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'Sites and services', and in-situ slum upgrading

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Question

How are 'sites and services' and 'in-situ slum upgrading' defined and how are they being used to deliver better (more sustainable, more compact, more affordable) urban development? What is the evidence of success or impact; failure or difficulties in implementation; models/approaches that might be replicable. What opportunities are there for 'sites and services' and in-situ slum upgrading projects in a post COVID-19 urban world?

Contents

1. Summary

'Sites and services'

'Sites and services' is a housing solution scheme for the poor where a serviced plot of land is bought for the inhabitant to build on and invest in. Servicing typically includes a sanitary unit and community facilities. Plots were serviced to different levels and were different sizes to attract varied income groups. Sites and services schemes were largely run in the 1970's and 1980's. Literature identified is therefore relatively old.

One recent report revisits a 'sites and services' scheme twenty years after the project was closed and 'deemed a failure' Owens et al. (2018, title). The article describes a well-functioning community neighbourhood. Success factors were thought to include small and affordable plot sizes, relaxed planning norms that maximised space, and design for mixed use so that shops and schools were integrated. The area continued to develop after the project was closed. Tenants have worked on their houses incrementally.

An expert consulted for this report cautions against generalising these results to other contexts. Another report on a 'sites and services' project in India describes mixed results reported by residents (Nathan, 2015). Experience in Kenya suggests low levels of success with conflict over plot allocation delaying progress and exclusionary construction conditions (UN Habitat, 1984). Plots ended up becoming private rental schemes. Community groups were found to support initially in managing low resources and informal development was thought to have been reduced to an extent.

'Sites and services' experience in Nigeria is reported to have operational difficulties, lack of community involvement and poor management (Onibokun et al., 1989). Indigenous expertise were thought to be underutilised.

Two reports on 'sites and services' in Egypt suggest low levels of success (Hegazy, 2016; Arandel and El Batran, 1997). Problems of project ownership and government buy-in were identified. There were also land-titling issues between the local population and the government. The sites had been transformed in more recent years but not towards the projects original aim for low-income residents.

In situ slum upgrading

In-situ slum upgrading is not widely distinguished in the literature from slum upgrading. Projects described as 'slum upgrading' were mostly happening in situ. Research suggests that slum upgrading can include improvements in land tenure, housing, infrastructure, employment, health services, and political and social inclusion. Projects and policies differ depending on region, politics and development histories.

There was a large body of literature on slum upgrading. To report within a rapid review framework, it was not possible to spend time screening which case studies would be most useful. Rapid search was carried out for the focus countries agreed by the commissioner of the report and the top-level results were included providing a small insight into a rich topic. A number of resources were also included that were recommended from experts contacted for this report. It was difficult to identify useful models as each context is impacted by complex histories and varying levels of political commitment. With further scope it would be useful to search more

broadly for projects which may not be described as 'slum upgrading' for example a search on 'incremental housing' may provide some examples.

A case study of Indonesia includes the Kampung Improvement Programme, run between 1979 and 1984, which was largely considered a success at the end of the project and today. There was strong emphasis on provision of water supply, sanitation systems, footpaths, drainage, and public amenities. Informal non-eviction guarantees made residents feel safe. Follow-up research finds improvement for residents in health, employment, and education (Buckley & Kalarickal, 2006). The programme was an indigenous initiative built on traditions of self-help and given strong institutional support.

Case studies also included in section 4:

- A report on slum upgrading in Quezon City in the Philippines describes improvements in tenure security and physical infrastructure (Minnery et al., 2013). Civil society engagement was active from a variety of groups.
- One paper describes successful slum upgrading in Namibia with a flexible land tenure system and strong community involvement (Delgado et al., 2020). Savings groups supported upgrading. One project has university students working with inhabitants on planning.
- Reports from slum upgrading in Kenya describe difficulties with administrative procedures (Gulyani & Basset, 2007) and restrictive government standards (Lee-Smith and Memon, 1988).

Slum upgrading appears to be most effective when responsibility and accountability is devolved to the lowest appropriate level (Buckley & Kalarickal, 2006). Citizen participation is important for sustainability. This combined with political will is favourable for success.

There was a small amount of literature which identified health outcomes as a result of slum upgrading (Section 5). There is some evidence of diarrhoeal disease reduction and (Galiani, 2007) and reduced insurance claims for waterborne illness (Butala et al., 2010).

The opportunities for slum upgrading and 'sites and services' in a post-COVID-19 world are not clear.

2. Definitions

'Sites and services'

The 'sites and services' model is described in Owens et al. (2018, p260) as "delivery of incremental housing for the poor through the provision of small serviced plots, sometimes with a core unit". Incremental housing is where people would invest slowly, over time, at a pace that fitted each individual family's circumstances. Conditions are habitable but at varying stages of completion. Progressive development was a key feature of both 'sites and services' and slum upgrading projects (Buckley & Kalarickal, 2006).

'Sites and services' were designed to meet the needs of low-income families who had built up some savings and were looking for more formal housing. Households must provide complementary private investment (Harari & Wong, 2019). Servicing typically included a sanitary unit and community facilities. Sites and services programmes were run in between 1970 and

1998 and were abandoned for lack of results (Owens et al., 2018). Delivery goals were narrow and were not allowed adequate time to be realised.

Projects varied widely in what they offered in terms of plots and financing (Owens et al., 2018). All programmes were small-scale and pilot in nature. The 'sites and services' model was able to offer a range of options to target different income levels including plots that were only surveyed or plots with a sanitary core.[1]

An expert consulted for this report suggests that serviced site programmes may be more common than the literature suggests as there are different labels for the same idea. This idea would be useful to explore with further scope.

In-situ slum upgrading

In-situ slum upgrading does not seem to be widely distinguished in the literature from slum upgrading. Upgrading itself began as a counter to slum removal policies. *In situ* refers to the fact that residents remain whilst the work is happening. This seems to be predominant in slum upgrading projects without it being explicitly described as *in situ*.

Slum upgrading can include improvements in land tenure, housing, infrastructure, employment, health services and political and social inclusion (Corburn & Sverdlik, 2017). Upgrading largely focuses on infrastructure or land regularisation, one may follow the other or upgrading can focus on both (Gulyani & Basset, 2006). Upgrading processes are noted as "inherently complex and challenge traditional public policy implementation practices" (Almansi et al., 2020, abstract).

Corburn & Sverdlik (2017, p345) note that "there is no single definition of "slum upgrading", as projects and policies differ based on region of the world, political and development histories, and other factors"

Background

Both slum upgrading and 'sites and services' were a focus for World Bank support from the early 1970's discussed in a World Bank review of shelter lending (Buckley & Kalarickal, 2006). In the mid 1980's the Bank moved away from slum upgrading and 'sites and services' towards dealing with policy issues and housing finance. The shift focussed on mobilising funds to support demand. Recent discourse suggests that now there are better tools for community participation and microfinance, slum upgrading and 'sites and services' projects should regain some focus. Slum upgrading projects funded by the World Bank were largely in Latin America which is not the focus of this report.

The World Bank review reports that 'sites and services' and slum upgrading projects often became somewhat distinct within larger urban areas rather than going to scale as had been hoped. Often because they were pilot programmes, and because they were exempt from certain building codes and regulations.

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[1] Known as "embryo" housing units

Results reported on different 'sites and services' schemes are mixed. In some cases, there was a decline in utilities and urban service quality once subsidies ended (Buckley & Kalarickal, 2006).

Research documenting experience in five Indian cities found slum upgrading was preferred over resettlement and site redevelopment with construction (Burra et al., 2018). World Bank experience suggests that slum upgrading is most effective when responsibility and accountability is devolved to the lowest appropriate level (Buckley & Kalarickal, 2006). This supports ownership and empowerment. Almansi et al. (2020) note that approaching complex urban problems through citizen participation improves urban governance, provides a more comprehensive response, and produces longer-term sustainability. Where community participation is low problems of patronage, clientelism and co-option are often found (Buckley & Kalarickal, 2006).

3. Evidence from 'sites and services' programmes

To keep within the scope of this review, search for evidence focussed on Indonesia, Vietnam, Myanmar, Uganda, Kenya, Nigeria, Ethiopia, Egypt, and India. It was not possible to search on these countries in-depth and rapid search did not identify literature suitable for inclusion on Indonesia, Vietnam, Myanmar, Uganda, or Ethiopia. Schemes known as 'sites and services' were running in the 1970's and 80's so not very well documented. Research is mostly old, and sometimes inaccessible or of poor quality.

India

Owens et al. (2018) review World Bank supported 'sites and services' areas in Mumbai and Chennai, India developed between 1977 and 1997. Deemed a failure at the time many of the project sites have now developed into well-functioning community neighbourhoods. Success factors include: making some plots very small so they were more affordable; planning norms that helped maximise space (for example allocating less space for streets) made plots more affordable; including a range of different plot sizes for different income groups; and design for mixed use such as shops and schools. Mixed use and attracting mixed-income groups are thought to be particularly important success factors. Small plots and narrow roads successfully deterred higher income groups. Costs were recovered before the projects closed. The number of beneficiaries continued to increase after the project closed. Sites originally too remote gradually became more accessible as infrastructure was built. Flexible planning has allowed additional floors to be built. Low income plots were found to be densely populated housing multiple families. Density increased as floors were gradually added to buildings. Tenants continue to work on their houses and vertical development increases. Incremental housing is considered relatively successful in this case study. The review recommends considering subsidies for serviced land rather than for constructing houses as residents then have greater ownership and stake in their homes. Investment in the neighbourhood amenities is thought to be particularly important and often overlooked.

A survey interviewed residents of Mogappir, Chennai 10 years after introduction of a 'sites and services' project who reported satisfaction with their dwellings but less so with the services (Nathan, 2015). Ownership was the most positive outcome for many of the residents and a factor for which helps people to overlook shortcomings of the residence. Features that were disliked were row house arrangements, shared drainage, small plot sizes and location of the toilet in front of the house. Many residents would have benefited from more information and technical guidance when designing their house. Respondents reported to have friendly and helpful

neighbours but that the neighbourhood lacked cleanliness and safety. Schools and shopping facilities were largely adequate but water supply, roads and public transport were reported to by unsatisfactory. Road and transport problems were cited as limiting access to education and employment. Faulty drain layout led to drinking water contamination and water-borne infections.

Kenya

A UN Habitat case study describes two 'sites and services' projects, Makongini in Thika, and Dandora in Nairobi (UN Habitat, 1987). Makongeni started in 1970 and plots were ready in 1971 with some foreign technical assistance and limited public capital. There was conflict over plot allocation procedures which delayed building by five years. Authorities provided communal water supply and roads.

Dandora had significantly more funding, particularly from the World Bank. Housing construction began in 1976 using simple materials with the intention of these later being improved. Collective participation was used to organise financial labour and managerial resources of plot-holders (UN Habitat, 1984). Building groups helped manage low resources and were registered entities. A plot owner could receive a loan after a certain amount of construction work had been certified. Community development staff in the City Council worked very closely with the building groups assisting with resource management, training, registration, and record keeping. There were some cases where group members took advantage of other members and used the group for political aims. More knowledgeable group members tended to dominate over illiterate group members. And accounts were often insufficient.

Both Makongeni and Dandora ended up becoming private rental housing schemes (UN Habitat, 1987). Subletting evolved as most rural inhabitants had left their wives and family in rural areas and urban accommodation was necessary for work but was not home. Sites allocated to savings co-operatives were the only ones where owners lived on the plots. In Makongeni pressure from higher income individuals and construction conditions excluded low income residents. High-income developers did succeed in building considerable amounts of accommodation. In Dandora, the World Bank insisted on targeting low-income families but these ended up taking the rent from the house and staying in lower standard sites. Data suggest that 'sites and services' did reduce informal development to an extent but the 'sites and services' plots remained unaffordable for 20 percent of the population. 'Sites and services' construction was successful in creating jobs.

Nigeria

Bauchi, Nigeria received funding from the World Bank for a 'sites and services' project in 1980. Project execution was protracted by operational, logistical and institutional difficulties (Onibokun et al., 1989). The engineering firm was found to be unsatisfactory. Surveys and maps were delayed. Indigenous expertise and technical expertise were thought to be underutilised. Onibokun et al. (1989) surveyed households and found that only half of the inhabitants were in the low-income bracket. Some beneficiaries were overambitious with building design. Local materials were not favoured as had been presumed by project planners. Many houses did not have piped water and still relied on wells. There was an absence of ngo or community organisations involvement. Cost recovery was an issue and higher subsidies were required than planned. This was due to currency depreciation, mortgage repayment defaults, and high spending on expert assistance. Property taxation was planned to be introduced to recover costs for services but this did not work as it was not an accepted practice.

A later paper discussing 'sites and services' in Nigeria suggests that the government had been implementing schemes without paying enough attention to management so there had been a lack of sustainability (Akinsola et al., 2014). Successful implementation requires dedicated and observant officials (Onibokun, 1989). Facilities were often not adequately provided or functioning (Akinsola et al., 2014). In some cases, there was technical infrastructure without the utility. Other problems include plot ownership changing hands and illegal partitioning of plots.

Egypt

'Sites and services' plots created in the 1970's designed to relocate slum dwellers were found to be unaffordable to those it was aimed at and occupancy rates were low (Hegazy, 2016). Government officials resented their reduced role and did not like the unfinished aspect of settlements (Arandel and El Batran, 1997). The government were concerned that 'sites and services' would end up creating slum areas with government consent. Projects were therefore initiated with foreign leadership and multilateral agencies. Where participation by local population and government was sought, integration of residents into the urban network was improved. But most projects were criticised for being top-down. Land titling conflicts were an issue between the government and local population. The 'sites and services' projects were deemed a failure and not further replicated by the government.

Review of a 'sites and services' project in Ismailia found that the area had been transformed (Arandel and El Batran, 1997). People had either built their houses and sold them on for a profit to live in new informal settlements or were unable to secure loans to build on the land and sold it on. High building standards resulted in structures that were higher standard than were needed by low-income inhabitants. High standards made building more expensive.

4. Evidence from in-situ slum upgrading programmes

Evidence is included from the chosen focus countries and evidence that was recommended by experts consulted for this report.

Indonesia

Harari and Wong (2019) look at results of an in-situ slum upgrading programme, the Kampung Improvement Program (KIP), in Jakarta which was run between 1979 and 1984. It is thought to be one of the largest slum upgrading projects in the world and one of the most effective in terms of urban poverty relief (Buckley & Kalarickal, 2006). There was strong emphasis on provision of water supply, sanitation systems, footpaths and drainage as well as public amenities such as open space, streetlights and health clinics (Jones, 2017). Residents were offered informal non-eviction guarantees so that investments they made were protected.

Positive impacts reported after 10 years of the programme show improvements in pathways, lighting, housing, water and sanitation (World Bank, 1995). Residents are found to be better educated and have higher employment rates (Buckley & Kalarickal, 2006). Improved sanitation reduced water-borne disease and child mortality. Success factors identified include: KIP was an indigenous initiative built on traditions of self-help; KIP had strong institutional support; multidisciplinary teams replicated strict design, engineering and cost standards. Local government staff played a positive and important role conducting outreach with communities for planning.

However, more recent evaluation finds that KIP areas have lower land value, less tall buildings, are more informal, and have higher population density than comparable sites which were not under the scheme (Harari & Wong, 2019). These neighbourhoods are thought to be harder to formalise. Weak property rights and unclear land management systems are likely to have contributed to the difference. Harari & Wong highlight the short-term benefits of the low-costs of slum-upgrading compared to 'sites and services' and public housing. Lower land values identified do not necessarily represent welfare loss to KIP residents.

An article in the Indonesian Urban Journal of Development Planning reviews slum upgrading in Indonesia (Hasanawi et al., 2019). The authors note the need to strike a balance between domination by government actors which represses community involvement on the one hand, and on the other, the need for government intervention to encourage even growth and a stronger position for lower income groups. The Neighbourhood Upgrading and Shelter Sector Project (NUSSP), implemented in 32 cities across Indonesia ran between 2004 and 2009. The project involved community-driven improved management and planning for upgrading existing neighbourhoods, micro-credit for upgrading indigenous homes, and upgrading low-income neighbourhoods. It had a government support component which aimed to strengthen the institutional capacity of local government agencies in implementing related sub-projects. An Asian Development Bank review of the project (ADB, 2012) finds different participation results in different settings depending on context. Community functioning is better in rural project areas than in semi-urban and urban. For example, villagers where fishermen were out at sea for large amounts of time were difficult to engage in community processes and women who traditionally remain at home were less likely to get involved. Some projects experienced less participation because of elite capture. Infrastructure outputs were perceived to be of good quality.

Maintenance for NUSSP subprojects varied with some constructions being well looked after and some suffering damage or becoming inoperable (ADB, 2012). Sub-projects implemented by a third party had lower commitment from the community for maintenance. Villages which self-implemented sub-projects were more committed to maintenance. Villages with greater social cohesion were more likely to keep up with maintenance.

An article in the Habitat International journal uses Bandung city in Java as a case study, looking at different slum upgrading projects in four village districts (Minnery et al., 2013). Results were initially favourable but in the 1997/98 financial crisis cooperatives were unable to repay loans and forced to close. One success noted was the building of social assets and integrating construction with on-the-job training. One reason for success identified by Minnery et al. in this early-United Nations Environment Programme project was that there was no ambiguity on how funds were spent and a focus on physical upgrading.

The new Indonesia National Slum Upgrading programme (2016-22) has a flexible framework to allow communities and local government to innovate.[2]

Philippines

Case study research on Quezon City found a strong civil society role in slum upgrading (Minnery et al., 2013). Involvement was found to include community-based organizations, family and corporate foundations, socio-civic clubs, and faith-based groups. The NGO community has

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[2] Source: Presentation by Judy Baker, World Bank, supplied by the adviser.

channelled aid funding for improving basic services, physical infrastructure, land tenure, and provision of leadership training. Civil society groups have demonstrated effective use of funds. Improved tenure security and physical infrastructure has transformed informal settlements.

Namibia

A paper in *Urbanization and Development* (Delgado et al., 2020) discusses successful bottom-up informal settlement development in Gobabis, Namibia. Since the late 1990's the Shack Dwellers Federation of Namibia (SDFN) and the NGO Namibia Housing Action Group (NHAG) have partnered to work on urban development supported by the Ministry of Urban and Rural Development. In 2012 a parliamentary act was passed to pilot the Flexible Land Tenure (FLT) system in three urban areas. FLT enables alternative forms of titling which can be upgraded to freehold titles.

Successful housing developments in Gobias include savings group upgrading the neighbourhoods and groups securing land tenure to build houses. Information collection is a key part of the process including community-driven mapping and feedback sessions. Reblocking, the repositioning of housing to improve spatial qualities, has led to upgrading instead of relocation. Approaches are enabled by a broad coalition of partners.

A "planning studios" concept which involves working with communities and academics was implemented with the Namibia University of Science and Technology (NUST). It was based within the undergraduate programme of Town and Regional Planning and worked with SDFN and NHAG. Working on Freedom Square, Gobias, students prepared land surveys examining drainage, vegetation and infrastructure. The inhabitants had already collected socio-economic data which was passed on to the students. A reblocking process was undertaken which strongly involved inhabitants and therefore compensation and reimbursement was less contentious. A further planning studio event was attended by officials, politicians, and SDFN members from other regions to improve connectivity within the settlement and to other neighbourhoods. Inhabitants from different blocks presented their results. Land registration proposals from a NUST town planner were approved by the local council.

Co-production makes efficient use of resources and decentralised power aligns efficiency and equity. Central and local governments are still thought to be in a more dominant position with regards to power dynamics regarding approval of tenure certificates. It was found that associational life among inhabitants works better in smaller clusters and needs to be voluntary.

Kenya

Kenya made relatively fast progress in land legalisation between 1991 and 1994 when responsive administration was in place (Gulyani & Basset, 2007). Administrative changes with the Deputy Commissioner of Lands in 1994 resulted in a slowing of paperwork with lack of coordination between the Department of Lands and the Department of Survey highlighting the importance of administrative and government support.

Reduced standards intended to make building easer in First Urban[3] slum upgrading project World Bank project in Kenya caused problems as the urban elite and government officials

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[3] So called as they were the first set of projects on urban issues funded by the Bank

decided the standards were not good enough which called for a complete redesign (Lee-Smith and Memon, 1988).

Current activity in Kenya has Mukuru in Nairobi declared a Special Planning Area (SPA) to enable upgrading strategies (Sverdlik et al., 2020). Under the SPA the Kenyan slum-dweller federation and partners (academic, civil society, private-sector, and government) have formulated the strategy with locally rooted, pioneering solutions. The plan aims to minimise relocation, utilise flexible funding and partnerships, and promote social inclusion. Careful sequencing is seen as key to inclusive upgrading. Regulations are being formulated to eliminate predatory informal practices whilst also recognising the potential of informal providers.

Egypt

In Egypt there began a shift from eradication to upgrading in the 1980s. By the 2000s the concept was more around integration than upgrading which meant integration into citywide policies (Khalifa, 2015). Informal urbanisation began to be linked with formal property market expansion. Physical integration involved building roads for improved accessibility. Social integration addressed community needs and juridical integration involved property regularisation and land-titling. In 2008, the Informal Settlement Development Facility was established in the government which put an emphasis on safety within informal urban areas. This ranged from focus on settlements in locations prone to environmental hazard or under threat from railway accidents; in unsafe structures; exposure to health risks; and tenure instability. Areas that were classed as unplanned rather than unsafe were connected to market-based mechanisms. There is found to be low levels of resident participation in upgrading planning in Egypt (Hegazy, 2015). A Kahlifa (2015) paper noted informal settlement growth to be faster and deemed upgrading efforts largely insufficient. Different areas used different combinations of policies and actors so it is difficult to make broad policy conclusions. No successful mode of intervention emerged. Availability of funds and political will are found to be vital for any successful.

India

A study from 2001 (Amis, 2001) looks at impact of DFID funded upgrading programmes in twelve slums in three Indian states. Construction of roads and drainage had the most impact and improved the image of the slums. The infrastructure improvements facilitated economic and social activity. Improvements on cleanliness and flood-reduction decreased the burden for women. The neighbourhood committee element of the project had mixed success. The study found no explanatory factor which could predict the degree of success of the community development components. The author emphasises the importance of negotiating skills for building and consolidating local groups.

5. Health outcomes of slum upgrading

A paper reviews slum upgrading evaluations and the effects on environmental determinants of health in cities across Asia, Africa and Latin America (Corburn & Sverdlik, 2017). The review finds limited data on health outcomes in slum upgrading project evaluations. Related measures identified include number of dwellers receiving piped water and waiting time for water eliminated as having related impacts on health (Aiga & Umenai, 2002).

One study shows that slum upgrading in Ahmedabad, India reduced waterborne illness using health insurance claims as a proxy for disease incidence (Butala et al., 2010). The improvement strategies involved: connections to a water supply for individual households; underground sewage for individual households; toilets for individual households; storm water drainage; stone paving of internal and approach roads; solid waste management; and street lighting. The intervention also gave guaranteed freedom from eviction for ten years. Costs were covered by the Ahmedabad Municipal Corporation and individual contributions were covered with a microfinance programme. Following the intervention, a persons' likelihood of claiming insurance for waterborne illness (excluding mosquito-related illness) was found to have declined from 25 percent to 10 percent.

A systematic review of health outcomes from slum upgrading identified five studies for inclusion judged to be low quality evidence (Turley et al, 2016). One controlled before and after study found reduction in diarrhoeal disease in households which had received water connections (Galiani, 2007).

6. Opportunities for these approaches post-COVID-19

The opportunities for slum upgrading and 'sites and services' in a post-COVID-19 world are not clear.

A brief literature search identified a small number of resources on COVID-19 response in informal settlements which may be of interest for further reading:

- A survey of collective action in informal settlements in Latin America finds measures focus on emergency food security, support for disease prevention and sanitation (Franco et al., 2020).
- An IIED blog[4] suggests a need for working with the informal sector to promote tenure security where COVID-19 has been used as a reason to evict slum dwellers and demolish slum areas.
- Corburn et al. (2020) make policy and practice suggestions for dealing with COVID-19 in informal settlements including physical improvements for protection.
- The Participatory Slum Upgrading Project[5] have set up a resource page to provide governments, communities and key stakeholders with reliable information to reduce the spread of COVID-19 in slums - https://www.mypsup.org/covid-19/
- COVID-19 has put greater emphasis on the importance of piped water. An IIED blog[6] argues for the value of actively engaging with different schemes already in existence to respond to COVID-19. An example is given of a slum titling project and associated Missions in Odish, India.

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[4] https://www.iied.org/working-informality-for-more-resilient-equitable-responses-covid-19

[5] a tripartite initiative of the Secretariat of the Africa, Caribbean and Pacific Group of States (ACP), the European Commission and UN-Habitat

[6] https://www.iied.org/covid-19-jaga-mission-value-already-existing-solutions

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About this report

This report is based on 7.5 days of desk-based research. The K4D research helpdesk provides rapid syntheses of a selection of recent relevant literature and international expert thinking in response to specific questions relating to international development. For any enquiries, contact helpdesk@k4d.info.

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