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Coordination of Policies and Governance: Regime Requirements in Dutch Freshwater Management

Introduction

Sustainable development presents public authorities with many challenges. Increasing steering capacity, legitimising current actions to address intergenerational benefits, and developing capacity to incorporate learning while dealing with complexities and uncertainties are needed to address upcoming dilemmas (Bressers and Rosenbaum, 2003).

Consequently, the coordination of policies across policy domains and governance scales is essential.

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Recent developments in freshwater governance approaches in the Netherlands can provide valuable insights for policy implementers. The coordination of a wide range of relevant policy domains, such as recreation, agriculture, nature and flood management, is being used to support sustainable water governance. Multi-policy implementation in complex and dynamic social interaction processes is essential in analysing governance for sustainable development.

Dealing with complexities and uncertainties requires adaptive skills and management approaches which provide implementers with sufficient flexibility. It also requires sectoral, domain-specific governance structures to provide a minimum level of direction and vision. While coordination and strategic direction are important, excessive control and top-down policy implementation can limit opportunities for context-specific solutions (De Boer and Bressers, 2011).

The challenge is in finding the right balance between the extent and intensity of central leadership, vision and direction and local flexibility for adaptation to uncertainties, complexities

and contextual conditions. The latter refers also to challenges of governing flexibly across policy domains (or horizontal coordination). This article describes the governance approach of contextual water management (Kuks, 2005), developed as a response to sustainability challenges, and illustrates its use in a case of river restoration in the Netherlands. This case offers an excellent example for understanding policy domain coordination challenges and the associated implementation processes.

The Netherlands is the most densely populated European country, with an average of 450 people per square kilometre. With approximately one quarter of the land area below sea level

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and three major rivers running through it, flooding issues have long been an important matter for Dutch society. Alongside the three administrative levels of government (national, provincial and municipal), independent regional water authorities (waterboards) play a key role in water management.

The subject of this article is the implementation process associated with planned multifunctionality, increasing space for river beds and the connection of natural areas. These goals are at the heart of efforts in Dutch rural areas to meet habitat and water quality and quantity goals set at the national and European levels. We examine how they can be achieved through complex multifunctional projects within the context of high population density and intense land use. The projects require giving a large amount of space back to natural processes while meeting recreational, economic development and water management needs.

The 52 kilometre-long Regge Valley belongs to the Dutch region of Twente.

Most inhabitants are concentrated in a row of cities, which gives the region a quite 'rural' atmosphere (by Dutch standards). The area used for traditional (intensive) farming in the Regge Valley is decreasing. We classify the Regge Valley as an increasingly interwoven combination of agriculture, recreation and tourism, towns, and both wet and dry nature (EU Natura 2000 areas).

Large investments are being made in the region to improve recreation opportunities, wetlands, river and stream dynamics and health. Combining these ambitions with economic and social development can create various physical planning issues. These efforts fall into key policy domains which require

coordination for sustainable development. One important aspect of governance for sustainable development is that it requires that new dimensions of social objectives be embraced (Meadowcroft, 2007). This necessitates internal and external policy integration efforts from those working within governance structures still heavily based on traditional sectoral segregations. This is a major component of the efforts being taken by local water managers in the Regge Valley.

The strategies discussed in this paper fall under a general framework referred to as contextual water management (CWM). CWM assumes a complex and dynamic implementation environment in which adaptive management strategies are necessary. It provides a conceptual understanding of the interaction of actors in implementation processes and suggests the appropriate sorts of governance structures that can support this. The CWM strategies practiced by Dutch local water managers address some issues typically challenging their work: stakeholder participation,

policy fragmentation and inflexibility, uncertainty and risk, multifunctional land use and improvements in sustainable development.

What follows is a description of the river restoration as a sustainable development-oriented project. Insights are provided regarding the experiences involved in applying CWM in practice. The article concludes with a summary of the basic principles of CWM.

Implementation in complex and dynamic situations

Being a delta country, the Netherlands has understandable concerns regarding the expected increasing frequency of high- and low-water settings as a result of climate change. This has warranted a drastic change of approach to water, land and nature management towards using nature's resilience to provide for both human and natural environmental needs. Recreation, agriculture, nature and flood management are integrated in projects like the Regge River restoration, even though they are based on different sectoral policies. The resulting projects are complex and need extended periods of time to manage opportunities and threats. These aspects are unpredictable from the onset and thus are also dynamic.

The projects are also typically multi-level by nature. Multi-level governance is based on the acknowledgement that all levels and scales influence a certain situation simultaneously (not necessarily to the same extent) and that all levels influence each other (Bressers and Rosenbaum, 2003). Though the projects studied are local by nature, abundant relations with upper levels (including the EU and world climate change arrangements) and lower levels (kitchen table conversations with individual citizens) are centre stage.

Inevitably, projects of the size and ambition of the Regge River renaturalisation are 'complex', but moreover they are also dynamic. The period over which they are implemented is sufficiently long to allow ample room to engage with other actors in the given context. It is also long enough for the actors to try to continuously modify the context of the interaction processes. As

such, the analysis of implementation needs to recognise that not only processes, but also contexts, evolve, both endogenously and exogenously. Attention to the concept of multi-policy implementation in complex and dynamic social interaction processes is thus essential for analysing river restoration projects as examples of governance for sustainable development.

Within this complex and dynamic context, the related unpredictability and uncertainty of the environment makes linear project management an unfit strategy. Sectoral governance structures often demand absolute priority for their own (though perhaps overlapping) goals or procedures. This encourages implementers to defect from collaboration with other policies' implementers and is thus a serious stumbling block for adaptive and collaborative implementation. Certain qualities are required to be able to succeed in integrating different uses, actors' consent, sectoral policy schemes, funding rules, time frames and scale issues. The members of the project teams need to be able to actively seek coherent projects outside their traditional environments (Williams, 2002), and see, use and create 'windows of opportunity'.

River restoration within the broader external governance context

Climate change is having, and will continue to have, the effect of delivering more rainfall at irregular periods, causing higher and more frequent peak water levels and droughts (IPCC, 2007). Two thirds of the Dutch population live in flood-prone areas: the land below sea level requires permanent protection, though further large inland areas also need protection from temporary inundation by sea and rivers. During the 1990s the Netherlands experienced three serious river floods, causing evacuations of people and extensive material damage. More space around rivers is needed not only for safety reasons (to allow rivers to rise and fall without risk to human life or harm to economic interests), but also for the ecological development of the river. River renaturalisation is seen as the best way to achieve more water buffering capacity given the future climate expectations. It is also seen as a way to answer the call of the

EU Water Framework Directive to achieve high ecological water quality standards.

As Leonardo da Vinci said: 'Water is the driving force of all nature' (Juuti and Katko, 2005). Given the increasingly acknowledged link between water and nature, the government agencies of the densely populated and ecologically fragmented Netherlands have started to assign significant importance to linking areas of ecological importance in order to create the highest possible value of biodiversity. Nature development is generally promoted in the context of completing the National Ecological

Network, and provided inspiration to the EU Natura 2000 initiative. From 1990 until recently, governments of all political colours have worked consistently to create stable and functional ecological linkages for that purpose. This level of political stability has been critical in garnering support from different sectors of society. It generated high levels of trust among the many relevant sectors, which was evident in their significant investments of time and resources. Recent revisions to government support of these projects, however, has jeopardised this relationship.

Political commitment and governmental leadership are essential for overcoming the many obstacles involved in spatial planning. In spite of the long-lasting and substantial governmental support for nature development policies, they are very hard to implement in such a densely populated country. Increasingly, water interests compete with other interests for the limited remaining space in the Netherlands. A new objective of the Dutch water policy is to make water a determining factor in spatial planning (Wiering and Immink, 2006).

This renders decision making difficult, especially at the level of waterboards and municipalities. Waterboards have an interest in considering water as a guiding principle in physical planning and leaving areas undeveloped if a flooding risk exists. Municipalities, however, have the final say in physical planning and have a stronger interest in economic and urban expansion (Woltjer and Neils, 2007).

Restoration projects are also affected by local planning processes. Municipal governments are required to submit zoning plans, which must incorporate national and provincial goals. For

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example, the legislation for the protection of specific species and national landscapes must be included and developed using an integrated approach. A special characteristic of Dutch local zoning plans is that they are detailed to the plot level and directly legally binding. All land uses other than the ones specified are restricted.

In 2001 the national government and the national associations representing the waterboards, provinces and municipalities concluded a first agreement on the implementation of such policies and the role of each organisation therein. In 2003 they concluded the National Administrative Agreement on Water (Nationaal Bestuursakkoord Water). This elaborated upon the responsibilities and resources for implementation regarding the water buffering aspect of water management.

River restoration in the Netherlands is done as much as possible in conjunction with any related land use and policy opportunities. There is as such quite a long list of important groups and documents that make up the governance structure associated with this activity.

The creation of new corridors of nature claims additional land. Lands are purchased by these public partners in a coordinated fashion to meet goals such as ecological network creation and the formation of water buffering space. The deliberate coordination of policies and strategies is a key capacity that has enabled these groups to work together across governmental levels.

The Regge restoration project

The Waterboard of Regge and Dinkel is responsible for the watersheds of the Regge River as well as the nearby Dinkel River. It is viewed nationally as being innovative and progressive in relation to the new demands of water and nature restoration

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tasks. The waterboard considers the Regge River basin to be suitable for additional water retention. This section outlines the current river restoration project to meet their flood risk management goals in this area. They are cooperating with various nature organisations, levels of government and other private and public stakeholders towards a coherent and strategic approach.

In 1998 the waterboard, in collaboration with the Dienst Landelijk Gebied (DLG, the national agency responsible for rural areas) and the province of Overijssel, initiated and issued the Regge Vision. This integrated policy agreement set the basis for the transformation of the heavily canalised Regge River back into a natural river. The various arguments put in favour of such restoration efforts revealed support for the multifunctionality of the area. The Regge Vision set an agenda for further consultation and concrete decision making regarding integrated management of water quantity and quality, nature, agriculture, drinking water supply, recreation, landscape and estates. All local and regional public authorities

(provinces, municipalities, waterboards, agencies) and non-governmental actors would be involved. While it provides a clear vision, its implementation strategy has been left open to accommodate high participation.

Participation is one of the keys to sustainable development and good governance (Steurer, 2009). This focus on public participation is consistent with that of traditional Dutch governance processes, which are heavily based on consensus decision making. The reclamation and settling of lands below sea level (poldering) forced many Dutch groups in the past to work together to maintain their lands against flooding. Consultation is used strategically by

the waterboard in order to minimise objections and obstacles in attaining their own objectives. It is necessary to engage in this type of communication at the outset of the project, before concrete plans are developed. This strategy increases the ability to include various interests in the project through clever and flexible project design. It also improves trust and cooperation among the various stakeholders.

The Regge restoration project is transforming the previously channelised Regge into a dynamic and resilient river system. Given the large scale of the project, complications are expected related to land use demands across the various sectors of society. It is quite common in Dutch projects involving land use changes for private citizens or public organisations to raise legal objections. These can delay projects significantly and add to their costs, so it is wise to avoid this where possible.

In a successful avoidance strategy, experienced project managers chose to invest minimal time on the development of an all-encompassing and detailed plan.

Instead, they adopted an opportunistic approach and did not begin implementation in a methodical manner. They often watched and waited for project options to develop independently through the initiatives of various stakeholders. They then collaborated with the initiators to include as many aspects of their own vision as possible. For example, in the early stages of the process the waterboard became aware of a farmer along the Regge who was interested in ceasing his farming business. By paying attention to other wishes of people in the area this ultimately resulted in a cascade of land exchanges. This not only enabled the waterboard to get hold of a stretch of the river banks for renaturalisation, but also created improvements for two other farmers and new opportunities for one trade and one recreation business.

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Thus, project managers left ample room in the Regge Vision for these types of participatory win-win situations to emerge and determine where short-term project efforts should be focused. Gradually, this developed into an implementation strategy referred to as 'contextual water management' (Kuks, 2005).

Contextual water management

Contextual water management is rooted in the observation that until the 1980s, water management was mostly segregated into sectors. Later on, the approach expanded to integrate various functions and measures in the water system. This was referred to as integrated water management (IWM), which is, however, only a form of internal integration that still preserves much of the traditional focus of water managers.

In the 80s and 90s a development took place in many European countries towards having a more open view on the relation of the water body to other aspects of natural and human uses. Water's role in the support of natural ecosystems in the river basin area and its role for recreation and tourism began to be better valued (Bressers and Kuks, 2004). This integrated water resource management

(IWRM) approach is a form of external integration, which now includes policy domains previously unrelated to water governance.

Nevertheless, this initiative still does not address key sustainability issues. It is at best an externally integrated water management optimisation process. The water manager simply considers additional issues before deciding what the best 'policy and management response' would be. In order to overcome the IWRM limitations, the water managers involved in the Regge restoration projects have started to develop and work with a new logic. Integration for sustainable governance of freshwater resources implies the incorporation of water goals into the various policies that affect or are affected by the water system of all partners involved.

Water is part of the environment as well as the social context. When water managers do not take the entire context into account, water goals become unfeasible because of opposition from the excluded actors and sectors. Stakeholders have their own socio-economic, aesthetic, cultural and ethical values in relation to how water should be managed. Water goals should be developed through interaction with partners in the environment and society at large, not just by the organisation responsible for managing water (Kuks, 2005).

Water managers should continuously seek an adequate balance between addressing the values and interests of various partners and those they see fit for supporting the water system. A permanent cooperative interaction, aiming at synergies, supports the incorporation of intergenerational interests into policy making. As a consequence, water governance goals cannot be uniformly implemented in different contexts. Within practical limits, there should be space for variation. Policy design that is more flexible and allows for contextual adaptations needs to be supported by policy outcome expectations that accommodate variable success measures. Just as there is not one sustainable water governance situation that can be striven for, an 'optimal' water system can never be attained. This method is, however,

considered to be the only feasible way to realise the maximum number of goals given the constraints of such a complex context (Kuks, 2005).

This turns water management from a modelling, decision-making and management process into a multi-actor interactive governance process. This is essentially a social interaction process crucially dependent on contextual factors.

Contextual water management supports a wide range of stakeholder involvement in governance processes. Decision-making processes are central to the CWM approach. CWM acknowledges the necessary dependency on others and clarifies the benefits of seeking out joint projects. The strength of CWM is that it shows how goals can be realised across

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sectors and how intergenerational benefits can be achieved. But for CWM to work, a framework or vision is needed that gives perspective to the core interests of the project, to keep it moving forward. The central inspirational guiding vision is best complemented with sufficient flexibility in the relevant integrated governance arrangement (Boer and Bressers, 2010). This provides the best conditions for making optimal use of scarce space and funds in the implementation process.

Adaptive implementation is very difficult under inflexible governance structures. It becomes further challenging when many inflexibly governed sectors need to cooperate in local implementation.

The following four points highlight a number of elements of governance that contextual water management understands to be at the heart of these implementation processes. This context sets the stage for and illuminates the necessity of an adaptive and dynamic approach to river restoration projects.

1. Processes: interacting process phases and manageable scales of operation

In the classical project-planning and implementation perspective (which is far from abolished in practice and theory) there is a sequence of phases through which each project goes: planning, design, realisation, maintenance. However, in a complex and dynamic context, all such phases no longer offer clarity and organisation, but in fact produce substantial risks. The transitions from one phase to another can be compared to a relay race. The 'baton' always has some chance of falling and this chance increases under stressful conditions. In reality, the complex and dynamic nature of water management projects provides no guarantee that the next runners are

eager to accept the baton or that they will accept it at all. Geldof (2004) warns about 'cold welds' that are inherently fragile and argues in favour of the blurring of boundaries between project phases. This is called 'interactive implementation' and can occur by involving actors who normally would enter the scene in the later phases.

The additional complexity that this produces must be channelled somewhere. We were able to observe quite clearly how this was handled in the Regge River renaturalization process. It involved not trying to implement the whole project everywhere and all at once, but breaking it down into a multiplicity of smaller (sometimes very small) sub-projects. These sub-projects can then be dealt with both in parallel and sequentially. In this way the actual work is captured in units with a manageable scale of space and time. The arenas, actors and resources may be kept reasonably simple per sub-project, even when inputs from various sides of the projects are included.

Structuring projects in a modular way is recommended as an approach that turns time into an ally and supports learning while doing. It also enables the promotional use of intermediate areas as good examples of successful projects in order to convince landowners and citizens in other places that it is worthwhile to participate and cooperate.

2. Interactions: dealing with motivations, cognitions and resources

In the implementation process a concerted effort is aimed at seeking alignment of the cognitions, motivations and resources of the actors involved with the goals of the projects, and vice versa. When a large power imbalance is not present between the participants, the interactions in the process are extremely important. They should be strongly considered when arranging a supportive setting of actors and their characteristics. It is important to combine clear playing ground limitations for each actor with the openness to include options for synergy, and the creativity to find or create such options.

Nearly all of the Regge restoration project agreements were voluntary in nature. One farmer's willingness to reduce the intensity of his/her operations is combined with the province's interest in developing an ecological pathway. Voluntary actions are considered ideal in order to reduce administrative overload, legal obstacles and costs. Actors trust each other to operate in ways that are beneficial towards one another when their interests naturally align.

This form of project development requires an open, participative and communicative approach. It is inclusive towards the social environment of other actors and it supports learning from each other. It is of crucial importance to have a good understanding about the characteristics of the other actors, and to monitor when and where productive settings of positive motivations, adequate cognitions and sufficient resources of actors can arise (Bressers, 2004). It is equally important to show not only openness, but also reliability and determination during the entire process (Bressers and Lulofs, 2010, pp.200-3).

3. Dynamic strategies: a balancing act between fixing options and keeping them open

The Regge restoration projects are not only complex by nature but also time consuming, regardless of how they are managed. In a democratic society in which funds and space are scarce it is beyond the capacity of any regional government to realise them overnight. As pointed out earlier, this is not negative when time is made into an ally. The additional time required by this approach provides a significant benefit in terms of the direct learning process of the actors involved. This does not hold only for the learning process of the actors. Aspects of the specific case context, such as the actor relationships and the institutional arena, can be modified through the application of careful strategies. They are actually bound to change as an emergent result of the complexity of relevant actions in the absence of such deliberate strategies.

The sequential nature of the line-up of sub-projects also creates ample space for improving network relations and trust-building. Clever actors can acknowledge this option beforehand and invest proactively in building such relationships.

For the waterboard officials this inevitably implies accepting a degree of uncertainty (Evers, 2011). Entering into an open implementation trajectory without knowing beforehand what exactly will evolve from it would appear to open up the process to higher levels of uncertainty. Objectively, however, this strategy does not increase the level of uncertainty associated with the achievement of the implementation goals. Contextual water management merely brings the uncertainties to light at an earlier stage of the process. Many implementation processes are bound to fail, get stuck at some stage or only proceed after substantial alterations to the initial plans have been made. Culturally, it requires accepting the inevitability that unforeseen complications or complexity will arise. Dealing with uncertainties requires a continuous balancing act between stability and adaptive behaviour.

4. Actor receptivity: craftsmanship and team spirit for effective organisations

From the individual employee through to the organisational level, the execution of adaptive implementation strategies becomes more difficult in less flexible governance structures. In order to overcome this, efforts that are oriented towards external cooperation must be valued and supported within the organisation. Motivated staff can remain supportive of their organisation's mission while also being adaptive to external factors. They can meet organisational goals through involvement or participation in cooperative relationships and project work (cf. Scharpf, 1997). Such relationships become far more common when there is open communication among the participants. A strong focus on collaboration, communication and networking is important. Organisational development is highly dependent on a sufficient degree of flexibility in the regulations involved and the willingness of the organisation's leadership to facilitate and provide the staff with sufficient leeway and trust.

Support for the continuous learning processes of the staff is also very important. This involves stimulating the exchange of views and practical experiences among colleagues, both within the organisation and with those in other organisations. It basically serves to stimulate all staff members to become 'reflexive practitioners' (Schön, 1983). Contextual water management is not a predefined list of 'dos and don'ts'. To a large extent it is a matter of careful judgment in informed dilemmas. Mutual learning through sharing of each other's experiences creates sharper insights and a team spirit, with a jointly-held collection of possible actions and outcomes.

Conclusion

Increasing complexity in spatial planning is inevitable in working towards achieving a more sustainable built and natural environment. The associated difficulties in developing a coordinated set of policy and governance structures are not likely to be solved through the addition of high-level policies aimed at increasing cohesion. In the field of freshwater management, local

efforts informed by a guiding vision can address both specific interests and broader goals from various sectors. Working under the framework of contextual water management can thus support the advancement of a number of different

societal goals and overcome a number of challenges posed by an incoherent governance structure. Similarly, a more flexible governance structure can better support projects in a complex and dynamic context. Contextual water management

supports sustainable development and is valuable as a best-practice framework for project managers and teams operating in a complex and dynamic environment.

References

- Boer, C. de and H. Bressers (2010) '“Inter-regime” effects on local stream restoration projects', conference paper presented at ISEE conference on Sustainability in a Time of Crisis, Oldenburg-Bremen, 22-25 August
- Boer, C. de and H. Bressers (2011) *Complex and Dynamic Implementation Processes*, Enschede: University of Twente Books
- Bressers, H. (2004) 'Implementing sustainable development: how to know what works, where, when and how', in W.M. Lafferty (ed.), *Governance for Sustainable Development: the challenge of adapting form to function*, Cheltenham, Northampton MA: Edward Elgar
- Bressers, H. and S. Kuks (eds) (2004) *Integrated Governance and Water Basin Management: conditions for regime change and sustainability*, Dordrecht-Boston-London: Kluwer Academic Publishers
- Bressers, H. and K. Lulofs (eds) (2010) *Governance and Complexity in Water Management: Creating cooperation through boundary spanning strategies*, Cheltenham: Edward Elgar
- Bressers, H. and W. Rosenbaum (eds) (2003) *Achieving Sustainable Development: the challenge of governance across social scales*, Westport, Connecticut: Praeger
- Evers, J. (2011) *Werk in Uitvoering: de toepassing van interactieve uitvoering in de praktijk*, Enschede: Universiteit Twente
- Geldof, G.D. (2004) *Omggaan met complexiteit bij integraal waterbeheer: op weg naar interactieve uitvoering*, Deventer: Tauw
- IPCC (2007) 'Summary for policymakers', in S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds), *Climate Change 2007: the physical science basis*. *Contribution of working group I to the fourth assessment report of the Intergovernmental Panel on Climate Change*, Cambridge and New York: Cambridge University Press
- Juuti, P.S. and T.S. Katko (eds) (2005) *Water, Time and European Cities*, Tampere: Tampere University of Technology
- Kuks, S. (2005), 'Contextueel waterbeheer', presentation with PowerPoint for the IPO, the Association of Dutch Provinces, Ellecom, 16 June
- Meadowcroft, J. (2007) 'Who is in charge here? Governance for sustainable development in a complex world', *Journal of Environmental Policy and Planning*, 9 (3-4), pp.299-314
- Scharpf, F.W. (1997) *Games Real Actors Play: actor-centered institutionalism in policy research*, Boulder: Westview
- Schön, D.A. (1983) *The Reflective Practitioner: how professionals think in action*, New York: Basic Books
- Steurer, R. (2009) *Sustainable Development as Governance Reform Agenda: an aggregation of distinguished challenges for policy making*, discussion paper 1-2009, Vienna: Institute of Forest, Environmental and Natural Resource Policy, University of Natural Resources and Applied Life Sciences, (BOKU)
- Wiering, M. and I. Immink (2006) 'When water management meets spatial planning: a policy-arrangements perspective', *Environment and Planning C: Government and Policy*, 24, pp.423-38
- Williams, P. (2002) 'The competent boundary spanner', *Public Administration*, 80 (1), pp.103-24
- Woltjer, J. and A. Niels (2007) 'Integrating water management and spatial planning strategies based on the Dutch experience', *Journal of the American Planning Association*, 73 (2), pp.211-22

THE COSTS OF CRIME

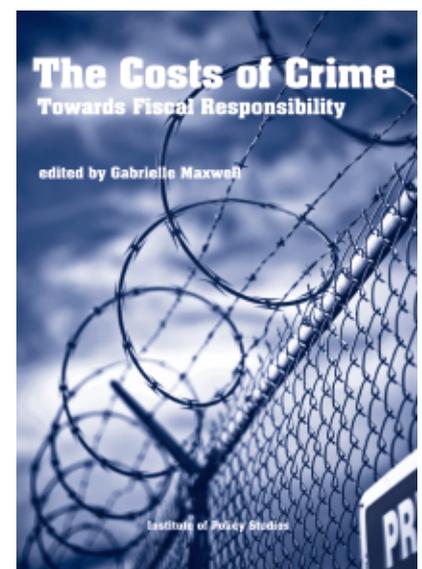
Edited by Gabrielle Maxwell

In 2012 the New Zealand government spent \$3.4 billion, or nearly \$800 per person, on responses to crime via the justice system. Research shows that much of this spending does little to reduce the changes of re-offending. Relatively little money is spent on victims, the rehabilitation of offenders or to support the families of offenders.

This book is based on papers presented at the Costs of Crime forum held by the Institute of Policy Studies in February 2011. It presents lessons from what is happening in Australia, Britain and the United States and focuses on how best to manage crime, respond to victims, and reduce offending in a cost-effective manner in a New Zealand context.

It is clear that strategies are needed that are based on better research and

a more informed approach to policy development. Such strategies must assist victims constructively while also reducing offending. Using public resources to lock as many people in our prisons as possible cannot be justified by the evidence and is fiscally unsustainable; nor does such an approach make society safer. To reduce the costs of crime we need to reinvest resources in effective strategies to build positive futures for those at risk and the communities needed to sustain them.



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