Chapter 9

Adapting to Drought: Beyond the Village

Introduction

So far I have concentrated on describing the agro-pastoral economy of western Rajasthan, emphasising the ways in which it is organised and the way it incorporates risk management. I have also discussed the twin hierarchies of caste and landownership which are an important aspect of the context within which agro-pastoralism operates.

In this chapter I will pursue two themes. Firstly I wish to show in greater detail how economic opportunities are opened or closed by position in either of the caste or landownership hierarchies. This partly involves a discussion of labour relations, but moves to an examination of various types of emigration and the ways in which caste and economic status affect the pattern of emigration. The second theme is the role of the state in famine relief and development.

I have already shown, in Chapter 6, how the options for various strategies of risk management are less available to poorer farmers. This involves the direct benefits of wealth. Production is higher and wealthier households are able to beat the averages and survive during a normal range of good and bad years, while poorer farmers are unable to cope in poor years and may be forced off the land if conditions continue for an abnormal number of bad years. Quite apart from the direct benefits of wealth there are ways in which the *relationships* between the people of various levels of wealth structure the opportunities available to each of them.

Hierarchical Relations

(a) Labour Recruitment and Relations

It is common to divide agrarian occupations into categories such as large farmer, small farmer and agricultural labourer. In fact the separation of various types of farmer from paid labourers is not very useful. Most poorer farmers to some extent work as paid labourers. All agricultural labourers in Hinganiya own some land (or come from households which do so). All except the smallest farmers occasionally need outside labour

in peak periods. What is really important is whether farmers pay more out for labour than they receive as labourers. There is a pattern of self-sufficiency, co-inciding with the five landholding categories and described in Chapter 5.

To sum up from Chapter 5: farmers in category 5 and 4 are almost invariably employers, but rarely, if ever, work for pay in others' fields; farmers in category 3 both employ and work as employees, but are net employers; farmers in category 2 sometimes employ others but are net employees; farmers in category 1 work for others, but rarely employ paid labour.

Given that most adult males and unmarried (and, therefore, employable) girls are in categories 1,2 and 3 (because most of the population is in these categories), and given that labour is only short in limited peak periods, it is clear that there is an employers' market. Wages at the time of my fieldwork varied from a reported low of Rs 4 per day to Rs 10 per day (with or without food). The highest figure (Rs 10 per day, plus food) in 1983 was reported by a member of the employer's household and was dismissed as self-aggrandisement by other employers. The lowest figure (Rs 4 with no food) was paid to a group of Jats imported from another village (1983). The landholder had been unable to compete on the local labour market at that particular time with that rate, but was able to obtain workers from elsewhere. Variations in labour demand occur in very short time periods and in adjacent areas. It is, however, somewhat unusual for a landholder to be unable to get local labour. The problem is more often at the other end: how can the labourer maximise his work opportunities?

The answer is that individual lower-caste labourers tend to attach themselves to particular larger or middle range landholders, working with them whenever possible. Working parties on the land of larger landholders tend to form around a core of more or less regular workers (although this is flexible). There is no evidence that these regular workers work for lower pay in return for guarantees of employment. The relationships seem to depend on personal preferences: on one hand it is to a landowner's advantage to be able to obtain reliable labourers whenever he needs them; on the other hand it is to the labourer's advantage to be able to obtain more or less regular work.

Occasionally labourers are employed in semi-permanent arrangements in overseeing roles. In one case where a clear arrangement like this existed the wages were Rs 100 per month. This arrangement was relatively fixed in 1983, but the permanency of employment seemed to have been replaced by a looser patron-client tie in 1985. In essence these arrangements are a form of patronage.

(b) Patron-client Ties, Borrowing and Debt

According to some studies (Mehta 1980) various forms of bonded labour are common in Rajasthan. I have no direct evidence of this for Hinganiya. In several cases where I suspected that it was the basis of what otherwise appeared to be patron-client ties, the patrons were quite generous with wages, food and loans and this is not consistent with the exploitative element of bonded labour. At the same time the line between bonded labour and the obligations involved in patron-client relationships is not always clear. It seems to me that the only way to differentiate is by examining the extent to which there are mutual obligations. To the extent that the obligations are mutual then, in any meaningful sense, we are dealing with patronage. By that definition the situation in Hinganya was patronage.

The clearest case of patronage is the case of the overseer I mentioned. In 1985, although his role as permanent employee to a Rajput landowner had ceased, he worked, as regularly as work opportunities in the drought conditions permitted, for his patron. The patron also arranged a substantial loan (Rs 4000) towards the purchase of a camel and cart to set the Nayak client up in business. The Rajput himself was not particularly well-off (he was a category 3 landholder) and the loan represented a large investment. (In fact I was prevailed upon, under unspecified conditions, to help with a donation.) The arrangement involved sharing the profits on a fifty-fifty basis, with the Rajput providing cash for expenses and the Nayak providing labour.

There were no major money lenders in Hinganiya. Even the richest farmers were poor in comparison to farmers and merchants in larger villages in the wider region. Within the village, loans tended to be short term, often based on patron-client ties and concerned with temporary assistance with cash flow. When people wanted to borrow money they went to a wealthy Chaudary in Kukunda and borrowed money on collateral such as livestock, land or jewellery. I believe that a shopkeeper and a wealthy Rajput in Kur were also money-lenders. I

All this sounds awfully egalitarian, within Hinganiya at least: the larger farmers help the poorer ones; interest is not charged on loans within the village, and so on. Sometimes it seemed to me to be too good to be true, and I looked for exploitation, debt-bondage, high interest rates. I found no evidence of them within the village.

There is, I suggest tentatively, an explanation for this. Hinganiya is a small village. It is relatively homogeneous in several respects: there are a

There is a farmers cooperative bank. Farmers are able to take out loans, but collateral is needed. This tends to discourage borrowing. Thus the bank is unable to compete with money lenders, particularly as far as small farmers are concerned.

small number of castes; the differences in wealth are large, but even the richest farmers are poor in comparison to others in the region and there is no clearly differentiated system of inequality based on classes with radically different access to the means of production; the male villagers, whatever their caste, had known each other since childhood. Many of the wealthier and middle level farmers felt a genuine desire to help their neighbours. They gained from the clients, but the relationship was essentially a two-sided one.

I don't wish to over state the picture of a happy cooperative village, without conflict. There were tensions between individuals both within and between castes. One of the major in-caste disputes that I observed (between two Rajputs over a land boundary) led to an attempted knife attack by one of the two parties on the other. However, between castes tensions were muted by what I saw as the implicit threat of withdrawal of patron-client ties or opportunities for employment.

A situation in which I was the cause of tensions illustrates the importance of this implied threat. I lived in a Rajput household within a fairly coherent household cluster. The younger brother of the household head was himself head of one of the other households in the cluster. He frequently followed me when I visited Navak or Meghwal houses, partly to make sure I was not offered tea or anything in breach of caste interdining rules. I believe that the main reason was to prevent me from making gifts or loans to Nayaks or Meghwals. On one occasion, he banned from his house a Nayak, who was my close friend and informant, on the grounds that I was giving him too much. In fact the Nayak was also a client of the head of the household cluster (and often worked with the jealous Rajput himself). The elder brother took no notice of the ban as far as providing employment was concerned, but clearly the fastidiousness of the Nayak in avoiding any hint of breaking caste rules was important here. He said it would be a problem for him if I broke the rules. On one or two occasions when other Navaks offered me tea, he was clearly worried that the Rajputs would find out. Generally Meghwals and Nayaks made it clear that they kept to interdining rules with me to keep the peace.

Thus, there were underlying tensions. Nevertheless, as long as lower caste people did not break the rules, there was a great deal of good-will.

The main points about differences in hierarchical position are that:

- Those at the bottom of the wealth scale are at much greater disadvantage in bad years.
- There is a strong disincentive for poor people in the lower castes to break caste rules, because they depend fairly heavily on paid labour, and labour supply usually exceeds demand.

 Recruitment of labour is usually through a fairly open system of supply and demand, although some landowners tend to have favoured clients as the core of their workforce.

Migration, Dual Residence, Caste and Kinship

I will now turn to an examination of a major way of reacting to drought and the risk of drought. Emigration, of one kind or another is a common response to drought. This section examines the extent of emigration and will also follow up the argument that caste differences provide some different opportunities in terms of making connections with the world outside the village.

(a) Typology

One of the themes I have been pursuing in this study is the extent to which outward migration is an important response to ecological and economic conditions. There are a number of different types of migration, in terms of the extent to which migrants maintain economic and social ties with people in the village and the permanency of migration. It is possible to construct a typology of types of migrants which is, in fact, a sort of continuum from migration to dual residence.

Type 1

Permanent migration. This type of migration only becomes apparent in retrospect. There are a number of people, who were mentioned in genealogies as being once resident or the descendants of former residents, with no remaining economic (land) interests, maintaining no residence and no longer seen as belonging to the village. It is difficult to study people in this category systematically, because their whereabouts are sometimes unknown and migration may have occurred one or two generations ago. The important point is that there has apparently been some level of migration for several generations.

Type 2

Permanent migration with maintenance of ties. This category consists of permanent migrants (or descendant of permanent migrants), identical to Type 1, except for a registered interest in land. Such people may be resident in a nearby village, thus farming the land themselves, or the land may be farmed by tenants or lineage members.

Type 3

Life-cycle migration. Life-cycle migrants are those who normally live away from the village in connection with employment. They may maintain a residence, are siblings or offspring of existing residents and often hold an interest in land. Life-cycle migrants are not members of a resident household; their wives and children live with them. However, they may frequently visit the village, perhaps even to farm their land. People leave the village to work in three broad types of job: (a) military service (including police and Border Security Force); (b) non-military 'service'; (c) labouring. (Non-military service includes all types of permanent employment, but particularly refers to government or semi-government, employment.) Life cycle migrants are regarded as belonging to the village. It is more or less assumed that they will return on retirement, but, in practice, they may ultimately become permanent migrants of one type or another.

Type 4

Dual residence. I refer to people in this category as part-time residents. The category comprises men or boys who are not normally resident in the village because of outside employment, or because they go to school in Jodhpur, but whose wives and children (in the case of married men) or parents and siblings (in the case of unmarried men and boys) are normally resident in the village. In other words part-time residents are members of resident households. Their wives and children may visit them in the city, but themselves remain normally resident in the village. Part-time residents differ from life-cycle migrants only in regard to the place of residence of their household of orientation. Some part-time residents are in military or non-military service. Others work as labourers, usually in Jodhpur. In this last group men may return to the village for the duration of the agricultural season. There is, thus, a fairly fine line between seasonally absentee men and the casual migrants of type 5. The difference depends on whether outside labour is a primary and normal source of income.

Type 5

Casual migrants. Those in this category are regarded as full-time residents for the purposes of my census. They perform outside work occasionally, but are normally resident in the village.

Type 6

Crisis migrants. In times of drought some men seek labour outside the village, mostly in Jodhpur. They may, or may not, take their families with them. Obviously there is a strong chance that crisis migrants may become

permanent migrants: this can only be determined in retrospect. Many crisis migrants return to the village in a good year. I suspect that the extent to which crisis migration becomes permanent will increase as population grows and land becomes scarcer.

In applying this typology there are some ambiguous cases and the definitional boundaries of the types are not totally mutually exclusive (for example Type 6, the crisis migrants can overlap with Type 4). This would present problems if the typology was to be used for statistical purposes, but the purpose of this typology is descriptive. My aim is to describe some of the different ways in which residence and labour extend beyond the village. The categories are not generally designed for statistical analysis (although Type 4 is used as a statistical category in opposition to 'full-time residents').

An important qualification is that the types are my descriptive categories. Villagers apparently do not have a similar typology, although my types do correspond, to some extent, to village perceptions. Villagers do talk about people who 'don't live here anymore'; people whose families live in the village are thought of as being members of resident households, even when they themselves live and work away from the village; and the difference between those who work in migrant labour occasionally and those who regularly do so is recognised.

(b) Dual (Part-time) Residence and Caste

There are differences in the extent to which various castes participate in different types of migration. Not surprisingly, the Nayaks, as predominantly small landholders, are particularly susceptible to drought and are disproportionately represented in the category of crisis migrants. It is quite common for crisis migrants to become permanent migrants. In 1986 there were five Nayak households which had all migrated in search of employment about a year before and remained away largely because of drought conditions. Each maintained an interest in land but none looked like returning. In 1987 three Nayak household heads who were resident in 1986 had either left with their families or had become part-time residents.

In addition to differences in the extent and type of migration between castes there are differences in the pattern of part-time residence between castes. In particular, the type of employment undertaken outside of the village tends to differ on a caste basis.

In Table 9.1, the incidence of employment by part-time residents outside Hinganiya is analysed by caste. It is striking that, with a single exception, all men who are in, or have been in, the military or paramilitary are Rajputs. I have already explained that this is a product of the values of Rajputs as Kshatriyas. Secondly, all of the other Rajputs on the table are in some sort of 'service', a category which includes all types of

permanent employment, but which particularly refers to government or semi-government employment. No Hinganiya Rajputs work in manual labour outside the village.

Table 9.1

Extra-village employment by part-time adult males by caste (Dec 1985-Jan 1986)

Employment Category	Rajputs	Bishnois	Nayaks	Meghwal
Ex-military/para-military	5	1	0	0
Present military/para-military	6	0	0	0
Ex-'service'	0	2	0	0
Current 'service'				
TourismDriversOther 'service'	1 2 1	0 0 1	0 1 0	0 0 0
Total Service	4	1	1	0
Unspecified or Manual Labour				
- Regular - Occasional*	0	4 0	2 6	0

Notes:

- 1. Except for the inclusion of Occasional labourers (*), figures include only men who are classified as 'part-time residents' as defined.
- 'Occasional' manual labour refers to those who spend several months each year working away from the village. Those who work on a completely ad hoc basis are excluded.
- 'Service': permanent position (usually in Government or semi-government agency.
- 4. There is no column for Jats. The only adult male Jat in Hinganiya is a full-time resident.

The Bishnois have reached into some 'service' occupations, but nowhere near as comprehensively as the Rajputs. Generally, the Nayaks are involved in private employment, mostly as labourers. The single Meghwal is also a labourer.

This table, of course, only tells the story in respect of part-time residents and occasional workers. It does not deal with permanent

migrants or life cycle migrants. Unfortunately it is difficult to obtain useful data on a cross-section of either of these types. However, for the limited number of cases for which I have data it is possible to make some generalisations about life cycle migrants/permanent migrants:

All the Rajputs in these categories are in 'service'

- The single Bishnoi (apparently a permanent migrant) is in government service.
- While one Nayak is in 'service' with the water board and one is a truck driver, all others are working as manual labourers.

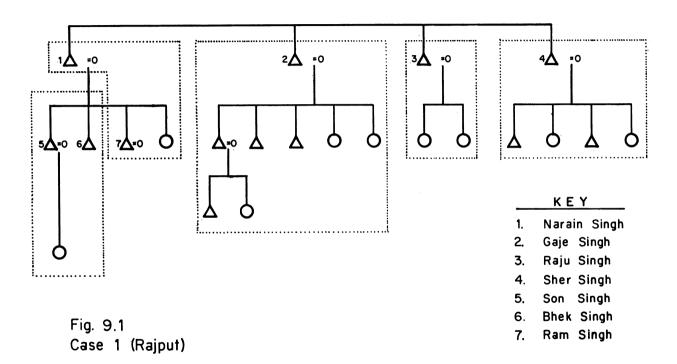
If we combine the three categories part-time resident, permanent migrant and life cycle migrant a difference between the Bishnois and Nayaks becomes evident. Some resident households in both castes obtain cash income from *members* labouring elsewhere, but the Nayaks are much more inclined to move with wives and children in search of labour. Thus the category part-time resident, taken alone, underepresents the number of Nayaks who are forced to look for work elsewhere. While some reverse migration does occur, crisis migration with wives and children tends to be more likely to become permanent. By and large the Bishnois are able to cope with their landholdings, but the Nayaks are not.

In Chapter 4, I described some features of the various castes which, I argued, affect the options open to people in those castes. I will now briefly discuss some case studies which illustrate the differences between migration and dual residence among the Rajputs and the Nayaks.²

Case 1 Rajput. (Figure 9.1)

This case is that of five related Rajput households, consisting of four brothers and their wives and children. The fifth household is that of Son Singh, the son of Narain Singh, one of the brothers. Son Singh has clearly established himself as an autonomous household head, although he is a part-time resident and in the army. Except for the household of Gaje Singh, the households live in adjacent buildings. Although the households are related (in fact they constitute a minimal lineage) there is not much evidence of economic cooperation between them: they remain fairly independent. Some conflict is evident in the case of Narain Singh and Son Singh. Bhek Singh, another son of Narain Singh, found himself in

The names of individuals have been changed in the discussion of these three cases.



- Note: 1. Areas enclosed by dotted line indicate separate households.
 - 2. Women married out of cluster not shown.

such conflict with his father that he switched allegiance to Son Singh's household in late 1985.³

The significant characteristic of this lineage is the importance of military service among its members. All four brothers were in the army, Border Security Force or police, although they are now retired. Two of Narain Singh's sons (Son Singh and Ram Singh) are now in the army.

In Chapter 4, I suggested that a sub-category of Rajputs with little land may have been the main source of military personnel. This is consistent with the situation in this case. The deceased father of the three brothers was also in military service (in the Maharajah's regiment). Three of the brothers hold only about two hectares of land each, having inherited from their father. Gaje Singh owns much more land than the others (9 ha) because he was adopted by a Rajput who had no son. All of the brothers receive pensions. Narain Singh and Sher Singh have spread economic risks and diversified economic activity, apparently using their pensions as a source of necessary funds: Narain Singh runs a small mill and Sher Singh concentrates on sheep raising.

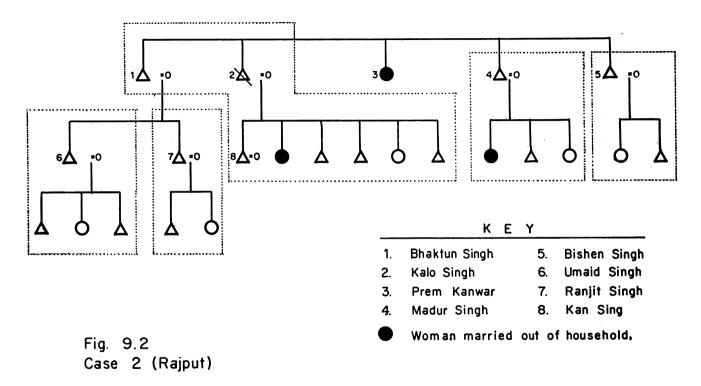
The decision of Gaje Singh and Ram Singh to join the army assures alternative income while delaying further fragmentation of Narain Singh's land, although, ultimately the two hectares will be divided amongst three sons. In Gaje Singh's case the situation is less crucial, given his larger holdings.

This case demonstrates the way in which some Rajputs have faced the problem of limited landholdings in a way quite traditional to their caste, and in a way which clearly illustrates their incorporation in the nation state.

Case 2 Rajput. (See Figure 9.2)

This case deals with the members of a cluster of related Rajput households which has taken the alliance option. As in Case 1, landholdings are not large. However, by holding land in trust for his sons and nephews, Bhaktun Singh has prevented the breakup of his holdings into unviable plots. With the exception of Kan Singh, all married males are heads of their own households. Several are completely non-resident: while they visit Hinganiya frequently their wives and children live in Jodhpur.

Bhek Singh, at least described it that way. Narain Singh may well have denied that Bhek Singh had left at all. In fact, he probably saw it as a case of a child threatening to run away from home. (Bhek Singh was about twenty years old at the time, but was rather simple.) As Bhek Singh was a regular visitor to me, I was reluctant to create additional problems by asking Narain Singh outright about the problem. In 1987 Bhek Singh was back in his father's household, although tensions were still very high.



Note: Areas enclosed by dotted lines indicate separate households.

Kalo Singh (Bhaktun Singh's deceased brother) was in the Rajasthan Armed Constabulary (RAC). On retirement from this typically Rajput occupation he became a clerk with Indian Airlines, having learnt to read and write while in the RAC. He encouraged his own children to become educated. Every male member of the second generation has attended or is attending school. (Female children have not been so lucky, although Kalo Singh's youngest daughter attended school for a few years.) Kan Singh was the first (and, up to the time I left the field, the only) person from Hinganiya to complete High School. Now, the pattern of boys going to High School in Jodhour has become standard within the households in this cluster.

The emphasis on education and subsequent 'service' began with Kalo Singh in traditional military service. But he apparently saw the potential for a new sort of strategy in educating his sons and encouraging the education of his nephews. However, it was a marriage alliance which opened the opportunities, particularly after his death.

Prem Kanwar, the sister in the first generation, was married to a man working at the Umaid Bhawan palace (now as head waiter). The Umaid Bhawan is the Maharajah's residence and much of it is now used as a five-star hotel. The affinal tie was useful in two ways. Firstly, the quarters behind the palace became the home for the Rajput boys from Hinganiya while they attended school in Jodhpur. Secondly, presumably through patronage and/or influence, both Umaid Singh and Kan Singh were employed in the palace as room attendants. Kan Singh later transferred to the Government owned Tourist Bungalow.

In this case the affinal tie has been used as the basis for opening economic opportunities. Kan Singh followed the practice of seeking advantageous marriages. In 1984 he married the daughter of a wealthy Rathor Rajput who was also a senior official in the Customs and Excise Department.

Gradually the Jodhpur connection is building up. Bishen Singh, the youngest brother of Bhaktun Singh, has built a house in Jodhpur. (I suspect the costs may have been shared between various members of the cluster, but I do not know the details). While Umaid Singh and his family live in the Umaid Bhawan, the house is almost a colony of the household cluster. Other members stay there when they visit Jodhpur. In fact, when other Rajputs from Hinganiya visit Jodhpur they often stay at this house.

This case is very different. The first two cases show how Rajputs are able to tap into opportunities which are essentially the legacy of the historical dominance. The Nayaks, on the other hand, were, and remain,

at the bottom of both the social and economic orders. Case 3 deals with a cluster of patrilineally related Nayak households.

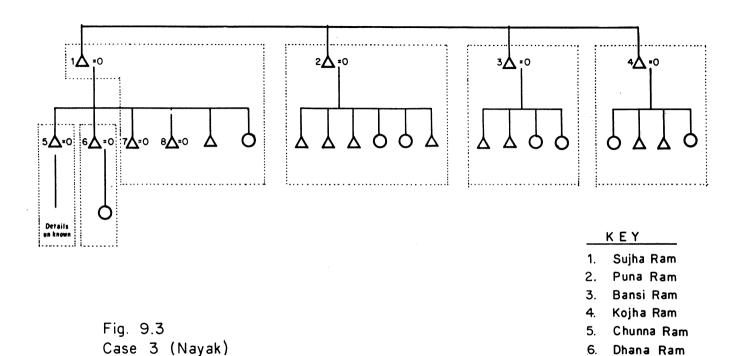
In this case four Nayak brothers inherited equal shares of their father's land. At this stage only one (Sujha Ram) has married sons. His land has been broken up to some extent. Ultimately his holdings will be divided into five equal shares, one for each of his five sons. Obviously, shares of about five-eighths of an hectare are unviable. At present the two oldest sons, Chunna Ram and Dhana Ram (who have already been given their shares), live in an outer suburb of Jodhpur with their families. Their land is worked on their behalf by Sujha Ram. One of the younger sons also lives in Banar, but remains part of his father's household. His wife lives in Hinganiya and I regard him as a part-time resident.

Two of Sujha Ram's brothers (Puna Ram and Bansi Ram) have also left the village with their families. In both cases the move occurred between my first period of fieldwork, which coincided with a good monsoon season, and the second, which was in the midst of a drought. Both return occasionally to work their fields, My expectation is that they will return whenever good monsoon rains fall. They are crisis migrants.

The process of migration in Case 3 is quite different from that which is apparent in the Rajput cases. In Case 1, income from holdings actually smaller than the 3.13 ha held by each of the four Nayak brothers was supplemented by pensions and drought did not force people off the land. Further, younger Rajputs obtained income from military service (Case 1) or permanent civilain employment (Case 2), which substantially increased the overall capacity of their own and related households to cope with bad agricultural years.

The Rajputs established permanent sources of supplementary/ alternative income by placing members outside the village economy. Further, when Rajputs leave the village they tend to move into permanent employment. The Nayaks, on the other hand, have not been able to establish sources of income as permanent supplements, instead becoming involved in manual labour. Their response to drought tends to revolve around search for lowly paid work when the monsoon fails. When Nayaks leave the village permanently, it is only to join the urban poor.

The argument which I have pursued here, began in Chapter 4 when I described some of the characteristics of the marriage rules and marital strategies of the various castes present on Hinganiya. In this section I have been arguing that migration, the historic response to drought in Rajasthan, still operates as a major response. Crisis migrants moving to urban labour today are moving for the same reasons as the crisis migrants who fled with their livestock in the past. Both intend or intended to return. However certain caste characteristics of Rajputs facilitate access to other economic options for them.



- Note: 1. Areas enclosed by dotted lines indicate separate households.
 - 2. Women married out of cluster not shown.

Now, as in the past, the land poor Rajputs are able to beat the limitations of relative landlessness by joining the military services, where they are welcomed and well-paid. Further, using a set of marriage rules which in the past no doubt facilitated military and political alliances, Rajputs now attempt to use affinal ties as a means of opening economic opportunities.

Development, Famine and the Role of the State

So far this study has largely concentrated on a micro-level, although I have talked about migration away from the village and about far reaching affinal ties. Now I will turn to a brief discussion of the role of the state in village economic affairs.

The first point to make is that this is not a case of a peripheral peasant society being newly incorporated into a centralised state. The process of state formation began in Marwar centuries ago and villages provided troops, paid taxes and received limited famine assistance for many years prior to incorporation into modern India.

The development of infrastructure is an important feature of incorporation into modern India. The villages are now served by roads and railways (at least reasonably accessible) which connect them with market centres (Pipar City), regional capitals (Jodhpur) and all of India. There is a market for the sale of surplus millet, milk, wool and meat, at least when surpluses are available. Perhaps more crucially, there is a transport system for the emergency supply of food during famine times. Infrastructure also provides access to water which is piped to the village. While there are seasonal difficulties it is certainly easier to obtain water than it was in the past.

This general development of infra-structure has almost certainly contributed to the ability of farmers to cope with drought conditions. I will turn to a discussion of the role of the state in development and, particularly, in famine relief. (Unless specified the word 'state' is a gloss for both the National and Rajasthan governments.)

Apart from schoolteachers and the police (who occasionally visit villages to break up fights, deliver summonses or make arrests), most of the government officials with whom the villagers are concerned represent the Collectorate (Office of the District Collector). The Collector himself is an officer of the Indian Administrative Service (Central Government), although his subordinates may be seconded from the Rajasthan Administrative Service. The Collector has responsibility for all land revenue matters, for record keeping on crop production, for all development projects and for implementing famine relief where appropriate. He has a judicial role (as District Magistrate) for matters

relating to land revenue, land tenure and law and order. The Sub-Divisional Officers (effectively assistant collectors) have responsibility for a specified portion of a District and also have a judicial role (as Sub-Divisional Magistrates). In Jodhpur there were two Sub-Divisional Officers, one responsible for the western half of the District and the other for the east (including Hinganiya). Under the Sub-Divisional Officer are Tehsildars, responsible for a Tehsil (sub-district) and under these are the Patwaris, each responsible for a circle of villages.

In addition to maintaining land records and collecting land revenue, the Patwari is responsible for compiling crop statements. On the basis of these statements the Collector may declare famine in particular villages where there is a net deficit between staple production and what is needed for local consumption. Following such declarations, famine relief policy is developed and action is taken.

Famine relief takes a number of forms, including emergency distribution of water by tankers, emergency construction of wells and tubewells, establishment of fodder supply centres, the provision of rations at fixed prices and work relief projects aimed at providing emergency employment.

The overall cost of these programs is immense. In October 1985 the Rajasthan Government proposed a total relief program of 5,800 million rupees (*Rajasthan Patrika*, 5 January 1986). In Jodhpur District 170 million rupees were approved for relief employment projects. These were to include 165 PWD (Public Works Department) projects, 83 Irrigation relief projects and so on (*Rajasthan Patrika*, 29 September 1985). The projects provided pay for villagers to work on development projects.

The underlying concept of work relief programs is that a developmental project is carried out as emergency employment by villagers. Many of these projects are specifically aimed at building capital works (water storage or irrigation, for example) aimed at reducing risks in future droughts. Thus there is a two-pronged attack which focuses on an immediate crisis as well as on future crisis prevention. For example, in 1983, before the monsoon, there was a large project in Hinganiya to build a pond to hold water for livestock after the wet season.

The form of payment for famine relief schemes in Rajasthan has varied. A food for work scheme was tried at one stage. In pre-monsoon 1983 payment was by cash only. Rates of pay were Rs 7 per day for men and Rs 6 per day for women. In 1985 the policy was different. Payment was on the basis of a combination of cash and food. The relative merits of cash or food relief, or a combination of both, is an important, but difficult, policy question, which also applies to grain rations.

The ration system provides for the provision of wheat, sugar, edible oils, kerosene and rice on a per capita basis at a substantially subsidised rate. Provision of subsidised grain helps solve a basic problem, in that basic calorific requirements can usually be met, but grain alone does not provide adequate nutrition and poorer families in 1985 sometimes did not have enough money to buy the ration. In order to maintain health a more balanced diet is required. Vegetables can only be obtained for cash in areas where there is no irrigation. Because of the drought, vegetable prices are high. Cash is also needed for other things besides food-clothing, medicines etc. In other words, grain at reduced prices does not attack a major problem - lack of available cash.

Sen (1988) points out that there are two types of causes for the failure of a person to be able 'to command food in a market economy' (p. 39). The first is a 'pull failure', in which

...the person loses his or her ability to demand food in the market, e.g., through loss of employment, loss of output, or reduction in real wages. On the other hand, if there is no such change but the person's ability to command food suffers because of supply not responding to the market demand, then there is a case of 'response failure'. (1988:39)

The philosophy behind food rationing is to avoid a 'response failure' by guaranteeing that regular supplies of food will be available at a guaranteed price. However, without emergency income the ability of the poor to 'pull' food from the system is reduced. Avoiding 'pull failure' underlies the policy of providing cash relief. In theory, the 1985 work relief program had the capacity to counteract both 'pull failure' and 'response failure'.

Unfortunately work relief programs did not reach everyone. In the 1985/86 famine the allocation was announced in September, but up to my departure at the end of January 1986 no project had commenced in Hinganya. In August 1987 I saw or heard no evidence of a project having been subsequently approved. There was some criticism of the Sarpanch (a merchant from Kur, who spent much of his time in his shop in Jodhpur) for not pursuing Hinganiya's interests vigorously. In the absence of relief work, a gradual drift of crisis migrants away from the village had commenced before the end of 1985.

Criticism of the Sarpanch raises some interesting issues. According to Chakravarti, writing about a village in Jaipur District

A successful [local] leader . . . is one who can prevail on administrators and politicians to operate the bureaucracy for the benefit of his followers. (1975: 187)

On this basis the Sarpanch seems not to have been a particularly successful leader. Overall Panchayat activities were very low key. No meeting ever occurred, to my knowledge, when I was in the area. According to the previous Sarpanch, meetings were held barely once or twice a year. I suggest that the relative apathy about formal village politics was related to the relative powerless of the Panchayat. (The Kur Sarpanch, however ineffective in obtaining external aid, took great personal responsibility. In 1987 he was providing, at his own expense, a daily tanker load of drinking water each for Khokhariya and Hinganiya.) A lack of confidence about famine relief projects was common. The Sarpanch of another Panchayat once dismissed the drought relief program as government propaganda.

Criticisms of the effectiveness and reach of famine relief projects has been voiced by more than villagers. An article in a major news magazine alleged in 1987 that much of the relief program had not been implemented (*India Today*, 15 October 1987). A prominent Rajput in Jodhpur told me in 1987 that the Congress Party would probably lose the next Rajasthan state election because it had no effective drought policy.

Despite these criticisms the emergency programs clearly worked reasonably well, given that there was no evidence of large-scale death by starvation. Despite its limitations food rationing met most people's needs for minimum staples. The main result of famine relief is that loss of life due to gross starvation is very rare, because rations are provided before mass starvation becomes a problem. Nevertheless, there is a major shift of the poorer farmers to towns and cities during famines. In these periods they depend on opportunities for paid labour.

Migration to Jodhpur in search of work becomes almost the only alternative for people with no cash resources. Fortunately, Jodhpur is growing rapidly and labouring work in the building industry is fairly readily available at present. As an indication of wages for rural refugee workers (in 1985), one informant said he was earning Rs 300 per month plus food. Another earned Rs 200 per month.

Mass migration of famine refugees to Jodhpur raises new problems, including the poor living conditions faced by workers. While wages available are high in comparison to wages for agricultural labour (up to Rs 10, but available irregularly even in a good year), the cost of living is also high in Jodhpur. The differential may be enough to encourage marginal farmers to stay on in Jodhpur, but migration amounts to moving from their role as rural poor to a new role as urban poor.

In some ways, then, McAlpin's view, that economic development has led to the end of major famine, holds. The state has absorbed much of the risk involved in subsistence farming, and general economic development, particularly in Jodhpur, provides job opportunities. But the

situation also demonstrates the great weakness in McAlpin's argument. McAlpin ignored the uneven effects of famine within the rural population; the same uneven distribution of the consequences of famine are evident here.

In terms of entitlement theory, the state has provided a new set of entitlements (to emergency relief) and has reduced the risk of 'response failure' in a crisis by reducing fluctuations in food prices. However, the ability of the poor to command food remains relatively limited.