

# Water for Agriculture in Zimbabwe

Policy and Management Options for the  
Smallholder Sector



*Edited by*  
Immanuel Manzungu, Aidan Senzanje and Pieter van der Zaag

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**U**NIVERSITY OF  
**Z**IMBABWE  
**P**ublications

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First published in 1999 by

**University of Zimbabwe Publications**

P.O. Box MP 203

Mount Pleasant

Harare

Zimbabwe

Reprinted 2000

ISBN 0-908307-63-2

**Printed by Mazongororo Paper Converters**

Typeset by the University of Zimbabwe Publications.

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# Acknowledgements

Special thanks are due to the Netherlands Organization for International Cooperation in Higher Education (NUFFIC), The Hague, for providing financial support towards the hosting of the workshop upon which this book is based. NUFFIC also met part of the publication costs. The two coordinating committees of the Zimbabwe Programme on Women, Extension, Sociology and Irrigation (ZIMWESI), a NUFFIC-funded inter-university exchange programme in research and training between the University of Zimbabwe and Wageningen Agricultural University deserve special mention for the moral support they gave us.

We also wish to thank Dr Dayo Ogunmokun and Mr Edward Chuma of the Department of Soil Science and Agricultural Engineering, University of Zimbabwe, for their comments on the draft of this book. Dr Ogunmokun has, however, left the University of Zimbabwe.

**Emmanuel Manzungu**  
**Aidan Senzanje**  
**Pieter van der Zaag**

**September 1998**

# Notes on Contributors

**Dumisani Magadlela** is a PhD researcher with the Department of Sociology at Wageningen Agricultural University. He studied irrigation interventions in Nyamaropa communal area. He is a former lecturer in the Department of Sociology at the University of Zimbabwe where he lectured social theory.

## CHAPTER 9

## Whose water right?

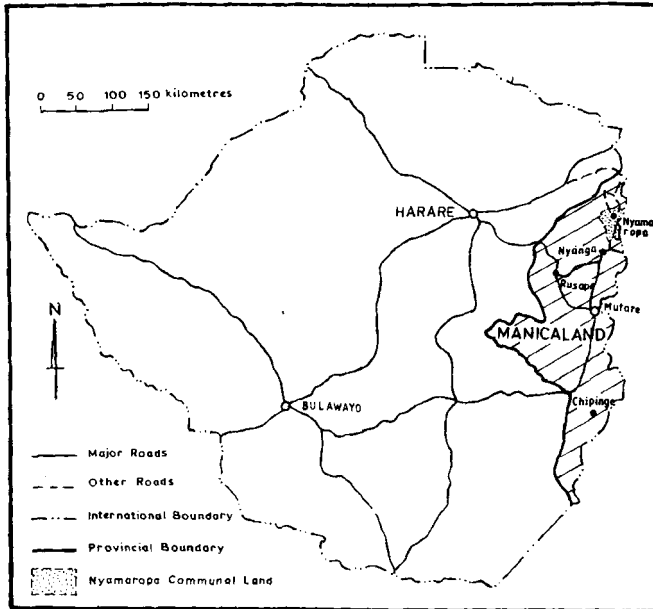
### A look at irrigators and catchment farmers' watered relations in Nyamaropa

D. MAGADLELA

This chapter presents an analysis of farmers' relationships and perceptions of their situation with regards to access to water for irrigation purposes in the area surrounding and incorporating Nyamaropa Irrigation Scheme (see Figure 9.1). It looks at two groups of farmers who share the same source of water but have different legal entitlements to it. The chapter presents views of catchment farmers, upstream of Nyamaropa Irrigation Scheme, who use the Murozi water without formal water rights. They are accused of illegal water use by irrigators in the government-managed irrigation scheme who believe they have a legal claim to water because of a formal water right. Significantly the individual farmers in the scheme do not know the provisions of 'their' water right. This is because the irrigators, who do not hold title to land they cultivate, cannot apply for water rights in their individual capacity. Instead the District Administrator, in liaison with the government Department of Agricultural, Technical and Extension Services (Agritex) apply for water rights on behalf of the irrigators. The whole episode revolves around who has a (more) legal claim to the water. While catchment farmers consider themselves to have a historical as well as traditional right to use the river's water, farmers in the irrigation scheme regard them as illegal irrigators who undertake irrigation in contravention of the law of the country, specifically the Water Act (1976) as enunciated in official documents (see GOZ, 1976; 1984). Differences in ways of accessing this important resource are at the centre of the analysis.

The argument in the chapter is that problems between formal irrigators and upstream informal irrigators, which are not unique to Nyamaropa, is symptomatic of the weaknesses of the country's water legislation. This is apparent in the way the legislation, hailing from the doctrine of prior appropriation (see below), chooses not to honour claims based on the same principle in the case of prior appropriation by Black cultivators. The story reported in this chapter falls under this category albeit with a different twist. Farmers in Nyamaropa Irrigation Scheme are privileged over informal irrigators with senior historical water rights because of the role of government departments, which want to safeguard government investments. Thus formal

**Figure 9.1: Location of the research area: Nyamaropa Irrigation Scheme**



irrigators can be considered as benefitting from an alien concept of water entitlement, at least from the perspective of informal irrigators. It is suggested in this chapter that solutions to current problems between the two groups of people must be at a fundamental level — that of defining legality in water entitlements (see Manzungu, 1997). In other words the question must be asked; whose water right is right? Further, rather than simply stopping at declaring which right is right, efforts must be made to find compromises, and by so doing workable solutions. Workable solutions, it will be apparent in this chapter, encompass social dimensions. Hopefully this approach will help technocrats and policy makers see beyond physical boundaries when drafting crucial laws and regulations guiding natural resource use. Taking cognisance of interests of different people claiming access to water must not be ignored.



The first two sections of the chapter present a brief background of the setting in relation to (a) problems of sharing common water sources and (b) the different actors involved in the water 'game' in Nyamaropa. This is followed by two sections each presenting the perspectives of the two main actors. The differences between these two are examined in the final section of the chapter. This has implications for current water reforms in the country.

### SOME CATCHMENT HEADACHES

Water sources in rural areas, which supply development projects such as irrigation schemes in the dry parts of Zimbabwe naturally attract increased human settlement. Water scarcity in such situations leads to intense searches for solutions. If these are not found social tension is bound to occur.

Nyati (1996, 1) from the Regional Water Authority, a parastatal organization responsible for water management in the south eastern part of the country, in a paper presented to a Water for Agriculture Workshop in Harare, stated a cold and hard fact, '[w]ithout proper water management skills, agriculture cannot be successful'. Indeed, skills are needed in all aspects of farming, and what planners need in their ranks are insights into the skills of rural area farmers who in some cases have been involved in irrigation-related farming for decades without external intervention. This could be assisted by an attitude that does not demean rural people's water management skills from the outset.

An interesting proposal on catchment management and its related problems was given by Elias (1996,1). He suggested that combining land and water management into a single story of natural resource management could solve problems created by sectoral interests. He added that the concept of an interdependence and not independence, between two or more groups of water users, ought to be fostered for the benefit of all. Elias further said,

[t]hose who cultivate land, on any scale, must accept that land and water are finite resources, that their management must be improved and that for any real progress to be made and maintained we all must learn to work and cooperate with our neighbour (*Ibid.*, 2).

Elias's experiences were derived from Chimanimani district in north eastern Zimbabwe. This was with regard to Nyanyadzi river which is 50 km long. Its catchment covers 850 square kilometres (Elias, 1996, 2). The river was said to have served Nyanyadzi irrigation scheme and communal areas along its course for over 60 years (*Ibid.*, 3).

In the same catchment, Bolding (Chapter 8, this volume) narrated the story of how Agritex staff and a group of farmers from Nyanyadzi irrigation scheme marched up the river with picks and shovels to close down furrows of upstream farmers using water from the same river.<sup>1</sup> In one of the rare solutions to catchment water problems, Bolding reports that Nyanyadzi irrigators and

upstream farmers had an agreement brokered by the District Administrator; upstream irrigators used water for a week and in the following week let it flow to the downstream irrigators in the scheme (1996, 13). For Nyamaropa such an arrangement never materialized. Nyamaropa catchment villagers claimed that water belonged to their ancestral spirits and to God. To them they were legitimate stakeholders (Magadela, 1996, 4).

In Zimbabwe, the Water Act (1976) governs the use of water in every public stream around the country. Any desire to use water for secondary purposes as for irrigation requires that one apply for a water right through the Water Court. The Court not only administers water issues, it also assesses water right applications and grants them. There is a first apply first serve condition in cases where several people desire to have water rights from the same water source. The person whose water right is the oldest gets priority use of water in times of shortage (Matinenga, 1995, 2). Only a person with title to land can apply for, and be granted a water right. This means that those farmers in government irrigation schemes cannot legally have water rights. Rather the scheme has rights that are applied for by civil servants. For individual water rights communal and resettlement farmers apply for water rights through their district administrators (DA) who are civil servants. Water rights are supposed to give a person or group of persons a legal entitlement to water use for specified purposes other than for primary use. The 1984 Water Amendment (No.2) Act by inference stipulates that there is a 'first apply first served' condition in cases where several people have water rights for water from the same source. This means that the person whose water right is the oldest gets priority use of water in times of shortage (Matinenga, 1995). Faced with these problems a catchment perspective has been suggested by many people.

Bolding (this volume) says that a catchment perspective in the management of water resources has always had a particular appeal amongst planners and engineers. He adds that the idea of integrated river planning originated from the Tennessee River Authority in America in the 1930s. In Zimbabwe, moves to have a centralised body dealing with water, catchment management and related subjects have resulted in the government expressing the desire to institute the Zimbabwe National Water Authority (ZINWA) so as to ensure integrated water management. ZINWA is supposed to run along commercial lines. It is my contention in this chapter that such bodies desperately need information as contained in this chapter in order to come up with sustainable policies on natural resource use.

Another related case is given by van der Zaag about irrigation along Mumvura river in Chinzara communal land (he gave fictitious names 'to protect' the illegal or unrighted water users). He characterised farmers in that catchment as having no formal water rights, but a strong sense of a historical user right to river water for irrigation (van der Zaag, 1996, 2). There was also an absence of a

centralised 'main system', or one single main canal, and village heads played important mediatory roles in cases of conflicts related to land and/or water.

Van der Zaag further pointed out that water allocation in his catchment study was based on farmers giving each other a chance to irrigate, and added that there was

need to link up the legal and normative frameworks of natural resource use, especially where this resource is shared among different groups of people. The institutional set-up must relate well to the practical reality on the ground' (Van der Zaag, 1996, 5).

A critical suggestion that van der Zaag makes is that many ordinary folk in communal areas do not regard the Water Act and the principles upon which it is based as legitimate (*Ibid*) because of a number of alien concepts.

For illustration, below are two cases of 'cluster gardens' or 'community irrigation schemes'<sup>2</sup> meant to give a closer view of the upstream side of the story, with specific emphasis on farmers' perceptions of their farming practices. This may sound as an argument to justify upstream irrigators on the basis of historical claim. There is an element of that. However, the aim is to bring to light differences in perceptions, views, and attitudes concerning access to a common water source.

A salient feature of the 'water wars' was that whenever there was a public (or private) discussion in Nyamaropa irrigation scheme about water shortage, there was almost always mention of catchment villagers as the main culprits. In this chapter I present the basis for their differences in perception of a shared resource. These include livelihood strategies, symbolic, social and cultural repertoires that ultimately delimited their interaction and influenced the different ways in which they related to each other.

## THE ACTORS IN NYAMAROPA

Nyamaropa Irrigation Scheme is itself a mixture of different groups of people whose origins has a significant bearing on the types of relationships among people in the scheme and its surroundings. The original inhabitants of the area now covering the irrigation scheme were Barwe villagers. These were said to have come from Mozambique across the Gairezi River. They refused to have anything to do with the irrigation scheme for a variety of reasons. Among these was fear of being labelled 'traitors' by nationalist leaders who were visiting the area and persuading people not to join the 'colonial project'.<sup>3</sup> Some of the elderly members among the Barwe assert that this "negative" attitude was based on a lack of adequate information about what irrigation farming really entailed. To most of the villagers during those days there appeared to be no significant advantage in joining the irrigation project, especially in light of abundant rains. The requirement to pay fees and observe strict irrigation rules and regulations was another source of concern.

Manyika settlers came and occupied the irrigation plots as the majority plottolders. They survived local hostility during the height of the war. However in 1978, they had to desert the irrigation scheme because of the war.

In the catchment settlement, villagers have continued to cultivate their gardens in clusters along the two rivers. They regard their irrigation practices as the mainstay of their livelihoods. They have their own problems such as who has which plots in which parts of the clusters of gardens. These differences are based on historical resettlement patterns from designated commercial land (groups of Manyika people were displaced by the colonial government in the 1940s and 1950s and settled in an area originally occupied by groups of Barwe villagers).<sup>4</sup> In a similar manner as the development of Nyamaropa irrigation scheme, local villagers of the Barwe group were 'displaced' from their original villages and gardens, making way for new Manyika settler immigrants. In their gardens the Barwe grew mainly horticultural crops for household consumption. Again like in Nyamaropa, informal irrigators were regarded by the immigrant Manyika as backward and averse to change and development.

#### 'STOLEN GOODS': FORMAL IRRIGATORS' VIEW

Social relations among farmers in Nyamaropa Irrigation Scheme and its catchment area during the study period were fluid and unpredictable. They ranged from a lack of recognition of the other's needs for water use to heated accusations of careless hoarding of water and cruel selfishness. The main bone of contention was the use of water by farmers in the catchment area who irrigated what both sides referred to as gardens, but could be said to be clusters of community irrigation schemes. Among formal irrigators there was widespread belief (and conviction) that catchment farmers wasted water, that they should be stopped from using the river water (by Agritex or any other responsible authority) because they did not pay anything for it, and that at least they should have their main furrows<sup>5</sup> concrete-lined and their irrigation practices regulated and controlled. The feeling was that Nyamaropa's irrigation water problems would be over once catchment farmers stopped 'indiscriminate use of water'<sup>6</sup> in their gardens.

A noticeable trend in Nyamaropa was that catchment farmers' gardens along the Murozi and Nyaurungwe rivers were not *always* seen as a problem. Irrigators only seemed to realise that the 'gardens' posed a problem during dry seasons or when water supply was short.<sup>7</sup> They believed that as full-time irrigators paying fees for irrigation farming, they should never be short of water. One irrigator said,

We are here because of the irrigation scheme, because there is water here, otherwise we could be somewhere else (Mautsa, 19 June 1994).

A widowed irrigator said,

We are in business here, we pay money for being here, we have to see the water that we pay for. Those people do not pay a cent, but they have all the water to themselves, and the government is doing nothing about it (Mai [Mrs] Hakutangwi, 19 May 1995).

Another farmer added,

I was in the committee that went to Samanyika to negotiate for a solution to our water problems, those people are not playing games, they can kill you. We were threatened with death there, I am not going back there, never, I would rather use the little water remaining, and we may try getting water from Gairezi\* [River] (Matombo, August 1995).

Agritex staff and irrigation farmers in Nyamaropa saw the scheme's problem as emanating from excessive 'illegal' water usage upstream. Nyamaropa irrigators, however, felt that Agritex, as the managing agency, should lead them in solving the problem of water 'pirating'. Both the farmers and Agritex did not want to be seen to be in the forefront of challenging the catchment farmers to stop the practice. Some of the Agritex staff said that they could not effectively deal with traditional factors raised by village leaders in the catchment area on the issue. This was raised in a meeting called to try and resolve the problem (see below).

The case was more complex for it to be solved by just walking up to the catchment area with an army of general hands and closing all the water take-offs as reported by Bolding (Chapter 8, this volume) in Nyanyadzi. The problems had to be addressed by Agritex and farmers alike before either party could sanction any form of regulatory action separately.

In one meeting at the irrigation scheme convened by the Nyamaropa Irrigation Management Committee (elected body of irrigation farmers' representatives) during the winter of 1994, to try and find a solution to the water shortage problem, one woman stood up and blamed Agritex for shortages because of unchecked water pirating. She said that the problem of irrigation water shortage was caused by the fact that dryland farmers were stealing water above the take-off point. She was shouted down by most of the audience before she could actually elaborate or recommend how this problem could be tackled. Some said that they did not want to go there (the catchment area) and be attacked by axes, spears, or bows and arrows, or risk the curse of spirit mediums on their families.

Nyamaropa scheme irrigators said that their status as irrigators had changed since upstream irrigators started taking more water to expand their gardens. They said they were more like dryland farmers who grew one crop per season. They blamed water shortage in the scheme not on changes in rainfall patterns, but on upstream people's use of 'their' (irrigators') water.

## IN DEFENCE OF A NATURAL RIGHT: INFORMAL IRRIGATORS' VIEW

### The 1992 meeting: Spirits to the rescue

The harsh drought of 1992 was one of those seasons that forced Nyamaropa irrigation farmers to hunt for reasons for, and solutions to water shortage. They resolved to confront the problem by convening a meeting with catchment area farmers held at a primary school in the catchment area. From Agritex files, the meeting was held on the 26th of March 1992 at Samanyika school, near the weir for the irrigation scheme. There was a team of representatives from Nyamaropa Irrigation Scheme led by the agricultural extension officer responsible for soil and water, representing the district agricultural extension officer in Nyanga. There was also a contingent from the Nyamaropa Irrigation Management Committee including the chairman and his deputy, two extension workers, and the irrigation supervisor.

From the catchment area, there were more than a hundred villagers, keen to defend their interests. They were led by six village heads, also called kraalheads. (The latter are traditional leaders who gain accession to these positions through inheritance. They are normally male members of the community who succeed their fathers).

The purpose of the meeting was to discuss efficient use of water within the catchment area. Items for discussion included how to develop water projects such as dams, water conservation through canal lining and legal entitlement to water (represented in water rights). In his report on the meeting, the agricultural extension officer (AEO) present at the meeting said that villagers were not interested in applying for water rights. They argued that they did not want to pay fees for water like farmers in the scheme were doing. The report said,

It looks like there is real war between dryland (catchment) and irrigation farmers on water. No cement works are permitted in the area, such as dams, weirs and canals. Four of them have water rights, but not the vocal Headman Samanyika (Agritex files, 26 March 1992).

He then went on to describe the heated ending of the meeting whereby the local *svikiro* (spirit medium; in some cases spiritual leaders can be female depending on their being said to be possessed by a spirit of someone who used to be a powerful and respected leader of that community or group of villagers), with the spirit of Mhiripiri<sup>9</sup> (literary meaning chillies), who was one of the great warriors of the original Barwe tribe in the catchment area, was suddenly possessed and spoke on the issue. The spirit gave what appeared to be a summary verdict on the water wrangle. She said that people should not fight over water, they should try and share it, and emphasised that spirits of the land (the catchment area) did not want concrete on the land. The spirit concluded by calling for an end to such water meetings,

What are you trying to do? You want Nyamubarawanda's family (people in the catchment) to starve to death? If you close the canals, all the rivers here will dry up . . . !

There was also a hidden threat that anyone who disobeyed the spirits would pay for it. Irrigators took this seriously when they reported back to their colleagues (Agritex files, 1992; this was confirmed by the agricultural extension worker from Nyamaropa irrigation scheme, 1994; irrigation farmer Matombo, 12 August 1995; former Irrigation Management Committee chairman, Samunda, 11 August 1995; catchment farmer Dzizangwe, 22 August 1995).

The point to note here is that catchment villagers were using a subtle and effective strategy of spiritual mystification and power, together with playing on the fears of the unknown, to achieve their objective of continuing to use water with minimal interference from outsiders. Among the Manyika and the Barwe of Eastern Zimbabwe, belief in the power of spirits to influence rainfall patterns or cause misfortune to those who do not listen to them when they speak through their mediums, is common and taken seriously.

#### **Finding a sense of community through traditional ceremonies**

The main traditional ceremony which people in the catchment area said they held together with people from other villages (and gardens) was *maganzvo* (rain making ceremony). *Mbuya* (Granny) Chapo, who was in her late seventies, said that each village brewed its beer. The ceremony was then held on an assigned date in October, before the onset of summer rains. The beer was then taken by a few selected people to the headman's place.

When the beer got to this place in the morning there would be people who were supposed to handle the pots of beer and put them in the hut near the *chikuwa* (sacred place in the kitchen, where they talk to the spirits, thank them for good things that may have happened, or just told them what was happening) and present their case to their ancestors.

Villagers called each other to the ceremony by beating drums. The following day people would drink beer and dance, and the spirits of the ancestors would speak to them about anything concerning rain and other things in their lives. The spirits, through their chosen ones living in the village, the *svikiros*, say out any other misbehaviour of people which might stop rains from falling, such as climbing the sacred mountains nearby. People seemed to agree that this was the way things had to be done for them to get what they wanted from their ancestors and the land.

The headman of Chidokori village said that they always brewed beer for *maganzvo* and told their ancestors that they were about to start tilling their land, and therefore could they be so kind as to give them some rain to make that venture profitable. Villagers also asked the spirits during these ceremonies to protect their fields from wild animals who tended to invade their farms. The headman added that a contingent of elderly people are sent with some calabashes of beer to the graves of great fathers of the original Barwe tribe,

Nyamubarawanda and Mhiripiri, where further rituals are performed in their honour.

None of this traditional celebration of links with the dead and protection of natural resources was evident among Nyamaropa irrigators. The latter actually regarded traditional ceremonies with disdain. This was also because of Christian teachings which condemned ancestral worship as heathen practices.

#### **Sanctions in resource use<sup>10</sup>**

Catchment farmers said that anyone who worked on *chisi* (sacred resting day) got punished some day. Any misfortune that befell that person later was seen as some form of punishment for their offences. The shortage of water in Nyamaropa Irrigation Scheme was interpreted by some of the catchment villagers as due reward for their disregard for traditional values. The expression used was, "*chisi hachieri musi wacharimwa*" (a resting day is not sacred/taboo only on the day of the offence, meaning that if one worked on the sacred day their punishment would not be immediate, it might be seasons or months later).

One elderly lady cited the example of the headman's wife *Mbuya Mbanje*, who used to work secretly on *chisi* day. One day baboons came down from the sacred Nyamubarawanda mountain, followed the Nyaurungwe river where their water came from, went past other farmers' gardens and got into the offender's garden. They ate and destroyed her maize crop. After that they took off in the same route back up the mountain without touching any body else's field.

Dzizangwe, the Manyau Market Garden's chairman, said that Mlomo, one of the new settlers in the village, used to disregard *chisi* and would do some work such as weeding in his maize while hiding in the crops. He was shocked to see that only his maize was being eaten by baboons. He stopped the practice and they stopped too! Dzizangwe himself one day decided to trap these baboons, caught one of them and killed it for his dogs. He was amazed when baboons came down the mountain and invaded his field. Upstream irrigators believed that if they did not kill wild animals, they did not work on *chisi*, they respected each other, especially their elders, and worked together, they would get almost all the blessings they needed, including good rains.

Another explanation to the baboon invasion of particular fields could be that they were located where wild animals could easily access. What mattered, however, was not baboons invading 'X's fields *per se*, but the meaning that others in the community attached to the incident, and how it is related to their ways of life in relation to utilising natural resources.

Even Christians did not work on *chisi* days (Wednesdays) in the area. A number of people of the Apostolic Faith sect said 'we have to give Caesar what belongs to Caesar so we do not work on Wednesdays but we also keep the Sabbath Day'. The way farmers in the catchment related to *chisi* was different



from farmers in the irrigation scheme who did not like it. Catchment villagers respected it and ascribed water availability in their rivers to their loyalty to and respect for their ancestors. They argued that they should be left alone not only to use the water, but also to worship their ancestors who gave them that water.

There were more signs of collective group activity besides rain making ceremonies and observing *chisi*. Manyau villagers had what they called *majana* (collective cattle herding where they gave each other turns as families to tend cattle). During the fencing of the gardens they worked together closely as a unit, and almost everyone co-operated to the extent that it was completed on schedule. Those who did not participate in each day's activities during fencing were fined nominal sums of money ranging from Z\$2 to Z\$6, mainly seen as their contribution to the project.

In Chidokori garden, people came together to clean furrows when the need arose, such as after heavy rains washed dirt into them. They all took part in the exercise because they knew that they would benefit from it. Ironically, this was not the case in the government irrigation scheme in Nyamaropa downstream. Farmers did not clean canals; they left that to government workers in the managing agency (Agritex).

## DISCUSSION AND CONCLUSION

When someone says 'catchment management', the first image that this conjures up in one's mind is of a team of technical experts drawing up strategies of how to ensure that the source of water for a particular capital project is secured against intrusion and 'illegal' tampering by pirates of one type or another. This chapter showed that technical issues surrounding catchment management can never escape the effects of differing perceptions held by various actors. In this chapter these were represented by informal and formal irrigators.

The chapter presented what can easily pass for 'stories' on what irrigators thought of catchment farmers' livelihood strategies. The chapter also looked into how catchment villagers viewed their own situation *vis-a-vis* that of irrigators, especially from a farmers' historical constructivist point of view. The basis of each group of farmers' point of view was based on their respective situations with respect to water.

The first highlight of the chapter was the clash between two livelihood contexts: that of historical traditional entitlement to a natural resource where the right to access water was predicated on one's very existence and residence in a village and having a plot in the garden. The second highlight was that of a government irrigation scheme with a formal right to use the river's water for farming purposes under government administration, and irrigation farmers' apparent anger at the use of the same water by catchment villagers. The two

highlights expose the contradictions surrounding official formal rules regulating natural resource use in rural areas. This is a critical aspect of policy, especially crucial for people who rely on land and water resources to earn a living. By granting irrigators priority rights over water use, the Water (Amendment No. 2) Act (1984) stratifies the needs of rural people on the basis of formal entitlement to water. This was not understood by many people. Consequently, they used their own basis to (re)claim what they regarded as their rightful entitlement. Irrigators, we saw, needed the same water to survive, and appealed to government extension staff to resolve the problem.

A major aspect of perceptive difference between catchment villagers and Nyamaropa irrigators was the way they related, not just to the water they shared, but the way they related to their spiritual authorities. Villagers in the catchment area showed that they took their beliefs in ancestral spirits to provide for them more seriously than their scheme counterparts. Scheme irrigators, on the other hand, ran to the government department to ask for more water. There was evidence of some irrigators making efforts to remove themselves from anything to do with traditional beliefs and traditional ceremonies, such as *maganzvo*. They openly protested against observing *chisi* (the traditional resting day) every Friday (in Nyamaropa), citing time wastage and that they were in business in the irrigation scheme (see Magadlala, 1995, 14).

Irrigators argued that because the irrigation scheme had a water right it was given when it started operating in 1960, and nearly all catchment farmers had no water rights, they were therefore illegal users. Catchment farmers, however, contended that they did not need a piece of paper with an official's signature to give them permission to use water that their ancestors and God gave them. They were not going to be cheated into paying for water by someone who either brought a fence, lined their furrows or did some 'minor' changes in their gardens. Their belief in supernatural powers to provide for them was illustrated by the way they observed and strictly followed traditional rules and rites such as *chisi*, *maganzvo* and how well they treated nature's blessings such as wild animals, trees and rivers.

The above scenario is at loggerheads with the state legislation governing water use. Water law in Zimbabwe is governed by the Water Act, No. 41 of 1976, now the Water (Amendment No. 2) Act of 1984. According to the Roman Dutch law (which governs water use in the country), which espouses appropriative rights, water rights are not dependent on ownership of riparian land, but on a first come first serve basis and on the application of water to a beneficial use (Matinenga, 1995, 1). Catchment farmers could not be drawn to apply for water rights because they said that it was a way of getting them to pay for 'their' water from 'their' ancestors. They did not see themselves as using stolen

property at all as alleged by the formal irrigators. The meeting they held with representatives from government and irrigation farmers from Nyamaropa showed how they relied on supernatural powers to defend their rights to water and to their livelihoods. On this basis, the two groups relied on different social and legal bases for their claims to water use.

The catchment use of river water seemed to partly go against some official recommendations from a legal point of view. Matinenga, in a paper presented at a Zimbabwe Farmers Union workshop in 1995, said,

There is need to preserve water flow . . . serious thought must be given to stopping, by legislation, any application to abstract from river flow. The legislation could accommodate minor abstractions to a maximum of . . . three litres per second (1995, 6).

What this did not tell the ordinary communal area smallholder farmer (and even a very discerning one for that), was how much land they could cultivate with how much water. Informal irrigators started using water in the area even before the irrigation scheme was constructed. By this fact alone they felt entitled to its use on another first-come-first-served basis which the state did not choose to honour; in so doing there was no difference between the colonial and post-colonial state.

In spite of some divisions, upstream irrigators made up a more united community than irrigation farmers. For example, they were able to organise themselves for a purpose. The Manyau village managed to get a fence before other gardens because it was deemed the most organised among a group of at least four gardens. When it came to traditional ceremonies of sacred days, catchment farmers seemed to have more respect for these than their irrigation counterparts in Nyamaropa irrigation project. They regarded this as the reason why Nyamaropa farmers were being punished by having water shortage, not that they were the ones to blame for taking up to 70 percent of the flow and not letting it back to the river after use.

In conclusion it can be said that there is a need for a whole new paradigm of catchment management with a new framework that takes into cognisance the different interests of all stakeholders. This should recognise the basis of each party's claims. The various actors' physical and social or symbolic boundaries, which shape their beliefs and practices, must not be ignored either. But these new water reforms still need to touch base with the fundamental issue of legality, not just from the position of the state, but also from the perspective of farmers. After all laws are supposed to be obeyed by the people and not the state itself. If that is to successfully happen the gap between the process of law making and the reality on the ground must be narrowed.

## NOTES

1. There are parallels between the Nyamaropa and Nyanyadzi irrigation schemes and their catchment areas. Nyanyadzi irrigation scheme, although started earlier, in 1932 (Nyamaropa in 1960), has a command area of 414 hectares, and Nyamaropa 442 hectares, both are government schemes and managed by Agritex. Both use surface canal irrigation and take water from rivers whose water is always used by other people upstream whom irrigators in the government projects believe should be stopped from doing so. Both schemes have seasonal water shortages when rainfall is poor. This is when formal irrigators initiate moves to have catchment users either stopped or controlled.
2. Farmers in both the irrigation scheme and the catchment area generally refer to the small irrigated plots as *gardens*. My impression from talking to both sides was that catchment farmers call them gardens to give an impression of smallness and therefore having insignificant impact on water flows, while irrigators call them gardens either because catchment farmers call them that, or because this gave them the image of stream-bank cultivation which is illegal.
3. This was around 1958 to 1960 when the nationalist movement in Zimbabwe, under the leadership of Joshua Nkomo, was starting to gain momentum. He visited the irrigation scheme site in 1960 and met the headman who was on the verge of joining the project, after which the latter took a more anti-irrigation stance, although he allowed any of his people to join if they wanted. Most of them stayed out.
4. I use the term 'villagers' here because it carries with it a more neutral meaning than, for example, 'peasants', 'farmers' or 'producers' which have all been found controversial when used in some contexts. The Barwe lived in villages which they could still identify by location and totemic relations, but were displaced by the Manyika who were settled in the area from the 1940s.
5. Some of the villagers referred to the water courses as '*makalani*' (canals), while others simply called them '*migero*', the plural for '*mugero*' (which could translate as canal or furrow).
6. Irrigators believed that catchment farmers did not know how to use water efficiently, but catchment farmers said that they used water sparingly, although some parts of their gardens were almost always water-logged. They said that they still did not consider themselves as wasting water, but rather saw themselves as using it differently from irrigators.
7. In related findings from catchment studies, Bolding (1996, 5), and van der Zaag (1996, 2), both found that water-related conflicts between formal or government-managed irrigation scheme farmers and catchment or informal irrigators escalated during periods of water shortage or when rains fell short, sometimes worsening during dry winter seasons.
8. This is a big perennial river bordering Zimbabwe and Mozambique, and is much closer to the irrigation scheme than the present problematic source of water. The problem was that it would take pumping engines and pipes to draw water from there, and farmers were not exactly willing to pay the price for it just yet.
9. It is not very clear who really got possessed and by whose spirit. The *svikiro* (medium) herself, *Mbuya* Kamimira, did not say, but her relatives, and many other people in

the area say that she was the one who spoke and warned the outsiders that if they harassed Nyamubarawanda's children (meaning the local people), all rivers in the area would run dry, a threat which was taken seriously by their rivals.

10. *Chisi* is the traditional resting day during which no one is supposed to scratch the earth. In the catchment gardens, this day falls on Wednesdays. In Nyamaropa it is on Fridays, and irrigators have always resisted and tried to disobey traditional leaders who enforce it. There is more agreement on, and respect for, traditional rules in the catchment than in the irrigation scheme.

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