

SUSTAINABLE DEVELOPMENT: THE QUESTION OF INTEGRATION AND COORDINATION

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ABSTRACT

It could be argued that the quest for integration is at the core of sustainable development implementation issues. Although there is no simple answer to the integration challenge there is no doubt that organisational integration and coordination comprise a critical ingredient in any prescription package. The reasons why it is difficult to achieve integration is encapsulated by the notion of the 'limits to governance' which describe the organisational complexities and constraints facing traditional governance. At the basic theoretical level the interactions between organisations are explained in terms of the two organising principles of competition and collaboration, while coordination could be a product of three alternative modes of governance. The general acceptance of the idea that a decentralised set of formal and informal agreements among diverse groups and organisations in the form of networks and partnerships holds the most promising institutional prospect, is explored in from two angles: firstly from a macro perspective considering the changing role of the state and secondly a bottom-up perspective focusing on the notion of organisational innovation in resource management. Finally some conclusions are drawn as to the prospects of networks being able to achieve integration and coordination in environmental management.

INTRODUCTION

The rapid evolution of environmental problems and greater public awareness and concern, bring pressure on governments to unify sustainable development policies and develop more credible approaches to implementation. Before the responses of governments could be explored, the question should be asked what does the implementation of sustainable development mean in practical terms and how can it be achieved? In the sustainable development literature which focuses on implementation issues, the single most recurring concept is that of integration: be it policy integration; integrated planning; organisational coordination and integration; integrated environmental man-

agement systems; integrated information; or monitoring and evaluation systems. In short, it could be argued that the quest for integration is at the core of sustainable development implementation issues. So why is it seemingly so difficult to develop integrated management approaches and what can or are being done in this regard?

As there is a strong organisational dimension in this challenge, the emphasis in this article will fall on the role of institutional arrangements in fostering coordination and achieving the integration sought after in the management of sustainable development. *Firstly*, to think about and understand the main constraints on more integrated management approaches, the problem is illuminated by the notion of 'limits to governance' is described as a point of departure. *Secondly* the basic theoretical underpinnings and models are analysed that can be utilised to clarify and to develop an understanding of the interactions between organisations in the search for coordination. *Thirdly* the responses are explored, both from a macro perspective in terms of general approaches adopted by governments as well as from a micro perspective in terms of organisational innovation. *Fourthly* some emerging practical implications for the management of sustainable development are offered for consideration before the final conclusions are drawn.

THE PROBLEM: THE LIMITS TO GOVERNANCE

As modern society becomes more complex and diverse, governments find it increasingly difficult to perform their management functions effectively (Kooiman and Van der Vliet, 1995, as quoted by Symes (1997:108). At the very time that an efficient, effective and well-coordinated government is perhaps most needed it is a quest rather than a reality: governments can depend on the formal structure of the public sector to produce coordination even less than in the past. The nature of contemporary government exacerbates their inherent coordination problems: the increasingly cross-cutting nature of issues (of which sustainable development is a prime example), the contribution of decentralisation trends towards incoherence, the disaggregation of structures into multiple agencies and multiplying activities (Peters, 1998: 295-296). In similar vein Carley and Cristie (2000:141) argue that a main organisational constraint on management for sustainability is the notion of 'limits to governance' which flow from limiting factors such as the tension between centralising and decentralising forces, the dynamic nature of the modern world with its endemic uncertainty and the 'fragmentation' in policy and institutional terms of contemporary societies.

According to Steward (1991) as quoted by Carley and Cristie (2000: 175), it is widely assumed that environmental issues can be dealt with in the same way as other governmental activities. However, the complex inter-relationships demand holistic thinking and a new multi-level, multi-organisational approach – presenting a challenge to traditional government organisational and management structures. What is known to be the case, is that major problems always occur at the boundaries – among states, among levels of government, among departments of state, among agencies, among divisions within departments. To this list can be added between the public and the private sector (and the non-governmental sector), between government and the scientific community, and

between government policy level and community level. Effective managers can manage what is theirs but falter when it comes to boundary questions (Eddison, 1985: 148).

So why is it so difficult to achieve integration and what are the main constraints on more integrated management approaches? Some of the important factors in the limits to governance according to Carley & Christie (2000:143-154) are:

- the complexity of environmental problems precludes straightforward cause-and-effect analysis of the problems, and also precludes simple solutions implemented by any government agency acting alone. Just as one agency is unlikely to resolve such a problem, so also is one government acting alone.
- The failure of the traditional command and control bureaucracies which are not well suited in dealing with the rapid 'unplanned' change which is becoming more typical of environmental problems, in which knowledge of the problem, and the problem itself, evolves rapidly, and for which any solution must involve overlapping public, private and voluntary sector initiatives.
- an adequate definition of environmental problems based on single discipline perceptions and solutions is absent.
- The 'administrative trap' which describes the common mismatch between the nature of the environmental problems and the sectoral problem-solving structures in government, which disaggregate ecological problems, recognise and treat symptoms as the problem itself, and generally remain inadequate to the task – the failure of horizontal integration.
- Poor vertical integration, which is the result of the common failure of understanding and information flows between the policy levels of government and the end resource users, may generate substantial, cumulative environmental impacts.
- Over-reliance on institutional reform: although institutional reform is often part of a high quality management approach, there is a common tendency to assume that if the "right" institutional arrangement can be brought into being, adequate environmental management will result.
- Failure to learn from experience: within the traditional bureaucracy there is often little motivation to learn from past experience and even less to admit, analyse and learn from past mistakes.
- Failure to confront the management process: most politicians and bureaucrats in public decision making and management have little interest in improving the process of decision making, and indeed, little interest in considering the process at all.

Having understood the range of constraints on integration, it is necessary to focus on some of the basic concepts which are at the core of the integration challenge. Some insights into and pointers to future prospects for achieving coordination in managing for sustainable development are required. The most promising institutional prospect for integrated resource management is, according to Nelson and Weschler (1998: 565), a decentralised set of formal and informal agreements among diverse groups and organisations that can address the resource issues and orient other management activities to the

well-being of the resource. The question here is what will entice diverse groups and organisations with different interests to collaborate instead of compete?

COORDINATION THROUGH COMPETITION AND COLLABORATION

The first point to clarify is: what does 'coordination' in the context of achieving integration in sustainable development policy and action actually mean? Peters (1998: 296) states that the term coordination is used to refer to an end-state in which the policies and programmes of government are characterised by minimal *redundancy* (when two organisations perform the same task), *incoherence* (when policies with the same clients have different goals and requirements) and *lacunae* (when no organisation performs a necessary task).

The two organising principles which can be utilised to develop an understanding of the interactions between organisations are competition and collaboration: the competitive imperatives implicit in the resource dependency approach explain alliances among organisations as responses to current or potential threats from competitors or the perceived opportunity to expand domains. In the process, influence is extended and new resources are secured. Collaboration theory is characterised by a notion of synergistic gain and programme enhancement from sharing resources, risks and rewards and the prioritising of collaborative rather than competitive advantage. The advantage is viewed as a broad range of benefits, some of which will not be definable at the start of the relationship. There is a tension between the harsh realities of the resource environment and the need to collaborate: contest, domain invasion and temporary alliances to achieve competitive advantage in the context of self-interest. Simultaneously the criteria for funding regimes stress co-operation and partnership building (Lowndes & Skelcher, 1998:317).

Peters (1998: 306) argues that coordination is becoming more difficult because of the shifting nature of issues: some conventional central agencies are becoming relatively less important while other, less conventional ones are gaining importance (i.e. globalisation means that foreign ministries become increasingly central players in what had been domestic policy concerns). In addition, the environment has become an overriding issue and environmental agencies now play central roles much as ministries for finance in the past. Another important source of change is the increasing importance of international and regional associations in domestic policy.

In all the theoretical models of coordination there is, according to Peters (1998: 298), an assumption of some difference of interest among participants, whether as a result of differences in policy preferences or simply defence of bureaucratic turf. It has been argued that coordination can be a product of three alternative '*governing structures*'. The concept governance refers to ways in which coordination is achieved and sustained within economic and social life. According to Lowndes & Skelcher (1998:318) three ideal types of modes of governance emerge namely hierarchy, markets, and networks.

The typical conceptualisation of coordination in government is as a top-down hierarchy dependent upon central agencies. This mode overcomes, in theory at least, the

problems of coordination and collaboration found in the market place. This approach to coordination functions well as long as the organisation or organisations involved are well integrated from top to bottom and they have a clear mandate about what to do. The imposition of an authoritative integrating and supervisory structure enables bureaucratic routines to be established. Coordination can be undertaken by administrative fiat, and the employment relationships pertaining within the organisation encourage at least a level of commitment by staff. The cost, however, is a reduction in flexibility and innovation because of a tendency to formalisation and routinization. Peters (1998: 298) points out that if organisations are structured more loosely or are involved in complex policy areas, requiring multiple information exchanges and interactions with a number of different organisations, the efficacy of hierarchy is reduced. In the hierarchy the need to bargain and to develop ad hoc understandings is reduced, while the negotiation and bargaining associated with both markets and networks impose high transaction costs.

A market mode which revolves around contractual relationships over property rights is the most commonly proposed alternative to hierarchical coordination. The basic assumption is that coordination can be achieved through the "invisible hand" of the self-interest of participants. Price mechanisms are the means by which the relationships between participants are mediated and where conflicts emerge there may be haggling or recourse to law in order to determine the liabilities of the parties involved. Markets provide a high degree of flexibility to actors in determining their willingness to form alliances, although the competitive nature of the environment and the parties' underlying suspicion may limit the degree of commitment to any collaborative venture. Essentially, actors prefer to be independent and will choose to collaborate only when they identify particular advantages to themselves. This type of coordination involves the willingness of the participants to exchange resources (money, contracts, information or even clients). Peters (1998: 298), however, notes that in many cases the capacity for direct exchange is absent and market-like mechanisms are not readily applicable in public service delivery, and the conventional pattern of behaviour in government has been to conform to law rather than to bargains.

As more open conceptions of governance become the norm, networks are seen as the most likely mechanisms to achieve coordination especially in so far the coordination of public and private action is concerned. This mode arises from a view that actors are able to identify complementary interest. The development of interdependent relationships based on trust, loyalty and reciprocity enable collaborative activity to be developed and maintained. Being voluntary, networks maintain the loyalty of members over the longer term. Conflicts are resolved within the network on the basis of members' reputational concerns. Apart from the advantage of being more open to the role of non-governmental organisations or NGOs, networks can contribute to solutions for problems of distribution and common value creation simultaneously.

One of the main consequences of the Rio summit was the realisation that NGOs have an important role to play in the protection of the environment. NGOs have established networks, often linking developed and underdeveloped countries, which will render increasingly difficult, the dumping of one country's environmental hazards on another. It

may be a sign of the times that some industries' greatest challenge may come not from formal governments, but from forces that are even more flexible and informal than the private sector itself, such as Greenpeace which has the financial and logistical capacity to operate world wide (Mercier, 1994:354).

It is helpful to distinguish between environmentalist NGOs and community-based NGOs (Carley & Cristie, 2000:182): Environmentalist NGOs now engage in research, coordination of funding and protest actions at the international and sub-international level. They can also target specific issues, generate widespread public interest, lobby key politicians, and pressure public agencies. Community-based NGOs are usually more local in orientation but can have a wider brief than environmentalist NGOs in that their concerns will be more geared to the overall development of their locality. In terms of building networks, it is important that every effort be made to extend the partnership to encompass relevant community-based NGOs. Peters (1998: 299) cautions that linkages to other organisations, public and private, may produce an inter-organisational version of the *tragedy of the commons* in which single organisation rationality is in conflict with collective rationality: each organisation may be serving its network, but that may inhibit coordination within the larger population of organisations.

ACTION NETWORKS AND MULTI-ORGANISATIONAL PARTNERSHIPS

In this section the response to action networks and multi-organisational partnerships will be analysed from two angles: first from a macro perspective in terms of the role of the state and the general approaches utilised. Secondly organisational innovation is explored from a micro perspective or bottom-up perspective.

Response from the Top: The Role of the State

What is becoming increasingly certain, according to Cooper (1995:185), is that there is a move towards a hybrid state, in which most governments seek less command and control regulation, more decentralisation, reduction in the size of the public sector and increased use of market-based policy tools. A widespread response has been to reduce the role of the state by contracting out several of its former functions to create systems of devolved management, partly aligned to the *New Right* philosophies of the market economy. At the same time, there are areas such as environmental management in which there are very definite limits to those trends such that government will continue to play a regulatory role, even if it employs economic incentives and other financial devices. Given concerns about nuclear wastes, global demands for action in several fields from air pollution to transnational shipment of hazardous waste, and increasing pressure on local communities to do something about their own environmental problems are priority issues. Public managers will continue to play an active role with regulation as one of their functions. Given the changing context, the nature of regulation must change. There seems to be a moving towards a future emphasising parallel system of management in

which public managers must simultaneously manage within government, outside government and across governments.

As no single actor, public or private, has all the knowledge and information required to solve complex, dynamic and diversified problems, no actor has sufficient overview to make the application of needed instruments effective. No single actor has sufficient action potential to dominate unilaterally in a particular governing model. The task of government, therefore, is to combine different groups of actors and to create different arrangements for dealing with management problems. Some may involve public-private partnerships and co-responsibility. Most would aim to reduce the state's direct role in regulation. Governance, in the words of Rhodes (1996) is *about managing networks* (Symes, 1997:109).

Collaborations among various sectors of the governance system cannot address all the issues of resource and environmental management, but collaborations can provide resources, technical assistance, moral support and civic leadership for addressing significant threats to the quality of life. The term *institutional readiness* is used to refer to the degree to which jurisdictions are aware of and primed to engage each other in collaborative governance. In the management of water catchment areas for example, basin-wide collaboration, including formal and informal linkages, promise to move environmental management beyond the parochial stances of local interests and expectations. Collaboration among communities and agencies are most effectively carried out in a well-developed, open system of governance. Democratic collaboration among leaders and citizens, agency administrators and communities is a goal achieved only through its practice, the issue is the degree to which participants in the various institutions of governance have experience of and practice in collaborative decision making and policy implementation. The critical question is: are they experienced in the democratic governance of a regional resource system? (Nelson and Weschler, 1998: 566-567).

The literature of interjurisdictional and intersectoral cooperation suggest that there are four observable conditions that indicate potential institutional readiness to engage in cross-sectional collaborations. *Firstly* the level of citizen and community interest and involvement; *secondly* the availability of existing institutions and organisations for regional governance; *thirdly* the degree of practical experience in formal and informal cross-sectional coordination and cooperation; and *fourthly* the amount of knowledge of and appreciation for the missions, goals and objectives of the other participants (Nelson and Weschler, 1998: 567).

How then, might one start the process of reducing the state's direct intervention in sustainable resource management? According to Symes (1997:110-112), the tendency in recent years has been that attempts trying to resolve this issue, is dominated by three approaches, each derived from distinctly different theoretical perspectives, championed by different disciplinary traditions. The approaches are *firstly* the privatisation of use rights, *secondly* co-management, involving a sharing of management between the state and responsible user group organisations and *thirdly* decentralisation of management through the regionalisation of policy.

The market economy approach originates, not surprisingly, from neo-classical economic theory, and a somehow, simplistic analyses of common use rights as implying a

condition of open access in which the only source of regulatory control is the state whose interventions distort the conditions of a free market. Thus, the discipline of the market largely substitutes the rule of law required by state management.

By contrast, the co-management approach has its origins in social science theory and in the research findings of social anthropologists, which point to the ability of local user groups to manage their resources effectively through sophisticated systems of self-regulation based on sound empirical knowledge of local ecosystems. The 'rule of law' is replaced, in some measure, by consensual decision making and an enhanced compliance resulting from a switch from an imposed to a negotiated regulation.

The regionalisation approach stems from the operational principle of subsidiarity or proximity, which argues that policy decisions are best made by those who are located closest to the theatre of operations. Symes (1997: 112) is of the opinion that there are no fundamental reasons why privatisation, co-management and regionalisation should not be joined together in an integrated approach.

Bottom-up Responses: Organisational Innovation

The 1990s are seen as the "Age of the Network" characterised by modes of governance that link public, private, community and voluntary sector actors. The logic flows from the complexity of environmental problems, which preclude straight-forward cause-and-effect analysis of the problems, and also preclude simple solutions implemented by any agency acting alone. The inability of traditional governmental bureaucracies, working on their own or vertically with international bureaucracies, to deal with complex environment and development problems led Carley & Cristie (2000:175-176) to suggest the development of what they call *action networks* for environmental management.

In technical terms, networks are non-hierarchical social systems which constitute the basic social form that permits an inter-organisational coalition to develop. An action network, linking the public, private and voluntary sectors should be flexible, open and capable of restructuring itself over time. Unlike the loose linkages in the more usual information-sharing networks, the action network is focused on the goals of its management and research tasks, and engages in regular, critical review of its progress towards these goals.

The networks function at a number of levels:

- as growing constituencies for sustainable development, fostering an ongoing political process of mediation and the building of consensus even where conflict is bound to be pervasive
- as a vehicle for new partnerships among government, business and non-governmental and community groups
- as groups of public managers and natural resource scientists with a commitment to mutual learning to develop a new range of skills in environmental management and
- in multi-layered 'nested' networks, as a means of integrating efforts at sustainable development from the local to the international level.

For the purposes of this article no distinction is made between the network and partnership forms of organisation (following the example of Carley and Cristie who are using the terms interchangeably). Some authors make distinctions in terms of formalisation or life-cycle phases. The network is seen by Lowndes & Skelcher (1998:314) as the more informal arrangement whereas multi-organisational partnerships are formalised by an agreement between the parties, which are given concrete expression through the creation of an organisational structure, e.g. a partnership board or forum. Here, strategy is developed and decisions are made which may have implications for the policies, resources and actions of the individual agencies involved.

The network and partnership can also be viewed as different stages in a life cycle model. A four-stage life cycle for partnerships is proposed by Lowndes & Skelcher, (1998:320) which incorporates the different modes of governance: the pre-partnership collaboration; partnership creation; partnership programme delivery; and partnership termination. A different mode of governance – network, market and hierarchy – predominates each stage. The pre-partnership collaboration is characterised by a network mode based upon informality, trust and a sense of common purpose. The partnership creation and consolidation is characterised by hierarchy based upon an assertion of status and authority differentials and the formalisation of procedures. The partnership programme delivery is characterised by market (or quasi-market) mechanisms of tendering and contract, with low levels of cooperation between providers. The partnership termination or succession is characterised by a re-assertion of a network mode as a means to maintain agency commitment, community involvement and staff employment. The key challenge for partnerships lies in managing the interaction of different modes of governance, which at some stage will generate competition and at other points collaboration.

The emergence and growth of networks and multi-organisational partnerships are explained by Lowndes & Skelcher (1998:315) on the grounds of:

- resource dependency issues which stimulated governmental bodies to find ways of delivering more with less by making better use of existing resources by reducing duplication, add value by bringing together complementary services and fostering innovation and synergy, and enabling the leveraging-in of new resources – either by enabling access to grant regimes requiring financial and in-kind contributions from private and voluntary sectors or using private sector partners to overcome public sector constraints on access to capital markets;
- the search by public bodies for integration within an increasingly fragmented organisational landscape arising from the new quasi-market environment;
- it reflects the complexity and intransigence of issues facing government i.e. issues that can only be tackled by bringing together the resources of a range of different providers and interest groups to obtain the apparently tidy hierarchy of the public bureaucracy being reshaped to establish lateral, diagonal and vertical relationships with other bodies operating at different tiers and in associated policy fields; and
- a desire to address in innovative ways those issues that cross organisational boundaries.

Increasingly, forward thinking public managers are sanctioning the involvement of such task-oriented, less formal groups in environmental management (Carley & Cristie, 2000:176). These groups define environmental problems in a more holistic and practical fashion, and work to develop consensus on the way forward. These kinds of innovations are not however, a replacement for the traditional bureaucracy, as they do not carry out any routine functions of government. Rather, government will find it helpful to participate in such networks, as a partner with business and community groups in tackling problems in environmental management.

The characteristics of these parallel action networks are:

- flat, flexible, organisational structures involving teamwork or partnerships
- imply equality of relationships among all relevant stakeholders
- require vision and value-driven leadership
- emphasise participation and organisational learning
- undertaking continuous performance review and improvement and
- demand network development in which events progress at a pace which is politically and culturally sustainable, given local conditions.

Each partner in an action-centred network makes a contribution of relevant expertise and enthusiasm, including representatives of government departments and agencies. But government also has an important overall societal role. This is a strategic role – the proactive attempts to throw light on present action by considering possible positive futures. It begins with some sense of the possibilities of the future, call it a vision, and uses this vision to initiate the sub-processes of innovation, i.e. the agenda for the future - what kind of society is expected, and commitment to implementation based on desire to realise this envisaged future and not some other, less satisfactory one (Carley & Cristie, 2000:171).

The important dimensions of variation in networks that will influence their likelihood of producing effective coordination according to Peters (1998: 301) are: *firstly* the degree of pluriformity (some are so integrated that they can be treated as a single organisation while others are little more than collections of autonomous organisations); *secondly* the extent of interdependence (loosely coupled versus closely interconnected which influence styles of interaction and relationships); *thirdly* the level of formality; and *finally* the nature of the instruments used (i.e. planning, formal regulations, contracts).

Although most analysis of networks are concerned with the vertical interactions of interest groups and government organisations, one of the most important questions in the analysis of the public sector is coordination among public organisations. Peters (1998: 308) cautions that the effective integration of networks vertically may limit the capacity of the constituent organisations to coordinate successfully with other organisations and other networks.

SOME PRACTICAL CONSIDERATIONS

What are the practical implications for the management of sustainable development of which public resource managers should take notice of when making decisions on the day to day implementation issues? Some practical pointers to consider are offered by Peters (1998: 304-308):

- Organisations that were closest together ideologically and that provided similar types of service were the most difficult to coordinate. Several factors bind organisations and individual officials across agencies, including role definition as a professional and a primary concern for clients.
- The iterative nature of interaction promotes coordination compared to a once-off event because it provides cooperation incentives for participants in the process to achieve long-term gains. If decisions are seen as entirely once-off and separable, each participant has incentives to maximise gains on each decision and not to cooperate. Hierarchies and even markets are able to allocate resources in a single interaction, but for networks to form, there must be some repetition and stability.
- The changing nature of governance, with continuing devolution of policy to lower echelons of government means that creating coherence and some level of equality across subsystems will be a growing concern for national policy makers. In both international and intergovernmental relations a country's individual organisations are less self-contained than they are in the typical relationship that occurs at only a single level of government.
- The typical image of coordination is as a "top down" process, with central agencies or lead ministries forcing cooperation among subordinate organisations. In practice, however, coordination is often a function of negotiations among the lower echelons of organisations concerning specific issues or clients (i.e. one-stop shopping). Many coordination problems can be solved by bargaining among affected organisations, often at the lower echelons. The best strategy appears to be to allow local organisations to devise their own plans, subject to central monitoring. The essential element required for this type of coordination to function, is substantial latitude for local action, whether the decentralisation is to local government institutions or to lower echelons of organisations. Therefore coordination issues conceptualised as implementation issues are more likely to be resolved successfully than are issues that are considered at the policy levels. Implementation issues tend to be addressed at a lower level of an organisation and settled for individual client issues, while policy debate emphasises issues of turf and organisational survival.
- Inter-organisational coordination efforts have a profound impact on the capacity of governments to hold organisations accountable: one obvious issue in accountability is the capacity to identify who did what, and that simple faculty is often lost when organisations meld their actions and use complex networks for service delivery.

EVALUATION AND CONCLUSION

There is no simple answer to the integration challenge so central in the quest for sustainable development. It depends on the specific issue, i.e. the prescription could be a multidimensional package made up of varying doses of improving policy integration, developing integrated planning processes; coordinating multi layered and multilevel organisational actors across sectors; implementing integrated information management systems for policy; planning and monitoring; or even vision and value driven leadership capable of rising above sectional interests and cultivating a holistic perspective. There is however no doubt that the organisational dimension is a crucial if not the critical ingredient in this challenge.

The notion of the *limits to governance* eloquently describes the organisational complexities and constraints facing traditional governance systems when it comes to integrated environmental management. At the basic level the interactions between organisations can be explained in terms of the two organising principles of competition and collaboration and the tension between them in the context of the participating organisations' self-interest. It has been argued that coordination can be a product of three alternative modes of governance namely hierarchy (the imposition of an authoritative integrating and supervisory structure), markets (contractual relationships driven by the invisible hand of self-interest of the participants) and networks (voluntary relationships based on the view that actors are able to identify complementary interest).

There seems to be wide acceptance of the notion that a decentralised set of formal and informal agreements among diverse groups and organisations in the form of networks or partnerships hold the most promising institutional prospect for integrated resource management. As no single actor, public or private, has the knowledge and information required to solve resource problems, no single actor has sufficient action potential to dominate unilaterally in a particular governing model. The process of reducing the state's direct role has been dominated by three approaches: *firstly* the market economy approach (the privatisation of use rights and the substitution of *rule of law* by the discipline of the market), *secondly* co-management, involving a sharing of management between the state and responsible user group organisations by consensual decision making; and *thirdly* decentralisation of management through the regionalisation of policy decisions to those located closest to the theatre of operations. Although the approaches are derived from distinctly different theoretical perspectives and championed by different disciplinary traditions, there are no fundamental reasons why privatisation, co-management and regionalisation should not be joined together in an integrated approach.

The emergence and growth of networks and multi-organisational partnerships during the 1990s – the Age of the Network – reflect the complexity and intransigence of issues, the search for integration, issues of resource dependency and a desire to address those issues that cross organisational boundaries in innovative ways. Many coordination problems can be solved by bargaining among affected organisations, often at the lower echelons and the best strategy appears to be to allow local organisations to devise their own plans, subject to central monitoring. Therefore it could be concluded that networks could be particularly successful in achieving integration if there is substantial latitude for local

action, whether the decentralisation is to local government institutions or to lower echelons of organisations. Coordination issues conceptualised as implementation issues are more likely to be resolved successfully than are issues that are considered at the policy levels. This is because implementation issues tend to be addressed at a lower level of an organisation and settled for individual client issues, while policy debates emphasise issues of turf and organisational survival.

Finally, although it is clear that the organisational dimension is a critical factor in integrated environmental management, there is no single blueprint or model for achieving coordination that will suffice for all problems and contexts. More likely the approach(es) and governance mode(s) or combinations thereof will have to (a) fit the type of problem, (b) work within the constraints and opportunities offered by the existing organisational landscape/capacity and (c) take the local political, social, economic and cultural context into consideration and adapt and innovate within that space. There are – unfortunately – no simple answers!

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