Conflicts over Canal Water for Irrigation in Mandya District, South India

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Abstract

The article highlights several conflicts over canal irrigation in Mandya district, which spearheaded the green revolution in Karnataka. Intensive cultivation of paddy and sugarcane, based on canal irrigation from the Krishnarajasagar dam and reservoir, has brought relative prosperity to the district. But it has also created conflicts between those who are favoured — by land ownership, location, caste and political backing — and those who are not. While the conflicts are played out between individuals, they are often reinforced by caste differences, notably between the major farming castes, Vokkaligas and Lingayats, and between these and the Dalits. The problems in Mandya are compared to those in the Cauvery delta, which were illuminated in a previous article. Political interference in the water conflicts tends to exacerbate the problems. Parsimonious use and equitable sharing of water could lead to a more just and sustainable development.

Introduction

This is the third and last of a series of articles focusing on conflicts over natural resources in South Indian agriculture. The first article (Folke 1998) deals at a general level with the conflicts over land and water in various parts of the Cauvery basin and relates them to the inter-state dispute over the Cauvery river between Karnataka and Tamil Nadu. It also presents the design and method of the extensive field study that forms the basis of all articles, as well as the political economy perspective which informs them. The second article (Folke 2000) gives a detailed account of a number of conflicts related to canal and well irrigation in the Cauvery Delta. Moreover, it discusses at a theoretical and at a practical level the difficulties involved in establishing relevant water management institutions, notably Water Users Associations. The present article highlights several conflicts related to canal irrigation in Mandya district. It thus provides more substance to some of the arguments of

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the previous articles and discusses similarities and differences between the situation in Mandya and that obtaining in the Cauvery delta.

The Visvesvaraya Canal System

When the first seeds of the green revolution were sown around 1960, Mandya district — like Thanjavur district in the Cauvery delta of Madras state — was selected to pioneer the introduction of the new strategy in Mysore state under the Intensive Agricultural District Programme. The main reason for this was the comparatively favourable conditions for irrigated agriculture, mainly based on canal irrigation originating from the Krishnarajasagar (KRS) dam on the Cauvery, which was completed in 1933\(^1\). These favourable conditions exist in particular in the southern part of the district irrigated by the huge Visvesvaraya Canal (VC) system\(^2\) as well as by some minor canal systems. All the 13 sample villages are located in this part of the district, so selected as to cover both the upper, the middle and the lower reaches of the VC system. But although this part of the district is favoured, the situation is different from that obtaining in the Cauvery delta where virtually all land in the sample villages in principle is covered by canal irrigation.

All but two of the sample villages in Mandya, have substantial drylands as well as lands irrigated by canal (and to a much lesser extent tanks). In most of the villages the wetlands are more extensive than the drylands, and owing to the higher productivity and the possibility of taking several crops a year irrigation-based farming is much more important than dryland farming. One village, favourably located near the head end of the VC system, has only wetlands, and one village in the midst of the area for topographical reasons has only drylands. The contrast between two villages in this area, dominated respectively by wet and dryland agriculture, was the subject of T. Scarlett Epstein’s classical study ‘Economic Development and Social Change in South India’ (Epstein 1962). When I first visited some of the villages (including several of the sample villages) in 1959–60, i.e., before the green revolution, I was struck by these contrasts. Now, forty years later, the contrasts remain, but irrigated agriculture has been extended, bringing relative prosperity to the entire region.

Generally speaking, canal irrigation is far more important than either tank or well irrigation in Mandya district, particularly in the southern part. For the district as a whole, 40 per cent of the net sown area was under irrigation in 1993–94. Roughly 25 per cent of the cropped area was sown more than once, reflecting the practice of double cropping in most irrigated lands. Out of a total net irrigated area of 1,03,969 ha, 86,471 ha (83%) was by canal, 8,353 ha by tanks, 6,633 ha by open wells, only 986 ha by borewells and 1,526 ha by other sources (Government of Karnataka 1996). Thus in terms of the sources of irrigation the situation is comparable to that in the Cauvery delta. Canal irrigation is almost as dominant, well irrigation
covers roughly the same, around 7 per cent, but tank irrigation is somewhat more important, although still quite marginal. However, many tanks have been converted into ‘system tanks’, fed by the canals, and others enjoy the advantage of receiving seepage water from canals in addition to rainfall.

Problems in Canal Irrigation

Over the years the Visvesvaraya Canal system has been extended to cover a larger area than anticipated. The VC system was designed to irrigate 1,20,000 acres (49,000 ha). In the mid-1960s it was stated to cover 44,000 ha (Government of Mysore 1967:110), but at present it covers roughly 74,000 ha. Around 95 per cent of this area falls in the southern part of Mandya district dealt with in this study. The main canal from the KRS dam is led through a 3 km-long tunnel (Hulikere tunnel) before it divides into several branches and fans out into numerous distributaries in three main sectors. Some of the more distant branches get regular supply of canal water only during the kharif (monsoon) season. Even so, the entire VC system has severely overstretched its capacity.

Moreover, the canals, branches and distributaries as well as the tanks generally are not well maintained owing to lack of funds. For instance, there are concrete plans to desilt 68 system tanks (out of a total of 211 tanks). According to these plans, silt covering 20 per cent of the tank capacity will be removed. The total cost of this, however, is budgeted at Rs.103 crore, an indication of the magnitude of the task. Apart from reasons of cost, maintenance and desiltation of the canal system is being resisted by the farmers because it may imply the prolonged closure of canals. The state government had planned the closure of the Visvesvaraya Canal for four to five months from February 1996 in order to execute maintenance and improvement works. But this was met with strong protests from both farmers and political parties forcing the government to backtrack on the issue.

The problems are exacerbated by the cropping pattern, which is entirely dominated by the most water-demanding crops, paddy and sugarcane. The VC system was originally designed for one-third under paddy, one-third under sugarcane and one-third under semi-dry crops like ragi (Eleusine coracana) and other millets. But today out of a total of 74,000 ha, 45,000 ha are under paddy and 24,000 ha under sugarcane. This leaves a mere 5,000 ha for other, less water-demanding crops. Thousands of farmers thus violate the rules governing cropping pattern.

On top of this comes the widespread illegal tapping of water from the canal system, either by breaking pipes, or damaging sluice gates or by installing energised pumpsets to pump water from the canals. Several cases of such unauthorised use of surface water will be dealt with in what follows.

Evidently, all these problems set the stage for conflicts between farmers and villages over water from the canal system. At all levels in the system there are
widespread conflicts between the more fortunate head-enders and tail-enders who are often denied their rightful share. Moreover, the illegal tapping of water has consequences for those further downstream, notably in the Cauvery delta, and hence adds fuel to the inter-state conflict between Karnataka and Tamil Nadu.

In terms of well irrigation the situation is different from that in the Cauvery delta in several respects. Whereas the wells in the delta everywhere are used in conjunction with canal irrigation this is only partly true in Mandya district. The existence of extensive drylands here entails considerable use of well irrigation in lands that do not receive any water from canals or tanks. In most of the sample villages there are wells both in drylands and as a supplementary source of irrigation in wetlands. But in all the villages (except the one with only drylands) the role of the wells is secondary — and often quite marginal — when compared with canal irrigation. None among the sample villages has a coverage by well irrigation comparable to the best endowed sample villages in the delta, and the water markets are not as highly developed as there.

In the main Visvesvaraya Canal water flows continuously for 320 days a year. Generally, there is enough water in the canals — at least in the upper and middle reaches — from June till January, and this, in combination with the monsoon rain, makes it possible to grow two paddy crops in lands that are close to the head-end canals or tanks which are used to store the water. But in most of the lands there is only enough water for one long-duration paddy crop, sometimes followed by a dry crop, typically ragi or one of the pulses. Moreover, in the tail-end parts of the VC system (at several levels) the amount of canal water has been reduced over the years by the expansion of the system and the concomitant dilution of the water resource.

Conflicts over Canal Water

In most of the sample villages it was reported that year after year there are conflicts between individual farmers over canal water in the dry season. This notably was also the case in the better off villages near the head end of the VC system. From January onwards (until May) there is hardly any rainfall and the amount of water in the canals is reduced. As mentioned above, some sectors get no canal water at all during the dry season, and those that do are usually supplied with water for about a week followed by a break of two to three weeks (repeated in a regular pattern). In comparison with the more fortunate parts of the Cauvery delta, the consequences of scarcity of water in the dry season are more severe because well irrigation as a supplement or alternative is not developed to the same extent in Mandya district.

More serious conflicts between groups of farmers at the head end and tail end of the distributary within a village were encountered in several villages. In some such cases the conflicts are amplified when different castes happen to be
involved. In a village (No. 17), for instance, in the lower reaches of the canal system, the dominant Lingayat caste (150 families) owns most of the irrigated lands, located at the head and middle reaches of the distributary. There is also a smaller group of Vokkaligas (90 families), the other major farming caste that is dominant in many villages in Mandya district, but which in this particular village constitutes a less well-endowed minority. Lastly there is an unusually big group of Dalits, mostly Adi Karnatakas. In fact the Dalits (200 families) are more numerous than any of the other castes, but their position is clearly inferior and their lands are located at the tail end of the distributary. Almost all Dalit families in the village acquired small plots of land (usually less than an acre) forty years back with government assistance.

Most of the lands owned by Dalits are drylands, but some 100 Dalit farmers have limited access to canal water. The farmers we interviewed were reluctant to give details about the disputes over water within the village, no doubt out of fear of reprisals from the Lingayats. During our first visits to the village the existence of disputes between head- and tail-enders was readily acknowledged, but most informants (notably among the Lingayats) claimed that amicable solutions were generally found, usually involving the good offices of a group of respected village elders. However, after several visits a different picture emerged:

Initially, after the Dalits had acquired lands they usually got their share of water, enough for an irrigated crop in the main kharif season. However, after the construction of more canals elsewhere in the VC system this village near the tail end gets less water on rotation. Recently, 200 acres of wetland have actually been reclassified as dryland. In the wetlands usually there will only be canal water during July–November and for only two to three days a week. The Lingayats for many years have appropriated the lion’s share of the canal water, taking advantage of the favoured location of their lands as well as their power in the village. In violation of the stipulated cropping pattern (the Dalit farmers claimed) most of them have been growing paddy and mulberry and even sugarcane (only farmers with wells), i.e. highly water-intensive crops. The consequence has been that in most years even the Dalit farmers with access to canal irrigation have been able to cultivate only dry crops like *ragi*.

Year after year they have protested and discussed the matter with the Lingayats, but to no avail. They have also frequently appealed to the engineer concerned in the PWD, but he usually professes his inability to do anything by referring to the dwindling amounts of water in the main canal. They have even organised *dharnas* (sit-down demonstrations) in front of the PWD office, but in vain. Sometimes the Lingayats also initiate such *dharnas*, but this is viewed by the Dalits as shrewd attempts to defuse the conflict within the village by directing attention towards the responsibility of external bureaucrats. Appeals to the local MLA in some cases have resulted in canal water being released for an extra day or
so. But by and large the Dalits have been compelled to accept their fate in terms of scanty supply of canal water.

Nevertheless, the situation of some of the Dalit families has been greatly relieved by government intervention. They have got assistance for drilling of wells and installation of pumps under various government schemes like the Million Wells Scheme, the Special Component Plan, and the Ganga Kalyana. The SC/ST office in Mandya has been helpful in facilitating their access to the government schemes.

Around fifteen Dalit farmers have open wells with pumps, whereas another fifteen Dalit families have installed borewells. This has been acquired with varying degrees of financial support from the government, in some cases free, in other cases with 60 per cent of the cost covered. In one case the borewell benefits a group of six to seven Dalit farmers, each owning one acre of land or less. Because their lands are quite distant from the canal, and owing to a fall in the groundwater table, the borewells have been drilled to depths of 150–200 feet or even more. In the early 1980s when the first borewells were drilled, the groundwater could be reached at 60–100 feet depth. As a consequence of the government support in this village there are as many Dalits with energised wells as farmers from the dominant farming castes, Lingayats and Vokkaligas; this is quite unusual. Even so, it is the slightly better off Dalits who have been able to avail of the government assistance for wells. The majority still have to rely on rainfall and some canal water.

Generally speaking, the Dalits have to accept the power equation that subordinates them to the dominant caste. Many among them also work as agricultural labourers on lands owned by the Lingayats, which of course produces a special dependency. Moreover, it is a sign of the power relations that the Dalits are not allowed inside the main village temple by the Lingayats.

In an interesting development a young, educated Dalit woman from this village was elected chairman of the gram panchayat, covering several villages. This election evidently was the result of the government’s reservation policies (with reservations for Dalits as well as for women). We interviewed her and found her quite articulate and assertive except when we took up agricultural issues, which she preferred to refer to her husband. But we also interviewed a group of leading Lingayat farmers who dismissed the significance of this and appeared to be certain that they and their caste fellows could handle it in a way that would not jeopardise their hold on village affairs.

The conflicts in the described village may be contrasted with the conflicts in another nearby village (No. 16). The distance between the two villages is just around 10 km and they are similar in many respects. But village No. 16 is even more unusual than village No. 17 in the composition of its population. In this village Dalits form an outright majority (200 families). In terms of numbers the main farming
caste in this village, Urs, constitutes a small minority (30 families). Even though their landholdings tend to be larger than those of the Dalits, most of the lands in the village are actually owned and cultivated by the latter. They have obtained lands for cultivation by various means. Some Dalits got surplus land during the land reform of 1974, some have purchased their lands, some are engaged in share cropping and some have encroached on lands and taken up cultivation. The encroachments have given rise to unresolved conflicts between Dalit and Urs families.

This village is not located quite at the tail end of the VC system as village No. 17, but the difference is marginal. Even in this village canal water is supplied only during the kharif season but for only two to three days a week. Previously, the village used to get water six days a week, but this practice was discontinued in the mid-eighties. In general, farmers with access to canal water can grow one paddy crop. Around twenty farmers, half of them Dalits, have a borewell or pumpset; these farmers may grow two paddy crops or sugarcane. The scarcity of canal water leads to repeated conflicts between head- and tail-enders within the village. But here the Dalits have lands both at the head, middle and tail end of the distributary within the village. In conjunction with the numerical superiority of the Dalits this results in a different pattern of conflict. Conflicts over water here tend to be played out between individuals without widening into caste conflict.

When the farmers are unable to solve the conflicts themselves they are usually solved by a PWD engineer. A Water Users Association has been formed, the first in Malavalli taluk, and it is hoped that this among other things will ensure a more equitable distribution of water.

During our several visits to this village (which I had also visited previously) we observed that the Dalits were quite assertive. A number of them have received higher education, and there is a unit of the Dalit Sangasha Samithi, which fights for the rights of Dalits, in the village. We conducted group interviews with farmers in mixed groups, notably Dalits as well as Urs, and everybody expressed the view that on the whole the different castes were on good terms. The contrast to village No. 17 is striking and no doubt related to the overwhelming numerical superiority of Dalits in village No. 16.

Village No. 16 also happens to be one of the villages investigated by Aase Mygind Madsen in her study of the upward mobility of Dalits (Madsen 1996). Although the topical context is different, our observations tend to reinforce hers. Numerical strength, land ownership, and education have contributed strongly to the position of Dalits in this village, which in turn has provided a different setting for the conflicts over water.

Conflicts between villages over canal water were encountered in several sample villages. Village No. 17 (described above) has not only internal conflict, but also regular conflicts with two neighbouring villages. All three are at the tail end of
the VC system, and every year (usually in June) they fight over canal water. During one of our visits to the village we could observe that somebody from one of the neighbouring villages had torn down a concrete-reinforced bund next to a closed sluice gate in order to tap unauthorised water from the canal. Sometimes the confrontations between farmers from the involved villages turn violent with brandishing of swords and actual use of sticks, agricultural tools, etc. Usually the conflicts are solved by the intervention of an official from the PWD who sometimes threatens to cut off water to all three villages if they do not find a solution.

In another village (No. 18) the farmers complained that they, as well as five neighbouring villages, were denied their rightful share of canal water almost every year due to the interference of a powerful local politician with vested interests, including lands, in a neighbouring group of villages. Year after year water has been unlawfully diverted to a tank serving these villages. They have repeatedly complained to the Irrigation Department, but without result because of the power and influence of the politician who has for some time been a minister. This conflict thus is heavily politicised with some of the combatants belonging to the two main rival parties in the area, Congress and Janata Dal. The villagers have tried to mobilise their own MLA, but complain about his lack of interest in the matter and explain this in terms of the peculiar location of the village. Because the village is in Maddur taluk, but belongs to a constituency of Malavalli taluk, the MLA does not look after it properly, and hence they do not get his assistance in the water conflict. Recently, however, it appears that the conflict has been solved as the politician at the centre of the controversy has sold his lands in the neighbouring village. Since then canal water has been available to village No. 18.

Illegal Pumping of Water from Canals

We now turn to a different type of conflicts, namely, the unauthorised drawing of water from canals with privately owned pumpsets, either electric or diesel-fuelled. Although this practice is illegal under the Karnataka Irrigation Act it is widespread in the VC system. In most cases it involves individual farmers who lift water for their own fields by applying a pumpset and a tube to the canal water. Usually there is no localised conflict around this since the individual appropriation is negligible compared with the water flow in the canal, and since the victims of this water theft are far downstream at the tail end of the canal system. Here follow two interesting cases of this practice that are both fairly large-scale, but in other respects quite different. The first case deals with a group of enterprising farmers who have made a lucrative business out of selling water, illegally tapped from a canal, to other farmers. The second case deals with a group of farmers who lifted so much water from a canal that a major conflict arose between them and their fellow farmers in the same village.
In village No. 19, located on the banks of a major canal, there are numerous farmers who draw water from the canal, using either their own pumpset or a rented one. The village also gets authorised canal water, which is partly stored in a system tank before being released. Even in this village the rivalry between Congress and Janata Dal is evident in the water affairs. Under the Janata Dal government in the mid-1980s it was promised that the tank capacity would be increased by desiltation and heightening of the dam. This would have considerably increased the area under irrigation. But when the Congress government took over, this plan was scrapped. Instead, the village was promised a public lift irrigation scheme, which, however, has not materialised.

Although the village is located somewhere in the middle of the VC system, water is usually sufficient only for one paddy crop. But since the main canal carries water most of the year farmers with access to water pumped from the canal can easily take two crops: in many cases two paddy crops, in some cases paddy and ragi or mulberry and in a few cases (long-lasting) sugarcane. Some small farmers with lands close to the canal rent mobile, diesel-operated pumpsets (Rs.10 per hour for a 5 HP pump, Rs.15 per hour for a 10 HP pump) and irrigate their own lands. A group of about ten bigger Lingayat farmers have invested in permanent, electrically-operated pumpsets, installed on the bank of the canal. They lift water for their own lands and also sell water to other farmers with adjoining lands.

This practice started about twenty-five years back, but has been considerably expanded since then, particularly after the introduction of the flat rate payment for electricity in 1980 (Rs.50 per HP) and all the more after the policy of free electricity for pumpsets (up to 10 HP) came into force in 1992. It is interesting that the Karnataka Electricity Board (KEB) has not objected to furnishing power connection to these pumpsets in spite of the illegality of water lifting from canals. The provision of electricity to these pumpsets also violates a rule that stipulates a certain minimum distance between electrically operated pumpsets and canals. We were unable to find out whether the power connections had been obtained by bribing the KEB personnel or as a reflection of de facto government policies tolerating — and semi-officially encouraging — this unauthorised use of water.

There are many problems with the regular supply of electricity, insufficient capacity, voltage fluctuations, etc. During summer, when the problems reach a peak, the KEB usually resorts to load shedding from 6 a.m. till noon. But immediately after noon all farmers switch on the pumps, with the result that the system gets overloaded and breaks down. This happens frequently to pumpsets everywhere in the region.

The ten enterprising farmers have installed pumpsets with motors ranging from 5 to 20 HP. The biggest among them has installed two pumps, a 5 HP pump twenty-five years ago and a 10 HP pump recently. He owns 8 acres, but with the
help of the two pumps he can sell water to 25 and 40 acres respectively throughout the year. The total price of the pumps is only around Rs.25,000 (Rs.15,000 for the 10 HP pump). However, in future he will have to pay Rs.100–150 annually per HP above 10 HP for the electricity. In view of the income from water selling this is negligible.

But in order to distribute water efficiently and economically this farmer has invested Rs.1,50,000 in 3,800 ft. of PVC pipes that carry the water (over the soil surface) to the fields. The other water sellers have made much smaller investments in pipes and sell water only to more limited lands. Pipe systems are common in the distribution of groundwater in a few regions elsewhere in India, e.g., Gujarat, where they constitute highly elaborate underground networks (Shah 1993:59ff), but we did not encounter a comparable pipe system anywhere else in the Mandya or Delta sample villages.

The big water seller supplies water to 65 acres cultivated by about 50 families. The biggest water buyer purchases water for 3 acres, most of the others for less than one acre, but usually for two crops a year. The payment is in cash and the amount depends on the crop grown. For paddy it is Rs.500/acre (per season); for ragi it is Rs.10–15/hour, i.e., a total of Rs.300–350/acre for the entire crop; for mulberry it is Rs.300/acre for three months. After the installation of the new pumpset the farmer also intends to sell water for sugarcane, a 14 months’ crop. The price for this will be around Rs.3,000–4,000/acre. Since the water seller pays virtually nothing for electricity (and water) it is clear that his unauthorised business is a real bonanza. The water buyers think that the rates they have to pay for water are too high, yet it is remunerative enough for them to continue to purchase water. Whereas the water seller is a Lingayat, among the water buyers there are both Lingayats and Vokkaligas, and this may lead to frictions.

This village is unusually densely inhabited and the scarcity of land has resulted in extensive sharecropping (in almost 30 per cent of the land) on terms that often appear unfair to the sharecropper. In some cases of ragi sharecropping the expenses are shared equally, but the land owner gets two-thirds of the harvest. In paddy sharecropping mostly the costs as well as the output are shared equally. There are clear tensions in the village around this, reinforced by the fact that Lingayats own most of the lands, while at the same time there is a bigger group of Vokkaliga farmers who constitute the dominant farming caste in many neighbouring villages. So typically the land owner will be a Lingayat and the sharecropper a Vokkaliga. The uneasy relationship between these two major farming castes, who have for decades been vying for political hegemony in Karnataka, thus complicates everyday conflicts within agriculture.

Another interesting case was encountered in a village (No. 24) located in the upper-middle reaches of the Visvesvaraya canal system. This village primarily
cultivates paddy, generally two crops a year in the lands with canal irrigation. In the dry lands *ragi* and groundnuts are the main crops. In the past the favourable location within the canal system in most years assured enough water for paddy cultivation. But in the early 1980s a group of about twelve well-to-do farmers in the village, owning around 100 acres of dryland (holdings varying from 6 to 16 acres) near the head end of the distributary, installed pumpsets (mostly with 10 HP engines) and started lifting water illegally from the canal. They cultivated both paddy and sugarcane, and in the process deprived their fellow villagers — and some in neighbouring villages — of their rightful share of the water.

In 1985 the deprived farmers got together against the twelve perpetrators. They protested to the Irrigation Department, and staged *dharnas*; politicians got involved and the case was reported in the *Deccan Herald*. It was also taken up by Tamil Nadu in relation to the Cauvery Waters Disputes Tribunal as an example of illegal use of the Cauvery waters in Karnataka. In 1986 the government issued a ban order on lifting water from the canal because this is illegal under the Karnataka Irrigation Act (1965, section 55). The government also instructed the Karnataka Electricity Board to disconnect power supply to all illegal pumpsets. But the twelve farmers concerned in turn appealed to the High Court, which issued a stay order on the government order in January 1987.

Then an informal village youth association spearheaded a movement to fight the case in court. The youth took a contract from the Irrigation Department for desilting of the distributary and organised people to do the work. The contract amount (Rs.14,000) was used towards expenses in the High Court case. In July 1991 the court finally gave its verdict and upheld the government’s order from 1986. The court directed the government to take steps to stop the illegal use of canal water, and subsequently the twelve farmers gave up their practice. This case demonstrates that there is a limit to the economic power of individuals when they threaten the vital economic interests of the majority.

Interestingly, the conflict served to catalyse what became the first Water Users Association to be established in Mandya district. Already in 1986 the farmers formed an informal association dealing with the conflict and getting involved in the desiltation work. Later, after contact with the Command Area Development Authority, a formal Water Users Association was set up in January 1993, which in many ways resembles the WUAs established in the Cauvery delta (cfr. Folke 2000). At the time of field work the association had 106 members (out of about 300 cultivators in the village) each of whom had paid a share of Rs.100. About one-third of them are Dalits, whose shares were paid by the Command Area Development Authority. The majority are Vokkaligas and all board members are Vokkaligas except one Dalit who holds a reserved seat. The twelve farmers who had previously lifted water from the canal have not been allowed to become members in view of their past misdeeds.

In the first two years the government contributed Rs.100 per ha, and in the
third year Rs. 75 per ha, but after that the association should stand on its own feet. The main activities are supervision of water distribution, ensuring that tail-enders can also get their share, and desiltation of sub-canals. The WUA has also supervised the lining of the main distributary, funded by the government. But in addition the association hires out agricultural implements and sells fertilizers, seeds, and pesticides at subsidised rates. It has even contributed to the financing of a small temple in a neighbouring village (as thanks for their support during the court case). Relatively speaking, this WUA appears to be functioning reasonably well, a fact that may be related to its history of growing up from below rather than being initiated from above as is frequently the case.

The case analysed here has much more than local perspectives. A retired executive engineer from the Irrigation Department (who himself happens to own lands at the tail end of the Visvesvaraya Canal system!) played an important role in ensuring that this conflict was brought to court. At the same time he was a member of an official Irrigation Consultative Committee, where he brought up the problem at a more general level. Documents from the Command Area Development Authority (1988–92) show that in the Visvesvaraya Canal system there were in 1987 no less than 900 cases of illegal tapping of water from the VC system, using energised pumpsets. This illegal water lifting benefitted 4,300 acres, mainly devoted to sugarcane cultivation in the upper reaches — with the result that a similar area at the tail end of the system was deprived of its rightful share of water. The documents also demonstrate the political difficulties of checking this illegal practice:

‘It is very difficult for the officers of the Irrigation Department to enforce elimination of these pumpsets, in view of the fact that some of the local MLAs are urging for regularisation of those unauthorised pumpsets...... It is also to be stated here that if such pumpsets are allowed to continue, there is scope for further increase of pumpsets and consequently there would be more and more scarcity of water in the tail end’ (letter dated April 6, 1988, from Administrator, Command Area Development Authority, Cauvery Basin Projects, Mysore, to Secretary, PWD, Government of Karnataka).

Two of the MLAs were members of the Irrigation Consultative Committee and used this position to block elimination of the illegal practices. This amply illustrates how politicians often intervene in the conflicts in a way that serves narrow, vested interests, particularly those of their constituencies.

Conclusion

One of the main strands of the argument running through the presentation of these cases has been the continued importance of caste in analysing conflicts over water for irrigation. While the conflicts are played out in everyday life between individuals, they are often reinforced by caste differences, notably between the
major farming castes and between these and the Dalits. Moreover, frequently there is a congruence of caste and class; many Dalits are agricultural labourers and even if they own land it is usually less, of poorer quality and less favourably located. Whereas the roots of the conflicts over water are economic — based on competition for a scarce resource — they are embedded in social relations characterised by inequality and power.

Inevitably this tends to disfavour the Dalits, but the cases also demonstrate that there are some nuances to this general picture. In the power game, numbers matter, as demonstrated in the difference between a village where the Dalits form a minority and a neighbouring village where, unusually, they are in a majority. It is also noticeable that government legislation in favour of Dalits, whether in the form of grants for wells or reservation for political posts, can actually make a difference.

More generally, however, politics comes into the picture in a way that usually backs the rural elites and the dominant castes. In this respect there are great similarities between the picture in Mandyala district and that in the Cauvery delta. Influential politicians often interfere in irrigation management in a way that takes care of the interests of their kin and constituency, sometimes in ways that blatantly ignore or actively undermine rules and legislation as the case of political support for illegal water lifting has amply shown. Moreover, the policies regulating water management in Karnataka — as in Tamil Nadu — are a mixture of timid regulation and populist policies such as free electricity for pumpsets and almost free access to canal water. A symbolic ‘water tax’ ranging from Rs.20 per acre for ragi and Rs.40 per acre for paddy (per crop) to Rs.150 per acre for sugarcane may or may not be collected.

In Mandyala district the farmers’ movement, Karnataka Rajya Ryota Sangha (Karnataka State Farmers’ Association), is particularly strong and the movement has been successfully lobbying against any attempts to introduce price, subsidy, and taxation policies that could harm the farmers’ immediate economic interests. Interestingly, even the farmers’ movement has a caste bias. Its adherents are primarily Vokkaligas, but the movement generally serves the interests of the better-off farmers (cfr. Kripa 1993).

As a consequence, the irrigation practices are clearly unsustainable. Generally speaking, water is flushed over the fields, entailing a lot of waste (by evaporation, percolation and excess use). But it is the easiest way and there is no premium on conservation. The situation is similar to that obtaining in the Cauvery delta, but even more pronounced because Mandyala enjoys the advantage of being upstream in the Cauvery basin. Besides, Mandyala district lags behind the Cauvery Delta in attempts to establish Water Users Associations. At the time of field work for this study there were just a handful of such WUAs (about eight in the entire district), set up on an experimental basis and with uncertain viability.

No doubt, canal irrigation has brought prosperity to Mandyala, particularly to
the farmers with substantial lands and easy access to water for irrigation. But as demonstrated in this article it has also created divisions and conflicts between those who are favoured — by land ownership, location, caste affiliation and political backing — and those who are not. A more parsimonious use and equitable sharing of the water resources could pave the way for a more just and sustainable kind of development.

Notes

1. Mandya District Gazetteer gives the following explanation: ‘Mandya district was selected for this experiment because of its high irrigation potential, existence of efficient cooperatives and other institutions and the progressive outlook of farmers’ (Government of Mysore 1967:142). A contributing factor may have been its proximity to the State capital, Bangalore.

2. Named after Dr. (Sir) M. Visvesvaraya, who designed the Krishnarajasagar Dam when he was Chief Engineer of Mysore State. He contributed in many other ways to the modernisation and industrialisation of Mysore and later became Dewan (chief administrator) of the State.

3. Some villagers claimed that the minister concerned in the Congress government, who hails from this area, scrapped the tank project because he had some associates in a neighbouring village who were (illegally?) cultivating coconuts in an area that would be submerged if the tank were expanded by increasing the dam height. Whether this is true or not we have not been able to verify, but it does testify to the political discourse which largely focuses on such vested interests.

4. Until 1980 owners of pumpsets had to pay according to the consumption of electricity. The unit rate was 15 paise for the first 200 units consumed monthly and 17 paise for the amount above 200 units, subject to an annual minimum of Rs.50 per HP (information obtained at the Karnataka Electricity Board office in Mysore).

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