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Disciplinary Brief

## **JUSTICE, RIGHTS AND THE QUEST TO REDUCE THE RISK OF DISASTERS**

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### **Justice and Mercy - Street Lights on the Jericho Road?**

I have often pondered on the issues that Nicholas Wolterstorff has lucidly raised during almost fifty years of working to reduce disaster risks. The key passage in Micah chapter 6 has always presented a powerful challenge for anyone working in the disaster field- how to balance the need for 'doing justice' and providing 'loving kindness (or mercy)' – not one or the other, but *both*. The need is to seek for both justice and mercy, often within the same project or work programme, while maintaining a humble relationship with a loving God.

My work in disaster planning began through my association with Tearfund, an evangelical relief and development agency that has now the fifth largest humanitarian organisation in Britain. Initially, issues seemed clear cut, the aim was to provide relief, to offer mercy to the suffering. The parable of the Good Samaritan was often cited by Christian relief agencies as they went about their aid distribution. In those early 1970's there was much hesitation in the board rooms of evangelical agencies concerning the risks in becoming involved in matters of justice. Such matters were generally regarded as the province and preoccupation of the World Council of Churches, liberal theologians and the political left. Now, half a century later, a far better balance has been achieved with justice and mercy issues becoming well integrated in holistic Christian Ministry.

I can vividly recall an electric moment in a Tear Fund conference in 1974 when the justice issue surfaced. Various speakers described their rather paternalistic intentions to provide British technical assistance to improve farming practice in certain drought-prone African Countries. Their comments were met by an irate response from Dr Darling, Head of Wye Agricultural College, who had spent most of his career in Central Africa.

“Scripture in James 1-5 cries out, not for charity but for justice for agricultural producers. Any system we encourage must end - up with the farmer getting a fair price for what he gives. Senior Nigerian and Sudanese people have said to me - 'Give us a fair price for our primary products and take your technical assistance and do what you like with it. We don't want to be obliged to you. You pay us what we've

earned and we'll hire the people we want to come and give us the assistance we need.'

We must aim for that - justice not charity is the prime object- but God forbid that we should withhold charity when it is needed and we have the power to give." [ 1 ]

My understanding of the aid industry expanded and deepened when undertaking PhD research on *Shelter following Disaster* in the Development Planning Unit (DPU) set within University College, London (UCL) . This led directly into the subject of development planning and disaster risk reduction involving a host of demanding justice issues. I will attempt to summarise some of these concerns within this paper.

The sentiments noted above by Dr Darling concerning the need to avoid paternalism remain highly applicable to the disaster risk and recovery field where my PhD supervisor, a leading figure in Development Practice, Professor Otto Koenigsberger, Head of DPU, once perceptively wrote a powerful challenge to the relief community:

*'Relief is the enemy of recovery, so minimise relief to maximise recovery. Avoid paternalism at all costs. Assisting groups must never do what survivors can do or provide for themselves.'* [ 2 ]

The aims and practice of disaster protection and recovery need to expand beyond the delivery of relief provision – well beyond the bare statistics of numbers of safe houses rebuilt, jobs created and infrastructure protected. Wolterstorff reminds us that justice is the 'ground floor of shalom' and shalom consists of 'flourishing'. This issue was beautifully captured in that famous speech by Martin Luther-King called : '[I've Been to the Mountain Top](#)', delivered on April 3, 1968, the day before he was tragically assassinated:

*".... I think the Good Samaritan is a great individual. I of course, like and respect the Good Samaritan....but I don't want to be a Good Samaritan." Dr. King continued, "...you see, I am tired of picking up people along the Jericho Road. I am tired of seeing people battered and bruised and bloody, injured and jumped on, along the Jericho Roads of life. This road is dangerous. I don't want to pick up anyone else, along this Jericho Road; I want to fix... the Jericho Road. I want to pave the Jericho Road, add street lights to the Jericho Road; make the Jericho Road safe (for passage) by everybody...."* [ 3 ]

So, for almost half a century, the major challenge in my career has been to work with others to create the safer world that King longed to see emerge. The aim has been to achieve higher levels of security from the threats posed to lives, livelihoods, the natural environment and property by the devastating forces of earthquakes, volcanic activity, floods, droughts, high winds, climate change etc. I have worked in various roles: architect, consultant to UN Agencies, Governments and voluntary and private sectors and as an academic based in various universities. In the early 1970's the concerned community of individuals, agencies and academic bodies interested in disaster risk was comparatively small and isolated, but with the exponential increase in disaster threats the global risk reduction community has become extensive and more integrated, with a rapidly expanding political awareness.

Reducing complex risks requires inter-disciplinary activity with concerted physical, environmental, social, economic and political actions. These processes, all aimed towards the creation of safe conditions, have been variously described as 'disaster mitigation', 'disaster preparedness', 'disaster risk reduction', 'disaster risk management', 'protective planning',

‘adaptation to climate change’ or ‘the creation of resilient structures, institutions, societies and individuals’.

In this paper I seek to comment on disasters as the product, or consequence, of the relationship between hazards and vulnerability and to highlight some of the justice issues described by Wolterstorff that relate to this collision and the quest for safety. A caveat is needed since this short paper inevitably risks over-simplifying the complexity of the subject that has extensive literature across its many disciplines: engineering/ health/ development planning/ public policy etc. and references have been kept to a minimum.

## Corruption Kills

Unresolved issues of justice and rights pervade the subject at all levels and in all sectors. Typical ethical questions that have attracted the attention of international conference delegates, academics and political leaders include: why are certain groups of people exposed to disaster risks?; what are the links between offering mercy and working for justice?; how are disaster risks generated, maintained and expanded?; who secures protection from disaster risks and why? and do communities have intrinsic rights to safety and who confers such rights?

The collective focus of concern has centred on ways to counter an oppressive vulnerability and exposure and in many cases an acute lack of justice for vast millions of people suffering from unjust – often criminal policies and practices. Professor David Alexander (4) has recognised the pervasive corruption that lies at a high percentage of disaster deaths, injuries, and property damage:

*“Corruption is an insidious problem that affects all societies, rich or poor. It defies easy characterization and direct measurement, yet it can have very clear, concrete effects. These are mainly of four kinds:*

*(a.) failure to observe rules, laws, regulations, and standards that relate to safety and protection of the public;*

*(b.) exploitation and lack of protection of vulnerable members of the public;*

*(c.) propagation of vulnerability to hazards through failure to take appropriate risk reduction measures, or weakening of existing measures;*

*and*

*(d.) undermining representation of the people, human rights, and community cohesion.*

*From this it can be seen that there are sins of both omission and commission. Failure to protect the public is one of the former, while exploitation of people and undermining of standards are examples of the latter” [ 4 ]*

Such failures relate to Wolstersorff’s challenge to us to ponder how Christ’s proclamation of bringing ‘good news to the oppressed...and liberty to the captives’ relates to our varied disciplines. In my case this applies to architecture, engineering, urban design, planning, land ownership, and official land and housing policies. The justice issues noted in this

paper are all in the ‘second-order justice’ category that has been proposed.

The Development of a model on Disasters as the interface between Hazards and Vulnerabilities.

Up to about 1960 the term ‘**Natural Disasters**’ was widely used, but as the geographical, engineering and social science professions focused their attention of the causal factors that gave rise to disasters, a recognition grew that *unnatural* disaster risk required the separation of two key elements. First, the existence of a **Hazard**: a climatic, biological, hydrological or geo-physical event outside of human control and second - **Vulnerability** or **Exposure** to such events or processes, controlled by human societies. In a key paper of 1976, Phil O’Keefe, Ken Westgate and Ben Wisner of the Disaster Research Centre in Bradford University argued the case that disasters are more a consequence of socio-economic than natural factors. [ 5 ] The negative impact of Hazard multiplied by Vulnerability can be reduced by increased **Capacity** that can include a diverse set of positive educational, physical and spiritual assets.

Their insights could be expressed as a simple formula:

Hazard (H) x Vulnerability (V)

Disaster Risk (R) = -----

Capacity (C)

I then devised a rather basic ‘Crunch Diagram’ in 1978 based on these relationships that was included in my first book: ‘Shelter after Disaster’. [ 6 ]

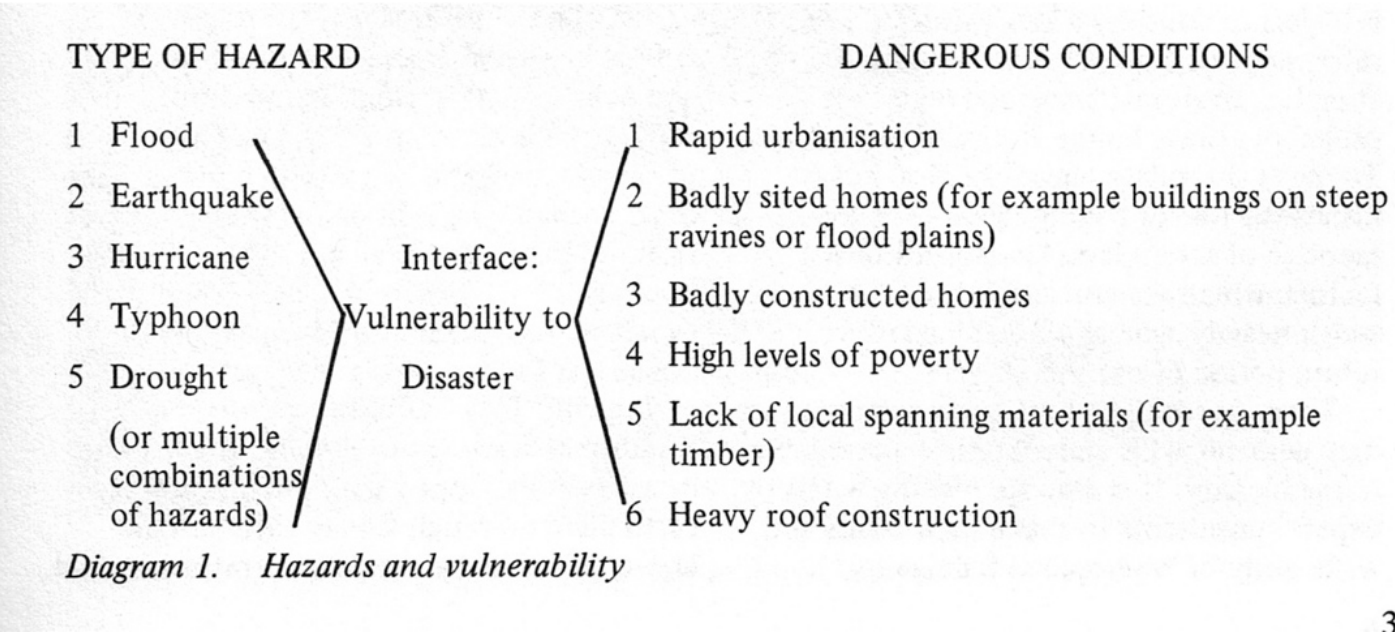


Fig.1. Initial Crunch Diagram, 1978

This rudimentary model was gradually developed as a central theme in the analysis of Disaster Vulnerability: *'At Risk, natural hazards, people's vulnerability and disasters'* written by four authors: Piers Blaikie, Terry Cannon, Ian Davis and Ben Wisner in 1994 and further expanded in a second edition in 2004. [ 7 ] Within past decades the model has been gradually accepted by the international community and in academic courses in schools and universities. I then made further revisions to the model in 2020 following growing evidence of the impact of Climate Change. [ 8 ]

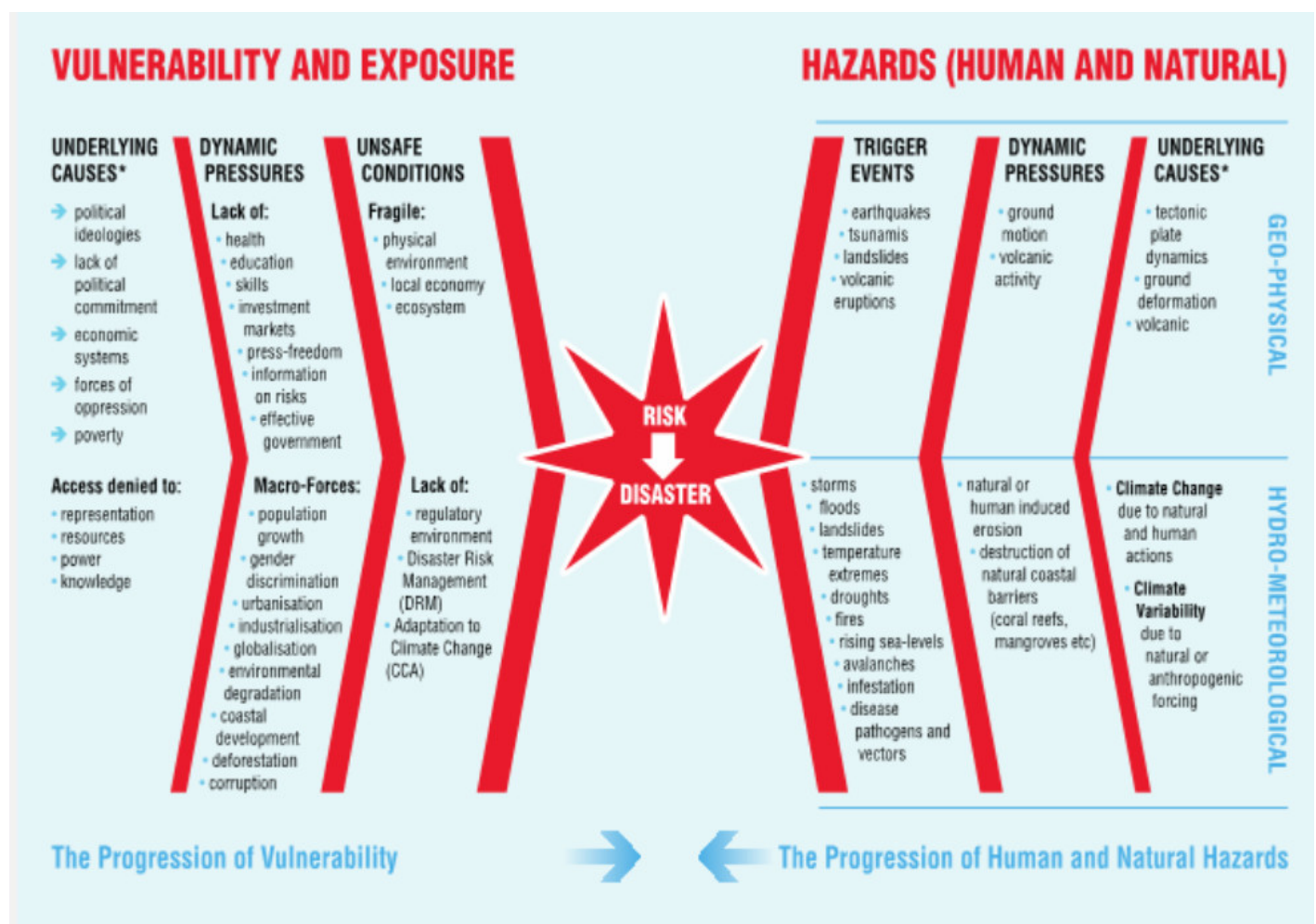


Fig.2. Further Expansion to the Crunch Diagram, 2020

The justice and rights issues that emerged in the subsequent development of the crunch diagram are highlighted above in Fig 2.

- The 'underlying causes', (sometimes called 'risk-drivers') are all deeply rooted aspects of un-development or social/economic deprivation. They include poverty, racism, discrimination etc. The progression of vulnerability described in the diagram indicates how such forces can drive pressures that can ultimately lead to highly unsafe conditions. Research is needed to determine the nature, route and consequence of such connections in specific contexts.
- The essence of the diagram is that the standard political approach to risk reduction is to focus on addressing unsafe conditions, such as producing manuals for local builders on how to build safely. However, such worthy actions can be limited in their effectiveness, merely providing cosmetic attention to 'symptoms', leaving 'underlying causes' undisturbed. The entrenched reasons why buildings are unsafe and set on unsafe sites are thus sidestepped.
- Deeply rooted historical patterns of exploitation have been referred to in subsequent versions of the crunch model described as 'structural violence', 'historical patterns of underdevelopment', 'neo colonialism' and 'neo-liberalism'.

## **Pre-Disaster Issues concerning Justice**

### **1. Siting of Settlements**

Communities who live or work in highly unsafe sites are vulnerable to multiple hazards. For example, inhabiting steep slopes subject to rockfalls and landslides that can occur in high rainfall, earthquake impact, shorelines subject to river or coastal flooding or tsunami attack. Such sites may be occupied by communities living illegally on prohibited sites, or in some situations the authorities may have actually provided the land for housing development on sites they know to be highly dangerous.

### **2. Unsafe Construction**

Dangerous construction practice is a common feature exposed in disaster damage assessments. Examples abound and include reinforced concrete with the corrupt omission of vital steel reinforcement, the substitution of sea-sand (costing nothing) containing corrosive salt in the concrete mix in lieu of prescribed pure sand (that has to be purchased). Dangerous construction can also result from ignorance concerning good, safe construction practice.

### **3. Corrupt Practice to avoid Regulations**

Government building safety construction by- laws or land-use planning controls are often sidestepped by the taking of bribes by enforcement officials. The situation is often 'regularised' by Governments paying such officials low-wages based on the assumption they will top them up by the receipt of bribes

In 1976 Guatemala experienced a devastating earthquake with over 23,000 deaths mainly resulting from unsafe construction of dwellings set on unsafe sites. A leading engineering seismologist - Professor N. Ambraseys from Imperial College reviewed the situation at a Royal Society Symposium where he predicted that: *'Today's Act of God will be regarded as Tomorrow's Act of Criminal Negligence'*. Thirty-five years later in 2011 Ambraseys, writing with a leading US earthquake

expert Professor Roger Bilham provided the evidence of the correlation between corruption and earthquake deaths as they analysed earthquake deaths against levels of national corruption as identified by the German based NGO 'Transparency International'. Their shocking conclusion in their paper: 'Corruption Kills' [ 9 ] was that 83% of all earthquake deaths over a thirty year period were the result of corruption that could be found in the design, construction and siting of unsafe dwellings. A lethal combination of action and inaction that weakened the promulgation, application, and enforcement of safety standards.

#### 4. Withholding Risk Data

Governments often possess detailed assessments of potential risks facing their citizens, but for political control reasons fail to share this data with affected communities. This data may relate to risks associated with unsafe buildings, such as the structural safety of schools, or the occupation of unsafe sites as noted above. In other situations, unscrupulous land-owners have sold land knowing the risks while withholding the risk assessment data to house purchasers or house renters. (The blood pressure of the prophet Amos would have risen to boiling point over such evil practices!)

#### 5. Risk-transfer

A common problem in the management of river flooding is for an upstream community to build safety measures for their communities that can increase downstream flooding – thus transferring and intensifying the risks facing others. In complex river catchments that cross national boundaries this practice can result in hostilities or 'river-wars'.

Currently, in June 2021, there is a dispute on this precise issue amongst communities living beside the River Thames. A flood protection measure for the (*upstream*) towns of Windsor and Maidenhead costing £110 million generated enhanced flooding for Wraybury (*downstream*) but the towns of Windsor and Maidenhead have refused to contribute £41 million to the cost of protection of the downstream communities. [ 10 ]

#### 6. Inaction by Governments

Governmental action is often found wanting, and this 'sin of omission' is certainly an issue of justice. Professor Ian Burton has noted that:

*"...decision makers often find themselves faced with pressures not to act or to delay decisions perhaps indefinitely. There is often a power structure and a set of political interests to which decision makers respond or comply with and fail to act in the best interests of the community as a whole in terms of risk and damage reduction. This power structure and political interests can be local, national and international (global) and there can also be expressions of private sector interests."* [ 11 ]

### Can Justice and Rights challenge deeply entrenched Causes of Disasters?

I conclude with the reminder that the root causes described in the Disaster Crunch Model include fundamental justice issues of poverty and inequality. These underlying causal factors relate to corrupt practice and the denial of access of



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marginal, disadvantaged communities, or sections of communities such as women, to representation, resources, power and knowledge. Each of these risk drivers presents a formidable challenge for any concerned individual, local church, concerned agency or government. But we need to remind ourselves that we serve a living God who cares for any vulnerable exploited community and takes positive delight in our faith and obedience to 'move mountains'.

*"If you have faith as small as a mustard seed, you can say to this mountain, 'Move from here to there,' and it will move. Nothing will be impossible for you." Matthew 17:20*

## Further Reading

All India Disaster Mitigation Institute (AIDMI) *The Contribution of Dr Ian Davis to Disaster Risk and Recovery Management 1972-2020* Southasiadisasters.net Issue 189, 2020. The text includes: 'Christian Perspectives on Disaster Management' by Mike Wall.

Ambraseys, N., and Bilham, R. 'Corruption Kills' *Nature* 469 (7329) January 2011 pp. 153-5.

On the anniversary of Haiti's devastating earthquake, a calculation that 83% of all deaths from building collapse in earthquakes over the past 30 years occurred in countries that are assessed as corrupt.

[https://www.researchgate.net/publication/49749502\\_Corruption\\_kills](https://www.researchgate.net/publication/49749502_Corruption_kills)

Davis, I. and Alexander, D. *Recovery from Disaster*. Abingdon: Routledge 2016. On problems and possible solutions in the complex recovery process following disaster events, including a long-term case study of positive urban recovery in India by a Christian Agency.

Davis, I. and Wall, M. (eds) *Christian Perspectives on Disaster Management: A Training Manual*. Tear Fund, Teddington: Interchurch Relief and Development Alliance (IRDA) 1992. Used in NGO training courses from the 1980's and 90's in Disaster Management.

Wisner, B., Blaikie, P., Cannon, T. and Davis, I. *At Risk (Second Edition) Natural hazards, people's vulnerability and disasters*. London and New York: Routledge 2004, on root causes and the nature of vulnerability of people to extreme hazards.

## References

- [ 1 ] Davis, I. (1978) 'Rich World, Poor World' *Third Way* December 1978 p.12
- [ 2 ] Koenigsberger, O. (1978) quoted in Davis, I. (1978) *Shelter after Disaster* Oxford: Oxford Polytechnic Press p.66
- [ 3 ] Luther King, M. (1968) *I've Been to the Mountaintop* Speech delivered 3 April 1968, Mason Temple (Church of God in Christ Headquarters), Memphis, Tennessee [americanrhetoric.com](http://americanrhetoric.com)
- [ 4 ] Alexander, D. (2016) Corruption and the Governance of Disaster Risk *Oxford Research Encyclopedia of Natural Hazard Science* New York: Oxford University Press p.16  
Online Publication Date: Oct 2017 DOI: 10.1093/acrefore/9780199389407.013.253
- [ 5 ] O'Keefe, P., Westgate, K. and Wisner, B. (1976) Taking the Naturalness out of Disasters' *Nature* 260 (5552) April 1976
- [ 6 ] Davis, I. (1978) *Shelter after Disaster* Oxford: Oxford Polytechnic Press p.3
- [ 7 ] Wisner, B., Blaikie, P., Cannon T. and Davis, I. (2004) *At Risk, natural hazards, people's vulnerability and disasters* London: Routledge p.51
- [ 8 ] Davis, I. (2020) 'Integrating Holistic Approaches in Tackling Intensifying Hazards associated with Climate Change' pp. 20-25 in Asian Conference on Disaster Reduction 2020 'Can We Adapt to the New Normal?- Approaches from Asia' Asian Disaster Reduction Centre , Kobe, Japan
- [ 9 ] Ambraseys, N. and Bilham, R. (2011) Corruption Kills *Nature* 469 153-155
- [ 10 ] Private Eye (2021) 'Thames Barriers' *Private Eye* No.1549 11 June 2021 p. 41
- [ 11 ] Ian Burton, quoted in Davis, I. (ed.) (2018) *Disaster Risk Management in Asia and the Pacific* Chapter 3. The Vulnerability Challenge p. 83 Asian Development Bank Institute (ADBI) Tokyo Abingdon: Routledge

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