

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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Emmanuel Manzungu
Aidan Senzanje
Pieter van der Zaag

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Epilogue

A preview of Zimbabwe's new water law¹

In the preface of this book it was pointed out that the government of Zimbabwe had embarked on a reform of the water sector. Since the days of the workshop in 1996, upon which this book is based, more details concerning the water reforms have emerged. In November 1997, the government of Zimbabwe, through the Minister of Rural Resources and Water Development, presented two bills; the Water Bill and the Zimbabwe National Water Authority (ZINWA) Bill for public debate.

The availability of these draft bills presents an opportunity to assess how the proposed water reforms articulate with the realities on the ground. Some of these realities were captured by the empirical material presented in the various chapters of this book. The articulation of the proposed changes with the realities on the ground cannot be overemphasized: it is there on the ground where the usefulness of the reforms will be tried and tested. In other words the realities on the ground are the perfect benchmark upon which to evaluate the reforms. We have no hesitation to forward the empirical material presented in the various chapters in this book for this purpose. The reason for this rather bold statement is simple: we are not aware of any collection of material in Zimbabwe that so adequately demonstrates the intricacies/controversies involving water, beginning from how water is generated up to its use in both rainfed and irrigated agriculture and to some extent for domestic purposes (refer to Lovell *et al's* chapter). As was said in the preface of the book, technical, social, political and legal issues are at play. What this book has demonstrated, and needs re-stating, is that it is not enough to recognize the technical, social, political and legal ramifications at play. The issue is how these are actually interlinked and interrelated in practice. Such an understanding allows informed intervention which can only be a positive thing.

The preceding chapters have already gone into some detail about the nature of the inter-relationships which, it must be noted, occurred within a certain socio-politico-legal environment. This environment was described in the preface and its impacts described in the individual chapters. It needs to be noted that it is the legal environment that has been singled out for reform by the government of Zimbabwe, perhaps on the basis that the other factors will change in sympathy with the legal changes. This is an important observation since government's

¹ The Water Bill and the ZINWA bill were first presented to Parliament on 30 July 1998.

change of the water law is based on the premise that legal changes will beget the desired social changes (referring to government's desire to see equity in the water sector based on a broader participation in the use and management of water by all stakeholders including the disadvantaged communities particularly the indigenous population). The relationship between changes in the legal environment and the social/political changes, we contend, is less straightforward as it is commonly assumed. In the following paragraphs, we will briefly touch on a few aspects of the reforms where the required social changes, we feel, will not be realized. To do this we shall, very briefly and rather superficially, sketch the proposed water reforms. The information was obtained from the draft bills (GOZ, 1998a&b) and the WRMS document published in 1998. Thereafter we will suggest the way forward. This exercise, however, should not be seen as a comprehensive review of the new water legislation.

SALIENT POINTS OF THE WATER REFORMS VIS-A-VIS THE SMALLHOLDER SECTOR

Box 1 below summarizes the proposed changes to the water legislation in terms of stated objectives, the principles that will be applied, and the envisaged major changes. The reforms can be seen as having social, political, environmental and economic objectives. This is better appreciated if we re-organize the information contained in Box 1 so that we have the output/targets of the reforms and the instruments by which these outputs are proposed to be achieved. Table 1 presents the re-organized data.

It is necessary to observe that the expected outputs are in themselves quite noble. The question that needs to be answered is whether the instruments that have been proposed will bring to fruition the desired changes. The relevance of this question lies in the fact that there appears to be a number of tensions encapsulated in the main tenets of the reforms. The compatibility between the social/political and economic objectives is a case in point. Given the fact that the majority of the smallholder farmers are wholly dependent on government for irrigation infrastructural development (whose expansion is restricted by lack of finance resulting in a growth of 500 ha per annum compared to 2,000 ha in the commercial sector according to an IFAD document produced in 1997), this means that these farmers will not access much of the water at least in the short to medium term. The fact that water prices will be market-related is another problem that will hinder irrigation expansion in the smallholder sector. We can conclude therefore that the assertion that "managing water as an economic good is the best way of achieving efficient and fair use and of encouraging conservation and protection of water resources" (WRMS, 1998) is a bit of a contradiction. In fact the opposite may be true: market principles

implied in the notion of water as an economic good, do not result in fairness nor do they encourage conservation and protection of the environment. This is simply because the profit motive is at loggerheads with such morality as "fair" or consideration of the general good of preserving the water resources. It is our contention, therefore, that social/political aspects should have been isolated and addressed as such rather than attaching them to the economic good. We will illustrate our point by giving two small examples. The draft Water Bill states that water permits will be issued on the basis that

- a) the user has a piece of land upon which to use the irrigation water, and
- b) that water will be used beneficially which basically means for productive agricultural purposes.

While at the surface these conditions appear useful they are in fact problematic when we factor in the situation of the smallholder farmers. This instrumental approach to water allocation simply reproduces the existing inequalities as the smallholder farmers do not enjoy much access to land (hence the current water reforms) and cannot use water productively because of financial limitations, among other factors. It would make a tremendous difference if rural communities could be afforded a real allocation of water in nearby dams and rivers which water they can sell or rent out (subject to adequate conditionalities of course). This point assumes greater significance given that there is no stated indication of what constitutes an acceptable transfer of water to smallholder farmers. Early in the discussion it was said that adequate water will be transferred (WRMS, 1997). At present there is no stated target (the Indigenous Commercial Farmers Union suggests that 60% of the water should be reserved for indigenous people according to a document commissioned by WRMS).² It is obvious that the current reforms are less dramatic to those we put forward in chapter 15.

There is yet another tension. This relates to democratising the water sector. It is significant that the draft bills intend to increase the role of the state in the water sector as well as that of the general population. This is unlikely to happen since democracy by definition implies reduction of the influence of the state to promote popular participation. This, however, is not to say that the role of the state must be reduced arbitrarily. In the short term the increased role of the state is justified on the grounds that the smallholder sector is currently weak and therefore cannot stand on its own. The state then is seen as safeguarding the interests of this sector. Such an observation only becomes plausible if there is a clear understanding that the state will not only reduce its role, but that there are mechanisms in place for this to happen. In their present forms catchment councils are unlikely to empower smallholder farmers because of unequal power relations.

² GOZ (1998) Impact of removing the priority date system and options for future water management in Zimbabwe.

BOX 1. HIGHLIGHTS OF THE WATER REFORMS**Objectives**

- Ensure fair access to water by all Zimbabweans
- Improve the management of water resources
- Increase protection of the environment
- Improve the administration of the Water Act

Principles

- The state owns all the water and any use of water, except for primary purposes, must be approved by the state
- All people with an interest in the use of water should be part of the decision making and the management of water
- Water is to be managed at the catchment level
- The environment must not be jeopardized by activities linked to the use and development of water
- The present racially skewed access to water is to be corrected
- People who use water must pay at socially acceptable prices; polluters will be held accountable by way of paying realistic penalties
- Water must be taken as an economic good which ensures efficient and fair use of the water, conservation and protection of water resources

Major Changes

- Water rights will not be granted in perpetuity
- The priority (date) system will no longer apply
- No water will be privately owned; both surface and underground will belong to the state
- The distinction between normal flow, flood flow and storm water will no longer apply
- Water shortages will be better managed by shortening the process of declaring water shortage areas
- Better management due to creation of catchment councils
- Increased representation at the Administrative Court
- More effective deterrent penalties will be imposed
- The polluter pays principle will apply
- The environment will be regarded as a legitimate water user

Source: WRMS (1998)

Table 1: Expected targets, objectives and instruments of the water reforms

TARGET	TYPE OF OBJECTIVE	INSTRUMENTS
EQUITY	Social	<ul style="list-style-type: none"> > Removal of the priority date system > Water rights will become permits with a defined duration > Disadvantaged people will be co-opted into the decisions about water > There will be targeted subsidies for disadvantaged communities
ENHANCED STATE ROLE	Political	<ul style="list-style-type: none"> > State ownership of water increased as there is no more private water > Underground water comes under the jurisdiction of the state > A parastatal, ZINWA, will be put in place to oversee water development
BROAD (DEMOCRATIC) PARTICIPATION	Political	<ul style="list-style-type: none"> > All stakeholders will be represented in decisions on water through catchment councils
MARKET PRINCIPLES IN THE WATER SECTOR	Economic	<ul style="list-style-type: none"> > Water will be taken as an economic good > Water prices will be market-related > Penalties imposed on polluters will be market-related
IMPROVED MANAGEMENT	Management	<ul style="list-style-type: none"> > Water will be managed at a catchment level > The process of declaring a water shortage will be shortened > Distinction between normal flow, flood flow and storm water will be abolished
ENVIRONMENTAL MANAGEMENT	Environmental	<ul style="list-style-type: none"> > The environment will be regarded as a legitimate water user > Pollution will be heavily penalised

THE WAY FORWARD

By way of conclusion it needs to be stated that water reforms, or any other reforms, are a process rather than an event. This is because of the complexities of the issues involved. As was said before, changing the legislation does not automatically usher in the desired social/political and economic changes. This is because the legal changes may not guarantee the necessary changes in the physical, human, financial dimensions. Legislation simply provides conditions, which may be good or bad, depending on how they are crafted and whose interests are represented. It is not uncommon for legal changes to be unworkable especially if the realities on the ground were missed out.

The foregoing then sets the agenda for the future. It is necessary to find out how the reforms will be implemented as well as whether they will achieve the objectives. In other words the story should not be seen as ending with the enactment of the water law. The new realities on the ground need to be captured (this book has already set a good base by documenting some of the issues on the ground) so that appropriate refinements can be made. With the passage of the new legislation in the near future the journey towards water reforms has just started!

REFERENCES

- Government of Zimbabwe. 1997a. The Water Bill.
- Government of Zimbabwe. 1997b. The Zimbabwe National Water Authority Bill.
- International Fund for Agricultural Development. 1997. Zimbabwe. Smallholder Irrigation Support Programme.
- Water Resources Management Strategy. 1997. Impact of Removing the Priority Date System and Options for Future Water Management in Zimbabwe. Terms of Reference.
- Water Resources Management Strategy. 1998. Highlight of Changes to the Water Act No. 41 of 1976.

Water for Agriculture in Zimbabwe is a comprehensive account of water-related issues in the smallholder farming sector of Zimbabwe. The book is divided into four parts. Part I discusses rainfall, focusing on its incidence as well as the technical and social interpretations that various people hold. Part II discusses some technologies that can be used to improve, conserve and make efficient use of the limited water resources available in the smallholder sector in both rainfed and irrigated environments. In Part III the discussion shifts to catchment management where technical, managerial, institutional and legal aspects are discussed. Part IV presents relevant policy issues regarding drought and irrigation, water pricing, a comprehensive water reform, including legal aspects and the concept of integrated water resource management.

The book should be of interest to students, practitioners, researchers and policy makers dealing with agriculture, water resources and rural development in Zimbabwe and other developing countries.

ABOUT THE EDITORS

Emmanuel Manzungu completed his PhD research in irrigation management with the Wageningen Agricultural University, The Netherlands, and is attached to the Department of Soil Science and Agricultural Engineering, University of Zimbabwe, which hosted his research. He is the author of a number of journal articles and book chapters. He has also co-edited the book *The Practice of Smallholder Irrigation: Case Studies from Zimbabwe* and *Researcher-Practitioner Dialogue on Smallholder Agriculture in Zimbabwe*.

Aldan Senzanje holds a PhD in Irrigation Engineering from Colorado State University, USA. He has several years experience in irrigation engineering and management in Zimbabwe. He is a former Chairman of the Department of Soil Science and Agricultural Engineering at the University of Zimbabwe and lectures in Irrigation and Drainage Engineering. His main research interests are in the management of surface and drip irrigation systems.

Pieter van der Zaag, a senior lecturer at the IHE Delft in The Netherlands, is currently a project manager of a collaborative programme for capacity building in the water sector with the Department of Civil Engineering, University of Zimbabwe and the Institute of Water and Sanitation Development, Harare. He has published widely on various aspects of water resources management. He is also co-editor of *The Practice of Smallholder Irrigation: Case Studies from Zimbabwe*.



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