



Coping with Poverty and Institutionalised Practices: Tank-Irrigated Cultivation in Kolar District, Karnataka

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ABSTRACT

Though in decline, tank irrigation is still an important characteristic of rural social life in many parts of South India. It is of particular importance to the poor being dependent on agriculture, while rich landowners increasingly concentrate their investments and income on non-rural activities. Based on fieldwork in two communities, this paper explores the strategies of the poor and the management of tank irrigation. It establishes the main concerns and priorities of the poor and describes why the poor regard well-managed tank irrigation as a significant asset. Moreover, it studies two sets of institutionalised practices in relation to tank management, namely those related to the distribution of water from the tank and those related to the use of water when water is scarce. Both sets of practices have stable and disputed elements, and given the particular circumstances they are the object of more or less intense negotiations. Furthermore, the practices are influenced by contextual changes including the changing caste relations. Overall, the paper argues that different and equally legitimate logics can be applied to the distribution of water and this provides some opportunities for the poor to influence tank management to their advantage.

INTRODUCTION

Although generally in decline (Palanisami, 2006, Sreedhar, 1996), tank irrigation in South India, being an 'ancient tradition', is still characterised by certain institutionalised practices which different actors seek to exploit in an attempt to cope with harsh conditions (Shah, 2003). Tank irrigation is far from a uniform, undisputed institution with clearly defined rules and sanctions. Quite on the contrary, its organisation is continuously being contested by different social groups given the changing political and natural contexts. Landless people constitute one of the groups who have a clear interest in tank irrigation and who seek to reap the benefits from this important economic resource. This chapter endeavours to analyse the strategies of the poor particularly in relation to tank irrigated cultivation, and it goes into some depth with the contested nature of the institutionalised practices in relation to tank irrigation. The chapter is based on a study of two tanks in Kolar district, Karnataka.

Tank irrigation is important to the rural poor in South India (Reddy and Behera, 2009, Balasubramanian and Selvaraj, 2003, Kajisa et al., 2007). It reduces the risk of drought in the rainy season and it provides an opportunity for cultivation in the dry season. For vulnerable people strongly dependent on agriculture and the vagaries of the weather, assured water for cultivation is extremely important, and tank irrigation may furnish such assurance. However, tank irrigation requires management, and since tanks and their water are common goods, management requires a common effort. This complicates the matter because different actors have different perspectives on tank irrigation and sometimes pursue incompatible strategies in this respect. The first objective of this chapter is accordingly to examine the interests of various groups in relation to tank irrigation and in particular to discuss the op-

portunities that tank irrigation provides for the poor.

Where tank irrigation works, the daily management and distribution of water are seldom the object of major disputes. Disagreements may occur concerning the amount of water distributed to individual farmers, the timing of the distribution, the effort supplied to clean field channels, etc., but the fundamental principles guiding water distribution, such as the role of various actors and the procedures for water allocation, are less contentious issues. However, in particular situations conflicts may emerge. One such situation occurs when tanks contain some, but not sufficient water to irrigate the normal area of land. In such a situation of water scarcity, two logics may be applied to tank irrigation, namely the logic of private rights to land and the logic of shared rights to water. The chapter's second aim is to discuss tank management and its implications for the poor both in periods with sufficient water and in times of water scarcity. My argument is that institutionalised water distribution from a tank is a clear advantage to the poor.

The study of tank management provides insights which complement academic debates of rural institutions and the way actors relate to them. That rural institutions are contested, ambiguous and strategically used in social struggle has been documented repeatedly (Berry, 1993, Berry, 1997, Long, 1992, Long and Ploeg, 1994). At the same time, it has been noted that institutions also provide more or less shared meanings and understandings of social interaction and that they, in this sense, affect people's strategies and the nature of social struggle (Friedland and Alford, 1991, Mosse, 1995, Mosse, 1997, Engberg-Pedersen, 1997). These not necessarily contradictory observations are largely confirmed by the present study which, moreover, proposes that different actors apply different institutional logics to situations where there are no commonly ac-

cepted ways of organising tank management. There are ‘grey areas’ where a particular set of practices has not been institutionalised and where different competing logics may be applied with equal pertinence, but with substantially different outcomes. One such ‘grey area’ emerges in the situation of water scarcity when the logic of private right to land is contested. The argument suggested here is that although different actors typically seek to further institutional practices which suit their concerns, they may accept other practices if these reflect logics that embody generally shared values and understandings.

Institutionalised practices¹ pertaining to tank irrigation are the product of a negotiated historical past, technological requirements, present choices and of a changing natural and political environment. They are on the one hand people’s present actions and on the other something handed down from the past and given by others. They create distinctions and ascribe particular roles to specific groups and, yet, some of these distinctions and ascriptions are difficult to uphold given the changing socio-economic context in Karnataka. Therefore, people relate to the institutionalised practices in tank irrigation with ambivalence not only when it comes to the ‘grey areas’, but also, though less expres-

sively, where particular practices are well established. In a study of irrigation in Western Mexico, Norman Long notes:

Irrigation organization therefore emerges as a set of social arrangements worked out between the parties concerned, rather than simply ‘dictated’ by the physical layout and technical design, or even by the ‘controlling’ authorities who built and now manage the system. Hence irrigation organization is not an organizational chart or organigram; it is made up of a complex of social practices and normative and conceptual models, both formal and informal. (Long, 1992: 36)

Within such social arrangements, there is room-for-manoeuvre even for the poor. While typically being dispossessed and subordinate, the poor are not powerless. In most situations, they have “the possibility of gaining edge and pressing it home” (Villarreal, 1992: 256). Given the particular circumstances, there is a “probability of achieving only part of one’s own project, of accepting compromises, but then pressing home one’s moderate gain in an attempt to dominate as big a part of a situation as possible” (ibid). Tanks are “thick with power relations and politics” (Bijker, 2007: 115) and therefore it is often difficult for the poor to influence the institutional practices of tank management, but it is not impossible. Esha Shah describes a tank where Muslim farmers having plots in the typically less irrigated tail end have managed to challenge the historically privileged caste group having land in the head reach with respect to the irrigation practices, and she concludes:

The tail end challenge to the norm indicates that both technological designs and social arrangements around designs are contested, negotiated, subject to conflict,

¹ By an institutionalised practice I mean a way of going about a specific problem or action which entails some rules indicating what to do and what not to do in particular situations as well as the social and normative connotations attached to the rules (Engberg-Pedersen, 1997). The latter aspect is just as important as the former since the distinguishing feature of an institutionalised practice is that it contains a meaning that provides a cognitive and normative understanding of social life (Friedland and Alford, 1991). Some practices are undertaken because they are useful and can easily be changed when convenient, but when they gain credit by having been carried out numerous times or by embodying shared values, e.g., in relation to justice and reciprocity, I describe them as institutionalised.

defied or resisted and changed. Ultimately, these actions around sharing of water resource crystallises into a certain balance of power in the local context. (Shah, 2003: 271)

The chapter is organised as follows. First, I describe tank irrigated cultivation in South India and the two studied tanks in their particular contexts. These sections provide a background for the discussion of the general questions in the working paper. Secondly, the nature of poverty and the strategies of different categories of the poor are examined. The purpose here is to analyse the role of tank irrigation as seen from the perspective of poor people. Thirdly, I go into detail with the ways different actors relate to the institutionalised practices of tank irrigation. The paper is based on two household surveys as well as interviews with key informants conducted in April-May and October-November 1997.

TANK IRRIGATION IN SOUTH INDIA

Tank irrigation is a technique whereby rain and spring water from a catchment area are led into a tank. When stored in the tank, water can be used to wash clothes, to water animals, etc., but the main purpose is to lead the water through sluices to a lower-lying command area where the fields are irrigated. Tanks are often connected in a long chain where surplus water from one tank is led to the next in a large drainage system. Tank irrigation is important by providing many farmers with the possibility of growing two crops a year, by reducing damages from floods, by evening out erratic rainfalls and by increasing the ground water level (Dikshit et al., 1993). Moreover, one can argue that tank irrigation may be more accessible to the poor than ground water irrigation

that typically requires costly tubewells (see Rao, 1993).

Tanks are, however, not merely a way of providing irrigation for fields, but have also constituted a significant part of social and political life. The Irrigation Commission of 1901 noted that tanks were the life of the people (Dikshit et al., 1993: 7). That is true in more than one sense. The construction of tanks dates back to 1500 B.C., but had its golden age approximately from the 11th to the 14th century (ibid.). It was big business as tanks were sponsored by kings, chiefs, dominant castes and even merchants and priests for purposes of revenue enhancement, tax concessions and religious merit (Shankari, 1991: A-116). Village temple festivals have often been linked to the village tank, and particular ceremonies were conducted, e.g., when the tank was full. Moreover, the political significance of tanks stands out: Water has always been a political as well as a natural resource, and the operation of tank systems regulating its flow have been influenced by changing configurations of power at both village and state level (Mosse, 1995: 146). Although the links to supra-local politics are much weaker today, tanks have not lost their social, religious and political meaning. They continue to be linked to temple festivals (Janakarajan, 1993), and they clearly reflect the distribution of power in village politics.

The general situation of tank irrigation in South India is presently one of decline (Dikshit et al., 1993, Janakarajan, 1993, Shankari, 1991, Sreedhar, 1996, Palanisami, 2006). Siltation, neglect of maintenance, encroachment in tank bed and catchment area, and reliance on ground water are some of the immediate reasons for the rapidly decreasing area irrigated by tanks. Other important factors include an inappropriate division of labour between numerous different government bodies each in charge of a separate part of the tank system, the political indifference with respect to tank

irrigation compared to canal and ground water irrigation, changing cropping patterns as a consequence of increasing preferences for cash crops, increasing numbers of absentee landlords, and possibly the changing social configuration of many rural communities. The decline is not only a post-Independence phenomenon, as it was observed already under British colonial rule where high revenue claims supposedly led to a neglect of tank maintenance (Shankari, 1991).

Interestingly, it has been argued in a historical perspective that a significant reason for the breakdown of tank irrigation should be found outside village communities. Indeed, it was the creation (or invention) of an understanding of villages as isolated entities (in the sense of the dismantling of former overarching segmentary political structures) rather than the erosion of village traditions that underlay a weakening of tank systems in this part of Zamindari south India (Mosse, 1997: 479). The argument is that the links in pre-colonial days between villages on the one hand and kings and other notabilities outside the villages on the other were very important for upholding tank management institutions because supra-local power holders were highly interested in tank irrigation for the purpose of revenue collection. With the British colonisation these links were loosened, and another approach based on ideas about private property combined with village 'traditions' was employed.

There are several more or less institutionalised practices related to tank irrigation and cultivation (concerning, e.g., the cleaning of field channels, which crops to grow, the relations between farmers with neighbouring plots). I will, however, concentrate on two sets of practices, namely those related to the distribution of water from the tank to the fields in the command area and those linked to situations of water scarcity. The first set of practices has much to do with the water distributor

(*neergatti*) who, among other duties, opens the sluices, distributes water to the fields according to his own judgement, and keeps animals out of the command area during the cropping season (Janakarajan, 1993, Shankari, 1991, Somashekhar Reddy, 1995). In return, the *neergatti* has been given a plot in the command area, and he is also entitled to a share of each farmer's harvest every year. The farmers, on the other hand, have the right to water. The *neergattis* typically belong to the scheduled caste² which brings a number of caste-related connotations into the relationship between farmers and *neergattis*, and they have also different interests in tank irrigation and its development. The institutionalised practices concerning water distribution are therefore far from undisputed.

A crucial issue in relation to the second set of practices is whether to delimit the irrigated area according to the amount of water in the tank and to distribute land within this limited area to all interested farmers. According to these practices a meeting can be held when the monsoons end in December, to decide the area that can be irrigated with tank water. If the tank is less than full, paddy cannot be cultivated in the whole command area because its size is determined by the water-retaining capacity of the tank when paddy is grown. Water scarcity therefore raises two questions; which crop to grow and which area to irrigate?

2 In this chapter, a categorisation of three types of castes is used: 'upper castes' including Brahmins, Balijas and Vakkaligas; 'backward castes' including Kurubhas, Goldsmiths, Blacksmiths and Chakalis; and 'scheduled castes' including Adikarnatakas, Bhois, Dommaras and Adidraidas. Caste hierarchy, identity and categorisation are very complex and politicised issues, and the tripartition used here is based on state policies of preferential treatment of particular groups in the late 1990s (for a thorough discussion of caste issues in Karnataka, see Madsen, 1993, Srinivas, 1987, Manor, 1989).

The first question cannot be left to individual farmers to answer since paddy requires much more water than other crops such as *ragi* (finger millet). Moreover, if paddy is grown upstream, other less water-consuming crops will be flooded downstream. Soil conditions may, however, limit the range of alternative crops that can be chosen. The second question also presents problems that need to be addressed collectively. All farmers would, of course, like to have their own plots irrigated, and it is accordingly a disputed issue which area and thereby whose plots to irrigate. To save water it is, however, most useful to irrigate the head reach (the fields in the command area closest to the tank, typically just below the tank bund through which water seeps) or a particularly low-lying area, which then raises the questions: who should cultivate this land and on which conditions? The owners of the land can argue that their normal rights of private property³ prevail, whereas others with different arguments (see below) can claim that the land should be shared among interested farmers.

While water distribution by *neergattis* is a fairly institutionalised practice in many tanks, it is much less common to have well-established practices concerning irrigation and cul-

tivation when water is scarce.⁴ There are examples of land sharing (Ramaswamy et al., 1985, Somashekhara Reddy, 1995), but this practice is neither widespread, nor very institutionalised in the sense that it is perceived to be a long-standing and evident way to handle water scarcity.

Two tanks where these water distribution practices are employed to some extent, have been identified in Mulbagal taluk, Kolar district, Karnataka. One is Big Tank close to Devarayasamudram and the other is Honnasettihalli Tank. Situated only four kilometres apart and 90 kilometres east of Bangalore close to the highway to Madras, the tanks differ substantially in size, the first having a command area of 308 acres and the second one of 42 acres⁵. Landowners in the two command areas come from several villages, but the majority live in Devarayasamudram and Honnasettihalli, respectively.

TWO TANKS AND THEIR VILLAGES

Big Tank

In a commemorative volume on the silver jubilee of the high school in Devarayasamudram in 1982, the then Karnataka Governor writes:

Devarayasamudram is a model village, a fact which is reflected in the useful and effective interaction between the school and the village community. The Silver Jubilee

3 Land tenure in this area is based on private property rights. Particularly the command areas of tanks are carefully divided into privately owned plots, but also dry land of any agricultural potential is owned by individuals. Although catchment areas of tanks have been common property, they increasingly contain private plots and areas of common property appear to become open-access resources (Palanisami, 2006) and of decreasing importance to many people's livelihoods. The only way to access land without owning it is through sharecropping where the cultivator typically covers all costs and shares the crop with the landowner.

4 Actually, it was quite difficult to identify tanks where some sort of water management was undertaken. Apart from the two tanks discussed in the following, it did not seem that any other tanks in the area had the same practices for water distribution and for handling water scarcity, although *neergattis* existed in some places.

5 These figures have been provided by village respondents. According to the Department of Minor Irrigation, the command area of Big Tank amounts to no more than 192 acres.

Celebration Committee has come out with a proposition to open an industrial training institute. The institute when it is ushered into existence is sure to go a long way in increasing the employment-potential of this village.

In the same publication, the ex-Deputy Chairman of Karnataka Legislative Council notes:

“Devarayasamudram village has carved a special position in the map of Karnataka State. It is a model village comprising of resourceful persons in every walk of life. Many of them occupy high positions not only in our country but also abroad.”

It is said that there are some 120 television sets in the village and that numerous people born in Devarayasamudram now live in the United States and in Britain. The commemorative volume includes also a list of all the renowned villagers who have served as scientists, industrialists, civil servants, soldiers, etc., and who have brought electricity to the village, constructed a primary health centre and a veterinary dispensary, maintained the temples, and so forth. As a consequence of a hailstorm in April 1997 which destroyed an important part of the second crop, district authorities were immediately contacted to get compensation for the damages. Leading villagers seem to have good contacts to politicians and public authorities. Thus, Devarayasamudram is no ‘ordinary’ village.

Approximately 300 households live in Devarayasamudram and its four hamlets; Keeroholalli, Mallappanahalli, Doddanaganahalli, and Bellamballi. A comparatively large proportion (perhaps 25%) belongs to the caste of Brahmins who almost all live in Devarayasamudram. There is a clear difference of status between the main village and the hamlets where people belonging to lower castes live.

The difference is visible in the sense that many houses in the hamlets were built with the support of a government housing scheme targeted at scheduled castes. Still, the quality of the houses is generally much higher in Devarayasamudram where the streets are also paved and where the infrastructure mentioned above is situated. In the past, scheduled caste families in the hamlets were linked to Brahmin families in Devarayasamudram more or less as their servants, and these ties still exist, although their importance have decreased. The hamlets are therefore historically linked to Devarayasamudram as spokes to the hub in a wheel.

Three tanks are situated close to Devarayasamudram, and the biggest of these is the object of this study. It is called Big Tank (Peddacheruvu), and the size of its command area, 308 acres, makes it the third largest tank in Mulbagal taluk. A fairly large barren hill is situated next to the village, and a wall has been built across the hillside to lead the rain falling on the hill into the tank. It is said that the original wall was built 200-300 years ago, but it was reconstructed in the 1960s. The two other tanks have command areas of approximately 70 and 100 acres.

There are some 300 cultivators working with the land in the command area of Big Tank. The command area is divided into four parts each of which is the ‘territory’ of a *neergatti*. The first crop cultivated from June to December is rainfed while the second from January to April can be grown only if there is water in the tank. Apart from their water-distributing task, the *neergattis* have practical responsibilities in relation to various festivals to celebrate the water when the tank is full and to praise a good crop. They are paid a quantity of paddy per acre, and each of them has three plots of 0.25 acres in the head, middle and tail reaches, respectively. The position as *neergatti* is hereditary, and they argue themselves that as long as there is water, the job is well worth the long hours of work.

The availability of water is fluctuating quite a lot. Thus, it is far from certain that two crops can be grown a year, and it seems actually that one crop a year is typical. Particularly the second crop is uncertain, but even the first crop is not assured, and with the damages on the second crop by the hail storm in 1997, it is clear that the vagaries of the weather do affect the living conditions also of the producers having land in the command area.

There are very few, if any, wells in the command area. Some have tried to drill holes for borewells down to a depth of 300-400 feet without reaching the water table. Thus, for the second crop the farmers depend on tank water. When the tank is less than full, a limited part of the command area is cultivated. According to some, everyone having land in the command area has a right to a parcel in the limited zone being irrigated, whereas others claim that you still have to give half of the crop to the landowner no matter whether you have land elsewhere in the command area. I will return to this question below.

Honnasettihalli Tank

Situated only four kilometres from Devarayasamudram, the village of Honnasettihalli distinguishes itself by hosting the NGO, Grama Vikas, which has been active in a large area primarily in Mulbagal taluk since the 1970s. Grama Vikas is particularly concerned with women's living conditions and undertake a variety of activities with women's groups in many villages. Furthermore, it has ensured various social and economic services in Honnasettihalli, such as gas for cooking, agricultural implements, access to credit, etc. It has also supported the desiltation of a number of tanks, but generally it does not concentrate on problems of tank irrigation and management.

Some 150 persons distributed on 38 households live in Honnasettihalli. Not all of them have land in the command area of the tank,

and some of the landowners come from neighbouring villages: Putteri, Holali and Keeroholalli. The relationship between these villages and Honnasettihalli does not resemble the above-mentioned organisation of Devarayasamudram and its hamlets. Honnasettihalli seems to be relatively autonomous in that respect, and its villagers belong to a mixture of castes. An influential Brahmin who, together with three brothers, owns more than one quarter of the command area of Honnasettihalli tank, lives in Bangalore but has a comparatively fashionable residence in Honnasettihalli. With few exceptions, the rest of the villagers as well as the landowners belong to the backward and scheduled castes. Six farmers belonging to scheduled castes own almost 20 percent of the command area and apart from another Brahmin, the remaining 20 producers belong to two backward castes and own approximately 50 percent of the command area. A few villagers from Honnasettihalli have land in another small tank nearby.

Honnasettihalli Tank has a command area of approximately 42 acres. Desiltation has taken place several times, and in 1992-93 the operation was financed by OXFAM and Novib. Contour lines to prevent silt from coming into the tank have also been constructed in the catchment area. Some of the silt is fertile and has been carried to dry fields to increase their productivity. The water availability resembles the one of Big Tank in Devarayasamudram. At the time of the fieldwork, the tank had only been full once during the previous four years, two times a limited part of the command area had been cultivated, and one time there was not enough water even for dry crops. There are a few old, open wells in the command area, but no submersible pumps even though the water table can be reached at a depth of 300 feet.

Four families work as *neergattis* by turns. They change every year, and the three *neer-*

gattis, who do not work in the tank, perform duties as village assistants and distribute water in a smaller tank nearby. Their tasks in Honnasettihalli Tank are approximately the same as in Big Tank. They have land in the command area, and they also receive a quantity of paddy from each farmer for their services as water distributor. They highly appreciate having the right to do this work every four years.

In Honnasettihalli there are also disagreements as to the procedures when water is scarce and paddy for the second crop cannot be grown in the whole command area. In one season, only eight acres of the command area were cultivated due to water scarcity. According to one respondent, ten persons not having land within the eight acres were given land there. Those having land within the restricted area were allowed to keep half of their plots while the other half was distributed to others. The size of the area to be cultivated, the share that landowners within the restricted area can keep and cultivate by themselves, and the distribution of land to farmers not having land in the area are all decided upon during a meeting in December or January. It is important that everybody agrees at this meeting so that no one starts cultivating fields in excess of what the water in the tank can cover. The respondent also emphasised that the farmers not owning land in the restricted area, but getting access to a plot, do not give anything to the one who owns the land. This was, however, disputed by others who argued that people from 'outside' the restricted area always have to give half of the crop to the landowner.

These disagreements do not reflect difficulties with remembering what took place in the past. Rather they indicate different opinions on how land should be distributed in times of water scarcity. This question deals with a 'grey area' where a set of practices has not been fully institutionalised and continues to be negotiat-

ed. The question is explored further below, but first, I will discuss the nature of poverty and the poor's strategies. The purpose is twofold: to provide a better understanding of the social groups negotiating about water, and to underline the significance of tank management from the perspective of the poor.

WHAT IS POVERTY AND WHO ARE THE POOR?

Ten women from the women's group in Honnasettihalli described some essential elements of poverty in the following way:

- Lack of food is the worst thing. Sometimes, we only got food once a day.
- Having to use the same clothes all the time. Not being able to change into clean clothes. Not having something to cover one's body with.
- When the hut couldn't resist the wind and the rain. This was a problem before.

Working on an empty stomach, bad health, having to go far to find work, low salaries, eating leaves, having to sell one's jewellery were also mentioned as elements of poverty. A good life, on the other hand, was described both in terms of good income, education, a solid health, bathroom, a television set, a borewell in the dry fields, and with respect to the relationship between man and woman. An equal responsibility between the two was stressed and so was the point that the man must not drink. Thus, in this brief conversation the women described poverty and a good life primarily in relation to material issues, but questions of dignity and equality were also touched upon. Furthermore, it was mentioned that during the hard times ten years ago, when rainfalls were irregular, landlords took land in return for un-

paid loans. In this sense, poverty means also dependence on others which, moreover, very easily may reduce poor people's productive assets.

The conversation with the ten women indicates that poverty is a well-known phenomenon and something that can be discussed. The differences in caste, in wealth and in opportunities are very pronounced and have produced a stratified community that people recognise. The different government schemes aiming at supporting the scheduled castes contribute to this recognition. The precise content of being poor differs, however, according to the socio-economic position from which it is considered. What to the present author seems to be an obvious problem, namely inequality and dependency, is not mentioned much. This may be explained partly by the loosening relations between different castes, partly by the power of discourses legitimating inequality with respect to landownership, education, access to credit, etc. The way poverty is experienced and understood differs also between men and women, since the latter repeatedly mention a drunken husband wasting money playing cards as a sign of poverty and a bad life. Moreover, there is a difference of outlook between those who have land or who cultivate land as tenants and those who work as agricultural labourers, stone cutters, day labourers in construction, etc. While they all typically agree that land is the crux of the matter, physical security and control over one's own labour power are a larger problem for the latter than for the former. Women working as agricultural labourers are clearly concerned about assaults. They prefer to work in groups and to have men in the groups if they have to go far from their home. They also reject non-agricultural work in the nearby towns out of fear of being attacked. Similarly, some men refuse to go to the towns because of road accidents, and stone cutters emphasise the freedom of being

one's own master compared to doing work as an agricultural labourer.

It is evident that the poor is no uniform category with similar strategies and concerns. Poverty is a multifaceted monster, and many experience different aspects of it, whereas some have to live with almost all of them. There is no point in establishing a clear line between the poor and the non-poor, because such a line would be accidental and erroneously indicate that the poor suffer from the same distress. How should one assess the climatic risks involved in sharecropping against the physical risks involved in construction work in the towns? How should one judge an agricultural labourer's dependence on a landowner against a woman's dependence on her husband? And how should one evaluate the conditions of a Brahmin with a small plot of dry land and few implements against the fairly assured and independent living of a stone cutter? Clearly, the dimensions of poverty are so many and the ways they are experienced so diverse that *the* poor do not exist. Moreover, to be poor does not refer to a very specific set of conditions in Karnataka, and a conceptualisation based on people's use of the term does not identify a specific group.

On the other hand, poverty is a well-established phenomenon in relational, relative and absolute terms. The relational dimension is obvious with respect to sharecropping, money lending and access to land, particularly in the command area when water is scarce. In these respects, some people are strongly dependent on others who base their affluence at least partly on this relationship of dependence. Poverty manifests itself also in relative terms where some have better living conditions and substantially more opportunities than others. The four Brahmin brothers who own a major proportion of the command area of Honnasettihalli Tank illustrate this. They are working outside Honnasettihalli as an engineer, a

contractor, a businessman and an employee in the Forest Department. Stone cutters and sharecroppers, on the other hand, repeatedly argued against migrating to the urban areas because living is more expensive and risky there. Finally, absolute poverty is evidenced in bad housing conditions and lack of food that many respondents say they frequently experience.

Poverty is very much linked to landownership. A questionnaire survey was carried out in the villages and hamlets where the farmers who own land in the command areas of Big Tank and Honnasettihalli Tank live. Some villagers without land, with dry land or with land leased in were also interviewed. In Table 1 the situation of the interviewed households in terms of their access to land is compared with two measures of poverty; lack of food and housing condition. The first measure is based on the responses obtained during the survey, whereas the second is assessed by the interviewer. Both measures only partly reflect the above discussion of poverty and its diverse dimensions. For instance, they do not capture the questions of insecurity and lack of control over one's own labour power that came up during the 'in-depth' interviews. The questionnaire actually included a question on physical insecurity, but practically no one considered themselves to be

insecure in relation to that query. Moreover, the two measures can be criticised of not reflecting poverty in a definite way, since people may choose in particular situations to use their resources for other purposes than food and housing (Sen, 1981: 27). This is particularly valid with respect to housing which moreover is complicated by the fact that a government programme is seeking to provide durable dwellings to scheduled castes. The two measures, and particularly the second, should accordingly not be seen as more than tentative representations of specific dimensions of poverty.

It is quite clear from Table 1 that households without access to land are very likely to lack food and to live in bad houses. Furthermore, having land in the command area of a tank is likely to put a household in a better position with respect to the two measures of poverty than holding dry land or leasing in land in a command area, even without considering the size of the landholdings. Thus, it is safe to conclude that not possessing land in a command area is an indicator of poverty in these communities. On the other hand, it should not be deduced that households owning land in a command area are immune to poverty. If lack of food and a non-durable or semi-dura-

Table 1. Land holding and poverty

	Households interviewed	Households who own land in the command area	Households who own dry land or lease in land in the command area	Households with no land
Big Tank	56	43	11	2
Honnasettihalli Tank	27	22	1	4
Households always or sometimes in lack of food	48%	40%	67%	100%
Households with non-durable or semi-durable houses	55%	48%	75%	100%

ble house are seen as manifestations of poverty, almost half of those having land in a command area could be characterised as poor.

In an Indian context, poverty needs to be contrasted with caste as well. This is done in Table 2 where a distinction between three types of castes is employed. The same two measures of poverty are used to indicate the proportion of each caste category being poor households. Again the testimony of the Table is fairly clear. Few, but still some, households belonging to ‘upper castes’ are poor according to the present standards. More households belonging to ‘backward castes’ can be described as being poor, and still more, not to say horribly many, families of ‘scheduled castes’ lack always or sometimes food. That backward castes are more disadvantaged than scheduled castes with respect to housing may be attributed to the above-mentioned government scheme supporting scheduled castes. Observations made in the villages strengthen this proposal.

(see, e.g., Baulch, 1996, Chambers, 1995) that poverty is associated with a number of factors which in combination significantly complicate poor people’s attempt to escape poverty.

Evidently, a questionnaire survey can only give some rudimentary ideas about poverty and the conditions of being poor. However, it can be concluded that poverty in the sense employed here is a feature that affects approximately half of the respondents. Furthermore, it seems to be related to tank irrigation in an ambiguous way as not having land in the command area of a tank is definitely an indicator of poverty but, still, even owners of land in a command area may be poor. Accordingly, institutionalised practices concerning tank irrigation are important to the poor in different ways. If they provide access to tank-irrigated land for those who do not have it, they may constitute an important opportunity to some groups of poor, and more directly they affect poor landowners by distributing the benefits that tank irrigation gives rise to.

Table 2. Caste and poverty

	Upper castes	Backward castes	Scheduled castes
Big Tank	26	13	17
Honnasettihalli Tank	7	6	13
Households always or sometimes in lack of food	24%	42%	77%
Households with non-durable or semi-durable houses	33%	79%	67%

The relationship between landownership and caste on the one hand, and food availability and housing conditions on the other is perhaps not astonishing, but it seems at least to be strong. The questionnaire indicates furthermore that the measures of poverty are related to the level of education as well. The proportion of illiterates is substantially higher among the poorer segments of the respondents. Thus, the data support the general conclusion in the literature

THE STRATEGIES OF THE POOR

Before turning to the institutionalised practices in relation to tank irrigation, I will deal briefly with the strategies of the poor in more general terms in order to put their concern with tank irrigation into context. Although there are differences of opinion depending on resources, opportunities, position, etc., different categories of the poor are surprisingly

much in agreement about the following list of prioritised goals:

- Getting land in the command area and dry land.
- Leasing in land for sericulture or paddy cultivation.
- Doing agricultural work in a group.
- Working as agricultural labourer.
- Working as casual labourer in the vicinity or the nearby towns.

Except for a few who have specialised in stone cutting and prefer this next to getting their own land, there is much agreement about this list and about agriculture being the crucial activity. This view is shared by women and men. Getting one's own land is clearly the top priority, though this is not likely to be an obvious possibility to many. In the above-mentioned survey, 41 respondents can be characterised as poor because they lack food sometimes or always or live in non-durable houses. Of these respondents, 16 have bought land at least once in their lifetime. Of these, 12 have bought 0.25-1.00 acre of land in the command area of a tank within the last ten years. The price of wet land seems to be at least four times the price of dry land, and it approximated 40-50,000 INR per acre in 1995-96. However, some argued that this was the price of an acre in the middle or tail reach of the command areas only, whereas an acre in the head reach easily amounts to 80,000 INR. Interestingly, only one of the 12 persons who have bought wet land within the last ten years, has been able to get a plot in the head reach, and this plot equals 0.075 acre! Accordingly, land in the head reach is almost unobtainable for the poor whether this is due to the price of the land or because it is rarely sold. At the same time it appears that the poor are not completely excluded from buying land,

although it is not an obvious economic opportunity to most of them.

Leasing in land typically on a sharecropping basis is highly valued by most of the poor. However, it was repeatedly stressed that to do so you need to have bullocks and cart. Landowners are not willing to lease land to people without agricultural implements because the harvest is likely to be smaller. Also, the costs for the sharecropper are probably too big if agricultural labour needs to be hired to substitute for bullocks and cart. There is a substantial incentive for the sharecropper to economise the costs since the landowner does not pay any of these, but takes half of the crop. As the costs often amount to one third of the value of the crop, the profit of the sharecropper is no more than one quarter (approximately 2,500 INR per acre at the time of the fieldwork) of the total net profits from his or her work! Nevertheless, it was argued that it is more profitable to be a sharecropper if you have agricultural implements than to be an agricultural labourer, and several respondents had taken loans to buy implements. People without bullocks and cart were quite eager to get them, but some had dismal experiences with repaying loans for bullocks that had fallen ill and died. Yet, the strategy of most poor people was to get bullocks and cart and thereby move from being agricultural labourer to leasing in land.⁶

The large landowners were not quite in agreement whether it is most profitable to cultivate land by hiring agricultural labourers or to lease out the land on a sharecropping basis. One stated that it is most profitable to hire labourers if you are not an absentee landlord

6 One of the large landowners argued that you need to cultivate 3-4 acres of paddy, 2-3 acres of dry land, and 1 acre of gardening to make profitable the acquisition of bullocks and cart. The strategy implies, accordingly, access to quite some land.

who works outside the village and therefore has to hire supervisors to monitor the work; another said that labour charges have increased more rapidly than the price of paddy and that it is no longer profitable to cultivate the land 'yourself' compared to leasing it out. This view was supported by some of the *neergattis* who said that the landowners prefer sharecropping in order to avoid the costs of agriculture. Since much of the land in this area is owned by absentee landlords or by people who are busy elsewhere and do not depend on an agricultural income, many landowners probably go for sharecropping. It seems to be just as much for reasons of identity and status than due to material considerations that these landowners keep their land.

Sericulture is another appreciated activity by both women and men depending on agriculture. Mulberry for the silkworms is typically grown outside the command area on dry land with a borewell. It needs a lot of water, but not as much as paddy, and it tends to be flooded if it is grown in a command area where everybody else is growing paddy. Apart from a borewell and bullocks and cart, sericulture also requires investments in baskets for the silkworms, stands for the baskets, fertilizer and agricultural labour for transplanting. The costs per acre are higher than for paddy production, but so are the benefits, and it is possible to produce approximately five harvests per year. It is a quite labour-intensive activity well suited for family labour since the tending of the silkworms takes place at home. Women, in particular, consider this an advantage. An important risk is related to the quality of the silkworm eggs that the farmers can get. They are difficult to assess beforehand so you have to rely on the seller. All in all, sericulture is more profitable, but also more costly and risky than paddy production. From poor people's perspective it is attractive to do sericulture as a tenant because it is an all-year activity, and the landowner pro-

vides both land and water. Some prefer it above sharecropping in the command area, but as it is more demanding than paddy production, and as most owners of dry land grow mulberry for silk production themselves if they have invested in a borewell, sericulture on a tenant basis is not very widespread. Still, sericulture is clearly regarded as a way out of poverty if the initial investments can be overcome.

Agricultural group work is another popular activity both among agricultural labourers and among landowners. The former argue that they earn more (in the order of 25-35 INR a day as an individual labourer and 35-50 INR a day if you are working in a group). Typically, the payment is different because the group is given a particular amount of money for transplanting (500-600 INR per acre), weeding (300-350 INR per acre) or harvesting (1,000-1,300 INR per acre)⁷ a specific plot. If the group speeds up its work, it can earn the money more quickly, whereas the daily wages for individual agricultural labourers depend less on their effort. The problem from the labourers' point of view is that agricultural group work is only available during the three mentioned operations which limits this activity to a couple of months every year. The landowners also seem to prefer labourers in groups, partly because they work harder, partly because less supervision is needed. Since the speed with which the different operations are carried out is important for the overall produce, landowners may compete for labour in these peak periods.

Working groups appear to be fairly heterogeneously organised, consisting of both women and men, small landowners and landless, people belonging to different castes, etc. The primary qualification for participating in a

⁷ The figures should be considered with care since they have not been confirmed by repeated observations.

working group seems to be the ability to work hard. If you stay away or do a lousy effort, you are not called upon in the future. While working groups undoubtedly are considered attractive by the poor, they are also one of the manifestations of the inequalities in rural Karnataka. In Honnasettihalli, a working group of some 30-40 persons is regularly completing the three operations on the land of the earlier mentioned four Brahmin brothers, and since the group comprises members of most households in the village, this arrangement bears witness to the general social subordination of Honnasettihalli to the Brahmins living elsewhere.

The above list of the poor's prioritised goals reflects their short term ambitions. Education of children is valued very much when it comes to the hopes for the future. Some parents argue that they want their children to get away from agriculture because of the hard work and the risks involved, and others say that they may be able to buy land with their children's salaries if these get a job in the government or elsewhere. Giving education to the children is, however, considered to be expensive due to the costs of transportation, books, clothes, etc. According to some respondents, Grama Vikas has supported people in Honnasettihalli with respect to the children's education, and some have set aside means for this purpose instead of investing in agriculture. Nevertheless, the poorest seem to have difficulties in pursuing this strategy because of the resources needed to do so and because the benefits are uncertain and materialise only in a distant future.

Migration is not considered an option by many among the poor. As mentioned above, it is regarded as too expensive to live in the cities, and few would like to give up the few resources that they have now. Moreover, it is much more difficult for the women to find work in the urban areas. Education is viewed as a condition for migrating which one respondent expressed

like this: "The people in Devarayasamudram can migrate because they have education. We have not." That the labour power in the rural areas cannot afford to leave is clearly an important reason why it is possible to uphold a situation where a minority owns the land and bags the profit while a majority has to cope with harsh living conditions.

DEALING WITH INSTITUTIONALISED PRACTICES

From the above it can be seen that people have different interests in tank irrigation depending on their resources, experiences and opportunities. It is also clear that tank irrigation is important to most people in the two villages and notably to the poor. Water for cultivation is a key constraint, and the poor are eager to secure it. The organisation of tank irrigation is therefore likely to be the object of significant concern and struggle. I will now focus on the two sets of institutionalised practices introduced above (in relation to water distribution and water scarcity) and discuss how different actors relate to them. My points are that the practices entail a specific distribution of the benefits accruing from the collective good; that there are 'grey areas' where competing institutional logics can be applied; that political changes interfere with the way that the practices ascribe particular roles to particular groups; and that the poor are not without possibilities of manipulating the practices to their own advantage.

The theoretical point I would like to bring forward is that people regard and relate to these institutionalised practices in an ambiguous and inconclusive way, for which reason they determine their objectives and strategies along the way depending on the particularities of the processes of interaction and struggle. There are few fixed interests which the actors pursue unequivocally, not least in situations,

like the present, where different institutional logics are equally pertinent to the problems at hand. This is not to say that material concerns are not important 'in the last instance', but to say that actors realise these concerns along the way when negotiating institutionalised practices, and that there are more solutions acceptable to the parties involved.

Water distribution

The *neergattis* are crucial persons in water distribution. No one else is allowed to open the sluices and distribute water, and the *neergattis* also decide how much water each plot is entitled to get. Besides, they have a number of duties such as checking the bund for leakages, keeping animals out of the command area, and organising the clearing of the field channels. It is typically also the *neergattis* who decide how much water the tank contains, how much of the command area that can be irrigated, and when to irrigate. On the other hand, they bear the responsibility of securing water to the fields once these have been sown.

Ideally, the farmers get two crops a year, the first one rain-fed and the second irrigated with tank water. If, however, rains are irregular and insufficient during the first season, the *neergattis* may decide to use whatever water the tank contains to save the crop. The *neergattis* are supposed to open the sluices early in the morning, to walk around in the command area to secure the distribution of the water, and to close the sluices at night. Accordingly, the idea is that they are present and always supervise the irrigation of the command area. They should also adjust the irrigation according to the needs of the different agricultural operations such as ploughing, weeding, fertilisation and harvesting.

The task of distributing water is hereditary and seems to be highly appreciated by the *neergattis*. They are entitled to a part of each farmer's production, and they have received

plots in the command area. It appears that the part of the harvest received by the *neergattis* has not changed for the last 40-50 years, although there is not unanimity as to the size of this proportion. In Big Tank, some say 15 kilogrammes per acre and some say 30. In Honnasettihalli Tank, the estimates range from 20 to 50 kilogrammes per acre. These discrepancies reflect probably neither absent-mindedness, nor wishful thinking on the part of the respondents, but rather the point that the *neergattis'* part depends on the size of the crop. If a farmer has had a poor harvest for anyone of a number of reasons, he is most likely to be able to negotiate his payment to the *neergattis*. The system of payment ensures, accordingly, that the *neergattis* are eager to provide the best possible conditions for crop production. The distribution of their plots in the tail, middle and head reaches in Big Tank also helps to assure that they endeavour to get water to all parts of the command area.

Particularly in Honnasettihalli, the *neergattis* present themselves as those who look after the common property.⁸ They are concerned about the whole command area and not just about individual plots, they seek to solve minor conflicts between the farmers, and they try to keep people out of the area so that they do not make tricks, as one said. Furthermore, they are very concerned about people who lead water into their fields themselves or who cultivate land in the command area that cannot be irrigated given the amount of water in the tank. As the farmers often exercise a very

⁸ The difference between Honnasettihalli and Big Tank is that the Brahmins play a more significant role in the daily management of the latter. In Honnasettihalli Tank, the differences in terms of caste between farmers and *neergattis* are much less important, and this is a rather specific feature of this case. Generally, *neergattis* occupy a clearly subordinate position vis-à-vis the farmers (Janakarajan, 1993, Shankari, 1991).

strong pressure to get water when their crop is growing, it is sometimes difficult for the *neergattis* to save water, but this can, of course, create criticism amongst other farmers when water is scarce. Therefore, the *neergattis* seem to support collective decisions on how much land to cultivate in the command area. They also support the sharing of land when water is scarce which fits nicely with an interest in preserving an organised tank irrigation. The more people who are satisfied with the existing system, the more likely it is that the *neergattis* can maintain the income and the status that they derive from their water distributing tasks.

The instability of the water distributing practices is exemplified by one respondent who stated that in 1985 everybody cultivated their land for a second crop in Honnasettihalli, but water was insufficient and all the plants dried out. After that, he argued, they decided to assess the amount of water and how much land to cultivate. Thus, it seems that some of the tasks of the *neergattis* may have been (re)invented, which partly can be explained by the fact that Grama Vikas was established in Honnasettihalli some twenty years ago and showed some interest in tank irrigation. Another example of the fluidity of the practices was provided by a *neergatti*, also in Honnasettihalli, who argued that it is not allowed to pump water from wells in the command area to dry fields outside it because this would in reality tap water from the tank. Yet, when somebody actually did it, no one in the village criticised it. Others said that the person in question had not yet started the illegal action and wanted to ask the community first.

It is clear that some of the institutionalised practices with respect to water distribution are more accepted than others. In Big Tank and Honnasettihalli Tank, no one disputed the usefulness of having *neergattis* to irrigate the command area. Some were not satisfied with

their work, but did not question the principle of delegating water distribution to a few persons specialising in this task. Nor did anyone challenge the remuneration of the *neergattis* in the form of plots in the command area and a share of the harvest. However, when it comes to the use of water from wells in the command area, the practices seem to be much less certain. Since these wells are fed by water seeping into the ground from the tank and the command area, one could easily argue that this water is common property. Also in relation to the cleaning of the field channels, the practices were uncertain: Some argued that this is the duty of the *neergattis*, while others held that it is a common task.

The institutionalised practices of water distribution in which the *neergattis* have a central role, appear to be important for the different groups of poor people. Generally, the poor were satisfied with the functions performed by the *neergattis*, and it was often mentioned that the poor are most anxious to cultivate the command area for a second crop when water is scarce. As described above, the poor in these communities rely on agriculture to a very large extent, and since very few of them have access to borewells, tank irrigation provides an important opportunity for agricultural activities at a moment when rain-fed agriculture is not possible. In other tanks, water distribution by *neergattis* has broken down for a number of reasons, and the only way to cultivate a second crop is with the help of a borewell. As landowners investing in a borewell are most likely to till their land themselves, the poor – whether they want to cultivate their own plots in the command area or seek to establish sharecropping arrangements – are not likely to be able to do so.

The way in which the *neergattis* are paid is also favourable to the poor, because it turns the *neergattis* into advocates of tank irrigation; because it stimulates the *neergattis* to secure ir-

rigation of marginalised land, e.g., in the tail end; because at least in principle rich farmers are not allowed to pay to get water at the expense of poor farmers; and because the payment is dependent on the production in the sense that the *neergattis* cannot get a share of the harvest if it fails. Accordingly, the institutionalised practices in relation to water distribution ensure to some extent that resourceful farmers are not able to capture an exorbitant proportion of the benefits from tank irrigation, and that the common good is accessible to the poor.

The *neergattis* are not above reproach, however, and the criticism reflects the changing political context of tank irrigation. Historically, the *neergattis* belong to the scheduled castes performing manual, agricultural functions. During a number of years, government policies have sought to favour the scheduled castes through, i.e., house construction schemes, credit programmes and positive discrimination as to government employment. These policies have had the effect that scheduled caste people are less prepared to accept a subordinate position. According to respondents from upper castes, the result has also been that any criticism of the *neergattis* is turned into an inter-caste conflict. A respondent belonging to the 'backward castes' argued that the *neergattis* are wasting water because they open the sluices in the morning and then tend to other business elsewhere. He had, however, given up discussing the matter as "even the Brahmins dare not say anything" and the law and government are in favour of the scheduled castes. A Brahmin respondent was even more explicit when stating that the *neergattis* do not assure sufficient water, do not clean the field channels and sometimes steal the crop. Since there is no authority and everybody is master, this Brahmin had decided to be on good terms with the *neergattis* to avoid an inter-caste conflict.

An account by the same Brahmin bears witness to the significance of the caste sentiments:

In the old days, one could tell the scheduled caste people what to do, and there would never be any trouble. They would never dare to come inside the house, and if you gave them food, they would not touch it, before you had left. Nowadays, they like to take the food directly from your hand to provoke you, and if you utter any disapproval, they will go around and say that you think a lot of yourself.

An episode during the fieldwork brought out the importance of the caste issue: In a nearby town, violence broke out due to a traffic accident. A man was killed by a 'tempo' (a van for passenger traffic) possibly because the driver was drunk. A lot of people started to attack tempos and lorries and break their windscreens. In Devarayasamudram, some Brahmins quickly described the troubles as organised by scheduled castes, but later it became clear that the Balijas, who are close to the Brahmins in the caste hierarchy, were the primary responsible for the violence. The social role of people is still substantially linked to their caste, and conflicts are quickly interpreted along the lines of caste differences. The latter is not conducive for the solution of conflicts over water distribution, and it shows that tank irrigation and the role of *neergattis* cannot be analysed isolated from the changing social and political contexts.

Water scarcity

As mentioned above, there is a number of important questions to address when water is scarce: Which crop to grow, and which area to cultivate on which conditions? The practices in these respects are much less institutionalised than in relation to water distribution, probably because farmers have more opposing

interests in this field and because the practices are exercised with irregular intervals of sometimes several years. In the questionnaire survey, people said that the last time they had cultivated land within a restricted area was in 1991 in Big Tank and in 1994 in Honnasettihalli Tank. While there may have been other occasions where a restricted part of the command area has been cultivated, it is clearly not every year that it becomes pertinent to consider what to do with a sub-optimal amount of water in the tank.

One issue has to do with the distribution of land in the restricted area. Owners of land in the head reach of Big Tank argued strongly that they are not obliged to share their land with anyone. The normal rules apply in the sense that you can choose to cultivate your land or to lease it to someone on a sharecropping basis. It was claimed that the price of the land in the head reach is higher than the land in the rest of the command area, precisely because it is typically the restricted part of the command area that is irrigated when water is scarce, and this justifies the landowner's right to decide by himself what he wants to do. Also in Honnasettihalli Tank some said that the landowners can choose as they please. However, one argued that when they meet to decide what to do with the limited amount of water, it is very difficult for landowners to deny sharing in front of everyone. A counter argument was that the plots have become so small due to land fragmentation that it is difficult to share with others. Some suggested that the *neergattis* should refuse to irrigate the plots of landowners who do not share their land with others since water is a community property, and everybody in the community should therefore have a right to land in the restricted area. Evidently, these different arguments seek support in either notions of private ownership of land or ideas about water as a common property. Since both resources are necessary for produc-

tion, the ability to reason convincingly is crucial.

Another issue has to do with the payment to the landowners for cultivating their land in the restricted area. A few interviewees stated that it is not necessary to pay anything because of the farmers' right to get land in the restricted area when water is scarce. However, it is quite clear from the questionnaire survey that it is common practice to pay half of the crop to the landowner, apart from cases where tenants have got access to very small plots (less than one tenth of an acre) or where there is a special relationship between the landowner and the tenant. There is no difference on this point between the two tanks. It seems therefore that the practice of sharecropping overrules the principle of equal access to water that could be said to imply equal access to land within the restricted area for all owners of land in the command area. In another tank, also in Kolar district, it has been practiced to allot a share of the restricted area proportionate to the size of one's landholding in the command area (Ramaswamy et al., 1985, Somashekhara Reddy, 1995). Here, the tillers do not furnish the landowner with a share of the crop, as the right to water precedes the right to land for farmers having land in the command area.

On November 12, 1997, a meeting, which I attended, was organised in Honnasettihalli to decide how to make use of the water in the tank since the rains had been meagre, and the season of the second crop was approaching. The meeting took place on the grounds of Grama Vikas, and the director of the NGO showed up a few times. After a long time of small talk, waiting and walking to and fro, some twenty men were gathered, and the discussion began with a question from one of the two persons whom many identified as the most influential. One is a member of the taluk council, but does not have much land himself. The other is an enterprising man who looks after the property

of the four Brahmin brothers and who has succeeded in sericulture. Both of them belong to the scheduled castes. The sericultivator asked the *neergattis* about the amount of water in the tank and got the answer that there was not sufficient water to cultivate the whole command area. Then, more people started to argue that those having land in the tail end or high-lying land should be able to get land in the head reach within the restricted area to be irrigated. One suggested that they should go for a less water-consuming crop such as *ragi* instead of paddy. The sericultivator and another landowner opposed that owners could be forced to share their land with others, and they spoke even in favour of the right to leave land within the restricted area uncultivated. The discussion was clearly complicated by the fact that more than two thirds of the head reach is owned by the Brahmin absentee landlords who were not present, although they were represented in one way or another by the sericultivator.

The discussion went on with some claiming that the owners of land in the head reach should stand forward and donate land to others. This was clearly rejected by the sericultivator who said that people can come and ask for land. Another argument put forward was that owners of much land in the tail end should not be excluded from the restricted area. It was suggested to postpone the decision to see whether more rain would come to increase the amount of water in the tank. Other issues popped up now and then and diverted the focus from the question of the sharing of the restricted area: One complained that he had not got water on a particular occasion; others wanted to consult farmers from other villages having land in the command area; and fish rearing in the tank was also brought up. At some stage, the sericultivator decided authoritatively that *ragi* should be cultivated. However, this did not stop the discussion, and more or less the same arguments were reiterated. At the same time, several farm-

ers wanted to stop the discussion and go home. Having discussed fish rearing and the varieties of breed for some time, the sericultivator and the member of the taluk council concluded that they should meet again after a couple of weeks.

The meeting did not last much longer than 45 minutes after the initial waiting and gossiping, and it had a rather cyclic nature. The same positions with respect to sharing of the restricted area for irrigation were repeated interrupted by other comments. It seemed that there was not much disagreement whether owners of land in the restricted area should give land to others for sharecropping. The question was rather how this should take place and according to which institutionalised practice: The practice that owners of land in the command area have a right to irrigated land or the practice of sharecropping. Some participants expressed their dislike of begging for land, and this was no doubt a crucial underlying question in the debate. However, the issue has also a longer-term consequence for how tank irrigation is considered, namely to what extent do landholding rights prevail over rights to water. Irrigation of a restricted area is a kind of intermediate situation, a 'grey area', where different institutional logics are possible to use, and the cyclic nature of the meeting reflects the attempts by different actors to apply a particular logic to this situation.

CONCLUSION

This working paper has discussed the strategies of poor people and other social actors in relation to two sets of institutionalised practices of tank irrigation. The two tanks, which form the basis for the discussion, are in many ways peculiar and very far from representing tanks as such. They have fairly well-established institutional practices for tank irrigation,

Devarayasamudram is historically a powerful and wealthy village with substantial social and political ties to the surrounding world, and Honnasettihalli is atypical by hosting the headquarters of an NGO, Grama Vikas, which substantially influences all aspects of social life in the village. Any generalisation to tanks and tank irrigation as such on the basis of these particular tanks would be unfounded. Still, five conclusions and one theoretical implication can be drawn.

First, the institutionalised practices with respect to water distribution and in situations of water scarcity have distinct consequences for the distribution of the benefits flowing from tank irrigation. To the poor, who rely very much on agricultural activities, tank irrigation provides a number of opportunities compared to existing alternatives. During the rainy season, it constitutes a safety net if the rain is erratic, and it may supply water for a second crop during the dry season. Moreover, the specific organisation of tank irrigation with a *neergatti* being the sole responsible for water distribution is also advantageous to the poor. To some extent it ensures an equal access to water for all owners of land in the command area. Thus, both the management of tank irrigation and its specific institutionalised practices provide important opportunities for the poor in Devarayasamudram and Honnasettihalli.

Secondly, there is some scope for owners of small plots of land and landless sharecroppers to negotiate and influence the institutionalised practices to their own advantage. As the *neergattis* belong to the scheduled castes and are eager to secure irrigation of even marginalised parts of the command area, many of the poor feel that the *neergattis* represent their points of view in tank irrigation. Furthermore, when it comes to the 'grey area' of how to organise cultivation when there is a limited amount of water in the tank, the poor can present strong reasons to get access to land by referring to

water as a common property. Although they did not get through with this idea during the meeting discussed in the previous section, the poor at least avoided a decision which would leave it to the owners of land in the restricted area to do as they please.⁹ The poor may accordingly draw on values and ideas embedded in particular institutional logics that are likely to further their interests.

Thirdly and rather predictably, the political context in which the communities exist affected tank irrigation and its organisation. Government policies to improve the conditions of the scheduled castes have strengthened the bargaining power of the poor. There is much scope for turning divergent interests into an inter-caste conflict which has meant that farmers belonging to non-scheduled castes are nervous about criticising the *neergattis*. On the one hand, this may lead to a reinforcement of tank irrigation since the poor, many of whom belong to the scheduled castes, are very anxious to secure irrigation. On the other hand, it may also destabilise tank irrigation if the landowners, most of whom belong to non-scheduled castes, feel that tank management has evolved into a caste conflict. The institutionalised practices in relation to tank irrigation are sophisticated and cannot cope with significant social conflict that may cause an individualisation of irrigation (see Janakarajan, 1993). This would be a clear disadvantage to the poor.

Fourthly, an important reason why small landholders and landless sharecroppers can influence tank irrigation in Honnasettihalli and Devarayasamudram is that the more significant landowners are less and less concerned about the yields of their land. Their income-earning

⁹ My own role, attending this meeting, should not be underestimated. Especially when the discussion touches upon issues of justice and fairness, there is little doubt that the presence of an outsider has a bearing on the debate.

strategies focus mainly on opportunities outside the villages through wage labour, business or remittances from family members who have migrated to Bangalore and abroad. The four Brahmin brothers, who own a substantial part of the command area of Honnasettihalli Tank, work and live outside the village, and most of the big landowners in Devarayasamudram have at least two family members abroad. Accordingly, they are not dependent on their land, which to a large extent plays a symbolic role to them. Land is linked to status, especially for older people who prefer to stay in the villages, and their major concern with respect to the land is to exercise their prerogatives as landowners. Indeed, they may be more eager to have their land cultivated and tank management undertaken than to maximise yields.

Fifthly, the practices in relation to tank irrigation are more institutionalised in some respects than in others, and people regard them with various degrees of ambivalence. The practices dealing with water distribution are quite institutionalised, not least because they are exercised regularly, but also because they do not provoke generalised conflict. The practices in relation to water scarcity are much less institutionalised, they are object of openly conflicting interests, and they have to be negotiated in each concrete situation. At the same time, people regard the practices with ambivalence no matter how institutionalised they are, and this comes out clearly in the role of the *neergattis*. They are doing a job which most farmers in principle appreciate. It is useful, and it reflects values of community and fairness. Thus, the institutionalised practices of water distribution form part of everyday life, and in this sense the farmers respect them. However, some farmers criticise the water distribution by the *neergattis*, and sometimes farmers break the rules and lead water into their fields themselves because they find that the practices or the way they are exercised are unfair to them. Thus, farmers en-

dorse many of the practices of tank management, but they do not defend them enthusiastically.

Turning to the theoretical implications, I suggest that the above-mentioned ambivalence indicates that institutionalised practices, and institutions for that matter, are neither an objective social reality which the actors assess and negotiate, nor internalised ways of acting which are never questioned. They are a way of going about a particular situation or problem, and have to be re-enacted time and again in order to be significant. They are, nevertheless, very important for how people act and how specific goods are distributed. Accordingly, it becomes crucial to different actors to establish a particular set of practices in 'grey areas' where no clear institutional logic prevails. This is the way one can interpret the discussions and very different viewpoints of what to do when there is too little water in the tank to irrigate the whole command area. Since this issue is disputed and comes up only at intervals of several years, the contest is to apply the practice of common ownership of water versus that of private ownership of land. No one disputes that tank water is a community property or that land is private property, but the question is what to do when these institutionalised practices contradict each other. The farmers will typically look upon this question from a material perspective and assess which practice will benefit them the most. However, since most farmers share the view that these two institutional logics are relevant and valuable both in their respective fields and in the case of water scarcity, the farmers find themselves in an ambiguous situation when they have to decide how to cultivate a restricted part of the command area. For none of the farmers, there is a clear, unambiguous solution to the problem. However, from the perspective of the poor, the 'grey areas' of negotiation implied in the water distributions practices discussed in this chapter

open up for the possibility of contesting existing power structures and relations of inequality. Or to phrase it differently, inconsistencies of institutionalized practices, which are likely to characterise access to natural resources, may provide opportunities for the poor to improve their living conditions.

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