

IDS Working Paper 204

**Rights and risk: challenging biotechnology policy in
Zimbabwe**

Jennifer Clare Mohamed-Katerere

September 2003

INSTITUTE OF DEVELOPMENT STUDIES
Brighton, Sussex BN1 9RE
ENGLAND

Jennifer Mohamed-Katerere is a constitutional lawyer specialising in human rights, development and environmental law and is engaged in both research work and law and policy development. She has worked with governments in the southern African region, multi-lateral institutions and donors in reforming and developing law to make it more socially responsive. Her primary research interest is the implications of human rights law for environmental management and public rights. She was previously a lecturer in law at the University of Zimbabwe but now works independently. She is a member of the World Conservation Union's (IUCN) Commission on Environmental Law and also its specialist group on water.

Summary

Human rights have become a key focus of law and development, yet they remain conspicuously absent from the regulatory and policy regimes for the use and development of modern agricultural biotechnology. In contrast to rights approaches biotechnology law and policy is concerned with individual property rights and global trade. In this context the only “acceptable” restriction on biotechnology development is safety and thus regulation has focussed almost exclusively on risk assessment. Drawing on the experience of Zimbabwe and other countries in southern Africa, this paper argues that a risk-based approach, creates an artificial divide between civil and political rights and economic, social and cultural rights, desegregates society into a conglomerate of individual rights holders, effectively dis-empowers citizens and fails to create a viable and supportive legal framework for consensual agricultural biotechnology development that is responsive to local needs and perceptions about rights.

The paper begins by examining the legal underpinnings of a risk-based approach and asks why it has come to prominence. It contrasts this with a rights approach and looks specifically at how rights framing and claiming has evolved since Zimbabwe’s independence in 1980. Against this background it examines demands for rights to participation, livelihood choice, farmer and community property and information and how these are manifested as challenges to the established regulatory regime. In particular it looks at issues of problem framing, knowledge, culture, values, information and responsibility. In conclusion the paper suggests that human rights law is a useful tool in creating more socially responsive law. This is so because it seeks to redress inequalities by establishing legal standards that allow for the restoration of human dignity by putting people back in control of their lives and limiting abuse and so creating substantial equality between people.

Contents

	Summary	iii
	Preface	vii
	Acknowledgements	viii
1	Introduction	1
2	Locating risk-based approaches	2
3	Rights-based approaches	4
4	Rights development in Zimbabwe	8
	4.1 Independence and the dominance of CPR	8
	4.2 The emergence of active civil society organisations	10
	4.3 Diversification of rights approaches	11
5	Rights disputes and demands in the context of biotechnology	13
	5.1 Rights of participation	13
	5.2 livelihood and development rights	15
	5.3 Property rights: farmers and local communities	17
	5.4 Rights to information	20
6	Rights challenges to risk-based regulation	22
	6.1 Asking the right question	22
	6.2 Risk and liability	26
7	Rights challenges to risk-based regulation	27
8	Challenges for the future	30
	References	34

Table

Table 3.1	Contrasting features of risk and rights approaches	7
-----------	--	---



www.ids.ac.uk/biotech



Preface

Biotechnology Policy Series

This IDS Working Paper series emerges from a series of three interlinked projects. They involve collaboration between IDS and the Foundation for International Environmental Law and Development (FIELD) in the UK and partners in China (Center for Chinese Agricultural Policy (CCAP)), India (Centre for the Study of Developing Societies, Delhi; Research and Information Systems for the Non-Aligned and Other Developing Countries (RIS), Delhi; National Law School, Bangalore), Kenya (African Centre for Technology Studies, Nairobi) and Zimbabwe.

Three key questions guide the research programme:

- What influences the dynamics of policy-making in different local and national contexts, and with what implications for the rural poor?
- What role can mechanisms of international governance play in supporting the national efforts of developing countries to address food security concerns?
- How can policy processes become more inclusive and responsive to poor people's perspectives? What methods, processes and procedures are required to "democratize" biotechnology?

The work is funded by the UK Department for International Development (DfID) ('Biotechnology and the Policy Process in Developing Countries' and 'Globalisation and the International Governance of Modern Biotechnology') and the Rockefeller Foundation ('Democratising Biotechnology').

This paper is a product of the 'Biotechnology and the Policy Process in Developing Countries' project. Other papers in the Biotechnology Policy Series are listed inside the back cover.

Also available

**'Democratising Biotechnology: Genetically-Modified Crops in Developing Countries'
Policy Briefing Series**

Issues covered in the series include: food security and biotechnology, trade, IPRs, the role of the corporate sector, science and decision-making, biosafety regulation, biotech in Africa and China, Bt cotton, rights-based approaches to biotech, and the use of citizens juries to expand participation in biotechnology policymaking.

The briefings can be downloaded free of charge from www.ids.ac.uk/biotech
Hard copies of the set can be obtained free of charge for those in non-OECD countries from Oliver Burch, email o.burch@ids.ac.uk or purchased from the IDS bookshop www.ids.ac.uk/ids/bookshop

Acknowledgements

The creation of knowledge is always a social process and I'm grateful to all those that have engaged with me as I developed my ideas and understanding about this key policy area. This work was carried out over three years from 2001 to 2003. During this time interviews and discussions were held with over 30 key informants from the NGO, government and the private sectors. I also had the opportunity to participate in several public fora hosted by key institutions. I would like to thank those who so generously found the time to talk and debate as well as share documentary information with me.

I would like to acknowledge my colleagues in the 'Biotechnology and the Policy Process in Developing Countries' team with whom I had some lively discussions. I'm particularly thankful to Ian Scoones, Munyaradzi Saruchera and James Keeley. I am grateful to them also for their consistent support and encouragement. Thanks too to Oliver Burch for editorial assistance.

1 Introduction

In contrast to law and policy development in other areas of public interest, regulation and policy for modern agricultural biotechnology has emphasised the protection of individual interests – both human and corporate – and paid scant attention to the broader social, cultural, environment and development concerns that have informed most public law development in the last two decades. In general, biotechnology law and policy has focussed on individual property rights, globalised trade rules and narrow regulatory regimes in which the only “acceptable” restriction on biotechnology development has been safety. Consequently, regulation has been based almost exclusively on the containment of risk through science-based assessments. Legal and policy development in Zimbabwe has followed a similar approach.

It is perhaps not surprising then that the development of modern agricultural biotechnology and its application has been fraught with controversy and conflict. Zimbabwe is no different. Zimbabwe’s first encounter with genetically modified (GM) crops was the sneaking in and illegal planting of Monsanto’s *Bt* cotton for trials on a few large-scale farms. Even as government sought to regulate biotechnology development controversy continued to unfold around issues of where authority should lie, the role of science, the independence of scientists, intellectual property rights (IPRs) and the control of seed and the food industry, the quiet consent of the Biosafety Board to allow GM cotton and maize trials, the import of GM food aid, the economic and ethical appropriateness of genetic engineering amongst others. Ideally, the law should resolve these conflicts, address the inherent differences between actors and develop mechanisms for creating some sense of equity and fairness in outcome and thus, finally, create a basis for forging ahead. Across the world it is clear that law and policy has failed to do this. In Zimbabwe the debates have not gone much beyond their original parameters – although new actors have emerged and rights claims are stronger than they were. Still, despite numerous “consultative” meetings organised by the Biosafety Board and others, there is no sense of growing consensus, trust or confidence. Instead, biotechnology forges steadily ahead, a regulatory regime for research and testing is in place, field trials for GM crops are now a foot, whilst consumers, farmers and development experts continue to raise concerns about the appropriateness of biotechnology for Zimbabwe and citizens’ rights.

Drawing on the experience of Zimbabwe and other countries in southern Africa, this paper argues that a risk-based approach, by creating an artificial divide between civil and political rights (CPR), on the one hand, and economic, social and cultural rights (ESCR) on the other, and by desegregating society into a conglomerate of individual rights holders, effectively dis-empowers citizens and fails to create a viable and supportive legal framework for consensual agricultural biotechnology development that is responsive to local needs and perceptions about rights. The paper suggests that human rights law may be a useful tool in moving beyond the current impasse because it has evolved through social struggles against social, economic and political injustices and consequently it seeks to redress inequalities by setting a legal

standard¹ that allows for the restoration of human dignity by putting people back in control of their lives and limiting abuse and so creating substantial equality between people. A rights based approach builds on the human rights tradition and also new development approaches in which the citizen moves from being a subject to an actor. It departs from concerns with the appearance of the law – its seeming equality through neutral language – and confronts head on how the legal, social, economic, political positioning shapes peoples’ reality.

The paper begins by examining the legal underpinnings of a risk-based approach and asks why it has come to prominence. It contrasts this with an approach that focuses on the indivisibility of rights, human well-being and dignity. It then examines how rights framing and claiming has evolved since Zimbabwe’s independence in 1980. Against this background it looks at key focal points in rights demands and biotechnology. It then examines key aspects of the existing regulatory approach and the rights responses of civil society. It considers the ability of marginal groups to use the biosafety regulations² to have their views heard and considered. In particular it looks at how problem framing and issues of knowledge, culture, values, information, responsibility and rights are treated and the implications of this for inclusive policy. The paper focuses primarily on consumer organisations, but also considers NGO and farmer responses. It suggests that, in adopting a market-based approach to choice and an exclusively science-based approach to decision-making, the regulations have alienated those very people it claims to benefit. The result is a biotechnology regulatory regime that many do not trust, and that undermines social justice and the distribution of societal benefits. The paper concludes that it is the lack of focus on rights that has been the Achilles heel of biotechnology law and argues that this must be redressed if agricultural biotechnology development is to be responsive to local interests and needs. In conclusion the paper considers how a rights approach may contribute to the development of more responsive policy and law through the creation of procedures and mechanisms that allow for citizen participation, taking account of peoples’ rights and interests.

2 Locating risk-based approaches

Risk as a concept is concerned with the prospect of crisis and how to evaluate, contain or avoid negative impacts. It is the central concept informing biotechnology regulation. Typically, risk assessment procedures use “substantial equivalence” and “familiarity” to determine the likelihood of potentially harmful effects and on this basis to decide on further product testing (field trials), development and release into the market (cf. Scoones 2002). Raffensperger and de Fur (1997) suggest that this approach, that focuses on the known and ignores the unknown in assessing risk, stems from the assumptions that

¹ The Universal Declaration of Human Rights, for example, proclaims that rights are ‘a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society . . . shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance . . .’

² Research (Biosafety) Regulations 2000, Statutory Instrument 20 of 2000.

human creativity through technology trumps ecological limits and that the economy is not related to the environment except for the benefits to the environment achieved through a competitive free market.

Risk analysis as a decision-making framework is intimately intertwined with globalisation and the prominence of market-centred thinking in policy debates. The underlying philosophy is that in the absence of a risk posed, individual civil rights such as marketing and property rights should not be curtailed or restrained. This is derived from a legal jurisprudence that places the individual at the helm of a rights hierarchy and in which the link between an individual's and society's rights are severed. Both scientists and industry have argued that this focus on the individual is necessary for innovation.

The focus on individual rights needs to be understood also in the context of a shifting locus of power globally and nationally. The role of the state has been substantially re-shaped. At the global level there has been a convergence between market and law making organisations, as is evident, for example, in such rule-setting organisations as the World Trade Organisation (WTO) and its subsidiary treaty on Trade Related Aspects of Intellectual Property (TRIPS). Given the weakening of multi-lateralism, trade rules have become dominant and all other law making is required to be consistent with this. At this level notions of freedom of property (both material and intellectual) and the freedom of contract – in which there is perceived equality between contracting parties – set the basis for global interaction not only between states but also within states. This focus on free markets and creation of an arena for trade has effectively placed individual rights (research, sale, ownership) at the centre and sidelined political and social issues. There are few permitted reasons for derogation. These include environmental and safety considerations, for example as spelt out in the Cartagena Protocol, which deals with biosafety and the transborder movement of living modified organisms (LMO). This effectively pressurises governments to bring their national regimes in line with trade rules or face punitive action.³ In some instances this undermines local participatory or democratic provisions. For example, in Zimbabwe the ministry responsible for trade quietly pushed through new intellectual property laws in conformity with international requirements with no public debate notwithstanding a long history of public interest in this matter and active NGO involvement in regional and global debates around farmer and community rights.

This approach tallies with the liberal tradition of understanding the emergence of government as based on a social contract between individuals to curtail individual abuses. Simultaneously, there has been a shift at the national level from the state as decision maker to the market as regulator. As Hobsbawn (2001) notes 'market sovereignty . . . is an alternative to any kind of politics, as it denies the need for political decisions, which are precisely decisions about common or group interests as distinct from the sum of the choices, rational or otherwise, of individuals pursuing private preferences. Participation in the market replaces participation in politics. The consumer takes the place of the citizen' (Fakir 2001). This

³ See McKenzie (2003) and Yamin (2003).

move is complemented by the weakening of the state through economic structural adjustment programme development, as well as a development focus on the citizen as driver.

3 Rights-based approaches

The advocates of a risk-based approach and its accompanying individual rights focus hold this out as just as legitimate as any other rights framework. This thinking is fundamentally flawed. Firstly, it fails to consider the status of human rights in society as the primary legal foundation both in relations between states and within states⁴ whether or not they have explicitly incorporated human rights into their national law. And secondly, it severs rights into unconnected and thus meaningless groups.

Human rights establish a framework for the relations between states and their citizens and also amongst citizens themselves. It is essentially the skeleton on which we have agreed to build our world. Human rights, that form part of customary international law (CIL), are binding on all nations irrespective of whether they have committed to them. This is reflected in the preamble to the United Nations Charter, which commits the peoples of the United Nations to

Reaffirm the faith in fundamental human rights, in the dignity and worth of human rights, in the equal rights of men and women and of nations large and small.

Significantly, as Jochnick (2002; see also CESR 2000: 7) argues, human rights law contemplates duties for non-state actors even though they are not party to treaties. The Universal Declaration of Human Rights,⁵ for example, proclaims that every individual and every organ of society shall promote respect for fundamental rights and freedoms. The implication of this is that multi-national corporations have an obligation to work with in a human rights framework. Also important is that there is now legal recognition that responsibility for human rights abuses arising from state policy extends beyond territorial jurisdiction. The practical effect of this lies essentially in how actively these rights are claimed. Potentially, this means that governments have responsibility for the food aid they give and its impacts. It is not unlikely that this responsibility can be extended to companies and their seed.

Risk-based approaches neglect the indivisibility of human rights. Not only can this result in the adoption of solutions that might be inappropriate, but it might also serve to undermine the rights of those very people that development should support. The indivisibility of rights is key to giving them meaning that can contribute to development. The original human rights declarations established legal provisions for CPR alongside wider ESCR⁶ as two parts of one whole. The political disputes of the cold war however

⁴ In general human rights that are derived from international instruments are enforceable between states whereas as those incorporated into domestic law create obligations between the state and civil society and thus set the basis for the individual to make claims or take legal action against the state.

⁵ This was adopted by the General Assembly of the United Nations by Resolution 217A(III) on 10 December 1948.

⁶ For example, the Universal Declaration on Human Rights includes both civil and political rights and economic, social and cultural rights.

resulted in a focus, at least in the western world, on CPR. Unfortunately in 1966 it resulted in two conventions – The International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights being adopted. This was used to justify treating human rights as divisible. Consequently throughout the western world national legislation came to focus on CPR. This was justified on the grounds that CPR are generally defined negatively, as a constraint on the action of governments, and are thus easy to enforce while ESCR are seen as positive statements of intent, rather than an obligation and consequently not justiciable.⁷ Such division, Scott argues, has led to a focus on the legalistic notion of rights as tangible and objective entities and has neglected the other half of the equation – the capacity to be human. (Scott 1999) Thus, although human rights have had significant political and civil gains they have brought few social, cultural and economic benefits to the poor. A further irony is that rights once designed to protect the weak and vulnerable have become tools of the powerful. It has resulted in the erosion of many community rights, which may be held individually or collectively. In the case of biotechnology, farmers' rights, intellectual property rights and seed rights are a few that have suffered. In response the legal and human rights movement have advocated for a global approach that emphasises the linkages between these rights categories. In 1993, the global community declared that

All human rights are universal, indivisible and interdependent and inter-related. The international community must treat human rights globally in a fair and equal manner, on the same footing and with the same emphasis, while the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind, it is the duty of States, regardless of their political, economic and cultural systems, to promote and protect all fundamental freedom.⁸

ESCR necessarily need to be a recognised part of an effective human rights regime because they protect communities that share a common history, identity and economic background and because individual civil rights are unable to offer this protection (Trakman 1994: 29). Globally there is an emerging shift to such a purposive approach. For example, Chief Justice Dickson of the Canadian Supreme Court stated

. . . the values and principles essential to a free and democratic society . . . embody, to name a few, respect for the inherent dignity of the human person, commitment to social justice and equality, the accommodation of a wide variety of beliefs, respect for culture and group identity and faith in social and political institutions that enhance the participation of individuals and groups in society.

⁷ It is widely accepted that for a matter to be justiciable there must be a judicially discoverable and manageable standard on the basis of which the legal obligations of the parties can be adjudged. Brennan J. in *Baker v Carr* 69 US 186, at p 217 cited in Nherere, P. (1993: 132).

⁸ Article 5, The Vienna Declaration and Programme of Action, adopted by the World Conference on Human Rights, 25 June 1993. It is significant that signatories include the United States of America who had previously refused to adhere to the Declaration on the Right to Development.

Although rights have become increasingly prominent as the basis for agenda setting their precise content and implications remains vague. There is, however, a growing body of legal instruments that set human rights standards. International organisations such as the United Nations Development Programme, United Nations Children’s Fund, Food and Agricultural Organisation, the International Labour Organisation and even the World Bank have developed standards to monitor economic, social and cultural rights. At a national level there is also a growing focus on the content of human rights with a significant number of judicial systems addressing such cases. The contestation over rights is a powerful catalyst in rights framing. Rights-claiming – and the judicial resolution of disputes – is an important force in giving content and meaning to rights (CESR 2000: 6).

In contrast to a risk-based approach a rights-based approach to development requires viewing an issue from the perspective of rights and obligations imposed by international human rights norms (UN High Commission for Human Rights 2002: 1). It marks a convergence in human rights and development thinking.

In the area of biotechnology several community rights are applicable, these include consumer and farmer rights. Also important are the rights to food, an adequate standard of living and to development. The right to development is an:

inalienable human right by virtue of which every human person and all peoples are entitled to participate in and contribute to and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realised.⁹

This sets the basis for rights of participation in decision-making. The flip side of this is the right to public accountability and transparency. Environmental rights, and many of the post-UNCED (United Nations Conference on Environment and Development) environmental multi-lateral agreements, focus sharply on the issue of rights in the context of development. Through the UNCED process the global community recognised that environmental protection should be addressed in the context of sustainable development¹⁰ and an increasing number of prominent international lawyers have argued that the obligation to develop in a sustainable way is an emerging principle of CIL (Ginther and De Waart 1995).¹¹ The implication of this is that all governments have a responsibility to act within this framework. The right to development, taken alongside a right to food and an adequate standard of living, can be used to support demands that policy development takes into account livelihood choices and the sustainability of agricultural development. Also of importance are intergenerational rights, the precautionary principle, the

⁹ Article 1, Declaration on Right to Development adopted by the United Nations General Assembly Resolution 41/128 on 4 December 1986.

¹⁰ Rio Declaration on Environment and Development adopted by The United Nations Conference on Environment and Development, 14 June 1992.

¹¹ Sands (1994:379) for example states that ‘sustainable development is established in international law even if its meaning and effect are uncertain’. It is a legal term that refers to process, principles and objectives as well as to a large body of agreements on environmental, economic, civil and political rights.

originator's principle and the principle of co-operation, which are widely regarded as principles of customary international law and thus binding on all countries.

The concepts of risks and of rights, then, have significantly different foci. To some extent scientific interrogation is concerned with the establishment of truth, while legal systems focus on the achievement of fairness and justice. Table 1 compares – in necessarily highly simplified form – these two approaches to regulation.

Table 3.1 Contrasting features of risk and rights approaches		
<i>Contrasts</i>	<i>Risk</i>	<i>Rights</i>
Scope	Science-based expertise dominates; relatively narrow focus; biosafety (food, environmental risks) concerns central; restricted views of cause and effect	Broader framing of issues; technologies as part of livelihood options and development futures; consumer concerns; farmers rights; rights of participation longer time frames
Policy/legal frame	Statutory regulatory provision; Requires regulatory enforcement from the top down. Essentially negative provisions to prevent foreseeable harm to health and environment.	Relates to wider human rights commitments; sometimes enshrined in constitutional law or international agreements; focused on principles and processes; requires incorporation into legislation and regulations
Decision-making	Expert led, technical and managerial; limited public information (on science and risk) and some consultation	More participatory approaches, both individual and collective action; accountability and responsibility; focus on sharing of information and communication. Recognition of power and politics as central
Assessment	Product based – is the GM organism substantially equivalent. Considerations of health and safety	Product – how will this be used/ misused in practice Technology – what are the technological impacts on environmental, economic and social rights including the right to a safe environment, development, life etc.
Liability	Post application – only where clear scientific evidence	Obligation to take adequate precautions to avoid negative impacts More stringent obligation for negative impacts

In the following sections, the paper explores these contrasts in relation to the rights and development debate in Zimbabwe, with a particular focus on how this affects our understandings of the regulation of biotechnology.

4 Rights development in Zimbabwe

This section looks at how human rights have been demanded, articulated in law and claimed in Zimbabwe since independence in 1980 and sets the basis for considering rights claiming around agricultural biotechnology and civil society responses to the biosafety regulations.

This historical perspective is important because, as Ncube (1995) has argued, it is only when law is approached historically that we can understand the shape, substance and content, its achievements and its influence on or connection with society's present needs as well as its failures and injustices in the past and present. Rights, therefore, must be located in social, economic and political reality

Rights are social constructs rather than a natural phenomenon, as is sometimes erroneously and wistfully claimed. Legitimate rights of individuals and groups are products of societal processes involving conflicts, choices and decisions before they become formalised in social policies. The roots of rights are human needs. However, which and whose needs will be satisfied out of society's natural resources and human-created wealth, on what terms, when and to what extent, depends on social choices. In short rights are explicit or implicit societal sanctions for satisfaction of specific human needs of certain individuals and groups out of society's concrete and symbolic resources.

(Maboreke 1988: 65)

Although rights demands are more than a localised claim of a global enunciation, the pronouncement of the United Nations General Assembly, multi-lateral agreements, courts in other national jurisdictions, as well as at the regional and international level, international legal bodies such as the United Nations committees, alongside the growing body of jurisprudence developed by legal scholars have been an important influence on local human rights approaches.

4.1 Independence and the dominance of CPR

The struggle against colonialism, links with other liberation movements as well as global human rights development are key influences in rights thinking in the early post-1980 independence era in Zimbabwe. Rights framing in the Constitution and the law more general has also been important.

The independence struggle focussed attention on rights that were lost and distorted through colonialism, and in particular the de-humanising aspects of it. Activist documents argued that the struggle was one for the equality of all people irrespective of race, class, and culture; for the establishment of the democratic freedoms of speech and assembly; and the recognition of the right to self-determination through the control of land, natural resources and the means of production.¹² However, the first constitution, the Lancaster House Constitution, borne of political compromise and modelled in the western tradition, focussed on CPR and did not include ESCR. It recognised rights to life, liberty, security

¹² See for example the ZANU (Zimbabwe African National Union) Political Programme, No 2. 1973: 21–7, cited in Ncube (1987a: 72).

of person, protection of the law, freedom of conscience, of expression and of assembly, freedom from torture, inhuman and degrading treatment and the protection of privacy and property.

A conservative legal profession and jurisprudence entrenched a liberal, legalistic and narrow approach to these rights.¹³ Successful rights claiming through the courts focussed on the outlawing of adult corporeal punishment,¹⁴ recognition of African female majority status¹⁵ and the restatement of racial equality, personal political freedoms and labour rights. Legislative interventions sought also to address and remove explicit racial privilege,¹⁶ limit gender discrimination¹⁷ and address labour concerns.¹⁸ Given the war in Matabeleland and other perceived security threats, law restricting personal freedoms from the Rhodesian era were not repealed.

In the 1980s the state effectively captured popular human rights demands by supporting the organisation of the trade union movement, small scale and communal farmers, co-operatives, consumers, women and youth and linking such organisations to the state through party structures. Using the new language of nationalism and unity of purpose between the state and the people, independent rights appeals were discouraged sometimes by the state but also by civil society leaders themselves. Notwithstanding the fact that the Constitution did not recognise ESCR this became a key focus of the new government's intervention. In particular, substantial achievements were made in the areas of education and health. Private property rights, however, remained untouched. In general, NGOs had close links with government agencies. They sought to fulfil development gaps by complementing existing governmental and private sector initiatives so as to expand development opportunities (Moyo and Makumbe 2000b: 7). Government activism and the fact that the Constitution did not recognise these rights led to wide acceptance that these issues were issues for the state to address in development programmes. Consequently public rights, demands and claims, with the exception of labour, were relatively weak and ESCR were virtually absent from rights debates.

CPR claiming, however, remained an important independent area of activity and some organisations were quite prominent¹⁹ particularly in the context of the war in Matabeleland. Human rights lawyers also played a pivotal role in framing rights debates. Another salient feature of this early phase was the emergence of organisations that focussed on access to legal information to supported rights claiming.²⁰

¹³ See for example Ncube's discussion of unlawful detention (1987b).

¹⁴ *Ncube and others v The State* SC 156/1987 (Supreme Court unreported).

¹⁵ *Katekwe v Mhondoro Muchabaiwa*, SC 87/1984 (Supreme Court unreported).

¹⁶ For example, the Constitutional of Zimbabwe Amendment Act 6 of 1987 abolished the reserved white parliamentary seats.

¹⁷ For example, the Legal Age of Majority Act 15 of 1982 extended legal majority to African women, the General Law Amendment Act 13 of 1983 established the same conditions of employment between men and women in the public or civil service, the Labour Relations Act of 1985 prohibited employee discrimination on the basis of sex and the Immovable Property (Prevention of Discrimination) Act of 1982 outlawed gender discrimination.

¹⁸ This included establishing minimum wages (Minimum Wage Act 1980), protecting workers against unfair dismissals, and legalising unions for all private sector workers through a new Labour Relations Act 1985.

¹⁹ These included the Catholic Commission for Justice and Peace.

²⁰ In 1983 the Legal Resources Foundation and in 1993 Zimrights were formed.

4.2 The emergence of active Civil Society Organisations

In the 1990s globalisation and economic structural adjustment emerge as powerful factors. In particular the global defining of an “acceptable” political, social and economic regime as a prerequisite for aid and as the foundation of multi-lateral trade is key. Human rights conditionality was an aspect of this and set the basis for the dominance of a classical liberal approach to rights.

Ironically globalisation, and the developments in information technology, also supported a more active and interconnected civil society. In Zimbabwe links between local social movements and their counterparts elsewhere were strengthened.²¹ In some instances this resulted in local organisations, such as the Consumer Council, focussing more explicitly on rights. At a regional level, with the end of apartheid in South Africa and the strengthening of the Southern African Development Community (SADC), alliances also grew. A further irony of globalisation is that these social movements utilised the globally recognised CPR to challenge relations and structures of power (Stammers 1999), development processes and make new rights demands. NGOs increasingly demanded a role in policy development at the regional and national level. So, for example, the new SADC Treaty explicitly recognised public concerns including poverty alleviation, improved livelihoods and the right to participation. These demands extended into the international plane. Originally international agreements had been harnessed to support local demands for public participation, decentralisation and accountability; now civil society demanded to be involved in the development of new international agreements dealing with development. In Zimbabwe NGOs played an important role in the UNCED process and the World Conference on Human Rights in the early 1990s. At the national level new processes involving the public have been created in the development of new environmental law, water law and, most recently, law regulating biotechnology.

By the mid-1990s new development approaches globally, as well as local development tensions, become key. The shift in development thinking from people as passive recipients to actors was a catalyst for a renewed focus on rights and created an important opportunity for marginalized groups to demand an active role in decisions that affect their lives. With the changing position of the state in the 1990s, NGOs assume a greater role in socio-economic issues. Moyo and Makumbe (2000a) suggest that NGOs became more vocal in development debates and, in the context of increasing poverty under structural adjustment, were prepared to be more confrontational with the state. Human rights were no longer the preserve of human rights organisations; rights agendas were more effectively incorporated into the overall focus of development NGOs. This group primarily includes NGOs with a poverty alleviation or environmental focus, as well as farmer organisations.²² These NGOs came to play a very important role in

²¹ These included stronger links with groups such as the global consumer movement, global coalitions for indigenous people's rights etc. Additionally a growing number of NGOs joined international membership organisations such as the World Conservation Union (IUCN).

²² Key here are Commutech and ZERO Regional Environment Organisation both of whom have taken a vocal role in promoting farmer, community and indigenous rights.

shaping debate, influencing policy and developing new approaches. They have fostered approaches to rights that focus on law making processes, resource management, livelihood choices, self-determination, environment, health and information.

4.3 Diversification of rights approaches

In the 1990s rights demands and claims took a new turn. A key factor was the resolution of the war in Matabeleland, which led to the merging of the two main political parties in 1987 and a growing sense of peace. This extended rights demands from issues of personal freedoms to broader societal concerns and generated significant national debate about political democracy and the nature of governance. Both CPR and ESCR focussed organisations broadened their scope. By the end of the 1990s new organisations focusing on constitutional issues had also emerged.²³

While CPR organisations shifted their attention to broader constitutional and societal issues, organisations concerned with development began more actively to pursue issues of governance and CPR rights. Development NGOs had increasingly been frustrated by their failure to deliver economic, social and cultural benefits. In this context NGOs began to focus on citizens' rights to be involved in determining development paths and the need for government agencies to be more publicly accountable. CPR in this context were more vocally linked to ESCR demands. The growing global focus on governance, successful rights claiming by CPR organisations and rights advocacy work were also influential in NGOs addressing rights more comprehensively. In particular, organisations and academics highlighted the need for improved access to justice and administrative justice provisions. Issues of legal standing, rights of access to state held information, the obligation to give reasons for administrative decisions and the legal right to a remedy were highlighted.²⁴ By the late 1990s these rights were widely demanded by NGOs in the reform of environmental and water law.

A further significant development was that understanding about CPRs was also broadened. CPR organisations' focus now went beyond individual rights to include collective and group rights. One important area that focussed on collective interests and in which rights claiming led to legal revision is that of "legal standing". The rules of legal standing determine who can bring a legal claim to court. The common law position was that sufficient interest had to be shown in order to bring an action. "Sufficient interest" was interpreted to mean a direct personal interest and would include things such as personal liberty, money, property, benefits or expectation of benefits. In general individuals and organisations were not entitled to bring an action on behalf of another, even where social, economic or other factor stopped that person from acting. Concern about the legality of an action or decision was an insufficient basis, as the law does not recognise the right to bring an action in the public interest.

²³ For example in 1996 the Zimbabwe Lawyers for Human Rights was formed; two years later, in 1998, the National Constitutional Assembly was established.

²⁴ See for example policy recommendations based on field research made to the Ministry of Environment and Tourism in the reform of environmental law by ZERO Environmental Regional Organisation *et al.* (1996) and Ncube *et al.* (2002).

CPR organisations have, alongside other citizens' groups, successfully pushed this narrow interpretation in cases where fundamental rights are at stake. So, for example, in the Supreme Court case, *Catholic Commission of Justice and Peace (CCJP) v Attorney General*,²⁵ the CCJP was allowed to seek redress for prisoners on death row. This right to bring an action however was not extended to cases where the affected persons could bring the action themselves.²⁶ In 2000 the Class Action Act was promulgated addressing this deficiency. The Act provides that the High Court may give leave for an applicant to bring a class action on behalf of any class of persons, irrespective of whether he or she is a member of that group. In deciding whether an action should be allowed the court considers *inter alia* the ability of the group concerned to enforce their claims individually.

In the context of a more diversified and active rights culture, development organisations, and civil society more generally, have a renewed focus on the inter-linkages between these two rights categories.²⁷ This is evident to some extent in the debates that took place around the proposed revision of the Constitution in 1999-2000. In the press and other national fora debate was polarised between the political opposition, arguing for stronger CPRs and governance frameworks, and the ruling party, focussing on the need to redress land rights that had been at the centre of the liberation struggle. However, more localised debates addressed a diversity of issues. In addition concerns were raised about environmental protection, traditional resource rights, immigration issues, the relationship between gender equality and traditional cultural practices, administrative justice frameworks, the right to development, amongst other things.

Development and environmental NGOs had over several years prior to this focussed on rights to transparent and accountable administration, access to information, environmental rights and traditional resource rights; these were not included in the draft constitution. So, although the Constitution had gone part of the way in addressing social and cultural rights that had been the focus of public debates, it did not address governance issues adequately nor redress existing limitations on civil and political rights. In February 2001 the draft Constitution was rejected in a national referendum. Many voted against the new Constitution, not as a rejection of the proposed land reforms per se, but because of the failure to address the two prongs of rights, which are increasingly seen as equally important.

²⁵ 1993(1) Zimbabwe Law Reports 242 (Supreme Court).

²⁶ So for example in *Kweremu and others v Minister of Lands and Water Development* (High Court Harare 230 of 1993) the court refused to allow a human rights organisation to be party to a suit which sought to interdict the Minister from evicting some squatters.

²⁷ From the late 1990s to the present day, with the growing political conflict around issues of governance and allegations of abuses of personal freedoms, there has been a re-emergence of CPR focused organisations and rights claiming. These include local chapters of international organisations such as Transparency International (1996) and Amnesty International as well as local NGOs. Unlike in the 1980s these alleged rights violations are seen as being closely linked to the overall governance regime.

5 Rights disputes and demands in the context of biotechnology

This diversification of rights approaches has implications for how rights are claimed, and how rights approaches are used to demand things from the state and also used to mediate disputes. This section looks at different forms of rights relevant to the biotechnology policy debate: rights of participation; livelihood and development rights; property rights; and rights to information. In each case the way biotechnology debates have played out in Zimbabwe are examined through a rights-focused lens.

5.1 Rights of participation

At the heart of a rights-based approach lies the re-casting of the relationship between different actors to redress inequalities; it places emphasis on accountability for actions and decisions, non-discrimination and empowering all individuals to legitimise their voice in decision-making (United Nations High Commission for Human Rights 2002: 2). This merges human rights and development approaches and is fundamentally different from the established legal approach to participation.²⁸ The right to development, as exposed in the globally accepted Declaration on Development adopted in 1986²⁹ and reiterated in Vienna in 1993,³⁰ underlies this new approach. It includes a right to a particular process of development in which all rights can be meaningfully exercised with freedom. This implies free, effective and full participation, processes that are transparent, decision makers who are accountable and individuals must have equal opportunity of access to the resources of development and receive fair distribution of its benefits (Sengupta 2000: 5).

Against this background the public right to participate in decision-making related to biotechnology development and application has been a key focus of civil society demands. The articulation of this right and the response to it by decision-makers needs to be understood in the context of the legal culture of participation.

In Zimbabwe the absence of rights has been as important as rights themselves in shaping approaches to participation. Here, the political focus in the early independence era on “the state as the people” and the focus on individual rights are key. The confluence is a governance system that neglects issues of public accountability and responsibility. To some extent this approach is replicated in many NGO and donor projects.³¹ Two areas that have been particularly significant in shaping approaches to participation in development have been local government and natural resource management law. Local government reform in the early 1980s sought to replace indigenous institutions with state development committees, which although elected locally were upwardly accountable effectively cementing the state’s control over local decision-making and development approaches (Mohamed-Katerere 2002: 8–9). Despite addressing

²⁸ The established approach is based primarily on a right to object to decisions, but offers no role in decision-making. This approach is reactive and based on indirect representation. The emerging right of participation is proactive in that it creates opportunities for individuals and groups to participate in the formulation of management strategies and the implementation thereof. For a fuller discussion of this see Mohamed-Katerere (2001: 4).

²⁹ Adopted by United Nations General Assembly Resolution 41/128 on 4 December 1986.

³⁰ Vienna Declaration and Programme of Action adopted by the World Conference on Human Rights. 25 June 1993. UN Document A/Conf 157/23.

³¹ See Saruchera (2003).

many social, economic and cultural concerns government has resisted passing legal title to natural resources to the users and has consistently asserted that titled vested in the state is analogous with title of the user. This is often attributed to the state impetus to retain control of resources and the continuation of the colonial conservationist thinking, which focussed on the state as protector and the user as potential abuser (Ncube *et al.* 2002:121); however equally important is a deeply entrenched and internalised legal framework that focus on individual property rights and has no methodology for addressing group interests.

In the late 1980s the sustainability of colonial conservation approaches was challenged. In response government established a framework for increasing local benefits from wildlife management and localised some decision-making while retaining overall authority over wildlife. This initiative, the UNCED process, and the link in its conventions between sustainability, governance and development were used to support demands for more participatory, accountable and ecologically sound systems of environmental management. First, there was some limited demand for the recognition of rights that are held collectively. These include rights to the environment and rights of local people to practice their culture and have their values and knowledge recognised in decision-making processes. Second, governance rights, including administrative justice provisions, were demanded primarily on the grounds that this supported more sustainable approaches; the role of the state was not directly challenged. The result is an approach to participation that focuses on consultation particularly in policy processes, but stops short of inclusive decision-making.³² To a large extent this has been justified on the grounds that the decisions themselves require technical expertise that the public lack. It is against this background that a consultative process was embarked upon that culminated in the adoption of the Biosafety Regulations that have a technical decision-making system and that fail to address many of the rights concerns that civil society participants raised.

Civil society, however, has not been willing to accept this and continue to demand a more active role in decision-making. There are two important trends here. Demands by consumer groups, farmer groups and NGOs that issues of livelihoods, culture, society and economy be incorporated in decision-making. This marks a shift from a focus on safety to one of choice. Such an approach requires an understanding of local perceptions of “development and technology” and an emphasis on the local articulation of rights. Subsequently, this has been extended to the right to be part of technical decisions to ensure that concerns of citizens are being addressed. Both these aspects are discussed more fully below.

³² For example in reviewing environmental law the government embarked on a protracted process that included expert advice and public consultation prior to drafting legislation. Key stakeholders including both members of civil society and the technical departments responsible for resource management reviewed the draft legislation. Thereafter it was presented to cabinet who directed that further revision be made. The legislation is now before Parliament. Ironically public rights in the draft bill notwithstanding a six-year development process are weak (cf Keeley and Scoones 2000). Other law development processes that used public consultation include that leading to the adoption of the Water Act. Here too, although the legislation seeks to address past social injustices and develops a localised management regime, public rights remain weak particularly because the social, economic and cultural circumstances that users find themselves in and that undercut participation are not taken into account. See for example Mohamed-Katerere and van der Zaag (2003).

5.2 Livelihood and development rights

As discussed above, the human right to development emphasises the right of citizens, together with governments, to choose technology futures that support locally-defined livelihood needs and do not undermined or foreclose livelihood and development options. An increasing range of groups articulate these rights explicitly.

This has been a focus of NGO activity in Zimbabwe since independence. Community and farmer focussed organisations have supported local projects that are based on farmers' self defined needs. In the area of biotechnology, Commutech (Community Technology Development Trust)³³ and the Biotechnology Trust of Zimbabwe's (BTZ) projects that focus on fermentation, tissue culture and so on are an example of this.³⁴ Recently Intermediate Technology Development Group (ITDG), in collaboration with other organisations, has in one district begun a deliberative process where farmers and other community members actively engage with scientists, corporations, research institutes and government officials in defining technological futures consistent with their livelihood vision.

Until recently the Consumer Council's approach to biotechnology has been to focus on issues of individual choice and health concerns. However, in the context of the crippling drought and the US offer of GM food aid, in order to avert a food crisis, debate around the right to choose took on new complexions.

In August 2002 Zambia's President Mwanawasa, on the basis of a national debate – that included NGOs, farmers, women's groups, church leaders, traditional leaders, members of Parliament, opposition politicians and government – and advice from Zambian scientists and economists rejected GM food aid.³⁵ Key considerations influencing the Zambian decision included:

- 1) The speculative nature of the safety reassurances that GM food was not likely to present human health risks. The US assurances of safety were believed to be premature. Also many stakeholders pointed to the fact that the consumption patterns in southern Africa were substantial different from that in the US; for many Africans consumers maize is a staple eaten several times a day.
- 2) Suspicion that the promoters of GM – like those of hybrid seed before – provide skewed information highlighting only the positive and failing to warn of associated costs. Small farmers felt that the introduction of hybrid seed had threatened food security in Zambia (Panos Institute 2002).
- 3) Concerns about economic impacts and the implications for marketing agricultural products to Europe.
- 4) Uncertainty about environmental impacts and impacts on wild living resources and the legislative requirement to adhere to the precautionary principle.
- 5) Concern about genetic transfer.

³³ Also known as CTDT.

³⁴ See for example Saruchera (2003).

³⁵ Zambia rejected 35 000 metric tons of GM maize offered by the US despite the fact that its acceptance was tied to 50 million dollars aid relief.

The Zambian decision not to import GM food aid was very influential in consumer thinking in Zimbabwe and, in addition to the issue of livelihood choices, it drew attention to the issue of participation and consultation in decision-making. This marked an important deviation away from risk-based approaches and brought into focus the complexity of the issue at stake. It sharpened the approach of the Consumer Council of Zimbabwe (CCZ).

There are several key moments in consumer efforts to define an approach that focuses on rights. Suddenly people were faced with the reality of having GM *sadzwa*³⁶ on their plates. First, in this context, the issue moved from being an individual issue to a societal one. In being forced to make an immediate choice consumer organisations directly addressed the implications for development, livelihoods and overall food security. Second, this marked a shift in how the issue of choice was understood. It was no longer just about safety in a narrow sense. Third, for the first time consumer leaders expressed a concern that marketers' rights fly in the face of their rights to a safe environment, development and health and thus effectively recognising that the "free market framework" in which they had been operating was unable to take into account other rights. Fourth, in these circumstances consumer organisations across the region rallied together to find an appropriate response. They consulted widely and engaged with other civil society actors with whom until this point there had only been very superficial interaction. In this context issues that had been at the periphery of their concerns, such as the link between GM and overall food security, moved centre stage. In November 2002 African consumer leaders from 22 countries, along with farmer representatives, research institutes and government leaders, met in Lusaka to discuss the issue of biotechnology and food security. This meeting rejected GM technology as a solution for food security and advocated that food security must be addressed through 'maximising existing resources, tackling distribution problems, promoting local foods which are low tech but highly resistant to drought and other adverse environmental influences.'³⁷ Fifth, the Zambian experience reinforced consumer and civil society belief that they had a right to be involved in a decision. The participatory and transparent approach that had been adopted in Zambia was not replicated in Zimbabwe. Although Zimbabwe originally rejected GM food aid as political pressure was brought to bear on Zimbabwe³⁸ to accept the food aid the President turned to the existing regulatory structures to help make a decision. The Biosafety Board is

³⁶ *Sadzwa* is a stiff maize porridge that forms a staple for many Zimbabweans.

³⁷ Lusaka Declaration adopted in November 2002 at a regional meeting of consumer and other civil society leaders.

³⁸ Several donors made accusations that President Mugabe was starving Zimbabweans and linked this to the overall political crisis. There were reports of threats by the US and aid organisations that if Zimbabwe did not accept the food aid, they would be forced to intervene and to forcibly drop food aid. At a regional training workshop on Disaster Management, in Johannesburg in November 2002, a senior USAID official told me that Zimbabwe's regulations were of no interest to them in the context of a humanitarian crisis and that they considered unsolicited airdrops of GM food to be within the realm of their legal duty under international humanitarian law to provide assistance. The Cartagena Protocol regulating the movement of LMO in which the right of countries to regulate the import of GM goods was from their perspective irrelevant.

reported to have recommended that Zimbabwe accepted the aid provided measures were put in place to ensure the maize was ground to avoid planting of GM seed. Sixth, the consumer council demanded transparent and publicly accountable decisions.

Civil society activists have played a key role in advocating for an Africa-wide approach that establishes a framework in which biotechnology and biosafety regulations will be implemented. In this regard they have focused on the now internationally recognised precautionary principle, as a way of making risk assessment more responsive to local concerns by taking into account development and livelihood rights.

In May 2001 an African Union workshop accepted the draft text of a model law on biosafety in Africa, which is to be tabled at the Council of Ministers Meeting. The African Model Law on Safety in Biotechnology, requires that, prior to the import, contained use, release or marketing of GMOs or their products the competent authorities should determine that this will:

- 1) Benefit the country without causing any significant risk to the environment, biological diversity, or human health
- 2) Contribute to sustainable development
- 3) Not have adverse socio-economic impacts; and
- 4) Accord with the ethical values and concerns of communities and will not undermine community knowledge and technologies.³⁹

5.3 Property rights: farmers and local communities

Property rights have dominated much of the debate about biotechnology in Zimbabwe. The current international regime is set out in the WTO's TRIPS agreement. This favours researchers and corporations, who have argued for strong property rights so as to promote innovation and technology development. The overall regime is characterised by what one NGO commentator called the new totalitarianism, the features of which he described as freedom of the market in which the rights of corporate monopolies are pitted against those of small farmers and an agricultural system leading to monocultures.⁴⁰ NGOs have been very active since the 1990s in demanding a property regime that recognises farmers and community rights. They have found support in the Convention on Biological Diversity (CBD), which calls on all parties to ensure that IPR regimes are supportive of the CBD's objectives to conserve biological diversity and to ensure the equitable use thereof. It is worth noting that the TRIPS regime was negotiated after the ratification of the CBD and thus the legal regime it establishes should be consistent with these objectives.

At issue is the commercial use of the genetic heritage of developing countries and the sharing of benefits and the impact of a privatised seed industry, in which farmer's traditional rights are compromised,

³⁹ This approach is not unique. New Zealand's Royal Commission on Genetic Modification for example recommended that decision-making must include the risks and acceptability to the public of the proposed use.

⁴⁰ Andrew Mushita, Director of Community Technology Development Trust speaking at workshop on 'GMOs, Food Security and Small Scale Farmers', hosted by Friedrich Ebert Stiftung, IDS Department of Agrarian and Labour Studies University of Zimbabwe and HIVOS, 26 November 2002.

on livelihoods and well-being.⁴¹ This is because food security and self-sufficiency, particularly in the marginal areas, depends on the availability of genetic diversity. Farmers are able to use this diversity as a risk aversion measure (CTDT 1998). In many instances the entrenchment of private property rights into international and national law have meant that farmers' rights to seed have been effectively down graded to a privilege and their access to a broader genetic base threatened. A related concern is the implications of the erosion of farmer's rights for community rights⁴² to genetic resources and their technical indigenous knowledge. The ecological threat posed to wild living resources could threaten community resource rights and contribute also to the loss of indigenous technical knowledge.

The tension between these property rights regimes exists not only at an international level, but also between different stakeholders within Zimbabwe. There is a long NGO history of actively lobbying for legal regimes that protect the rights of local communities and farmers to biological and genetic resources. These approaches are based on how seed is used and perceived locally. In general seed is shared and many local communities depend on annual collection of seed for replanting and crop improvement. There is concern that new property rights will effectively re-designate the farmer as contract labourer, shifting from their current role as innovator.

Local realities, alliances with civil movements internationally and developments in international law have been key in shaping these responses. The Convention on Biological Diversity and Agenda 21 recognise that community knowledge and rights are essential for effective conservation regimes. As early as 1992 key local farmer-focused NGOs developed relations with international groups such as RAFI (Rural Advancement Foundation International) and GRAIN (Genetic Resources Action International). By the mid-1990s locally-based international organisations such as IUCN (the World Conservation Union) and FAO (Food and Agricultural Organisation) also began to play a key role. In the late 1990s NGO collaboration across southern African became more prominent; mirroring developments in many other areas. Important here was the growing interest in biotechnology as a development tool, with several countries starting policy or law development initiatives. Also the recognition by both SADC and the African Union (AU) that citizens could make a value contribution to policy was key.

In Zimbabwe, as elsewhere in Africa, NGOs have seized the opportunity created under TRIPS for countries to develop a *sui-generis* system of plant variety protection. They have succeeded in getting the Organisation of African Unity (OAU now the African Union) to adopt a model law that serves as a guide for African countries to develop national legislation. The model acknowledges the intimate connection between livelihoods, property and social-cultural rights. It protects the rights of farmers, breeders and local communities to their biological resources, traditional knowledge and technologies over individual

⁴¹ See also Masiiwa (1999).

⁴² The term local community is considerably wider than indigenous community. The legal definition of indigenous people is very restrictive and applies only to those maintaining their cultural systems whereas in determining who constitutes a local community many more criteria are used. For example self-definition is an important consideration here. As Mayet (2002) argues communities may define themselves in territorial terms, in relation to a particular resource or set of natural resource or some shared activity. In others culture or religion may be important.

and corporate rights. The motivation is to protect and ensure access to the genetic resources that form the basis of local livelihoods, culture and knowledge. Given that most African countries are party to WTO, TRIPS and other international agreements on property rights means that the overall legal framework will involve a combination of patents and farmer rights. How these aspects will come together at the national level however remains controversial.

NGOs throughout the region continue to struggle to have farmer and community rights incorporated into national law. In 2001 a regional meeting bringing together a wide range of actors considered how to implement the model in southern Africa. In 2002 a farmer focused NGO in Zimbabwe brought together a range of stakeholders to discuss a white paper on appropriate law for Zimbabwe. They were able to solicit support from the Ministry of Environment and are now involved in developing national legislation. In a parallel move researchers have successfully lobbied government to strengthen the private property regime. Researchers from agricultural institutions were involved in making presentations to parliament when the Patents Act was tabled. They argued that patents are important because they encourage economic growth through investment, stimulate invention and encourage the disclosure of information by offering protection for a limited time period. In partial recognition of farmers' rights claims, but without consulting interested stakeholders, this same group successfully sought an amendment to the Plant Breeders Act that recognises a farmer's entitlement to save seed from one season for their own use. NGOs have expressed unhappiness both at the process leading to and the substance of the provision, which is seen to downgrade farmer's rights to a legal privilege.

The inability of groups to come together and jointly develop an approach to property rights illustrates the level of mistrust. Also, given the stronger links to policy-makers those arguing for strong property rights have effectively been able to ignore civil society views in law development. Also important here are the overall legal approach to property and the convergence between researcher interests, private sector interests, established jurisprudence and entrenched state approaches. Both the courts and the state have been reluctant to consider any form of group property title whether it is to wildlife, seed, knowledge or land. For example, land claims that went to court on the grounds that land had been unlawfully appropriated under colonial law have consistently been rejected by the state,⁴³ notwithstanding a constitutional provision that a pre-existing law could be declared invalid on the grounds that it violated fundamental rights. Even the current land reform programme, which seeks to transform the land tenure regime and address historical injustices, does not deal with cultural and social rights to land. In any event the state has a clear interest in entrenching private property rights, as these are the basis of investment and public research alliances and a central to current economic revival initiatives. One problem with these parallel right-demanding processes is that, given the weak inter-ministerial links, we could end up with farmers' and community rights that are protected under environmental legislation and private property rights protected under trade regimes creating an ineffectual rights claiming arena. This unfortunate

⁴³ See for example *Makanyanga and Others v Forestry Commission*. SC 1/1991 (Supreme Court unreported).

situation must be linked with the inability of the office of the Attorney General to engage with new legal approaches due to both skills and financial constraints.

5.4 Rights to information

Demands about access to information have been a key feature of civil society struggles since the mid-1990s. Two major trends in the 1990s are evident – one stemming from the demand for improved CPRs and the other from the right to participate.

The first focussed on broadcasting freedoms and the right of the public to have access to all available opinions and views. It was linked to rights of freedom of association and expression and not as in the biotechnology debates a right to know and an obligation of disclosure. The demand focussed on free trade in information. Ncube (1996: 145), for example, in advocating for revision of the Broadcasting Act, argues that: ‘The ultimate good desired is better reached by free trade in ideas – the best test for truth is the power of thought to get itself accepted in the competition in the market.’

The second version focussed on the public right to state-held information in order to ensure that environmental and developmental decisions had been properly made. This right was seen as essential in order to challenge state decisions and ensure that development and environmental management is in the public interest. It was an important focus of the consultations for the Environmental Management Act and was included, albeit watered down, in the final bill.

Rights to information have been a critical aspect of the debate on whether or not to allow the marketing of GM food. Although the CCZ position in this debate was to a large extent based on that of Consumer International, its position had some important parallels with earlier rights claims. CI has advocated that the Codex Alimentarius⁴⁴ recommends mandatory labelling. CCZ focused on the consumer right to choose and rejected the assertion by the developers/marketers of the GM products that they are substantially equivalent. Drawing on literature generated elsewhere in the consumer movement, they argued that GM foods must be labelled to support consumer choice as there are allegations that they can result in allergic reactions, have unanticipated toxic effects and increase anti-biotic resistance (Halloran and Hansen 1998). Drawing on concerns raised by consumers themselves about whether the technology was tantamount to playing god, interfering with nature, contrary to local ethics and also whether gene insertion would play havoc with the totem system that lies at the heart of local cultural association, CCZ went a step further and advocated for labelling on the grounds that it was necessary to allow consumers to express their religious, ethical and environmental preferences. Kanyeba an official of CCZ, for example, noted that

⁴⁴ This is an agency of the UN world Health Organisation and the Food and Agricultural Organisation.

There are people who . . . culturally are not supposed to eat certain things but there is no way that they can be sure they are not eating these things. You can say you don't eat pork but you could be eating food that was genetically modified using genes from a pig and you would not be able to know.⁴⁵

Originally this demand for a right to information was firmly located in a market freedom approach and the "right" of companies to market their products. Consequently the focus was on the individual consumer's right to know and, on the basis of information, to exercise the right to choose whether or not to use GM products rather than a right to information in order to access whether the marketing is appropriate from a livelihood or cultural perspective. In this sense the approach was more akin to that developed by CPR activists, rather than that of the environment and development movement. The approach reflects the legal tradition of Zimbabwe and its ingrained respect for the principle that 'individual freedoms should not be unduly limited'.⁴⁶

Additionally, the CCZ approach tallies with the deep-rooted respect for private property and the rights attached to it. Interestingly there was a slight shift away from this position when faced with the reality of GM food imports. In these circumstances consumer organisations focussed on their right to information in order to make livelihood choices as a community. Effectively accepting that limitations on fundamental rights when in the public interest are permissible.

Both the approaches of CPR and ESCR advocates highlight the link between trust and information. This is something that Amadou Kanoute, the Africa Director for Consumer International⁴⁷ has drawn attention to in relation to US and EU dispute over mandatory labelling, he advises

these are real concerns which the United States should address, rather than trying to use international institutions to force consumers to accept their products . . . we would like an assurance that our rights are respected.

As early as 2000 the consumer demand for labelling was widely acknowledged as legitimate. Publicly all stakeholders, including members of the Biosafety Board and biotechnology researchers, accepted this need. Eventually, in what appears to be a compromise, a committee was established under the Standards Association of Zimbabwe (SAZ) to look at the creation of labelling "regulations". The fundamental flaw with this is that these regulations are not regulations in the legal sense but voluntary standards.

Attitudes to information, however, are clearly changing. Biowatch in South Africa for example made an application to the High Court in Pretoria at the end of 2002 for an order compelling the Registrar of Genetic Resources, the Executive Council for GMOs, and the Minister of Agriculture to release

⁴⁵ 'Zimbabwe joins Genetically Modified Foods Fray,' *Financial Gazette*, 9 March 2000.

⁴⁶ The Constitution, for example, proclaims in Section 11 that, 'Every person is entitled to the fundamental rights and freedoms of the individual . . . subject to respect for the rights and freedoms of others and for public interest.'

⁴⁷ CI represents 120 consumer organisations in 45 African countries.

information regarding GMO release and use on the grounds of possible risks to human health, the environment and food security.⁴⁸ In response, the Government stated that they cannot release the information as they need to protect “third party interests” i.e. private sector interests.

Despite the clear rights demands of civil society in the consultative process leading to the adoption of the Biosafety Regulations the regulations are primarily risk focussed and do not take rights into account. They provide that one of the functions of the Board is to actively promote biotechnology in Zimbabwe.⁴⁹ In this context the Board has interpreted their assessment function conservatively focusing on the physical aspects of risk (Biosafety Board, undated a & b). The regulations were crafted from the information gathering visits members of the drafting team undertook to the US and Europe, rather than developed out of the public consultations that took place.

6 Rights challenges to risk-based regulation

A rights perspective raises some basic challenges to the way regulation is thought about. This section examines some of these, highlighting how a risk-based approach is limiting in a number of important ways. First, does it ask the right question? Risk approaches frame the regulatory problem in a particular way, but a rights perspective opens up this framing to highlight other areas of concern that perhaps should be brought under the regulatory provision. Second, a recognition of risk also suggest the need to recognise liability and the rights of those potentially harmed by biotechnology interventions. A rights approach, it is argued, chimes with the precautionary principle and the need to recognise liability issues. Third, a rights perspective raises questions about the legitimacy of decision-making, and the rights of different actors, with different forms of expertise, to engage in the process of regulatory deliberation. The paper questions the current arrangement for biosafety regulation in Zimbabwe, dominated as it is by a particular type of scientific expertise. The challenge of public involvement to ensure a wider debate and more trustworthy and legitimate decisions is highlighted.

6.1 Asking the right question

Risk analysis in Zimbabwe focuses on the characteristics of the donor and the GM organism being assessed, intended use of the organism, the expression and properties of the gene product and the features of the recipient environment (Biosafety Board undated a: 16–21). The Guidelines assess its probable effect on the environment as well as the possibilities of containing and controlling the organism. It sets out procedures to be followed before GMOs are commercialised and released into the environment (ibid: 20–25). The concept of familiarity is established as a general consideration in risk assessment – the extent of

⁴⁸ Biowatch requested various documents including copies of applications for permits under legislation regulating GMOs (including risk assessments), copies of permits granted for the import, use, release and export of GMOs, details of public participation measures adopted and implemented in relation to the regulation of GMOs, locations of field trials of genetically engineered crops and minutes, memoranda and other documents relating to GMOs in the possession of the Department of Agriculture.

⁴⁹ Section 5(2)(b).

familiarity determines the required depth of risk assessment (ibid: 26). A further consideration, here, is whether the organism is substantially equivalent to a known organism. The thinking being that where there is substantial equivalence, no health or environmental risks are created. The Biosafety Board bases its risk assessment processes on a designation of risk groups based on the pathogenicity of the agent, the modes of transmission and host range of the agent, the availability of effective preventative treatments or curative medicines and the prevalence of the micro-organism in Zimbabwe (ibid: 16). The Guidelines direct the decision-maker to consider impacts on human health, agricultural production, other organisms and the quality of the environment (ibid: 28).

Nobody denies that scientific risk analysis should be an important part of the decision-making process, but its place as the only basis for decision-making is questioned. There are several reasons for this resulting primarily from disagreement about the framing of the issue at stake, as being safety and the determination of an acceptable degree of risk, and the purpose of regulation.⁵⁰

According to one member of the Board the defined decision-making processes are not designed to be restrictive instead they are proactive and seek to encourage science. The Regulations set a basis for case-by-case assessment of proposed initiatives on the basis of whether they pose a health or safety risk. They supposedly acknowledge the need for responsible decision-making but are careful to ensure that decisions have a scientific basis and avoid what is labelled as emotive decision-making. Despite this clarity of purpose from the Board's perspective and clear legal framework for biotechnology development it has not led to a situation of public trust and acceptance. Underlying this is that there is no agreement, as the Biotechnology Trust of Zimbabwe⁵¹ suggests, that

The development of modern biotechnology in Africa is not a question of whether or not we should embrace it but how we should embrace it. We have no alternative but to develop the technology that is suitable to our people in the region.

(Mswaka *et al.* 2001: 8)

Consequently, there seems to be a continuing tension between the regulators, multinational companies, biotechnology funding agencies and scientists on the one hand and consumers, small-scale farmers and farmer-focused and environmental NGOs on the other.

First, significant sections of civil society believe that this approach neglects the complexity of risk. Risk analysis deconstructs the problem reducing it to just one of its parts and disguises the fact that there may be more than one possible solution to the problem that the risk taking strategy seeks to address. In this case biotechnologists tend to see the problem as a growing food crisis stemming from the natural limitations of the crops currently used; genetic engineering is posed as a solution as it can create more resilient crops. Others, however, point to the narrowness of this approach, arguing that technological solutions need to be weighed in the overall national context and the reality of small farmers. One

⁵⁰ See also Keeley and Scoones (2003).

⁵¹ This NGO was established essentially as a funding mechanism for small scale farmer biotechnology projects.

suggestion, raised at a national meeting on GMOs and food security, is that an agricultural strategy should be based on an understanding of why farmers are not meeting the potential of the crops they are using and focus on solutions that address this.⁵² An important aspect of this might be promoting farmer's own varieties and helping them improve these varieties through technology that is easily accessible, such as second generation biotechnology⁵³ thus ensuring that farmers retain control and that their rights are respected.

Second, it fails to acknowledge that "risk" is a slippery concept and that it varies in content according to circumstances. As local concerns demonstrate danger, threat and risk all have dimensions that are emotional, moral, political and economic. Recent work by psychologists suggests that public take into account emotional and moral factors and have a broader temporal perspective (Lyndon 1988: 299). Risk assessment, as currently constructed, ignores the social construction of risk and that technological risk is often seen against the historical experience of technological innovation. While new technologies have had important gains for human health, communications and overall well-being many have caused unexpected damage that we, as humanity, have little capacity to rectify. Public perceptions about radioactive waste, ozone damage, global warming, lead poisoning and pollution and in the Zimbabwean context the unfilled promises of other agricultural interventions are key.

Third, risk assessment does not weigh what will be lost or gained. Need and benefit are not considerations partly because it operates within a short-time frame. As a methodology it focuses only on what science knows and denies the significance of what science does not know. Consequently risk assessment is set up to resolve dilemmas beyond its own dimensions as a science tool of evaluation (Lyndon 1988: 299). The Regulations do not test the assumption that biotechnology development is good they simply seek to minimise environmental and human health harm. Thus they are out of step with the public reality that there is no consensus on the value of this technology. NGOs and farmers' groups consistently point to the uncertainty of implications for agricultural strategies and whether GMO crops are needed at all. Local NGOs have argued that for technological choices to be sound, there must be a clear setting of priorities driven by need and not an external technological push. There must also be an understanding of how the technology will be delivered if the historical lessons of agricultural development are to be learnt. The promised benefits of the green revolution did not come to fruition in Africa due to the unaffordable costs of fertilisers, pesticides and irrigation. These concerns are not as such an outright rejection of biotechnology. As the director of one of the most vocal local NGOs argued

There is a need to create an environment where the local scientists have space and capabilities of testing these emerging technologies, and assess the level of contribution of the biotechnology options

⁵² Roger Mpande speaking at a workshop on 'GMOs, Food Security and Small Scale Farmers', hosted by Friedrich Ebert Stiftung, IDS Department of Agrarian and Labour Studies, 26 November 2002, Harare.

⁵³ Ibid.

within the context of sustainability. The other dimension of this is the technologies accessibility and their scope to solve the problems of the poor farmers in their endeavour to attain food security and self sufficiency.

(Mushita 2001: 1)

Related to this is the link between sustainability and human and environmental security. At the heart of human security are the normative values of justice, fairness and responsibility which risk assessment does not address.

Despite the global shift to considering the precautionary principle in risk assessment its use in Zimbabwe remains contested. For some in the scientific community it places too much emphasis on what is not known, neglecting actual experience and ignoring the immediate problems of hunger. Researchers are at pains to demonstrate the short-term benefits, which they feel should not be trivialised. One senior scientist, who sits on the Biosafety Board and who also works with a publicly-funded biotechnology research organisation, urged participants at a biotechnology workshop to “leave it to science” and to “allow the facts to guide us.” For civil organisations its value lies in bringing in a range of issues not normally considered in risk assessment by drawing attention to economic, social, cultural and environmental impacts.

In practice the state’s ability to adopt a precautionary approach in the face of other powerful political and commercial interests is questionable. Zimbabwe had originally turned down an offer of GM food aid. Several key actors urged precaution. A Zimbabwe Farmers’ Union official cautioned against importing GM maize because of the danger posed to other seed varieties and the threat it poses to Zimbabwe’s current status as GM-free; he also expressed concern about beef and poultry exports because feed was based on maize.⁵⁴ The Ministry of Lands, Agriculture and Rural Resettlement echoed these concerns.⁵⁵ Even BTZ cautioned against importing GM foods asserting that further studies are required.⁵⁶ A SADC briefing advises that, in the light of GM food aid being accepted, member states should undertake awareness campaigns to ensure that GMO grain is not planted (SADC 2003: 3) and that all GM maize is milled before distribution (ibid: 4). In the context of US pressure and linking the refusal to the current political crisis the government backed down and accepted GM maize on the condition that it was milled. A senior USAID official argued that Mugabe was starving his people and that if need be the US would, in terms of its international obligations, air drop food in Zimbabwe.⁵⁷ The attitude of the US in the debate and their heavy handedness eventually led to a senior CCZ official surmising that the US had used the food crisis to impose its products on developing countries.

⁵⁴ ‘GMO products threaten seed varieties –ZFU,’ *The Independent*, 7 June 2002.

⁵⁵ ‘Official says GM Maize would have hit country’s beef export’, *The Daily News*, 19 June 2002.

⁵⁶ Ibid.

⁵⁷ Personal communication, OFDA-USAID Disaster Risk Management Training Initiative for southern Africa, Johannesburg, November 2002.

Fourth, another frequently expressed concern with risk assessment methodologies is that they do not take into account the actual reality of application and use.⁵⁸ As Fakir argues some negative consequences may not stem from the technology per se but the context in which it is applied (Fakir 2001: 3). While field trials go some way to addressing this, they may take place in a setting quite different from that where the final products would be used. One biotechnologist and a member of the Biosafety Board publicly acknowledged that refugia requirements etc that would be used in trials might be difficult to guarantee in communal area context of land scarcity and poverty. An NGO working with small-scale farmers suggested that their experience in Zimbabwe reveals that, when faced with new seed varieties, farmers will test these in a small area and leave a portion of land to their normal crops as a risk aversion strategy. Also important is that many small farmers intercrop, use residues for animal feed and save seed for replanting.

Fifth, risk assessment is seen to fall short as a decision-making tool because, as Baram (1988: 503–4) argues, it treats people as just one more variable in the decision rather decision maker. Given this, it misses not only the questions that the public ask, but also does not acknowledge that the information they provide could be a valuable part of a review process. Recognising the role of civil society in decision-making widens the range of issues that are considered. Yet the prevalent focus on science and risk has been used in public debates to trivialise public concerns.

6.2 Risk and liability

In Zimbabwe, as in most free market societies, legal and regulatory institutions are heavily biased in favour of permitting new products to enter the market, assessing risks retrospectively, and demanding persuasive scientific evidence of harm before restricting any use of the product (Groth 2000: 2). Unfettered research is seen as key for improved and safer technology and, in general, harm is dealt with retroactively.

One recurring issue and concern about the regulations is its failure to establish an adequate framework for liability. Consumer representatives have often asserted that in the absence of recognition of the consumers' right to information (in order to make an informed choice) and mandatory labelling requirements liability provisions should be strengthened. The current regulations deal only very superficially with this issue, by imposing a general duty of care on users⁵⁹ of GMOs to ensure that

Appropriate measures are taken to prevent or minimise any foreseeable danger to persons, animals or plants or to the environment generally that may result from the use of such organisms.⁶⁰

⁵⁸ This has been a keen discussion point at several of the public meetings hosted by the Biotechnology Trust of Zimbabwe and the Biosafety Board.

⁵⁹ A user is defined as including the owner or controller of facilities involved in the development of GMOs, researchers and sellers and marketers of GMOs.

⁶⁰ Section 13(1).

This provision does not change the common law provisions for establishing delictual⁶¹ liability; it simply sets a standard for negligence and the basis for legal wrongfulness. The section is cold comfort to the consumer because in determining “appropriate measures” and “foreseeability” the court will consider how the reasonable person would behave. In the case of a scientist the standard would be a reasonable scientist. The section does not address the shortcomings of the common law and in particular the difficulty in establishing causation in circumstances where there is considerable time lag between action and effect or where a direct causative relation cannot be established. The provisions fall short of consumer expectation that manufacturers or developers should have strict liability for the impacts of their products. With the increasing number of novel products on the market and the difficulty of legally establishing responsibility there is growing recognition at the global level that increased prudence is needed. Here we see a several legal principles, including the originators’ principle⁶² and the precautionary principle, gaining prominence.

The precautionary principle shifts the emphasis from post-use to pre-use, moving the emphasis thus from remedy to avoidance. Additionally, it is widely believed to reverse the burden of proof, requiring the proponent of an activity to show that it is safe. It places a greater burden on proponents of a new technology, to demand that risk questions be better identified and addressed, before innovations are widely adopted and thus effectively places public issues social, cultural, development considerations above individual commercial interests. A precautionary approach is, in this sense, an extension, rather than a replacement, for risk assessment – a tool for balancing risks and benefits. In many jurisdictions this principle is used in impact assessment procedures that consider arrange of factors from the scientific to the social. Zimbabwe’s environmental impact assessment policy does not specifically include biotechnology or agriculture.

Despite these legal developments, and the knowledge gaps around biotechnology, there has been reluctance to adopt strict liability provisions or precautionary measures. One Biosafety Board member asserted that there was no need to address this as there was no international framework for this and, in any event, it would undermine investment. The issue has been conspicuously absent from consultative meetings arranged by the Biosafety Board.

7 Legitimacy of decision-making

Related to the issue of how assessment criteria are framed is the issue of how the decision-making authority, the Biosafety Board, is composed. In terms of the Regulations the Biosafety Board is responsible for risk assessment at various levels and for developing a long-term policy for safety in biotechnology in Zimbabwe. The Biosafety Board is made up of independent experts appointed by the

⁶¹ The law of delict is known as the law of tort in English and American law. It deals with all civil wrongs other than those that arise from a breach of contract.

⁶² The essence of this is that developers as key reapers of the benefits should accept major responsibility for costs. It is a legal tool for re-distributive justice. The most well know aspect of this principle is the polluter pays principle.

President. These experts are primarily biotechnologists, but include a toxicologist, an environmentalist and an agriculturalist.

This is a source of tension. From the Board's perspective the composition is justified, given the areas of inquiry envisaged under the Regulations. Most civil society organisations, however, demand that the Board include civil society representatives in recognition of their right of participation, but also because they believe that this will enhance decision-making, make it more transparent, and thus facilitate public trust. The Board has, however, continually expressed its reluctance to recommend that civil society representatives be included or that the composition be significantly changed. One official of the Board asserted that "those who make noise⁶³ will not be included." Board members are appointed for a three-year period. The first appointments were made in 2000 and were almost exclusively biotechnologists, in 2003 new members have been appointed effectively widening the professional expertise. This, however, has not answered the public concerns expressed. Several issues are raised. First, what kind of expertise and interests should be included on the Board and in what proportions? Second, is civil society representation necessary to ensure independence and transparency? Third, is the Board competent and able to carry out its functions?⁶⁴

Several members of the Biosafety Board argue that there can be no space on the Board for people who lack "real" understanding of the science of biotechnology. Consumer and civil society leaders argue that public involvement is important because ordinary people bring new insight into the issues of safety, which could be useful in broadening the areas of scientific investigation. In any event society's understanding is improving – some of the concepts used are under public fire. For example, the thinking behind substantial equivalence as the basis for making decisions is widely criticised. Similarly, consumer leaders raise concerns about the extent of scientific knowledge; for example, they point out that the relationship between genetics, chemicals and toxicology remains unknown.

The dominance of biotechnologists has been a point of frustration for other scientists who argue that environmental and agricultural issues are not adequately considered in decision-making. An official in one of the Ministry of Agriculture's technical branches said that the Board could do what they want but that, at the end of the day, all marketing of seeds would need to take place in terms of the Seeds Act for which Agriculture has responsibility.

Leaving aside the issues of socio-economic appropriateness and unknown impacts another set of issues that undermine public confidence relates to the adequacy of the assessment process, the ability of the Biosafety Board to demonstrate this and their capacity to undertake them. There is public cynicism about the appropriateness of the Board's decisions and the information provided to justify them. Various stakeholders, in particular consumer bodies, have raised questions about their ability to test effectively for allergenicity, toxicity, pathogenicity, genetic and ecological effects. This gap in capacity to carry out meaningful risk assessment has been acknowledged at a regional workshop on biosafety, which included

⁶³ A peculiar Zimbabwean expression meaning to be controversial.

⁶⁴ cf Keeley and Scoones (2003).

participation of the Biotechnology Trust of Zimbabwe and the Biosafety Board (Mswaka *et al.* 2001: 44). However, the Board asserts its competence to make decisions on the basis of what is known about specific GMOs. For example the Board decided to allow GM maize to be imported for consumption on the evidence of safety generated in the United States of America. There is much unhappiness about this. The motivation for the US aid donation is widely questioned. In a statement on 18 November 2002, the CCZ wondered if the American biotechnology industry and the United States government were ‘exploiting the crisis in Southern Africa as a means of pushing unwanted and potentially unsafe transgenic foods onto the region’.⁶⁵

Tensions on this issue between civil society and consumers and the Biosafety Board is illustrated in a public tussle between the Board and consumer organisations. As already noted the decision to import GM food aid generated much public debate. Questions were raised about what tests had been carried out on the maize that was imported. Eventually consumer organisations asked the Board to collaborate with them in testing the maize so as to inform consumers about the potential risks involved. In a letter, dated 12 November 2002, from the Registrar of the Biosafety Board, declined to give the CCZ some samples of donated maize grain for testing and advised that they ‘should, however, get samples of maize-meal directly from consumers to carry out your own tests.’ This caused some public outrage.⁶⁶ At a public meeting in November, on GMOs and food security, a member of the regional office of CI confronted the Registrar about this attitude but he refused to engage. She also noted that her request to make a short presentation on consumers’ thoughts about GM food aid were turned down by the Registrar who was chair of the session.

A related issue is the kind of information that the Biosafety Board presents to the public. A member of the Board argued at an academic meeting on science, technology and development that professionals should present clear and unqualified opinions to policy-makers and the public so as to clearly guide them in decision-making. The perceived unwillingness of the Board to engage with the public and policy-makers in a frank and open manner has caused a fair amount of unhappiness. Members of the public are becoming increasingly vocal around this. At the meeting referred to above, the Biosafety Board (and BTZ) was accused of presenting only one side of the available information and deliberately manipulating the agenda of consultative meetings. Conflict around public rights to information regarding risk came to a head around the import of GM maize. In several radio presentations members of the Board sought to allay public fears by reassuring the public about findings of the US regulatory agency and the fact that the American public has been consuming GM maize for some time now. One Zimbabwean journalist captures the essence of public concerns noting that the authorities had assured the public of the endless benefits from biotechnology – its value as a tool that can be used to raise crop yields, create drought-resistant crops and boost nutrition for millions of malnourished people, but have not advised on the risk

⁶⁵ Hwande, T. ‘What choice between starvation and GMO food?’, 28 March 2003, *Daily News*.

⁶⁶ As is illustrated in the report by Tanonoka Hwande, ‘What choice between starvation and GMO food?’, 28 March 2003, *Daily News*.

posed. He laments the lack of credible information and wonders: 'There are just too many disagreements and even controversy over GMO foods. Who shall we trust to tell us the truth?'

The partisan nature of the Board and its failure to engage honestly and openly with the public is seen essentially as non-disclosure and as fundamentally dishonest and there is an increasing suggestion that the skewing of available information takes place to justify decisions after they are made. As noted earlier one key objective of the Board is to promote biotechnology and thus it is unlikely that, in the absence of strong evidence showing adverse impacts, they are not likely to curtail new products.

To some extent public involvement is believed to serve as a check on potential abuse of authority. This is a concern because of a perceived conflict of interest. Several Board members have a link with research institutions or are themselves researchers. In the context of the current squeeze on public funding it is felt they might develop partnerships with the private sector. Public involvement is resisted by the private sector because of the strong commercial propriety rights attached to biotechnology and the lack of agreement on where the boundary between privately and publicly held information should lie.

8 Challenges for the future

The legitimacy of a risk based approach as socially and politically neutral is increasingly being questioned as the relationship between scientific exploration and commercial application is becoming more intertwined. Science is no longer popularly seen as acultural or apolitical but as a socially embedded activity. Facts generated are not accepted as unsullied, pristine bits of truth (Koukoutchos 1994: 2239–40); instead there is a growing public perception that society (economics, culture, politics) influences what we see and how we see. Regulating for biotechnology must take this into account. The old adage that justice must not only be done but must be seen to be done captures the concerns of many. As long as regulations neglect rights they are unlikely to be seen as being able to lead to social justice and fair solutions.

This paper has raised several concerns expressed in debates in Zimbabwe, and indeed more broadly in Africa. A rights approach might be useful in creating a more conducive framework for policy development and law as it demands a return to development thinking that focuses on the unity of the social experience – and the multi-faceted nature of human dignity. It reunites all aspects of human rights and challenges the artificial division within human rights between those concerned with the economic, social and cultural issues, on the one hand, and those that focus on civil and political concerns, on the other. As such it demands that we look beyond the immediate. Used effectively it offers various opportunities to develop an agricultural biotechnology strategy that is more equitable and that caters to the needs, concerns and visions of the poor. This includes revising both procedural and substantive rights issues.

Rights approaches seek to create opportunity for effective rights claiming and thus, as the United Nations High Commission on Human Rights (2002) notes, they:

- Place emphasis on participation of individuals in decision-making;
- Introduce accountability for actions and decisions, which can allow individuals to complain about decisions affecting them adversely;
- Seek non-discrimination of all individuals through the equal application of rights and obligations to all individuals;
- Empower individuals by allowing them to use rights as leverage for action and legitimising their “voice” in decision-making; and
- Link decision-making at every level to the agreed human rights norms at the international level, as set out in the various human rights covenants and treaties.

By creating better opportunities for participation, rights approaches bring competing claims to the fore. Such approaches do not provide easy solutions or prescribed answers; instead they force us to recognise difficult issues and provide a framework for trying to resolve existing conflicts through processes and institutions which protect the interests of the poorest and most marginalized (DFID 2000: 17).

Widening the space of engagement and giving new voice to the marginalized might help improve communication between technology developers and users, whether they are farmers or consumers. Communication will assist better and more appropriate definition of the problem, setting priorities and establishing assessment methodologies. Some engagement might reveal a need to redefine goals or focus on crops or fruits to reflect local priorities and could also lead to better understanding of the actual context in which crops will be used.

Taking specific rights into account will help create solutions that do not further marginalize poor people. Key here would be farmers’ rights, as well as the right to development. Acknowledging the links between farmers’ rights, genetic and biological diversity, the internationally recognised right to an adequate standard of living and of indigenous people and communities to the maintenance of their cultural identity calls into question a narrow definition of ownership and control. For example, the centralised system of seed development and its implications for farmers will need to be reconsidered.

Wider participation in priority setting exercises, both by public and private sector agencies, is demanded by a rights approach. Rights and international law need to be taken into account in priority setting. Increasingly, the precautionary principle is thought to be a useful tool. Much of the resistance to its use stems from misunderstandings about its implications. It is a decision-making framework rather than a prescriptive rule. This principle can be broadly thought of simply as the caution – it is better to be safe than sorry. It is not anti-development per se; instead it calls for better mechanisms for anticipating adverse side-effects of new technologies, for reviewing technologies more thoroughly, and exploring alternative ways for reaping benefits, while minimizing adverse collateral effects before any major innovation is widely adopted (Groth 2000: 2). In its weakest formulations it addresses only “serious or

irreversible threats”⁶⁷ and in its strongest “potential adverse effects.”⁶⁸ Also there are difference about what, in the face of threats, is the appropriate response. In some this means “no action” in others it calls for cost benefit analysis and thus a determination of what constitutes acceptable risk.⁶⁹ The principle only comes into operation when there is scientific uncertainty. Increasingly there is an acceptance that the principle, unless defined, is in international law the lowest common denominator of its various formulations. Its key value lies in the fact that it widens the scope of considering impacts from that of traditional risk assessment.

An alternative approach would be to devise a process that does not overestimate what we know and underestimate what is uncertain (Fisk 1998: 3). By taking rights into account decision-making criteria and concerns will necessarily need to be expanded. Millar and Mepham (2000), for example, develop a decision-making framework based on an ethical matrix in which impacts of biotechnology are assessed in terms of (or lack of) respect for three ethical principles (well being, autonomy, justice) as they apply to different interest groups. This matrix can be further developed to more explicitly include the traditional concerns of biotechnology regulation – health and safety – and of rights claiming. So, for example, the aspect of well-being would need to more explicitly look at livelihoods, economics, farmer and community rights and so on. The usefulness of this approach is that it goes beyond being a checklist, but encourages reflection on science in the context of values. By focusing on how decision-making criteria apply to actual stakeholders, the focus is shifted from some abstract ideal interpretation to the actual reality of application and assessing possible costs, benefits and determining the kinds of risk society is willing to take.

Rights-based approaches assert that consumers, farmers and future generations have the right not to have risks imposed upon them. It is essential that a consultative process should determine where the risk should lie and how much and what kind of risk is acceptable. A determination of this will help determine the appropriate levels of liability to be imposed on product developers. Rights are concerned with empowerment and equalisation and it is possible that a rights approach to responsibility for risk would require strict liability to be placed on the developer or producer.

The inherent danger with these approaches, as with all forms of participation and public engagement in policy of course, is that they become ritualised window-dressing to placate any opposition. And given that rights, although proclaimed as universal, all people do not hold or experience rights equally. To safeguard against this different kinds of decision-making institutions and opportunities for citizens to demand accountability and redress are necessary. Making local participation effective requires supportive legislative provisions. These may include legislative provision securing include rights of access to

⁶⁷ Principle 15, Rio Declaration on Environment and Development.

⁶⁸ Cartagena Protocol.

⁶⁹ The Cartagena Protocol states: ‘Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate with regard to the import of that living modified organism intended for direct use as food or feed, or for processing, in order to avoid or minimize such potential adverse effects.’

information, rights to be given reasons for public decisions, disclosure obligations and other administrative justice provisions. This would strengthen the ability of citizens to act as rights holders and claimers. Consequently, reinforcing the capacity of consumers and small and marginal farmers to do this in the Zimbabwe context, as elsewhere, remains a major challenge for the future.

References

- Baram, MS., 1988, 'Environmental Risk and Democratic Process: A Critical Review' *Columbia Journal of Environmental Law*, Vol 14 No 2: 501–48
- Biosafety Board, undated a, Biosafety Guidelines
- undated b, Procedures for Assessment of Planned Trial Release or General Release of Genetically Modified Organisms
- Community Technology Development Trust (CTDT), 1998, 'Socio-economic factors determining on farm agricultural biodiversity in Zimbabwe', report sponsored by IUCN Regional Office for Southern Africa, <http://economics.iucn.org>
- CESR (Centre for Economic and Social Rights), 2000, *Economic, Social and Cultural Rights: A Guide to the Legal Framework*, www.cesr.org/text%20files/escrguide.pdf
- DFID, 2000, *Realising Human Rights for Poor People*, http://62.189.42.51/DFIDstage/Pubs/files/tsp_human.pdf
- Fakir, S., 2001, 'GMOs for food security: a corporate misnomer', *IUCN Policy Think Tank Series* No 8, South Africa Country Office
- Fisk, D., 1998, 'Environmental science and environmental law', *Journal of Environmental Law*, Vol 10 No 1: 3–8
- Ginther, K., and De Waart, P., 1995, 'Sustainable Development as a Matter of Good Governance: An Introductory View' in K. Ginther (ed.), *Sustainable Development and Good Governance*, Nijhoff Dordrecht
- Groth, E., 2000, 'Towards a more precautionary and more scientific approach to risk assessment: a consumer perspective on food safety', presented at the World Congress on Medicine and Health, 'Medicine meets Millennium', Session on Nutrition and Food Safety), www.consumersunion.org/food/mmmcp800.htm
- Halloran, J. and Hansen M., 1998, *Why We Need Labelling of Genetically Engineered Food*, www.consumerunion.org/food/
- Jochnick, C., 2002, *The Human Rights Challenge to Global Poverty*, www.cesr.org/text%20files/actors.PDF
- Keeley, J. and Scoones, I., 2003, 'Contexts for regulation: GMOs in Zimbabwe', *IDS Working Paper, Biotechnology Policy Series* 9, Brighton: Institute of Development Studies
- 2001, 'Environmental policy-making in Zimbabwe: discourses, science and politics', *IDS Working Paper* 116, Brighton: Institute of Development Studies
- Koukoutchos, B., 1994 'Solomon meets Galileo (and isn't quite sure what to do with him)', *Cardozo Law Review*, Vol 15: 2237–54
- Lyndon, M.L., 1988, 'Risk assessment, risk communication and legitimacy: an introduction to the symposium', *Columbia Journal of Environmental Law*, Vol 14: 289–306
- Maboreke, M., 1988, 'Women under Zimbabwean law'. *Zimbabwe Law Review*, Vol 6: 64–78
- Mackenzie, R., 2003, 'The international regulation of modern biotechnology: finding space for food security?', *IDS Working Paper, Biotechnology Policy Series* 18, Brighton: Institute of Development Studies

- Masiwa, M., 1999 *Genetic Farming: Concerns and "Opportunities"*, Harare: Friedrich Erbert Stiftung
- Mayet, M., 2002, 'Securing Sustainable Livelihoods: Developing an Appropriate Regime to Protect Community Rights to Biodiversity', in C. Machena and G. Banda, *Community, Farmers' and breeders' Rights in Southern Africa: Towards a Framework for a Sui Generis policy and Legislation*, Harare: IUCN-ROSA
- Millar, K. and Mepham, B., 2000, *Biotechnology, Bioethics and Decision-Making*, www.bbscr.ac.uk/news/features/00jul/00_07_bioethics.html
- Mohamed-Katerere, J.C., 2002, 'Customary Environmental Management Systems', in J.C. Mohamed-Katerere and M.Chenje (eds), *Environmental Law and Policy in Zimbabwe*, Harare: SARDC: 87–112
- 2001, 'Participatory natural resources management in the communal lands of Zimbabwe: what role for customary law?', *African Studies Quarterly*, Vol 5 No 3, <http://web.africa.ufl.edu/asq/v5/v5i3a7.htm>
- Mohamed-Katerere, J.C. and van der Zaag, 2003, 'Untying the "Knot of Silence: Making water policy and law responsive to local normative systems.' Forthcoming as an *IHP Technical Document – PCCP series*, UNESCO, Paris http://webworld.unesco.org/water/wwap/pccp/cd/pdf/history_future_shared_water_resources/untying_the_knot_of_silence.pdf
- Moyo, S. and Makumbe J., 2000a, 'NGOs and Development', in S. Moyo, J. Makumbe and B. Raftopoulos, *NGOs, The State and Politics in Zimbabwe* :1 –7
- 2000b, 'The Socio-Economic Environment and NGOs', in S. Moyo, J. Makumbe and B. Raftopoulos, *NGOs, The State and Politics in Zimbabwe*: 7–19
- Mswaka, A.Y., Masimbe, S. and Mnyulwa, D., 2001, 'Regional Co-operation on Biotechnology and Biosafety in Eastern and Southern African Countries,' Proceedings of a Regional Workshop on Biotechnology and Biosafety, Kadoma, Zimbabwe, 16–18 July 2001, Convened by the Biotechnology Trust of Zimbabwe in Collaboration with the Biosafety Board of Zimbabwe
- Mushita, A., 2001, *An African View on Genetic Engineering*, http://talk2000.nl/docu/bmd_96.html
- Ncube, W., 1996, 'The right to information and the regulation of broadcasting in Zimbabwe: towards a more liberal framework', *Zimbabwe Law Review*, Vol 13: 139–157
- 1995a, 'Legal history in law: a Zimbabwean perspective', *Zimbabwe Law Review*, Vol 12: 65–77
- 1987a, 'The constitutional recognition and popular enjoyment of human rights. Zimbabwe', *Zimbabwe Law Review*, Vol 5: 54–94
- 1987b, 'When is a breach of the constitution not unlawful? Preventative detention and the remedy of Mandamus: the decision in Minister of Home Affairs v Dabengwa 1984(2)SA 344 (ZSC). Zimbabwe', *Zimbabwe Law Review*, Vol 5: 202–213
- Ncube, W., Mohamed-Katerere, J.C. and Chenje, M., 2002, 'Environmental Rights and Justice', in J.C. Mohamed-Katerere and M.Chenje (eds), *Environmental Law and Policy in Zimbabwe*, Harare: SARDC:113–152
- Nherere, P., 1993, 'The Limits of Litigation in Human Rights Enforcement', in P. Nherere and M. d'Engelbronner-Kolff, *The Institutionalisation of Human Rights in Southern Africa*, Nordic Human Rights Publications: 117–136

- PANOS Institute, 2002, *Survey of Zambian Farmers' Attitudes to Genetically Modified Organisms*, www.panos.org.uk/environment/gm_food_aid_survey_of_zambian_farmers.htm
- Raffensperger, C., and de Fur, P., 1997, *A Paradigm Shift: Rethinking Environmental Decision-Making and Risk Assessment*, www.biotech-info.net/paradigm_shift.html
- SADC (South African Development Community), 2003, 'SADC responds to GM debate' *SADC Seed Update*, Electronic Newsletter of the SADC Seed Security Network, Issue 2, January: 2–4
- Sands, P., 1994, 'International law in the field of sustainable development', *British Yearbook of International Law*, Vol 65: 303–67
- Scoones, I., 2002, 'Science, policy and regulation: challenges for agricultural biotechnology in developing countries', *Biotechnology Policy Series 3, IDS Working Paper 147*, Brighton: Institute of Development Studies
- Saruchera, M. and Matsungu, O., 2003, *Understanding local perspectives: participation of resource poor farmers in biotechnology – the case of Wedza District of Zimbabwe*, www.ids.ac.uk/biotech
- Scott, C., 1999, 'Beyond the category of economic, social and cultural rights', *Human Rights Quarterly*, Vol 21: 633–60
- Sengupta, A., 2000, *The Right to Development as a Human Right*, www.hsph.harvard.edu/fxbcenter/FXBC_WP7--Sengupta.pdf
- Stammers, N., 1999, 'Social movements and the social construction of human rights', *Human Rights Quarterly*, Vol 21 No 4: 980–1008
- Trakman, L. 1994, 'Interpreting a Bill of Rights: Canada and South Africa Compared', in Kruger and Currin (eds), *Interpreting a Bill of Rights*: 26–49, Juta
- United Nations High Commission for Human Rights, 2002, High Commissioners Expert Group on Human Rights and Biotechnology, United Nations High Commission for Human Rights. www.unhchr.ch/biotech/
- Yamin, F., 2003, 'Intellectual Property Rights Biotechnology and Food Security', *IDS Working Paper, Biotechnology Policy Series 22*, Brighton: Institute of Development Studies
- ZERO Regional Environmental Organisation, Mohamed-Katerere, J.C. and Stewart, J., 1996, 'Incorporating social and cultural values in Zimbabwe's environmental legislation', *report produced for the Ministry of Mines, Environment and Tourism*