

Chronic Poverty Advisory Network

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Cambodia Poverty Dynamics and Covid-19

National Report

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Abbreviations

CDRI	Cambodia Development Resource Institute
CPAN	Chronic Poverty Advisory Network
FCDO	Foreign, Commonwealth and Development Office
FGD	focus group discussion
HFPS	high frequency phone survey
IDPoor	Cambodian government identification system for targeting poor people
LSMS	Living Standards Measurement Study
MFI	microfinance institution
NFE	nonfarm enterprise
NGO	Non-governmental organisation
NIS	National Institute of Statistics

Summary

This report tracks changes in poverty in Cambodia in the context of the Covid-19 pandemic. Prior to the pandemic, Cambodia had achieved rapid poverty reduction. However, the pandemic and related public health measures undercut the very sources of poverty reduction.

This study synthesises a quantitative analysis of pre-pandemic panel household survey data, with household surveys and qualitative research conducted at three sites during the pandemic (January and February 2022) to assess its socioeconomic impacts. The report also draws out the policy implications of the research findings.

Poverty

In the two decades prior to the pandemic, Cambodia achieved stellar growth performance, which was associated with poverty reduction until at least 2013. The economy has undergone transformation, with agriculture declining in importance. During this period, the urban poverty rate was significantly lower than the rural poverty rate; poverty incidence was highest in the Tonle Sap, plateau and mountainous regions and lowest in the Mekong Plain and coastal regions.

Household assets have been important correlates of welfare, particularly owning a mobile phone, livestock and land, and access to electricity. Access to financial services, education, and involvement in non-agricultural businesses, migration and remittances were all also important determinants of wellbeing. Poverty was linked with having large numbers of dependents (high dependency ratios), rural landlessness and dependence on casual labour.

Livelihoods

In rural areas, diversification away from agriculture since 2000 has provided important routes out of poverty, supported by education and improvements in health services. Diverse livelihoods supported resilience during the pandemic, and households with diversified livelihoods were less vulnerable to downward mobility and destitution.

Agricultural livelihoods have historically been closely connected with migration, with farm households relying on remittances for financing farming operations. Many farm households also rely heavily on credit, and even pre-pandemic were deeply indebted; the disruption of migration during the pandemic deepened indebtedness as farm households strived to keep their operations going. Even better-off households live on fine margins, and the multiple shocks brought about by the pandemic have wiped out hard-won gains. It may be that some of the most damaging impacts of the pandemic in Cambodia will turn out to be increases in household debt and a worsening of repayment terms. The worst impacts may not yet be evident, but would include land sales, which have been substantial according to a forthcoming report (see Brook 2022).

Wellbeing effects of the pandemic

Income loss during the pandemic was widespread, with many households seeing substantial declines. Falls were proportionally greater among households in the bottom two income quintiles, who experienced low levels of consumption even before the new declines began to impact. For many, income declines have not subsequently been reversed and have, in fact, continued to deepen, suggesting that there are considerable processes of impoverishment and destitution in Cambodia as a result of the pandemic and related public health measures. These income losses have been associated with long-term employment loss, and the economy has failed to simply 'bounce back' now that lockdowns have ended. Looking across the full range of income sources, we see that income from non-farm enterprises, remittances, and incomes from the informal sector were particularly vulnerable

to declines. In urban areas, reduced job opportunities during lockdowns were enough to tip some households into destitution.

Shocks

Income losses occurred alongside an increase in the cost of agricultural inputs and foodstuffs. The combination of rising prices and falling incomes caused a squeeze on household budgets that contributed to increased borrowing, as families struggled to cope. For farm households, farm-gate prices and market integration declined, and there was reduced national and cross-border trade, which meant that many households fell into arrears.

Other shocks included ill health, accidents, disability, and the stressor of old age. These overlaid the impacts of the pandemic and overwhelmed traditional safety nets based on kinship, community and friendships.

The pandemic has thus undermined the resilience that vulnerable households had achieved before Covid-19 emerged. There is now greater indebtedness, a lesser ability to rely on social networks, and greater sales of assets, including land, partly to repay debts.

Coping

Borrowing was a key coping strategy for households during the pandemic, and when they fell into arrears, distress migration was commonly employed as a strategy to repay. This was less likely where households gained income from cash crops or other sources. Other widespread forms of coping included: reducing the quantity and quality of the food consumed; greater use of wild foods; dramatically reducing discretionary spending; stopping using electricity; and, for poorer households in later survey waves, accessing social protection or support from non-governmental organisations (NGOs) and churches. Reducing food consumption as a form of coping was particularly marked among those households in the bottom two quintiles – who already had the lowest level of food and general consumption, pre-pandemic.

The roll-out of cash transfers eventually reached many IDPoor households (IDPoor is Cambodia's national system for identifying poor households).¹ Cash transfers improved wellbeing but disbursements may have been inadequate, as food insecurity remained. There were regional variations in social protection coverage, with Tonle Sap being disadvantaged. There were also reported to be problems with targeting; in some communities, there were concerns that local political leaders were not sufficiently objective when identifying households eligible for support from IDPoor.

Many farm households stopped buying fertiliser and stopped hiring casual workers during the pandemic. Only average income and better-off households in urban areas could rely on savings to see them through. Urban and rural households alike disposed of assets as a coping strategy during the pandemic.

Education

Households with at least secondary education were more protected from poverty before the pandemic. During the pandemic, widespread education disruptions had the worst impacts on

¹ The ID poor comprise households identified by each Commune/Sangkat Working Group who are poor, or from 2022 also vulnerable to falling into poverty. Such households get Equity Cards which enable them to access a range of services. The system is supported by the Ministry of Planning and local governments. See: <https://idpoor.gov.kh/en/about/#::~:~:text=IDPoor%20is%20essentially%20a%20community,livelihood%20due%20to%20special%20circumstances.>

children from rural and poor households. Many children were unable to access learning during school closures, as their parents did not have smartphones or could not afford to access data. Many children struggled to concentrate on lessons accessed via a mobile phone, and parents were often unable to support home schooling, as they themselves needed to work. Even though schools have reopened, children from poorer households have often stayed away, with many deciding to drop out and migrate in search of work.

Perceptions of the future

When asked about the future, households in the bottom two quintiles were pessimistic. Many IDPoor households (41 per cent) said that they expected their welfare to be slightly or much worse in the months ahead. Women were more pessimistic, which is understandable as women rely more strongly on social networks and migrant remittances, support from friends, and borrowing food to make ends meet. These networks have thinned out during the pandemic, leaving them even more vulnerable.

Policy measures

During the pandemic, Cambodia balanced health protection measures (in the form of selective lockdowns and movement restrictions) with economic mitigations, including a furlough scheme for laid-off workers in the garments and tourism sectors, increases to the minimum wage, and expanded social protection (cash transfers and a cash-for-work programme).

Increased policy attention to agriculture included interventions to boost infrastructure, increase productivity, strengthen competitiveness, promote agro-processing and the seed industry, and maximise the benefits of free trade agreements.

Perhaps the most controversial aspect of government policy was around microfinance.² The government requested that microfinance institutions (MFIs) postpone debt repayments during the pandemic. However, for those borrowers who have become over-indebted, this would only serve to increase their problems in the long term as interest continued to be charged while loan repayments were postponed, increasing the total cost of the loan.

² See Brook (2022) for preliminary findings and recommendations on a report on over-indebtedness and land sales.

Introduction

The Covid-19 pandemic has significantly increased poverty and downward mobility across the world, especially in low- and lower middle-income countries, which have far less scope for mitigating the effects of both the pandemic and the public health policy responses to it. This report tracks what has happened in Cambodia – a country that had, prior to the pandemic, been reducing both income poverty and multidimensional deprivation in exemplary fashion. In countries with high rates of poverty, where poverty reduction has been slower or has stagnated, one would expect minimal household resilience to a pandemic, since the systems and resources would not be in place to enable people to cope. In a country (such as Cambodia) that had already achieved rapid poverty reduction before the pandemic, one might expect a greater degree of resilience. However, if the sources of that poverty reduction are themselves undermined during the pandemic, this may not be the case.

In terms of cases and deaths, the pandemic had limited direct effects in Cambodia. A total of 138,000 cases of Covid-19 infection were reported, with 3,054 deaths (since July 2021) – a case fatality rate of between 2 per cent and 2.5 per cent. There was excess mortality of around 53/100,000, which is comparatively low, though other countries in Southeast Asia had an even lower rate (Covid-19 Excess Mortality Collaborators 2022). Cambodia had many advantages in dealing with the pandemic, most notably its very young population (average age 25 years, compared with 44 in the UK, for example), its high rural population living in open-air conditions during the day, as well as widely dispersed villages. Combined with the substantial fear of self-reporting generated by forced quarantine and hospitalisation measures at various points in the pandemic, it is likely that the number of cases has been under-reported. Cambodia had achieved remarkably high vaccination coverage by mid-2021, after which time the number of reported cases declined.

This report synthesises a quantitative analysis of pre-pandemic panel household survey data, with household surveys and qualitative research conducted at three sites during the pandemic (January to February 2022) to assess its socioeconomic impacts. The report also draws out the policy implications of the research findings.

The household survey data (see Annex 1) included the following:

- The Cambodia Living Standards Measurement Study Plus (LSMS+) 2019–2020 data.
- Five rounds of the Covid-19 high frequency phone surveys (HFPS) conducted between May 2020 and March 2021. This included a sub-sample of the LSMS+ respondents (disaggregated by pre-pandemic wealth quintile) and another sample of IDPoor households.³

The qualitative research took place in three locations – two rural and one urban. The rural sites were selected from the research sites covered in previous work on poverty dynamics (Bird et al, 2019) and the urban site was selected according to poverty dynamics. Research tools that were used included:

- Focus group discussions (11).⁴
- Life history interviews and sentinel household interviews (35).⁵

³ The surveys were affected by high attrition rates, small sample sizes and other limitations that are discussed in Annex 1. However, relying on both sub-samples of Covid-19 phone surveys, and the pre-pandemic LSMS+ cross-section, allows us to present a more holistic analysis of welfare before and during the pandemic.

⁴ Three focus group discussions (FGDs) with women; three FGDs with men; five thematic FGDs on migration, debt, school lockdown, and social and economic issues.

⁵ Ten Kampong Thom – follow-up sentinel household interviews; ten Mekong Plain – follow-up sentinel household interviews; 15 Phnom Penh – new, urban site, life history interviews.

- Key informant interviews (10).⁶

Of the 35 life history interviews and sentinel household interviews, 12 respondents were classed as chronically poor, 11 were had escaped poverty but only transitorily; and 12 sustained their escapers; 17 were male-headed households and 18 were female-headed households.

In the sections that follow, we specify where the analysis refers to qualitative data collected during fieldwork, and where it stems from the quantitative data sets. For the latter, references to IDPoor households derive from the HFPS-IDPoor data set; references to the full population or quintile analysis refer to the HFPS-LSMS data set; and the pre-pandemic analysis relies on the LSMS+ 2019–2020 data set.

The sequence of work was as follows. The research we are reporting on here builds on work done in 2018, when the original panel data collected by CDRI was analysed alongside qualitative research (focus group discussions, life history interviews and key informant interviews locally and nationally) (Bird, Roth and Diwakar 2018).

Analysis of the LSMS+ 2019–2020 data preceded analysis of the survey data collected during the pandemic, and these two data sets were subsequently brought together (Diwakar and Roth 2022). This was then followed by the qualitative research, which was able to take advantage of the preliminary results from the quantitative work. This report is the first attempt to synthesise these two pieces of research and analysis.

Pre-pandemic poverty, wellbeing and dynamics

What do we know about poverty in Cambodia pre-pandemic? Figure 1 illustrates growth and poverty trends. In addition to a stellar performance on growth, which translated into poverty reduction, at least until 2013, one study notes that Cambodia's:

...economic structure has been gradually changing, with the role of agriculture in gross domestic product and employment steadily diminishing... Nonetheless, agriculture remains an important income source for rural Cambodians. Linked to this has also been processes of land use change, marked by deforestation and over-fishing that has affected access to common property resources.

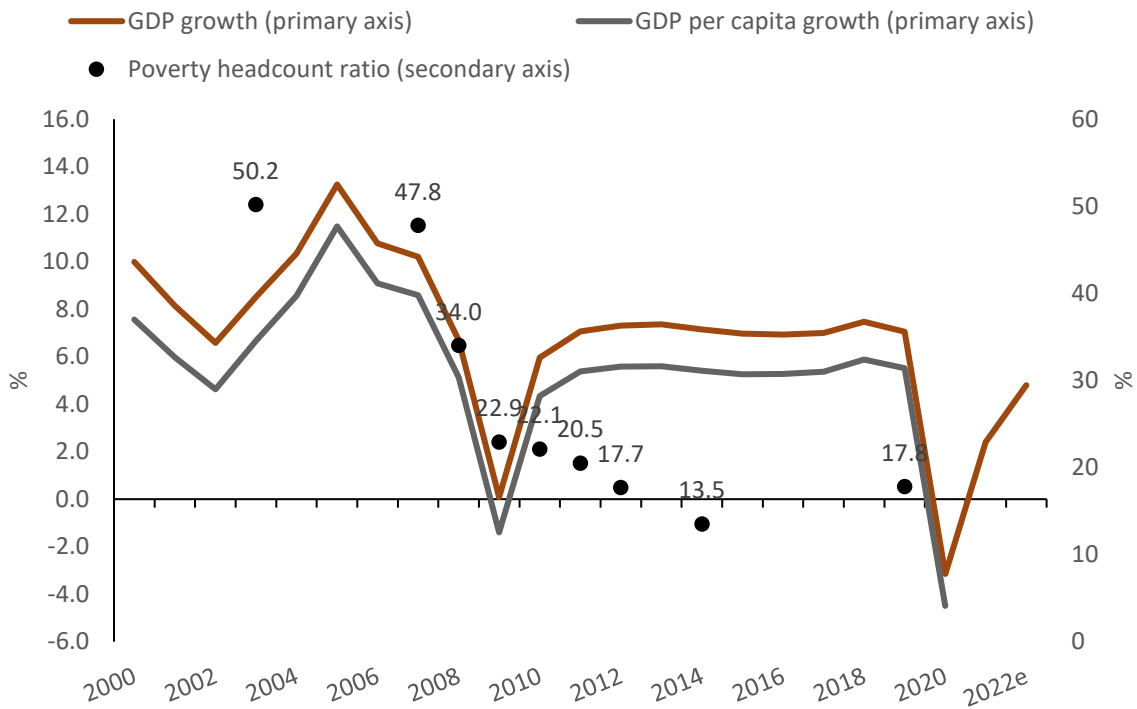
(Bird, Roth and Diwakar, 2018, cited in Diwakar and Roth 2022: 6)

More recently, and speculatively, the rate of poverty reduction *may* have declined, though the 2019–2020 data is unfortunately not comparable with earlier surveys.

Urban poverty was significantly lower than rural poverty. Regionally, the highest incidence of poverty was in Tonle Sap and the plateau and mountainous regions, and incidence was lower among households in the Mekong Plain and coastal regions. Tonle Sap's economy is marked largely by subsistence farming and dependent on agriculture and natural resources, so it is also particularly vulnerable to climate-related shocks and stressors (Varis 2008; World Bank 2021a; Iskander *et al.* 2022). A large proportion of people living in poverty in the region depend on fisheries. They lack access to technology, inputs and services that would enable them to benefit from improved value chains (Iskander *et al.* 2022). Levels of income inequality are high (Figure 2).

Figure 1 Growth of GDP, GDP per capita and poverty headcount

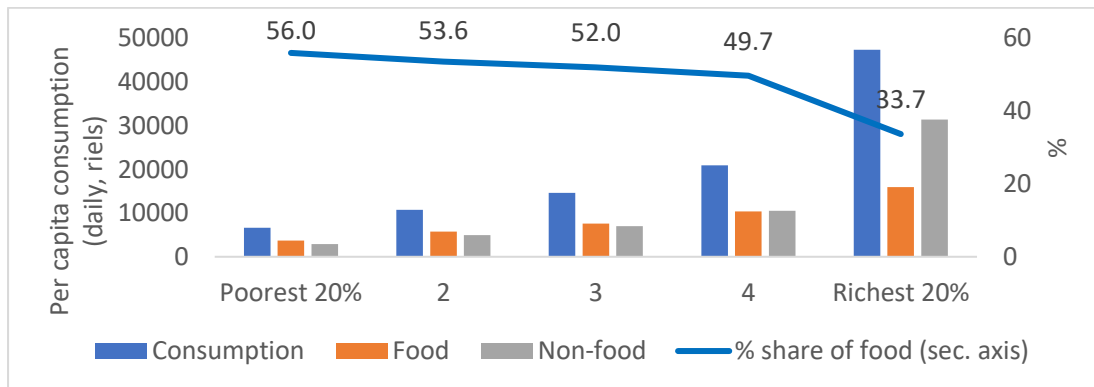
⁶ Four local-level key informant interviews (KIIs) with local authority representatives, six national-level KIIs.



Note: The poverty rate in 2019/2020 is not comparable to the previous estimates as the government improved the poverty measurement method and redefined the poverty line to calculate the 2019/2020 poverty rate.

Source: Authors' analysis based on World Bank (2020) public data from 2006 to 2020 Estimates for 2021 and 2022 are from Ministry of Economy and Finance (2021).

Figure 2: Per capita consumption by quintile



Source: Authors' analysis based on Cambodia National Institute of Statistics (2021) LSMS+ data set .

Household resource endowment was an important correlate of welfare, particularly in terms of possession of a mobile phone, ownership of livestock and land, and access to electricity. Other factors that correlate with wellbeing include access to financial services, education, involvement in non-agricultural businesses, migration, and remittances. Remittances were particularly important in rural areas and for female-headed households. De facto female headship in households with an adult male, and also in households with a migrant, was associated with a lower probability of poverty (Diwakar and Roth 2022).

At the other end of the poverty–wellbeing spectrum, the qualitative research found that staying poor was a result of having more dependents (high dependency ratios) and, in rural areas, landlessness and

dependence on casual labour. In urban areas, living environment could play a fundamental role; simply living along a flood-prone stream could mean needing to take loans from money-lenders when floods destroy property, and earnings would rarely be enough to repay the capital as well as service the interest.⁷ Reduced job opportunities, as during lockdowns, could tip such households into destitution unless their social networks could help them out.

The underlying poverty dynamics in Cambodia are summarised in Box 1.

Box 1: Poverty dynamics during the 2010s (pre-pandemic)

Four rounds of the panel Agriculture, Rural Development and Poverty Reduction Survey in Cambodia between 2008 and 2017 revealed that just under one-fifth of households escaped poverty sustainably, while almost the same share (20 per cent) escaped only to fall back into poverty, or became impoverished for the first time. There was considerable change in the poverty status of rural households, with almost 4 in 5 living in poverty during at least one of the nine survey years. Household coping strategies that lead to a sustained escape from poverty are strongly influenced by diversification of livelihoods and migration, often in conjunction with human capital improvements and underpinned by flexibility to adapt to changing contexts.

This report combined analysis from four rounds of the panel survey with qualitative research approaches (particularly key informant interviews, life histories, and participatory wealth ranking) in six study sites across Cambodia's major agro-ecological zones to further investigate the drivers of changes in poverty status.

The following factors were found to contribute to sustained escapes from poverty:

Initial household resource base

- Initial conditions mattered: the panel data analysis revealed that households which escaped poverty but only for a period were further below the poverty line in 2008 compared to households making a sustained escape. Qualitative evidence indicated that parental asset holdings, parental education and parental occupation all influenced the poverty status of the next generation.
- Agricultural land was an important protector of household wellbeing; livestock was the resource that was most often associated with the largest reduction in the risk of a poverty escape being transitory rather than sustained. also performing an important protective function.

Household characteristics

- Increased dependency ratios in the household were associated with a reduced risk of impoverishment relative to a sustained escape from poverty, though the presence of older children in the household could also contribute to household income and was crucial for escaping poverty.
- High capabilities were associated with sustained escapes from poverty; education and skills were particularly likely to enable access to better earnings.
- Psychosocial factors – such as alcohol and drug abuse/dependence, and violence in marital relationships – were found to contribute to downward mobility (in the qualitative analysis). Conversely, cooperative spousal relationships, strong kinship networks and supportive social relations were found to be important in enabling successful livelihood strategies (in the qualitative analysis).
- Increased inequality, marketisation of previous collective institutions and increased individualism leaves some households excluded and others adversely included⁸ (according to qualitative findings).

Household activities

⁷ However, approximately 60 out of 600 households in the informal settlement where flooding took place in 2021 were included in the IDPoor scheme and had received social assistance.

⁸ Adverse inclusion is where a person is included economically, socially, but on bad terms.

- Agriculture is a core livelihood activity for most rural households, but marginal landholdings (panel analysis) and low and variable profit margins (qualitative analysis) mean that sustained escapes from poverty cannot be achieved through agriculture alone.
- Employment of the household head in a non-farm sector is associated with a 70 per cent lower risk of impoverishment relative to a sustained escape from poverty. Sustained economic growth has generated these non-farm employment opportunities for poor people in construction, retail, the garments sector and tourism, supporting poverty escapes.
- Remittances were associated with a 57 per cent lower risk of a transitory rather than sustained escape from poverty – the largest risk-reducing variable among economic activities.
- Formal loans were associated with a 65 per cent lower risk of chronic poverty relative to a sustained escape in the regression results, based on loans taken out in the 2011 baseline survey round. There was, moreover, a statistically significant increase in the use of formal loans between 2008 and 2017 in the panel data. However, access to formal loans (from NGOs or MFIs) is still relatively low among chronically poor people and households escaping poverty but only for a period, compared to people making a sustained escape. The qualitative data indicates that borrowing was both a source of investment and working capital, and a key source of coping following shocks. Many households benefited from access to credit but cycles of debt, default, and the loss of assets were also a frequent driver of downward mobility.

Household shocks and stressors

- In the panel analysis, health shocks were the most common driver of downward mobility, followed by harvest failures. Poor disaster preparedness left farmers highly exposed to uninsured agricultural shocks. Humanitarian responses were short term and inadequate to enable households to rapidly recover their livelihoods and rebuild their asset bases.
- Low-cost health and crop insurance, coupled with enhanced micro-saving opportunities, could support resilience and promote sustained escapes from poverty.
- Erosion of common properties (forests, fish stocks) had undermined rural livelihoods, with particularly negative consequences for poorer households.
- Distress migration has increased as other sources of coping have been eroded (decline in the Common Property Resources – forests, grazing, and agricultural mechanisation eroded opportunities for local casual work) while risk exposure remained high and indebtedness grew (Bird *et al.* 2018).

Poverty and wellbeing during the Covid-19 pandemic

This section discusses income losses, destitution, shocks and impoverishment, household debt and migration, coping strategies, and social assistance.

The diversification of livelihoods away from agriculture – part of Cambodia’s structural transformation since 2000 – has provided important avenues out of rural poverty, supported by education and improvements in health services. This is reflected in the livelihoods of our 35 qualitative respondents, of whom only 15 households relied primarily on agriculture (11 farmers, 4 agricultural wage labourers), with 10 working as petty traders and 3 relying on salaried or waged work.

Diverse livelihoods remained important during the pandemic, as illustrated in Box 2. This case also illustrates the importance of small households, which do not have to spend so much on food. However, many of the positive factors underlying escapes from poverty have been constrained during the Covid-19 pandemic, as the rest of this section will document. It should be noted that the restrictions placed on economic activities varied from one place to another and during the different pandemic waves, with considerable discretion given to provincial governors. This means that impacts will not have been uniform across the country. The vignettes provided by the qualitative research

need to be complemented wherever possible by representative survey-based results before generalisations can be valid. The qualitative research suggests that people saw the impacts on their lives and livelihoods less as a result of the restrictions and more as a result of the pandemic as a whole.

Box 2: Diverse household investments building resilience even in the pandemic

One woman respondent was from Prey Veng province. She has four members of the household. Their main income is from the family business (brewing wine from rice and raising pigs – see below). Her husband looks after cattle (they have six). Two of her children have been married for a long time. Her other two sons just focus on studying.

She learned how to run a brewing business in the 1980s. At that time, many people in the village ran such a business but now it is only her household who runs this business. She can earn a net income of around 500,000 riels (approximately US \$ 120) per month. From raising pigs, she could earn around US \$1,000 every six months. She said that these two businesses complement each other. She can earn on a daily basis from rice brewing and can sell pigs every six months. The money she earns is used for buying food and sending it to her sons for their education. She doesn't borrow money from anyone.

She reported that she also lost some income during the lockdown in 2021 but this hasn't affected her too much as she has the two businesses, and she had enough money to support in her daily life. Also, she doesn't have debt and she spends very little on food consumption since the household has only a few members. This meant she was able to save a little, which she could use in any urgent case like the previous year.

Income loss

Analysis of Covid-19 phone surveys points to the severity of income loss both in terms of breadth (share of households affected) and depth of loss. The latter was more pronounced in proportional terms among households in the bottom two quintiles with an already low consumption base, and was also severe among IDPoor households. In other words, not only has income loss been deep, but it continues to get deeper over time, starting from a low base. This suggests that there are considerable processes of impoverishment (breadth), but also destitution (depth) in Cambodia as a result of the Covid-19 pandemic.

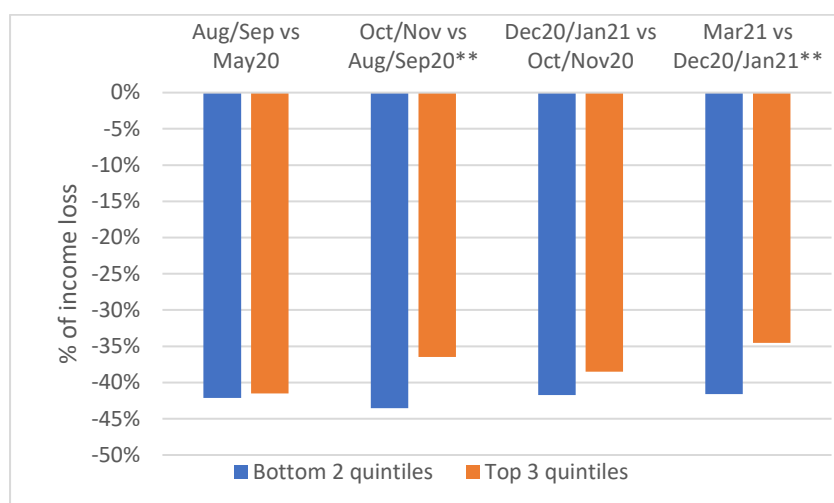
Income loss has also been severe. Non-farm enterprises (NFEs) were most affected by income loss at the outset of the pandemic. By March 2021 (compared to December 2020), a large share of households (particularly IDPoor households) continued to report income loss if their main income derived from NFEs. Receipt of remittances also plummeted during the pandemic. These results are particularly concerning given that NFEs and remittances were both important correlates of reducing the probability of poverty pre-Covid-19, suggesting that important pathways out of poverty are being constrained. For example, in the Phnom Penh qualitative research site, many people diversified into running grocery shops during the pandemic, but this activity was later abandoned as customers were not spending enough.

When focused on the subset of IDPoor households, moreover, large reductions in household income were observed across sources, more so than for the full population. For example, 63 per cent of LSMS + households relying on income from wage employment experienced income losses in May 2020, but the figure was much higher, at 79 per cent, among IDPoor households. This could reflect the insecurity of informal employment, a sector that accounts for a large share of the Cambodian population. It was estimated pre-pandemic that 7 million workers were not covered by National Social Security Fund schemes, corresponding to around 83 per cent of the country's workforce (Both *et al.*, 2018).

On remittances, in May 2020, 75 per cent of LSMS + households and 87 per cent of IDPoor households in May 2020 that relied on this income reported experiencing losses from these transfers, compared to pre-pandemic levels. Over 60 per cent of migrant households reported declines in the income of the migrant during the pandemic. Of migrants who had returned home by August/September 2020, most had done so because the factories they were working in had closed (36 per cent), or there was a lack of work (24 per cent) (Karamba and Tong 2020).

Among households reporting income loss, those in the bottom two quintiles experienced a more severe reduction in incomes. Based on the already low per capita consumption of households in the bottom of the distribution (Figure 2), this points not just to new impoverishment but severe processes of destitution occurring from an already low welfare base. Such income losses continued as the pandemic wore on (Figure 3).

Figure 3: Income losses over time, bottom 2 quintiles compared to top 3 quintiles

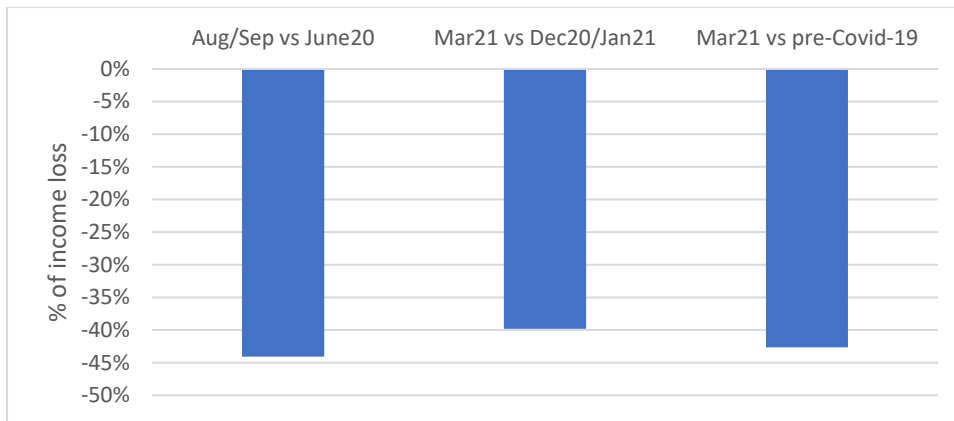


Source: Authors’ analysis based on World Bank (2023) HFPS-IDPoor data set.

Destitution

To better understand the extent of destitution, we further examine the percentage decline in income among IDPoor households. We find that 56.5 per cent of IDPoor households experienced reductions in their income in August/September 2020 compared to June 2020. Those households had a 44.1 per cent income reduction (on average) in August/September 2020 compared to before the Covid-19 outbreak (Figure 4). By the time of the latest survey round in March 2021, IDPoor households experiencing income loss had a 39.8 per cent reduction in their income (on average) compared to December 2020/January 2021. However, when compared with pre-pandemic, the depth of income loss remained high, with households reporting as much as a 42.7 per cent reduction in their incomes (on average) over time. Many households who reported income loss overall also reported income loss in agriculture, NFEs and wage employment, with similar levels of severity, reporting between 45.1 per cent and 47.2 per cent reduction in their income from these sources by March 2021 compared to prior to the pandemic.

Figure 4: Percentage decline in income among IDPoor households



Source: Authors' analysis based on World Bank (2023) HFPS-IDPoor data set.

More recent data (since the HFPS) point to continued loss in employment and incomes into July 2021 (ADB 2021). By December 2021, although fewer households faced income reduction and job loss compared to October 2021, female-headed households remained particularly vulnerable to job loss. Moreover, income reductions affected IDPoor households in particular (ADB 2023).

Shocks and impoverishment

Qualitative research revealed that there were many shocks which could lead to impoverishment. Income losses during the pandemic were common for both farm and non-farm households. Of the 35 households in the qualitative data set, 22 experienced a reduction in their own income during the pandemic. A further 3 saw their remittances fall and 7 saw a reduction in the support they received. Sharp rises in input prices have shattered agricultural profitability, increasing farmer debt and vulnerability. In Prey Veng province, farms have been affected by floods and droughts, and returns to farming have suffered from these combined shocks.

Growing rice is not profitable because the price of oil doubled from 50,000 to 100,000 riels and fertiliser prices increased from between 60,000 and 80,000 riels to between 170,000 and 200,000 riels, while the price of rice has remained around 800–1,000 a kg (2020–2022). Therefore, we have had to pause growing rice for one season and wait until May and October when there will be more rain, which reduces the need for fertiliser.

(Pov Houen, Interview 8, Male, Temporary Escape, Prey Veng)

Other important shocks capable of inducing impoverishment or downward mobility included ill health, accidents, disability, and the stressor of old age. There was also widespread reliance on borrowing to avoid becoming poor or destitute; however, that in itself could be a cause of impoverishment if assets had to be sold to repay loans, or additional loans had to be acquired to pay off the first one. Box 3 gives an account of a family that had to sell its land to defray health expenses, and has then struggled to create self-employment opportunities, going into significant debt and risking fines in the process. Reduced income from firewood collection due to the effects of movement restrictions on firewood traders certainly stressed the household economy further for a period of time.

Box 3: A case study of chronic poverty in Kampong Thom

This case study is of a male respondent in Kampong Thom province, whose family has five members. They earn their livelihood through forest logging and wage labour. He has no farmland; he sold it to cover the costs of his wife's health-care treatment three years ago. It is more difficult for him to earn money now. During the Covid-19 pandemic last year, he couldn't sell firewood. Normally, there are

some people who buy the firewood from villagers and then sell it on in other provinces. However, many of them didn't buy firewood due to Covid-19 restriction measures (the authorities did not allow people to travel across the province). Their income from selling firewood fell by around 50 per cent (from 1 million riels to 500,000 riels per month). They then needed to do other work collecting cashew nuts. The household is still facing food insecurity; they don't have enough to eat and sometimes need to borrow foods such as meat and eggs from vendors in the village.

The man borrowed money from a microfinance institution (MFI) to buy a hand tractor to start forest-logging activities three years ago. He gave the reason that his sons were older now and didn't have any work to do. He borrowed about \$3,000 at an interest rate of 1.5 per cent per month. He also borrowed money to buy a motorcycle from another MFI two years ago. Currently, he has to pay around 1 million riels per month in debt repayments. He said that he didn't want to be indebted but his sons have nothing to do and have no farmlands to cultivate; therefore, he needed to borrow money to buy the machine so that they could earn an income and sustain their livelihoods. For now, the income is dropping but he has to repay the debts every month. It is therefore difficult for him to improve his livelihood.

There could also be location-specific shocks, such as regulation, and flooding. In one rural site, hand tractors were seized from illegal loggers, some of whom had been forced into that activity by a lack of alternatives, as employment opportunities had dried up and common land no longer provided a safety net. To get their tractors back, the loggers needed to pay a fine of 3 million riels (\$750). They had no choice but to find or borrow the money from money-lenders. In the urban site, severe flooding of a riverbank informal settlement destroyed some houses and other assets and led to displacement (see case study, Box 4). These shocks were overlaid on the pandemic, which was itself multidimensional.

Box 4: A case study of the drivers of poverty for a household in a Phnom Penh informal settlement

This case study is of a female respondent in Phnom Penh. Her household used to be an 'average' (not poor, not wealthy) household before 2020. Her husband is a dump-truck driver. Before the pandemic, he could earn a decent income as the construction sector was booming. However, since Covid-19 broke out, construction activities have slowed. Her husband's income has decreased to around 30 per cent of what it was. On top of that, they have many children and there are lots of household expenses to cover every day. They eat 2 sacks of rice (100kg) a month. Their daughter's job in NagaWorld (a luxury hotel) has also been suspended and she no longer earns from that. There was also a heavy flood in 2021, which affected their house, adding to the family's problems. They don't have money to repair the house but are still living in it, despite the damage.

In order to deal with these problems, the household has adopted various strategies. The couple has borrowed money from their siblings to cover daily expenses (a source of borrowing for which they don't have to pay interest). She has also cut down expenditure on food. Before, she spent around 60,000 riels per day on food but now spends only 20,000 riels per day. Her husband also forages for golden apple snails in the rice fields. (Golden apple snails are not commonly eaten but because of Covid-19 and the family's reduction in income, they have decided to eat this kind of snail.) They have also reduced the money they give to their children for school, from 2,000 riels per day to 1,000.

Indebtedness and migration

Borrowing is widespread, with 22 out of 35 households in the qualitative data set having an outstanding loan, compared to only 9 with savings and 6 with livestock. Seventeen households took out new loans in response to the pandemic (the principal coping strategy); only 10 households sold property or possessions, while 11 diversified and another 11 reduced food expenditure. A

forthcoming report has put a quantitative estimate on credit and over-indebtedness, based on a survey of 1,388 households in 24 villages across six provinces (Battambang, Banteay Mean Chey, Kampong Thom, Kampong Chhnang, Kampong Speu and Kampot). Brook (2022), describing the report's findings, states that: 'at least 770 households surveyed had an active loan and 964 households, or 70%, received loans between 2016 and 2021.' The report found that:

...most of the borrowers surveyed were satisfied with their microloans, as 82.3% reported benefits including increased income from assets such as houses and land and "replacement of [a] previous loan." In contrast, 17.6% reported negative experiences with microloans including repayment problems, distressed sales and social challenges... Estimates of more than 167,000 forced land sales, or 33,480 annually, for Cambodia as a whole, were based on 61 of the households who reported they were forced to sell land to repay debt. He claimed not all of the 61 households were in "crisis" as a result of the sales.

(Brook 2022)

There was extensive further evidence of distress among borrowers interviewed by these authors:

In 2020, During the covid-19 pandemic, my monthly salaries were \$192–\$210 but it was not enough to pay for my debts so I continue to borrow (\$50/\$10 interest). My first solution is to borrow more money. I usually borrow \$50–\$60 at the end of each month until I get my salary. I have to borrow money to feed my family. To cope with this situation, I consider borrowing money from the bank to give to these private lenders but I have no property to give to the bank. I am worried about the increasing debts but I cannot do anything... I hold on to hope that I can start my own business when I have some money and pay back all my debts.

I started borrowing money from my fellow factory workers with very high interest. I have 3 main loans that include \$1,000 from a bank, which is almost paid off. Another \$1,500 with \$120 monthly payments. This debt has now grown to \$3,000 and continues to grow. My husband used to work as a bodyguard but he had stopped because of Covid-19... The debts continue to grow as we depend on my husband's unreliable salary, my father-in-law's additional help and borrowing money.

(Unassigned name, Interview 29, Female, Life History Interviewee, Chronically Poor, Phnom Penh)

Indebtedness linked to Covid-19 is now driving a minority of households interviewed (3 out of 35) to sell land and is driving distress migration among a larger minority, as agricultural profits collapse. However, migration is not delivering the same level of returns as it did pre-pandemic, as garment factories have cut production and many no longer offer overtime. Yet, many households are still reportedly migrating in a desperate bid to either repay existing debts or avoid new debts (thematic FGD, Baboang).

In urban areas, the lengthy lockdowns led to many people surviving by borrowing, with casual labourers and informal sector workers in particular becoming indebted. In rural areas too, the rise in input prices in 2021 coupled with declining output prices also increased household borrowing. The collapse of the firewood market (already discussed, see Box 2) brought on another source of new debt.

In Prey Veng province, according to one focus group participant:

Around 20 per cent of farmers didn't cultivate this year [2021]. They instead migrate to work outside. Around 70 per cent of villagers migrate to work. You can see that the village is quiet

as people leave their houses to earn income in Phnom Penh and Sihanoukville. Only old people are staying at home and looking after their grandchildren.

(18 participant in FGD with women, Prey Veng province)

I didn't cultivate rice last year. The rice farms nearby were abandoned as the owners migrated to work outside. I am afraid that mice and insects would have destroyed my rice if I cultivated it alone.

Before the pandemic, I worked as a primary teacher. I also grow rain-fed rice on 1 hectare, getting one harvest a year of around 3 tons. I keep half for household consumption and sell the rest to repay the rice trader who gave me seasonal credit for agricultural inputs [at 3 per cent interest]. I feel pressure to repay all the credit to the trader after the harvesting season. I don't want to be indebted to them. In some years, I sell the rice and still cannot repay all the credit. Then, I use my salary to make the repayment.

(Male respondent, 65 years old, rural site in Prey Veng) (Sun Bunly, Interview 7, Male, Sentinel Household Interview, Temporary Escape, Prey Veng).

However, where there are cash crops and other viable sources of income, there was reported to be much less migration, as in the Kampong Thom research site. According to an interview with the village chief, the migration rate is relatively low. People tend to work on their cash crop farms and some are also farm workers. However, this is the village where forest guards are clamping down on illegal logging, so there could be pressures to migrate in future if these livelihood opportunities are closed.

Migration is highly socially differentiated, for example, in construction (Lawreniuk and Parsons, 2020). Uneducated, poor migrants obtain low-skilled, low-paid jobs, whereas educated migrants can generally obtain better jobs and remit more money. The need to migrate during the pandemic would have represented decisions under pressure and would have been unlikely to have been for the higher levels of pay obtained by some.

In the Prey Veng province research site, where out-migration is a key coping mechanism and a push factor from low rice yields, qualitative interviews indicated that poor migrant households were mostly engaged in waged labour: men tended to do construction work and women tended to work in the garments sector. In contrast, non-poor or average households mainly migrate to drive vegetable and grocery vending trucks in Phnom Penh and Sihanoukville province. This kind of business requires financial capital to invest in motorcycles and trucks. We saw earlier that this could be a risky occupation during the pandemic, as consumer demand fell.

Alongside renewed migration driven by indebtedness, households (including those with migrant members) reported a drop in remittances during the pandemic, lasting until February 2022. Those who are engaged in the garments sector have not been getting overtime payments as factories' purchasing orders have been limited. One female garment worker explained during a focus group discussion that:

Before Covid-19, my salary was \$300 including overtime payment, I could send my parents around \$200. From 2020, there was no overtime, and I could send them around \$100–\$150 a month. I send it to my parents for my child's milk powder and other daily expenses.

(Female respondent, 22 years old, garment worker, rural site in Prey Veng)

A member of another household that typically received remittances from a migrant member reported that:

During the pandemic, I stopped receiving money from my children every month – just on special occasions such as Khmer New Year. My daughters could not earn money like before

and that is why they stop sending money. One of them is pregnant and doesn't work. Another one cannot earn as before. She is a garment worker and her income fell. She has to earn money to support her family too.

(Ya Sopha, INT 10, F, SHI, CP, Prey Veng)

Those engaged in the vendor truck business, on the other hand, could not earn a good income since 2020 as consumers had limited their expenditure, such that incomes were significantly less than in 2018 and 2019. One person engaged in this business said that his income had dropped from 150,000 riels a day in 2019 to around 50,000 a day now (thematic mixed FGDs, Prey Veng).

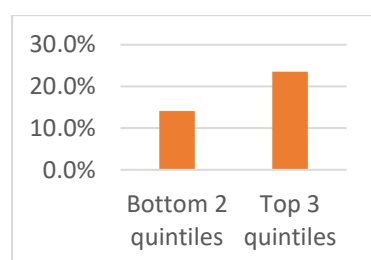
The reduction in remittances will have had severe consequences for farm households who have relied on remitted money to purchase inputs like seeds, pesticides and fertilisers, or to pay for labour. Reduced capacity to farm would have coincided with a flow of returned migrants no longer receiving their salaries or incomes from self-employment, dependent on the farm to feed them, which would have tested the resilience of those farms. A further effect of Covid-related restrictions on movement would have been to reduce the circular migration of migrants back to farms to help with farm operations.

Education

Education was another correlate of welfare in Cambodia pre-pandemic, offering protection against poverty, especially for households with members that had attained secondary level and above. During Covid-19, however, widespread and repeated school closures disrupted education provision. Even where education activities have resumed since the pandemic, the engagement of children from poorer households remains low (Figure 5). A focus group discussion in a village of Prey Veng province revealed that many young people decided to drop out of school and migrate to work outside the village.

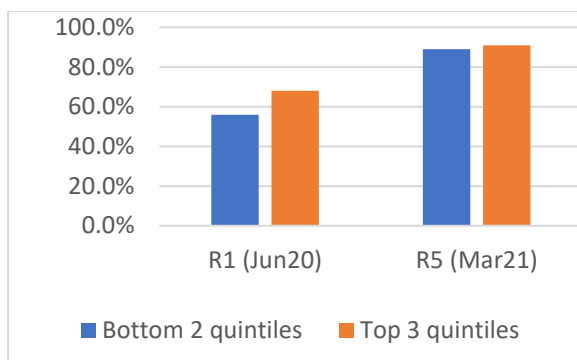
The closure of schools in March 2020 until the start of November 2020, and a second nationwide closure from the end of November, strongly affected children's ability to engage in learning activities. At the onset of the pandemic, children from richer households were more able to continue engaging with education activities in spite of the school closures, though by the latest wave there was a levelling off, as the proportion of children from poorer households engaging in education began to increase (Figure 6).

Figure 5: Education activities for more than 24 hours per week



Source: Authors' analysis based on World Bank (2021b) HFPS-LSMS data set.

Figure 6: Engagement in education



Source: Authors' analysis based on World Bank (2021b) HFPS-LSMS data set.

The qualitative research provided further insights into the negative impacts of the pandemic on children's learning. In rural areas, especially at the research site in Kampong Thom province, most parents revealed that their children did not study during school closures. This situation was even worse for poor households, which do not have smartphones for their children to use. Instead of going to school, children usually went with their parents to the farms, and stayed there all day. According to a focus group discussion with primary teachers at a local school in the village, teaching online was not feasible. They had to spend a lot of time teaching as children did not pay attention and could not stay still in front of the phones. Also, the participation rate was very low; this led them to stop teaching online and instead arranged another study mode – small group studies.

Urban children experienced a different challenge. Even poor households tended to have a smartphone that their children could use to study. However, the quality of education was a key concern for parents and caregivers at the urban site. Children were reported to have no capacity for concentration when studying using tablets or smartphones, given the large amount of inappropriate content available on the internet. Parents could spend all their time monitoring their children since they were also busy earning their living. A respondent in a focus group discussion explained that her child studied online during the school closures, but she observed that the child's level of learning was limited. She prefers her child to study in the school rather than study virtually.

Coping strategies

As a result of the Covid-related shocks, households were forced to rely on a range of coping strategies, especially reducing consumption, taking loans, and (for poorer households in later survey waves) accessing social protection (Figure 8). The qualitative research identified the same coping strategies.

I have an IDPoor card and have received a cash transfer of around 200,000 riels from the government every month since the beginning of 2020. Besides, we have frequently received food aid from authorities, such as instant noodles and oil... My daughter who is studying at Dong Kda primary school also once received some support such as rice and fish during this Covid time.

(Yan Yav, Ineterview 19, Male, Sentinel Household Interview, Chronically Poor, Kampong Thom)

As well as reducing food consumption, households responded to income loss by changing their diet, introducing wild foods and inferior foods, and reducing the number of meals.

We ate only twice a day on non-working days and ate three times a day on working days. This practice occurred a long time ago.

(Yan Yav, Interview 19, Male, Sentinel Household Interview, Chronically Poor, Kampong Thom)

From 2019 to the beginning of 2021, I had to reduce spending on food and choose cheaper alternatives such as eggs and fish, because I cannot afford pork or beef.

(Norn Leakhena, Interview 5, Female, Sentinel Household Interview, Temporary E, Prey Veng)

Some poorer households reported that on days when they have not earned enough, they resort to buying food on credit from a grocery store where they are well known.

When we don't have enough money to buy meat and stuff, we would go to buy eggs from the nearby grocery store on credit.

(Yan Yav, Interview 19, Male, Sentinel Household Interview, Chronically Poor, Kampong Thom)

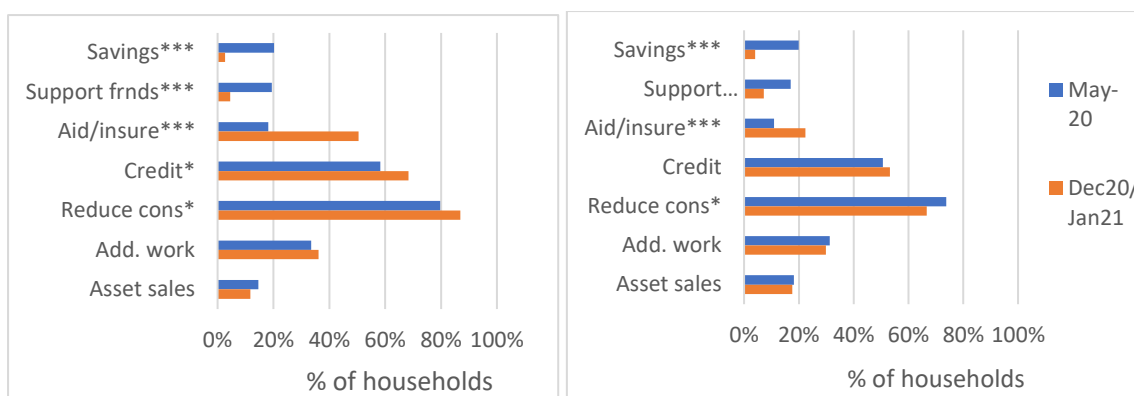
Some rural households also stopped buying fertiliser in 2021 as they could no longer afford it; and some urban households stopped buying electricity. Only average income and better-off households in urban areas could rely on savings. On the other hand, both urban and rural households disposed of assets when they had to. Better-off households were seen as quite resilient to the pandemic, precisely because they could use savings and sell assets.

The qualitative research revealed that some households resorted to eating wild foods during the pandemic. In rural areas, it is common for villagers to collect non-timber forest products such as fruits and fish (for consumption) from nearby lakes or forests. We found that both poor and non-poor households who have male members tended to apply this strategy. Men tended to do this when they were free from working or farming. They are also well-practised in this activity, which is a way to help families reduce some expenditures and boost food security. Surprisingly, in the urban research site, people had started to find natural products to eat, such as snails from nearby streams and rice fields. They reported that they had never done this before, but just after the pandemic started in 2020, they suddenly lost income and needed to find food, otherwise they would not have had enough to eat (Box 4).

NGOs and churches also provided food aid for some families. Some rural poor households, especially those who obtained IDPoor cards, received food aid such as rice and fish. In the urban qualitative research site, some households were members of a local church, which provided some foods such as rice to its members every month.

Traditional forms of support, such as from friends, have been reducing over time, perhaps as a result of community networks thinning out due to widespread challenges. Even though the roll-out of cash transfers has eventually reached many IDPoor households, the amounts may not be sufficient to prevent reductions in food consumption and continued food insecurity. Moreover, there remain regional variations in access to social protection, disadvantaging Tonle Sap, which was already the poorest region in the country pre-pandemic. In this context, household expectations for future months often remained bleak.

Figure 7: Actions in response to Covid-19, bottom 2 quintiles (left), top 3 quintiles (right)



Source: Authors' analysis based on World Bank (2021b) HFPS-LSMS data set.

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$, representing statistically significant difference in responses in Dec 20/Jan 21 compared to May 20.

Indebtedness was common across the qualitative study sites. There are three main sources that households typically seek to take out loans, the most popular being microfinance institutions (MFIs) and banks. The interest rates offered are quite reasonable but only those who have collateral assets (such as land or a house with a title deed) can borrow from these sources. Landless and poor households from all study sites reported not being able to seek loans from these sources, and had to use private lenders instead. Although the latter do not require collateral assets, the interest rates are quite high, ranging from 3 per cent to 25 per cent per month. The third source of loans is relatives, where there is no interest rate but borrowers have to repay the debt quickly. A small number of households said that they *could* borrow money from their relatives but chose not to because their relatives also had financial difficulties and they did not want to add to them; they borrow from financial institutions or private lenders instead.

Social assistance

Social assistance is also considered to be a potential interrupter of poverty for poor households because the cash transfers help them reduce some expenditures on food and health.

In response to the needs of poor and vulnerable groups during the pandemic, with aid from the World Bank and UN, the Cambodian government updated the list of IDPoor households, and introduced 'on-demand' IDPoor. This requires the local authorities to assess the emergency needs of people in their localities. The government then responds by providing support in cash through an app. This process is able to reach a wide range of people quickly and simultaneously, with benefits in terms of accountability and transparency (Sivutha 2022). The number of IDPoor households increased during the pandemic from around 900,000 to around 2.3 million, who could then gain access to crucial social services.

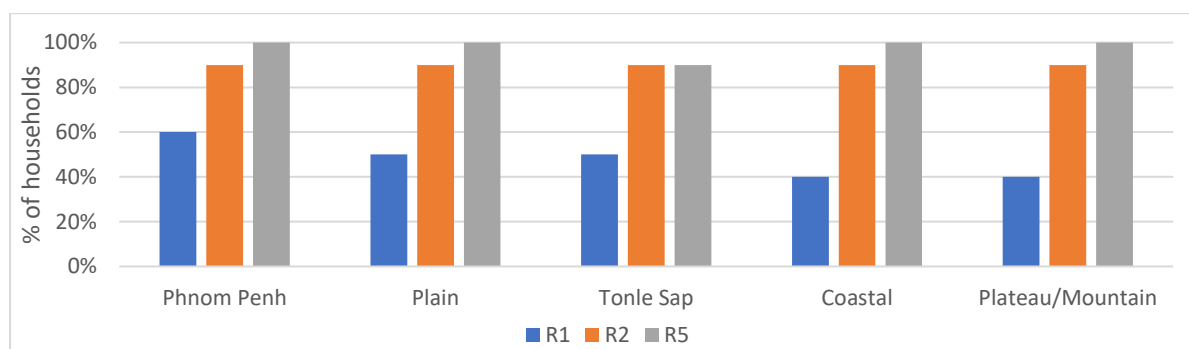
The qualitative research found that the government's IDPoor programme was beneficial for poor households during the pandemic. Over the past two years, identified poor households had received cash transfers from the government every month to support their daily expenses. All 9 individuals from IDPoor households who were interviewed reported that cash transfers had partially helped them with food and medical expenses. In Kampong Thom province, one female head of household used to receive remittances from her children who were working in garment factories in Phnom Penh, but they stopped remitting since the beginning of Covid-19, because they did not have enough money to send her. Fortunately, she had received the cash transfer of 150,000 riels per month through the IDPoor programme. This has helped her with some household food expenses.

Despite the IDPoor benefits, many of which reached the right people, there were some concerns expressed about targeting. Some villagers reported that poor households are identified by village chiefs, who identify and choose households and send the names to communes for further processing. The villagers criticised the lack of transparency in this process as it depends solely on a decision by the village chief. As a solution, they asked for another way that they could apply to the program in their own right, without the chief’s intermediation. The poor households we interviewed rarely participate in any decision-making process. The programme’s lack of communication and sharing of information and inclusive engagement could be one of the key reasons why poor households see a lack of transparency and accountability in the process of IDPoor identification procedures. For example, there was strong criticism among poor households in the Phnom Penh research site regarding lack of accountability and transparency, and nepotism.

Narith and Chaker (2022) argue that some people might not have taken full advantage of the benefits IDPoor eligibility brings, such as free healthcare, citing inadequate dissemination and communication about the benefits associated with the programme. There should, therefore, be greater efforts to disseminate this information and people’s understanding of the benefits of IDPoor.

The household survey analysis also identified regional variations in the receipt of cash transfers, disadvantaging Tonle Sap compared to other regions, potentially on account of its remoteness (Figure 8). Despite improvements in this access, the level of aid appears to be inadequate. For example, most IDPoor households on average received a total of \$252 in Covid-19 relief cash transfers between late June 2020 and December 2020/ January 2021 (Karamba, Tong and Salcher2022).

Figure 8: Assistance to IDPoor households



Note: The cash transfer programme was not launched in round 1, which largely explains the difference between rounds 1 and 2 in terms of household receipt of social assistance.

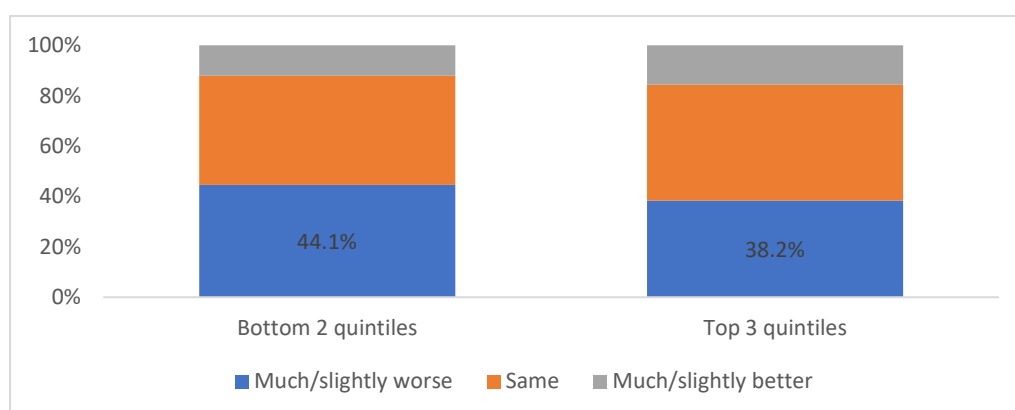
Source: Authors’ analysis based on World Bank (2023) HFPS-IDPoor data set.

As a result, households in the bottom two quintiles in particular were forced to further reduce their consumption in an effort to make ends meet (Figure 4) whereas households in the top three quintiles were less likely to reduce consumption over time. By gender, the main difference among IDPoor households was in terms of borrowed food, in that female-headed households were more likely than male-headed households to borrow food by the latest wave. Reflecting these coping strategies, households in the bottom two quintiles across research sites were also much more likely to record being ‘a lot’ or ‘extremely worried’ about family members not having enough to eat, despite people in poverty already spending a larger share of their income on food pre-pandemic. Indeed, by the latest survey wave, though the shares of income spent on food had decreased across the distribution, around 35 per cent of households in the bottom two quintiles were still really concerned about this.

Poverty futures

With all these impacts of the pandemic – from substantial income losses and reduced food consumption to continued food insecurity and children’s learning deficits – it is no wonder that we observed a sense of hopelessness among households in the bottom two quintiles (Figure 9). Among IDPoor households, many (41 per cent) reported that they expect their welfare to be slightly or much worse in the months ahead. Disaggregating by gender, men were (on average) more optimistic, with 17 per cent expecting the situation to be better in the months ahead, compared to only 8 per cent of female-headed households. This is understandable given that female-headed households were more likely to rely on social networks and migrant remittances, support from friends, and borrowing food to make ends meet. With a thinning out of these networks, it is no wonder that they are less able to remain optimistic. Finally, if we disaggregate further, we find that food-insecure households and those experiencing income loss were more likely to expect their wellbeing to decline into the summer of 2021, reflecting their increased vulnerability.

Figure 9: Expected wellbeing change in the next few months (LSMS)



Source: Authors’ analysis based on World Bank (2023) HFPS-IDPoor data set.

Conclusions and policy priorities

The Covid-19 pandemic has undone significant aspects of the progress made by Cambodia in reducing poverty in the 2000s and 2010s, and has undermined people’s resilience. The shocks to people’s livelihoods created by the pandemic and responses to it have affected large swathes of the population, including those who were not poor or particularly vulnerable before the pandemic. As well as many of the gains of previous decades coming undone, the high levels of debt incurred during the pandemic as people struggled to secure their livelihoods have undermined resilience to future crises, such as recent floods. Cambodia is highly vulnerable to climate-related disasters, and these can only be expected to increase in frequency and intensity. It will be important to rebuild resilience – of households and systems – over the coming years.

Cambodia’s experience nevertheless illustrates how a country with still significant levels of poverty and vulnerability was able to develop a balanced policy response (see below).

The pandemic had very strong indirect effects in Cambodia, with job and income losses, and school disruption reducing learning significantly. Limited direct effects (3,054 deaths, since July 2021, which translates into a 2 to 2.5% case fatality rate) and a relatively low excess mortality rate reflect the public health measures taken, which were weaker than some countries’, but in retrospect seem to have been adequate for the situation faced, and included a very big and successful vaccination campaign in 2021-22. The key impacts of the pandemic, as unearthed by our research, include a significant over-indebtedness of poor Cambodians, which worsened during the pandemic. This is illustrated by the

rush to return to migration in some communities, even though migrant worker earnings had not returned to pre-pandemic levels. Other impacts – including the extent of food insecurity and coping strategies that reduce food intake and expenditure, and the difficulties encountered by children to continue learning during school closures – point to worsened nutritional, cognitive development and educational outcomes in the longer term, particularly for poor Cambodians. Given the scale (breadth and depth) of income losses during the pandemic, the indirect effects will be felt in the medium-to-long term, depending on recovery policy responses going forward.

Cambodians have lived for many generations in a very risk-intensive environment, characterised by high levels of personal debt, inflation, poorly functioning markets (price volatility, poorly integrated over time and space), and many skip-generation households. The pandemic, and policy responses to it, were laid on top of those risks. This has increased the likelihood that progress in poverty reduction has stalled or even regressed. The global recession has removed or reduced opportunities for escaping poverty (labour-intensive manufacturing, migration, non-farm enterprises) as well as impoverishing households and causing downward mobility, especially among the lower half of the distribution.

Policy measures undertaken

Cambodia's response to the pandemic was active and became more balanced over time. Political leaders and their advisers understood that selective lockdowns and movement restrictions were necessary to limit transmission of the virus. They also understood the need for a furlough scheme, with payments to a minority of laid-off workers in the garments and tourism sectors of \$40 per month from the government (Ministry of Labour and Vocational Training 2020) and \$30 from companies (though employers did not always pay their share), and the government raised the minimum wage (Box 5). The cash transfer was expanded and a cash-for-work scheme developed to mitigate the impacts of the lockdowns on households (Box 5). Although such payments might not have been substantial and, in the case of cash transfers, took months to really expand, they were appreciated by recipient households.

Box 5: Minimum wage negotiations during the pandemic

The minimum wage negotiations between trade unions and employers in 2020 were conducted in the tough context of the Covid-19 pandemic, with implications for industries already under pressure. Cuts to the Everything but Arms (EBA) tariff scheme, which affects 20 per cent of garment and footwear exports to the European Union (EU), put key industries under further pressure. Employers proposed a \$17 decrease in the minimum wage of \$182, set in 2019, while unions wanted an increase of \$12. The National Wage Council decided against an increase in 2020, but in 2021 approved an increase to \$190. With employers pitted against unions, however, the Cambodian government announced a small rise in the minimum wage of \$2 for 2021 to take effect from January 1, 2021 (Chea 2021).

Box 6: Expanded social protection

An evaluation of the Covid-19 cash transfer programme by the Ministry of Planning, the General Secretariat of the National Social Protection Council and the United Nations Development Programme (UNDP) concluded that it succeeded in promoting positive coping skills, improved people's resilience, and decreased poverty. Additionally, it prevented some further loss of development gains made over the past 20 years. Components that aided the programme's success included the strengthening and institutionalisation of current social protection policies, prioritising those most at risk and affected by the pandemic, utilising digital technology to increase efficiency, and improving targeting to ensure inclusivity. By October 2021, cash transfers had been extended to one-fifth of the population (678,459

households, including around 2,000 HIV-positive individuals and more than 60,000 people with disabilities). These beneficiaries were identified by the IDPoor programme, receiving payments of \$45 per month, totalling almost \$440 million, and the scheme was extended until December 2021. Another 121,397 eligible (Covid-affected) non-poor households received one-off payments.

The government's support for social assistance has reached 700,000 poor and vulnerable households (totalling \$714.9 million) as at June 25, 2022 (Dara 2022). Major driving forces for the successful expansion of the cash transfer were the inclusive 'on-demand' IDPoor (OD-IDPoor) identification methods at commune level and the speed with which it can identify households (the process has been supported by UNDP, UNICEF and GIZ on behalf of the German and Australian governments, who sponsored two tablets for each commune). The OD-IDPoor scheme rapidly identified new households affected by Covid-19 in addition to the original poor and vulnerable households identified pre-pandemic (Pagnathun, Cerceau and de Riel 2021). From the beneficiary perspective, based on a Garment Workers Survey (2021) with 2,000 respondents, government support programmes were the third most common coping mechanisms for garment workers to mitigate the impacts of the pandemic (Bossba and Socheata 2022).

Sources: Delux and Socheata (2022); authors' interviews.

The government also invested heavily in vaccination, with significant success (it was second for vaccination coverage in Asia, and seventh in the world, by November 2021); and 85 per cent of the population were fully vaccinated by the end of March 2022, rising to 95 per cent as at November 2022. Cambodia achieved much more rapid progress than other countries by targeting areas rather than categories of individuals, informing people when and where vaccinations would be available (at 300-plus centres). It also rapidly and effectively countered misinformation on social media, such that there was little vaccine hesitancy among the population.

Compared to other ASEAN (Association of Southeast Asian Nations) countries, by 2021 Cambodia was leading the way in its Covid-19 response, balancing public health restrictions and advice with mitigation measures to minimise the impact on people's livelihoods. While other richer countries in the region (such as Thailand and Singapore) were able to have a stronger fiscal stimulus and compensate income losses more adequately, several others did not manage to compensate income losses and expand social protection to the same extent or implement such adequate public health measures (Shepherd 2022).

The Cambodian government's attempt to rebuild after the pandemic focuses on a strategy to revitalise growth. It is attempting to do this in the context of regional and global trends and the need for sustainability and to build socioeconomic resilience. The strategy is built around three pillars (or 3Rs): recovery, reform and resilience.

- **Recovery:** This will be achieved by stimulating sectors that dominated the economy prior to the pandemic. This pillar aims to revitalise businesses and stimulate job creation. Recovery may require stimulating 'growth from below' (small/household-level investments, informal) as well as 'growth from above' (medium-to-large investments, formal), since most of the poorest 40 per cent of Cambodians rely on growth from below.⁹
- **Reform:** This pillar involves improving the investment climate and trade facilitation, with cross-border trade and migration agreements likely to play an important role.

⁹ For an elaboration of the need to balance growth from below with growth from above, see CPAN (2019) [The Fourth Chronic Poverty Report: Growth](#).

- **Resilience:** This pillar involves strengthening preparedness and responsiveness to shocks, including future pandemics. It focuses on: raising productivity through improved human development; developing small and medium enterprises (SMEs); digital connectivity; promoting a green economy for climate resilience; and developing health and social protection systems.

Agriculture and agro industry have been recognised as having absorbed labour during the pandemic, with important implications for national economic stability and food security, while key sectors such as tourism and supporting services were hard hit. The government increased policy attention to the sector, in response, attempting to boost agricultural productivity, strengthen competitiveness through competitive pricing and improved quality, invest in infrastructure to support agricultural value chains, promote agro-processing and the seed industry, and maximise the benefits of free trade agreements. However, it is not easy to track down new government policies or programmes reflecting the increased attention to agriculture, livestock and fisheries, although there are programmes supported by the World Bank, the International Fund for Agricultural Development (IFAD) and other donors/lenders, which were mostly designed prior to the pandemic, and in which government is a financing partner and implementer.

Policy implications – pandemic management

Reflecting on lessons from this pandemic may enable the government to build an even stronger, more resilient and more inclusive economy that would be more prepared for any future crises, whether local, national or global. This will require adjustments to current policies and programmes. For example, during the pandemic, self-employed people saw their incomes collapse. Such losses could be mitigated by creating a baseline that will enable the rapid expansion of the IDPoor scheme when needed. The speed of expansion during 2020 and 2021 was slower than ideal; however, investment in digitisation, and the innovative ‘on-demand’ IDPoor scheme, which used tablets at commune level to assess applications, was critical in expanding coverage and will enable faster expansion if needed in future. However, whether these measures alone are enough to enhance resilience needs to be reviewed.

There are also lessons to be learned from the pandemic about the quality and equity of health services in Cambodia. They can be made ready for future crises by continuing to invest in enhanced capacity and facilities to promote better prevention, medical treatment, and quality care services. A major lesson for other countries is the location- and occupation-based (rather than age-based) vaccination strategy, which enabled a very fast rate of progress to be sustained (Strangio 2021).

More general poverty reduction policies

A focus on **narrowing development gaps** across urban and rural areas and between regions (Phnom Penh vs others; levelling up, especially in Tonle Sap) remains relevant. This would contribute to inclusive and sustainable growth and development – an agenda that has been strongly emphasised in the Rectangular Strategy IV, the National Strategic Development Plan (2019–23) and the Cambodia Sustainable Development Goals. This can be done by biasing recurrent government expenditure and investment towards those areas and regions. For example, the overwhelming bias of spending on roads in favour of national roads over rural and urban roads, and from capital to operations and maintenance, has been slowly but steadily shifting in favour of the latter during the 2010s. Remote, sparsely populated regions have benefited significantly less than other areas, with development partners deeply involved in setting priorities that support cross-border trade (World Bank 2019: 131–140).

Increasing coverage of **financial services** and improving their quality (especially of non-credit services, savings and insurance) – particularly for households at the bottom of the distribution – has the potential to reduce poverty. However, where households become over-indebted, debt exacerbates food insecurity and health poverty, making it difficult to produce, buy or forage enough quality food to feed the family, and difficult to pay for health services when needed (Iskander *et al.* 2022). Families often have to make very difficult choices in order to repay debts: to reduce consumption of food and other necessities; to sell assets; or to take out new loans.

Households that had savings were, not surprisingly, better able to continue expenditures during the pandemic – for example, on fertiliser. It appears that savings are not adequately promoted by financial institutions and MFIs, and this would be something to focus on in rebuilding resilience post-pandemic.

Cambodia's strong emphasis on microcredit needs to be balanced with the provision of better opportunities for **savings and insurance**. Alternatives to formal collateral-based lending need to be developed, like the intensive BRAC ultra-poor model, based on groups guaranteeing individual loans.

Regulatory reform needs to recognise that financial services can be impoverishing, and in particular that there should be limits to people paying off loans by taking out new loans. Rescheduling of existing loans has been put in place as a response to the pandemic, but this only postpones household debt problems, and even increases the debt if interest is charged during the postponement. Given the highly indebted status of much of the Cambodian population, especially those in rural areas, this is a topic that needs widespread public and expert discussion to find solutions. A recommendation emerging from this and other research cited here is that the National Bank of Cambodia should acknowledge that there is a problem, and organise a consultation process that includes MFIs, researchers who have developed some understanding of the situation, and other stakeholders (such as organisations providing social protection or support to smallholder farmers and nonfarm micro-businesses). This process should explore how high levels of debt can be managed in the short term and reduced in the medium term.

An important part of this process should be public discussions to explore what **alternatives to borrowing** can be enabled as an alternative coping strategy. This would include: broader and deeper social protection: continuing to expand the cash transfer programme, the cash-for-work programme, and the Health Equity Funds (or other health insurance schemes); and exploring the gradual extension of the minimum wage to the informal sector. The short-term response to the crisis, including special social assistance programmes, can be phased out and replaced by sustainable programmes for poor and vulnerable people with an adequate budget (Guermond *et al.* 2022). One key recommendation is that social protection payments need to be expanded so that they cover more of the gaps in household expenditures, which would in turn mean that poor and vulnerable people need to borrow less. As post-pandemic recovery proceeds, schemes will need clear criteria for graduation. These should reflect the degree of resilience achieved by households, potentially measured by asset ownership.

Continued public investment in **education** for all has a strong and long-term poverty-reducing effect, particularly ensuring that the majority of school-aged children can finish secondary education or higher. There is also an urgent need to support children who have missed school and those who have dropped out to recover the missed learning and re-join school. For future crises, there is a need to build the resilience of education provision. In particular, plans for emergency school closures need to be rethought to limit learning losses, especially among poor children. Online education is not the solution, or at least not until the population has much higher levels of access to internet-capable devices, and preferably computers rather than phones. Alternatives to digital learning will be required in any future crisis where schools are closed for significant periods.

The research also supports some recommendations on **agriculture, as cross-border markets** collapsed when Vietnamese traders stopped coming to buy in Cambodia. How can Cambodia secure resilient national and cross-border markets and trading institutions? One aspect of this is to make sure that finance for Cambodian agro-traders is adequate. Another is to review trade agreements to see if there is scope for arrangements for markets to be made less fragile.

On **agricultural production**, Cambodia urgently needs to develop 'climate-smart agriculture', which relies less on expensive agro-chemicals and more on effective management of natural resources. Irrigation could be an important part of increasing the returns available from farming, as could investing in and promoting local agro-processing.

Agriculture is highly dependent on flows of remittances to finance seasonal inputs, and the pandemic undermined these flows. Future crises may have similar effects, so there is a need to review how agriculture can be made more resilient to the interruption of remittance flows, without falling back on deeper reliance on microcredit. Reducing input costs through climate-smart and agro-ecological systems is one approach. Enhancing the protection of the earnings of migrant workers is another. Having a disaster risk reduction plan for agriculture that recognises the need to support farmers' cash flow during crises, without creating additional indebtedness, is important to protect against future food insecurity.

Disaster risk management in Cambodia, as elsewhere, needs to acknowledge the multiple crises that people experience. Whether at the same time, or in rapid sequence, they may suffer climate-related, health and global economic shocks – all of which combined can undermine resilience and lead to impoverishment and destitution in the medium-to-long term. Policies and programmes are generally designed to mitigate the effects of one disaster, rather than the effects of compound shocks.

Whereas single disasters can find an adequate response in a singly agency, compound disasters need a whole-of-government approach, which Cambodia achieved to a greater extent than other countries with similar income levels (and many well above it). Many countries left management of the pandemic to the Ministry of Health, and recovery to macroeconomic managers. As we have seen, Cambodia developed a raft of additional economic and social policy responses, and its disaster risk management structures involve the whole of government under the Prime Minister, through the National Committee on Disaster Management and its sub-national committees.

Further research on the following topics would be advisable:

- Migration: how can poor people migrate with better outcomes? What policy and programme supports are useful? What are the lessons from migrant support programmes?
- Post-pandemic, people need to resume asset accumulation, especially those who have lost assets. How much did asset values reduce during the pandemic? Were people borrowing instead of selling assets because asset markets had collapsed? What are the lessons from other crises on preventing collapsed asset markets, and from asset recovery programmes?

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Annexe 1 Quantitative research design

Data

This study examines poverty in Cambodia pre-Covid-19 and welfare changes during the pandemic. The analysis of pre-pandemic welfare is based on the Cambodia Living Standards Measurement Study Plus 2019–2020 data (LSMS+), a nationally representative survey on socioeconomic characteristics of households in rural and urban areas. The data was collected by officials at the National Institute of Statistics (NIS), Ministry of Planning, and was funded by the World Bank. The Cambodia LSMS+ was conducted in 25 per cent of the enumeration areas (Eas) that were visited by the 2019/20 round of the Cambodia Socioeconomic Survey, which was also implemented by NIS officials.¹⁰ The survey was completed prior to the pandemic.

The high frequency phone surveys (HFPSs)¹¹ were conducted in Cambodia between May 2020 and March 2021 during the pandemic, to assess socioeconomic impacts of Covid-19. In Cambodia, the HFPS consists of two samples: (1) the LSMS+; and (2) IDPoor households.¹² The latter was implemented to monitor the Cash Transfer Programme for Poor and Vulnerable Households during Covid-19, launched in late June 2020. Hence, HFPS Round 1 was conducted before the implementation of the cash transfer programme. Table 1 outlines the sample size per wave and survey. In both cases, sampling weights are employed to ensure representativeness of the LSMS+ at the national and urban/rural levels, and additionally at the regional level among IDPoor households.

Table 1: Sample size per survey and wave

Wave	LSMS+ sample (month)	IDPoor sample (month)
1	700 (May 2020)	984 (June 2021)
2	612 (Aug/Sep 2020)	1,055 (Aug/Sep 2020)
3	481 (Oct/Nov 2020)	1,185 (Oct/Nov 2020)
4	410 (Dec 2020/Jan 2021)	1,277 (Dec 2020/ Jan 2021)
5	378 (Mar 2021)	1,309 (Mar 2021)

It is worth emphasising the high attrition rate in both samples. For example, just 51 per cent of the 1,512 LSMS+ households were successfully re-interviewed in Round 1, and only around half of that proportion were re-interviewed in the latest survey wave. Though survey weights have been adjusted to try to ensure representativeness at national, rural, and urban levels, these small sizes mean that these descriptive results – particularly from the HFPS-LSMS data set – should be viewed with caution, and so we also limit geographical and other forms of stratification of the data set.

Methods

To derive poverty status, we develop household-level consumption aggregates from the LSMS+ 2019–2020, comprising food and non-food expenditure consumed by households in different reference periods. Consumption items, particularly non-food expenditure, are then converted to a uniform reference (recall) period. We finally treat the poorest 20 per cent of the consumption distribution as poor. Not only does this equate closely to the poverty rate identified in the 2019 Cambodia Socioeconomic Survey, but it also allows for a relatively fluid assessment of welfare across quintiles, which is then carried over to the Covid-19 analysis. More details on the derivation of consumption

¹⁰ For more information on the data and implementation of data collection, refer to <https://microdata.worldbank.org/index.php/catalog/4045/download/50889>.

¹¹ The [World Bank High Frequency Telephone Surveys](#) have been conducted in a number of countries.

¹² The Identification of Poor Households (IDPoor) is a mechanism developed by Cambodia's Ministry of Planning to identify poor and vulnerable households, after which they receive cards that enable them to access social transfers, healthcare, and other targeted services.

aggregates and poverty status are presented Annex 1. A detailed description of pre-pandemic results is provided in Roth (2022) and summarised in this paper.

The study results first present descriptive analyses of monetary poverty and welfare before the outbreak of Covid-19. We investigate a range of factors that the literature review suggests affect household welfare, and draw attention to gendered differences derived through women's control of assets, enterprise and migration. Our regression analysis next employs logistic regression and simultaneous quantile regressions to examine correlates of poverty and welfare across consumption distribution, respectively. The probit regression is specified as:

$$Pr(\rho_i = 1 | \beta, v_i) = F(\beta_0 + \beta_1 HH_i + \beta_2 Region_i + \beta_3 H_i) \quad (1)$$

where ρ_i takes the value of 1 if the household per capita daily consumption is below the pre-defined poverty line; β is a set of parameters to be estimated and v_i is a set of characteristics of household head and household and regional differences.

We further investigate how the correlates used to understand household poverty incidence can impact welfare outcomes of households at various level of consumption distribution (percentile), using simultaneous quantile regressions (SQR). The simultaneous quantile regression could be specified as:

$$qY_\tau = \alpha_0 + \alpha_1 HH_i + \alpha_2 Region_i + \alpha_3 H_i + \epsilon_{\tau i} \quad (2)$$

where τ is per capita daily consumption of household i in quintile τ^{th} ; α_0 is a constant; α_1 , α_2 , and α_3 are a set of parameters to be estimated. $\epsilon_{\tau i}$ is assumed to have zero conditional mean. The per capita daily consumption is in logarithmic transformation to account for the right-skewed distribution. It should also be noted that we employ the same covariates of household head, household, and regional differences in equations.

Finally, we descriptively examine changes in households' socioeconomic wellbeing over time during the Covid-19 pandemic, relying on the HFPS. For our analysis, we link households' pre-Covid-19 welfare status from the LSMS+ to the subset of households re-interviewed during the five rounds of the HFPS panel, to offer a joint analysis of pre- and during-pandemic realities. We make use predominantly of the first and last survey waves to examine changes over time, though in some cases we also rely on the second and fourth survey waves for additional variables given that survey modules vary per wave. We focus on changes over time (from pre-Covid-19 through the HFPS rounds) in income from different sources, coping strategies, food security, receipt of social assistance, and education activities to understand how these changes differ by (pre-Covid-19) welfare status of households across the distribution. Where possible, we disaggregate the LSMS+ analysis by quintile groups (bottom two quintiles compared to top three quintiles) to carry on the distributional analysis presented in the pre-Covid-19 results. We also analyse the IDPoor survey results as a whole and disaggregate where possible by gender and other demographics, recognising that these constitute households at the bottom of the welfare distribution.

Annexe 2 Qualitative research design

This annexe briefly outlines the qualitative research methods for the Cambodia Covid Poverty Study. It describes the main research activities by the qualitative team.

National key informant interviews

Six key informant interviews (KIIs) were conducted at the national level. Some that were undertaken **before fieldwork** explored:

- developing a timeline of how Covid has impacted Cambodia and introduction of public health measures (and roll-out of immunisation programme);
- discussing relative impact on different wellbeing groups, different parts of the country (urban/rural, different provinces) and different livelihood groups (including international and in-country migrants and their families) (depends how many emerging issues there are, and who the stakeholders are);
- mitigation measures (such as social protection) put in place to support health, education, livelihoods, consumption.

Some KIIs that were undertaken **after fieldwork** explored issues emerging from the analysis of the quantitative data and initial fieldwork findings.

Study sites

Three study sites (two rural, one urban)

RURAL:

Mekong Plain

Has a relatively balanced spread of poverty trajectories, including large numbers of individuals in the Sustained Escapes (SE), impoverished, and 'unclassified' category (the latter, which might also include PPPN (poor in first three periods, non-poor in fourth period)). Out of the villages named in the earlier panel rounds, Prek Khmeng (PK) also has the highest ratio of migrants to household size, and a relatively high share of remittances in total income. It also has a small number of international migrants. Main livelihoods are rice production (dry season) and fishing.

Kampong Thom

The selected study site in Kampong Thom has a good balance of poverty trajectories, and is in a different region to PK. In addition, it covers former forest land where logging, firewood, and charcoal are some of the key activities, thus allowing for a different type of livelihood focus to the rice/fish/migration activities in PK.

URBAN:

A study site in Phnom Penh was selected, based on high population density (as the capital), and a site of stringent lockdown restrictions (The Phnom Penh Post 2021). Within this, we selected Dang Kao as a site with a high proportion of households possessing the IDPoor card, which suggests a high poverty concentration. As the Poverty Monitoring Initiative focuses on people in or near poverty, we selected a site within Phnom Penh with relatively higher levels of poverty (Dang Kao district) according to 2010 estimates (Haslett, Jones and Sefton 2013). More recent research by the World Food Programme (based on a 2016 survey) suggests that 'outer' zones in Phnom Penh – a category that includes Dang Kao – do tend to have a higher proportion of people with an IDPoor card, which signifies lower incomes.

Methods

The rural study sites for the 2021–22 fieldwork build on the 2018 data (see text box). The urban study site in Phnom Penh was identified in the absence of panel data. This instead relied on analysis of survey data from 2010 and 2016, to select a site with high population density, lockdown restrictions, and a high share of people in poverty as proxied through the prevalence of IDPoor cards.

Six study sites: two in Tonle Sap Plain, one in Mekong Plain, two in both in Upland Plateau, and one in Coastal. These six sites were chosen because analysis of the Agriculture, Rural Development and Poverty Reduction Survey in Cambodia revealed that they had high shares of households that were transitory escapers and sustained escapers. Their selection was also influenced by being in USAID areas of interest, as USAID funded the 2018 study.

21 key informant interviews with development stakeholders in Phnom Penh, and interviews with knowledgeable community leaders in the six study sites.

Information from 36 **focus group discussions** (FGDs), separately for men and women and differentiated by poverty trajectory, was used to create historical participatory wealth ranking in the six study villages. These FGDs provided a snapshot of the meso-level drivers of mobility and wellbeing.

Life history interviews with 60 men and women in the six sites, identified from the panel data analysis and confirmed during the participatory wealth ranking as being on the different poverty trajectories.