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# Climate Change Compensation an unavoidable discussion

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## Abstract

Climate change will cause significant loss and damage throughout New Zealand. This will affect everyone. When considering the options for responding, compensation will inevitably be raised, as either a requirement or a policy choice. Many people, however, appear reticent to engage with ‘compensation’ either as a word or as a concept; preferring to avoid it altogether. This article argues that compensation will be an unavoidable part of the discussion about how best to respond to the challenges of climate change. It is an integral aspect of the law of compulsory acquisition and the Public Works Act. It sits in the background to both legal and popular understandings of other statutory regimes such as the Biosecurity and Earthquake Commission Acts. This article explores the ramifications of this observation from a legal perspective and suggests that careful thought should be given, as soon as possible, to the development of a principled approach to compensation for climate change loss and damage.

**Keywords** climate change, compensation, acquisition, legal precedents, ethical principles

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There’s one issue that will define the contours of this century more dramatically than any other, and that is the urgent and growing threat of a changing climate.

*U.S. President Barack Obama (Obama, 2014)*

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Climate change will cause a range of problems, with inevitable loss and damage for individuals, businesses, and government (PCE, 2015; Abbott, 2014). How best to adapt to these challenges is a question currently receiving significant attention (Cooper and Pile, 2013; NZCPS, 2010; Hayward, 2008). It is clear that adaptation will result in increasing and ‘unavoidable’ costs to

the public (AOSIS, 2008, p.2; Vanhala and Haestbak, 2016). In this context the question of compensation is critical, both for adaptation strategies which involve the acquisition of land, and where a choice is made to pay people for the loss or damage they have suffered. However, extended consideration of the role of compensation has been largely absent from discussions so far, particularly from a legal perspective. Indeed, our experience has been that discussion of compensation engenders anxiety in many people working on climate change issues, a number of whom appear to have a preference to avoid the term altogether.

In this article, we argue that the idea and expression ‘compensation’ is an unavoidable aspect of the climate change adaptation discussion and explore the consequences of this. Compensation is an intrinsic aspect of the law of compulsory acquisition. It will also have to be discussed when deciding whether to make payments to people who have suffered loss or damage. The term is well understood and used by both lay people and experts. Euphemisms, such as ‘assistance’ or ‘transitional assistance’, may appear attractive and as softening reality. In our view, however, they distract from the key policy choices that will need to be made, and from the established place of compensation in the law. This has a number of ramifications. In particular, it suggests that careful thought should be given, as soon as possible, to the development of a principled approach to compensation in the climate change context.

#### Compensation Anxiety

As the most recent report of the Intergovernmental Panel on Climate Change makes clear, climate change will have a wide range of effects and many of these will cause individuals, business and states loss and damage (IPCC, 2018). How best to respond is a question currently occupying many scholars and policy makers. At a practical level central and local government are taking a number of initiatives (Storey et al, 2017). For example, the Climate Change Adaptation Technical Working Group was tasked with considering how New Zealand might build resilience to the challenges of climate

change. It touches on compensation when noting the importance of ensuring New Zealand has the financial capacity to deal with adaptation to climate change, where the costs will fall and how those costs can be funded. In making its recommendations it encourages the investigation of what an appropriate funding mechanism might look like and how future costs might be reflected in investment and planning decisions (Climate Change Adaptation Technical Working Group, 2018, Actions 16 and 17). Scholars are also beginning to engage with the issue. In considering the question of climate change funding in some detail, Boston and Lawrence (2017,

2018) have highlighted the profound ethical and administrative issues that need to be addressed in developing any principled approach to compensation. Although there is a vast legal literature on the law of takings and compensation, very little of it addresses the emerging question of compensation in the context of climate change (although see (Berry and Vella, 2010) which considers the question of regulation, property rights and managing coastal hazards).

The absence of detailed discussion is surprising, given the important role compensation could play in this sphere and the widely held popular expectation that governments will provide compensation payouts for climate change loss and damage (Boston and Lawrence, 2017 p12; McCrone, 2018). However, the view of the general population appears to be in stark contrast to the views of many of those on the front line of decision making. Indeed, our experience, supported by anecdotal evidence, is that the term ‘compensation’ when used in the context of climate change causes deep concern and anxiety in policy circles. There appears to be an informal consensus that the word should not be used

in this context at all. Rather, to the extent the state may pay people money as a result of the effects of climate change, other terms (usually some variant on ‘assistance’) are seen as more appropriate. There may be a number of reasons for this, including the sheer size of the fiscal risk that will accompany climate change (Boston and Lawrence 2018; Hino, 2017; Verchick and Johnson 2013; Alexander, 2011; Nicholls et al, 2010), and the other challenges climate change poses on ethical and political levels. Questions regarding how to equitably distribute the costs of climate change have yet to be answered (Hayward, 2008, and 2017). The role of individual responsibility

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remains unclear, as are the precise obligations of the state. Moreover, gaining clarity in relation to these considerations may simply be a precursor to further questions, including what might get compensated, and (equally importantly) what might not. In such an atmosphere of uncertainty, anxiety is understandable. In our view, however, while these are ultimately questions that will be answered on the basis of policy, from a legal perspective compensation as a word and a concept is unavoidable in this context.

#### The Unavoidability of ‘Compensation’ in this Context

The idea of compensation is not difficult. As Dixon J noted in *Nelungaloo Pty Ltd v Commonwealth* ([1947] HCA 58; (1947) 75 CLR 495 at 571):

... “compensation” is a very well understood expression. It is true that its meaning has been developed in relation to the compulsory acquisition of land. But the purpose of compensation is the same, whether the property taken is real or personal. It is to place in the hands of the owner

expropriated the full money equivalent of the thing of which he has been deprived.

It is inevitable that compensation as an idea and expression will arise in the context of climate change. Damage and loss are certain. Potential responses include payments for that loss, or acquisition of property to avoid further, or future, harm. New Zealand has a tradition of compensation across a wide range of areas which can be described as both institutionalised and ad hoc. It is important to recognise that any approach adopted in

must be authorised by a statute allowing for the acquisition in clear terms (at [45]; Imperial Laws Application Act 1988, Schedule 1; Corfield and Carnwath, 1978, p.1). This suggests that where the state decides it is necessary to acquire land in the context of climate change (or takes steps which amount, in law, to a taking) it will have to be authorised to do so by way of clearly worded legislation. Crucially, compensation is an integral part of the compulsory acquisition process and will have to be considered as part of the development of any legislative schemes. As noted by Donovan LJ in *Birmingham*

... the board is guided by the well-known principle that a statute should not be held to take away private rights of property without compensation unless the intention to do so is expressed in clear and unambiguous terms.

Nonetheless, it is important to note that there are no explicit legislative prohibitions on state acquisition of property in New Zealand. There is no 'constitutional protection' of private property as found in Australia (Commonwealth of Australian Constitution Act 1900, s 51(xxxi)) or the United States (United States Constitution, Amendment 5). Parliament could, therefore, conceivably pass legislation acquiring land without compensation in the context of climate change. However, there is a strong general presumption against uncompensated acquisition. As Sir Geoffrey Palmer explains:

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New Zealand will be informed by both historical practice and societal expectation. The concept of compensation has been integral to schemes in the past, it is an important concept legally, and appears to form part of everyday discussion of what the responses to climate change might involve.

### 'Takings' of private property

No area demonstrates the unavoidability of compensation better than the law surrounding the 'taking', or acquisition, of private property by the state. A familiar example is the power of the Crown to compulsorily acquire land under the Public Works Act 1981 for a range of 'public works', such as infrastructure projects including roads and airports. There is a very long tradition of law relating to these powers and this will inevitably be triggered where any state driven response to climate change affects private property rights.

As observed by the Supreme Court in *Waitakere City Council v Estate Homes Ltd* [2007] NZSC 112, [2007] 2 NZLR 149, the Magna Carta 1297, c 29 remains statutory authority that anything amounting to a taking (or acquisition) of private property

*Corporation v West Midland Baptist Trust* [1970] AC 874:

... in any developing community there must be a power to take land from private owners for public purposes; and *in society where private ownership of land is permitted justice requires that compensation should be paid for such takings.* (emphasis added).

The Supreme Court echoes this in *Waitakere City* where it also observed that one of the effects of Magna Carta is that where a statute authorises the acquisition of land the statutory practice is "to confer entitlements to fair *compensation* where the legislature considers land is being taken for public purposes under a statutory power" (*Waitakere City Council v Estate Homes Ltd* at [45] (emphasis added)). Moreover, the Supreme Court stressed that the courts have been "astute to construe statutes expropriating private property to ensure fair compensation is paid" (citing Taggart, 1998 pp. 104 – 105). This is reinforced by the Privy Council's discussion in *Director of Buildings and Lands v Shun Fung Ironworks Ltd* [1995] 2 AC 111 at 125 where it noted:

... it is a recognised principle that the state should not appropriate private property for public purposes without just compensation. But in New Zealand, absent any statutory obligation such as that contained in the Public Works Act, it is a principle that has to be honoured by the executive and Parliament. It cannot be implemented by the Courts. (Palmer, 2001, p.168)

However, from a property lawyer's perspective, it is also almost inconceivable that the state would ever take property without compensation. It also seems extremely unlikely from a political perspective. Certainly, we can say that if the Crown were to attempt to do this it would have to be authorised to do so by very clearly worded legislation and a public outcry could be anticipated. Indeed, when the Crown does take property, even with an offer of compensation, it tends to be highly contentious.

The traditional approach to compensation is reflected in at least two existing legislative schemes allowing the state to either acquire property, or when state action in relation to property causes loss or damage. The Public Works Act 1981 embodies the most straightforward system of compensation for public works in New Zealand. The basic proposition is that the

Crown (or occasionally other public bodies) may acquire land for public works. Where the land cannot be acquired voluntarily, it can be acquired compulsorily. In either case 'full compensation' must be provided (s 60). Equally illustrative, are the compensation provisions of the Biosecurity Act 1993. The overall purpose of this legislation is to preserve the integrity of New Zealand indigenous flora and fauna. The Act provides for compensation to be paid to individuals in a number of circumstances where measures taken under the Act impact on their private property. For example, the recent Ministry for Primary Industries (MPI)-led response to *mycoplasma bovis* has involved an element of compensation (MPI, 2018). Section 162A of the Act provides that in certain circumstances a person or business is entitled to 'compensation' where the MPI has exercised powers and a loss has resulted, either because property has been damaged or destroyed, or because restrictions have been imposed on the movement of goods. In relation to *mycoplasma bovis* compensation has flowed for losses incurred as a result of MPI directives to shield the dairy economy by culling dairy herds (MPI, 2018).

In line with the Supreme Court's comments in *Waitakere City* both the Public Works Act and the Biosecurity Act demonstrate the clarity adopted by legislation providing for state interference with private property rights. They also illustrate the presumption that compensation will be paid in this context. Both Acts explicitly use the word 'compensation' and each serve to highlight that successive New Zealand governments have made an explicit policy choice to ensure that individuals whose property is affected by governmental intervention are compensated.

Of course, there are many state actions that can be taken in relation to private property that do not amount to acquisitions. There is no presumption of compensation for 'regulatory takings' (the imposition of policies or rules on private property justified as safeguards on the grounds of public health) such as most regulations imposed by the Resource Management Act 1991 (see s 85; Palmer, 2017, para 15.1.01). Authorities will have

recourse to many climate change response measures that will fall short of a 'taking', but compensation will need to be considered where people are denied the ability to use or live on their land as a result of public decision making, even if this does not amount to a full acquisition by the Crown.

Overall, it would be an incredible break with past tradition if, in the context of climate change, the state took steps to take private property (or took actions which amounted in law to a taking even if there is no acquisition by the state) and did not

residential property against damage caused by certain natural disasters'. This includes, but is not limited to, earthquake, natural landslide or tsunami (s 2; Boston, 2017). Where land is damaged the EQC may pay the affected owner various sums, within certain specified limits (s 19). The language of 'insurance' is interesting here, as it technically avoids the use of 'compensation'. However, this does not stop people using the word 'compensation' in the EQC context. For example, in 2005 the (then) general manager of EQC noted:

... We want the risk that has been thrust upon us dealt with – compensated in the form of payment or mitigated in the form of hazard protection ...

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provide compensation. It is also difficult to see how the word compensation could be avoided in this context. Any euphemism for a taking (such as 'transitional assistance') would be likely to be treated as just that, would not necessarily be of legal effect, and would be best avoided.

#### *Payments for loss and damage outside the law of takings*

Beyond the narrow confines of the law on takings, however, it must also be recognised that New Zealand has a long tradition of the state making payments to people who have suffered damage to their property as a result of adverse events (Boston and Lawrence, 2017). In our view, although it might be possible to argue that such payments are not 'compensation' in a strict sense as they are not necessarily payments made as a result of state action incurring a loss, the reality is that most people would view such payments as compensation.

The Earthquake Commission Act 1993 provides a good example. In addition to establishing the Earthquake Commission (EQC) the Long Title to the Act indicates that its overall purpose is to 'to make provision with respect to the insurance of

We pay compensation for land around a property that is damaged and cannot be used again ... EQC's recent claims history has featured an increasing proportion of payouts in compensation for loss of land. For example, over 60 per cent of the amount payable to residents of the Bay of Plenty following the storm in May is compensation for land loss. (Bridges and Conchie, 2005)

This suggests that even where the word compensation is carefully avoided people are likely to adopt the word in any event. Indeed, the use of the word compensation in a vernacular rather than specific sense appears quite common. For example, a recent newspaper article considering whether Brighton and Southshore in Christchurch have a habitable future in light of sea-level rise quotes one resident as stating 'We want the risk that has been thrust upon us dealt with – compensated in the form of payment or mitigated in the form of hazard protection' (McCrone, 2018).

Clearly, legislators have choices about how they frame payments made to individuals for loss. This need not involve 'compensation' per se. For example, the

residential red zones declared in Christchurch after the Canterbury Earthquakes of 2010/2011 involved a Crown offer to purchase insured residential properties in those red zones (Tarrant, 2011; *Quake Outcasts v Minister for Canterbury Earthquake Recovery* [2015] NZSC 27, [2016] 1 NZLR 1) and not ‘compensation’ as such. That said, the Cabinet Paper outlining the proposal and seeking Cabinet agreement drew a distinction between the suggested approach to insured and uninsured properties partly on the basis that the Crown offering to buy uninsured properties would ‘compensate

is not to be provided if that is the policy choice made); under what circumstances compensation must be provided; whether any current scheme may already mandate compensation; and what new schemes need to be developed. As noted, in the context of compulsory acquisition compensation is almost certain to be required, although it may arguably not be required for state actions that do not amount to a taking.

Clarity will help those tasked with the ultimate decision about whether or not compensation is to be provided in this context. It is also important because decisions in this sphere are likely to

slips or increased flooding vulnerability) (Earthquake Commission Act 1993, Part 2), this is no guarantee that it will remain fit for purpose in the context of climate change (Boston and Lawrence, 2018).

In essence the EQC is a reactive body not dissimilar to a publicly funded insurer. The premise is that the government has a role to play in facilitating recovery in the aftermath of predetermined unforeseeable and catastrophic events. However, access to its funds is limited to those people who have taken out private insurance (s 18) and it is funded by way of a levy collected as part of those private insurance policies. Presumably, one of the policies underpinning this scheme is that it is justified on the basis that the compensation paid out to those affected will not only assist them individually, but also provides benefits on a community level. While anecdotal evidence suggests that some interested parties consider that this framework may be called upon to address natural hazards caused by climate change, this is far from certain given it has not been developed in the context of climate change and will not cover all of the potential events that climate change may cause, nor does it cover all of the people who are likely to be affected. Moreover, the approach the scheme takes to ‘insurance’ (or ‘compensation’) may also fit uneasily with the effects of climate change. A payment calculated on the basis of how much it might cost to remediate land may not be appropriate in circumstances where land no longer exists or cannot be remediated for a reasonable cost. Given the predicted effects of climate change payments calculated on the basis of one-off, discrete events, would also need to be reassessed (Boston and Lawrence, 2017).

Similar observations can be made about the Public Works Act. The premise underpinning the Crown’s powers under this Act is partly based upon the Crown holding radical title to most of the land in New Zealand, but also that where land is acquired for a public work, the collective return supersedes the cost to the individual. Thus, the Crown (and in some cases others) is empowered to take land for a ‘public work’ which is defined, in essence, as ‘a Government ... work that the Crown ... is authorised to construct, undertake,

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for uninsured damage’ (at para [32] and 6.1). This also suggests that even when framed as an offer to purchase, decision makers were thinking in terms of ‘compensation’. The Supreme Court itself certainly seems to have framed the scheme in terms of ‘compensation’ as well, with the majority observing that it was not to be taken as ‘suggesting that the decisions to compensate at 2007 rateable values for the insured group ... was in any way inappropriate’ (at [160]). It follows that there will be no escaping either the word, or the concept, of compensation when confronting the question of how to respond to the effects of climate change.

### Compensation for Climate Change Acquisition, Damage and Loss

The fact that compensation is unavoidable in this context has a number of ramifications. It suggests that it is critical to consider: whether compensation will be provided (and how to make it clear it

influence how climate change responses are both framed and developed. Whether or not compensation is legally required will be an important starting point in discussions about whether people should move, or be moved, away from high risk areas. Even if there is no legal requirement but there is a moral imperative to compensate (or if compensation may be necessary to achieve a particular end without protracted and risky litigation) clarity will be crucial.

Clearly, New Zealand has a strong societal expectation of compensation and a culture of government action to recompense for individual loss (Boston and Lawrence, 2017). However, it appears that none of the existing frameworks are robust enough to deal with the effects of climate change. For example, while the regime set up under the Earthquake Commission Act does respond to some types of natural hazards (for example payments under the Earthquake Commission scheme for land

establish, manage, operate or maintain ...' (s 2). Although broadly defined, it is not clear that a 'managed retreat' (a planned and progressive retreat from high risk areas (Nolon, 2014)) would amount to a 'public work'. The purpose of taking land in this context would be to abandon it completely, not to develop it. Moreover, the purpose of the Act itself may sit uneasily with the imperatives of climate change. It appears to be predicated on the idea that land can be acquired to avoid the problem of holdouts, facilitate economic development and increase aggregate social wealth. However, this appears irreconcilable in a situation where land is acquired to avoid harm and with the intention it be abandoned. How to calculate the quantum of compensation may also need to be reconsidered. Compensation under the Public Works Act is calculated by way of a number of rules including that the value of the land is to be assessed on the basis of the amount the land would realise if sold on the open market by a willing seller and a willing buyer (s 62). Whether such an approach would remain appropriate where the land may have no value at all, and where the risk associated with that land has been known for some time, are questions that would need to be considered. It seems likely that complete acquisitions in the context of climate change would need bespoke legislation, within which the role of compensation would need careful thought.

That neither the EQC or Public Works Act schemes will work easily in the climate change context suggests that the existing frameworks need to be revisited, or new ones developed. However, to these existing statutory schemes, a range of what might be termed 'ad hoc' approaches to recovery can be added. The residential red zones declared in Christchurch after the Canterbury Earthquakes of 2010/2011 are perhaps the best example. The Crown offer to purchase affected property was justified for a range of reasons, including the extent of work that would need to be done to remediate such large areas of land and the consequent uncertainty and dislocation for people living in those areas (Tarrant, 2011; *Quake Outcasts v Minister for Canterbury Earthquake Recovery* [2015] NZSC 27, [2016] 1 NZLR 1). Further examples include: the 'liveable homes project'

developed by the Bay of Plenty Regional Council to fund the repair of homes after the Edgecumbe floods in 2017 (New Zealand Herald, 2017); the \$4 million provided by the Ministry for Primary Industries following the Kaikoura earthquakes to help farmers and growers determine what to do with their land (MPI, 2017); and a Mayoral fund established by the Dunedin City Council in June 2017 to help those affected by flooding in South Dunedin who could not find assistance by other means (Dunedin City Council, 2017). This sort of ad hoc approach to compensating people for the adverse effects of natural events both underlines the

be that compensation should only flow for state decisions that impose limits on existing property rights. That is not the only approach, however, and it would be perfectly possible to compensate for any damage to property, or loss of income, caused by adverse events (Boston and Lawrence, 2018; Sprinz and von Büna 2013).

Ideally, a principled approach to the question of where the costs of climate change should fall would be developed, with consideration of how to implement this legally (and in light of the existing legal landscape) coming once the policy choices have been made, although the law will have

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expectation held by many that the state will step in when things go wrong (Boston and Lawrence, 2017), but is unlikely to provide an appropriately principled framework for dealing with the anticipated increase in these sorts of events as climate change accelerates. This further highlights the need for careful thought to be given to when compensation will apply, and what alternative approaches might look like. In the absence of detailed discussion it is important to consider how, beyond existing schemes, loss as a result of climate change may be dealt with.

### Towards a Principled Approach

Beyond the presumption that compulsory acquisition of property will be accompanied by compensation, the question of whether those people whose property or incomes will be affected by climate change should receive compensation is a difficult one (Boston and Lawrence, 2018). It is also, at least at first instance, a policy choice. As noted, a fundamental question is which effects a climate change compensation scheme should cover. One response would

an impact on what choices are available.

Consideration of the policy questions has begun. Boston and Lawrence have noted some of the reasons why any public compensation for losses will be complicated to address (2018). They suggest that given New Zealand's tradition of spreading the risk of natural disasters through cost sharing mechanisms, any statement that no compensation will be made in the context of climate change is unlikely to be believed. A decision not to compensate would also lead to increased pressure for expensive protective works. Conversely, a decision to compensate would have to account for factors such as perceived inequalities where individuals are compensated in relation to second or third homes, and the risk of 'moral hazard' (the dual concern that people get compensated for risk they have knowingly taken, and that there is less incentive to guard against risk if one knows that compensation will be paid). Any scheme would also need to be consistent and have sufficient cross-party political support to withstand changing administrations over time (Boston and

Lawrence, 2018). While it is beyond the scope of this article to consider the ethical arguments in any detail, it seems inarguable that any regime settled on should be 'consistent with widely accepted principles of social equity (or distributive justice)' (Boston and Lawrence, 2018, citing Kunreuther and Pauly, 2017).

Clearly, law has an important role in this discussion, but it is a subsidiary one, at least at first instance. It helps to shape the start of the conversation as it dictates the state's ultimate powers in this sphere. For example, in the context of takings, it is clear that there are no constitutional

example, whether or not the Resource Management Act is the appropriate mechanism for effecting a managed retreat remains open (France-Hudson, 2018). Beyond the question of whether it is possible to use the Act for this purpose, lies the question of whether a decision to 'retreat' should be made at the national or community level. The current scheme of the Act suggests that, for the most part decisions affecting a community should be made by the community, but where large sums of money are involved and difficult decisions need to be made, the local level may not be appropriate (Boston, 2017).

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impediments to the Crown's ability to compulsorily acquire property. Conversely, it is clear that it can only do so when authorised by a clearly worded statute. This will be accompanied by a strong presumption that compensation will be paid for that taking.

Beyond these factors, law will also have a role in determining both the manner of the imposition of any regime and its governance once put in place. These are factors that should also be considered in developing a principled approach to climate change adaptation in general and compensation in particular. Administrative law, including judicial review, natural justice and access to justice considerations will be unavoidable. The role of existing precedent will need to be considered. The availability of compensation for compulsory acquisition, for example, is guided by a number of existing rules (including that compensation flows for the depreciation in value of the property and not for a loss of profits or income (Palmer, 2017, para 15.5.02)). Whether existing pieces of legislation are fit for purpose will also, ultimately, be legal questions. For

Thus, the law will help to identify who (if anyone) is empowered to make a decision, and the process by which such a decision can be made. Law will also provide the options available if new processes are seen as necessary, although ultimately this will be a policy question in the first instance.

Any scheme, ad hoc or comprehensive, will also have to be one that is defensible in terms of an initial plan, policy, and obligations under the law. For example, the majority of the Supreme Court in *Quake Outcasts* ultimately decided in favour of the uninsured land owners, not because a decision against compensating a specific group was unenforceable, but because '[t]he red zone decisions were made on a community wide basis and this suggests a whole of community approach' (at [187]). It followed that uninsured landowners were entitled to some level of compensation because they were part of the community for which the plan had been created. Thus, while the court recognised that a decision not to compensate was perfectly defensible, it could not be made in isolation, and had to have regard to the ultimate purpose of offering compensation to some people.

This appears to be in line with Boston and Lawrence's (2018) identification of comparative justice as an ethical consideration in this sphere. If some groups receive compensation and some do not, there ought to be a very good reason distinguishing between them. The law will help to police this boundary, and how it does so is something that can be assessed ex ante in light of existing doctrines and precedent. Indeed the *Quake Outcasts* ruling may already stand as legal precedent for the fact that any action deemed a 'community response' creates an obligation to treat the designated area uniformly. Certainly, such a precedent should inform the development of broader guiding principles in this context, such as ensuring the consistent treatment of people throughout the country and over time.

The law, therefore, in the context of compensation as with everything else, does have a role in the development of a principled approach as it both accompanies some of the ethical decisions that need to be made, but also because it is the only way in which the policy decisions taken can be implemented in practice. This is a critical point and should not be overlooked in the development of tools to deal with the effects of climate change. Careful thought must be given to the desired outcome, how that outcome can actually be implemented and how that implementation will interact with the existing body of law.

### Conclusion

Loss and damage is, and will be, a major consequence of climate change. It follows that compensation, both as a word and legal concept, will be unavoidable. Whether or not compensation is paid for any of the effects of climate change is ultimately a policy question. This will be informed by a range of factors including: the grip compensation has on the popular imagination; the legal importance of the concept for state acquisition of private property; and the role that it has played across a number of different statutory and ad hoc response to loss in the past. It is, therefore, important that compensation as a topic is not avoided, but is expressly acknowledged as forming part of the wider discussion about climate change adaptation and how best to respond.

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School of Government

# Quixotic or essential science advice, public policy and the post-truth dynamic

A public lecture by Sir Peter Gluckman

Over the past decade New Zealand has developed a science advisory mechanism to assist the executive of government. This development can be seen as part of an international trend to enhance the science-policy interface (using science in the broadest sense to encapsulate the robust knowledge disciplines). This interface is complex and multidimensional. Scientific evidence assists the decision-making process leading to enhanced choices between policy options, but there are significant issues on the supply side, the demand side and at the interface. There is no area of government where robust evidence cannot advance the policy process. Data alone are not information, information without expert analysis is not knowledge, and knowledge itself only becomes evidence when appropriately applied to the question in hand.

Sir Peter will review current thinking about the processes, structures and skill sets needed to

improve the incorporation of evidence into policy. It is essential that these processes are robust; however, the trend towards applying generic policy evaluation methods rather than deep domain expertise can crimp the potential for robust evidence to usefully impact on the policy decisions.

New challenges are emerging. These include the size of the scientific enterprise, the incorporation of different epistemologies, the confused state of accessible and reliable knowledge on the web, and the impacts of digitalisation that will allow Big Data and AI to impact on public policy. While New Zealand has been at the forefront of these latter areas with the Integrated Data Infrastructure programme, major issues have emerged and will continue to emerge, in part because of the failure to get adequate data governance in place.

The so-called 'post-truth' dynamic, which has yet to extensively infect New Zealand, undermines

the role of evidence in policy-making. In the current international political climate it is becoming ever more apparent that robust evidential input into policy is a core part of protecting democracy. Sir Peter will use examples from his experience to explore these issues and reflect on general and emerging principles relating to all-important knowledge brokerage. He will also highlight some research questions he is hoping to address.

**Sir Peter Gluckman ONZ KNZM FMedSci FRSNZ FRS** was the first Chief Science Advisor to the Prime Minister of New Zealand from 2009 to 2018 and developed New Zealand's departmental Science Advisors network. He also acted as Science Envoy for the New Zealand Ministry of Foreign Affairs and Trade, and coordinated the secretariat of the Small Advanced Economies Initiative. He is chair of the International Network of Government Science Advice (INGSA) and president-elect of the International Science Council (ISC).

**Date:** Friday, 23 November 2018

**Time:** 12.00 – 2.00 pm (Lecture commences at 12.15 pm)

**Venue:** RHLT1, Lecture Theatre 1, Rutherford House, Pipitea Campus, Wellington

**RSVP:** [maggy.hope@vuw.ac.nz](mailto:maggy.hope@vuw.ac.nz)

Capital thinking. Globally minded.

