



Title	Agrarian Relations in a Rajasthan Village
Author(s)	NAKATANI, Sumie
Citation	ZINBUN (1999), 33: 107-127
Issue Date	1999-03
URL	http://hdl.handle.net/2433/48758
Right	© Copyright March 1999, Institute for Research in Humanities Kyoto University.
Туре	Departmental Bulletin Paper
Textversion	publisher

Agrarian Relations in a Rajasthan Village

Sumie NAKATANI

1. Introduction

The aim of this article is to describe agrarian relations in a Rajasthan village and to ask how positions of farmers in the production relations influence their power, behavior, and choices.¹ Economic relations in agrarian-based societies in India have been studied from three different approaches which resulted from different views of class structure. To make clear the points of difference in these approaches, I begin with a review of the different interpretations of class structure in general.

Ossowski classifies various types of interpretation of class structure into three main schemes. The first one is called "scheme of gradation", the second one "dichotomic scheme", and the third one "functional scheme" (Ossowski 1963).

Class division in the first scheme is conceived as a division according to the degree of a quality treated as a criterion, e.g., amount of income. Society is perceived in the form of a stratified system of three or more classes, of which each is higher or lower than the other in some respect. The boundaries between classes are unclear, one passes easily from one to the other, and the groups have no reason to find themselves in a permanent state of conflict.

In the second conception, two classes are terms of an asymmetrical relation: one-sided dependence. It is usually understood as subjection to somebody's power. This one-sided dependence, however, can be interpreted as mutual dependence of antagonistic interests. Two classes are characterized by mutually opposed attributes: dominating—dominated, exploiting—exploited, propertied—

¹ This is part of a larger study which deals with power in everyday life in a Rajasthan village. How does power operate in social relations in the village? What does caste, class, or gender mean in power relations? In this article I focus on agrarian relations and ask the meanings for farmers of their position in the production relations.

propertyless etc. This is a classical Marxist view of society.

The third one assumes the "organic" dependence of each class. Society is divided into a certain number of classes differing in accordance with the functions which they fulfill in social life. By virtue of their distinct functions, the classes are mutually essential to one another, in the same way as different occupational groups are necessary to one another. The class structure based on the functional scheme forms a hierarchy of classes which is distinguished from any gradation, since certain categories of social roles are in various respects privileged in relation to others.

The scheme of gradation is mainly found in the studies of agrarian structure done by economists. Class is defined, for example, by the size of landholding or by the scale of production. The studies based on the dichotomic view, on the other hand, define the agrarian relation in terms of the possession of means of production and the exploitation of labor. What defines class is whether the producer exploits the labor of others through obtaining profit, rent or by some other means, or whether he is self-employed, or whether he, himself, is exploited. The third view is reflected in the study of caste and its division of labor in India. The *jajmānī* system has been studied based on the functional view of the agrarian class.

Each approach has its advantages and its problems. The scheme of gradation mechanically divides classes. Its statistical groupings of class face two kinds of problems. The class boundaries are essentially arbitrary and the mode of grouping varies according to the indices selected. The Marxist approach does not question the nature of social relations. It maintains from the first that the relations between classes are in their essence, relations of conflict. There may be both cohesion and conflict in the relationship between different classes. The problem of the functional approach is that it does not consider the dynamics of social relations.

In the following discussion, I try to understand what a position in production relations means for the farmer and in what conditions cohesion and conflict exist in the relations of classes, and I also try to see the relations reproduced and transformed through everyday transactions. I will describe agrarian relations by focusing on the unequal distribution of material resources, but what I want to stress is the possibility of choices given to individual farmers in the agrarian structure.

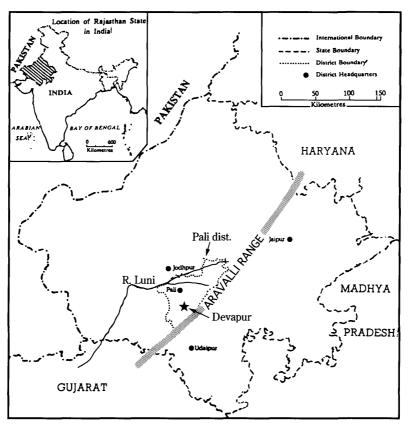


Fig. 1. Location of Devapur Village.

2. Devapur and its Setting

Devapur is a village located in the Pali district of Rajasthan, the southwestern region of the Aravalli Range which is called the Luni Basin or Godwar tract (see Figure 1). The village lies on the bank of the Mithri river, which has seasonal water flows. It rises in the Aravalli Range and meets with the Luni river, the only perennial river of the desert tract in Rajasthan. The area has a semi-arid environment that places certain rigorous conditions on the subsistence patterns possible. Farmers can attain a degree of economic security only through an integrative pattern of cultivation and animal husbandry.

With some exceptions, almost the entire region, now known as Rajasthan, was under the politico-economic dominance of Rajput rulers and their clansmen and

Table 1. Caste Structure in Devapur.

	Castes (Jāti)	"Traditional" Occupations	Numbers of Households
1	Rajput	Warriors	
	Deora Rajput	Landlords (Jagīrdār)	10
	others	Ordinary farmers	7
2	Rajpurohit	Political advisers	8
3	Swami	Renouncers	7
4	Chaudhri	Cultivators	50
5	Rabari	Pastoralists	19
6	Banjara	Transporters	25
7	Kumhar	Potters	1
8	Chipa	Tailors	6
9	Vaishnav/Sant	Temple priests	1
10	Daroga	House servants	8
11	Dholi	Drummers	1
12	Megwar/Bhambi	Leather workers	10
13	Sargra	Packhorse men	17
14	Guru	Priests of low castes	6
15	Raw	Genealogists of Megwar	2
16	Mehatar/Bhangi	Scavengers	2
17	Mina	Night watchmen	2
	Total Households		182

* Other Backward Castes: 6, 7, 8, 9 and 10 Scheduled Castes: 11, 12, 13, 14, 15, and 16

Scheduled Tribe: 17

kinsmen organized under the *jagīrdārī* system.² The warrior clans of Rajput conquered the areas and established princely states. The five princely states of Bikaner, Jaipur, Jodhpur, Kota, and Udaipur stood out and continued to exist as distinctive political and cultural units. Devapur itself was formerly one of the *jagīr* estates granted to a Deora Rajput man by the Jodhpur State. This was around three hundred years ago when members of the Rajput clan came to inhabit and rule the village.

Devapur has a population of 1087 in 182 households. There are 17 different

Jagīr, in the context of Rajasthan, may be defined as the assignment of revenue conditional on future service. The jagīrdārī system evolved in Rajasthan has characteristics in which jagīr holders not only had kinship with the king but also physically contributed to the establishment of the new kingdoms (Narain and Mathur 1990).

caste groups characterized by endogamy, hereditary membership, and a style of life which sometime includes the pursuit of a particular occupation defined by caste and which is usually associated with hierarchical status (see Table 1).

Many households in the village are related to agriculture in one way or another, but only 50 percent of them identify themselves as farmers. The other 50 percent have different identifications like pastoralists, temple priests, tailors, factory workers, etc., even though they get some of their income from agriculture and some of them are actually involved in agricultural processes.

3. Forces of Production in the Village Agriculture

In the process of material production, resources are combined by human labor with the help of different tools in accordance with certain technical rules and organizational rules. The forces of production, which determine the size of the product that can be produced in a given, socially necessary labor time, include resources and technology and the organization of labor.

3.1. Natural resources: climate, agricultural season, and soil

The most important requisites of agriculture are water, air, sunlight, and soil. These are natural conditions that confront farmers, but the extent of their actual contribution to production is determined by agricultural technology. The availability of water and the quality of soil, to some extent, reflect on technology and labor in Devapur. First, I will describe natural resources that are more or less equally distributed among farmers.

The climate of the district is on the whole dry with a hot season. From May through early June is the hottest period of the year and the maximum temperatures sometime reach 46°C. The period from mid-June to mid-September is normally the monsoon season. The average annual rainfall in the district is, according to the District Gazetteer, 472.2 mm. Variations in the annual rainfall from year to year are considerable. The shortage of rainfall and its erratic nature are major problems in the area. It is sometimes less and sometimes quite excessive which has been causing considerable damage to the local agricultural production.

The annual climatic cycle determines the agricultural seasons. The agriculture season starts with the onset of the monsoon. The *kharīf* (autumn) crop locally known as $sawn\bar{u}$ is primarily rainfed.³ It is sown in June-July with the fall of

³ The autumn crop is called *kharīf* in Hindi and $sawn\bar{u}$ in the local Godwari language. The spring crop is $rab\bar{\iota}$ in Hindi and $un\bar{\iota}l\bar{u}$ in Godwari.

the first rains and harvested in October-November. The important crops in *kharīf* are $jow\bar{a}r$ (great millet), $gu\bar{a}r$, maize, sesame, etc. Important $rab\bar{\iota}$ or $un\bar{a}l\bar{\iota}$ (spring) crops, which are sown in October-November and harvested in February-March, are wheat, barley, $r\bar{a}\bar{\iota}$ (rape), etc. $Rab\bar{\iota}$ cultivation is considered to be more profitable than that of *kharīf* which depends on rain.

The soil in the area is shallow and predominantly of a sandy-loam type. The soil in Devapur is classified into the following four categories: $ch\bar{a}h\bar{i}$ (irrigated land for food crops), $j\bar{a}w$ (irrigated land for fodder), $bar\bar{a}n\bar{i}$ (unirrigated land depending on rain), banjar (unproductive barren land). $Ch\bar{a}h\bar{i}$ and $j\bar{a}w$ support $rab\bar{i}$ crops and $rajg\bar{a}$ (green grass suitable for fodder). Those lands permit a family to produce surplus grains and increase income by raising cows and buffaloes. $Ch\bar{a}h\bar{i}$ enables a farmer to establish a pattern of farming with husbandry as a self-contained livelihood in a semi-arid area (Rosin 1987: 82).

3.2. Technology: irrigation, tractors, seed and fertilizer

I will discuss technological factors that make use of natural resources different for each farmer. Amongst agricultural resources, the most critically constraining resource in Devapur is water. Cultivation is now highly dependent upon the use of groundwater. Artesian and tube wells with electrical or diesel pumps are operating in the village.

Over the last thirty years, the water level in the village is said to have decreased from 25 to 90 feet. Some farmers point out the over-exploitation of groundwater by pumping machines, others attribute the deterioration of the water level to a dam constructed in the upper reaches of the river which runs just beside the village. There are lots of wells, all of which have been used in the past but eventually ran dry.⁴ Farmers need to invest a huge amount of money for their wells to be deepened. Many of them have considered digging new wells, but until today, could not afford to do it.

When they have money to invest, the farmers must be selective and strategic in determining which wells they will deepen, or where they will dig a new well. More than a few farmers failed to get water despite a big expenditure. For example, three households of brothers sharing a well dug by their father made it deeper since it had dried up completely over twenty years, but the water level in the well did not increase. Then, they dug a new well at a cost of 200,000 rupees,

⁴ According to the 1981 census, the irrigated land in Devapur amounted to 491 hectares, but it decreased to 314.57 hectares in 1991 census. In the 1998 fieldwork, I found at least 10 wells had run dry in the past 20 years.

but little water resulted.

There are roughly two types of groundwater. One is sweet and the other is saline. The former can produce many varieties of crops and vegetables, while the latter is used only for wheat and millet cultivation. Saline water also damages the soil itself. After one harvest, the land needs to be kept fallow for the next two or three years to recover. A farmer, therefore, has to change places for cultivation every year if the water he uses is saline. Sometimes, he leases land adjacent to his well, but it is difficult to secure sufficient scale of fallow land in every year. Normally, he cultivates one-fourth of his fields in a year and leaves the other three-fourths fallow.

Bullocks traditionally supplied the main source of energy in ploughing, threshing, lifting water from the well, carrying goods, etc. Rossi argues that the possession of bullocks determined whether a cultivator was to be a tenant or a laborer in pre-Independence Mārwār (1987: 110). Bullocks were capital equipment necessary for cultivation. Nowadays, we can see bullock carts carrying fodder, firewood, and other goods over short distances, but motor pumps and tractors replaced the other important roles that bullocks had played. Fewer and fewer farmers are interested in having bullocks, while they are eager to purchase tractors and lorries.

There are fifteen tractors operating in the village. A tractor is now essential for agricultural processes not only in tilling land, but also for carrying laborers to the field, moving harvested crops to the market, etc. Non-owners of a tractor ask its owners to plough their land for a charge of 150 rupees per hour. Since the owner first plows his own field, the hiring of a tractor incurs a delay in agricultural work to be done within a given period. As a result, it reduces agricultural productivity and raises agricultural expenses.

The crop pattern is mainly determined by the ecological conditions that I discussed above. Against the fact that there is a vast barānī (unirrigated land) which can be utilized for kharīf cultivation, farmers in Devapur are less interested in kharīf cultivation. A heavy rain may spoil the seeds sown or a drought may wither the seedlings. Successful cultivation needs rainfall at the right time. The total areas sown in kharīf cultivation in the 1997–98 agricultural year are less than half, compared with those in rabī cultivation in the same year (see Tables 2.1 & 2.2).

The *rabī* production needs higher capital investment for irrigation, high yield varieties of seed, and chemical fertilizers. Wheat requires careful soil preparation with repeated ploughings. According to one farmer, it makes a good seedbed to plough in a timely fashion and at least ten times. Many farmers use high yield

Table	2.1	Cultivated	Areas it	Nharif	Crons

(in hectares)

			(III flectares				
	199	5-96	199	6-97	199	7-98	
crops in <i>chāhī & jāw</i> (irrigated land)							
maize	7.74	2.2%	4.52	1.3%	23.43	6.8%	
cotton	2.00	0.6%	3.48	1.0%	3.22	0.9%	
vegetable	0.08	0.0%	0.00	0.0%	0.10	0.0%	
(a) cultivated area in chāhī & jāw	9.82	2.9%	8.00	2.3%	26.75	7.8%	
(b) fallow in chāhī & jāw	334.72	97.1%	336.54	97.7%	317.79	92.2%	
chāhī & jāw in total	344.54	100.0%	344.54	100.0%	344.54	100.0%	
crops in <i>barānī</i> (un-irrigated land)							
bājrā	0.0	0.0%	2.89	0.0%	1.85	0.4%	
mūng	1.00	0.2%	3.69	0.2%	10.37	2.0%	
sesame	8.35	1.6%	16.54	1.6%	24.78	4.7%	
guār	2.32	0.4%	0.00	0.4%	14.12	2.7%	
jowār	33.47	6.3%	92.74	6.3%	113.81	21.6%	
others	0.00	0.0%	0.64	0.0%	4.90	0.9%	
(c) cultivated area in barānī	45.14	8.6%	116.50	8.6%	169.83	32.2%	
(d) fallow in barānī	482.26	91.4%	410.90	91.4%	357.57	67.8%	
barānī in total	527.40	100.0%	527.40	100.0%	527.40	100.0%	
(a+c) total cultivated area in kharīf	54.96	6.3%	124.50	14.3%	196.58	22.5%	
(b+d) fallow in total	816.98	93.7%	747.44	85.7%	675.36	77.5%	
cultivation land in total	871.94	100.0%	871.94	100.0%	871.94	100.0%	

Tabel 2.2. Cultivated Areas in Rabī Crops.

(in hectares)

	199	1995–96		6–97	1997-98		
crops in <i>rabī</i> cultivation							
wheat	122.03	30.1%	65.20	21.3%	85.00	19.4%	
barley	3.68	0.9%	13.58	4.4%	7.00	1.6%	
<i>rāī</i> (rape)	275.23	67.9%	224.30	73.3%	343.00	78.3%	
rajgā (grass)	4.25	1.0%	2.93	1.0%	3.00	0.7%	
(a) total cultivated area in $rab\bar{\iota}$	405.19	100.0%	306.01	100.0%	438.00	100.0%	
(b) chāhī & jāw in total	344.54		344.54		344.54		
percentage of (a) to (b)	177.6%		88.8%		127.1%	-	

varieties of seed which need chemical fertilizers, i.e., urea and DAP (diammonium phosphate). They take a loan for seed, fertilizer and other agricultural investments from a certain broker in the *mandī* (crop market). The loan is conditioned on selling their crops to him after the harvest.

It is often said that the use of chemical fertilizers made their soil *kamzor* (less fertile). They stress the importance of traditional manure, which comes from cattle. The dung of sheep and goats is considered the best and most powerful manure. Normally, farmers do not raise goats and sheep; their dung is purchased from pastoral families in cash or in exchange for crops. Once manure is applied to a field, it is effective for three years of cultivation. Urea is good for six months and DAP is good for two years. Urea makes the soil hard, while DAP makes it soft. Thus, it is suitable to use less urea and more DAP for the soil in Devapur, but the village farmers use them in reverse proportion. This is partly because DAP is costly and partly because they have less knowledge of it.

3.3. Labor organization

After the $rab\bar{\imath}$ harvest in April, farmers have little agricultural activity. In the lean season, they carry out preparations for cultivation: spread manure, repair tractors, make hedges around fields with boughs, etc. Spreading manure requires teamwork. All of the family and relatives including members who are usually engaged in other occupations work together. The ex-jagīrdār farmers hire laborers for the task. Another important work in this season is well deepening. A layer less than forty feet consists of stone. The well is deepened by breaking the stone by electric explosions and removing it manually.⁵

Cultivation starts after the first rain with ploughing and sowing. These are men's tasks. A few farmers use a seed drill, while most of them throw out seeds by hand. *Kharīf* crops do not need watering. Providing water for *rabī* crops in the growing stage is men's work. Since water resources are scarce in Devapur, water is sometimes sent to fields five kilometers away from a well in which water is available. The farmer makes a long earthen channel run across several fields from the well. He must keep an eye on the channel when he goes to the field and returns, otherwise a cow may sit down and prevent water flowing or the channel may break at some point. During the season, a man spends whole nights in the

One explosion costs 2,000 rupees and breaks stone one foot deep. Stone appears at 40 feet in the area. It costs 120,000 rupees to break stone and dig another 60 feet. Including labor, if hired, the total amount to dig a 100-foot deep well is about 200,000 rupees.

field watching crops so they are not eaten by animals. Recently, farmers have been suffering a lot from damages by blue bulls, locally called *nilgāi* or *roj*. Weeding is female work. Wage laborers are hired in the larger fields for this task.

Harvesting and threshing are mixed male-female tasks in which a few men work together with a group of women. Except for wives and daughters of the farmers, all women are hired laborers. In this season, utilization of the labor force reaches the peak and labor demands exceed supplies. Farmers have difficulties in hiring enough laborers. The local agents collecting them play an active role. The sheaves of a crop are cut with sickles by the women and the men bundle them. In threshing of $r\bar{a}\bar{\iota}$ (oil seed), a man gets the tractor to run over the crop on the threshing floor, while a mechanical thresher is used for grains. Combines are not used in the village because they waste chaff, which serves as cattle fodder. Then the grain is threshed, and a haystack of chaff is built at the side of the field.

Winnowing is mainly done by the family labor consisting of both men and women. After winnowing, a mound of grain is built on the harvest ground to divide the grain into five shares ($hiss\bar{a}$ or $bh\bar{a}g$): one for land, two for water, another one for tractor and seed, and the last one for human labor. In $khar\bar{i}f$ cultivation, the crops are divided into three shares that exclude water, because it is rainfed.

The dividing of grain is locally called $l\bar{a}t\bar{a}$ and it is a kind of ritual. Each owner of the five shares, e.g., landowner, water-owner, etc., attends to watch it.⁷ A special man is called to measure and divide the grain. He stands on the grain heap. A team of farmers fills their bowls with the grain in front of him, and then he flattens a pile of the grain in each bowl with a simple tool. They keep those bowls of grain in one place and go back to the grain heap with empty bowls. When this process is repeated five times, five smaller heaps are built in different places. The man who flattens the bowls sings a song telling which number of bowls they are filling. As long as the main grain heap remains, $l\bar{a}t\bar{a}$ is repeated.

The final work is to fill the divided grain into bags and take them to each owner's house. Some farmers immediately sell their crops in the market so as to repay their agricultural loan taken at the beginning of cultivation. Interest is compounded every month. Others store the crops and sell them when the price

⁶ The local agents are mainly middle aged women who themselves work as agricultural laborers. Each agent is connected to a particular supervising farmer. In return for collecting laborers in harvesting for him, she gets no extra payment but his favor, which will work for her convenience in future.

Production relations are different in each field. Land and water may belong to the same owner. A share for the tractor and seed belongs to the person who paid the expenses of ploughing and sowing.

increases.

4. Relations of Production in the Village Agriculture

There are broadly four different ways in which people take part in agriculture in Devapur. The first way is to supervise agriculture (*khetī sambhālnā*) without engaging in any manual work. Farmers in this category employ sharecroppers by contract for the agricultural year. The details of the contracts vary in each relation between owners and sharecroppers, but the basic rule in the area is that harvested crops are divided into three shares in *kharīf* and five shares in *rabī*: one for land, two for water, another one for tractor and seed, and the last one for labor (see Section 3.3). Normally, a supervising farmer supplies his sharecropper with land, water, a tractor, seed and fertilizer. Thus, the share of the sharecropper is only one-fifth of the whole harvest. When the cultivation scale is big, a supervising farmer keeps several sharecroppers. Then, one-fifth of the harvested crop is again divided among all the sharecroppers. This system of dividing harvested crops is called *bhāgedārī*⁸ and the sharecropping is called *bhāwarī* in the local language.

The second way is to engage in actual agricultural work. This is called <code>khudkāsht</code> (self-cultivation) and the farmers under this category are called <code>kāshtkār</code> (cultivators). Among them there are a few families in the village who cultivate their own land with their own water. However, this is not a common practice, because water is scarce in the area and many families of cultivators do not have enough water for irrigation of their land. Even if they have water resources, those who have saline water need to change areas for cultivation every year. Many families of cultivators take in either land or water, or both, on the basis of the <code>bhāgedārī</code> system. When a farmer cultivates an other's land under this system, he is said to conduct <code>bhāwarī</code> of the landowner, but there is a big difference between sharecroppers employed by supervising farmers and those who lease land by themselves. The latter, may be described as independent sharecroppers or tenants, who make decisions and have responsibility for the agricultural process.

The third way is to simply let out land for cultivation and receive one-fifth of the harvested crop as rent. A landowner in this category does not have to incur

⁸ There is also another way to cultivate on other's land. It is called *thekādārī* (contract) system. At the beginning of cultivation, a farmer contracts with a landowner how much he will pay for the land use. In spite of crop failure or a good harvest, he will pay the amount of cash or crops which is contracted previously. Cultivation under the *thekādārī* system is not found in Devapur, but it is found in neighboring villages.

any agricultural expense nor go to his field except at the time of $l\bar{a}t\bar{a}$ (the crop dividing ritual). Some landowners in this category have non-agricultural occupations, but others are also farmers themselves. Since they do not have a water resource and they cannot cultivate their own land, they lend it to someone who can manage water.

The fourth way is to work as an agricultural wage laborer hired for weeding, harvesting and threshing. Most agricultural laborers are women because men demand higher wages than women. In 1998, women laborers in the area were normally paid $35{\text -}40$ rupees per day, while men were paid $50{\text -}60$ rupees. It should be noted that they are hired by cultivators, not by landowners nor by water owners. Under *bhāgedārī* cultivation, the expense for agricultural laborers is borne by the sharecroppers.

These different ways of participation in agriculture do not divide the people into distinct groups. In many cases, one person engages in agriculture through more than one route. For example, a cultivator (A), who has land but does not have water, may be employed as a sharecropper by a supervising farmer (B) and his land without water may be let out to another cultivator (C) who has a well near his field. In this case (A) is doing *bhāwarī* of (B) and (A) is, at the same time, a landowner of (C). The cultivator (C), who is doing *bhāwarī* of (A) will hire wage laborers for harvesting, but he may also work for wage labor in other fields on different days.

There is, however, an economic hierarchy among the people who live mainly by agriculture. Corresponding to the form of appropriation of surplus labor, there is a particular form of ownership of the forces of production. I will describe the forms of ownership and control of the main forces of production in Devapur agriculture, i.e., land, water, and tractors, and then ask how different people are related to one another in the production process.

4.1. Land

A remarkable relationship with caste is found in the size of landholdings. Table 3 shows a pattern of the distribution of agricultural land among different households in the village. Twelve households of ex-jagīrdār Rajput⁹ control more than 29 percent of the total land owned by the village people. Some of their land was allotted in land reforms to the families of Chaudhri and Daroga who were

⁹ There are ten households of the ex-*jagīrdār* Rajput in the village, and two sisters who married out also have land in Devapur. These two households, though they do not belong to the village, are here included here in the statistical tables.

actual cultivators of the land.¹⁰ Some of their land was sold over the course of time, but each of them still own hundreds of *bīghās* of land.

Most of the Chaudhri and Daroga families own a good amount of land except for three landless households.¹¹ There is a hierarchical difference in the size of holdings among the caste itself. This is explained by the fact that some families purchased land recently in addition to the land which was allotted in land reforms, as well as due to family divisions of land.

Rajpurohit, Swami, and Banjara are traditional landholders. A certain amount of land was given to the caste as a whole by the *mahārājā* (state king) or by the *ṭhākur* (village king) for religious gifting. The land owned by Rajpurohit and Swami has been divided into small pieces from generation to generation, while the land of Banjara is registered as temple land and is exempt from taxation. In Table 3, for statistical purposes, I divided the land of Banjara into pieces according to the proportion in which the crops from the land are divided among the households.

Some of the pastoral Rabari families invest in agriculture, but most of them engage in non-agricultural occupations. Thus, their total holdings are small. The service castes, i.e., Chipa, Kumhar, and Vaishnav are more or less in a similar situation. In the past, they engaged in traditional services for which they received annual payments of crops from the village farmers. Some still depend on the traditional services, others do not. None has sufficient land to support a family.

About 40 percent of families of the lower castes which are defined as scheduled castes and tribes is landless and about 60 percent of them own land. There

Chaudhris are traditionally cultivators. Darogas were servants of the households of the jagirdar. Women of the caste worked in the kitchen and men worked on the farm.

One of three landless households is a family which belongs to another village. For some reason, the family moved to Devapur where a sister had married. The other two are families that are recently separated from their fathers, but they have not inherited land yet.

¹² Rajpurohits are Brahmins, but their occupation is not a family priest. They used to give religious and political advice to a *thākur* in the village, or head of a *jagīrdār* family. Swamis are the oldest dwellers in the village. They have a *maṭh* (monastery) and land which is said to be given by the previous *mahārājā* not by the *ṭhākur*. Banjaras of Devapur are called *pājārī* (worshippers), because they have a hereditary right to serve a Siva temple near the village. The occupation of Banjara defined by caste is a transporter of salt, sugar, and other commodities, but three Banjara brothers in the neighboring village were appointed as priests of the Siva temple by their village *ṭhākur* who established the temple in 1636. Since Devapur is close to the temple, he asked the Devapur *ṭhākur* to make them settle in Devapur. The Devapur *ṭhākur* gave them a plot of land for settlement and agricultural land.

land owned (in hectares)		Rajput (ordinary)	Rajpurohit	Swami	Chaudhari	Rabari	Banjara	Daroga	Kumhar, Chipa, Vaishnav	SC & ST	total
more than 32.01	3	0	0	0	0	0	0	0	0	0	3
32.00-16.01	3	1	0	0	3	0	0	0	0	0	7
16.00-12.81	1	0	1	0	2	0	0	0	0	0	4
12.80- 9.61	1	1	0	0	4	1	0	2	0	0	9
9.60- 6.41	2	2	1	1	10	0	5	1	0	1	23
6.40 - 3.21	2	3	1	0	12	1	4	1	0	3	27
3.20- 0.01	0	0	5	6	16	7	12	4	7	19	76
landless	0	0	0	0	3	10	4	0_	1	17	35
total households	12	7	8	7	50	19	25	8	8	40	184

Table 3. Distribution of Land among Households in Castes.

Table 4. Distribution of Irrigated Land among Households in Castes.

land owned (in hectares)	Rajput (ex <i>-jagīrdār</i>)	Rajput (ordinary)	Rajpurohit	Swami	Chaudhari	Rabari	Banjara	Daroga	Kumhar, Chipa, Vaishnav	SC & ST	total
more than 32.01	0	0	0	0	0	0	0	0	0	0	0
32.00-16.01	3	0	0	0	1	0	0	0	0	0	4
16.00 - 12.81	0	0	0	0	2	0	0	0	0	0	2
12.80- 9.61	0	1	0	0	0	0	0	0	0	0	1
9.60-6.41	3	0	0	0	7	0	1	0	0	0	11
6.40 - 3.21	1	0	1	0	12	0	5	0	0	0	19
3.20- 0.01	3	6	6	0	11	2	0	0	0	1	29
landless	2	0	1	7	17	17	19	8	8	39	118
total hoseholds	12	7	8	7	50	19	25	8	8	40	184

is, however, no real difference between those who have land and those who have no land, because their land is basically not used for a number of reasons. First of all, their land is unirrigated and in the neighboring areas there is no well from which they can draw water for their land. If it is much bigger, they may invest in digging a well. If it is located near the residential area, they may cultivate it at least in *kharīf*. In the growing stage, crops need to be watched during days and nights to prevent animals from eating them. Their land is too small and produces too little to pay for such agricultural expense and labor.

It is clear that the ownership of land and its size does not explain the economic status of its owner. As shown in Tables 2.1 & 2.2, the main production in Devapur is $rab\bar{\imath}$ crops and among them, the cultivation of $r\bar{a}\bar{\imath}$, a kind of oil seed, is the most important source of income of farmers in the village. Thus, it is water that is more decisive for the production scale in Devapur where land is plenty and water is scarce. In the next section, I will examine the ownership of irrigated land and wells.

4.2. Water

Irrigated land increases in yield and promises at least three-fifths of the total harvested crops: one for land and two for water. To own irrigated land means that a farmer is independent. He will take in other land if his land is small. In this case he may depend on the landowner in a sense, but it is rather considered that the landowner depends on him for cultivation, because he makes decisions and assumes responsibility in the production process. The landowner will not complain, even if the crop yield in his field is less than his expectation.

Table 4 shows the distribution of the irrigated land among different households in the village. It is locally said that 40 *bīghās* (6.4 hectares) of irrigated land enables a family to make a living. 88 percent of village households own less than 40 *bīghās* of irrigated land. Supposing agriculture is the only means of livelihood, a total of 162 families must work for others.

In analyzing the economic situation of a family who mainly lives by agriculture, Table 4 is more reliable than Table 3, which shows the ownership of agricultural land irrespective of water resources. However, the scale of cultivation does not always correspond to the size of the irrigated land holdings. The water owner, if he has more water than the amount necessary for the cultivation of his land, will either lease other land or lease out his surplus water on the basis of a *bhāgedārī* contract. Whether he will lease land or lease out water partly depends on the labor power which he has, and partly depends on the social relation between a lessor and a lessee. In any case, the cultivation scale will increase. In

Table 2.2, the total cultivated area in *rabī*, in the agricultural years of 1995–96 and 1997–98, is beyond the total area of irrigated land in Devapur. This is because some areas of unirrigated land are converted into irrigated land, supplying water drawn from wells which are situated in other fields.

In Devapur, there are twenty-two wells which had water in 1998 and eight wells out of the twenty-two are owned by the ex-jagīrdār households. Five households of them send their water to fields where water is not available. In this way, they cultivate two or three hundred bīghās of land according to water availability and earn a considerable amount from agriculture. At the same time, there are waterless households in the same ex-jagīrdār family.

It should be noted that the water level is different in each well and varies every year. Thus, the amount of land which is able to be cultivated varies according to the well and to the rainfall in the monsoon season. Furthermore, the level of groundwater in the village is gradually decreasing. These facts imply that the ownership of water is uncertain. For example, when a farmer digs a well in his field, the water levels of neighboring wells may go down. If a farmer installs a powerful motor pump to draw water, neighboring wells may run dry. Nobody knows how water flows underground and the water supply also changes over time. In the last twenty years, ten wells in Devapur went dry and thirty-eight households of several castes lost their water resources.

In addition to the amount of water, its quality, whether it is sweet or saline, determines economic situations of the households which mainly live by agriculture. The groundwater in a certain area close to the riverside is sweet. This area is mainly occupied by the ex-jagīrdār family, and most of the wells which supply sweet water are controlled by the family. There is a correlation, though it is not stable, between the ownership of water and the caste group, which cannot be overlooked.

4.3. Tractors

In 1967, a Rajput man introduced the first tractor into Devapur. His brother caught up with him immediately. For a while, tractors in the village were only in the hands of ex-*jagīrdār* families. There were five tractors in 1992 when I first visited the village, but I found fifteen tractors in 1998, eight tractors out of which were owned by non-Rajput families. A secondhand tractor with a lorry costs 50,000 to 80,000 rupees. Some families also invest in other implements like a harrow, a cultivator, a bund former, a mould board plough, a seed drill, etc. These implements are attached to the back of a tractor.

Farmers who invest in tractors normally own water resources. This is be-

cause farmers in Devapur first invest in digging a well. If they succeed in getting a water resource, it becomes easier to purchase a tractor and other implements since the irrigation promises increasing profits. If they fail to get water, they not only waste money digging wells, but also have no means to produce surplus crops. It is difficult and also considered less necessary for a farmer who does not have irrigated land to purchase his own tractor.

There was one interesting case where a farmer, who had land but no water, borrowed money to purchase a tractor from a supervising farmer under whom he was doing *bhāwarī*. He cannot use his tractor in the field of the supervising farmer. It is he who actually drives a tractor of the supervising farmer in ploughing, threshing, and carrying things, and he who maintains the tractor and repairs it. But a share for the tractor and seed, that is, one-fifth of the harvested crops is given to his supervising farmer who paid for fuel and other maintenance costs. It is more profitable for him to use his own tractor and bear the expenses, but he is indebted to the supervising farmer and he cannot stop working under his creditor.

4.4. Relationship between supervising farmers and sharecroppers

Supervising farmers, who are all members of the ex-jagīrdār family, often told me that their production scale was gradually decreasing, because it is becoming difficult to keep as many sharecroppers as they had. In the past, when most of the village cultivators did not own irrigation wells or tractors, and when they worked only in the village, sharecroppers were easily available. These days, young men from cultivating families go to Bombay to work. Some sharecroppers have come to dislike working under the ex-jagīrdār family in their own village and prefer doing bhāwarī outside the village. In addition to agricultural work in the fields, personal work for the supervising farmer is often required of the sharecroppers in the same village without any extra payment. For example, a supervising farmer may ask his sharecroppers to collect firewood, to mill grain, and to prepare food for feasts etc. They are sometime sent to his relatives' houses for some business. They are called when the owner's family needs extra labor or when his family wants to exhibit status and power.

It may be said that sharecroppers are exploited in a feudalistic relation, but it is, at the same time, a relation based on the interests of both sides. There are some advantages for a sharecropper doing *bhāwarī* under a powerful supervising farmer. One of them is a right to take *rajgā*, green fodder which is essential for milking cows and buffaloes specially in the dry season. Without it they will give little milk. The supervising farmers have wells which supply sweet water and

make it possible to grow $rajg\bar{a}$ in their fields. Half of the $rajg\bar{a}$ in a field belongs to the owner and the other half to his sharecroppers. This is a strong incentive for them. Other villagers who are not undertaking $bh\bar{a}war\bar{n}$ have to buy ridegs of $rajg\bar{a}$ either from supervising farmers or from their sharecroppers. The second advantage is to get chaff. The right to chaff normally belongs to a person who gave the seed in sowing, but sharecroppers who work under some supervising farmers get a half of it without giving any seed. The third advantage is that a sharecropper can borrow a tractor from the supervising farmer under whom he works when he cultivates his own land. He pays only the fuel charge to its owner, while the normal charge to hire a tractor is 150 rupees per hour.

These advantages seem to be very small compared with the labors provided by the sharecroppers in a good monsoon year followed by a good harvest. They work through the year for the family of a supervising farmer and get only one-third of the *kharīf* crops and one-fifth of the *rabī* crops, from which they have to pay the wages of the agricultural laborers they employed in harvesting and threshing.

However, if rain does not come, being a sharecropper of a powerful farmer is an effective way to survive. If the monsoon fails, most of wells in the village except two or three wells owned by certain supervising farmers will run dry. The *kharīf* crops will fail and the coming $rab\bar{t}$ crops will not be sown in most of the fields. No green grass, no chaff, and no fodder is available. The cattle stop giving milk and starve. People wait for rain as long as possible, but they must finally give up their cattle and send them away. In such situations, the land of supervising farmers is provided with water, although it is on a smaller scale. Their sharecroppers can have some crops, $rajg\bar{a}$, and chaff during a drought. Even natural weeds growing in the field are in demand for fodder, and the sharecroppers have the first right to them. In a severe drought, the supervising farmers reduce the cultivated area and the numbers of sharecroppers they employ. Those who are fired are sharecroppers of non-villagers.

It is difficult and also less meaningful to argue that the relationship between supervising farmers and their sharecroppers is exploitative or mutually dependent. What is more important is to see the nature of rights, duties, and obligations which forms the basis of their mutual relations.

The bhāgedārī contract is made at the beginning of the agricultural season.

People cut part of the *rajgā* for which they contracted, keeping the lower portion of the stalk and changing places everyday. The *rajgā* grows again in fifteen days. One ridge of *rajgā* costs 150 to 200 rupees per month. An average household pays 300 to 400 rupees monthly.

Some sharecroppers may change owners, others will work under the same owner. No one discloses under whom he will work for the next year. This is because he wants not to belong to any supervising farmer by the time cultivation starts. He tries to prevent supervising farmers from asking him to do extra work in the slow season. Just before the *kharīf* cultivation starts, sharecroppers start negotiations with different supervising farmers.

The supervising farmers and sharecroppers discuss details of the contract. For example, in the negotiation in June 1998, a sharecropper demanded of his owner under whom he has been working for a long time, two one-fifth shares of the harvested crops, while the owner offered another incentive that not only the grass of $rajg\bar{a}$, but also half of the seeds harvested would be given to the sharecropper. Since the seeds of $rajg\bar{a}$ are quite expensive in the market, the sharecropper agreed to work in the coming 1998–99 agricultural year. Such negotiations are made without direct claims on the economic interests of either side. Sharecroppers ask their owners to increase their share, saying "We have been serving your family such a long time from my father's generation", "I have many daughters to marry", or "I am expecting you to be generous to poor cultivators like us", etc. The nature of rights, duties, and obligations is negotiated based on the local logic which is expressed as $parampar\bar{a}$ (tradition), but which is constantly being remade and transformed corresponding with economic interests.

5. Concluding Remarks

There exists a clear inequality in agrarian relations in Devapur. The labor of poor cultivators is severely appropriated by some rich farmers. It is, however, insufficient to discuss only the positions of farmers in production relations which are determined by the ownership and control of the forces of production. There is some room for a farmer to decide in what way he takes part in agriculture and to what extent he keeps a close relationship with other farmers, that is, owners of land, water, or/and tractors. These are the strategies of farmers. I, however, do not think it pertinent to consider such strategic behavior of each farmer as symbolic resistance or so-called "weapons of the weak" (cf. Scott 1985).

The cultivators in Devapur choose to do sharecropping under a certain powerful farmer. There remain several other choices even for a cultivator who has no land, no water, no tractor. One of them is to go to cities for non-agricultural work. The second is to engage in wage labor. The third is to lease land, water, and a tractor and cultivate as an independent sharecropper. Agricultural loans are available from the government and from brokers in the crop market.

Lastly, he can conduct sharecropping in neighboring villages and thus escape entering into an extra-economic and feudalistic relation with the supervising farmer in his village. Whether a cultivator engages in sharecropping or not, and under whom he engages in it, result from his calculation taking many factors into account.

This article is limited in aim to analyzing agrarian relations in the village, but it is impossible to cut them off from other social relations in the village. The village economy consists of agriculture, animal husbandry, and other non-agricultural occupations including remittance. The economic relations are, to some extent, embedded in political and religious relations. In future studies, other social relations have to be considered to analyze the behavior of farmers in the village.

Acknowledgments

Fieldwork was conducted in 1992–3 and in 1998. I would like to thank all the people in Devapur who shared their knowledge and experiences with me. From the beginning of the fieldwork through the process of writing, I have been guided by Prof. K. Kano in Kanazawa University, and Prof. A. Béteille in Delhi University, and Dr. M. Tanaka in Kyoto University. I thank very much for their comments and suggestions. This paper is part of a research project conducted with the aid of the Research Fellowship of the Japan Society for the Promotion of Science and the Grant-in-aid for JSPS Fellows of The Ministry of Education, Science, Sports and Culture, for which I am grateful.

References

Béteille, André 1974. Studies in Agrarian Social Structure. Delhi: Oxford University Press. Census of India 1981. District Census Handbook: Village & Town Directory, Village & Town wise Primary Census Abstract, District Pali. Series 18, Rajasthan, Part 8 A & B.

——— 1991. District Census Handbook: Village & Town Directory, Village & Town wise Primary Census Abstract, District Pali. Series 21, Rajasthan, Part 7 A & B.

Djurfeldt, G. and S. Lindberg 1975. Behind Poverty: The Social Formation in a Tamil Village. London: Curzon Press.

Gazetteer of India 1976. Rajasthan District Gazetteers: Pali. Jaipur: Government of Rajasthan. Harriss, John 1982. Capitalism and Peasant Farming: Agrarian Structure and Ideology in Northern Tamil Nadu. Bombay: Oxford University Press.

Narain, Iqubal, and P.C. Mathur 1990. "The Thousand Year Raj: Regional Isolation and Rajput Hinduism in Rajasthan before and after 1947", in Francine R. Frankel and M.S.A. Rao (eds.), Dominance and State Power in Modern India: Decline of a Social Order, vol. 2. Delhi: Oxford University Press.

Ossowski, Stanislaw 1963. Class Structure in the Social Consciousness. London: Routledge & Kegan Paul.

Rosin, R. Thomas 1987. Land Reform and Agrarian Change: Study of a Marwar Village From Raj to Swaraj. Jaipur: Rawat Publications.

Scott, James 1985. Weapons of the Weak: Everyday Forms of Peasant Resistance. New Haven, CT: Yeale University Press.

(Research Fellow of the Japan Society for the Promotion of Science)