# Afterword

# Reflections on a Return Visit

In July 1994 I spent several weeks in Rajasthan, visiting Hinganiya and travelling further west to Jaisalmer and Barmer. I also visited the now completed Rajasthan Canal. The visit was brief and I had no opportunity to carry out comprehensive research. Nevertheless, what I observed provides a focus for useful reflections.

The early 1994 monsoon had been extremely heavy, causing heavy flooding in parts of Rajasthan. In fact, since my last visit in August 1987, monsoon rainfall had been generally good. This lead to some astonishing changes in Hinganiya.

Judging by the increased number of houses there had been a considerable increase in village population, probably the result of a natural increase combined with the return of crisis migrants. Most strikingly, there were many new pakka houses, including several in the Nayak and Meghwal sections of the village. Further, there was quite a lot of new construction activity. One of the Nayaks had become an accomplished mason and was earning around Rs 150 per day building houses. Electricity had been connected to many houses and the village appeared quite prosperous in comparison to earlier visits.

The visibly improved economic situation was clearly the result of a sequence of good monsoons, with excellent crop production. Interestingly, the pattern of caste-related strategies for obtaining non-agricultural income had continued. Several Rajputs who had been at school in 1987 were now enlisted in the various military or paramilitary forces, or working in the tourist industry. Nayaks and Meghwals had continued to seek income as labourers, especially in construction. At least one younger Nayak was working as a bus driver. The Rajput "colony" in Jodhpur continued to be a base for visitors from the village and for the young men working at the Umaid Bhawan Palace Hotel. The Rajputs

were placing great importance on the education of young men in Jodhpur.<sup>1</sup>

The combination of good agricultural seasons and continued involvement in non-agricultural activities, had clearly led to a much improved economic situation in comparison to that which existed in 1987. The question which arises is to what extent the next episode of drought would jeopardize the economic gains of the previous ten years. It is difficult to answer this question with any certainty, but it seems likely that the good seasons had allowed most households to build a useful buffer against the inevitable drought. Although I was not in Hinganiya for long enough to quantify my observations, it also seemed very clear that many more men, of all castes, had positioned themselves to take advantage of non agricultural income, largely following strategies traditionally preferred by their caste fellows. All of this seems to reinforce the view that economic development reduces the risk of catastrophic famine.

Western Rajasthan as a whole was, like Hinganiya, astonishingly green in July 1994. Even in the desert tracts near Jaisalmer there were extensive grasslands and (something I had never seen before in the area) large areas of surface water, often amounting to medium sized lakes.

In my original analysis I wondered what effects the completion of the Rajasthan canal would have on the region. I was not able to visit the tail of the canal, near Jaisalmer, because of restrictions on foreigners visiting the area, but I did visit the canal near Phalodi. Clearly agricultural activity and productivity had increased in areas near feeder canals, although it was unclear whether the effects were as great as designers had expected. I wonder personally how much the busy new and expanded settlements had developed as a result of improved agriculture and how much they had developed as a result of the need for workers to build and maintain the canal and the need to provide services for those workers. This is speculative and there is room for a detailed and critical study of the socioeconomic impacts of the canal.<sup>2</sup>

The effects of the canal on migration routes were surprisingly limited. Herders at Sam, to the west of Jaisalmer and fairly near the tail of the

An example of just how effectively the networking by Rajputs led to economic benefits to the village is exemplified by the involvement of villagers in the production of the film *The Jungle Book*, much of which was filmed in and around Jodhpur. Through tourist industry contacts Hinganiya provided many workers for the production. These were reportedly paid Rs 200 per day.

<sup>&</sup>lt;sup>2</sup> Dr L.P. Bharara, a sociologist at the Central Arid Zone Research Institute, has reported on some impacts of the canal in earlier stages of its construction (Bharara 1985). He believes (pers. comm.) that a comprehensive evaluation is now necessary.

# Afterword

canal, reportedly still take their livestock to Gujarat in bad years. Others, near Barmer, reported that they migrate to Haryana, the Punjab or Gujarat. Others talked of Jaisalmer District. Surprisingly no one interviewed reported taking livestock to the canal zone, although providing fodder was supposedly an objective of canal construction. It is possible that the good recent monsoons (since the completion of the canal) had meant that migration had been very limited, there being no fodder crisis. Consequently, as there had been no really bad years, the option of canal zone grazing had not been tested. It seems, in any case, that the canal zone is not yet seen as a major option by herders. Some herdsmen reported that they had not been 'asked' by the government to take their herds to the zone and there may well be some uncertainty about rights of access to the grazing lands. It is also possible that larger migrations, however onerous, are more attractive because they bring herders in contact with markets for livestock and animal products.

Following this brief return to Rajasthan, I was left with a strong sense of improved economic conditions. The reality of this impression, although unquantified, is unquestionable. What is less certain is just how fragile the changes are. Clearly, the next drought will lead to a downturn, but it remains possible that the period of prosperity will provide a legacy of greater security.

The sustainability, in ecological terms, of rapidly increasing population, remains more problematic. Exploitation of underground water resources is seen as presenting serious difficulties (Goldman 1989). With reference to desertification, the extraordinary growth of grass and other natural vegetation during the 1994 monsoon leads me, however, to question whether soil degradation is as clear a trend as is often claimed. Since my first visit to Rajasthan in 1983, vegetation (both crops and natural vegetation) has varied immensely, but the extent of vegetation in 1994 was far greater than anything I had seem previously. Against this background of great variation over the short term, claims of inevitable long term trends of declining soil condition should, perhaps, be treated with some scepticism.

# Appendix

# The Twenty-Nine Rules of the Bishnois

The following version of the twenty-nine rules is a composite of the versions translated or quoted by Rose (1911, vol 2:111) for the first two rules and Gupta (1965, quoting Walter, n.d.) for the rest. Rose's account of the last twenty-seven rules differs from the account of Gupta in some respects and is, in any case, quite cryptic. The full set of rules as provided by Rose is version B. Note that I have quoted the wording from both versions verbatim.

# (a) Composite Version

- 1/2 For 30 days after child-birth and five days after a menstrual discharge a woman must not cook food.
- From the day when a child, whether male or female, begins to eat grain, it should be bathed daily in water.
- 4 To be faithful always to one woman.
- 5 Whatever a man possesses therewith always to be content.
- 6 Always to salute each other five times a day.
- 7 To pray to the deity every evening.
- 8 Everyday before partaking of food to put ghee on a fire.
- 9 Never to speak without consideration.
- Water used for drinking or bathing to be filtered.
- 11 To carefully examine all wood for burning to see that insect or other living thing is in it.
- 12 Never to give way to anger.
- 13 Never to thieve.
- 14 Never to speak ill of anyone.

# Appendix

- 15 Never to tell an untruth.
- 16 To fast on the 15th of the dark part of each month.
- 17 Always to call on the name of Vishnu.
- Never to take life nor as far as it is possible permit others to do so.
- 19 Never to cut a green tree.
- To eat only such food as is cooked by the sect.
- 21 To fix a mark on the ear of every goat and sheep so that its life may be safe and as far as possible to make others do the same.
- 22 Never to geld a bullock.
- 23 Not to eat opium.
- 24 Not to drink spirituous liquor.
- 25 Not to smoke.
- Not to take bhang.
- Not to let indigo touch the body.
- Never to bear enmity to another.
- 29 So to live as to be always prepared to die.

# (b) Rose's version

'For 30 days after child-birth and five after a menstrual discharge a woman must not cook food. Bathe in the morning. Commit not adultery. Be content. Be abstemious and pure. Strain your drinking water. Be careful of your speech. Examine your fuel in case any living creature be burnt with it. Show pity to living creatures. Keep duty present to your mind as the Teacher bade. Do not speak ill of others. Do not tell lies. Never quarrel. Avoid opium, tobacco, bhang and blue clothing. Flee from spirits and flesh. See that your goats are kept alive (not sold to Musalmans, who will kill them for food). Do not plough with bullocks. Keep a fast on the day before the new moon. Do not cut green trees. Sacrifice with fire. Say prayers. Meditate. Perform worship and obtain heaven. . . Baptize your children if you would be called a true Bishnoi.' (Rose 1911, Vol 2:111-112)

### (a) Census of India and Census of Marwar

For convenience, all documents published by the Census of India (with the exception of monographs) are cited by the year of the census, not the year of publication, followed by a letter indicating the particular publication according to the following bibliography. A similar approach has been adapted to references from the Census of Marwar.

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#### Census of Marwar

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