.

Conclusion

The COVID-19 pandemic provides a unique opportunity to question contemporary approaches towards informal settlements. We argue that tweaking the current upgrading approach is inadequate in a COVID-19 world. Rather, a transformation towards a planetary health, transdisciplinary, people-centred, 'revitalisation' of informal settlements is needed. This paradigm shift is needed now; it is not a task for when COVID-19 'is over' given the likely protracted nature of the pandemic and the need to address the immediate informal settlement vulnerabilities. To be clear, we should continue with *in-situ* responses, regularising land tenure, and strengthening existing community organisations. At the same time, we should expand transdisciplinary research (e.g. the Revitalising Informal Settlements and their Environments program (Brown *et al.* 2018)) and amplify existing research-practice partnerships for impact. Building on these existing efforts with an explicit view to transformation may help redress the socio-spatial structural injustices perpetuating urban health inequalities so that cities and *all* their residents are better placed to overcome COVID-19 and similar crises in the future.

Disclosure statement

We declare no competing interests. The opinions expressed herein are those of the authors.

Notes on contributor

The authors are collaborating through the Revitalising Informal Settlements and their Environments (RISE) program which is testing a new approach to revitalising informal settlements in a randomised control trial in Fiji and Indonesia. The trial aims to generate new knowledge on the links between human health and the environment and understand the opportunities for alternative water and sanitation servicing options for the urban poor and vulnerable. www.rise-program.org

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