



WAVE 5

National Income Dynamics
Study (NIDS) – Coronavirus
Rapid Mobile Survey (CRAM)

Driven further apart by the pandemic? Contrasting impacts of COVID-19 on people and places

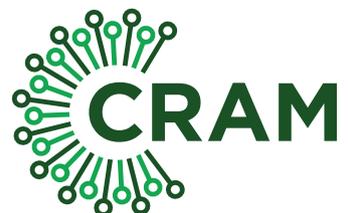
Justin Visagie - Human Sciences Research Council, University of the Free State

Ivan Turok - Human Sciences Research Council, University of the Free State

8 July 2021



N.i.D.S.
NATIONAL INCOME DYNAMICS STUDY



CORONAVIRUS RAPID MOBILE SURVEY 2020

Driven further apart by the pandemic?

Contrasting impacts of COVID-19 on people and places

Justin Visagie¹

Ivan Turok²

Abstract

COVID-19 has exposed the fault lines that distinguish the lives and livelihoods of different social and racial groups in South Africa. Analysis of the pandemic's stark spatial divides has been neglected in comparison. Yet the crisis has unfolded in different ways across the country, and the inequalities in income and well-being between social groups have tended to get accentuated by the differences between places. This paper explores the spatial impact of the pandemic on people and places over the last 12 months. The socio-economic consequences are explored both in terms of different parts of the country (metros, smaller cities/towns and rural areas) and between neighbourhood types within urban areas (suburbs, townships, shack dwellers and peri-urban areas). A positive finding is that employment levels and food insecurity have improved for most communities over the past year, following the initial shock caused by the strict lockdown. The COVID-19 SRD grant was also well targeted towards poorer communities, although it has since been terminated. A sobering message is that many people and places throughout the country remain vulnerable to hardship and misery, and that the poorest communities have suffered most during the crisis. Levels of hunger are still very high, even 12 months since the start of the pandemic. Urban shack dwellers stand out as being at particular risk of harm and have been most severely impacted all-round.

¹ Senior Research Specialist, Inclusive Economic Development, Human Sciences Research Council (HSRC) and Senior Lecturer, Department of Economics and Finance, University of the Free State

² Distinguished Research Fellow, Inclusive Economic Development, HSRC, and NRF Research Professor, Department of Economics and Finance, University of the Free State

Executive Summary

COVID-19 has exposed the stark disparities in income, hunger and education between social and racial groups in South Africa. Analysis of the spatial fault lines of the pandemic has been somewhat neglected in comparison. Yet the crisis has unfolded in different ways across the country, and the inequalities between social groups tend to get accentuated by the differences between places. This paper explores the spatial impact of the pandemic on people and places over the last 12 months. The socio-economic consequences are explored both in terms of different parts of the country (metros, smaller cities/towns and rural areas) and between different neighbourhood types within urban areas (suburbs, townships, shack dwellers and peri-urban areas).

Large gaps in employment conditions persist between metros, cities/towns and rural areas, although there has been some recovery everywhere since the initial shock of the hard lockdown. All regions experienced a slump in employment of almost 10 percentage points when the economy was shut down. Employment fell even further in rural areas to a record low of 35% by June 2020. However, rural areas appeared to bounce back strongly subsequently, and employment levels seemed even higher than pre-pandemic by March 2021. Rural jobs may have benefited from special circumstances that have buoyed agricultural production. Towns/cities also recovered to pre-pandemic levels but **the metros still have some way to go to get back to the pre-existing position.** By March 2021, 55% of adults were in employment in the metros, compared to 50% in cities/towns and 46% in rural areas.

Although metro employment levels have still not fully recovered, their jobs have generally been more secure than those elsewhere. 35% of adults in the metros were consistently employed in every period, compared with 27% in towns/cities and only 16% in rural areas. Conversely, 39% of adults in the metros had intermittent spells of employment, compared with 44% in towns/cities and 53% of adults in rural areas. **In other words, although rural areas appear to have experienced a strong recovery in employment levels, many of these appear to have been temporary posts.**

Turning to different neighbourhoods within urban areas, **shack-dwellers faced the biggest jobs slump under the hard lockdown and their recovery has been the most muted.** Townships and peri-urban areas also faced a sharp drop in employment during the lockdown, but they have had a more robust bounce-back. Meanwhile, the reduction in employment levels for adults living in suburbs was the mildest and they had probably fully recovered, or come very close, by March 2021. Therefore, **urban shack dwellers have fared worst of all groups over the last 13 months in terms of lost livelihoods.**

Shack dwellers were also the most likely of all groups to experience intermittent spells of employment rather than sustained jobs. In contrast, adults living in suburbs were almost twice as likely to be in steady employment in every period than adults in other settlement types. 42% of adults living in suburbs were always employed compared with 27% in the townships, 28% of shack dwellers and only 19% in peri-urban areas. The same share of adults were never in employment (approximately 25%) when comparing suburbs, townships and shack dwellers.

In summary, the pandemic had adverse employment outcomes for all places, but the poorest localities tended to be worst affected in terms of the quantity and/or quality of jobs. **Urban shack dwellers stand out as having experienced the greatest loss of jobs and weakest recovery by March 2021.**

The COVID-19 Social Relief of Distress (SRD) grant provided disproportionate benefit to areas in greatest need (i.e. places with low employment levels). It therefore appears to have met its basic objective of being directed towards concentrations of vulnerable adults with no other source of income. Access to an SRD grant increased in all areas between June and

October 2020 and remained at a high level subsequently. As many as 40% of adults living in rural areas reported that someone in their household received a SRD grant in March 2021. This compares with 32% in cities/towns and 28% in the metros. Within cities, 18% of adults living in suburbs said someone in their household received a SRD grant in March 2021, compared with approximately 35% in townships, peri-urban areas and shack dwellers. The consequences for household resources of the SRD grant being terminated in April 2021 are of concern.

The COVID-19 Temporary Employer/Employee Relief Scheme (TERS) benefited far fewer people than the SRD grant. It was also distributed slightly more towards high employment areas than low employment areas. A slightly higher percentage of adults in the metros received TERS compared with rural areas. In March 2021, 8% of adults in the metros received TERS compared with 5% in cities/towns and 3% in rural areas. Settlement types within urban areas showed even smaller differences in TERS receipt at around 6%. **A steady decline in TERS between April 2020 and March 2021 for all areas is consistent with the time-limited nature of the TERS benefit and the economic recovery that was underway.** However, there are new concerns about the ability of laid-off workers to pay their bills and feed their families following the level 4 lockdown being reinstated in June 2021, unless the TERS benefit is reintroduced.

The contrasting vulnerability of different communities is clearly revealed by their risk of hunger. **After the initial spike, all areas experienced fewer adults saying their household had run out of money to buy food that month.** The decline was greatest for rural communities, presumably because of the employment recovery and the SRD grant. Metros ended up better-off than other areas with 32% saying they ran out of money for food compared with 36% in cities/towns and 39% in rural areas. Nevertheless, it was still the case that **more than one in three adults said their household ran out of money to buy food in March 2021, whether in metros, towns/cities or rural areas. This is better than it was in April 2020, but it is still far above pre-pandemic levels.** The prospect of another economic and employment downturn in July/August 2021 without any additional government relief for those affected is concerning.

After the initial spike in April 2020, the percentage of adults who said that someone in their household had gone hungry in the past week also declined in all regions, especially in rural areas which were worst off to start with. By April/May 2021, 19% of adults said that someone in their household had gone hungry compared with 17% in cities/towns and 14% in metros. In the metros, 70% of adults said that no-one in their household was ever hungry in any of the waves, compared with 57% in rural areas. **So, almost half of adults in rural areas said their household had experienced hunger in the last 10-12 months.**

Food insecurity was more polarised within urban areas than between rural and urban communities. The percentage of adults who said their household had run out of money to buy food was 22% in the suburbs compared with 37% in the townships, 39% in peri-urban areas and 46% amongst shack dwellers in March 2021. This was still very high, but an improvement of more than 10 percentage points (15 percentage points for shack dwellers) compared with April 2020 during the hard lockdown.

Hunger was still common among poor urban communities in April/May 2021, with 23% of shack-dwellers, 21% of adults in peri-urban areas and 18% of adults in the townships saying that someone in their household had gone hungry over the past week. These numbers were at least 5 percentage points lower than in May/June 2020 (and nearly 10 percentage points lower for shack dwellers). 80% of adults in the suburbs said that their household had never experienced hunger in any of the surveys, compared to 57% in townships, 60% in peri-urban areas and 54% among shack dwellers. **Hence, more than 2 out of every 5 adults in poorer urban communities experienced hunger in the last 10-12 months.**

Attitudes and behaviours towards COVID-19 health risks also varied across the country. The perceived likelihood of a respondent catching the virus fluctuated over the period, yet it was always higher in the metros than in the cities/towns and rural areas. This was the same for people saying they knew someone who had been diagnosed with COVID-19. **Despite lower perceived health**

risks of COVID-19 in rural areas, people's willingness to get vaccinated was slightly higher than in urban areas. 75% of rural residents were strongly in favour of getting vaccinated compared with 66% in the metros and 69% in cities/towns. This is surprising considering the higher incidence of COVID-19 in the metros.

Within urban areas, the self-assessed risk of catching COVID-19 was almost 45% in April/May 2021 among people in the suburbs, townships and shack dwellers compared with 31% for peri-urban areas. Interestingly, **suburban residents were much more likely to know someone who had been diagnosed with COVID-19 at 53%, compared with 36% in the townships and less than 30% in peri-urban areas and among shack dwellers.** This may reflect the higher level of testing within the suburbs.

Mask wearing was much more common in the suburbs than in poorer urban communities. **Two-thirds of suburban residents said that most people wore masks in public, whereas less than half of township residents and shack dwellers said so.** This suggests that some groups are more willing - or resigned - to accepting social risks than others, which presumably reflects their vastly different socio-economic conditions and exposure to many other social hazards.

Lastly, people's willingness to get vaccinated also varied across neighbourhood types. **Less than 60% of suburban residents were strongly in favour of getting vaccinated, compared with 70-75% amongst poorer urban residents.** The hesitancy could reflect the greater autonomy and/or lower vulnerability of affluent suburban residents, who might be less trusting of government and have greater access to diverse information sources raising doubts about the efficacy and side-effects of certain vaccines.

1. Introduction

Where people live has always had a profound effect on their well-being, prosperity and life chances in South Africa. Location influences access to jobs, schools, healthcare and other facilities, as well as vulnerability to disease, crime and other social hazards. People's place of residence also affects whether they feel included or excluded from the wider society and public decision-making.

The unprecedented nature of the coronavirus pandemic and lockdown response has accentuated the influence of geography on people's lives and livelihoods, thereby amplifying spatial divides. While many suburban residents have been able to adjust fairly easily to remote working, studying and entertainment, many households living in townships and rural areas have not had the same opportunities and been forced to make difficult choices between going out to work, using public transport, caring for relatives and staying safe at home. Far more of them have lost their jobs and incomes, experienced hunger and struggled with digital connections.

Many people living in informal urban settlements and peri-urban areas without piped water and sanitation have been unable to follow even the basic COVID-19 behavioural protocols of hand washing and social distancing to prevent infection. Their crowded living conditions and precarious livelihoods have heightened their risks of contracting the disease, falling ill and dying. Complying with the official coronavirus containment restrictions has been particularly difficult in these harsh circumstances.

Consequently, the twin public health and economic shocks of the pandemic have both exposed and reinforced pre-existing fault lines between and within regions. This is disturbing because these economic and social disparities were already very large and the source of considerable social discontent, resentment and disengagement. Structural inequalities and social polarisation of this kind make the tasks of finding common purpose to contain the pandemic and to fashion a robust and equitable recovery that much more difficult.

The purpose of this report is to understand the uneven socio-economic effects of COVID-19 on different communities and to assess how the impact has unfolded over time since the onset early in 2020. Recognising the extent and significance of spatial variations during the pandemic is vital to go beyond national average measures of the impact, which can be very misleading in a country like South Africa. Spatial analysis is also necessary to develop differentiated plans and policy responses that are sensitive to realities on the ground and that leave no-one behind. Recognising uneven impacts is important too for getting people to cooperate in their everyday activities to contain the growth in infections and to mobilise community-level actions to tackle the devastating economic and human consequences.

The government has generally favoured a uniform, centralised response to the pandemic on the grounds of national unity, solidarity, resource mobilisation and urgency in disaster management. Central planning and direction are necessary and appropriate for conveying moral leadership, pursuing regulatory oversight, obtaining the best scientific research and advice, procuring specialised items such as ventilators and vaccines, maximising the macro-economic stimulus and providing universal social grants to protect vulnerable groups from the loss of jobs and livelihoods.

However, there are important reasons for grounding at least some of these policies in local knowledge and experiences, and for tailoring certain programmes more closely to the diverse circumstances in different places. For example, lockdown restrictions should be tighter where the contagion is surging and hospitals are under pressure, but they could be more lenient when and where infections are much lower in order to limit the extent of economic disruption and damage. Screening, testing and tracing people to monitor the spread of the virus and to isolate those at risk also requires a localised approach focused on the pandemic hotspots.

In addition, there are sound reasons for mobilising local groups and communities to play a bigger part in managing aspects of the crisis and associated recovery programmes to build forward better. Ensuring that people follow the lockdown protocols of wearing masks, washing hands and social

distancing is a good example. Encouraging people to take up the offer of free inoculation against the virus is another. These constructive behaviours depend on citizens having trust in government and confidence in scientific advice. These are generally fostered by public consultation, popular participation and decentralised decision-making, rather than by national decrees, directives and authoritarian controls.

The report draws on all five waves of the NIDS-CRAM survey, conducted between May 2020 and May 2021. A broadly representative sample of approximately 7,000 adults were interviewed over the telephone during this period, with some attrition between each wave of the survey.

The structure of the report is as follows. The next section discusses the methods, data sources and definitions adopted. Section three examines the labour market effects, access to COVID-related government support, levels of food insecurity and finally social behaviour and attitudes to COVID-19. Each section begins by considering the contrast between metros, cities/towns and rural areas. It then examines the differences within cities between suburbs, townships, informal settlements and peri-urban areas. The report ends with some reflections on the key findings and implications for policy.

2. Methods and definitions

2.1. Spatial analysis of the NIDS-CRAM survey

This paper draws upon survey data from waves 1-5 of the National Income Dynamics Study: Coronavirus Rapid Mobile Survey (NIDS-CRAM). The NIDS-CRAM was designed as a 'barometer' for assessing the socio-economic impact of the COVID-19 pandemic on South African individuals and households in the 12 months or so since the onset of the hard lockdown and the ensuing economic crisis (Spaull et al, 2020). The survey was based upon a sample of adults who were previously surveyed as part of Wave 5 of the National Income Dynamics Study (NIDS) in 2017. Hence, the NIDS-CRAM provides another five rounds of socio-economic data for a subsample of individuals (aged 18 years and older) from the NIDS:W5 who were re-interviewed in May/June 2020 (NIDS-CRAM: W1), July/August (NIDS-CRAM: W2), November/December 2020 (NIDS-CRAM: W3), February/March 2021 (NIDS-CRAM: W4) and April/May 2021 (NIDS-CRAM: W5).

We analyse the NIDS-CRAM mainly as a series of cross-sections which can be interpreted as "a broadly representative sample of South African adults from 2017, who were re-interviewed in 2020" (Ingle et al, 2021). The sample sizes for each wave are admittedly quite small (W1: n=7,073; W2: n=5,676; W3: n=6,130; W4: n=5,629; W5: n=5,862), but they still allow for robust comparisons of socio-economic conditions between people and places, notwithstanding the margin of error. We are careful to point out where differences between estimates may not be statistically significant and provide a supplementary list of tables in the appendix with 90% confidence intervals for all our results.

In a few instances we take advantage of the data as a panel to explore how individuals moved into and out of certain socio-economic conditions (such as hunger and employment). This offers a dynamic view of changing conditions facing segments of the population which is masked by a static evaluation of cross-sections. The balanced panel includes 3,456 individuals who were successfully interviewed in each wave, with panel weights applied to mitigate against attrition. There are inevitable differences between estimates produced using the NIDS-CRAM as a balanced panel compared to its use as a series of cross-sections, although we depend upon both for different purposes.

A natural concern with our findings is the extent to which the NIDS-CRAM might under- or over-sample segments of the population from particular regions. Both the NIDS and NIDS-CRAM apply weights which were calibrated to improve representivity between sample and population, and explicitly include spatial controls (see Kerr et al, 2020 and Branson and Wittenberg, 2019). However

the original NIDS 2008 sample (which the NIDS-CRAM is based upon) is limited in its design for sub-national analysis. Therefore we take care to focus our analysis on larger geographic aggregations and avoid reporting at a provincial level.

The different components of our analysis – ranging from employment, to social grants, hunger, social attitudes and behaviour towards COVID-19 – present a consistent and plausible account of socio-economic change within different kinds of communities. The coherence and lack of contradiction adds confidence to our findings and conclusions, notwithstanding certain instances where the sample sizes are too small or the recorded differences between categories are not large enough to be statistically significant. South Africa faces very large disparities in livelihoods and living conditions between places which emerge very strongly from the NIDS-CRAM data.

2.2. Definitions of geography

We divide up the NIDS-CRAM sample into different territories using two complementary approaches: an ‘urban versus rural’ typology based upon reported place of residence, and an ‘urban neighbourhoods’ typology based upon an individual’s perception of their neighbourhood type.

2.2.1. Urban versus rural areas

An ‘urban versus rural’ typology is derived from the residential address of the respondent as reported during the telephonic interview. This is subsequently matched to an urban or rural sub-place categorisation provided by Statistics South Africa from the Census 2011. We also distinguish between individuals living within South Africa’s largest metropolitan regions and all other urban areas. We end up with a threefold classification of ‘urban versus rural’ areas:

- ‘Metros’: the eight largest urban agglomerations in South Africa. These are defined as sub-places that fall within metropolitan municipalities. The eight metros are Johannesburg, Cape Town, eThekweni, Ekurhuleni, Tshwane, Nelson Mandela Bay, Buffalo City and Mangaung.
- ‘Cities/towns’: smaller cities and towns. These are technically defined as sub-places that fall within urban areas according to StatsSA but excluding those within metropolitan municipalities.
- ‘Rural areas’: rural and either commercial farms or land governed by traditional authorities. These cover the rest of the country and are areas classified as ‘rural’ according to StatsSA.

Figure A1 and *Table A1* in the appendix illustrate the spread of the urban-rural population across the five waves of the NIDS-CRAM. The NIDS-CRAM sample is stable over time, although seems to under-represent rural communities, particularly in W1, if compared to the NIDS W5 or Community Survey 2016.³ We reiterate that our findings are exploratory and hard facts should be backed up with evidence from other sources.

2.2.2. Urban neighbourhoods

South African cities are notorious for extreme levels of inequality and entrenched socio-spatial segregation. Focusing on aggregated trends between urban and rural areas risks creating the wrong impression about the living conditions and life-chances of many poorer urban residents. Therefore, as an extension to the urban-rural typology, we also identify different sorts of neighbourhoods within urban areas. These are based upon a respondent’s perception of their neighbourhood type.⁴

We divide our urban sample into the following four-fold classification of ‘urban neighbourhoods’:

³ A closer inspection of the data suggests that there were some arbitrary differences in the way in which residential addresses were captured and classified in some of the earlier NIDS-CRAM waves. This mainly impacts on W1 and W2 as historic data was used to classify the large majority of the NIDS-CRAM sample from W3 onwards. However, in the end, a strong majority of respondents end up with a consistent geographical classification in all waves. Visagie and Turok (2020) demonstrate that age, race and gender profiles for urban and rural areas in the NIDS-CRAM W1 and W2 were very consistent with the NIDS W5 and Community Survey 2016.

⁴ The NIDS-CRAM questionnaire asks: “Which of the following best describes the area you live in now: Traditional, informal settlement, township, formal residential, farm, or small holding?”

'Suburbs': which residents perceive as "formal residential" areas. This category could include a variety of urban neighbourhood types including individuals living in apartment blocks through to affluent households in low-rise suburbia.

'Townships': which residents perceive as "townships". Former black townships have been slow to transform and many experience inadequate infrastructure and low levels of formal economic activity.

'Shack-dwellers': which residents perceive as "informal settlements". We augment this category to include residents who recorded living in "an informal house like a shack" and hence explicitly include other forms of informality such as backyard shacks. Shack dwellers is not a pejorative term. In fact, it is the phrase used by an international social movement of community-based organisations across 33 countries across the global South called Shack Dwellers International.

'Peri-urban': which residents perceive as a range of low-density categories including "farm", "small holding" or "traditional". We have imposed the condition that a person's sub-place was classified as urban or metropolitan by StatsSA and hence these neighbourhoods would be in or around the urban fringe.

Our urban neighbourhood classifications are based upon the respondent's perception of their area type which is inherently subjective. There is bound to be some discrepancy between how individuals perceive their neighbourhood and how this would be defined through geo-referencing.⁵ It should also be noted that W1 of the NIDS-CRAM survey did not collect information on neighbourhood type. Therefore we impute missing information on neighbourhood type for W1 from W2 which could introduce some minor discrepancies.⁶ Notwithstanding these limitations, *Figure A2* and *Table A2* in the appendix suggest that intra-urban categories were actually very stable across each of the NIDS-CRAM waves: 29-32% of respondents were in 'suburbs', 37-38% in 'townships', 14-15% were 'shack dwellers' and 17-18% in 'peri urban' areas.

We do not claim that our perception-based classification system of neighbourhoods can or should replace rigorous analysis of cities based upon fine-grained spatial data. However, we believe that it provides some important clues about the trajectories of different neighbourhood types.

3. Results

3.1. Labour market

This section discusses the impact of the pandemic on employment conditions in different parts of the country, starting with the contrasts between urban and rural areas, and then considering the differences between neighbourhood types within cities.

Urban versus rural areas

The overall level of employment in South Africa fell sharply by almost 10 percentage points during the first few months of the lockdown because of the stringent restrictions on most forms of economic activity and population movement, except for essential sectors and workers. Interruptions to global supply chains and faltering external demand also damaged economic output and jobs during the first half of the year. There was a rebound during the second half of 2020 as most of the lockdown restrictions were lifted. Consequently, most businesses resumed their activities and many people

⁵ It is possible for respondents to arbitrarily switch their perceived neighbourhood type across waves – this was most noticeable for a minority of individuals who classified their neighbourhood type as 'formal residential' which is an open-ended category. However switches between neighbourhood types impact on a small share of respondents and were not large enough to alter the distribution of neighbourhood types across waves.

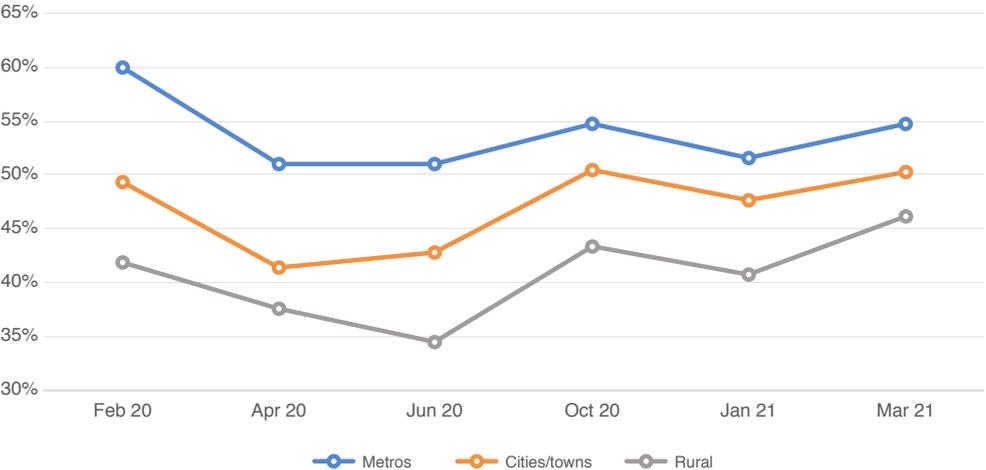
⁶ 82% of the W2 sample indicated they were living in the same dwelling as when interviewed in W1.

went back to work. Towards the end of the year a second wave of the pandemic brought about a further tightening of the containment measures, which resulted in another bout of job losses by the start of 2021. Since then there has been another modest recovery in employment nationwide as the lockdown restrictions have been relaxed.

Figure 1 shows that all parts of the country have followed this broad pattern, although their starting points were very different. Some 60% of adults in the metros were in employment in February 2020 compared with only 42% of adults in the rural areas, with smaller cities/towns somewhere in between at 49%. They all experienced a sharp contraction in jobs of almost 10 percentage points in the subsequent period. Employment slumped even further in rural areas to a record low of 35% by June 2020. However, rural areas appeared to bounce back more strongly than other places subsequently, and by March 2021 employment levels seemed to be even higher than pre-pandemic (although we must caution that this trend was only weakly significant). Rural jobs may have benefited from favourable weather conditions across the country and buoyant international prices for agricultural produce, driven mainly by higher demand from China, which have boosted agricultural production and confidence to record levels over the last year or so (Sihlobo, 2021; Institute for Economic Justice, 2021). One qualification to this positive story is that many of the jobs in rural areas appear to be intermittent or temporary (see Figure 2). Hence it could be that the recovery has consisted mainly of seasonal agricultural jobs, which cannot be equated to permanent positions.

Employment levels in the metros appear to have been more stable than in the rest of the country since the initial shock of the lockdown. This could be simply because their local economies are much larger and more diverse than those of cities/towns and rural areas, and therefore more resilient to both positive and negative shocks affecting particular industries. Nevertheless, the employment rate in the metros remains about 5 percentage points lower than it was in February 2020 (at 55%), so there is a considerable way to go to full recovery. Cities/towns appear to be slightly better off than a year ago, but this is within the margin of error and not statistically significant. The net result is that there has been an apparent narrowing of the employment gap between urban and rural areas over the last 13 months.

Figure 1: Urban vs rural: Employment to population ratio (including furloughed workers)



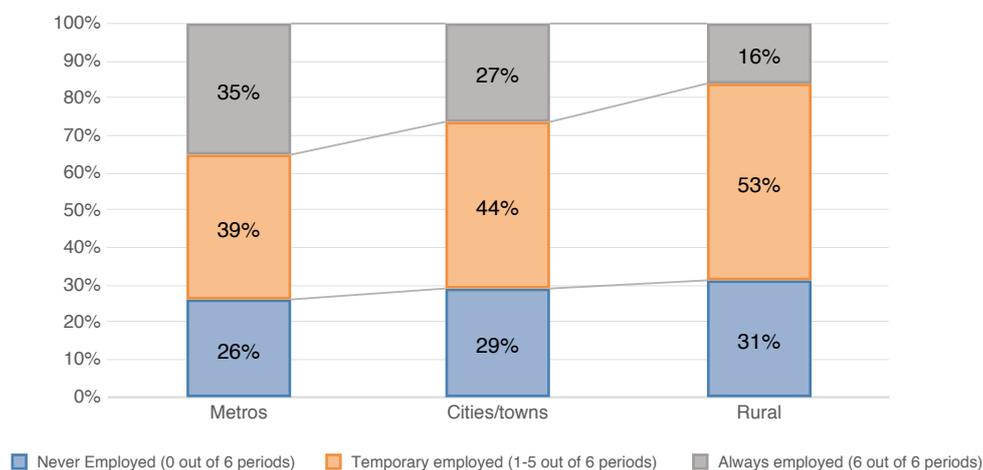
Source: NIDS-CRAM W1-W5

Notes: See Table A3 in the appendix for confidence intervals. The data are weighted.

The survey provides evidence relating to the quality as well as the quantity of employment in each area. One indicator of quality is whether the jobs are held temporarily or are sustained over time. Figure 2 shows the proportion of adults in each type of area who were employed throughout, experienced intermittent spells of employment (they had a job for at least one, and at most five, periods out of the six covered by the survey), or were never employed over the last 13 months. The differences across the settlement categories are large and statistically significant. There was relative job stability in the metros and a high level of attrition, or ‘churn’, in the rural areas as people moved in and out of temporary jobs.

Adults living in the metros were much more likely to be in steady employment in every period than adults elsewhere. 35% of adults were consistently employed in the metros, compared with 27% in towns/cities and only 16% in rural areas. Conversely, 39% of adults in the metros had intermittent employment, compared with 44% in towns/cities and 53% of adults in rural areas. Seasonal employment tends to be more common in rural areas, affecting tourism and hospitality industries as well as agriculture. In other words, although rural areas appear to have experienced a strong recovery in the quantity of jobs, many of these appear to have been temporary. Although metro jobs have still not fully recovered, their jobs have been more secure than those elsewhere.

Figure 2: Urban vs rural: Labour market stability and churn



Source: NIDS-CRAM W1-W5

Notes: See Table A4 in the appendix for confidence intervals. Balanced panel. The data are weighted.

Urban neighbourhoods

Figure 3 shows a more diverse pattern of employment change for neighbourhoods within urban areas compared with the differences between urban and rural areas. Employment levels among urban shack dwellers fluctuated widely and they fared worst of all settlement types over the period. They started at a high level in February 2020, but collapsed during the hard lockdown with a large and significant 17-18 percentage point reduction in the employment rate when many shack dwellers lost their jobs and livelihoods.

One important reason for this was that many shack dwellers engage in informal trading, given its low barriers to entry and the shortage of jobs in the formal economy. However, informal traders were prohibited from operating early on during the pandemic to minimise the risk of spreading the virus. The Cabinet decision to ban informal trading was widely criticised as unreasonable and socially damaging (Battersby, 2020). The restriction hit informal traders particularly hard because they lack the legal and financial protections generally available to formal workers operating in regulated parts of the economy, such as contributory social insurance. Restrictions were also imposed on charities and other non-profit organizations distributing emergency food parcels in townships and informal settlements.

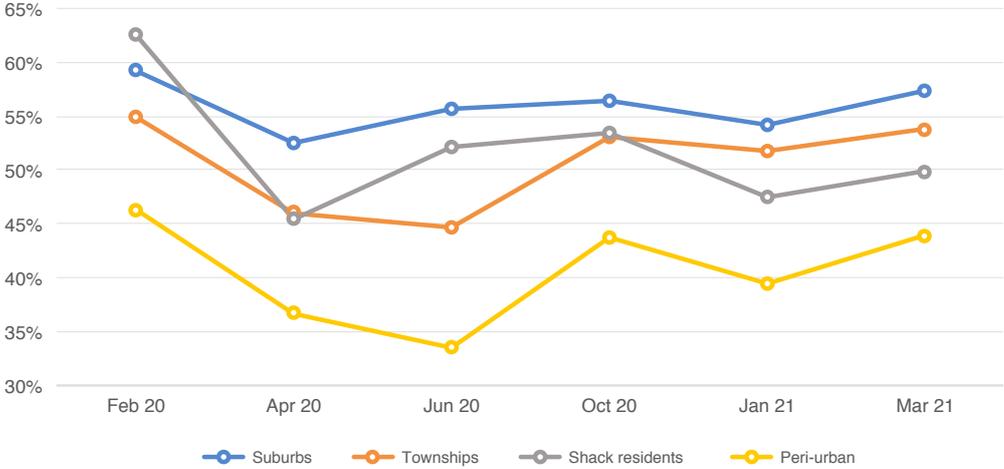
There was a partial rebound in employment among urban shack dwellers in the middle of 2020 after many of the restrictions were lifted and informal enterprises were able to resume their activities. However, this recovery does not appear to have been sustained because the second wave of the pandemic resulted in further restrictions on economic activity and movement, with knock-on effects for consumer demand and spending on the goods and services supplied by informal traders and other retail outlets.⁷ By March 2021, the employment rate of urban shack-dwellers was still more than 10 percentage points lower than the rate before the pandemic. The impact on household resources and poverty is bound to have been severe given the lack of savings and extreme financial precariousness among informal workers (Bassier et al, 2021).

⁷ Fluctuations in employment relating to additional restrictions during the second wave were less severe than the hard lockdown and therefore only weakly significant.

The employment trajectory for suburban residents was quite different. They experienced the smallest reduction in the employment rate of 'only' 7 percentage points and had almost fully recovered by March 2021 (the remaining difference of 2 percentage points was not statistically significant). Hence suburban residents proved to be the most resilient and least vulnerable to the COVID-19 shock, presumably because more of them occupied higher-skilled positions in sectors that were least disrupted by the pandemic and they were able to continue working from home using digital connections.

Townships and peri-urban areas faced a larger drop in employment than the suburbs between February and April 2020, but the data suggests that they might have recovered by March 2021. Their trajectories fluctuated more than the suburbs, but less so than shack dwellers. Peri-urban areas have had a persistently lower employment rate than other urban areas, presumably reflecting their greater physical isolation from economic opportunities, and greater reliance on subsistence activities and livelihoods, such as smallholder farming.

Figure 3: Urban neighbourhoods: Employment to population ratio (including furloughed workers)



Source: NIDS-CRAM W1-W5

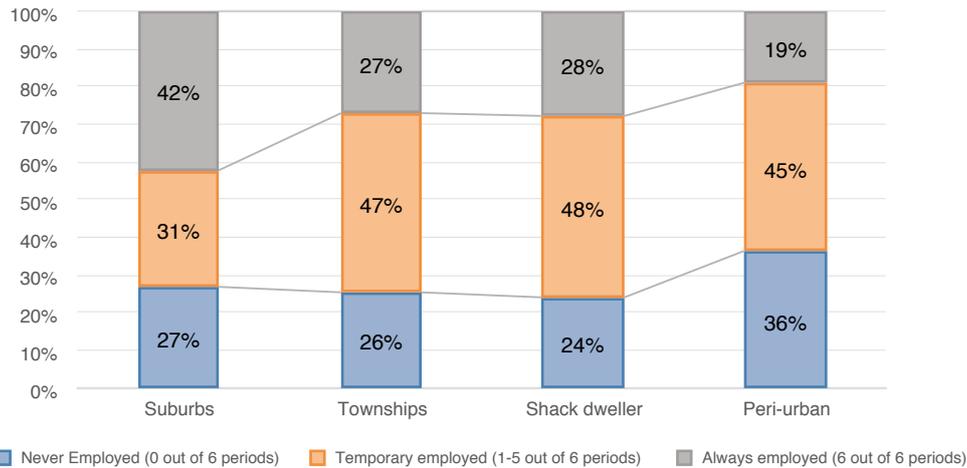
Notes: See Table A3 in the appendix for confidence intervals. The data are weighted.

Sizeable differences have also emerged between the stability of employment across the different neighbourhood categories. Figure 4 shows the proportion of adults in each type of settlement who were employed throughout, experienced intermittent spells of employment, or were never employed over the last 15 months. It shows that adults in the suburbs were much more likely than adults living elsewhere to be in steady employment in every survey. 42% of adults were consistently employed in the suburbs, compared with 27% in the townships, 28% of shack dwellers and only 19% in peri-urban areas. Suburban residents were more likely to work in stable occupations and to be able to work from home.

People in poorer types of urban neighbourhood were much more likely to experience intermittent spells of employment than suburban residents. The proportion of adults who were temporarily employed in the suburbs was 31%, compared with 47% in the townships, 48% in the shack areas and 45% in the peri-urban areas. These proportions are very high, indicating substantial attrition, or 'churn', as people move in and out of temporary jobs. Employment patterns everywhere could well have been disrupted by changing lockdown restrictions during the course of the pandemic. This is likely to have applied particularly to high-contact service industries such as retailing, restaurants, entertainment and domestic work (Institute for Economic Justice, 2021).

Adults in peri-urban areas were most likely to have never been employed at all during the survey period. More than a third (36%) never had a job at any point. This was about 10 percentage points higher than in the other neighbourhood types, presumably reflecting the marginal physical location of peri-urban areas in relation to economic opportunities.

Figure 4: Urban neighbourhoods: Labour market stability and churn



Source: NIDS-CRAM W1-W5

Notes: See Table A4 in the appendix for confidence intervals. Balanced panel. The data are weighted.

Summing up, a striking finding emerging from the evidence of labour market effects concerns the contrast between suburban areas, on the one hand, and rural and peri-urban areas, on the other. The negative shock of the pandemic had an adverse impact on jobs everywhere. However, the suburbs had substantially more people in employment and more stable jobs throughout the period of the last 15 months than the rural and peri-urban areas. Urban shack dwellers stand out as having experienced the greatest loss of jobs and weakest recovery by March 2021.

3.2. Government Support

This section considers key forms of emergency relief provided by government grants and examines the extent to which they cushioned households in different places from the severe economic shock of the pandemic.

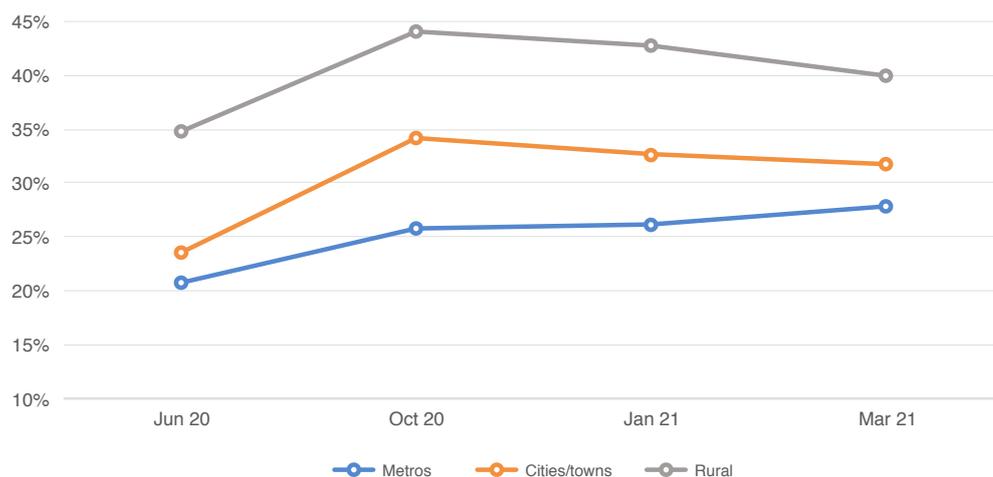
Urban versus rural areas

The Government introduced the COVID-19 Social Relief of Distress (SRD) grant in June 2020 to provide emergency support to adults who were unemployed but not receiving any other grant or support from the Unemployment Insurance Fund. The value of the grant was a modest R350 per month. The NIDS-CRAM survey data shows that the SRD grants delivered fairly high and disproportionate benefits to areas with low employment levels, i.e. places of greatest need. The measure therefore appears to have met its basic objective of assisting people without alternative sources of income.

The level of receipt of the SRD grant increased by a significant margin in all areas between June and October 2020 as households became aware of the money being made available and their applications were processed and approved by the relevant government department. In October 2020 nearly half of all adults in rural areas said that someone in their household received a SRD grant. This was nearly twice as many compared with the metro areas.

By March 2021, 40% of adults living in rural areas reported that someone in their household received a SRD grant. This compares with 32% in cities/towns and 28% in the metros. The contrasting trajectory of receipt of the SRD grant between October 2020 and March 2021 in the three types of area was fairly slight and therefore may not be statistically significant, but warrants further investigation. The ending of the SRD grant in April 2021 is bound to have caused financial difficulties for many households, given the high level of receipt across the country and the slow recovery in jobs.

Figure 5: Urban vs rural: Percentage of adults reporting their household received a COVID-19 SRD Grant



Source: NIDS-CRAM W2-W5

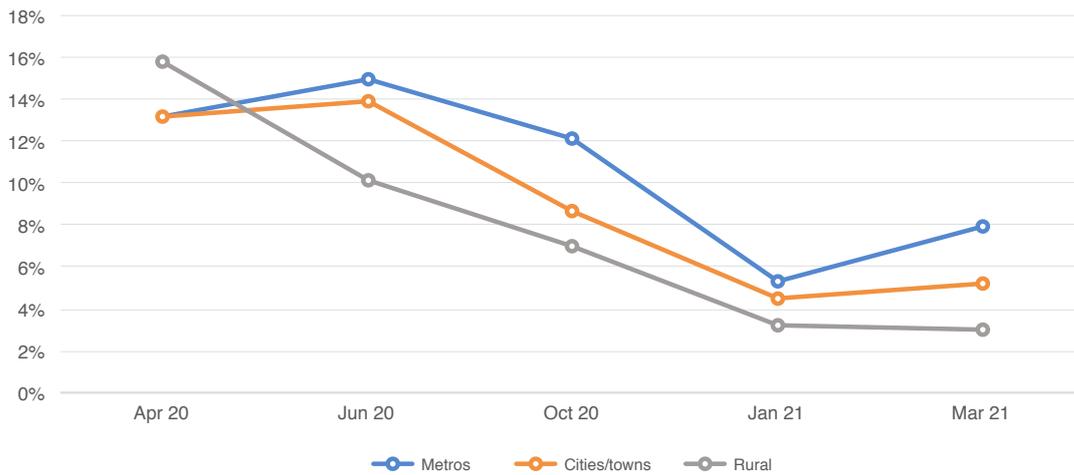
Notes: See Table A5 in the appendix for confidence intervals. The data are weighted.

In March 2020 the Government established the COVID-19 Temporary Employer/Employee Relief Scheme (TERS). It was funded through the Unemployment Insurance Fund and was designed to cushion people in formal employment who were going to be laid off because of the pandemic and the strict lockdown. Employers were allowed to apply for the TERS benefit for workers affected by a temporary closure of all or part of their business operations. Workers could receive the TERS benefit for a maximum of three months at a proportion between 38% of their salaries for high earners, and 60% for low earners. The amount that each worker received was considerably more than the SRD grant, although for a shorter period. Between April 2020 and March 2021, payments were made to 267,000 employers and 5.4 million employees at a cost of R58.7bn. It therefore represented a valuable injection of resources into household budgets at a crucial time.

Unsurprisingly, the proportion of NIDS-CRAM survey respondents who received the TERS benefit was much smaller than the SRD grant because of its selective nature – benefiting laid off formal employees rather than the general unemployed (*Figure 6*). One in seven adults overall (14%) received TERS in April 2020. This declined over the following nine months to one in twenty (5%) in January 2021. This was partly a reflection of the economic recovery that was underway. It also reflected the time-limited nature of the TERS benefit.

The TERS was clearly not skewed towards areas of lowest employment and greatest need. A slightly higher but statistically significant percentage of adults in metros received TERS compared with rural areas (*Figure 6*). By March 2021, 8% of adults in the metros received TERS compared with 5% in cities/towns and 3% in rural areas. This partly reflects the differences in employment levels (and therefore eligibility for TERS) at the outset. A higher proportion of adults in the metros were previously in work and were temporarily laid-off during the lockdown. TERS was clearly a very different form of government support to the SRD grant, with spatial outcomes that did not favour the poorest communities. Towards the end of June 2021, new concerns emerged about the ability of laid-off workers to pay their bills and feed their families following the level 4 lockdown being reinstated, unless the TERS benefit is reintroduced.

Figure 6: Urban vs rural: Percentage of adults who received the TERS benefit



Source: NIDS-CRAM W1-W5

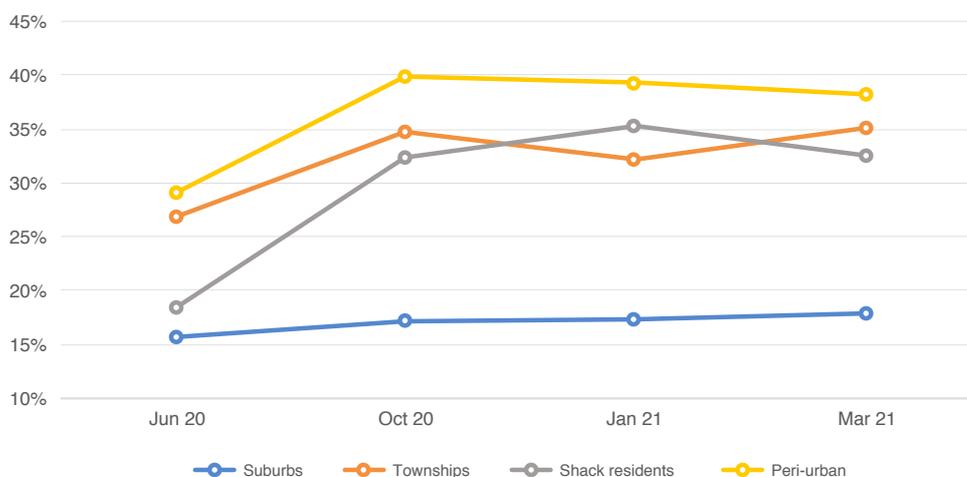
Notes: See Table A6 in the appendix for confidence intervals. The data are weighted.

Urban neighbourhoods

Just as the SRD grant was directed towards rural areas, it also appears to have given disproportionate benefit to poorer neighbourhoods with low employment rates within cities. *Figure 7* shows that 40% of adults in peri-urban areas said that someone in their household received a SRD grant in October 2020. Townships and shack areas were not far behind (although this difference was only mildly significant). Meanwhile, less than half as many suburban respondents (17%) said someone in their household received a SRD grant in October 2020. This is consistent with the objectives of the SRD grant to assist unemployed adults with no other financial support from government.

The subsequent trajectory for all urban areas was broadly stable between October 2020 and March 2021. Hence the SRD grant continued to benefit vulnerable communities as originally intended. The successful targeting of the SRD grant raises questions about the consequences for household budgets of its termination in April 2021.

Figure 7: Urban neighbourhoods: Percentage of adults reporting their household received a COVID-19 SRD Grant



Source: NIDS-CRAM W2-W5

Notes: See Table A5 in the appendix for confidence intervals. The data are weighted.

Far fewer survey respondents received the TERS benefit than the SRD grant (Figure 8). The decline in receipt to January 2021 reflected the time-limited nature of the TERS benefit and the economic recovery that was underway.

The TERS benefit was distributed fairly evenly between affluent and poor neighbourhoods, so its spatial impact can be described as broadly neutral rather than progressive. It appears that the higher employment level (and therefore eligibility for TERS) in the suburbs was offset by the lower level of temporary lay-offs because people’s jobs were more secure and they could work from home. Meanwhile, fewer adults in the poorer neighbourhoods were previously in work, but it seems that a higher proportion of those with jobs were temporarily laid-off during the lockdown, so they were eligible for TERS. The SRD grant was deliberately aimed at adults with no income, so it was more beneficial to the poorest communities than the TERS.

The position of the townships was slightly different to the other urban neighbourhoods, with a marginally higher level of TERS receipt – although this is small enough to be due to a margin of error in sampling. TERS receipt was 9% in townships in March 2021 compared with about 5% in the other neighbourhood types. The possibility of a real difference could be due to the higher proportion of township residents who were in formal employment compared with shack dwellers and peri-urban residents (this is apparent in Figure 3), but also the higher vulnerability of these jobs than those occupied by suburban residents (this is apparent from Figure 4).

Figure 8: Urban neighbourhoods: Percentage of adults who received the TERS benefit



Source: NIDS-CRAM W1-W5

Notes: See Table A6 in the appendix for confidence intervals. The data are weighted.

3.3. Food insecurity

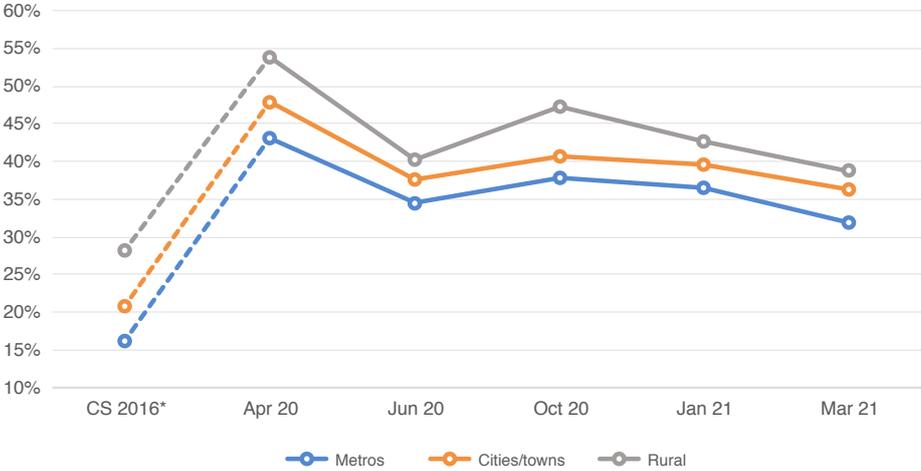
The contrasting vulnerability of different communities is sharply revealed by differences in their degree of food insecurity. This section considers the percentage of adults who reported that their household ran out of money for food, suffered from hunger, as well as their likelihood of moving into and out of hunger over the past year. Hunger is an obvious cause of suffering and distress. It also poses risks of malnutrition and undermines children’s development.

Urban versus rural areas

All communities experienced a large and enduring increase in their risk of running out of money to buy food in the month compared with equivalent findings from the Community Survey in 2016. Food insecurity peaked at the start of the pandemic in April 2020 at 54% in rural areas, 48% in cities/towns and 43% in the metros (Figure 9). The percentage then fell sharply in June 2020, as the hard

lockdown was relaxed, and then remained reasonably steady thereafter, dipping slightly by the end of the period to finish on 39% in rural areas, 36% in towns/cities and 32% in the metros. This is lower than it was in April 2020, but still far above pre-pandemic levels. More than one in three adults said their household had run out of money to buy food in March 2021, whether in metros, towns/cities or rural areas.

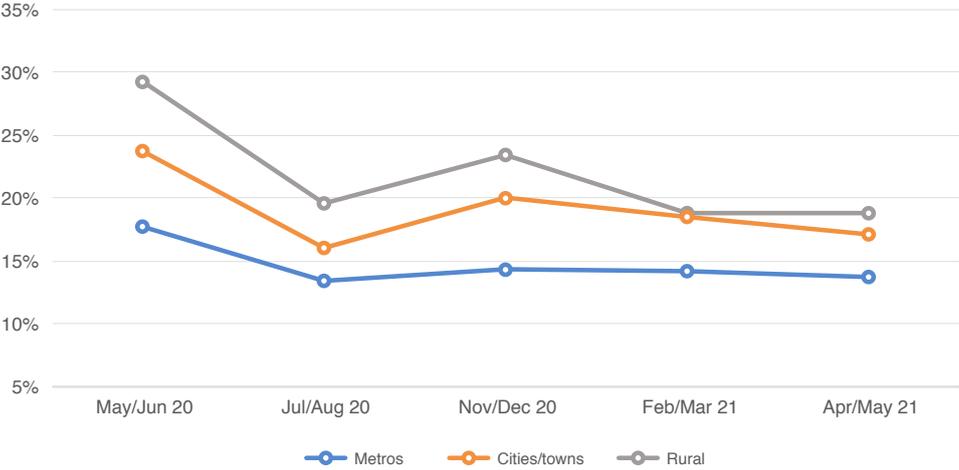
Figure 9: Urban vs rural: Percentage ran out of money to buy food in the month



Source: NIDS-CRAM W1-W5
Notes: *The CS2016 asks individuals if their household had run out of money to buy food in past 12 months. See Table A8 in the appendix for confidence intervals. The data are weighted.

The trends for areas experiencing hunger correspond with households running out of money to buy food. There was an initial spike in hunger in May/June 2020, which subsided by July/August, but it has since stalled (*Figure 10*). There was also a big gap between urban and rural communities, although it appears to have narrowed somewhat, presumably because of (i) the rural employment recovery and (ii) the special COVID-19 grants. However, the situation was still dire for many households. By April/May 2021, 19% of adults in rural areas said that someone in their household had gone hungry in the past week, compared with 17% in towns/cities and 14% in the metros.

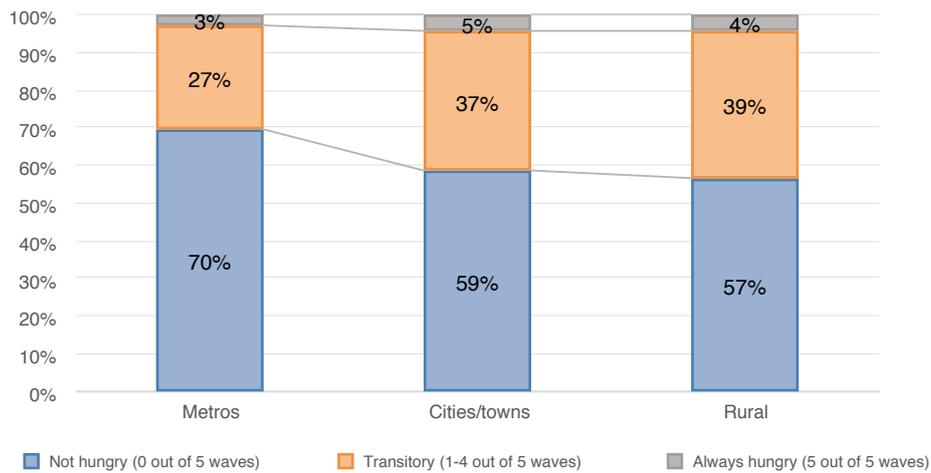
Figure 10: Urban vs rural: Percentage reporting going hungry in past week



Source: NIDS-CRAM W1-W5
Notes: See Table A7 in the appendix for confidence intervals. The data are weighted.

Another way of understanding vulnerability to hunger is to consider the likelihood of a household falling into and out of hunger across each of the waves of the survey. Alarmingly, almost half (43%) of adults living in rural areas said their household had experienced hunger in at least one the waves in which they were surveyed over the past 12 months (*Figure 11*). The proportion was significantly lower in the metros, at less than 1 in 3 adults (30%) saying their household went hungry at some point, although vulnerability to hunger was still pervasive.

Figure 11: Urban vs rural: Transitions into and out of hunger



Source: NIDS-CRAM W1-W5

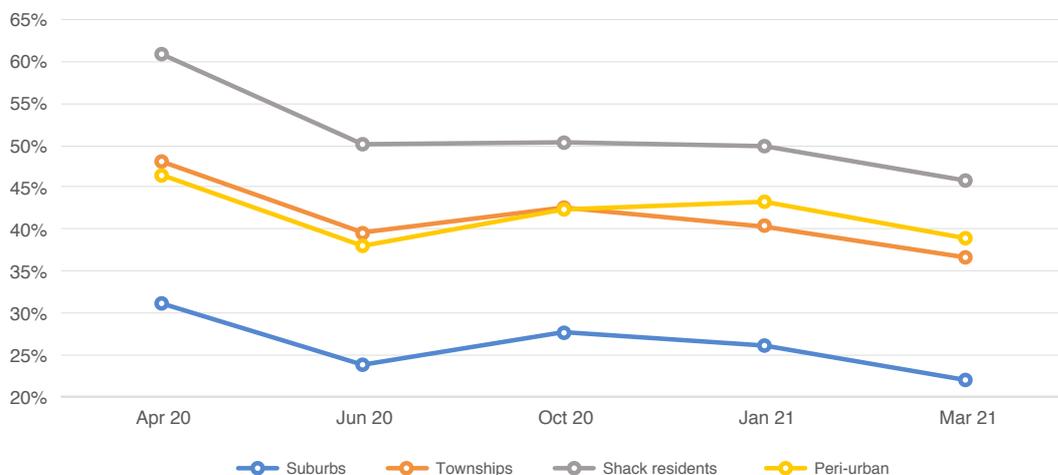
Notes: See Table A9 in the appendix for confidence intervals. Balanced panel. The data are weighted.

Urban neighbourhoods

Food insecurity across different neighbourhoods within urban areas was much more polarised than between rural and urban communities. The proportion of adults who said their household had run out of money to buy food was much higher for shack dwellers than for peri-urban areas, townships and suburbs (*Figure 12*). Across all the waves, there was a consistent gap of about 25 percentage points between shack dwellers and suburban residents, and about 15 percentage points between townships and suburbs. These are very sizeable (and strongly significant) differences.

Between April and June 2020, the chances of running out of money to buy food fell sharply in all urban neighbourhoods as the strict lockdown was lifted and employment began to recover. However, further improvements were limited thereafter, except perhaps between January and March 2021 after the second wave restrictions were relaxed. By March 2021, the percentage of adults who said their household had run out of money to buy food was 22% in the suburbs, 37% in the townships, 39% in peri-urban areas and 46% among shack dwellers. In other words, more than one in three households in townships and shack areas said they ran out of money to buy food in April/May 2021.

Figure 12: Urban neighbourhoods: Percentage ran out of money to buy food in the month

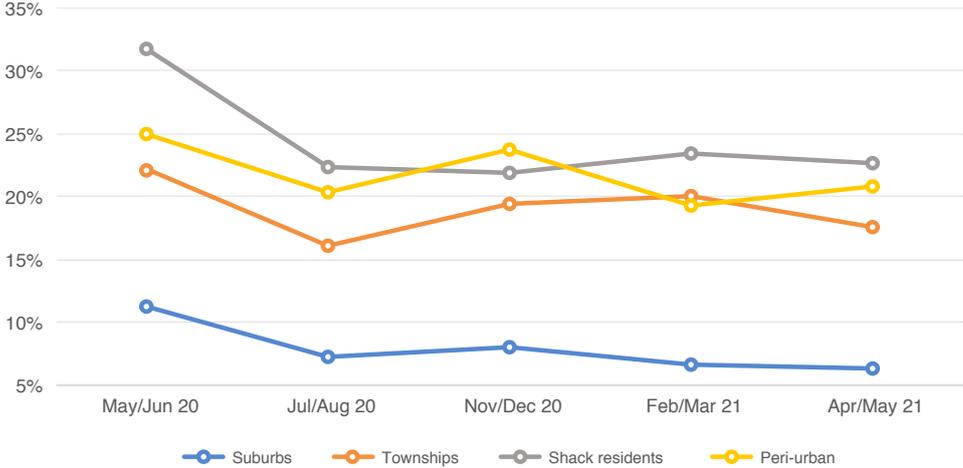


Source: CS 2016; NIDS-CRAM W1-W5

Notes: *The Community Survey 2016 asks individuals if their household had run out of money to buy food in past 12 months. See Table A8 in the appendix for confidence intervals. The data are weighted.

The large differences between poorer urban communities and suburban residents remains when looking at hunger. In May/June 2020, 32% of shack-dwellers, 25% of adults in peri-urban areas and 22% in the townships said that someone in their household had gone hungry over the past week, compared with only 11% in the suburbs. Hunger declined over the following few months, but then more-or-less stabilised at an historically high level thereafter. The differences between poorer communities was not always statistically significant but there was always a large and significant gap compared to the suburbs. By April/May 2021, nearly 1 in 4 shack dwellers (23%) said their household had gone hungry over the past week compared with 21% of adults in peri-urban areas, 18% in the townships and 6% in the suburbs. Suburban residents have always been far better off and less susceptible to going hungry than other urban communities.

Figure 13: Urban neighbourhoods: Percentage reporting going hungry in past week

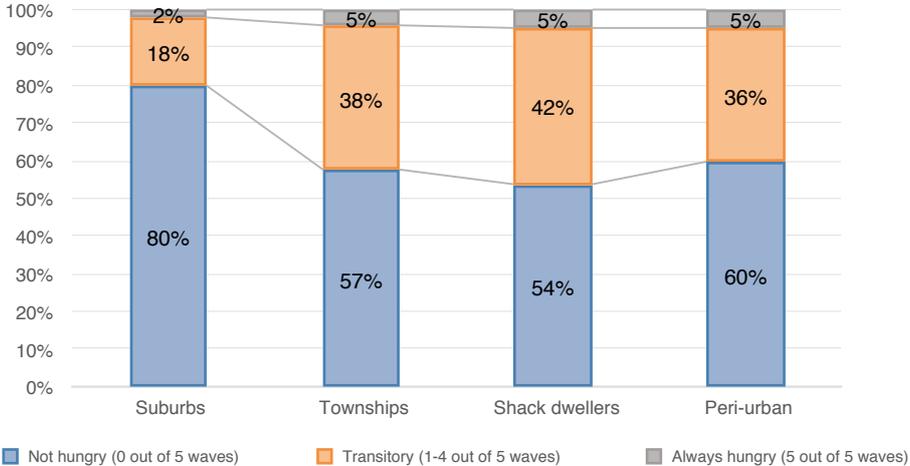


Source: NIDS-CRAM W1-W5

Notes: See Table A7 in the appendix for confidence intervals. The data are weighted.

Going hungry was a hardship for an even larger share of individuals when considering whether or not they went hungry at any time. Only 54% of shack dwellers, 57% of township residents, and 60% of peri-urban residents said that their household had never experienced hunger in any of the survey waves, compared with 80% of suburban residents. Hence, more than 2 out of every 5 adults in poorer urban communities experienced hunger at some stage in past 10-12 months and nearly half of adults living in shacks.

Figure 14: Urban neighbourhoods: Transitions into and out of hunger



Source: NIDS-CRAM W1-W5

Notes: See Table A9 in the appendix for confidence intervals. Balanced panel. The data are weighted.

In summary, the evidence suggests that fewer people were exposed to hunger a year after the initial spike in food insecurity induced by the pandemic and lockdown reflex. Yet, a disturbing number of people in poorer urban and rural communities were still running out of money to buy food and going hungry. Almost half of shack residents still struggled to put food on the table some 12 months after the start of the pandemic.

3.4. Social behaviour and attitudes towards COVID-19

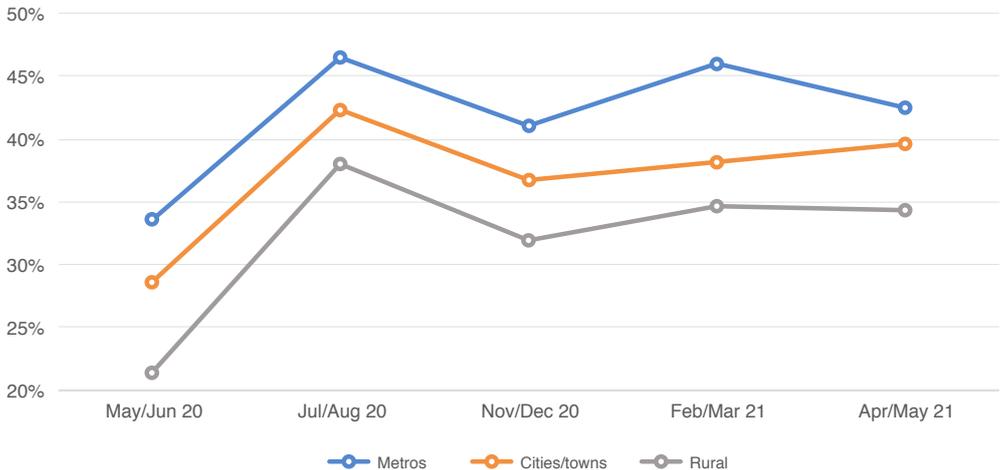
The final section contrasts variations in the behaviour and attitudes of different communities to the health risks posed by COVID-19. This is explored in terms of the perceived risks of being infected by the virus, knowledge of someone diagnosed with the virus, the prevalence of mask wearing in public, and attitudes towards getting vaccinated.

Urban versus rural areas

The perceived risks of getting infected were surprisingly high in all parts of the country, although residents in the metros were consistently more likely to feel susceptible to catching COVID-19 than residents in cities/towns (by about 5 percentage points) and in rural areas (by about 10 percentage points) (*Figure 15*). The perceived risk of infection rose sharply in all areas between May/June and July/August 2020, corresponding with an actual surge in recorded infections during the first wave of the pandemic. Perceptions declined by 5 percentage points in November/December 2020 and remained fairly stable thereafter. The exception was in the metros, where perceptions increased again in February/March 2021, corresponding to the second wave of infections.

By April/May 2021, 34% of rural residents, 40% in towns/cities and 43% in metros thought that they would catch the virus. One of the main reasons for this disparity is likely to be that the actual rate of infection has also been higher in the metros than in other areas. This reflects their population density and external connectivity, both of which increase community transmission of the disease. Therefore, it is not surprising that metro residents were more aware of the risk.

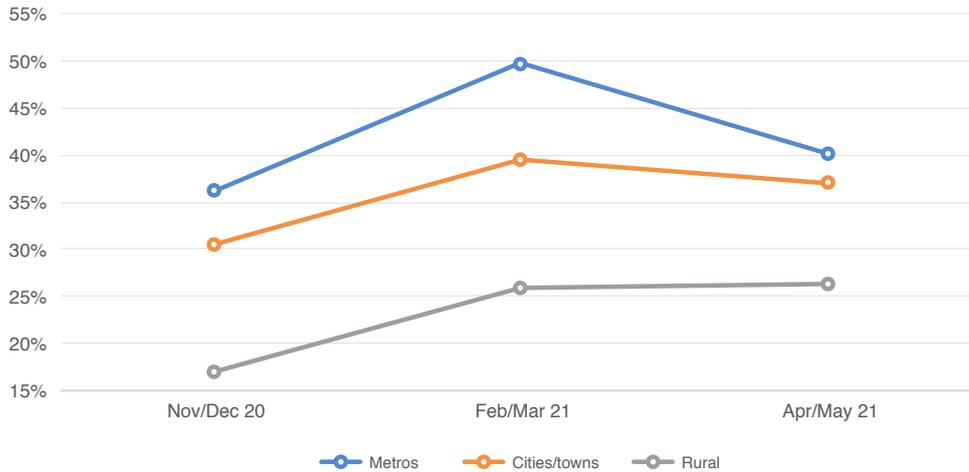
Figure 15: Urban vs rural: Perceived likelihood of getting the Coronavirus



Source: NIDS-CRAM W1-W5
Notes: See Table A10 in the appendix for confidence intervals. The data are weighted.

Residents of the metros were also far more likely to know somebody who has been diagnosed with the virus than rural residents in any of the three waves for which data is available. The proportion of people knowing somebody diagnosed with the virus was almost 50% in February/March 2021 for the metros, which was roughly double that in rural areas (*Figure 16*). One reason for this is likely to be the higher rate of infection in the metros than elsewhere. The chances of knowing somebody with COVID-19 fell in April/May 2021 - coincident with the end of the second wave - but remained constant in rural areas.

Figure 16: Urban vs rural: Percentage who know somebody diagnosed with the Coronavirus



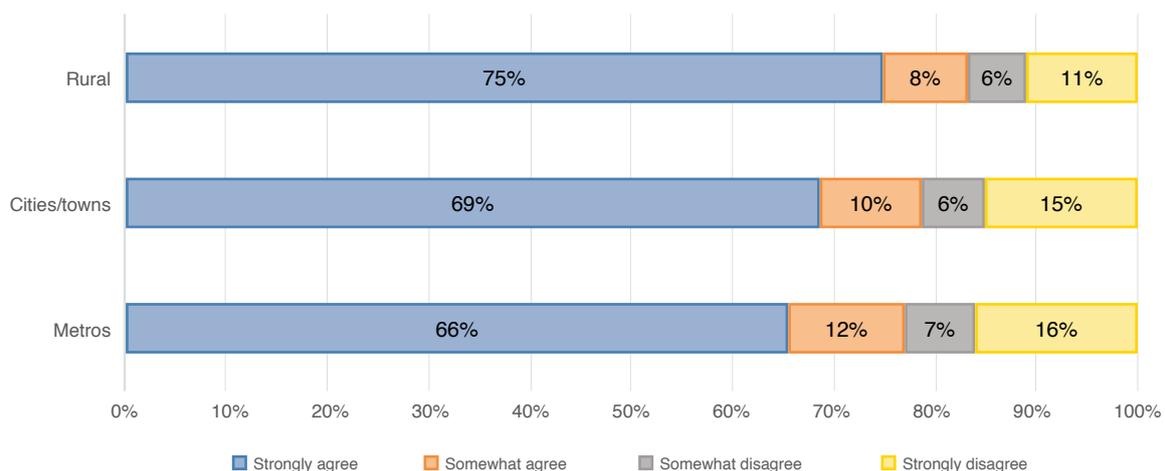
Source: NIDS-CRAM W3-W5

Notes: See Table A11 in the appendix for confidence intervals. The data are weighted.

The significant gap between urban and rural areas in the perceived risk and knowledge of infection is unsurprising considering that cities have been the epicentre of the health crisis over the past year. People crowding together in well-connected places has enabled the virus to spread rapidly and put the health service under enormous pressure.

Despite this, residents of metros and cities/towns were more cautious about getting vaccinated compared with rural areas. Only 66% of metro residents were strongly in favour of getting vaccinated compared with 69% in cities/towns and 75% in rural areas (Figure 17). Similarly, 16% of metros residents were strongly against getting vaccinated compared with 11% in rural areas. Their greater hesitancy towards vaccination warrants further research. It may be that residents of urban areas are more aware of doubts about the efficacy and side-effects of certain vaccines, or more susceptible to misinformation on social media.

Figure 17: Urban vs rural: Vaccine hesitancy (If a vaccine for COVID-19 was available, I would get it?)



Source: NIDS-CRAM W5

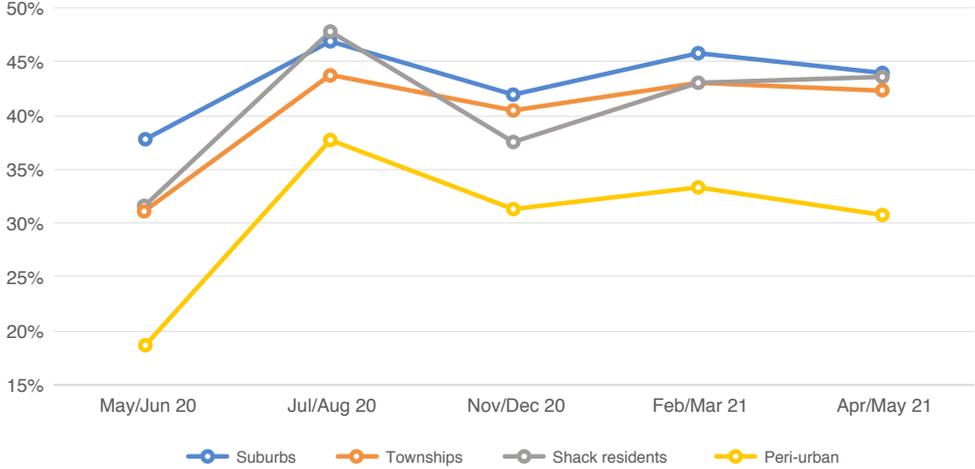
Notes: See Table A13 in the appendix for confidence intervals. The data are weighted.

Urban neighbourhoods

There were fewer differences in the perceived risk of getting infected among urban neighbourhoods. It appears that almost half of urban residents expected to catch the virus. The exception was in peri-urban areas, where the risk of infection was consistently much lower (Figure 18). For suburban

residents, townships and shack dwellers, the perceived risk increased between May/June and July/August 2020 (coinciding with the peak of the first wave) and fluctuated thereafter between 40-45%. Peri-urban areas followed a similar trajectory, but at a lower level. Residents of peri-urban areas may have been less aware and/or less susceptible to the virus, since their settlements are less dense and less well connected.

Figure 18: Urban neighbourhoods: Perceived likelihood of getting the Coronavirus



Source: NIDS-CRAM W1-W5
Notes: See Table A10 in the appendix for confidence intervals. The data are weighted.

Suburban residents were far more likely to know someone diagnosed with COVID-19 than residents in poorer urban communities. The proportion in the suburbs rose to roughly double that in the other urban areas in February/March 2021 (the peak of the second wave), but then fell again (Figure 19). In April/May 2021 suburban residents were still much more likely to know someone who had been diagnosed with the virus (53%), compared with 36% in the townships and less than 30% for peri-urban areas and shack dwellers. Information on the actual incidence of the virus in suburbs, townships and shack areas is not available but is likely to be higher in the latter than the former. Greater awareness in the suburbs may reflect a higher incidence of testing rather than higher actual rates of infection.

Figure 19: Urban neighbourhoods: Percentage who know somebody diagnosed with the Coronavirus

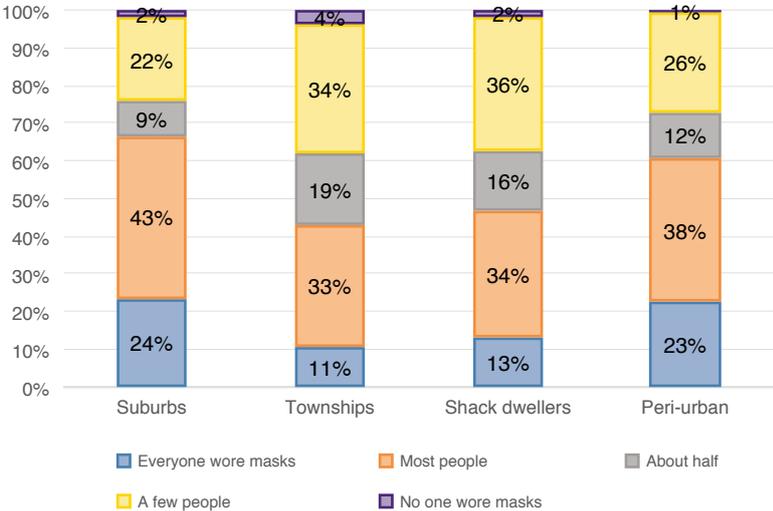


Source: NIDS-CRAM W3-W5
Notes: See Table A11 in the appendix for confidence intervals. The data are weighted.

The perceived risks of catching the virus were high in most urban areas, yet compliance with the protocols, such as wearing a mask, was much more common in affluent communities than in poorer neighbourhoods (Figure 20). Two-thirds of suburban residents said that most people wore masks in public, whereas less than half of township residents and shack dwellers said so. This points to

differences in the willingness of some groups to take on social risks, which presumably reflects their vastly different socio-economic conditions and exposure to many other social hazards. Lower levels of mask wearing in the townships and shack areas may also reflect disillusionment and frustration about their predicament in the context of poor job prospects, limited state support and the misery of hunger.

Figure 20: Urban neighbourhoods: Percentage of people in the neighbourhood who wore masks when they were in public/on the streets

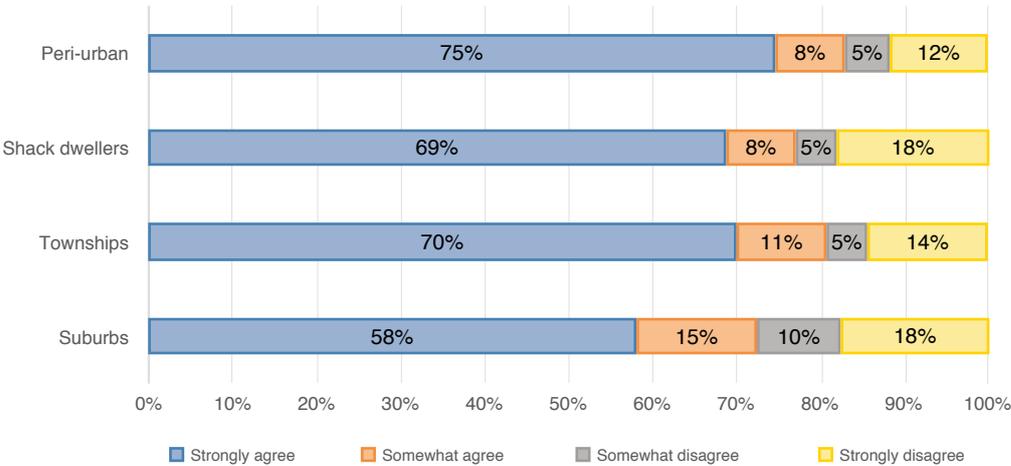


Source: NIDS-CRAM W5

Notes: See Table A12 in the appendix for confidence intervals. The data are weighted.

People’s willingness to get vaccinated also varied across neighbourhood types (Figure 21). Less than 60% of suburban residents were strongly in favour of getting vaccinated, compared with approximately 70% of township residents and shack dwellers, and an even higher 75% amongst peri-urban residents (although the difference between poorer urban communities was not statistically significant). Conversely, about 1 in 4 suburban residents were not in favour of getting vaccinated compared to 1 in 7 peri-urban residents. This is surprising considering that suburban residents were more likely to know someone diagnosed with the virus. This could be because they have greater autonomy and exposure to diverse information sources, which makes them less trusting of government and/or more doubtful about the efficacy and side-effects of certain vaccines. Further research is required to corroborate these findings.

Figure 21: Urban neighbourhoods: Vaccine hesitancy (If a vaccine for COVID-19 was available, I would get it?)



Source: NIDS-CRAM W5

Notes: See Table A13 in the appendix for confidence intervals. The data are weighted.

4. Conclusion

Sizeable differences in household incomes get transmitted into residential sorting across different quality neighbourhoods. Spatial segregation creates stark contrasts between the amenities and services available in rich and poor areas. These place-based inequalities in turn exert a powerful influence on the well-being and life chances of local residents. Without countervailing actions, especially by the government, these feedback effects can create a virtuous circle of prosperity in affluent areas and a vicious cycle of poverty and exclusion in marginalised areas. This is a recipe for entrenched inequalities, social instability and widespread unrest.

Residential location influences access to jobs, schools, healthcare and other facilities, as well as vulnerability to disease, crime and other social hazards. The pandemic has compounded these effects through the role of density in virus transmission and the importance of basic services such as clean water and decent sanitation for hand washing and social distancing. Recognising the extent and significance of spatial variations in the pandemic's impact is vital to go beyond misleading national averages. Differences within and between regions are key to promoting differentiated plans and policy responses that are sensitive to realities on the ground and that leave no-one behind.

Evidence from the five waves of the NIDS-CRAM survey shows that COVID-19 has amplified spatial inequalities across the country. Disparities are reflected both between metros, towns/cities and rural areas, and within urban areas (between suburbs, townships, shack dwellers and peri-urban areas). Whilst there has been some rebound of jobs and incomes across all areas, poorer communities have been worst affected, with greater volatility and vulnerability over the past 12-15 months. This is most apparent in the case of urban shack dwellers, who faced the biggest jobs slump under the hard lockdown and the weakest recovery subsequently. Shack dwellers were also most likely to experience intermittent spells of employment, compared with the sustained jobs of suburban residents. Despite suffering the biggest loss of livelihoods, shack dwellers received no extra financial relief from the main government COVID response programmes – the SRD grant and TERS benefit. As a consequence, almost half of all shack dwellers went hungry at some stage over the past year. This was a higher proportion than for any other settlement type, urban or rural.

In the light of the ongoing challenges posed by the pandemic and the likelihood of a slow and uneven recovery, we offer several recommendations for government consideration:

First, serious thought should be given to reinstating the SRD grant for another 12 months. This would help to provide immediate relief for the misery of joblessness and hunger, and demonstrate that the government cares about the plight of marginalised groups and wants to avoid a humanitarian crisis. Whilst there has been a modest improvement in employment among poor communities since the economy was shutdown early in 2020, the evidence indicates that food insecurity and hunger are still pervasive. Many of the jobs in low income areas appear to be insecure and temporary in nature. They could be jeopardised as tighter restrictions are imposed on travel, hospitality, entertainment and social gatherings in response to the third wave of infections, which could threaten another swathe of job losses. The SRD grant seems to be effectively targeted towards vulnerable households in poor communities and provides a foundation to build more substantial social protection upon for the future.

Second, the hazardous conditions in informal settlements and backyard shacks warrant special focus. In terms of the health risks, contagion is naturally higher within shack areas because of overcrowded living conditions, poor ventilation and limited access to water and sanitation. Sick people depend on shared public and private living spaces and are unable to self-isolate. People tend not to wear masks, which heightens the risks of infection. Employment levels among shack communities were devastated by the strict lockdown and have been slowest to recover. Many people living in shantytowns work in the informal economy, where jobs are insecure and lack the usual legal protections (Institute for Economic Justice, 2021). Households have meagre savings to buffer against shocks. Improved access to clean water, decent sanitation, electricity and waste collection are obvious priorities within shack communities, preferably using local labour to enhance skills and livelihoods. A more comprehensive process of settlement upgrading should be the next objective,

underpinned by community participation. This could include the readjustment of dense settlement layouts and building of 2-3 storey dwellings to make room for service infrastructure, community spaces and local enterprise.

Third, government needs to complement its centralised, national approach to disaster management with a more decentralised, place-based dimension. The evolving health and socio-economic crises cannot be managed through a uniform, top-down approach. National departments need to work hand-in-hand with local and provincial authorities to refine and tailor the response to the diverse situation unfolding on the ground in different places. Greater flexibility and nuance are required to address the tensions and trade-offs surrounding people's lives and livelihoods in a more sensitive and effective manner than hitherto.

Finally, the battle for people's hearts and minds cannot be won by national directives and authoritarian controls. Widespread fatigue and complacency surrounding social behaviours such as mask wearing, social distancing and vaccine hesitancy require new ideas and fresh thinking. More widespread consultation, community participation and involvement of local leaders and civil society organisations could inject renewed energy and momentum into the campaign to get people to take appropriate precautions and to get inoculated.

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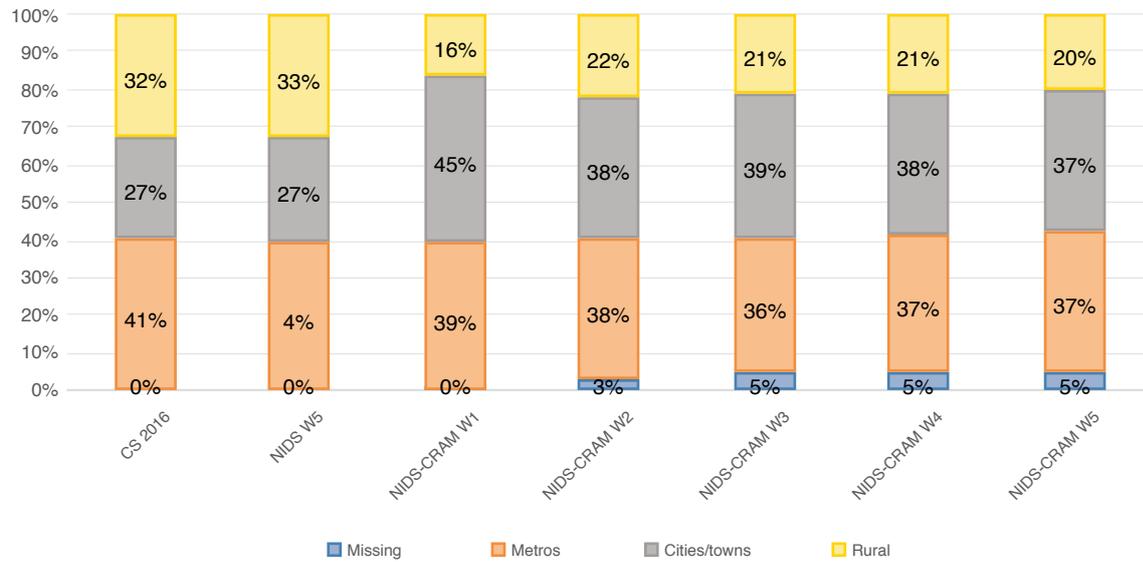
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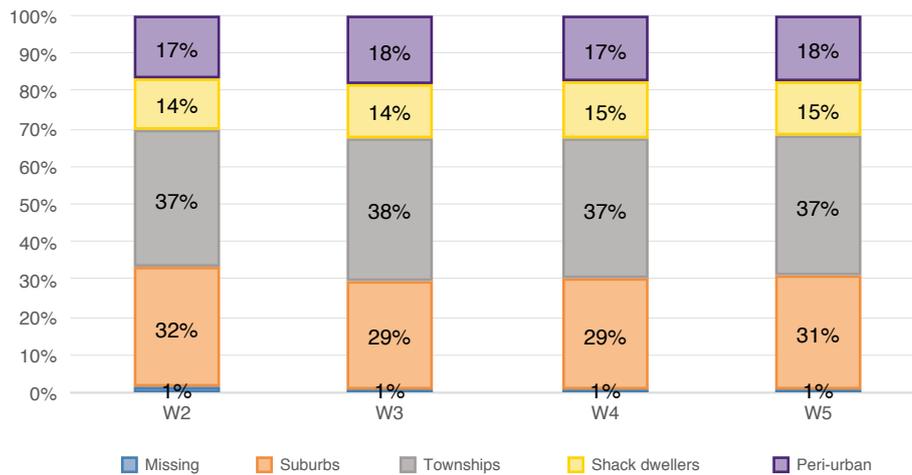
Appendix

Figure A1: Urban vs rural: Population share, W1-W5



Source: NIDS-CRAM W1-W5

Figure A2: Urban neighbourhoods: Population share, W1-W5



Source: NIDS-CRAM W1-W5

Table A1: Urban vs rural: Population share, W1-W5

		CS 2016	NIDS W5	NIDS-CRAM W1	NIDS-CRAM W2	NIDS-CRAM W3	NIDS-CRAM W4	NIDS-CRAM W5
Missing	%	-	-	0.1	2.8	4.7	4.6	5.4
	CI	-	-	[0, 0.3]	[2.1, 3.5]	[3.8, 5.9]	[3.7, 5.6]	[4.5, 6.4]
	N	-	-	8	155	255	252	299
Metros	%	40.8	39.9	39.1	37.6	36.1	37.1	37.4
	CI	[40.7, 40.9]	[34.6, 45.4]	[35.7, 42.6]	[33.9, 41.5]	[32.6, 39.9]	[33.3, 41]	[33.9, 41.1]
	N	765236	5990	1725	1303	1336	1225	1309
Cities/ towns	%	27.0	27.4	44.9	38.0	38.5	37.5	37.0
	CI	[26.9, 27.0]	[23.2, 32.0]	[42, 47.8]	[35.1, 41]	[35.3, 41.8]	[34.5, 40.7]	[34.1, 40.1]
	N	581066	9046	3832	2593	2766	2551	2638
Rural	%	32.3	32.7	15.9	21.6	20.7	20.8	20.2
	CI	[32.2, 32.3]	[28.4, 37.3]	[14.2, 17.7]	[19.3, 24.1]	[18.5, 23]	[18.6, 23.3]	[18, 22.5]
	N	819318	11986	1508	1625	1773	1601	1616

Source: NIDS-CRAM W1-W5; 90% confidence intervals

Table A2: Urban neighbourhoods: Population share, W1-W5

		W2	W3	W4	W5
Missing	%	1.4	0.9	0.9	0.8
	CI	[0.9, 2.2]	[0.6, 1.4]	[0.5, 1.4]	[0.6, 1.1]
	N	68	54	41	48
Suburbs	%	31.8	29.0	29.2	30.5
	CI	[28.9, 34.8]	[26.1, 32.1]	[26.2, 32.4]	[27.5, 33.6]
	N	956	897	833	891
Townships	%	36.8	37.8	37.3	36.6
	CI	[33.4, 40.3]	[34.1, 41.7]	[33.8, 41]	[33.2, 40.1]
	N	1386	1486	1374	1427
Shack dwellers	%	13.5	14.4	15.2	14.7
	CI	[11.6, 15.8]	[12.1, 17.1]	[12.9, 17.8]	[12.7, 16.8]
	N	500	560	529	535
Peri-urban	%	16.5	17.8	17.3	17.5
	CI	[14.3, 18.9]	15.6, 20.3]	[15, 19.9]	[15.3, 20]
	N	986	1150	999	1046

Source: NIDS-CRAM W1-W5; 90% confidence intervals

Table A3: Employment to population (incl. furloughed workers)

		Feb 20	Apr 20	Jun 20	Oct 20	Jan 21	Mar 21	
Urban rural	Metros	%	60	51.1	51	54.7	51.6	54.7
		CI	[57.0,62.9]	[48.1,54.1]	[46.9,55.1]	[51.3,58.0]	[48.0,55.3]	[50.9,58.5]
	Cities/towns	%	49.3	41.4	42.9	50.5	47.7	50.3
		CI	[47.0,51.5]	[39.2,43.7]	[40.1,45.8]	[47.9,53.1]	[45.2,50.2]	[47.9,52.8]
	Rural	%	41.8	37.5	34.5	43.4	40.8	46.1
		CI	[38.2,45.4]	[34.3,40.8]	[31.4,37.7]	[40.5,46.4]	[37.8,43.9]	[43.0,49.2]
Intra urban	Suburbs	%	59.3	52.5	55.7	56.4	54.2	57.4
		CI	[55.0,63.4]	[47.9,57.0]	[51.5,59.8]	[52.5,60.3]	[49.9,58.4]	[53.4,61.3]
	Townships	%	54.9	46	44.6	53.1	51.8	53.8
		CI	[51.5,58.2]	[42.9,49.1]	[40.7,48.6]	[49.9,56.2]	[48.3,55.3]	[50.1,57.5]
	Shack dweller	%	62.5	45.4	52.2	53.5	47.4	49.9
		CI	[56.7,67.9]	[39.2,51.8]	[46.7,57.6]	[48.0,58.9]	[40.3,54.5]	[43.7,56.2]
	Peri-urban	%	46.4	36.6	33.5	43.7	39.4	43.9
		CI	[41.8,51.0]	[32.4,41.0]	[29.5,37.7]	[39.3,48.3]	[35.0,44.0]	[40.0,47.9]

Source: NIDS-CRAM W1-W5; 90% confidence intervals

Table A4: Labour market stability and churn

		Never Employed (0 out of 6 periods)	Temporary employed (1-5 out of 6 periods)	Always employed (6 out of 6 periods)	
Urban rural	Metros	%	26.0	38.9	35.1
		CI	[22.1,30.2]	[34.4,43.7]	[29.7,40.9]
	Cities/towns	%	29.2	44.3	26.6
		CI	[26.3,32.1]	[41.2,47.5]	[23.2,30.2]
	Rural	%	31.2	52.8	16.0
		CI	[27.6,35.0]	[49.0,56.6]	[13.4,19.0]
Intra urban	Suburbs	%	26.7	31.1	42.2
		CI	[22.5,31.3]	[26.1,36.6]	[36.0,48.7]
	Townships	%	25.6	47	27.4
		CI	[21.4,30.4]	[42.7,51.3]	[22.9,32.3]
	Shack dweller	%	24.1	47.8	28.1
		CI	[18.4,31.0]	[40.6,55.0]	[20.5,37.2]
	Peri-urban	%	36.1	44.8	19.2
		CI	[31.1,41.4]	[39.9,49.7]	[14.9,24.3]

Source: NIDS-CRAM W1-W5 (balanced panel); 90% confidence intervals

Table A5: Percentage of adults reporting their household received a COVID-19 SRD Grant

		Jun 20	Oct 20	Jan 21	Mar 21	
Urban rural	Metros	%	20.7	25.8	26.1	27.9
		CI	[17.1,24.9]	[22.7,29.3]	[23.2,29.4]	[24.1,32.0]
	Cities/towns	%	23.5	34.1	32.6	31.8
		CI	[21.2,26.1]	[30.6,37.7]	[29.8,35.5]	[29.1,34.6]
	Rural	%	34.8	44.1	42.7	39.9
		CI	[31.2,38.6]	[41.0,47.3]	[39.1,46.3]	[36.6,43.2]
Intra urban	Suburbs	%	15.7	17.1	17.4	17.9
		CI	[11.7,20.7]	[14.5,20.2]	[14.5,20.8]	[14.8,21.5]
	Townships	%	26.8	34.8	32.2	35.1
		CI	[22.8,31.2]	[30.4,39.5]	[28.5,36.1]	[31.5,38.9]
	Shack dweller	%	18.4	32.3	35.3	32.5
		CI	[14.0,23.9]	[26.5,38.7]	[29.2,41.8]	[27.4,37.9]
	Peri-urban	%	29.1	39.9	39.4	38.3
		CI	[25.1,33.4]	[35.6,44.5]	[35.4,43.6]	[34.4,42.3]

Source: NIDS-CRAM W2-W5; 90% confidence intervals

Table A6: Percentage of adults receiving TERS

		Apr 20	Jun 20	Oct 20	Jan 21	Mar 21	
Urban rural	Metros	%	13.2	15	12.1	5.3	7.9
		CI	[10.5,16.5]	[12.0,18.7]	[9.3,15.5]	[3.5,8.1]	[5.4,11.2]
	Cities/towns	%	13.2	13.9	8.7	4.5	5.2
		CI	[10.8,16.1]	[11.3,17.0]	[6.8,11.2]	[3.0,6.7]	[3.6,7.5]
	Rural	%	15.8	10.1	7	3.2	3
		CI	[11.0,22.3]	[7.1,14.0]	[4.5,10.6]	[1.9,5.4]	[1.6,5.5]
Intra urban	Suburbs	%	16.7	14.4	9.1	3.6	4.5
		CI	[12.3,22.4]	[10.7,19.2]	[5.9,13.7]	[1.7,7.3]	[2.3,8.4]
	Townships	%	12.9	16.5	11.4	6.2	9
		CI	[9.4,17.5]	[12.7,21.3]	[8.7,14.7]	[4.2,9.2]	[6.4,12.4]
	Shack dweller	%	16.5	11.9	11.6	5	5.7
		CI	[10.5,24.8]	[8.3,16.7]	[7.4,17.6]	[2.2,11.0]	[2.7,12.0]
	Peri-urban	%	15.9	11.9	8.6	4.5	5.2
		CI	[9.9,24.6]	[7.7,17.8]	[5.5,13.3]	[2.4,8.2]	[2.7,9.7]

Source: NIDS-CRAM W1-W5; 90% confidence intervals

Table A7: Percentage reporting going hungry in past week

		May/Jun 20	Jul/Aug 20	Nov/Dec 20	Feb/Mar 21	Apr/May 21	
Urban rural	Metros	%	17.7	13.4	14.3	14.2	13.7
		CI	[15.6,20.0]	[11.1,16.0]	[12.1,16.8]	[11.9,16.9]	[11.5,16.4]
	Cities/towns	%	23.8	16	20	18.5	17.1
		CI	[21.8,25.9]	[14.1,18.1]	[18.0,22.2]	[16.3,20.9]	[15.0,19.3]
	Rural	%	29.3	19.6	23.4	18.8	18.8
		CI	[26.5,32.4]	[16.8,22.7]	[20.8,26.1]	[16.5,21.3]	[16.5,21.2]
Intra urban	Suburbs	%	11.2	7.2	8.1	6.7	6.3
		CI	[8.8,14.2]	[5.4,9.5]	[6.3,10.4]	[5.1,8.7]	[4.7,8.5]
	Townships	%	22.2	16.1	19.5	20	17.6
		CI	[19.6,25.2]	[13.7,18.9]	[17.0,22.3]	[17.3,23.0]	[14.9,20.7]
	Shack dweller	%	31.7	22.4	21.9	23.4	22.7
		CI	[26.8,36.9]	[18.1,27.3]	[17.7,26.8]	[19.3,28.1]	[18.2,28.0]
	Peri-urban	%	25	20.3	23.8	19.3	20.8
		CI	[21.5,28.9]	[17.3,23.7]	[19.8,28.3]	[16.4,22.7]	[17.6,24.5]

Source: NIDS-CRAM W1-W5; 90% confidence intervals

Table A8: Percentage ran out of money to buy food in the month

		CS 2016*	Apr 20	Jun 20	Oct 20	Jan 21	Mar 21	
Urban rural	Metros	%	16.2	43.1	34.5	37.8	36.5	31.8
		CI	[16.1,16.3]	[39.7,46.5]	[30.3,38.9]	[33.6,42.1]	[32.2,41.1]	[28.1,35.7]
	Cities/towns	%	20.8	47.9	37.5	40.6	39.6	36.2
		CI	[20.7,20.9]	[45.8,50.0]	[34.8,40.2]	[38.1,43.2]	[36.9,42.4]	[33.9,38.6]
	Rural	%	28.2	53.8	40.2	47.2	42.7	38.7
		CI	[28.1,28.3]	[50.0,57.5]	[37.0,43.6]	[44.2,50.1]	[39.4,46.0]	[36.1,41.5]
Intra urban	Suburbs	%	-	31.1	23.9	27.6	26.1	22
		CI		[27.3,35.3]	[20.2,28.1]	[24.3,31.1]	[22.7,29.9]	[18.6,25.8]
	Townships	%	-	48	39.7	42.5	40.4	36.6
		CI		[44.5,51.6]	[36.1,43.4]	[38.9,46.2]	[37.0,43.9]	[33.3,40.0]
	Shack dweller	%	-	60.8	50.1	50.3	49.9	45.8
		CI		[54.7,66.6]	[43.1,57.2]	[44.0,56.7]	[43.3,56.5]	[40.3,51.3]
	Peri-urban	%	-	46.4	38	42.4	43.3	38.9
		CI		[42.8,50.0]	[33.9,42.3]	[37.7,47.3]	[39.3,47.4]	[35.0,43.1]

Source: NIDS-CRAM W1-W5; Community Survey 2016; 90% confidence intervals

Table A9: Transitions into and out of hunger

		Not hungry (0 out of 5 waves)	Transitory (1-4 out of 5 waves)	Always hungry (5 out of 5 waves)	
Urban Rural	Metros	%	69.8	27.3	3
		CI	[64.8,74.3]	[23.2,31.8]	[1.9,4.5]
	Cities/towns	%	58.6	36.7	4.7
		CI	[54.3,62.8]	[33.4,40.1]	[3.1,7.2]
	Rural	%	56.6	39.1	4.3
		CI	[52.1,61.0]	[34.9,43.4]	[3.0,6.1]
Intra urban	Suburbs	%	79.7	18.2	2.1
		CI	[74.3,84.2]	[14.4,22.7]	[0.9,4.9]
	Townships	%	57.4	38.1	4.5
		CI	[51.3,63.3]	[33.2,43.3]	[2.4,8.1]
	Shack dweller	%	53.7	41.6	4.7
		CI	[46.5,60.8]	[35.1,48.4]	[2.8,7.9]
	Peri-urban	%	59.5	35.6	4.9
		CI	[54.2,64.5]	[31.2,40.4]	[3.3,7.3]

Source: NIDS-CRAM W1-W5 (balanced panel); 90% confidence intervals

A10: Perceived likelihood of getting the Coronavirus

		May/June 20	Jul/Aug 20	Nov/Dec 20	Feb/Mar 21	Apr/May 21	
Urban rural	Metros	%	33.5	46.5	41	46	42.5
		CI	[30.6,36.5]	[42.7,50.3]	[37.5,44.5]	[42.8,49.3]	[39.0,46.0]
	Cities/towns	%	28.6	42.3	36.7	38.1	39.6
		CI	[26.5,30.7]	[39.7,45.0]	[34.1,39.2]	[35.4,41.0]	[36.9,42.2]
	Rural	%	21.4	38	32	34.6	34.3
		CI	[18.6,24.6]	[34.4,41.7]	[29.3,34.9]	[31.8,37.6]	[31.3,37.6]
Intra urban	Suburbs	%	37.8	46.9	41.9	45.8	44
		CI	[33.8,42.0]	[42.9,51.0]	[37.6,46.2]	[41.6,50.1]	[39.6,48.5]
	Townships	%	31.2	43.7	40.5	43	42.3
		CI	[27.8,34.8]	[39.8,47.8]	[36.9,44.1]	[39.3,46.7]	[39.2,45.5]
	Shack dweller	%	31.6	47.8	37.5	43.1	43.6
		CI	[25.8,38.0]	[42.1,53.6]	[33.3,41.9]	[37.0,49.4]	[36.9,50.6]
	Peri-urban	%	18.6	37.7	31.4	33.3	30.8
		CI	[15.2,22.5]	[33.8,41.7]	[27.5,35.6]	[29.6,37.2]	[26.9,35.1]

Source: NIDS-CRAM W1-W5; 90% confidence intervals

A11: Percentage who know somebody diagnosed with the Coronavirus

		Nov/Dec 20	Feb/Mar 21	Apr/May 21	
Urban rural	Metros	%	36.1	49.7	40.2
		CI	[32.3,40.0]	[45.8,53.5]	[36.8,43.8]
	Cities/towns	%	30.5	39.5	36.9
		CI	[27.8,33.3]	[36.6,42.5]	[33.9,40.0]
	Rural	%	17	26	26.3
		CI	[14.2,20.3]	[23.2,29.0]	[23.5,29.2]
Intra urban	Suburbs	%	51.2	63.3	53.1
		CI	[47.1,55.3]	[58.4,68.0]	[48.1,58.1]
	Townships	%	30.2	39.8	36
		CI	[26.8,33.9]	[36.5,43.2]	[32.9,39.3]
	Shack dweller	%	22.2	32.6	26.5
		CI	[18.1,27.0]	[26.4,39.5]	[21.6,32.0]
	Peri-urban	%	19.1	33	28.4
		CI	[15.8,23.0]	[29.5,36.7]	[24.8,32.2]

Source: NIDS-CRAM W3-W5; 90% confidence intervals

A12: Percentage of people in the neighbourhood who wore masks when they were in public / on the streets

		Everyone wore masks	Most people	About half	A few people	No one wore masks	
Urban rural	Metros	%	16	36.6	13.7	31.3	2.4
		CI	[13.4,19.1]	[32.9,40.3]	[11.2,16.6]	[27.7,35.1]	[1.6,3.5]
	Cities/towns	%	18.2	36.8	15.1	27.4	2.6
		CI	[16.1,20.5]	[34.2,39.5]	[13.3,17.0]	[24.9,30.0]	[1.9,3.5]
	Rural	%	17.2	38.8	15.2	27.6	1.3
		CI	[14.9,19.8]	[35.5,42.2]	[12.9,17.7]	[24.9,30.3]	[0.8,2.0]
Intra urban	Suburbs	%	23.6	43	9.3	21.9	2.2
		CI	[19.7,28.1]	[38.7,47.3]	[7.3,11.7]	[18.6,25.6]	[1.3,3.6]
	Townships	%	10.8	32.3	18.7	34.3	3.8
		CI	[8.9,13.1]	[28.8,36.0]	[16.0,21.7]	[30.8,38.0]	[2.7,5.3]
	Shack dweller	%	13.1	33.7	15.7	35.7	1.9
		CI	[9.8,17.2]	[28.5,39.2]	[11.3,21.4]	[29.9,41.9]	[0.9,3.8]
	Peri-urban	%	22.5	38.1	12.4	26.3	0.7
		CI	[19.2,26.1]	[34.7,41.6]	[10.1,15.2]	[22.4,30.6]	[0.4,1.4]

Source: NIDS-CRAM W5; 90% confidence intervals

A12: Vaccine hesitancy (If a vaccine for COVID-19 were available, I would get it?)

		Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	
Urban rural	Metros	%	65.5	11.6	6.9	16
		CI	[61.4,69.4]	[9.1,14.6]	[4.9,9.6]	[13.7,18.5]
	Cities/towns	%	68.5	10.2	6.2	15.1
		CI	[66.2,70.8]	[8.6,12.1]	[5.1,7.5]	[13.2,17.1]
	Rural	%	74.9	8.4	5.7	11
		CI	[72.2,77.5]	[7.0,10.1]	[4.1,7.8]	[9.3,13.0]
Intra urban	Suburbs	%	57.9	14.5	9.8	17.8
		CI	[53.4,62.3]	[11.6,18.0]	[7.2,13.4]	[14.8,21.2]
	Townships	%	70	10.5	5	14.4
		CI	[66.7,73.2]	[8.3,13.2]	[3.7,6.8]	[12.3,16.8]
	Shack dweller	%	68.8	8.1	4.9	18.2
		CI	[63.8,73.5]	[5.3,12.0]	[3.1,7.7]	[14.2,23.1]
	Peri-urban	%	74.5	8.3	5.3	11.8
		CI	[70.8,78.0]	[6.2,11.1]	[3.9,7.3]	[9.3,14.9]

Source: NIDS-CRAM W5; 90% confidence intervals

For further information please see cramsurvey.org and nids.uct.ac.za