

Introduction

To ensure that water resources are used and developed sustainably is a challenge for the global as well as the local communities with a shared interest in these resources. The way in which water resources are managed is ultimately the responsibility of everyone within the community. The responsibilities of every person depend upon the nature of each person's interest and its function within the system. Governance is a function that goes beyond management to include all of the arrangements – institutional, constitutional and legal – that contribute to how water resources are used and developed from all perspectives. The role performed by the law is critical. The law by itself cannot ensure sustainable water resources governance. But, in the absence of appropriate and effective legal arrangements, the sustainable use and development of water resources are unlikely to be achieved.

A water resources governance system performs two essential functions:

- to align the system with the hydrological cycle;
- to identify clearly and unambiguously who controls water and who is responsible for the way water resources are used and developed at each and every point in the hydrological cycle.

Traditionally it has been local custom and practice which have set these parameters. The wider public interest became increasingly acknowledged and made effective through centralised institutional arrangements. These frequently emerged through the legal system as rights of control incidental to rights of ownership – both public and private – of water resources and of water across the hydrological cycle. The emergence of nation states during the 16th and 17th centuries introduced the concept of the sovereignty of a nation state which has substantially influenced the way in which the community of interest of nation states in international water resources has been recognised and developed by international normative arrangements.

The relationship between sustainable water resources governance and the law thus introduces four complex and challenging concepts: sustainability, the hydrological cycle, governance and the law. The creation of a coherent structure that recognises and makes effective such a governance system is a challenge to be addressed by each member of the global community and by each member of the local community.

The legal arrangements for the management of water resources have ebbed and flowed as much as the water resources themselves. There has tended to be a mixture of formal as well as informal arrangements. Whatever their character, these arrangements have included rights and duties of various kinds. These rights and duties have been distributed across the range of institutions and persons involved in and affected by the management of water resources. Some of the earlier civilisations – for example in Egypt, in China or in Mesopotamia – recognised customary rights at the local level, but within a context of obligations or duties imposed

and enforced by an institution protective of the public interest. The more formalised structure of rights and obligations in Roman law provided greater opportunities for individuals to protect their rights and to ensure compliance by others with their obligations. But during the later period of the Roman Empire there was to some extent a return to centralised control of water resources. Such a diversity of approaches can be seen at the beginning of the 21st century that are informal as well as formal. While earlier civilisations have probably been motivated by what is now described as the principle of sustainability, this principle is increasingly performing a more formal function within these sets of arrangements.

It is trite to observe that current legal arrangements have evolved out of past legal arrangements. Islamic law has influenced and continues to influence the way water resources are managed in many parts of the world. The structures of Roman law have influenced the way water resources are managed in many parts of Europe. Indeed Roman law influenced the development of English law during the Middle Ages and later periods. The doctrinal foundations of Roman law and of English law have influenced – as a result of European colonisation – the legal foundations for water resources management in different parts of the world.

Despite these historical and cultural differences, a number of common characteristics have emerged. The international community recognises that water resources are essentially shared resources. There is consequently a reciprocal responsibility to ensure their sustainable use and development. This has led to the principle of equitable utilisation of water resources and the correlative responsibility not to harm these resources and not to harm the environment of which they are a part. While the concept of sovereignty recognises that a state may use and develop its natural resources as it sees fit, this has increasingly been constrained by the responsibility to ensure that activities within the state are undertaken consistently with these wider responsibilities. This does not always happen in practice. Simply because there never has been and presumably never will be complete and perfect compliance with legal arrangements. Nevertheless, nation states within the international community are in their own ways responding to these challenges. In other words, a move towards greater coherence between the international legal arrangements and the national legal arrangements.

The nature of international law as such – particularly in the absence of an international legislature – means that it evolves slowly, in accordance with emerging custom and practice, influenced by specific and more detailed arrangements between and among states, and disclosing a relatively strategic and flexible approach to the normative structure of its arrangements. This is important not only for its own sake but also because such an approach is increasingly reflected in the way national arrangements are structured. These arrangements comprise a set of relatively flexible principles and directions comprising a strategic normative framework which is implemented – in the case of national arrangements – through more detailed sets of plans leading to the recognition or creation of sets of individual rights and obligations for the use and development of water resources in particular locations and for particular purposes.

This is essentially a normative structure with effect at three levels:

- strategic;
- regulatory;
- operational.

The general principles of customary international law tend to be strategic in nature. Agreements between and among states about water resources – interstate agreements – are

strategic, but increasingly have become regulatory and operational. Most importantly, however, the arrangements within states are not only strategic but also regulatory and operational. The balance between these three levels depends – as one would expect – not only upon the doctrinal foundations of the legal system but also upon the political context within which the legal system operates. The structure for the management of water resources within a state is in this sense probably no different from the structure for the management of natural resources generally. In both cases there has probably always been a recognition of the public interest in how these resources are managed.

If these resources are to be used and developed sustainably – which is the current assumption – then the legal system may respond in a number of different ways. It may state strategic objectives and leave it to the public and private sector participants to perform their functions accordingly. In this case the achievement of sustainable development is not enforceable. Alternatively, the legal arrangements may be structured as a system of direct regulation which prohibits engaging in the regulated activities without a specific authorisation by a public sector agency. In this case the decision of the public sector agency is controlled – either by way of guidance or by way of direction – so as to achieve in practice sustainable development. A third alternative is for a set of rights and duties to be structured so that compliance with them will lead – or be expected to lead – to sustainable development. This set of rights and duties applies generally and automatically. It is the responsibility of public sector and private sector participants to comply with these arrangements. A failure to comply will result in appropriate legal sanctions.

In practice it is likely that a combination of these various approaches will emerge. This necessarily makes the arrangements more complicated from the legal perspective. This is because they comprise sets of public rights and public duties and sets of private rights and private duties. The exercise of these rights and the discharge of these duties operate within a strategic framework of principles and directions. Some of the elements of this system are enforceable as a matter of law while others are not. Whatever their enforceability, each impacts upon and is impacted upon by the other. It is consequently the relationship among them that is critical. Thus there is on the one hand what may be described as a macrolegal system which states the values, the principles, the goals and the objectives that comprise the normative framework of the system. And on the other hand there is a microlegal system which states the rights that are protectable and the duties that are enforceable in particular sets of circumstances, and these comprise the normative fabric of the system. A norm may be part of the framework – strategic. Or it may be part of the fabric – regulatory or operational. Their relationship has been described as ‘interstitial normativity’.¹ The legal relationship between the interstices of this normative system depends upon its structure and its terminology.

International legal arrangements are often described as a combination of ‘hard law’ and ‘soft law’. The former is potentially enforceable and the latter not. Much depends upon the status of the instrument and the way it is structured. For example, resolutions of the General Assembly of the United Nations or statements following upon international conferences do not contain rules of law in the sense of enforceable rules. Similarly, preambular statements in multilateral agreements and statements of exhortation or encouragement in such agreements do not constitute such rules of law. Nevertheless the application and interpretation of rules of law in multilateral or bilateral agreements are influenced by such statements.

These distinctions reflect to some extent the statement of a value, or perhaps even of a fundamental right, on the one hand and the realisation of this value or right through a set of

regulatory or operational rules on the other hand. Much of international law can be characterised in this way. For example, the principle of equitable utilisation of water resources on the one hand and its realisation on the other hand by its operational application and its operational application in particular sets of circumstances in an interstate agreement between the relevant parties or in a determination by the International Court of Justice settling a dispute between parties. This reflects the nature of international law. The concept of 'interstitial normativity' links these elements of the system in a practical way.

It is increasingly common for the constitutions of nation states or their statutory arrangements to include statements of value or of fundamental rights relating to natural resources and the environment with implications for water resources. These statements perform various functions within the system and there is no uniformity of status. Some are part of a coherent framework, while others sit independently within the system. But whatever their function and whatever their status, increasingly one is beginning to inform the other. Even more importantly, they are part of the overall normative framework which includes sets of rights and duties cast in traditional and enforceable form: once again – an example of 'interstitial normativity'.

These international and national arrangements for the governance of water resources disclose on the one hand a framework of values, principles, goals and objectives that are on the face of it unenforceable, and on the other hand a complex set of enforceable rights and duties. The first we have described elsewhere as paralegal rules and the second as legal rules.² It is their relationship that is important. Paralegal rules may be described as descriptions of the fundamental *Grundnorms* which underlie the system and drive it in a particular direction, and legal rules may be described as prescriptions of the procedures and processes for decision-making by regulators and of the behaviour and conduct required of those undertaking operational activities. An example of the former is sustainability or sustainable development supported by the principles of sustainable development and an example of the latter is a duty imposed upon the users of water resources to take reasonable and practicable measures to ensure that their use of the water resource does not cause damage or injury to another user of the water resource. Accordingly:

All of these elements are linked together in various ways as part of a legal structure. A legal structure comprises a set of rights, duties and instrumental techniques. All of these different elements are bound together by a set of rules and a set of paralegal rules. So we have a set of concepts which gives the whole system substance and two sets of rules which give it validity, coherence and possibly enforceability. It is language which binds these components of the whole system together.³

Integration is generally regarded as a necessity to achieve an effective system for sustainable water resources governance. Integration operates in a number of different ways: environmentally, hydrologically, institutionally, even legally. The relationship between legal and paralegal rules is essentially about what has been described as 'normative integration'.⁴ This is a process to bring together all of the normative elements of the system, whether they are enforceable in the traditional sense or not. It has been suggested that this might be achieved – particularly in relation to international law – in two ways. The first is by creating a focus on interrelationships within the international legal system⁵ and the second is to encourage the judiciary to use 'integration as a judicial reasoning tool'.⁶ Neither is easy. But in either case the foundations need to be laid carefully before any result may ensue. The judiciary, for example, can apply and interpret constitutions and statutory provisions only in accordance

with their structure and terms. If the judiciary is the ultimate guardian of the rule of law, then the legal rules and the paralegal rules need to be structured both in design and language to enable the judiciary to give effect to them so as to achieve their ultimate objectives. Clearly the legislative, executive and judicial organs of a state must be moving in the same direction. While each performs a different function, it is ultimately the responsibility not only of the legislature, the executive and the judiciary but also of everyone within the community – global, national and local – to comply with it. This is integration in the most extensive sense of the word. Thus:

In the final analysis, integration needs to affect the entire spectrum of institutional, corporate, legal and, if I dare say, *individual* behaviour if sustainable development is to have any chance of being meaningfully realised.⁷

It is the totality of humankind that is interested in and concerned about how water resources are managed. And it is the responsibility of the totality of humankind to use and manage water resources sustainably.

It has already been suggested in this introduction that the creation of a sustainable water resources governance system is a challenge. Its incorporation within the legal system is even more of a challenge. It involves the integration of the concepts and functions related to hydrology, governance and sustainability. To be effective, the law must be aligned to address each of these at their relevant points of contact. It is normative integration in the sense discussed across international, regional, national, local and individual relationships. It applies to relationships between citizen and citizen; between citizen and state; between state and state; and among states within the international community. The normative arrangements at all of these levels differ considerably. But they impact upon each other. So it is a complex set of vertical and horizontal legal relationships. These legal relationships are continuously evolving and adapting – sometimes quite quickly.

There is a large and growing literature on all of the perspectives involved in sustainable water resources governance and the law. The approach adopted in the following chapters is consequently not a detailed and comprehensive description and review of any particular legal system – international or national – as it relates to the management of water resources. But it draws upon as many of these legal systems as possible. Nor is it an examination of any particular governance system or any particular issue associated with the management of water resources. Nor is it about the effectiveness in practical terms of any set of arrangements. It is concerned almost entirely with the fundamental doctrines, the principles, the legal rules and the paralegal rules that comprise and support the normative arrangements for the management of water resources. It is an exercise in legal doctrine, in legal structure, in legal form and ultimately in legal substance.

The following chapters seek to address six issues:

- how legal doctrines and legal structures for the management of water resources have evolved over the millennia;
- how the doctrines and structures of international legal arrangements currently address the management of water resources;
- how the doctrines and structures of national legal systems currently address the management of water resources;

- what is the nature and function of sustainable development in the context of the management of water resources;
- whether and to what extent these legal arrangements acknowledge and incorporate the sustainable development of water resources;
- how legal arrangements may be structured to achieve the sustainable development of water resources.

It is no surprise that the relationship between sustainable water resources governance and the law involves a discussion of a number of themes, some of which have already been identified. For example, the challenges of the hydrological cycle; the unique characteristics of water; the nature and function of sustainability and sustainable development; the function of governance; the fundamental doctrines of the law such as sovereignty and property; and the range of assorted public and private rights and duties all of which are set in a contextual framework of paralegal rules. Each of these themes appears, disappears, and reappears in different contexts and for different purposes. If a musical analogy may be permitted, there is a central theme – sustainable water resources governance and the law – but this is separated out into a number of linked themes. These linked themes are stated, varied, and repeated in contrapuntal and fugue fashion until – it is hoped – at the end there emerges a reconstruction of the original theme as a model for the future of a coherent and integrated system for sustainable water resources governance.

Much of the following chapters is concerned with the form, the structure and the language of a number of international and national legal instruments. In particular the structure and terminology of legal rules are in many respects remarkably different from the structure and terminology of paralegal rules. It is however their structure and their terminology which may or may not lead to coherence within the system in the sense of a set of integrated relationships between these legal and paralegal rules. Clearly there is more to legal arrangements than structure and language. But structure and language are critical if the ultimate objective is the design of a set of arrangements which is intended to achieve the sustainable development of water resources. It is in this way that the structure and language of these rules – whether legal or paralegal – indicates the function that they perform within the overall system. Are these rules norms of competence, of procedure, of conduct or behaviour, of performance, of outcome or result, or of process or methodology? The answers to these questions go to the doctrinal foundations of any legal system. These are the doctrinal foundations that give substance to the system.

Let us focus upon the fundamental point to be addressed in the following chapters. To be meaningful, legal rules are expressed in the form of language. To be enforceable, legal rules are expressed in the form of precise and unambiguous language. Precise language should itself be meaningful. But in the context of the law relating to natural resources – including water resources – the language used to express protectable rights and enforceable obligations does not necessarily conform to the degree of precision required for the creation of enforceable rights and obligations. The reason is not difficult to uncover. The objectives and perspectives of natural resources management are frequently so general and wide that they may arguably be lacking in sufficient precision to sustain enforceability.

This is not an adequate response. The discipline of natural resources law lies at the boundaries between law and policy, between independent legal duty and executively created obligation, between mandated procedures and discretionary substance, and between enforceable

rules and deliberative criteria. These boundaries are increasingly becoming irrelevant. What is emerging is a normative framework comprising legal and paralegal rules which seeks to integrate all of these elements. Language is the medium through which a structure is created. It is accordingly the text and the context of the law operating coherently together which create the foundations upon which an effective structure for a sustainable water resources governance system can be built. But now is the time to turn from the architectural analogy to the substance of sustainable water resources governance.

NOTES

1. Lowe (1999, p. 31).
2. Fisher (2008).
3. Fisher (2008, p. 108).
4. French (2006, pp. 110–116).
5. French (2006, pp. 110–113).
6. French (2006, pp. 113–116).
7. French (2006, p. 116).

GENERAL REFERENCES

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