The expert view: how disasters are made, and how to stop them

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Interviewee: Terry Gibson – Director, Inventing Futures
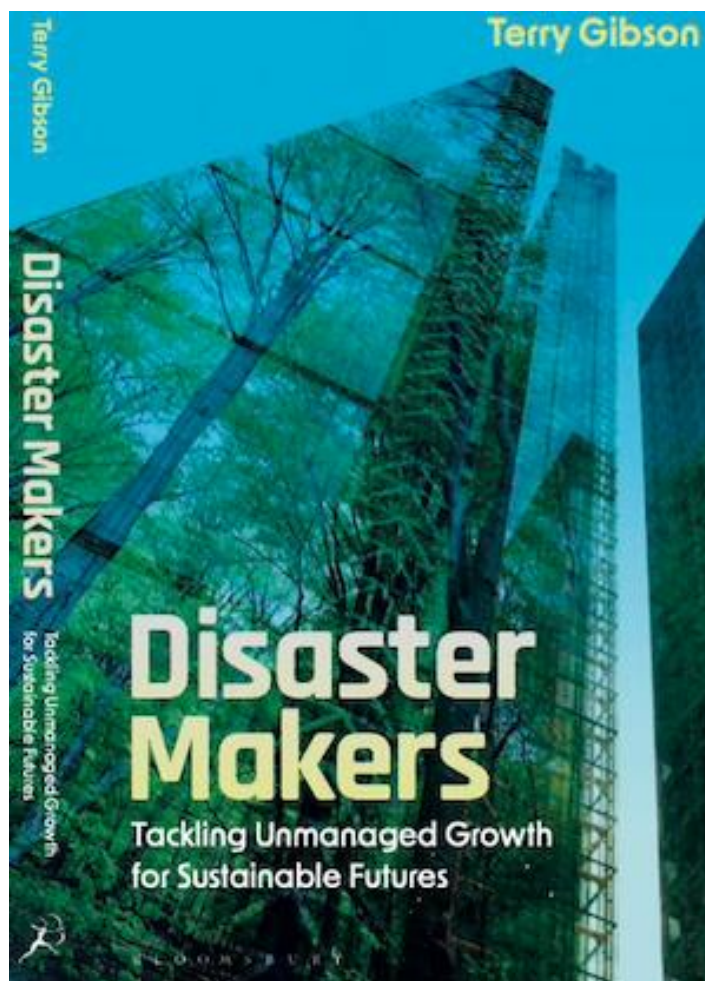
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Image: Disaster Makers (Source: T Gibson)

Terry,

Thank you for making the time to talk with me about your work focusing on sustainable development and your book, Disaster Makers, which has been published in 2025. I am looking forward to hearing your views on how disasters are caused and what can and should be done to ensure disasters are avoided, with people and decision-makers around the world in all capacities helping to shape meaningful and sustainable development. Can we begin this interview with an overview of your background and the work you carry out through your Inventing Futures set-up?

Terry: My involvement in sustainable development has come about from a background in media production. I have always been intrigued by international development, and some time ago I supported a UK-based International Nongovernmental Organisation (INGO) called Tearfund with a media role in which I made films for them. My work required travel to many different places to make these films, and seeing what was happening on the front line, from the slums of Phnom Penh to bush villages in East Africa. Oftentimes, I found that I learned more when I turned my camera off and spent social time with people.

Through this work, some of which comes out in the Disaster Makers book as case studies and examples, I found myself questioning what I know and what I don't know. My experience inspired me to undertake part-time study and research at the International Development department of Manchester University, which subsequently led me to a PhD. My PhD required a case study, and this helped to push me towards a role at the Global Network for Disaster Reduction (GNDR), which I spotted on the Tearfund jobs page. The main action of this network was to conduct global social surveys on the impacts of disasters at the everyday local level, the results of which would be presented at the UN Global Platform for Disaster Risk Reduction. It was a busy and stimulating time.

Nowadays, I am a freelance writer and researcher. I find myself incorporating much of what I have been doing around the world for many years, during which I did not have much time for reflection. The title of my brand, Inventing Futures, is about the huge potential I see, which is so often untapped, for learning.

Everybody talks about needing change, better development and transformation, yet we keep seeing time after time that aspirations to change for the better do not materialise. I don't think we do a good enough job capturing learnings; we keep reproducing failure. As an independent voice, I focus on digging into why this keeps happening through publications and other media, workshops and consultancy. This theme is infused into the Disaster Makers book, and also a previous book I have written about aid agencies: 'Making Aid Agencies Work'.

Gareth: Thanks for this outline, Terry. Interesting that you mention your connection to GNDR. Ana Prados and I had the pleasure of interviewing their Executive Director, Marcos Concepcion Raba, in January 2025, which was a very engaging review about the valuable work of Civil Society Organisations (CSOs).

Let's dive into your book, Disaster Makers, which you have just explained contains elements of your experiences over the years. Could you explain a little more your drive for writing it, and what you are hoping that it can achieve? It sounds like it is a book you have had in mind for some time, bearing in mind the experiences you have had during your career.

Terry: One of the defining experiences for me which has influenced the way I have approached the writing of the book was a Tearfund project a number of years ago where I was filming in a Tanzanian bush village.

The film was about countering the presentation of people as objects of suffering and need. To make the film we worked with a local development organisation, and we spent time in a village with people living a fairly settled subsistence lifestyle, a week at a time at three points over a 12-month period. We didn't devise a specific filming plan before we started it, instead we lived in the village and chatted to people to piece material together for a documentary showing what their lives are like. This was extremely insightful to me. I remember talking with local farmers like Matayo, who would describe their working week – which was usually tough and gruelling.

For villages in Tanzania, land ownership is allocated and spread further and further out from where locals live, and farmers must walk a long way to get to their place of labour. Matayo talked about what they would get up to on the weekend, with the family getting together and cooking a meal. These are the types of things that happen all round the world. We also listened to people further down the rungs of the village economic ladder, people like Cathalene, a widow bringing up small kids with only a smallholding to work on, and we found her making clay pots. We asked her, with our mindset of making things to achieve an economic benefit, whether she was making them to sell or to support her cooking – some kind of economic reason – and she replied, No, she just liked making pots. The idea that someone at the poor end of the village hierarchy obtains aesthetic pleasure from making things as much as anyone else struck a chord with me. I asked the development officer who was with us, an energetic local woman called Christine, what the best evidence was of positive development in the village, to which she responded, An oxcart. It wasn't a question of having a grand project; a communal oxcart has been key for them.

This type of direct view of people's lives feeds into Disaster Makers, which has been some 20 years in the making. I kept thinking about the knowledge local people have, wherever they live, about what could and would make their lives better in terms of education, agricultural inputs and everything else. Then I look at what has happened when people have faced disasters such as severe drought and famine, and how they coped. There is so much knowledge locally about what can make their lives better which goes largely unheard. If you feed this into the framework of disasters and disaster risk reduction, you can see the circumstances described by people such as [Ben Wisner](#) and colleagues in the 1990s, for example through the book [At Risk](#), playing out in terms of hazards, vulnerability and risk.

To give you another example, I spent time in Honduras in the wake of [Hurricane Mitch](#) which struck in October 1998, and there, as I describe in Disaster Makers, the story of the disaster was the story of the decades before and the decades afterwards.

These situations that I was seeing and talking with people about were leading me to an understanding that disasters are not a headline event, and they are not all large in scale – many are smaller and go undocumented and unnoticed. What lies behind them is the book's title – disaster makers. There is a way the world works that tends to create risk for people, be it in cities or villages, whether it is increased risk of a major disaster or what I call the small, grinding everyday disasters.

This really came into focus in the research I was undertaking in parallel with my role at GNDR. I learned a huge amount from GNDR community members who were typically small voluntary organisations, many of whom I got to work with in person. All of this converged in my mind towards deciding to write the Disaster Makers book.

Gareth: Thanks for this explanation of how Disasters Makers came about, Terry. I can see the power of seeing first-hand many direct circumstances of people living in challenging situations, and your point about how we continue to fail to learn is definitely one that I want to unpack.

You point out that there is a wealth of valuable knowledge at the local level that could and should be tapped into, but we often fail to learn about it. Your videos on your YouTube Channel do a very good job of articulating how we can and should learn from the past, I must say.

Are you hoping that the book can help to bridge the learning gap, to make us more mindful of how disasters are caused and to take action to prevent them from happening? In our Disasters Avoided initiative we are supporters of the "disasters are not natural" campaign.

Terry: I agree that disasters are not natural. In Disaster Makers, I mention a paper written in 1976 titled "Taking the naturalness out of natural disasters". One of the writers, Ken Westlake, commented a couple of years ago on how even nowadays the NoNaturalDisasters campaign still doesn't have full buy-in by everyone. This is a strange situation to find ourselves in.

Consider an example on the scale of a dramatic and very large disaster such as the 2023 earthquake in Türkiye (which also struck Syria). The President of Türkiye called it an Act of God (Force Majeure), yet within days, people were asking why some buildings withstood the shock and others collapsed like pancakes. We know that twenty years prior to the 2023 earthquake there had been a previous one, in 2003. Despite building codes being clearly specified, a large number of buildings that were built were not code compliant and therefore vulnerable to an earthquake. The 2023 earthquake in Türkiye, similar to Hurricane Mitch and other major events, occurred extremely quickly, but it was a couple of decades in the making and caused by a failure to learn and a failure of governance.

I have drawn lessons from the field of economics and the 2008 financial crash – we can learn from all types of disasters. The economist Joseph Stiglitz said there is a system where we privatise the gains and socialise the risks. People make choices which they successfully master, which increases their focus on making these choices work for them, which in certain situations can create disasters in the making. In the case of the 2008 financial disaster, you can trace a history and a cycle over several decades of financial regulation-deregulation-regulation going back to the 1930s. When a financial disaster happens things get reset, but then they gradually change and what was put in place to prevent a future disaster gets unpicked because the forces at play of privatising the gains are strong.

As another seismic example, consider the major Kathmandu earthquake of 1934. After this earthquake occurred, the government instituted a citywide law that there should be no building higher than four storeys in designated zones. After the more recent 2015 earthquake a team from an agency working on earthquake technology took me round and showed me many examples of buildings that had additional stories built on top of the fourth storey subsequent to the earlier earthquake.

There was flagrant disregard of the regulations and this intensified the impact of [the 2015 earthquake in Kathmandu](#).

As I mentioned earlier, we see large scale disasters (those that make the news when they happen, for a short space of time) and small, grinding everyday disasters. We keep failing to learn from too many of them. There are powerful forces that lead us to "unlearn", including a steady erosion of regulations that introduce when something happens and then, over time, people start to view administrative rules as unnecessary and burdensome red tape.

The history of these things happening time and again is important information to share with the public, because the public can act as powerful potential change makers and guardians, and to keep things in check.

Gareth: Hold that thought about the role of the public, Terry, I'll come onto it shortly. Regarding the examples you mention about earthquakes, I remember reading about the 2023 Türkiye earthquake [one year on, in February 2024, and how many problems that still persisted](#). I [interviewed Michel Bruneau about engineering and earthquake design in 2023](#), and we talked about the 2023 Türkiye earthquake.

I'd like to discuss a term you use in your book, risk creators. You talk about the trajectory of risk creation and about how this trajectory is caused by a triumvirate of (1) government in all its different forms, (2) industry, and (3) consumers (or the public).

I wonder whether we could unpack your thinking about this triumvirate, starting with government. We know governments at all levels face many challenges, and situations where risk exists are rarely simple. We continue to see uncontrolled and unchecked development taking place in some parts of the world, and in the book you talk about how there are tough choices people have to make under different types of pressure.

I'm interested in your views to start with about government and then the private sector and industry, and then the very important part of the public.

I also appreciate the various examples you provide about disasters that have occurred. UNDRR describes a forensic analysis approach to reviewing why disasters occur in their [GAR Special Report 2024](#), which perhaps we can discuss later.

Terry: Government at all levels has a key role in risk governance. We live in a world which is framed to a large extent by the idea of free markets and freedom of choice. This economic model has raised living standards for people everywhere around the world, but we have to recognise and remember that, depending on how it is governed, it comes with attendant dangers of risk creation towards disasters.

One of the key roles of government, at a national/federal level, a state level and a local/city level, is to manage all of this at their level and scale. There are good examples of this taking place, and bad examples.

Consider one example. I was working with people in the Philippines just before the COVID-19 pandemic, and they were talking about the tension between local government and civil society – they didn't trust each other. It's not easy. Local government has large volumes of regulations and policies flowing down to them from national government, and this can give the impression of throttling development. In the Philippines at the time, there was a highly developed system of risk governance compared with a lot of countries, which had evolved over the previous 20 years, but this system was being put under pressure due to the demands being placed on local government.

Local government has a key role to play to ensure regulations are supporting good risk reduction, but quite often it's a struggle to make it work at the local level, where resources are usually stretched. They have to work with the local people they serve and also to deal with what's coming down from above.

When you look at the role of national government, it ought to be proactively looking at risk governance and risk creation and the idea of risk-informed development – in which you don't just develop land, you look at whether a development fits within a framework of acceptable and manageable risk and supports a sustainable future. However, a lot of the time the reality is different. When you go and talk to people in national governments, "emergencies" is the core word, because they are geared up to respond to an emergency, but they are not looking and acting enough at the underlying risk creation, which magnifies an emergency when it happens.

The situation is present in developed countries, it is not just developing countries that it applies to. In my research for Disaster Makers, I looked at the background to the COVID-19 pandemic, and I found that whilst the UK government had held all sorts of exercises and spotted and highlighted the risks of microbial pathogens and ways of dealing with them with strong coordination and backup resources, when COVID-19 happened the government had wound down a lot of this activity because they were not investing in it for the long term. There were other pressures that they felt they had to deal with, and then they were faced with a pandemic emergency to deal with.

I think the challenge for national government and disaster risk reduction is to shift the mindset. I know "the right mindset" is one of your disasters avoided model points. The right mindset needs to apply at national and state government, and to cities and local authorities. Some cities are as big as nations these days, as you know.

How can we shift the mindset from one that either allows uncontrolled development, regardless of the risk, or focuses on responding to disasters, to one that focuses on doing what we know to be the intelligent and the right thing, which we have lots of lessons to draw from. This is not a new idea – it has been around for something like 50 years. The emergence of the UN Disasters Secretariat arose from a movement in the 1970s and 1980s that said we need to do something to manage massive disasters rather than just responding to them, even in pure economic terms (let alone all the lives that can be saved).

These are some key challenges at the national level. Then you've got the supranational level where we could imagine a system of international government coordination, whether it is for a climate treaty or the UNDRR disaster secretariat, but technically it is not global governance, it is international governance.

I learnt this by working at [GNDR](#) for eight years, where a lot of our interaction was with [UNDRR](#) to try and influence the shaping of the Sendai Framework for Disaster Risk Reduction 2015-2030 (following the Hyogo framework).

Supranational agencies have to satisfy all their member governments, which is always a challenge. They don't stand above them as a supranational government, they respond to them. It's the system we have created. When we saw the Sendai negotiations take place in Japan, you could see different governments focusing on removing parts of the potential agreement that did not suit them.

There are layers of tension at the ground level of local government through to state and national / federal government and the level of international governance. Trade-offs happen throughout.

The thing that seems to consistently fail, which is written about a lot in UNDRRs research including very intelligently in [their GARs](#), is that we need to adopt a system of recognising that risk is embedded in development, that it is not a process where we develop and then manage the risks afterwards. I think this the challenge of government and it is seen most starkly in the language about regulation, where regulation is often labelled as "red tape", and it is too often seen as problematic, something to work around. Then a disaster event occurs and there is a renewed focus on regulations (whether it is the financial disaster example of 2008 which I mentioned earlier or any other). After a disaster event, governments want to take action to prevent another disaster on that scale happening again, so we may see a spate of regulation. But how it is conceived and maintained is key. Government and governance are critical to a sustainable future, but our government and economic model sometimes works against us.

Gareth: You point out, Terry, that the different levels of government are not always as well connected as they should be. I appreciate that government structures work differently in different countries, and that different levels of government have different levels of authority including fiscal authority. When we think of the free market and commercial pressures, it would be great to see some good examples of where it works well.

This includes the implication of bureaucracy being red tape, and the importance of how the free market and its associated economic principles can work with and respect good regulation, which brings us onto the role of industry and the private sector – the second of your risk creators.

Purely in financial terms and financial heft, the amount of wealth in the private sector around the world is huge. I know there are some private sector programmes and initiatives to support sustainable development but probably represent a sliver of total wealth.

There is financial value, and there is also socio-economic value, and economists like [Mariana Mazzucato](#) discuss what the real concept of value should be in today's and tomorrow's society. I'm interested in what you think about the role of industry and the private sector to help avoid disasters and create sustainable development.

We know there is always pressure to develop land and business ventures for commercial gain. Can we ensure development can take place in a sustainable way at the same time?

Terry: Industry is a key part of the equation of sustainable development, and it represents many interests. Milton Friedman wrote a famous article "[The Social Responsibility of Business Is to Increase Its Profits](#)" in 1970 which countered the idea of corporate social responsibility by saying, I think, that it is immoral for companies, for industries, to adapt their activities to account for their impact because it is not the job of industry. It is my belief that industry can account for their impact, and that there are benefits to doing so.

There is a lot of social responsibility activity and effort going on in the private sector, such as the ESG movement, the Global Reporting Initiative ([GRI](#)) and industry-specific work. These are efforts that link to companies having a triple bottom line (measuring a company's impact on people, the planet, and profit) – that they should take account of the impact of their activities rather than just pursuing financial profit. Yet we also know that it can become greenwashing if it is just being dressed up for show. There are cases of companies that do not set a good example.

Like you, I have worked with some reasonable sized companies, for example in retail and the beverages sector. I have seen some thorough CSR (Corporate Social Responsibility) programmes, and I have seen examples where businesses were challenged to do something substantive and they did so, sometimes influenced by the media and therefore public pressure. For example, in procurement and sourcing a company might find out (either themselves or through the investigations of others) that deep in their supply chain there is modern slavery or child labour exploitation going on, not directly by them but somewhere in their supply chain.

I worked a lot in the 1990s with corporates on corporate video production and most of the people I met at director level and upper manager level where people with a lot of personal integrity. I have seen senior leaders take this on board with a personal passion. I have experience of leaders that have come on trips with us to see what was going on and I saw personal ownership of handling the matter. Large companies may appear by some to be faceless behemoths, but they are run by people. In the modern theory of companies and multinationals, ownership is often divorced from management, and managers can have all sorts of motivations.

I can see huge potential for the private sector to contribute to sustainable development wherever they operate – both in emerging economies and developed economies. Many large companies have a large environmental footprint from their operations, and they can make a real difference, and many do. Some companies are for example responsible for major swathes of land for various purposes. How they deal with this land is key.

So, whilst industry is sometimes seen as a problem to be addressed in sustainable development, industry has a major opportunity to be a big part of the solution, and many in industry are doing good work. It is important to get the whole framing of what is happening embedded in everyone, including those in companies, whilst always appreciating the profit incentive and the need to satisfy shareholder and investor demands and expectations.

Gareth: I appreciate your explanation of how the private sector and industry can play its part, Terry. You mentioned the COVID-19 pandemic just now, and the example of the role of breweries. I know a lot of breweries quickly retooled their production lines during the pandemic to make hand sanitiser and other essential cleaning solutions. Many businesses played a valuable role to help see the world through the pandemic, in many ways.

Whilst I know that there are examples of companies that could do better, like you I have seen examples of good practices by industry first-hand. For example, I have worked with mining companies that provide genuine support to the communities where they operate in a range of areas including valuable jobs and the provision of water expertise to support the local area.

One of our 2025 Disasters Avoided in Newsletters has focused on the role of the private sector to support disaster risk reduction and resilience. For this Newsletter I spoke with someone in Arup about how they work and how they operate and their International Development team, which does a lot of purposeful work around the world. I also spoke with someone who works for the Z Zurich Foundation in the Zurich Climate Resilience Alliance which links up with a number of partners including the NGO Practical Action and others.

Some people I have spoken with in the private sector talk about how they design their activities and interventions to serve as a multiplier that can help achieve greater benefits across an ecosystem. They know there is only so much they can do as individual organisations, even with organisations that are large, and they are thinking about how they can amplify their work and efforts, and to support sustainable practices for the long-term.

I wonder how we can help to broaden the thinking and knowledge about how the business community can play a valuable role in sustainable development. I often look at the approach taken in Japan in this space, where businesses support proactive disaster resilience.

And then there is the third part of that triangle, the one that you mentioned earlier might be the most important of all, the public. What are your thoughts on how the public play a role in how we collectively avoid disasters?

Terry: It's worth starting this point about the public by thinking about how "the public" is framed. There is a media presentation and lens to it, there is a governmental framing of who the public are, and there is an industry / business view. I think it is important to get to the truth of who the public are, the potential for public movements, campaigns and pressure groups, and behind this, the matter of language.

I think the public are too often presented and framed as passive, which is not true. In some circles the public is presented as consumers, with the concept in government economics of the public being units of consumption. We're here to consume, and we are passive. Can we change the narrative by using a different description of who the public are? Jon Alexander wrote a book called Citizens. By changing the word from consumer to citizen it changes the perspective of who the public are.

If we think about ourselves as citizens rather than consumers, we start to think of them as people who are active for the right to live meaningful lives rather than passive occasional voters.

The media tends to depict the public as not being overly concerned, or even worse, they don't really depict them at all. If there's a particular issue they are reporting on, they talk to four people on a street, and they'll deliberately have two say yes and two who say no. That does not represent anything.

I have talked to a senior media person who has thought about this a lot. He told me of the struggle to get his journalists to properly represent public attitudes. Rather than get a few anecdotes, can the media gather good data from surveys and find out what people are thinking rather than relying on vox pops?

If you look at surveys of the public, you will find there are genuine public concerns. We often hear that "the public" is not prepared to pay out of their own pocket for change, yet surveys indicate a different view – many show that we would pay for sustainable change if the facts showed the costs of not doing so, to ourselves directly and to our future generations.

There are other studies that ask, if this is the case, why do the public seem passive? To my point earlier, the public media presentation is that most people aren't concerned. The academic phrase for this is pluralistic ignorance. Is there a conjuring trick here, whereby if people who are part of the public realise that more people like them are concerned, they would be more likely to want to take action, to speak up and do something about it?

Positive examples of public action exist to draw from. Many times, the public has influenced tremendous social changes. A major one that comes to my mind is the ending of apartheid in South Africa. This was the result of a growing social movement. Whilst there was violence and problems in the transition as the change took place, there was a gradual and important shift in attitudes.

Businesses and industry take note of public attitudes like this because they know their customers – citizens – take action with their credit cards as well as through polling booths. Time and again we see that citizens (the public) can make a difference.

If we look at examples in a local area, where I live in a northwest England town, Macclesfield, there is a big patch of land which is prime peat bog and an important natural environment. There has been a battle ongoing for 10 years to develop the land to build 1,000 houses on it, and a very well-orchestrated public campaign has resisted this intent, arguing that it is not sustainable and the wrong thing to do. The sitting MP, a member of the Conservative Party at the time of writing, aligned with the public mood in opposing the development proposal. When I asked why, it was because it was good politics for the MP. So, the public can vote with their credit cards and also at the ballot box, and if they can be mobilised against bad ideas, they will see what power they have. Many other local, valuable examples exist around the world. We can make a difference as "the public".

This also relates to a point I made earlier about the power of language and the choice of words we use. Consider the ongoing debate about climate change. We all know that protecting nature is important, but it will not be done if it will bankrupt the locality and the country where we live. One form of language brackets all of climate change as solely protecting nature. This sounds important but it is not life-changing to individuals and families. However, if you look at data, such as a major report by Swiss Re that analysed the economics of what the world would be like in 2050, we can see through data that if we do not do anything, we may bankrupt our country.

The question is, how can we engage the public with hard facts and ask the public what they really think and are prepared to act on, and to inform the public about what they actually think. There is huge potential here to mobilise the public and they are the people who will be listened to by government and by industry.

Gareth: I have the book you mentioned, Citizens, by the way. As you say, when we think about ourselves as citizens rather than consumers, we think of ourselves as active change-makers rather than passive. I use the term citizens a lot in my urban sustainability work.

As you say, Terry, there are different approaches and different ways of doing things, and the language and the meaning behind it that we are presented with is key to how we responding to things. For example, the Swiss Re report you mention has a good graphic in it, showing drivers of weather-related risk. It's an example of how to distil a message using meaningful data.

You mentioned also that there are successful examples of public pressure campaigns. I can think of a lot of these examples at the city and town level, but also some that have not succeeded. We live in a world of social media today, where there are some good examples as well as some negative ones. There is a lot to consider here.

You mentioned some of the ways we can engage as citizens to take responsible action. I have tried to articulate some of these points in a book that I have written, which focuses particularly on creating thriving, sustainable and resilient urban places.

With regard to the use of language, perhaps we can talk about the Disasters Avoided model which has been developed by myself, Ilan and Ana. We call it an emerging model because we don't see it as set in stone. It is a result of reviewing a lot of examples where disasters have been avoided, and where they should have been avoided but they haven't.

When disasters are being avoided, we keep seeing the six factors of the model, and we thought hard about the wording to describe them. We have sought to use wording that we hope can resonate with everyone and translate into different languages.

You mentioned one of our six points earlier, the importance of the right mindset. We also talk about the right investment coupled with good governance and good data, and then meaningful inclusion (how we involve everyone: the public industry, government and others) and meaningful targets, some of them quantitative, some of them qualitative.

I'd be interested in your views on this model and if you have any suggestions on how we might be able to improve it. There is detail behind these six factors, I should add.

The Disasters Avoided model: © G Byatt, I Kelman & A Prados
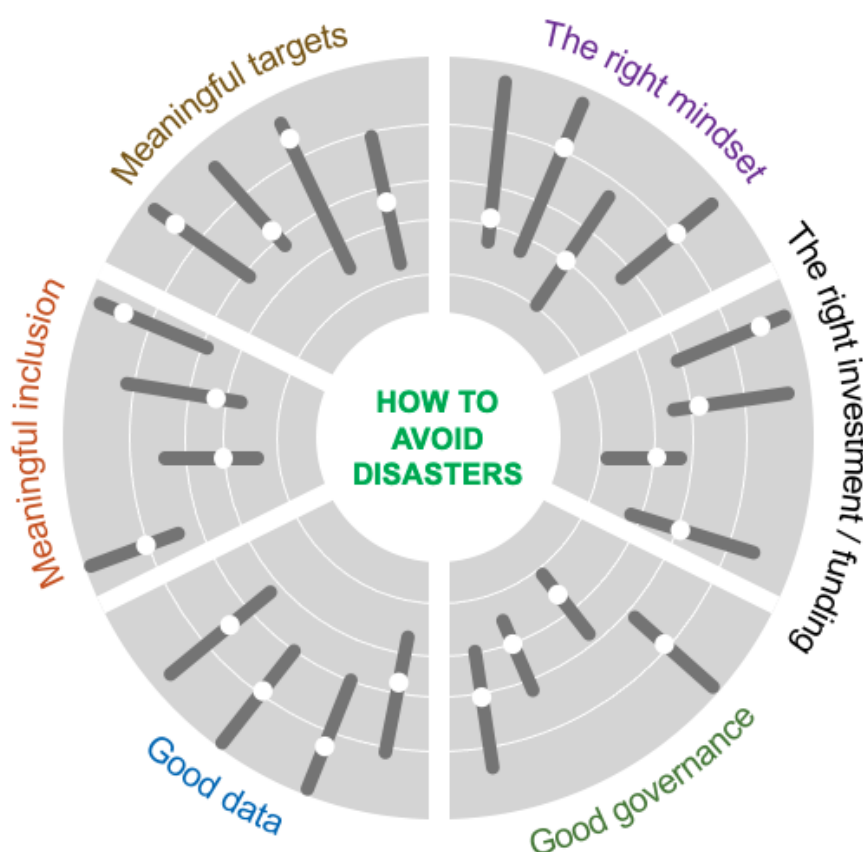
Terry: I agree with the concept of the model and the way you have framed it. A holistic approach that can support detailed action is essential. That's what doesn't happen a lot of the time, so being able to have a framework like this and to audit the context of what is going on and to check against the different components in a systems approach is important.

As a couple of thoughts on it, one concerns data, and another is about the politics of action or inertia. Starting with the politics point, there is a huge question – which is what levers need to be pulled to make them happen and what do you do if some or all aspects are not happening?

There is some good work in this area. John Gaventa has looked a lot how people who are suffering the consequences of things not working well can gain any sort of power and agency. He talks about three kinds of spaces. There are closed spaces, where people are completely voiceless.

They don't have any influence on change. Then there are invited spaces, where you get invited to a meeting or a workshop or similar, but there's an element of "performance" about it, that it may actually be more of a box-ticking to say "Yes, we have consulted our stakeholders."

His most interesting space is the third one, the created space, where people take control of a situation – whether it is through campaigning or anything else. It's a way of saying: "We will make our voice heard in a way that's not shut out and which isn't managed and controlled." Perhaps this is a consideration across the model, of course in the Meaningful Inclusion part but also across all other parts.
It's about considering the political aspect, and the inertias and resistances built into a process.

Gareth: There are certainly some things for us to think about here. The three kinds of spaces you mention make me think of how cities and municipalities approach the involvement of their citizens in shaping their local places. Sometimes I see the "invited spaces"; I'd like to see more of the "created spaces" being used (which is something I write about on one of my websites, called Urban 2.0). In the Disasters Avoided model, in describing good governance we considered how political aspects are taken into account. You have given us some good feedback for how political matters influence all six factors. We hope that when people have decisions to make and when they oversee action, they can use this model as a guiding principle.

Perhaps we can focus specifically on your observations towards the development of cities. I use a set of principles in my Urban 2.0 work, which are described below, which have some linkages to the Disasters Avoided model factors – I may mention some of these at points in our discussion:

Urban 2.0 principles (by: G Byatt)

In Disaster Makers you talk about accumulating urban risk. I see this in my travels and the urban reviews I get involved in with people around the world. I appreciate you sharing [a video about megacities and the risks to urban development](#). In the Disaster Makers book you also mention a 2023 survey which found that about 900 cities around the world represent almost two thirds of global GDP, which is a huge proportion.

We know that risk affects all sizes of urban places – from the smallest townships to the world's mega cities. As the world becomes more and more urbanised, how do you see things playing out? I know there are good examples of sustainable development taking place in some cities and towns around the world, but there are also a lot of examples where urban development is not taking place in a sustainable way, and some cities and towns are dangerously exposed to hazards.

Terry: It's a big area of concern. I'll continue with our discussion point about the need to learn from and involve people – citizens – in the discussion and debate on what to do to achieve resilience in a city or a town. How you bring in the voices of citizens, the inhabitants of these places, is crucial.

I worked on this aspect of how to hear from people with GNDR, initially through questionnaires and we then developed a new approach that I worked on with Ben Wisner, to look at whether we can go beyond asking people to tick boxes on questionnaires and hear and understand what they really want to say.

The answer, it turns out, is to ask them. There is an element here of a major programme that GNDR carries out, which I think Marcos will have mentioned to you in [the interview you held](#), which is called [Views from the frontline](#) (VFL). Frontline is simple in essence, and powerful. It is about sitting down with people and interviewing them with trigger questions about the threats they face, what they feel the consequences are of these threats, and what are the possibilities for change. We listen as they talk.

I used this approach in [Tegucigalpa](#) (the capital of the Honduras), and when we asked people what they thought of how we were listening to them, they told us that while it was gratifying for them to be asked what they think rather than being consulted with questionnaires.

The challenge with this technique is: how many people can you interview and what do you do with the rich qualitative data you obtain? I have talked with the person at GNDR responsible for VFL about the use of AI because I think it has tremendous potential to analyse text data and pull out the key themes, which is something that's been done in qualitative research for decades, but it takes a long time, and it is laborious. There are software tools to support this already, but AI could be a real game-changer in giving people a voice. It has the potential to be an example of a high-tech tool supporting a low-tech need.

To give you another example of using technology to give people a voice, I remember a case of a slum area in East Delhi, where a local NGO conducted a programme to equip young people with an app with which they went around their local area and documented the issues they saw in their community, uploading them so that they could be collated.

The NGO took the compiled information to the local government to provide them with hard, actionable data. It's another example of giving citizens a voice in an active way, which can be very powerful to support sustainable development and to highlight specific local challenges and also solutions rather than talking about generic points.

This links to the data element in the Disasters Avoided model, and the meaningful involvement point in your Urban 2.0 principles. It brings us on to the question of how we make cities that are for people? As I have documented in Disaster Makers, there is a wealth of data that shows a growing segregation taking place in cities in general. In many places, poor populations are segregated into slums and shanty towns, and wealthier populations are either in the urban centre or they are out in better suburbs.

There are many vulnerabilities in urban community areas which are often informal. The percentages of informality vary around the world and across specific cities. I think 60% of Nairobi is accounted for by informal areas, for example. Whether informal areas make up a large proportion of a city's footprint or not, many hazards are increasing in size and severity for city and town populations.

Take air quality as an example (which I know you are researching). Air pollution is several times the WHO maximum in too many cities as well as towns. How can this come under control?

There are lots of cities that have grown and are growing very quickly from the size of a village to millions of people. How do you start to govern or manage this type of breakneck growth for the good of citizens? Even at slower rates of growth, such as what we see in some developed economies, growth is not always managed well.

For me, two things come to mind. The first is to point out the consequences of poor expansion of a city or a town by projecting it into the future. The second is to show the potential positive outcomes – to show examples of cities and towns that are trying to manage this challenge and that are making headway of some sort.

Cases of cities and towns where action is being taken to address development problems are often in wealthier places that have resources and capacity to manage it. Cases of cities where it isn't being handle well are often in the developing world. Take for example the new purpose-built city in India, Chandigarh. It is facing a range of problems as it has expanded including high levels of pollution, infrastructure problems and other matters that need to be addressed.

I hope we can at least highlight these problems through effective communication and involvement of citizens, to show where places and trends are heading if they do not change and to show examples of a better way.

Gareth: The example you provided of how we might be able to use AI for analysing interview-style unstructured data, Terry, is an interesting one that relates to my Urban 2.0 principle of meaningful involvement. I am looking at various cases for using AI for sustainable urban development (which I mention on my Urban 2.0 website). We need to ensure the correct themes are drawn from big data AI analysis, and perhaps some sampling can help with this.

One of the things we talked about earlier is the triumvirate of government, industry / the private sector, and the public / citizens. How can we get that working and also think about other groups to support it such as NGOs and academia?

Sometimes people talk about consultation. I prefer to talk about meaningful involvement and engagement. The examples you gave about listening to people speak to this. As you say, if we can use modern technology to help unpack the discussions we have, this could be very powerful.

There is a lot of untapped knowledge and a lot of lessons that sometimes might be learned for a while but then they get forgotten about. I often wonder how we can make sure we take the time to learn, and act on these learnings.

I like to seek out examples of good, immediate, quick win improvements that are linked to longer term betterment. Improvements can't always be in the future; we need to see positive action now as well.

I'm always interested to see how action at a local level can be tracked and linked through to international governance and targets. When I think about the global framework of the Sustainable Development Goals (the SDGs) for example, the overall concept and intent is sound. To monitor progress towards the SDGs, the SDG global indicators exist and are generally used at a national reporting level. I have looked at how to be able to link meaningful local urban indicators to the SDG global indicators.

The global frameworks of the SDGs and the Sendai Framework have up to the year 2030 to exist in their current form, and it will be interesting to see how they will be updated or replaced in an appropriate way.

Terry: UN frameworks including the SDGs and the Sendai Framework for Disaster Risk Reduction 2015-2030 provide a structure to work towards. They can influence the language and the thinking towards sustainable development, so as global points of reference they are important.

However, it only takes a shift in the political and social climate for them to be completely sidelined. When we think of all the global changes just in 2025, let alone other years, UN-led frameworks are not top of national or city-level priorities. When we are in disruptive times the work of international institutions typically takes a backseat.

Maybe the global disruption of 2025 might lead the architects of international frameworks like the SDGs and Sendai to ask whether the way in which they are being presented and worded is fit for purpose.

I strongly believe from my experience working with the UNDRR team on the Sendai Framework that that they are always driven to get the best outcome possible with the framework they oversee (and I'm sure the same is true for the UN team/s overseeing the SDGs framework), even though their own mid-term report on the framework published in 2023 despairs of us getting anywhere near its objectives.

Perhaps what these institutions do, and the language and the terms they use, has to change. Perhaps it comes back to an earlier point about the way concerns about sustainability and climate change are presented. Can we show good data analysis to ask what the data implies for different regions of the world, for cities and local areas, for the public and local economies in the near-term as well as up to 2050. Maybe we can use different language to frame this situation.

Some regions are seeing increasing social instability. There are migratory changes taking place around the world, and so on. Should the language we use in frameworks be more hard-headed than it is today? Plus, the way we communicate that language has to be more hard-headed to cut through in a hard-headed world.

Gareth: I appreciate your point that the language used in global frameworks can help set a direction, and I remember your earlier point about global institutions having to agree what they produce with all their contributing member nations.

I'm sure it is a tough position to be in with different competing demands, and like you I wonder how the relevant UN teams are approaching the next iterations of the SDGs and Sendai.

In Disaster Makers you talk about "exploring futures we might choose". I am a strong supporter in the value of describing a compelling vision for the future that can inspire people to act. Knowing that you talk about "accumulating urban risk" – the intensification of urban areas and the challenges of controlling urban planning – how do you see urban (cities and towns) disaster risk playing out up to 2030 and beyond?

Terry: Let's hope we can see positive developments. I would like to see a focus on shifting the language towards visions for a better future as this can be tremendously powerful. Humanity can do great things when it has a collective moonshot to aim for.

If we said that we genuinely want cities to be liveable places, environmentally healthy, psychologically healthy and equitable, we can paint a picture of smart cities and involve people in the discussion on how to make it happen. We can champion these types of things at a local level, it's not just at the global level.

If we can have more positive visions that people can galvanise around, it can be powerful. To shift to a discourse that says what sort of world do we want for the next generation, and to present compelling visions for that future at every level from local to global and then create the momentum to enact that, then people figure out how to do it. That's what I'd like to see happen.

Perhaps the social media space can be leveraged to get the message out to more people. It is on the one hand an opportunity, and on another it is a challenge because there is so much material out there to compete with for people's time. As we discussed earlier, I am hoping that AI can help us to analyse text data and also spread the message.

Gareth: One last question for you, Terry – what are some good ways to get the message across that disasters are not natural?

Terry: Perhaps too many of us in this space assume that the knowledge of hazard, vulnerability and exposure is widely known. It isn't, nor is knowledge that a hazard can be created or amplified by human action. Part of the reason for my book title Disaster Makers is to say that disasters are made, they don't just happen. Perhaps we need some famous people as champions to help us with this as a campaign to spread awareness.

Gareth: Thank you very much for your time, Terry. We look forward to continuing to follow your work. Keep writing and posting videos!