COVID-19 has had asymmetrical spatial impacts across South Africa. New evidence from the National Income Dynamics Study: Coronavirus Rapid Mobile (NIDS-CRAM) survey shows that the pandemic and lockdown reflex have magnified pre-existing divisions within cities. Although COVID-19 has severely impacted the whole country, townships and informal settlements have proved more vulnerable than suburbs. As South Africa was already one of the most unevenly developed countries in the world, COVID-19 has widened the gap between places, which face very different levels of risk and resilience.

**Significance:**
- We present original evidence that COVID-19 has affected poor urban communities more than it has suburbs in South Africa. This is apparent in terms of employment and hunger. The effect has been to magnify territorial divisions and exacerbate social discontent. Premature withdrawal of government relief will aggravate the hardships facing poor communities that rely on these resources following the slump in jobs.

**Introduction**

South Africa introduced one of the earliest and strictest lockdowns in the world in an effort to contain the coronavirus pandemic and to prepare the health-care system for the anticipated upsurge in patients needing treatment. This approach was driven by fear that the population was particularly susceptible to the disease and a desire to minimise the loss of life. However, the lockdown reflex shuttered much of the economy (production, consumption and distribution), with unintended socio-economic consequences.

While many other governments introduced exceptional support programmes for businesses and households to mitigate the damage caused by the restrictions on activity, South Africa’s response was limited by the poor state of public finances.¹ The devastating effects are gradually becoming apparent. Surveys suggest that between 2 million and 3 million people lost their jobs between February and April 2020.² Other data show a 16.4% contraction in GDP between April and June 2020.³ In September, the OECD announced that it expected South Africa’s economy to shrink 11.5% in 2020.⁴ This decline is the biggest amongst the 19 countries that feature in the Organisation for Economic Co-operation and Development’s (OECD) analysis.

The geography of South Africa’s twin public health and economic crises has received little attention to date, given the focus of the pandemic analysis and response at the national and provincial levels. The COVID-19 lockdown regulations and special support programmes have been uniform and ‘place-blind’ in the interests of simplicity and fairness. Yet South Africa is one of the most unevenly developed countries in the world, with stark contrasts in the risks and resilience of communities living in different places.⁵ Casual observation suggests that some urban communities have been buffeted more than others. Here we present original evidence of the unequal impact of COVID-19 on livelihoods and well-being across different types of urban area.

**Data and methods**

The evidence comes from Waves 1 and 2 of the ongoing National Income Dynamics Study: Coronavirus Rapid Mobile Survey (NIDS-CRAM). The NIDS-CRAM was designed as a ‘barometer’ to assess the socio-economic impact of COVID-19.² It is based on a sample of adults who were previously surveyed in Wave 5 of the NIDS in 2017. Hence, the NIDS-CRAM provides another two rounds of socio-economic data for a subsample of 7073 adults from NIDS Wave 5 who were re-interviewed in May/June 2020 (NIDS-CRAM: Wave 1) and 5676 adults who were interviewed again in July/August (NIDS-CRAM: Wave 2). The first wave allows an assessment of the initial shock of COVID-19 and the second wave provides insights into the subsequent trajectory, including any signs of recovery.

The locational typology used for the analysis focuses on the differences within cities between four different kinds of neighbourhood. The classification is intuitive and draws on urban residents’ own perceptions to distinguish between suburbs, townships, shack dwellers (informal settlements and backyards) and peri-urban areas (which include smallholdings, farms or tribal land on the urban fringe). NIDS-CRAM is a telephonic survey in which respondents are asked about the kind of neighbourhood in which they live. In addition, information on the quality of housing was used to identify backyards. The sample was restricted to individuals living in urban areas. The rationale is that one would expect the suburbs to cope better with the lockdown and social distancing protocols because residents tend to have secure jobs, more savings to rely on, and find it easier to work from home. In contrast, people living in townships, informal settlements and peri-urban areas are likely to have more precarious livelihoods, fewer resources to withstand shocks, and their neighbourhoods are likely to have weaker social infrastructure and safety nets.

We describe the impact of COVID-19 on these different areas. Doing so is important to improve understanding of the distinctive challenges facing different places and for more targeted, place-based responses, including consultation with local communities. We reveal that a blanket, nationwide approach that treats places equally does not diminish the gaps between them. The analysis is novel because initial studies of the impact of the crisis have focused on the attributes of individuals (race, gender, education, occupation, earnings, etc.) and paid little attention to spatial considerations. The analysis does not control for the possibility that some people moved between locations – either...
temporarily or permanently – as part of their livelihood strategies. A study based on Wave 1 of the NIDS-CRAM estimated that about 15% of adults moved to a different household during the first few months of the lockdown, some of whom would have been in a different location. It is not technically possible to pinpoint the origins and destinations of these movers. The findings presented here are based on where everyone in the survey was living during Wave 2.

The analysis focuses on three particular impacts of COVID-19: the labour market, household incomes and food security. These are clearly linked, with causation running from the labour market to household incomes and onto hunger. Changes in employment (job loss) result in a loss of earnings for households, which affects whether people go hungry. The severity of the shock has been moderated by social grants from the government. A special COVID-19 social relief of distress grant of ZAR350 per month was introduced in June 2020, along with various top-ups to existing grants and temporary relief for workers made unemployed.

**Asymmetrical urban impacts**

**Labour market effects**

The first and most important finding from the survey is that the pandemic has magnified pre-existing economic disparities between suburbs, townships and informal settlements within cities. The suburbs proved more resilient to the lockdown than other types of urban settlement. Suburbs started out in February in a much stronger position with 58% of adults in paid employment, compared with 51% in the townships, 45% in peri-urban areas and 59% among shack dwellers (Figure 1). The latter reflects the high level of informal enterprise among shack dwellers.

After the level 5 lockdown was imposed, the suburbs lost one in seven jobs (14%) by April, compared with one in four in the townships (24%) and peri-urban areas (23%) and more than a third of jobs (36%) in shack areas. Shack dwellers were extremely vulnerable to the restrictions on informal trading during the shutdown, demonstrating the precarious nature of their livelihoods.

The hard lockdown was eased to level 3 in May. Between April and June 2020, the suburbs showed slight signs of recovery, with approximately 5% of workers going back to paid employment. There was a similar bounce-back in the townships, but no sign of recovery in the peri-urban areas. Meanwhile, approximately half of the shack dwellers who lost their livelihoods were also able to resume their activities, presumably because the costs of restarting were limited.

The net result was that by June 2020, the economic slump had hit poor urban communities harder than it had the suburbs. This is most apparent from the divergent rates of unemployment between the neighbourhood types (Figure 2). The 2017 NIDS Wave 5 survey provides a useful baseline for purposes of comparison. There was only 12 percentage points difference in the unemployment rate between the different locations in 2017. However, by April 2020, the gap had widened to 20 percentage points. Every location suffered a sharp rise in unemployment, but particularly the peri- and shack areas. By June 2020, the unemployment differential had widened further to 27 percentage points. The suburbs and shack areas showed signs of bouncing back, but the townships and peri-urban areas did not. Consequently, the positions of the three poorer neighbourhood types were far worse in June 2020 relative to the suburbs than they were before COVID-19 struck.

**Social relief**

The second finding relates to the provision of social support. Peri-urban communities have been much bigger beneficiaries of government grants than have suburban residents. More than half of peri-urban respondents (54%) lived in households that received social grants in June 2020, compared with less than half of township residents (45%), two in five shack dwellers (40%) and one in four suburban residents (26%). This was because peri-urban residents were far less likely to be in paid employment.

In terms of special relief from the crisis, less than one in three peri-urban residents (29%) said that someone in their household had received the COVID-19 grant, compared with 27% in townships, 18% of shack dwellers and 16% in suburban areas. These differences are smaller than for other grants, suggesting that the COVID-19 grant is benefiting people who did not qualify for government support before, such as unemployed men. The proportion of shack dwellers receiving these and other grants is surprisingly low considering their levels of poverty and distress. Further research is required to explain this finding.
Sources: NIDS W5, NIDS-CRAM W12 and W26.

Notes: Expanded rate of unemployment (i.e. includes the non-searching unemployed). The sample comprises adults aged 18 years and older. Error bars are 90% confidence intervals. The data are weighted.

**Figure 2:** Rate of unemployment, 2017 to June 2020.

---

Sources: NIDS-CRAM W12 and W26.

Notes: Error bars are 90% confidence intervals. The data are weighted.

**Figure 3:** Percentage of adults who reported that their household ran out of money to buy food.
Government grants have clearly helped to protect livelihoods in poor communities and compensate for high unemployment rates. However, there is a corresponding risk to living standards if the temporary relief is withdrawn before the labour market has recovered. Such a scenario would aggravate human suffering and misery.

**Food security**

The third finding relates to hunger. The proportion of respondents who said their household had run out of money to buy food in April 2020 was 31% in the suburbs, 48% in the townships and 61% in the shack areas (Figure 3). Shack-dwellers were noticeably worse off than other urban respondents. This adds to the concern noted above that far fewer shack-dwellers receive government grants. By June 2020, these proportions had come down to 24% in the suburbs, 40% in the townships and 50% in the shack areas. In other words, hunger had declined everywhere, although the gap between the shack-dwellers and other groups was still large.

The proportion of respondents who said that someone in their household had gone hungry in the last seven days (in May/June 2020) was 11% in the suburbs, 22% in the townships and 32% in the shack areas. By July/August 2020, these proportions had come down to 7% in the suburbs, 16% in the townships and 22% in the shack areas. Conditions clearly improved, but the differences between urban neighbourhoods remained very large.

Summing up, government social grants helped to offset the large economic gaps between places, but the incidence of hunger was still much higher in informal settlements, townships and peri-urban areas than in the suburbs.

**Conclusion**

Further research is required to substantiate and extend this initial evidence of the asymmetric impact of COVID-19 across South Africa. The situation is dynamic and evolving as the restrictions are relaxed and different economic sectors show different levels of recovery. It is vital to recognise that different parts of the country face different challenges and risks of further setbacks, depending on how the pandemic unfolds and evolves. Poor communities have borne more of the burden of the lockdown than have suburban communities. Treating unequal places in the same way will not narrow the gap between them. Blanket national measures have not been sensitive to these variations, with the unintended consequence of amplifying inequalities. National programmes need complementary efforts to boost jobs and livelihoods in and around vulnerable communities. This means targeting particular kinds of places as well as specific groups of people in tackling poverty and unemployment. It also means working closely with affected communities in formulating and implementing appropriate responses.

**Acknowledgements**

We thank NIDS-Cram for funding the research report on which this paper is based.

**Competing interests**

We have no competing interests to declare.

**Authors’ contributions**

I.T.: Conceptualisation, oversight, writing. J.V.: Conceptualisation, methodology, data analysis.

**References**

1. Organisation for Economic Co-operation and Development (OECD). OECD Economic outlook: Interim report September 2020. Paris: OECD; 2020. https://doi.org/10.1787/34ff9c90-en
2. Spaull N, Ardington C, Bassier I, Bhorat H, Bridgman G, Brophy T, et al. NIDS-CRAM Wave 1 synthesis report: Overview and findings [document on the Internet]. c2020 [cited 2020 Sep 22]. Available from: https://cramsurvey.org/reports/#wave-1
3. Statistics South Africa. Key findings: P0441 – Gross Domestic Product, second quarter 2020 [document on the Internet]. c2020 [cited 2020 Sep 22]. Available from: http://www.statssa.gov.za/publications/P0441/P04411stQuarter2020.pdf
4. Turok I. Worlds apart: Spatial inequalities in South Africa. In: Smith MN, editor. Confronting inequality: The South African crisis. Johannesburg: Jacana Media; 2018. p.129–151.
5. Todes A, Turok I. Spatial inequalities and policies in South Africa: Place-based or people-centred? Progr Plann. 2018;123:1–32.
6. Spaull N, Oyenubi A, Kerr A, Maughan-Brown B, Ardington C, Christian C, et al. NIDS-CRAM Wave 2 synthesis report: Overview and findings [document on the Internet]. c2020 [cited 2020 Sep 22]. Available from: https://cramsurvey.org/reports/#wave-2
7. Posel D, Casale D. Who moves during times of crisis? Mobility, living arrangements and COVID-19 in South Africa. NIDS-CRAM Wave 1 Working Paper [document on the Internet]. c2020 [cited 2020 Sep 22]. Available from: https://cramsurvey.org/reports/#wave-1
8. National Income Dynamics Survey Wave 5 [data set on the Internet]. c2020 [cited 2020 Sep 22]. Available from: http://www.nids.uct.ac.za/nids-data/data-access