

12

Villages in a Global World

Throughout this report, we have documented tremendous differences in the lives of individuals and households based on their geographic location, with rural residents having poorer health, education, incomes, and employment opportunities. However, it is also important to note the diversity among rural residents. Many rural areas have seen rapid integration into the global economy while others seem to have been forgotten. This chapter explores the regional variation in the connectedness of the villages to the larger world and finds the differences quite remarkable.

Despite rapid urbanization and migration to urban areas in search of employment, according to the 2001 Census, 72.2 per cent of Indians continue to reside in villages. As we documented earlier, characteristics of communities greatly influence the success of the men, women, and children who live in them and this has important consequences for human development. For example, access to roads is important for the movement of goods and people and for the diffusion of ideas. Electricity access not only helps agricultural productivity but also increases the efficiency with which people can accomplish tasks like fetching water, reading, working in the evening after sun down, and enjoy some leisure through access to television. Similarly, access to schools and health facilities ensures an educated and healthy population.

The IHDS collected information on 1,454 villages nationwide through interviews with key informants in each village.¹ These key informants were usually village officials, but the information collected from them was often supplemented with interviews with other individuals. The survey

focuses on a variety of dimensions of village life and access to infrastructure, allowing us to ground the household-based information described in earlier chapters in a contextual perspective. While interpreting these results, caution in making interstate comparisons must be exercised because the sample of villages is far more restricted than the sample of households. Moreover, large and small villages are weighted equally in the results presented here.

This chapter focuses on the following:

(1) Village connectivity via road, rail, telephone, and availability of electricity and water; (2) The availability of public services such as schools and health care, and, (3) The presence of NGOs and development programmes.

VILLAGE CONNECTIVITY

As inclusive growth emerges as the theme for Indian economic development, it is important to recognize that this inclusion depends on how well connected the communities are to the wider economy. At its most basic level, this connectivity takes a physical form: access to electricity, post office, and telephone. Other measures include access to public transportation and banks. Paved roads are also important for connectivity, and our village level data indicates that one of the most important results of Indian growth seems to be the development of an extensive network of roads. With the exception of Uttarakhand, most villages in the IHDS sample seem to have a paved road in, or near the village. However, the geography of the state influences the distance from the nearest town and from the district headquarters. While the

¹ The IHDS surveyed 1,503 villages, but several village questionnaires were incomplete, resulting in 1,454 completed village questionnaires.

mean distance to the nearest town can be as little as 9 km, as it is in Kerala, it can be as much as 20–5 km, as it is in Uttarakhand, Jharkhand, and the North-East.

As Table 12.1 indicates, access to electricity varies by region.

While the states in the north (for example, Himachal Pradesh, Punjab, and Haryana) and in the south (for example, Andhra Pradesh and Karnataka) can boast of near complete penetration of electricity in rural areas, other states like Bihar, Assam, Jharkhand, and Orissa have a long way to go. Furthermore, penetration rates mean little if the reliability of access is poor. States that have the highest rates of penetration do not necessarily provide the most reliable services. For example, on an average, villages in Punjab and Haryana receive only 9–11 hours of electricity

per day. On the other hand, states that have poor penetration rates, like Bihar or Assam, also have the fewest hours of access (four and eight hours, respectively) to the service. In comparison, the rural areas of Kerala and Tamil Nadu not only have relatively high rates of penetration in rural areas but also enjoy more than 20 hours of electricity supply per day.

Comparison of household and village access to electricity points to an interesting lacuna of public policy interest. Although a large proportion of the villages in the IHDS sample boast of electricity connection, the same cannot be said of the households. For example, while 88 per cent of the sample villages in Gujarat, Dadra and Nagar Haveli, and Daman and Diu, have electric connections, only 29 per cent of the households in the rural sample do. This suggests that

Table 12.1 Village Infrastructure by State

| | <i>Number of Completed Village Schedules</i> | <i>Mean Distance from Nearest Town</i> | <i>Mean Distance from District Town</i> | <i>Per cent Villages with Paved Road</i> | <i>Distance from Road if No Road</i> | <i>Per cent Villages with Electricity</i> | <i>Per cent Homes with Electricity in Villages</i> | <i>Mean Hours of Electricity Per Day</i> |
|------------------------|--|--|---|--|--------------------------------------|---|--|--|
| All India* | 1,495 | 14.29 | 44.51 | 92 | 1.6 | 91 | 68 | 13.11 |
| Jammu and Kashmir | 20 | 9.55 | 33.10 | 90 | 1.8 | 100 | 81 | 11 |
| Himachal Pradesh | 52 | 19.90 | 47.42 | 85 | 2.4 | 100 | 98 | 14 |
| Punjab/Chandigarh | 61 | 11.10 | 32.72 | 100 | 0.1 | 100 | 96 | 11 |
| Haryana | 79 | 10.28 | 27.56 | 100 | 0.0 | 100 | 90 | 9 |
| Uttar Pradesh | 138 | 12.69 | 34.36 | 92 | 0.9 | 89 | 42 | 8 |
| Uttarkhand | 20 | 21.83 | 43.44 | 50 | 1.6 | 90 | 85 | 15 |
| Bihar | 61 | 12.80 | 28.70 | 95 | 2.7 | 62 | 23 | 4 |
| Jharkhand | 26 | 24.31 | 38.65 | 96 | 1.9 | 77 | 46 | 12 |
| Rajasthan | 88 | 12.63 | 53.63 | 93 | 0.4 | 91 | 56 | 8 |
| Madhya Pradesh | 129 | 17.45 | 47.34 | 90 | 3.6 | 95 | 78 | 6 |
| Chhatisgarh | 49 | 12.09 | 53.98 | 94 | 5.3 | 92 | 63 | 17 |
| West Bengal | 66 | 12.02 | 46.63 | 86 | 1.4 | 86 | 39 | 19 |
| Orissa | 84 | 16.84 | 50.51 | 85 | 2.1 | 76 | 29 | 19 |
| Assam | 38 | 13.53 | 42.67 | 87 | 5.9 | 58 | 27 | 8 |
| North-East | 33 | 20.91 | 38.30 | 97 | 3.5 | 94 | 71 | 17 |
| Gujarat, Daman, Dadra | 76 | 13.79 | 43.71 | 91 | 0.6 | 92 | 89 | 18 |
| Maharashtra/Goa | 121 | 12.34 | 51.61 | 98 | 0.4 | 98 | 79 | 17 |
| Andhra Pradesh | 94 | 17.62 | 65.41 | 89 | 1.5 | 100 | 85 | 16 |
| Karnataka | 142 | 16.52 | 51.49 | 99 | 1.1 | 100 | 82 | 11 |
| Kerala | 61 | 8.88 | 28.40 | 82 | 0.8 | 80 | 77 | 23 |
| Tamil Nadu/Pondicherry | 65 | 10.12 | 40.44 | 89 | 2.0 | 91 | 90 | 22 |

Note: *Tables present unweighted summary from village questionnaires. These data are from nationwide but not nationally representative.
Source: IHDS 2004–5 data.

there may be other barriers to electrification for households besides the availability of electric connection.

Provision of water is another basic infrastructure that seems to vary by state. Households' access to indoor piped water was discussed in Chapter 5, but Table 12.2 provides information about access to water supply at the village level.

This table indicates that the two most important sources of water in rural India are piped water (41 per cent) and hand pumps (33 per cent). The states of Himachal Pradesh, Gujarat, and Andhra Pradesh have succeeded in providing access to piped water to more than 80 per cent of the villages. Other states, like Punjab, rely more on a mix of piped water and hand pumps. Piped water is the least common in Orissa, Assam, West Bengal, Uttar Pradesh, Bihar, and Jharkhand.

Besides access to basic infrastructure, the integration of a village into the economy depends on the community's access to banks, post offices, public transportation, phones, and the like. Table 12.3 highlights that with the exception of telephone services most, if not all, states have a long way to go in providing universal access to such facilities in rural areas.

Among the worst connected are the rural areas of Uttar Pradesh, Jharkhand, Madhya Pradesh, Chhattisgarh, and Assam.

Proximity to administrative towns seems to affect the level of development such that the farther away a village is from the district headquarters, the less infrastructure facility it gets. Measuring economic development by counting within the village access to ten infrastructure facilities—electricity,

Table 12.2 Primary Water Source in Village by State

| | Primary Water Source in the Village | | | | | | Total |
|------------------------|-------------------------------------|-----------|-----------|-----------|--------------|-------|-------|
| | Piped Water | Tube Well | Hand Pump | Open Well | Covered Well | Other | |
| All India* | 40.7 | 13.4 | 32.5 | 8.7 | 2.0 | 2.7 | 100 |
| Jammu and Kashmir | 50.0 | 0.0 | 20.0 | 10.0 | 0.0 | 20.0 | 100 |
| Himachal Pradesh | 88.5 | 0.0 | 5.8 | 3.9 | 0.0 | 1.9 | 100 |
| Punjab/Chandigarh | 36.1 | 4.9 | 59.0 | 0.0 | 0.0 | 0.0 | 100 |
| Haryana | 54.4 | 3.8 | 30.4 | 3.8 | 6.3 | 1.3 | 100 |
| Uttar Pradesh | 6.7 | 1.5 | 88.9 | 3.0 | 0.0 | 0.0 | 100 |
| Uttarkhand | 38.9 | 0.0 | 50.0 | 0.0 | 0.0 | 11.1 | 100 |
| Bihar | 1.6 | 45.9 | 47.5 | 3.3 | 1.6 | 0.0 | 100 |
| Jharkhand | 3.9 | 19.2 | 57.7 | 19.2 | 0.0 | 0.0 | 100 |
| Rajasthan | 31.0 | 24.1 | 34.5 | 6.9 | 2.3 | 1.2 | 100 |
| Madhya Pradesh | 13.6 | 5.9 | 57.6 | 17.8 | 2.5 | 2.5 | 100 |
| Chhattisgarh | 6.4 | 6.4 | 68.1 | 17.0 | 0.0 | 2.1 | 100 |
| West Bengal | 6.3 | 17.2 | 62.5 | 12.5 | 0.0 | 1.6 | 100 |
| Orissa | 7.2 | 56.6 | 20.5 | 13.3 | 0.0 | 2.4 | 100 |
| Assam | 2.8 | 88.9 | 5.6 | 2.8 | 0.0 | 0.0 | 100 |
| North-East | 63.6 | 6.1 | 3.0 | 12.1 | 0.0 | 15.2 | 100 |
| Gujarat, Daman, Dadra | 85.7 | 1.4 | 12.9 | 0.0 | 0.0 | 0.0 | 100 |
| Maharashtra/Goa | 66.7 | 2.5 | 16.7 | 12.5 | 0.0 | 1.7 | 100 |
| Andhra Pradesh | 81.9 | 6.4 | 9.6 | 1.1 | 0.0 | 1.1 | 100 |
| Karnataka | 75.4 | 7.8 | 3.5 | 11.3 | 0.0 | 2.1 | 100 |
| Kerala | 26.0 | 6.0 | 0.0 | 34.0 | 32.0 | 2.0 | 100 |
| Tamil Nadu/Pondicherry | 59.3 | 13.6 | 3.4 | 1.7 | 3.4 | 18.6 | 100 |

Notes: *Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.

Source: IHDS 2004–5 data.

Table 12.3 Availability of PDS Shops, Banks, Post Offices, Buses, and Phones in the Village

| | Public Distribution System Shop | Bank in Village | Post Office in Village | Bus Stop in Village | Landline Phone in Village |
|------------------------|---------------------------------------|--------------------|------------------------------|---------------------------|---------------------------------|
| All India* | 72 | 30 | 53 | 51 | 79 |
| Jammu and Kashmir | 75 | 40 | 45 | 30 | 85 |
| Himachal Pradesh | 46 | 19 | 46 | 58 | 98 |
| Punjab/Chandigarh | 79 | 48 | 67 | 62 | 98 |
| Haryana | 81 | 47 | 58 | 63 | 100 |
| Uttar Pradesh | 79 | 16 | 43 | 19 | 91 |
| Uttarkhand | 35 | 15 | 10 | 10 | 60 |
| Bihar | 67 | 38 | 61 | 39 | 84 |
| Jharkhand | 77 | 8 | 15 | 58 | 62 |
| Rajasthan | 53 | 22 | 55 | 52 | 82 |
| Madhya Pradesh | 51 | 21 | 36 | 39 | 69 |
| Chhatisgarh | 53 | 8 | 24 | 41 | 57 |
| West Bengal | 64 | 17 | 52 | 32 | 86 |
| Orissa | 65 | 23 | 42 | 40 | 69 |
| Assam | 74 | 8 | 16 | 13 | 76 |
| North-East | 67 | 30 | 33 | 48 | 70 |
| Gujarat, Daman, Dadra | 80 | 34 | 75 | 71 | 88 |
| Maharashtra/Goa | 88 | 39 | 53 | 65 | 91 |
| Andhra Pradesh | 93 | 33 | 81 | 68 | 94 |
| Karnataka | 75 | 35 | 65 | 77 | 96 |
| Kerala | 75 | 64 | 77 | 52 | 82 |
| Tamil Nadu/Pondicherry | 83 | 34 | 74 | 74 | 89 |

Notes: *Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.

Source: IHDS 2004–5 data.

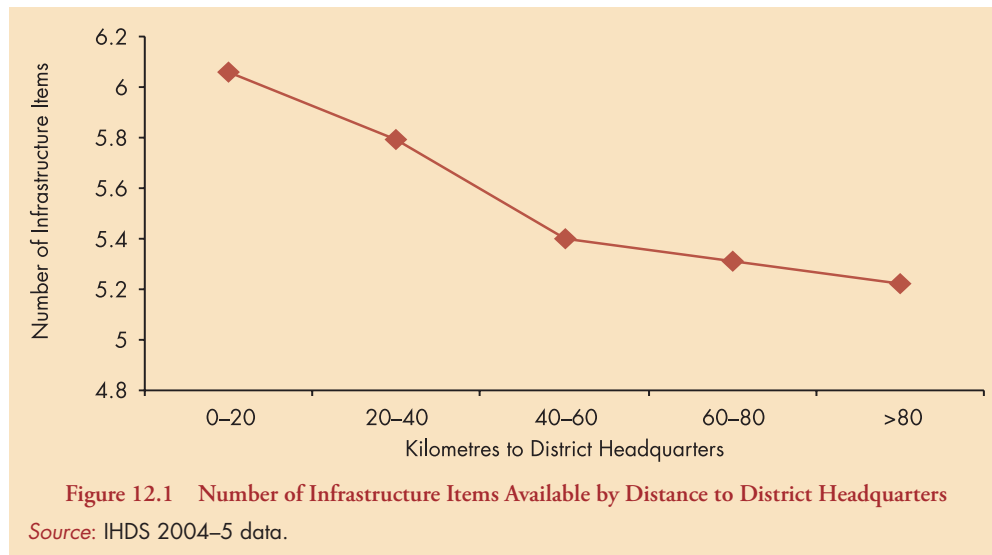
paved road, *kirana* (grocery) shop, bus stop, landline and mobile access to telephone, post office, police station, bazaar, and bank—we find that villages that are farthest from the district headquarters are the least likely to have access to these development inputs. Figure 12.1 shows a precipitous drop in the number of items available to a village as the distance from district headquarters increases.

Note that in the previous chapters we have described the differences in a variety of human development indicators, such as health, education, and employment opportunities and their relationship to village development. These chapters show that villages with access to at least six of the ten infrastructure facilities described above have considerably greater access to health care, education, and employment opportunities.

Finally, it is worth noting that while many villages have access to various kinds of infrastructure on paper, and often in the form of buildings or bus shelters, the actual provision of services is defunct or unreliable, as evidenced by the case of electricity. For example, in some villages, Public Distribution System (PDS) shops are often closed because of lack of supplies.

EDUCATION IN RURAL INDIA: UNEVEN DEVELOPMENT

India is receiving global recognition for producing savvy engineers, doctors, and other highly trained professionals. Early government investments in high quality medical and engineering schools seems to be paying rich dividends to a section of the population that can be compared with the



best in the world. In urban areas, there are many excellent educational institutions at the elementary, upper primary, and high school levels. However, as we documented in Chapter 6, the quality of education is highly variable. Only about half the children, aged between 8–11 in rural areas, are able to read a simple paragraph. Many children drop out of the schooling system, either because of a lack of access to schools or poor returns to education in rural areas. The IHDS results presented in Chapter 6 document that a substantial fraction of students completing Standard 5 drop out before completing Standard 10, and this is particularly true in rural areas. This finding may be related to a lack of access to schools in rural areas. Though, almost all villages in India boast of a government primary school, reflected in high primary school enrolment rates documented earlier, as Table 12.4 indicates, this is not true of higher levels of education, particularly secondary schools.

In some cases where government schools are distant, private schools may fill the gap. We documented an increasing number of rural children attending private schools (about 20 per cent). However, private schools are still rare in rural areas, with nearly 60 per cent of the villages not having a private school of any kind. It is important to note that the absence of school from villages is not synonymous with total lack of access to schools. In many instances, even when a school is not located in the village, it may be accessible in a nearby village. Table 12.5 shows the location of educational facilities in the village and within 1–5 km for primary, upper primary, secondary, and higher secondary schools, as well as colleges, whether they are public or private.

In many parts of India, children have access to a primary (Standards 1–5) and upper primary (Standards 5–8) school within walking distance from the village, even if not within the village. This access declines at the secondary level (Standards 9–10).

At higher levels of education (that is, higher secondary and beyond), almost all states fare poorly. Overall, only 13 per cent of villages have access to a government higher secondary school. Kerala leads with 48 per cent of the villages having access to a government higher secondary school, and Punjab follows with 35 per cent.

It is important to note that the absence of school from villages does not imply total lack of access to schools.

If we include access to private higher secondary schools, more than 50 per cent of villages have a high school within 5 km. As Table 12.5 indicates, in Kerala, almost all villages have some type of a high school within 5 km. Punjab and Tamil Nadu also fare quite well, with more than 70 per cent of villages having access to a higher secondary school within 5 km. However, Bihar and Jharkhand fare poorly even when private schools are included.

Dissatisfaction with the public school system is evidenced by a growing trend among households at all levels of income of sending their children to private schools. Table 12.6 documents a mean school index, ranging from 1 to 5, measuring the presence of primary, upper primary, secondary, and higher secondary schools, as well as colleges in rural areas.

These values are listed overall, and separately for government and private schools. While government schools form the majority of educational establishments available, states such as Punjab, Haryana, and Kerala also seem to have a sizeable number of private schools. Ironically, these are also states with the most access to various levels of government schools. With the exception of Uttar Pradesh, all states where private school presence is strong are states where government schools are widely available. This complementarity between private and public systems is a theme to which we shall return when discussing community programmes.

Table 12.4 Access to Government Educational Institutions in the Village

| | Per cent Villages with Access to Government... | | | | | | |
|------------------------|--|---------|---------------|-----------|------------------|---------|---------------|
| | Anganwadi | Primary | Upper Primary | Secondary | Higher Secondary | College | Girls' School |
| All India* | 89 | 93 | 60 | 28 | 13 | 2 | 10 |
| Jammu and Kashmir | 85 | 100 | 55 | 25 | 5 | 0 | 30 |
| Himachal Pradesh | 77 | 83 | 56 | 40 | 23 | 6 | 2 |
| Punjab/Chandigarh | 90 | 98 | 66 | 52 | 34 | 5 | 10 |
| Haryana | 96 | 99 | 72 | 58 | 23 | 1 | 34 |
| Uttar Pradesh | 86 | 92 | 49 | 9 | 8 | 1 | 6 |
| Uttarkhand | 75 | 85 | 45 | 15 | 10 | 0 | 0 |
| Bihar | 75 | 82 | 66 | 21 | 5 | 5 | 7 |
| Jharkhand | 96 | 88 | 50 | 4 | 4 | 0 | 8 |
| Rajasthan | 92 | 98 | 69 | 31 | 15 | 1 | 24 |
| Madhya Pradesh | 91 | 97 | 65 | 17 | 8 | 1 | 19 |
| Chhatishgarh | 88 | 96 | 53 | 16 | 12 | 2 | 8 |
| West Bengal | 86 | 94 | 30 | 29 | 9 | 0 | 5 |
| Orissa | 88 | 90 | 52 | 31 | 6 | 6 | 8 |
| Assam | 87 | 95 | 71 | 11 | 8 | 0 | 8 |
| North-East | 79 | 85 | 58 | 36 | 15 | 3 | 3 |
| Gujarat, Daman, Dadra | 91 | 91 | 54 | 24 | 14 | 0 | 14 |
| Maharashtra/Goa | 96 | 97 | 49 | 16 | 5 | 0 | 3 |
| Andhra Pradesh | 98 | 100 | 74 | 56 | 11 | 2 | 4 |
| Karnataka | 96 | 100 | 78 | 20 | 4 | 1 | 4 |
| Kerala | 82 | 75 | 66 | 56 | 48 | 7 | 5 |
| Tamil Nadu/Pondicherry | 88 | 82 | 57 | 34 | 26 | 8 | 2 |

Notes: *Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.
Source: IHDS 2004–5 data.

CHALLENGES IN RURAL HEALTH CARE

Access to medical facilities is even more varied than access to schools. Only 70 per cent of villages surveyed by the IHDS have access to some type of medical facility within the village. A distribution of medical facilities is shown in Figure 12.2.

Only 52 per cent of villages in this sample have some kind of government medical facility (see Table 12.7).

Unfortunately, in most states, the lack of public medical facilities is not compensated by access to private medical facilities. In about 20 per cent of the villages that are not covered by the government, private clinics fill the need. However, about 30 per cent of villages in India have neither a government nor a private medical facility. One-third of the villages have access to medical facilities offered by both sectors within the village. The most common government

facility for medical care in a village is a government health sub-centre.

Sub-centres are typically the first point of contact between government health services and patients and serve a population of about 5,000 individuals. They are expected to be staffed by two health workers. One is a female auxiliary nurse midwife (ANM) who provides immunization, and maternal and child health services. The other is typically a paramedical offering basic medical care along with emergency care while referring major illnesses for physician care to PHCs. Many sub-centres tend to be understaffed. Sub-centres refer patients to a PHC or CHC. Coverage norms vary depending upon geography. In the plains' states, PHCs cover a population of about 30,000, and CHCs cover a population of about 120,000. In general, several trained

Table 12.5 Distance to Nearest Educational Institution (Government or Private)

| | Per cent Villages with Distance to Nearest Educational Institution (Government or Private) | | | | | | | | | |
|------------------------|--|---------|---------------|---------|------------|---------|------------------|---------|------------|---------|
| | Primary | | Upper Primary | | Secondary | | Higher Secondary | | College | |
| | In Village | 1–5 Kms | In Village | 1–5 Kms | In Village | 1–5 Kms | In Village | 1–5 Kms | In Village | 1–5 Kms |
| All India* | 97.8 | 2.2 | 68.9 | 26.7 | 39.0 | 38.4 | 17.9 | 34.4 | 4.0 | 13.2 |
| Jammu and Kashmir | 100.0 | 0.0 | 80.0 | 20.0 | 29.4 | 58.8 | 7.1 | 57.1 | 0.0 | 28.6 |
| Himachal Pradesh | 82.7 | 17.3 | 55.8 | 42.3 | 28.6 | 50.0 | 23.5 | 29.4 | 6.1 | 10.2 |
| Punjab/Chandigarh | 100.0 | 0.0 | 74.6 | 23.7 | 58.6 | 34.5 | 40.0 | 36.7 | 8.3 | 8.3 |
| Haryana | 100.0 | 0.0 | 75.6 | 23.1 | 63.6 | 27.3 | 26.0 | 42.5 | 1.4 | 16.4 |
| Uttar Pradesh | 96.2 | 3.8 | 63.4 | 35.1 | 23.1 | 49.3 | 14.2 | 49.3 | 1.5 | 17.9 |
| Uttarkhand | 100.0 | 0.0 | 61.1 | 33.3 | 27.8 | 38.9 | 16.7 | 38.9 | 0.0 | 0.0 |
| Bihar | 90.9 | 9.1 | 69.0 | 27.6 | 22.8 | 56.1 | 5.7 | 35.9 | 7.0 | 17.5 |
| Jharkhand | 96.0 | 4.0 | 76.5 | 23.5 | 33.3 | 33.3 | 18.2 | 9.1 | 0.0 | 0.0 |
| Rajasthan | 100.0 | 0.0 | 72.1 | 25.6 | 34.9 | 37.4 | 16.3 | 36.3 | 2.6 | 2.6 |
| Madhya Pradesh | 99.2 | 0.9 | 67.8 | 32.2 | 19.3 | 30.7 | 9.9 | 26.1 | 0.9 | 8.9 |
| Chhatisgarh | 100.0 | 0.0 | 55.3 | 44.7 | 21.3 | 61.7 | 12.8 | 44.7 | 2.1 | 8.5 |
| West Bengal | 98.4 | 1.6 | 36.2 | 48.3 | 33.3 | 56.7 | 10.2 | 49.2 | 0.0 | 18.6 |
| Orissa | 94.0 | 6.0 | 56.6 | 42.2 | 36.1 | 48.2 | 7.3 | 40.2 | 6.0 | 25.3 |
| Assam | 100.0 | 0.0 | 81.8 | 15.2 | 16.1 | 54.8 | 10.3 | 44.8 | 6.7 | 33.3 |
| North-East | 90.3 | 9.7 | 72.4 | 17.2 | 56.5 | 4.4 | 27.3 | 18.2 | 5.6 | 0.0 |
| Gujarat, Daman, Dadra | 98.6 | 1.4 | 64.7 | 19.1 | 32.4 | 20.6 | 17.9 | 25.4 | 0.0 | 10.3 |
| Maharashtra/Goa | 100.0 | 0.0 | 64.4 | 28.8 | 42.6 | 43.5 | 12.1 | 35.3 | 3.5 | 13.3 |
| Andhra Pradesh | 100.0 | 0.0 | 76.6 | 16.0 | 59.1 | 26.9 | 11.8 | 15.1 | 3.3 | 10.9 |
| Karnataka | 100.0 | 0.0 | 79.4 | 15.6 | 40.7 | 34.8 | 8.5 | 28.7 | 1.5 | 11.5 |
| Kerala | 100.0 | 0.0 | 98.0 | 0.0 | 87.5 | 8.3 | 83.3 | 12.5 | 29.7 | 16.2 |
| Tamil Nadu/Pondicherry | 98.3 | 1.7 | 76.5 | 15.7 | 53.9 | 32.7 | 36.4 | 41.8 | 12.7 | 10.9 |

Notes: *Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.
Source: IHDS 2004–5 data.

physicians are available in PHCs, with four to six hospital beds and an ability to provide preventive as well as curative services.

Private health services consist of trained allopathic physicians working in major non-profit hospitals or clinics, setting up their own private clinics, and running four to ten bed hospitals or maternity clinics, as well as licensed practitioners with training in ayurvedic or homeopathic medicine. Moreover, many paramedics also set up private practice, sometimes in conjunction with a pharmacy. Although pharmacists are not expected to provide prescription drugs without prescription from a licensed practitioner, most prescribe and sell medication with impunity (see Chapter 7, Box 7.2 for a description of private and government facilities surveyed by the IHDS). At the most elementary level, a private *dai* (midwife) provides help with childbirth as well as sundry

illnesses. Most *dais* are not trained but come from families that have practised midwifery for generations. The percentages of sample villages with access to various forms of health care are provided in Table 12.7.

Sub-centres are poorly equipped and inadequately staffed. Households seem to have little trust in the treatment provided by these sub-centres. As Chapter 7 documents, even when a village has no other medical facility except the sub-centre, less than 30 per cent of individuals with a minor illness such as a cough, cold, or fever use the government facility, and more than 50 per cent travel outside the village to visit a private practitioner. The presence of a PHC or a CHC improves the usage of public facilities.

As documented in Chapter 7, many rural residents travel to a neighbouring village or town to seek medical advice and treatment. The journey often adds an additional

Table 12.6 Index of Government and Private School Access in the Village

| | All | Mean School Index | |
|-----------------------|------|-------------------|---------|
| | | Government | Private |
| All India* | 2.73 | 1.95 | 0.78 |
| Jammu and Kashmir | 2.75 | 1.85 | 0.9 |
| Himachal Pradesh | 2.56 | 2.02 | 0.5 |
| Punjab/Chandigarh | 3.92 | 2.49 | 1.4 |
| Haryana | 4.29 | 2.52 | 1.77 |
| Uttar Pradesh | 2.74 | 1.58 | 1.16 |
| Uttarkhand | 2.3 | 1.55 | 0.75 |
| Bihar | 2.03 | 1.74 | 0.29 |
| Jharkhand | 2.12 | 1.46 | 0.65 |
| Rajasthan | 3.08 | 2.14 | 0.94 |
| Madhya Pradesh | 2.4 | 1.87 | 0.53 |
| Chhattishgarh | 2.14 | 1.78 | 0.37 |
| West Bengal | 1.94 | 1.62 | 0.32 |
| Orissa | 1.98 | 1.8 | 0.18 |
| Assam | 1.97 | 1.84 | 0.13 |
| North-East | 2.39 | 1.93 | 0.45 |
| Gujarat, Daman, Dadra | 2.17 | 1.87 | 0.3 |
| Maharashtra/Goa | 2.41 | 1.66 | 0.75 |
| Andhra Pradesh | 3.06 | 2.41 | 0.65 |
| Karnataka | 2.75 | 2.01 | 0.74 |
| Tamil Nadu/Pondicherr | 2.8 | 1.98 | 0.82 |
| Kerala | 4.57 | 2.44 | 2.13 |

Notes: Ranges from 1–5 including presence of primary, upper primary, secondary, higher secondary schools and college.

*Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.

Source: IHDS 2004–5 data.

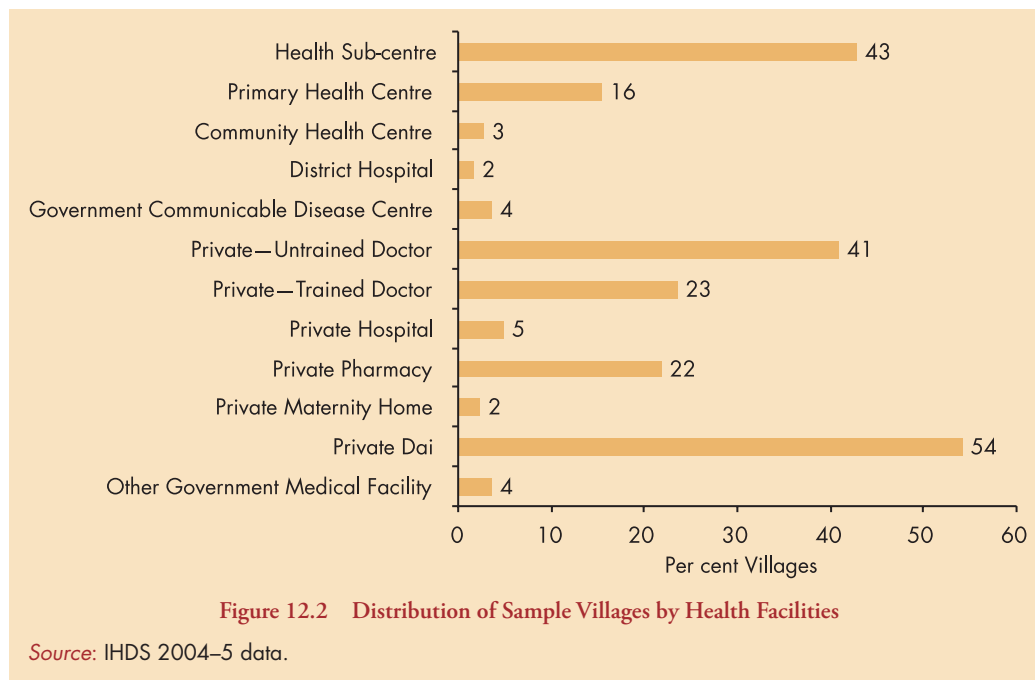
burden of travel expenditure to medical costs. Rural areas in the southern states have much better coverage than the rest of India (Table 12.7). While Kerala and Tamil Nadu have good coverage, with more than 70–80 per cent of villages having some kind of government medical facility, in Uttarakhand and Chhattisgarh less than 30 per cent of the villages have access to government medical facility within the village.

The IHDS data suggest that access to healthcare in Uttarakhand may be particularly problematic when we look at its lower availability of health facilities (Table 12.7) in combination with its absence of roads and easy access to buses (Table 12.3). However, caution should be exercised in interpreting these findings because the IHDS sample

of villages is more limited than the sample of households, and it is difficult to make any generalizations based on this small sample.

Immunization programmes are found in all villages except in Bihar (see Table 12.8).

These programmes deserve special attention in light of the historic division in the Indian health care system. Maternal and child health programmes have usually fallen under the heading of family welfare and trace their origin to family planning programmes. The ANMs who provide immunization also provide family planning services, and their performance has been closely monitored with respect to meeting family planning acceptance targets. While this target-driven approach has been relaxed in recent years, it may well be that



this approach had set a structure for the delivery of immunization services. Nonetheless, even here, while most villages have access to immunization programmes, the actual immunization rates documented in Chapter 8 remain modest, with higher immunization coverage for polio (administered under pulse polio campaigns) than for other immunizations.

Surprisingly, in states like Andhra Pradesh and Kerala that have good government coverage, there is also a strong presence of private medical facilities. However, this is not always the case. States like Tamil Nadu and the states in the North-East, while enjoying fairly high levels of rural access to government medical facilities, have relatively few private medical establishments. On the other hand, states such as Uttarakhand and West Bengal have a much larger presence of private medical facilities than government centres. Among the states leading in the presence of the private sector in rural health care, Punjab (75 per cent), West Bengal (77 per cent), and Kerala (72 per cent) stand out. When we correlate the presence of private facilities with usage presented in Chapter 7, it appears that West Bengal and Punjab document high usage of private facilities. However, in Kerala which has the availability of private as well as public facilities, the use of private facilities for short-term or long-term illnesses is not very high.

Many people rely on private facilities even when they have access to government centres, reflecting greater confidence in the quality and the efficiency of private services. Whether this confidence is well placed remains open to question. Often these private dispensaries are run by untrained doctors. In villages surveyed by the IHDS, less than 25 per cent of the villages have access to private dispensaries

with trained doctors. As documented in Table 12.7, about 41 per cent of the villages are served by untrained practitioners. They often treat common colds and fevers, prescribe antibiotics, and treat dehydration by administering oral rehydration therapies. Even some highly developed states like Haryana and Karnataka have a substantial presence of private facilities run by untrained personnel.

While most states have some facility for health care in villages, the facilities are faced with myriad problems ranging from lack of medical and other supplies, to the absence of medical personnel, and general lack of accountability. Drugs, in particular, often tend to be in short supply, and patients are forced to buy their own medication from private pharmacies. Doctors often don't want to live and raise their families in remote villages. Thus, although doctors may be on the payroll, they are often not available. For villagers, then, the option of having access to private untrained personnel may well be better than nothing. In the case of common illnesses, these practitioners seem to cure enough people that they have a relatively thriving practice. However, many untrained practitioners and pharmacies retain their reputations by prescribing antibiotics even for minor illnesses, a practice that may lead to long-term antibiotic resistance and may be harmful to long-term health.

COMMUNITY PROGRAMMES

In recent years, development practitioners have begun to recognize the role of self-help groups and NGOs in mobilizing the community and generating organic potential for development. The Indian government has also recognized this potential and has tried to foster the growth of such

Table 12.7 Per cent of Sample Villages with Different Types of Medical Facilities

| | Any Government Facility | Any Private Facility | Type of Govt Facility | | | | Type of Private Facility | | | | | |
|------------------------|-------------------------|----------------------|-----------------------|-----------------------|-------------------------|-----------------------------|--------------------------|--------------------------|------------------|-----------------|------------------------|------------------------|
| | | | Sub-centre | Primary Health Centre | Community Health Centre | Government Maternity Centre | Private Doctor Trained | Private Doctor Untrained | Private Hospital | Private Chemist | Private Maternity Home | Private Dai (mid-wife) |
| All India* | 52 | 52 | 43 | 16 | 3 | 4 | 23 | 41 | 5 | 22 | 2 | 54 |
| Jammu and Kashmir | 50 | 30 | 45 | 10 | 5 | 0 | 5 | | 0 | 15 | 0 | 25 |
| Himachal Pradesh | 54 | 35 | 27 | 25 | 2 | 2 | 17 | 30 | 0 | 8 | 0 | 56 |
| Punjab/Chandigarh | 56 | 75 | 49 | 11 | 3 | 5 | 33 | 23 | 3 | 46 | 2 | 87 |
| Haryana | 56 | 85 | 44 | 11 | 0 | 0 | 16 | 64 | 5 | 13 | 3 | 85 |
| Uttar Pradesh | 38 | 67 | 36 | 9 | 1 | 1 | 23 | 50 | 3 | 26 | 2 | 55 |
| Uttarkhand | 15 | 50 | 10 | 0 | 5 | 10 | 30 | 66 | 0 | 25 | 0 | 55 |
| Bihar | 49 | 51 | 43 | 10 | 0 | 0 | 16 | 50 | 7 | 30 | 5 | 75 |
| Jharkhand | 39 | 54 | 35 | 8 | 0 | 0 | 31 | 46 | 0 | 12 | 0 | 46 |
| Rajasthan | 60 | 43 | 48 | 13 | 5 | 7 | 15 | 31 | 3 | 15 | 5 | 68 |
| Madhya Pradesh | 38 | 34 | 34 | 6 | 2 | 2 | 13 | 33 | 1 | 10 | 2 | 65 |
| Chhatisgarh | 22 | 31 | 16 | 10 | 0 | 0 | 0 | 31 | 2 | 4 | 0 | 76 |
| West Bengal | 49 | 77 | 44 | 11 | 3 | 3 | 17 | 29 | 9 | 23 | 0 | 65 |
| Orissa | 57 | 30 | 46 | 13 | 7 | 6 | 13 | 68 | 0 | 17 | 1 | 32 |
| Assam | 34 | 45 | 24 | 11 | 0 | 0 | 8 | 23 | 0 | 42 | 0 | 13 |
| North-East | 67 | 15 | 45 | 30 | 9 | 3 | 12 | 45 | 0 | 15 | 0 | 30 |
| Gujarat, Daman, Dadra | 29 | 65 | 26 | 4 | 0 | 1 | 50 | 9 | 3 | 7 | 0 | 79 |
| Maharashtra/Goa | 50 | 50 | 45 | 15 | 2 | 3 | 42 | 53 | 5 | 30 | 4 | 80 |
| Andhra Pradesh | 65 | 71 | 59 | 13 | 4 | 7 | 18 | 19 | 11 | 32 | 7 | 56 |
| Karnataka | 61 | 40 | 51 | 23 | 2 | 3 | 23 | 68 | 1 | 7 | 1 | 20 |
| Kerala | 80 | 72 | 70 | 66 | 16 | 3 | 57 | 14 | 39 | 70 | 7 | 15 |
| Tamil Nadu/Pondicherry | 77 | 37 | 60 | 29 | 0 | 18 | 31 | 30 | 14 | 31 | 5 | 8 |

Notes: *Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.

Source: IHDS 2004–5 data.

organizations by providing direct and indirect support to them. In some cases, these voluntary groups work directly with government agencies and help in implementing government programmes. In others, they receive financial aid from the state. Other organizations have chosen not to be co-opted by the state and, instead, operate independently, sometimes as pressure groups working to ensure effective governance.

The IHDS collected information about the existence of a variety of programmes in sample villages. It is important to note that because the key informants were often village functionaries, there is a potential for the overstatement of various programmes. Nonetheless, Table 12.8 provides an interesting portrait of the presence of self-help groups, government programmes, and NGOs.

To the extent that villages are able to promote their own development through the use of self-help groups and non-governmental bodies, they may be able to substitute for, or supplement formal government programmes.

The success of states is often evidenced in the implementation of programmes. Even when there are programmes sponsored by the central government, the success rate and coverage of the programmes vary widely by state. Overall, the southern states stand out in coverage and implementation of government programmes.

However, the IHDS also suggests an interesting puzzle. Development discourse is suffused with an implicit or explicit assumption that when a state fails to reach certain areas or populations, the NGO sector has the ability to fill the vacuum. However, in the IHDS villages, the presence of

an NGO sector is not independent of the level of economic development. The IHDS village survey asked about the presence or absence of the following programmes: *Mahila Mandal* (women's organization), youth groups, self-help groups, trade unions/professional groups, credit or savings groups, festival/religious groups, caste associations, development groups or NGOs, agricultural or milk cooperatives, Panchayat Bhavan, *Pani* Panchayat (water cooperative), community centres, and community television sets. Figure 12.3 plots the number of these programmes reflecting social development in a village against infrastructure development discussed earlier (consisting of roads, banks, telephone services, and the like).

The results are striking. Villages that have higher infrastructure development also have greater presence of the community organizations. When we reflect on the nature of the non-governmental sector in India, this is not surprising.

While the development discourse tends to view the voluntary sector as being rooted in local culture, given the symbiotic relationship between the state and the voluntary sector in India, it seems eminently reasonable that the voluntary sector thrives only where state penetration is more effective.

DISCUSSION

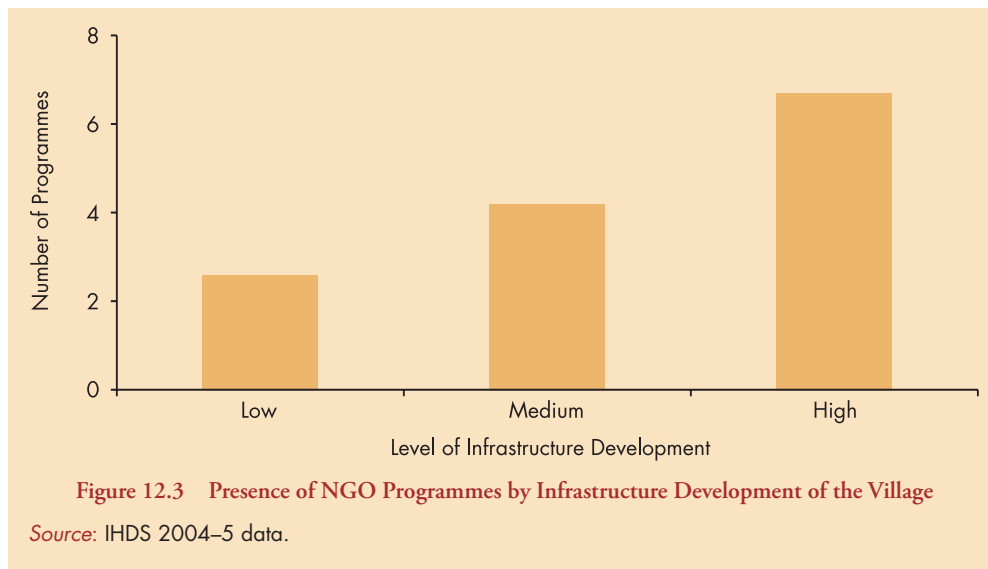
The urban–rural divide in indicators of human development has long been recognized. The contribution of this chapter is to focus on variations between villages in levels of infrastructure development. This provides a framework for interpreting the observation throughout this report that villages with higher levels of infrastructure development have far better health and educational outcomes than those with lower levels of development. These villages also have better employment opportunities and higher incomes.

Table 12.8 Per cent of Sample Villages with Access to Different Government Programmes

| | Safe Drinking Water | Sanitation/Toilets | Immunization | Midday Meal | Improved Stove | Agricult. Ext. | Micro-Credit | Widow Pensions | Old Age Pensions |
|------------------------|---------------------|--------------------|--------------|-------------|----------------|----------------|--------------|----------------|------------------|
| All India* | 61 | 55 | 89 | 87 | 35 | 37 | 49 | 87 | 88 |
| Jammu and Kashmir | 70 | 10 | 80 | 75 | 15 | 30 | 30 | 75 | 55 |
| Himachal Pradesh | 96 | 75 | 73 | 85 | 31 | 48 | 35 | 92 | 98 |
| Punjab/Chandigarh | 20 | 38 | 79 | 87 | 30 | 43 | 31 | 80 | 85 |
| Haryana | 67 | 41 | 96 | 89 | 42 | 35 | 46 | 95 | 95 |
| Uttar Pradesh | 78 | 78 | 80 | 77 | 44 | 15 | 71 | 93 | 96 |
| Uttarkhand | 61 | 83 | 78 | 83 | 56 | 44 | 22 | 94 | 89 |
| Bihar | 28 | 25 | 56 | 51 | 5 | 18 | 66 | 75 | 95 |
| Jharkhand | 12 | 4 | 89 | 77 | 0 | 0 | 15 | 69 | 81 |
| Rajasthan | 36 | 33 | 86 | 89 | 18 | 29 | 56 | 89 | 69 |
| Madhya Pradesh | 28 | 35 | 94 | 92 | 29 | 37 | 30 | 87 | 93 |
| Chhatisgarh | 43 | 23 | 92 | 89 | 30 | 30 | 28 | 96 | 98 |
| West Bengal | 58 | 66 | 56 | 94 | 14 | 11 | 44 | 61 | 92 |
| Orissa | 34 | 30 | 94 | 86 | 16 | 21 | 47 | 95 | 96 |
| Assam | 50 | 25 | 100 | 72 | 3 | 11 | 17 | 61 | 78 |
| North-East | 49 | 42 | 91 | 55 | 27 | 52 | 42 | 52 | 61 |
| Gujarat, Daman, Dadra | 60 | 36 | 100 | 99 | 24 | 63 | 23 | 83 | 61 |
| Maharashtra/Goa | 83 | 78 | 99 | 96 | 68 | 62 | 63 | 81 | 80 |
| Andhra Pradesh | 87 | 99 | 98 | 97 | 62 | 72 | 65 | 93 | 99 |
| Karnataka | 87 | 60 | 97 | 98 | 44 | 17 | 50 | 100 | 93 |
| Kerala | 78 | 94 | 100 | 76 | 60 | 82 | 80 | 100 | 100 |
| Tamil Nadu/Pondicherry | 83 | 80 | 93 | 97 | 42 | 51 | 66 | 98 | 95 |

Notes: *Tables present unweighted summary from village questionnaires. These data are nationwide but not nationally representative.

Source: IHDS 2004–5 data.



What makes some villages more fortunate than others? Two factors play an important role: distance to district towns and greater infrastructure development in the state. While much attention has been directed to the economic growth in the six metropolitan cities—Mumbai, New Delhi, Chennai, Bangalore, Kolkata, and Hyderabad—the growth in secondary and tertiary cities has been overlooked. However, these smaller cities—Nasik, Surat, Allahabad, and others—are home to industries and government offices that provide a large number of jobs and serve as engines of growth to nearby rural areas. Thus, villages from which individuals can commute to these district towns become prosperous and manage to lay claims to development funds for road, school, and hospital construction. The second influence is more general. States differ considerably in their history and geography, which shape the level of institutional development. We don't fully understand the forces that have led to these different developmental trajectories. Some arguments suggest that land tenure patterns in colonial

India, in which landlords were vested with significant power, had led to low investments in public infrastructure.² Others have emphasized differential development of Panchayati Raj institutions.³ Still others have focused on the role of social movements, such as the anti-caste movement.⁴ Regardless of the source, it seems evident that some states have better functioning bureaucracies in which the fruits of development reach far-flung villages, while villages in other states continue to struggle.

These are the villages that appear to be forgotten by the development surge—those that lack paved roads and experience scarcity of public transportation. It is in these poorly developed villages, in which 37 per cent of the IHDS households reside, that we find the lowest levels of human development: low school enrolment, poor learning outcomes, higher infant mortality, and low rates of vaccination. These are the villages where development efforts will have to be concentrated in order to ensure that human development goals are met.

HIGHLIGHTS

- Villages located closer to district towns have greater infrastructure development than those located farther away.
- More than 92 per cent of the IHDS villages have a government primary school within the village, but the availability declines at higher levels of schooling.
- Location of private schools is associated with the location of government schools. States with a better developed public education infrastructure also have a greater availability of private schools.
- Nearly 30 per cent of the IHDS villages have neither a public nor private health care provider within the village.
- Villages with a greater availability of infrastructure also have more access to non-governmental organizations.

² Banerjee and Iyer (2005).

³ Rao and Walton (2004).

⁴ Omvedt (1993).