

Mobility and Control Among Nomadic Shepherds: The Case of the *Raikas*. II

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This paper analyzes the relationship between leaders and ordinary shepherds among the raikas—nomadic shepherds from western India. It uses a neo-institutional perspective to show how control over information is crucial if shepherds are to prevent their leader from misusing the extensive powers he possesses to make decisions on their behalf. Control over information is not, however, sufficient. The paper argues that shepherds must also possess the capacity to impose sanctions if their leader oversteps the bounds of delegated decision-making authority. The paper highlights the importance of politics and the divergent interests of the shepherds and their leaders. In so doing, it allows inquiry into a system of social interactions that is characterized by conflicting interests and the negotiation of conflict, but is often perceived as harmonious. At the same time, the investigation offers new insights into other social situations structured by principal-agent relationships.

KEY WORDS: decision-making; agency; *raikas*; pastoralism; nomadic shepherds; Rajasthan.

INTRODUCTION

As social scientists are recognizing the importance of institutional arrangements in structuring human interactions, studies of rural societies that use an institutional perspective have begun to emerge.² A large number of

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²See for example Bates (1989), Berkes (1989), Cashdan (1990), Ensminger (1992), Ortiz and Less (1992), Ostrom (1990), and Wade (1988). Among anthropologists, Bailey (1965, 1988, 1991), Barth (1966, 1967), and Colson (1974) are among the earliest exponents of approaches that are either compatible with, or presage the current institutionalist approaches to the study of rural or "traditional" societies.

studies have focused on firms and markets (Alchian and Demsetz, 1972, 1973; Coase, 1937, 1960; Williamson, 1985). But anthropologists and development scholars have also contributed greatly to the development of the field by employing neo-institutionalism in rural and non-market contexts. Little of this work, however, focuses on pastoralists and their institutions, or on decision-making among pastoralists.³

In an earlier paper in this journal, I analyzed informal decision-making arrangements among the *raikas*, nomadic shepherds from Western India.⁴ I argued that decision-making responsibilities are distributed in *raika* migratory camps "to utilize available information, promote economies of scale, take into account the interests of different group members and at the same time control decision-makers from abusing delegated powers." The present paper probes the point further and inquires into the processes whereby ordinary shepherds in the *raika* mobile collectives control their leader, the *nambardar*. By highlighting the importance of asymmetries of information and the divergent interests of the shepherds and their leader, this paper focuses squarely on politics. It thus complements the initial investigation into the informal indigenous institutions of nomadic pastoralists.

The *raikas* are the largest group of nomadic pastoralists in India.⁵ Each year after the rains, hundreds of thousands of shepherds embark on collective camps on migratory journeys that can span distances of up to 1000 and last up to 9 months⁶ (see Fig. 1).

They camp in a new location almost every day. Each *dang* (mobile camp) is organized into 15–20 roughly equal-sized flocks, and can embrace as many as 7000 sheep and 100 camels, accompanied by a similar number of men, women, and children. Smooth coordination of the movements of such a large group becomes possible because the individual shepherds in the camp delegate much decision-making responsibility to either the leader of the camp, the *nambardar*, or to a council of elders. They reserve for themselves only the control over the day-to-day management of their own flocks.⁷ By delegating decision-making, the shepherds enable the camp to

³See some exceptions in the works of Ensminger and Rutten (1991), and Ensminger (1992). Many anthropologists have, of course, offered work on decision-making among different communities. See, for example, Barlett (1980), Gladwin (1979), Ortiz (1967), and Quinn (1975).

⁴See Agrawal (1993).

⁵General descriptions of the *raikas* are available in Agrawal (1992), Kohler-Rollefson (1992), and Srivastava (1990).

⁶There are some shepherds who migrate the entire year.

⁷Many of the flocks that comprise the mobile camp are themselves the result of several smaller shepherds coming together to create a flock of 300–500 sheep. Flocks smaller than this seem to face larger risks of economic loss during migration and larger flocks tend to divide into two units (Agrawal, 1992).

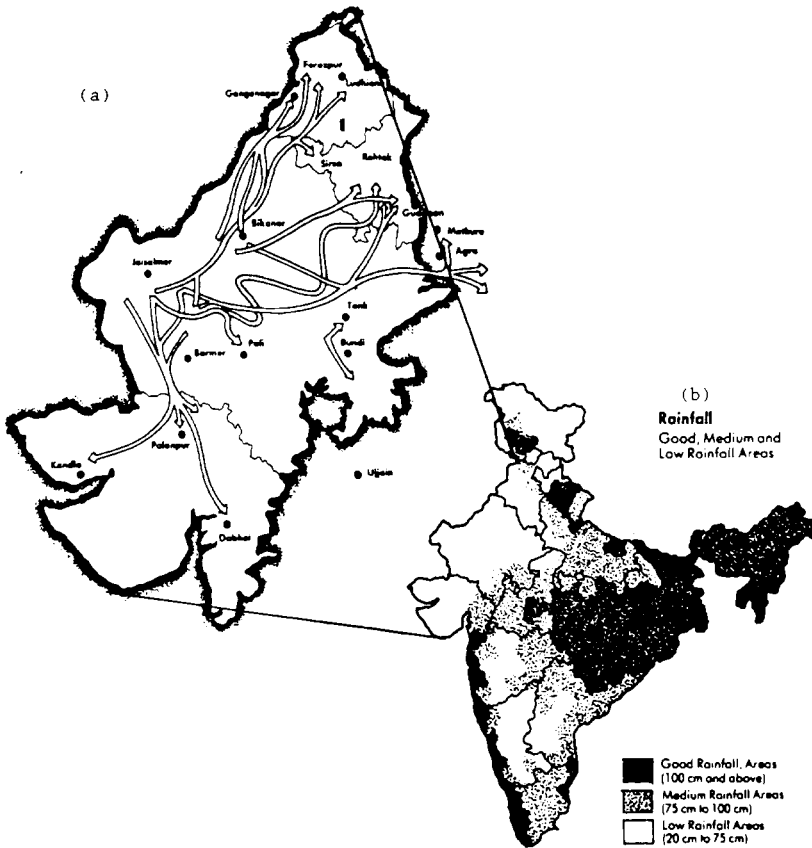


Fig. 1. Migration by *raikas* and its relationship to rainfall: (a) migration routes, and (b) rainfall pattern for India (adapted from CSE, 1985).

function better, increase their ability to counter environmental risks, and harvest greater scale economies (Agrawal, 1993).

I argued in my earlier account that the rationale that informs the distribution of decision-making powers is the desire to achieve greater efficiency and to mitigate environmental risks. This account, however, skirted the question of how, after delegating power, the shepherds ensure that their leader will not misuse that power.

The shepherds are caught in a dilemma. On the one hand, they stand to gain substantial economic benefits from giving their leaders the power to make decisions in a wide variety of situations. Yet, at the same time, they face the risk that these leaders, especially the *nambardar*, may abuse their powers. However, the shepherds have evolved a comprehensive set

of preventive and corrective measures to guard against opportunistic behavior. An analysis of the mechanisms they deploy not only helps us to better understand decision-making among nomadic pastoralists, it is also useful in explicating the dynamics of an enormous variety of social situations in which individuals face the same type of problems that the *raikas* face: how to control agents who exercise responsibilities and powers on one's behalf.⁸

To facilitate exposition, I have divided the paper into two sections. The first presents a framework for analyzing the costs the shepherds may incur in permitting their leader to make decisions on their behalf. The next section details the ways in which the shepherds prevent abuse of authority.

A NEO-INSTITUTIONAL PERSPECTIVE⁹

I analyze the shepherd camp using a neo-institutional framework and treat it as a relationship based on a set of contracts between principals (the ordinary shepherds) and their agent (the *nambardar*). According to this set of contracts, the shepherds selected a leader for their migration so that they do not each have to perform tasks that would divert their attention from the daily tasks related to sheep herding. In exchange, the *nambardar* gains social prestige, cultivates political contacts, and garners leadership status. In addition, as we shall see, he acquires some opportunities for economic gains.¹⁰

Even a cursory look at the range of issues over which the *nambardar* makes decisions reveals vast opportunities for malfeasance, graft, and exploitation (see Table I).¹¹ The *nambardar* decides upon the course of action

⁸As Kiewiet and McCubbins (1991, p. 24) put it, "Delegation [of powers and responsibilities] is the key to the division of labor and development of specialization; tremendous gains accrue if tasks are delegated to those with the talent, training and inclination to do them. This . . . is what allows firms to profit, economies to grow, and governments to govern."

⁹With the recognition that transaction costs, information asymmetries, and property rights play exceedingly significant roles in determining economic outcomes, the neo-institutional literature has burgeoned in the last two decades. Williamson (1985), Eggertsson (1990), North (1990), and Bromley (1989) provide useful introductions to this literature.

¹⁰Economic considerations seem, however, to play only a small role in the desire to be the leader. The power to make decisions for a group of followers is, perhaps, the primary force impelling some individuals to seek status as a leader.

¹¹To interpret the table, begin with row one. The "2" in brackets after the first issue area implies that there are two decision issues that fall under the general category of "Camp Formation and Dissolution." Respondents in each camp were asked who made the decisions on each of these issues. There were 60 respondents, but two were invalid (or the respondents did not provide an answer); hence the figure 58 in the last column. Of these 58 responses, the flock leaders were mentioned 49 times as the decision-making units and the camp leader, the *nambardar*, mentioned in nine instances. Of the 1800 responses for 60 decision issues from 30 respondents, 37 (2%) were invalid (or unavailable); and thus the number 1763 as the total number of responses.

Table I. Aggregate Data on Decision-Making, Classified by Issue Area

Issue area	No. of Decisions	Decision-making unit			Total
		Flock leaders	Nambardar	Council	
Camp formation					
dissolution	(2)	49	9	—	58
Migration	(11)	1	265	48	314
Flock management	(13)	322	55	—	377
Camp management	(16)	53	377	48	478
Market interactions	(10)	71	171	58	300
External relations	(8)	8	175	53	236
Total	(60)	504	1052	207	1763

in 60% of all situations mentioned by the shepherds as important. If we exclude the decision area of "flock management," which is related to issues internal to the management of each flock, the *nambardar* decides for the camp in 72% of all decision situations.

Opportunities for graft and exploitation arise from structural differences between the position of the shepherds and the *nambardar* that stem from asymmetries of power and information. The *nambardar* possesses much time-, place-, and asset-specific information that is unavailable to the shepherds. Indeed, this is the reason why they select him. But at the same time, the asymmetries of power and information place the *nambardar* into a position marked by the possibilities of adverse selection, moral hazard, shirking, and corrupt behavior. Each of these can lead to major losses for migrating shepherds.

Adverse selection refers to the possibility that the shepherds may select a leader who will turn out to be incompetent in solving problems related to migration. Information asymmetries mean that individuals offering services know much more about their capacities than those who seek their services. Shepherds typically try to counter this hazard by selecting *nambardars* with good reputations. But even if they select a reputable leader, he may alter his behavior after selection. This is called the problem of moral hazard in which information asymmetries create incentives for parties to a contract to alter their behavior after the contract. Altered behavior is typically characterized by "shirking," when selected individuals do not perform tasks to the best of their abilities, choosing instead to exert less effort on behalf of their principals. To prevent shirking, principals (the shepherds) must create mechanisms to gather information on the performance of tasks

by their agent (the *nambardar*). Finally, corrupt behavior embraces a range of actions that allow the agent to use his position to his own advantage and to the detriment of the persons who have appointed him to the position.¹² Corrupt actions become possible because agents possess superior information and principals are unable to sanction their behavior without incurring considerable loss.

Each of these types of behavior can be prevented and/or sanctioned. To prevent widespread abuse of power *ex ante*, or impose sanctions *ex post*, principals must meet two conditions. First, they should be able to gather information on the performance of their agent. Second, if they discover that he is acting against their interests, they should possess sufficient power to punish him. But collecting information and imposing sanctions may themselves involve costs. Thus, principals need to balance the costs of monitoring and sanctioning against the losses that may arise either from not specializing or from letting the agent cheat and thus dissipate the gains of specialization and delegation.

CONTROLLING THE *NAMBARDAR*

The many situations in which the *nambardar* can potentially abuse his decision-making authority possess two common attributes. They all involve interactions with outsiders and the exchange of sums of money or goods in kind. The leader can misrepresent both the true costs and the benefits of actions. Examples of the first type would include bribes negotiated to pay off government officials, payments to settle disputes with farmers, costs of medicines, and costs of supplies bought for feasts and festivals. Benefits might be misrepresented when farmers pay the camp for sheep folded in their fields, or merchants pay for pastoral products such as wool and sheep. To prevent discovery and possible sanctions the *nambardar* would need to conceal information from the shepherds and to ensure that they are unable to check his behavior.

The shepherds, on the other hand, must try to minimize the costs that can result from fraudulent actions of their leader. To do so, they must create reliable mechanisms to monitor the rates at which he sells products and buys goods, and the nature of his interactions with outsiders.

To see how the shepherds deal with the problem of monitoring, we will discuss four situations: the selection of camping sites; the purchase of medicines and supplies for feasts; the dealings with merchants; and finally,

¹²The above summary of the ideas of adverse selection, moral hazard, shirking, and corruption draws on Williamson (1985) and Ostrom et al. (1990).

the payment of bribes to police, forest, and other government officials. These constitute the most important situations in which the *nambardar* could benefit through "hidden action and hidden information" at the expense of the shepherds. The shepherds can respond by *ex ante*, precluding the possibility of the *nambardar* defrauding them; by checking on what the *nambardar* does; or by ignoring the *nambardar's* actions against their interests because attempts to prevent all deviations are too costly in comparison to the benefits of delegation. Above all, they should possess the ability to sanction the leader if his actions prove highly prejudicial to their interests.

Selection of Camp Sites

Raikas mostly camp on private fields. The leader negotiates with the farmers to select the fields in which the sheep will be folded for the night. The amounts the *nambardar* receives on behalf of the shepherds are sizeable—on the average Rs. 500.00¹³ for each flock over the year (see Table II).

The shepherds use a simple mechanism to ensure that the *nambardar* does not conceal information or siphon off returns from folding: the negotiations between the farmer and the *nambardar* usually take place in the

Table II. Income from Folding, and Expenses Incurred on Bribes/Fines: Data for 13 Flocks (in Rs.)

Flock number	Income from folding	Expenses on fine/bribes
1	264.00	107.00
2	335.00	134.00
3	227.00	100.00
4	396.00	150.00
5	396.00	150.00
6	335.00	134.00
7	396.00	154.00
8	396.00	160.00
9	791.00	300.00
10	791.00	300.00
11	791.00	382.00
12	396.00	161.00
13	791.00	350.00
Average	485.00	199.00

¹³At current rates of exchange, \$1.00 U.S. equals Rs. 31.00.

open and are settled on the spot.¹⁴ Further, in many cases, farmers pay in kind, and give between 50 and 100 pounds of grains. Because of its bulk, it is difficult if not impossible for the leader to misrepresent the amount received.

Purchase of Medicines and Supplies

The leader could purchase medicines from vendors known to him personally and skim a commission directly off the price, or he could misreport the price he paid. The shepherds guard against the latter possibility by having one or two members of the *dang* accompany the *nambardar* whenever he goes to buy medicines. Generally, on different occasions, different individuals go with the leader. This means that if the leader is successfully and systematically to report higher prices for the medicines he buys, he will have to collude with all the persons who go with him.

By patronizing a particular store and buying the medicine requirements of the entire camp in bulk, the *nambardar* could still make some gains; yet this opportunity for profit is limited by the fact that the prices he reports cannot exceed the prices in other stores. The shepherds use only a few types of Western medicines sold in shops and can easily compare prices. Because it is so time consuming to buy medicines, it makes sense for the shepherds to delegate medicine purchases.

To prevent misreporting of prices of supplies for collective feasts, shepherds use a similar mechanism: they travel in a group to purchase supplies so that an individual cannot exploit the rest of the collective.

Sale of Pastoral Products

Three sets of individuals outside the camp are involved in the sale of pastoral products—the shearers, the wool merchants, and the sheep buyers. The shepherds engage professional wool shearers called *lavas* to clip the wool. At the same time as the sheep are sheared, wool merchants receive invitations to come and purchase the wool. Individual sheep buyers frequently visit the camps to take advantage of the culling of sheep, which the shepherds are forced to do regularly owing to persistent cash flow problems.

Two factors prevent wrong reports about the rates for shearing: first, the *nambardar* makes the decision to invite the shearers together with the council of elders. Since he does not have the discretion to call shearers known to him personally, it is difficult for him to engage in any kind of price-fixing.

¹⁴As the *raikas* say, "Even your enemy does not cheat you while looking you in the eye."

Second, the entire party of 10–20 shearers stays with the camp for a week or more, which increases the chances of discovery if collusion did take place.

The rates for selling sheep are decided by flock leaders. This is a response to the possibility of large losses in case the *nambardar* colluded with the sheep buyers. Most flock owners are so vulnerable that if they did not get a good price in even one or two major sheep sales, they would be devastated. Also, the quality of sheep varies widely across flocks and few flock owners trust anyone else to set prices for their sheep. The costs of not delegating remain low, since sheep buyers visit the camp regularly in the hope of buying sheep from cash poor flock owners.¹⁵

It is in the case of wool sales that the *nambardar* finds the greatest opportunity for personal gains. He decides on the merchants to whom the wool should be sold, its quantity, and the price. The wool merchants or their agents stay in the shepherds' camp very briefly, seldom more than a few hours at a time. Finally, since the price of wool fluctuates relatively rapidly in the urban markets, the ordinary shepherds would find it difficult to ascertain the best price for their wool at any given time. Misrepresentation of prices, therefore, is a simple matter.

However, the shepherds seem to exercise some control over the *nambardar* through *ex post* information collection. As they migrate, they constantly exchange information with shepherds in others camps on the rate at which *nambardars* sell wool. Sometimes, new wool merchants visit shepherds' camps in search of developing regular sellers and in the process furnish price information. The vigilance of shepherds keeps within limits the commission that the *nambardar* can make on wool sales. Most shepherds believe only minor amounts to be at stake. Many of my interviewees felt that the *nambardar* deserved some returns for all the tasks that he performed for the collective. Using a common metaphor, a shepherd explained to me that the *nambardar* also had a "stomach to feed."

Bribes to Government Officials

Few members of the camp have much expertise in the fine art of bribing officials. The "rules of etiquette" that structure talking with government officials in a rural context, where officials consider themselves superior and gifted beings, are beyond the ken of most shepherds. Even the *nambardar* possesses the necessary skills for negotiating and paying bribes only to a small degree. Therefore he enjoys a virtual monopoly of power

¹⁵For a detailed explanation of why sheep buyers often visit the shepherd camps, see Agrawal (1992).

in this area of decision making. Yet, as Table II shows, the *nambardar* does not gain much capital from it.

Table II indicates that on the average flock owners pay Rs. 200.00 in bribes *and* fines during the entire migration cycle.¹⁶ As a percentage of the total income, bribes and fines are no more than 3% for any of the 13 flocks surveyed. Even if the *nambardar* makes some money for himself in the payment of bribes, it can be only a small amount. More importantly, the shepherds can do little, if anything, about it. They have to interact with government officials and they need someone who can manage the necessary side payments.¹⁷

We find that in most situations where the camp leader could make money on the side, institutionalized practices among the *raikas* either preclude or minimize the possibility of large-scale exploitation. Where the *nambardar* enjoys some discretion in fixing prices and rates, the advantages that accrue to him are relatively low. The shepherds tolerate such minor losses because eliminating all discretion from the *nambardar* would prove excessively costly. The question still remains, however, as to what the shepherds can do to sanction an unscrupulous leader.

Sanctioning the Leader

None of the shepherds I interviewed felt that the *nambardar* could be removed *during* a migration cycle, even if he proved incompetent or corrupt. While this seems to indicate that the shepherds possess no coercive powers over their leader to make him perform his tasks according to their interests, in the normal course of events they do have at least two options. First, they can choose to leave their camp in the middle of the migration and return home. This is a high cost/high risk strategy. The migration is risky enough for shepherds traveling in a group; for a lone shepherd it would be perilous in the extreme. A second possibility for dissatisfied shepherds would be to choose a different *nambardar* or to join a different camp after the current cycle concluded.

Few shepherds leave a camp in the middle of the migration cycle, but the fact that they have the choice remains a healthy restraint on hasty, thoughtless, or arbitrary decisions. The extent to which the leader can im-

¹⁶Usually the fines paid to settle disputes with villagers are negotiated openly. Thus all shepherds know the amount. The negotiations for bribes are carried out more covertly and seldom anyone other than the *nambardar* is involved. An elder member of the camp may contribute his expertise, but most of the time the *nambardar* alone decides the amount of the bribe.

¹⁷In a colorful phrase, a shepherd explained to me that government officials absorb bribes just as the parched earth sucks in rain.

pose his will is thus limited by the shepherds' freedom to express their preferences through exist and voice.¹⁸ In a rare conversation, shepherds remembered an instance where a flock leader, disgusted with his *nambardar*, left the camp in mid-migration.¹⁹ His *nambardar* was universally condemned by other camp leaders and shepherds as having behaved in a capricious and wilful fashion. "it is like a father deserting his son in the wilderness," was a common expression used by shepherds to describe the errant leader's behavior. When the shepherd left the camp, his leader lost status and respect.

Since very few shepherds ever leave camps, it seems that an equilibrium prevails where leaders do not abuse their decision-making powers, and shepherds do not need to exercise the potent threat of deserting the

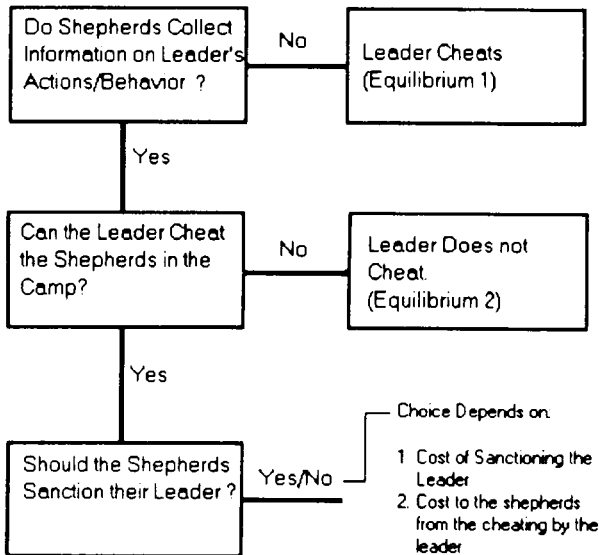


Fig. 2. A simple model of interactions between shepherds and their leader.

¹⁸The shepherds use "voice" not in complaining to the *nambardar* or protesting directly to him. Instead, they use "voice" to talk with other shepherds and thus affect the reputation of a *nambardar* and the possibility of his continued selection as *nambardar*. See also Hirschman (1970) for a detailed discussion of the strategies of exist, voice, and loyalty.

¹⁹Shepherds were unwilling to divulge the exact nature of the *nambardar's* impropriety. According to some, he misreported the selling price of wool. Another shepherd privately told me that the shepherd's defection had to do with an extramarital affair.

dang. If a leader begins to deviate, desertion by shepherds effectively not only checks him, but also warns other *nambardars*.

Shepherds often select new *nambardars* and often switch the collective with which they migrate. Relatively simple rules govern the selection of a new flock for a collective and, usually, an existing member can sponsor a new member into the group. The ease with which shepherds can switch from one mobile collective to another means that leaders must behave if they are not to lose their shepherds.

Figure 2 presents a visual summary of the relations between the shepherds and their leader.

As the figure shows, the shepherds can either remain passive, or collect considerable amounts of information on their leader's actions by monitoring his behavior. Equilibrium 1 never prevails. Most interactions between the shepherds and their leaders fall into the category of equilibrium 2—the shepherds collect information and the *nambardar* does not cheat. For some situations, however, it is exceedingly difficult for shepherds to collect adequate information. In these cases, the *nambardar* can cheat. Depending on the costs of cheating, the shepherds can either tolerate or sanction their leader's behavior. If the leader's behavior passes all accepted norms, they can rein him in by leaving the mobile camp in mid-migration. While this strategy necessarily imposes considerable costs on a shepherd, it is seen to decisively punish an errant leader.

The decision to choose a *nambardar* is one area in which decision-making has clearly political imperatives. If the shepherds do not retain the freedom to choose their leader or to leave one camp and join another, and are thereby saddled with a *nambardar* for all future migrations, then there is no reason for their leader to act in a fashion that will promote the interests of the individual shepherds. If all flock leaders have perforce to follow his directions, he has little incentive to act in their interests. At best he will be simply careless. At worst, exploitative.

CONCLUSION

This paper discussed the strategies nomadic shepherds in western India follow to ensure that their leaders do not abuse decision-making powers. The leader gains the opportunity to exploit the shepherds because he possesses superior information and opportunities to interact with people outside the mobile camp. The shepherds, however, actively seek information about his behavior which allows them to monitor and evaluate his performance. The information they are able to gather from different sources helps in reducing information asymmetries and helps

prevent wilful behavior by the *nambardar*. Information, and who possesses it, thus emerge as crucial variables in determining whether the leader will cheat.

The strategies the *raikas* pursue to ensure that their agent, the *nambardar*, does not act against their interests demonstrate the striking importance of information in all principal-agent relationships. But the discussion also shows that control over agents requires not just information, but also the capacity to sanction. The shepherds must back their information with the threat of sanctions—either by choosing a new leader or by imposing significant reputation costs on the existing leader. The *raikas* have thus informally institutionalized checks that suit their needs and suggest lessons for other contexts in which principal-agent relationships structure social interactions.

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