

EXTENSIVE INCOME LOSSES BUT LITTLE CHANGE IN LONG-TERM POVERTY:

A longitudinal study of 7 Rajasthan villages before, during and after Covid-19

Anirudh Krishna, Duke University
(ak30@duke.edu)

and

Tushar Agrawal, Indian Institute of Management, Udaipur
(tushar.agrawal@iimu.ac.in)

ABSTRACT

To what extent has poverty increased during the pandemic? In one of the first before-and-after comparisons, taken up in July and August 2021, we revisit 7 villages of southern Rajasthan (India), where we had earlier studied household poverty dynamics in 2002, examining 1,466 households. We find that in the two decades before the pandemic (2002-2020), people's structural positions improved vastly, long-term poverty fell from nearly half to less than 20 percent of households. Gains in resilience helped people cope with the pandemic. The majority suffered deep income losses between February 2020 and August 2021, but there is no evidence of any vast rise in chronic (or long-term) poverty.

Keywords – Covid-19, household poverty dynamics, long-term poverty, resilience

1. POVERTY AND THE PANDEMIC

During the prolonged lockdowns associated with Phase 1 of the pandemic in India (between March and October 2020), millions working in informal positions lost their livelihoods and went without income. Many live on the margins of poverty (Breman 2003; Kannan and Raveendran 2011; NCEUS 2007; Vaidyanathan 2014), and it seemed obvious that large numbers would fall below the poverty line as a result of pandemic-related privations. Indeed, early estimates predicted that between 77 million and 220 million could be additionally impoverished during the pandemic period, ranging from 69 to 136 million in rural areas and from 8 to 84 million in urban areas.¹

The size of these estimates is enough to cause alarm. An increase of the order of 200 million would double the numbers in poverty in the country.

And yet, to get a fuller picture and to mount the appropriate responses, additional questions need to be addressed: How much of the increase in poverty is of a transient nature, likely to be reversed when economic conditions return to normal – and how much of it has a structural or long-term character, marked by deeper and less easily reversed descent? We use the terms structural (or chronic or long-term) and transient (or stochastic or short-term) poverty in this essay following the usage of Carter and May (2001) and Carter and Barrett (2006): the structural (or chronic or long-term) poor are those whose income and consumption levels are

usually below the poverty line, because they lack assets and capabilities, and are unable to raise incomes on a regular basis. The transient (or stochastic or short-term) poor, on the other hand, have sufficient asset endowments so, on average, their incomes are above the poverty line. At particular times, such as during the months of the lockdowns, their incomes may dip sharply, falling below the poverty line or all the way to zero – a situations that likely describes the experiences of many counted among the 220 million. But unless there is simultaneous erosion of assets and capabilities, future earning capacities are unaffected. The gain in transient poverty is not matched in this case by an equal increment in structural poverty.

This distinction between structural poverty and transient poverty is critical for comprehending the gravity of the post-pandemic poverty situation. Measuring temporarily lowered incomes gives a good indication of transient poverty, but assets and capabilities need to be looked at in addition for making determinations about the likely longevity and severity of households' descents into poverty.² However, when information about structural conditions is not separately available, every increment in transient (income) poverty may be regarded as equally long-lasting. But there are different underlying conditions – and different policy responses are necessary – for dealing with diverse mixes of transient and structural poverty. To the extent that the increment in poverty is mostly transient, one need not worry so much: as normal life returns, the situation will get better. To the extent, however, that the effects are structural in character, the solution will not be automatic.

Different methodologies are available that can help collect the required information about structural and transient poverty.³ Using one such methodology, we assess the extent to which structural poverty has grown during the pandemic in a group of 7 villages of 3 districts of southeastern Rajasthan. We examine the 18-month long pandemic period (March 2020 – August 2021) against the backdrop of longer-term trends experienced by the same households and villages.

2. DATA AND METHODOLOGY

An important advantage of selecting these 7 villages is that we have fine-grained data at the household level dating back to 2002, i.e., nearly 20 years prior, and in addition, we have recall data for each household going back another 25 years. The seven villages we selected for this study form part of a larger group of 35 Rajasthan villages where we had studied household poverty dynamics in 2002 (Krishna 2004). Before discussing the methods followed in the present study, we briefly describe the methods adopted.

Earlier study (1977-2002): This study was based in five adjoining districts of Rajasthan – from north to south, Ajmer, Bhilwara, Rajsamand, Udaipur and Dungarpur. We studied 35 villages, selected to represent a variety of village characteristics, including size, population composition, and relative remoteness, using the Stages-of-Progress methodology.

This methodology, a participatory and community-based one, focuses on assets and capabilities, thereby getting a fix on structural poverty. The following steps were implemented in order.

Upon entering a village, the first thing we did was to assemble a community group of elders and others belonging to the different caste and religious groupings of this village. We introduced ourselves clearly as researchers. It was critical to make it very clear that we were in no way connected with the government or with any other program-implementing agency. We had no programmatic benefits to give to anyone. We hoped our results (and the information that the villagers provided) would help develop better poverty reduction programs in the future, so what people told us had considerable value in this abstract sense, but there were no immediate benefits. A few villagers left when it became clear what we were up to, but many, the majority, stayed to talk.

Establishing a shared understanding of what constitutes poverty was the next important step in this task. We would start this inquiry *not* by asking villagers to identify who is poor; instead, we would ask them to determine collectively what constitutes a state of poverty.

A useful device for this process was the Stages-of-Progress exercise. What does a household usually do, we asked the assembled villagers, led by elders from different caste and religious groups, when it climbs upward gradually from a state of acute poverty? Which assets or capabilities are acquired first? As things keep improving, which assets and capabilities are acquired subsequently? What does a household typically do in the second stage, in the third stage, and so on? Which assets and capabilities demarcate each successive step out of structural poverty?

One might have thought that there would be considerable differences in the markers of structural poverty from village to village, and indeed some differences in assets and capabilities were recorded for higher-level stages. At the lowest stages, however, when households are still desperately poor or just coming out of dire poverty, there were absolutely no differences in the sequence narrated in different villages.

The first four stages, in particular, were narrated in the same sequence in every village. These initial stages of progress are, in order:

- Food on a regular basis (or more accurately, the capability of keeping the household regularly fed)
- Sending children to school
- Possessing clothes to wear outside the house
- retiring debt in regular installments

Structural poverty is socially defined in these villages in terms of these initial stages of progress, each corresponding to a visible marker of material status. Villagers in this region, men as well as women, deem themselves (and others) poor when they do not have enough to eat, or decent

clothes to wear, when they accumulate more debt without being able to repay installments, and when they cannot afford to send their children to school.

The fifth stage – making essential house repairs, esp., patching leaky roofs – was also commonly reported across villages. This is the stage people reach after they have crossed over poverty. Anyone at Stage 4 or lower is regarded as structurally poor. This poverty cutoff is the local criterion that we adopted in the study.

Well-defined and clearly understood criteria for classifying households as structurally poor or non-poor in terms of underlying capabilities were derived in this manner. Appendix 1 gives the full list of stages of progress in a sample village. Villages differed in some cases about higher-level stages of progress – purchasing jewelry, procuring a refrigerator or a car – but these disagreements did not affect the definition of poverty. Everyone agreed about the first four stages.⁴

The next step in the exercise consisted of verifying each household's status at the time of the study (2002) and 25 years ago (1976-77) in relation to these stages of progress. Finally, a random sample of about 30 percent households was interviewed to elicit each one's event history. Men and women of these households were interviewed respectively by male and female investigators. They were asked about turning points in their lives and about the events that had accompanied or preceded the related upturns or downturns in long-term material status. The stories told by different household members usually tallied with and complemented one another; in a few cases, additional triangulation was necessary.

The result was a trove of data for nearly 6,500 households of 35 villages, with a detailed accounting of the reasons for moving up (or moving down) experienced by the sample of more than 2,000 households. This dataset of prior poverty measurements was available, against which drops suffered during the 18-month pandemic period could be backlit and calibrated.

New study: A follow-up study, undertaken in July and August 2021, returned to seven of these 35 villages. We repeated the steps taken by the earlier study, implementing the Stages-of-Progress methodology afresh in each village. We would have liked to extend this study to each of the 35 villages that we had studied earlier, but time and resources were both in short supply. We were operating in what many thought was an interregnum between a recently concluded Phase 2 and a widely anticipated Phase 3 of the pandemic. We needed to get in and out quickly after ascertaining key facts about increments in structural poverty. What we lost in numbers we hope to have made up in the timeliness of the study.

We had not anticipated the pandemic but had been preparing earlier for a repeat study in the same villages. In January 2020, we conducted a pilot study in two villages of Bhilwara and one village of Udaipur in order to check upon two critical aspects:

(1) *attrition:* would we be able to reconnect with the same households interviewed in 2002, or would many have died out or moved elsewhere?

(b) *comparability*: would the locally relevant scale of measurement developed in 2002 still be useful and relevant to the changed circumstances of 2020?

We found that making contact again with the same household heads (or with their successors in cases where the heads had died) was not a problem. A vast majority of the households interviewed earlier were still living in the same homes. The original head of household was no longer alive in some cases, but his or her successors carried on at the same address. After a lapse of 18 years, the average re-contact rate across the three pilot communities was more than 85 percent.

While many things have changed – there is more wealth and better infrastructure in the region – villagers’ understandings of poverty in terms of the successive stages of progress and the poverty cutoff has remained the same. The same initial four stages of progress were reported by village groups we convened in 2020, and the poverty cutoff was placed at the same point (between stages four and five) where village groups had placed it in 2002. Comparisons over time were, therefore, valid.

In July 2021 we commenced the 7-village revisit project. Some among the field investigators who had worked on the 2002 study rejoined the team, and they helped recruit a group of younger people, also village residents, with whom we trained for one week before sending them on to the first of seven villages. The team’s tasks were defined as follows:

- (a) To assess the poverty trajectories of all village households between the last observation (2002) and the present time (2021) and to examine the change during the 18-month pandemic period by assessing where each household stood on the Stages of Progress scale at three points in time – 2002, just before the pandemic (February 2020) and at the time of the inquiry (July-August 2021).
- (b) To undertake repeat interviews with each of the households in these villages who were interviewed earlier, once again eliciting turning points and the associated event histories. In addition, we asked about households’ education, incomes, and assets.

The protocol for the study in each village including filling out, first, a village information sheet and undertaking the Stages of Progress exercise; conducting a focus group with key respondents; undertaking re-interviews with each of the households interviewed in 2002 (or with successor household/s, by telephone, if possible, in the case of people who had migrated).⁵

Every member of the team was fully vaccinated. They were enjoined upon to remain masked and were provided with stocks of extra masks to offer village interlocutors.

Seven Villages: Located in three districts – Bhilwara, Udaipur, and Rajsamand – these villages are varied in terms of key characteristics (Table 1). While not statistically representative, they reflect the diversity of living conditions in a wider region.

- Table 1 about here

The share of Scheduled Castes (SCs, former untouchables) varies from zero to 33 percent. The share of Scheduled Tribes (STs) varies from zero to 64 percent. Average landholding (both irrigated and unirrigated) is 4.3 *bighas* (equal to 2.7 acres). Average household size is 5.2. Eight years of formal education is the highest level in most households, though the number of college graduate has risen sharply in every village. There are clear generational effects in education, with children far ahead of parents and grandparents. The number of households resident in these villages has gone up from 1,120 in 2002 to 1,466 in July 2021, an increase of 31 percent, with roughly similar percentage increases in each village. More than half of all households have members who migrate to a city for shorter or longer periods in order to tap into additional sources of income, but very households have upped and moved sticks in their entirety.

In-migration or out-migration by entire households is rare. A total of 13 households migrated in to take up residence within, and another 24 households migrated out of, these villages.

We had interviewed a total of 258 households in 2002. Nineteen years later, in 2021, we were able to re-contact and re-interview 185 of the same household heads. In addition, we interviewed the successors of 49 household heads, who had died in the intervening period. Missing entirely are 14 of the former 258 households, who died leaving no heirs, and another 10 households who migrated out of their villages and were not contactable. In total, we lost 37 out of the panel of 258 households including 13 households not available in the village at the time of the interview, an acceptable attrition rate for a study of this nature.⁶ Further, the missing households are not structurally different from the remaining ones in terms of key attributes, such as assets, education, household size, and caste composition.

3. THE PRE-PANDEMIC CONTEXT: DEEP CUTS IN STRUCTURAL POVERTY (2002-2020)

Overall, a great improvement in living conditions has been experienced by households of this region since the start of the millennium. Table 2 shows how the share of the population in structural poverty fell from more nearly one-half to less than 20 percent between 2002 and just before the pandemic.

- Table 2 about here

The improvement is broad-based. Every caste group has made progress, as Table 3 attests, though much larger proportions of SCs and STs remain poor compared to other groups.

- Table 3 about here

The mechanics of how this welcome transition has occurred are better visible in Table 4, which shows movements out of structural poverty in the 2002-2020 period, and separately, movements *into* structural poverty.

- Table 4 about here

Notice how, overall, only 0.48 percent of all village households fell into poverty over this period (non-poor in 2002 and poor in 2020). This proportion is low everywhere (ranging from 0 in Daulji-ka-Khera to 0.81 percent in Khatikhera). Falling into poverty was a rare occurrence during this period. In contrast, a much larger share of households – 31.25 percent overall – experienced the opposite (and happier) transition. They were (structurally) poor in 2002 but by 2020 had moved out of poverty. The share of households moving up and out of poverty ranges from 9.5 percent in Phairniyon-ka-Guda to 48 percent in Sarana.

This combination of a high rate of upward transition and low rate of downward transition is what stands behind the sharp reduction in structural poverty during the period 2002-2020. Signs of material improvement are widely visible. Where earlier, in 2002, at the time of the first study, it was rare to see a television set in a village and motorcycles were few and far between, nearly every household owns a mobile phone at the present time and more than half own motorcycles. There is a close association, as can be expected, between a household's asset holdings and its location on the Stages of Progress.

- Table 5 about here

Recent period (2002-2020) versus earlier period (1977-2002): The buoyant upward trend in the 2002-2020 period contrasts markedly with the trend observed earlier for the 1977-2002 period. Fewer households had moved out of poverty in the earlier period – and many more households had fallen *into* long-term poverty.

Table 6 compares over the two periods for the sample of 258 households for whom we collected detailed information in 2002. Recall that because of attrition this sample was reduced to 221 households by 2021.

- Table 6 about here

While 108 of these 258 households (42 percent) rose out of poverty in the first period, another 59 households (23 percent) fell into structural poverty. In the second period (2002-2020), by contrast, 97 households (44 percent) moved out of poverty, but only one household (less than one percent of the total) fell into poverty.

Households in this region have become more resilient against descents into poverty in recent years. The pace of escapes has remained about the same as in the earlier period, but the rate of descents into poverty has fallen sharply in the recent period.

Reasons: Exploring the household-level reasons for escape and descent reveals how a different set of dynamics has operated in the second period that has helped bolster households' resilience. The number of those who earn cash incomes by doing odd jobs in towns has gone up sharply. Obtaining such a job constituted the primary reason for escaping poverty in the second period.

Fewer than one-quarter of households had members earning cash incomes in 2002, but nearly *two-thirds* earned cash incomes in 2020. Commonly, younger and early middle-aged villagers have been working as factory labor, drivers, loaders, carpenters, plumbers, electricians, in mining work, etc. They earn, on average, between 8,000 and 15,000 rupees monthly. Opportunities for earning cash incomes have come up mostly in the urban informal sector, and not so much with either the government or the organized corporate sector. People from villages commute to cities, near and far away, in order to avail themselves of these opportunities. Vast numbers of households have invested in mobile phones (more than 90%) and motorcycles (more than two-thirds), not because these are vanity assets, but because, to earn these cash incomes, people need to communicate and travel.

The increase in cash incomes has come about as a result of a conflation of factors, including a rising demands for services and tradespeople in cities, the spread of education in villages, and improvements in transportation. Education is important, but no guarantor of higher income. Many educated individuals earn very little, for instance, Prakash in Village Daulji-ka-Kheda who labors in a local soapstone factory, earning 6,000 monthly, despite having 12 years of education. However, formal education of at least a few years goes together almost invariably with higher income. Hardly any among the cash earners in these villages is uneducated. The poorest are those who have very little or no education.

Overall, in this group of villages, the infusion of regular cash incomes has helped raise resilience. Whereas earlier few people had cash reserves and had to rely upon neighbors or the moneylender; now, after years of earning cash incomes, most households have built up cash reserves and operate bank accounts. Instead of having to sell or mortgage assets in times of financial stress, they can draw from accumulated reserves, averting structural descents and reductions in future earning capacities.

A second reason responsible for the growth in resilience is the much-reduced incidence of descents into poverty. In the first period (1977-2002), 23 percent of our sample of households fell into poverty and another 34 percent remained stuck in poverty – Table 6.

Three reasons were primarily responsible during this period for households' descents into structural poverty – illnesses and high healthcare expenditures; deaths of income earners; and social expenditures on funerals and marriages. Among these reasons, health care, was by far the most important: most of those who fell into poverty (or remained mired in it) had experienced one or more illnesses and high medical expenses.

The incidence of each of these three reasons fell sharply during the second period (2002-2020), when no more than 1 of 221 households fell into poverty, and another 37 households remained in poverty, a much lower share in poverty than in the first period. Illnesses, high health expenses, deaths of income earner, and funeral expenses figure much less often in people's experiences during the second period, and as a result, there were fewer downturns into abiding poverty.

Why instances of descents into poverty on account of health-related reasons, that were widespread and devastating in an earlier period, have become fewer and less severe remains to be explored fully. A variety of factors has mattered. The growth of public healthcare facilities is important. PHCs and sub-centers are much closer to villages than they used to be at the start of the millennium. There are ambulances with emergency services. Roads are much improved. People are more educated, and instead of waiting until the patient has turned seriously unwell, are more likely to go earlier to see a doctor.⁷

4. POVERTY DURING THE COVID-19 PERIOD (March 2020 – July 2021)

The backdrop of the preceding 18-year period helps understand why structural poverty increased so little in these villages during the 18-month pandemic period; even as many people lost their cash incomes precipitately, very few took out large loans or liquidated assets.

Phases 1 and 2 of Covid-19 were experienced differently. No one in these villages died from the disease during either phase, but many more were sickened from it in the second than in the first phase, with a few becoming quite seriously ill. Lockdowns, preventing people's travel to cities for work, were strictly enforced in Phase 1, leading to larger income losses, but they were more laxly observed in Phase 2 and imposed for a shorter period.

Focus groups estimated that as many as 60 percent of all households had lost between one-third and two-thirds of their cash incomes for as long as 6 months during Phase 1 and for another two months during Phase 2. Households' own estimates corroborate the same order of effects.

For people who live only marginally above the poverty line, such deep cuts in income can be a recipe for disaster. Interviewees spoke of how it could take months, even years, to recover the ground they had lost.

And yet, in terms of markers of structural poverty, these households experienced little to no change over the 18-month period (February 2020 – July 2021). Hardly any household's stage of progress differs between the beginning and the end of this period.

Table 7 depicts the extent of change, positive or negative, that was experienced by each household, respectively, over the longer 18-year period (2002-2020) and the shorter 18-month period (February 2020–August 2021). Each household's stage of progress at the beginning of each period is subtracted from what its stage was at the end of the period. Thus, a household

that was at Stage 4 in 2002 but had climbed to Stage 10 in 2020 gets a stage-change score of +6, while another household that fell from Stage 4 to Stage 2 gets a stage-change score of minus 2. The column related to each period shows the numbers of households with each of the different stage-change scores.

- [Table 7 about here](#)

Column (3) of Table 7 shows how 1,270 of 1,466 households (86.63 percent) remained as they were in relation to structural poverty during the pandemic period, experiencing no stage change. Of the rest, another 132 (9 percent) moved up by a single stage. Thus, more than 95 percent of all village households experienced no change or a small positive change in structural conditions during the 18-month period from March 2020 through August 2021.

A total of 12 households – less than one percent – experienced structural decline, and in 11 of these 12 cases, the decline was marginal, involving a descent of just one stage. Ramkumar, a 42-year-old sawmill operator of Sarana village, whose household status improved substantially from 2002 to 2020 as he expanded his business and his younger brother (part of the same joint-family household) set up a hardware shop in a nearby town, told us of how “work came to a halt during Corona, resulting in a loss of incomes, *magar kaam chalta raha*,” things continued largely as they were earlier.

The thesis that the pandemic period has given rise to widespread and deep-rooted increases in structural poverty does not find support among these households and these villages. In this rural belt, at least, there has been, so far, no substantial increment in long-term poverty

Two other pieces of evidence support the same conclusion: assets and expectations. Very few households reported selling assets during the pandemic period. Of the 221 households we interviewed, no more than 17 households had sold any assets, principally small ones, such as goats; hardly any household had sold high-value assets, such as jewelry, farm equipment, or land. Similarly, while 44 percent of households have outstanding loans, as could be expected, given the needs of poorer and informally-employed people living in a largely cash economy – these are mainly small loans; fewer than 30 households in all took out high-value loans of more than one-lakh rupees.

Further, 18 months into the pandemic and after two rounds of lockdowns there was no palpable sense of doom-and-gloom among village residents. We asked our 221 respondent households about the expectations 18 months into the future. As Table 8 shows, nearly half of all people expected to continue as they are, and another 26 percent feel their structural situations will become better. A minority (15 percent) feel things will get marginally worse, and only a tiny share is more pessimistic (5 percent).

- [Table 8 about here](#)

According to Logar Dangi, a key respondent in Vishanpura: “People could not go to towns during the Corona time. They lost their jobs and their incomes. There was nothing to do in the village, so people sat idly or they cultivated vegetables. There was no shortage of food. The government was helpful. No one had to sell off land or jewelry or abandon cattle, as in years of famine. *Paisey ki kami zaroor hui leykin garibi ka saamna nabin karna pada* (we faced cash shortages but did not have to deal with chronic poverty).”

It is difficult to predict what will happen if the period of income losses is stretched out further and there are more waves of the pandemic and more lockdowns. People’s cash reserves will get depleted. Their newly acquired resilience may not go much further.

5. DISCUSSION AND CONCLUSION

Why villagers of this region have been able so far to forestall long-term poverty descents despite suffering income losses remains to be explained. A combination of factors is implicated.

First, households’ resilience increased markedly in the pre-pandemic period. The halving of structural poverty and the growth of steady cash incomes during the previous 18 years helped bolster resilience, enabling households to stand firm, not sliding into structural poverty. Households could cope with the livelihood shocks and health shocks brought on by the virus – without having to sell their proverbial shirts.

Second, government assistance was commonly available, consisting of a food ration of five kilograms of wheat per individual every month for 5-6 months during Phase 1 and another two months during Phase 2. Households in every village reported availing themselves of this food ration. In two of seven villages, additional food assistance was provided to the neediest through local efforts. The government-run MNREGA was expanded overnight, providing minimum-wage employment in local public works, making up for some, though a small, part of households’ lost cash incomes. Every household (all but 3 in these villages) has a bank account, making transactions easier and more immediate.

Third, rising education together with the spread of the internet has contributed to improving people’s responses to threats and opportunities. The acquisition by them of more education has raised people’s abilities to find jobs and developed a facility for sourcing relevant information. A growing network of educated people has helped keep villagers stay informed about the latest developments. This growth in informed-ness and connectedness is a welcome new development, a very different picture from 20 years earlier.

It is beyond the scope of this study to identify which of these causes is the most important. The study considers only a small group of villages. Further research will be necessary, considering additional local economies.

And yet, despite its restricted scope, this study makes clear that local-level factors can be critically important. It also reinforces the importance of the distinction between long-term and transient poverty.

The resilience they have gained in the preceding two decades has helped residents of these 7 villages cope with these disruptions of the pandemic without needing to resort to distress measures, but the past 20 years may have played out very differently in other local economies. Resilience may actually have become weakened in some places; the pace of education and job growth could be very different. Initial evidence from urban slums shows how long-term poverty may have grown up starkly during the pandemic in these settings.⁸

Constructing a finer-grained regional mosaic is necessary for understanding what happened to poverty during the pandemic. State and national averages paper vastly different local economies. Undertaking additional regional studies of grassroots impacts will help us mount more effective and pinpointed responses.

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Tables

Table 1: Village information, 2020

| Village (District) | No. of households (HHs) | Distance to nearest market | Distance to nearest high school | Distance to nearest PHC/sub-center | % SC HHs | % ST HHs | Avg. HH size | Avg. Landholding (bighas) |
|-----------------------------|-------------------------|----------------------------|---------------------------------|------------------------------------|----------|----------|--------------|---------------------------|
| Phainiyonkagudha (Udaipur) | 231 | 10 | 2 | 2 | 4.33 | 25.11 | 5.96 | 2.03 |
| Phiyawari (Rajsamand) | 179 | 3 | 0 | 0 | 13.41 | 41.90 | 5.07 | 4.32 |
| Vishanpura (Udaipur) | 182 | 4 | 4 | 1 | 17.58 | 19.78 | 4.50 | 5.30 |
| Daulji Ka Khera (Bhilwara) | 163 | 6 | 4 | 6 | 0 | 63.80 | 5.00 | 4.06 |
| Khatikhera (Bhilwara) | 123 | 3 | 3 | 3 | 33.33 | 0 | 4.86 | 2.79 |
| Mehtaji Ka Khera (Bhilwara) | 240 | 7 | 0 | 4 | 15.00 | 10.83 | 4.59 | 6.16 |
| Sarana (Bhilwara) | 348 | 8 | 8 | 8 | 26.44 | 3.74 | 6.06 | 4.57 |
| All Seven | 1466 | - | - | - | 15.96 | 21.28 | 5.19 | 4.26 |

Notes: PHC refers to Primary Health Care. Distance is in kilometers. Average household size and average landholding are calculated using the interviewed households' data. 'Bigha' is a unit of land measurement in villages.

Table 2: Percentage of poor households in seven villages

| Village | 2002 | 2020 |
|-------------------|-------|-------|
| Phairniyonkagudha | 35.06 | 25.22 |
| Phiyawari | 68.72 | 31.28 |
| Vishanpura | 41.01 | 15.38 |
| Daulji Ka Khera | 67.48 | 19.63 |
| Khatikhera | 30.08 | 13.01 |
| Mehataji Ka Khera | 36.55 | 15.48 |
| Sarana | 60.34 | 12.93 |
| All | 49.38 | 18.58 |

Table 3: Percentage of poor households by broad caste groups

| Caste group | 2002 | 2020 |
|------------------------------|-------|-------|
| General | 30.77 | 6.25 |
| Other Backward Classes (OBC) | 33.12 | 5.93 |
| Scheduled Caste (SC) | 63.09 | 28.21 |
| Scheduled Tribe (ST) | 88.10 | 48.71 |

Table 4: Poverty dynamics at the village level, 2002-2020 (households, %)

| Phairniyonkagudha | | In 2020 | | |
|--------------------------|----------|---------|----------|-------|
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 25.22 | 9.57 | 34.78 |
| | Non-poor | 0 | 65.22 | 65.22 |
| | Total | 25.22 | 74.78 | 100 |
| Phiyawari | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 30.73 | 37.99 | 68.72 |
| | Non-poor | 0.56 | 30.73 | 31.28 |
| | Total | 31.28 | 68.72 | 100 |
| Vishanpura | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 14.04 | 26.97 | 41.01 |
| | Non-poor | 1.12 | 57.87 | 58.99 |
| | Total | 15.17 | 84.83 | 100 |
| Daulji Ka Khera | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 19.63 | 47.85 | 67.48 |
| | Non-poor | 0 | 32.52 | 32.52 |
| | Total | 19.63 | 80.37 | 100 |
| Khatikhera | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 12.2 | 17.89 | 30.08 |
| | Non-poor | 0.81 | 69.11 | 69.92 |
| | Total | 13.01 | 86.99 | 100 |
| Mehataji Ka Khera | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 15.13 | 21.43 | 36.55 |
| | Non-poor | 0.42 | 63.03 | 63.45 |
| | Total | 15.55 | 84.45 | 100 |
| Sarana | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 12.36 | 47.99 | 60.34 |
| | Non-poor | 0.57 | 39.08 | 39.66 |
| | Total | 12.93 | 87.07 | 100 |
| All Villages | | In 2020 | | |
| | | Poor | Non-poor | Total |
| In 2002 | Poor | 18.09 | 31.25 | 49.35 |
| | Non-poor | 0.48 | 50.17 | 50.65 |
| | Total | 18.57 | 81.43 | 100 |

Table 5: Share of households owning different assets (July-August 2021)

| Village | Mobile | Motorcycle | Television | Computer |
|-------------------|--------|------------|------------|----------|
| Phiyawari | 78.57 | 42.86 | 50.00 | 0 |
| Vishanpura | 90.63 | 62.50 | 45.16 | 6.45 |
| Daulji Ka Khera | 90.63 | 75.00 | 46.88 | 0 |
| Khatikhhera | 96.77 | 80.65 | 54.84 | 3.23 |
| Mehataji Ka Khera | 91.18 | 61.76 | 26.47 | 0 |
| Sarana | 91.67 | 72.92 | 41.67 | 2.08 |
| All above | 91.10 | 68.59 | 43.16 | 2.13 |

Table 6: Differences in structural poverty: First period (1977-2002) versus second period (2002-2020)

| <i>Number of households who:</i> | Remained poor | Escaped poverty | Fell into poverty | Stayed out of poverty | Total |
|----------------------------------|---------------|-----------------|-------------------|-----------------------|-------|
| First Period (1977-2002) | 88 | 108 | 59 | 3 | 258 |
| Second Period (2002-2020) | 37 | 97 | 1 | 86 | 221 |

Table 7: Changes in structural poverty – two time periods

| Stage-change scores | 18-year period (2002-2020) | 18-month Covid period |
|---------------------|----------------------------|-----------------------|
| +5 or more | 91 (6.21) | 1 (0.07) |
| +4 | 123 (8.39) | 2 (0.14) |
| +3 | 219 (14.94) | 9 (0.61) |
| +2 | 325 (22.17) | 38 (2.59) |
| +1 | 445 (30.35) | 132 (9.00) |
| 0 (No change) | 230 (15.69) | 1270 (86.63) |
| -1 | 15 (1.02) | 11 (0.75) |
| -2 or worse | 11 (0.75) | 1 (0.07) |
| TOTAL | 1,466 | 1,466 |

Note: Numbers in parentheses are the percentage of all households.

Table 8: Subjective assessments: Households' prospects 18 months into the future

| Future prospects | Percent |
|------------------|---------|
| A lot better | 2.75 |
| Somewhat better | 26.15 |
| As it is | 50.46 |
| Somewhat worse | 15.60 |
| A lot worse | 5.05 |

Appendix 1: Stages of Progress (illustration from one village)

| Stages | Activity of Progress |
|--------|---|
| 1 | Arrangement of Food |
| 2 | Arrangement of Clothes |
| 3 | To Send Children to School |
| 4 | Repaying debt in installments |
| 5 | Essential house repair (fixing leaky roofs) |
| 6 | Improvement in Farming |
| 7 | To Purchase Cattle |
| 8 | To Buy Motorcycle |
| 9 | To Construct a Concrete House |
| 10 | To Purchase Ornaments |
| 11 | To Purchase Tractor, Car etc. |

Note: A household below the stage 5 is considered as the 'Poor household'.

NOTES

¹ These estimates are, respectively, those made available by the Pew Research Center and Azim Premji University. See, respectively, Kochhar (2021) and APU (2021).

² See Angelsen and Dokken (2015); Carter and Barrett (2006); CPRC (2005); Hulme and Shepherd (2003); Krishna (2010); and Sherraden (1991, 2001).

³ See, for instance, Carter and May (2001); Haddad and Ahmad (2003); and Jalan and Ravallion (2000)

⁴ Housing is a notable omission from this list. Hardly anyone in these villages is entirely homeless, and though improving the condition of one's home is important for people, it comes at a later point in the stages of progress. In urban contexts we find housing coming in very early in the stages of progress. Rural and urban stages are different as a result.

⁵ These protocols were examined and approved by the Institutional Review Board of Indian Institute of Management (IIM)-Udaipur.

⁶ This extent of attrition is to be expected and is within an acceptable range for studies of this nature. See, e.g., Alderman, et al., 2001.

⁷ Health insurance coverage has grown, though in villages of these kinds still falls short of 20 percent of the population, a limit indicated, for instance, by ICE360's 2016 survey of 61,000 households.

⁸ See, for instance, Auerbach and Thachil (2021), and Downs-Tepper, Krishna and Rains (2021).