

## **A Better Way of Dealing with Risk – background note to a presentation to the Annual Conference of the New Zealand China Friendship Society, Wellington, May 2011**

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After a series of terrible disasters, New Zealand finds itself at a turning point. We can muddle on, as in the past, or we can regroup, gird our loins and try something new. We could even go for a new, visionary approach in rebuilding not only Christchurch, but also our earthquake vulnerable buildings throughout these islands. One new approach that we really need is a better way of dealing with risk. This is a challenge that faces China as well, especially in its high risk industries and how it responds to its earthquakes as well.

Over the past months the Chief Coroner has been forced by circumstances to open up a number of major inquests – the Pike River Mine Explosion, the Canterbury Earthquake and the collection together of a series of cyclist fatalities. The individuals, families and communities involved with each of these have suffered immeasurably. The rest of us have recoiled in horror, and then, like good Kiwis, have got stuck in to help, with support and funds. No matter what level of support is forthcoming, the loved ones will not come back and the pain and grief among relatives and friends will endure for many years.

In New Zealand, we used to have a better way of dealing with risk, whether in the workplace, on our roads or in the natural environment. We are a society fashioned jointly from Polynesian communal values of support and a pioneering spirit, which introduced the world's first welfare state. This welfare state created a social safety net, to cope with risk, bad luck and economic depression. It is not in tatters but it is now found wanting, savaged by too many alterations.

The Pike River mine management and men were simply left on their own to develop a mine in reasonably difficult geological conditions, without the advice of a mines' inspectorate; for that inspectorate had been abolished by earlier governments. This removed the working **safety triangle** of manager, government inspector and worker check inspector that we had inherited from the UK. Unbelievable as that decision to remove the guiding safety authority may have been, the mistakes made by the non-mining investors, in their rush to El Dorado meant that an inadequate risk assessment was carried out at the mine before the first drill struck rock and this practice seems to have continued throughout much of the mine's operation. Effective risk assessment required by law and practice in our high risk industries – mining, oil and gas – was largely abandoned, along with an inspectorate, deemed to be too expensive. In the same period the worker check inspector role was also abolished and replaced with a safety representative with fewer powers.

In China and other developing countries, governments have moved their thinking rapidly forwards and are increasingly designing into their regulatory frameworks for coal mining, a risk assessment approach, using the safety triangle. For example, in July 2010 China's State Council issued a guidance document requiring all plants and mines in the high risk industries to carry out monthly risk assessments. In addition, the Chinese government three years ago required the appointment of 100,000 special worker safety inspectors, especially for smaller mines, as in larger mines they already existed. Up to the State Council document, only new mines or new plants were required to complete a statutory risk assessment.

Not only does NZ have a higher fatal accident rate in its coal industry for 2010 than China, it has also fallen behind China in its safety regulation and practice. Unquestionably, there are modern mines which have operated more safely than Pike River, albeit there are many older mines which have had similar or worse disasters. The European Union and China are about to begin a 9 million euro, five year programme of co-operation in safety and health in China's high risk industries, with the objective of helping China to implement a risk assessment approach, adapted from the EU model.

Elsewhere in New Zealand we have had problems. Farmers are now killing themselves in droves and get grumpy when someone points this out. The farmers, especially, have been caught in our national Catch 22 over risk.

Self-regulation, the new watchword in the deregulating 1980s, lies behind this. But it has been a spectacular failure; for no matter what promises are made by the owners and managers of enterprises, buildings or road systems, they cannot keep us safe by their words. Self regulation, in turn, has bred a rule-making response from politicians and civil servants, telling the self-regulating public what they must do; but neither providing real guidance nor enforcing these rules, in any meaningful way. Resentment has rightly grown among ordinary people over often petty rules which seem arbitrary and nonsensical. Our safety nets are breaking apart, in particular for our children – from cycle safety to learn to swim, where many kids just never learn either skill, once thought essential.

In our building codes for earthquake resilience considerable progress has been made. We began to learn the lesson after the Napier earthquake with updates in 1935, 1965, 1976 and 2004, often after substantial earthquakes taking place elsewhere in the world. In the second Christchurch earthquake, those buildings built to or re-designed to meet the latest codes did not kill anyone. However, mass deaths have occurred in those buildings which did not meet the new standards, including the CTV building and the Pyne Gould Guinness building.

The question has been asked by many people – why did those buildings collapse? Rather, the question that should be asked is – why were people still working and studying in those buildings after the first earthquake in September, when it was known that they were at serious risk? Who was in charge of the post-September risk assessment? What decisions were made, by whom, to keep them open, rather than transfer the staff working there to safer premises? We are now told by the Prime Minister that there will be yet another inquiry into why these buildings collapsed, after those buildings were given green stickers last September. The owners say they carried out engineering assessments but they were not reported to the council, as the council did not require it. Self-regulation is not able to keep us and our foreign guests safe. Moreover, how many of the rest of us work or socialise or study in buildings just like them, which have not been assessed, elsewhere in these shaky isles?

In China, the response to the Sichuan earthquake, as the response to the Christchurch earthquake was magnificent. The emergency and rescue services were well organised and did a tremendous job. In China, within hours there were 44 mines rescue teams deployed and seven mines medical teams. They saved the first 1,000 people. However, in China, as in NZ there were far too many sub-standard buildings still being used and some of these had only been recently built in Sichuan, such as schools. The tragedy of parents finding their only child had been killed in a school collapse was too much to bear, just as it was in Christchurch's CTV building where Chinese young people, the future hopes of their families back home, also died.

On our roads, we have got into a real funk. We are paralysed by a combination of individual selfishness and the fear of losing our 'freedom', as actors in different transport modes, once a car driver, then a cyclist, now a truck driver, or a motor cyclist. We cannot seem to think coherently, as a group of transport users. This is because no real risk assessment has been carried out which identifies the hazards for each group, then recruits each group and each actor, to work together as groups to solve the problems. We cannot expect the police to carry out this task, but, hopefully, the Chief Coroner, by gathering together these cases will trigger the movement off. As always, it should be led by the political leaders of the country, but it is not; for are human like us.

If the country so desires, I have no doubt that we can use simple, modern risk assessment techniques to work out systematic solutions in each of the above examples. We could, in a transformational manner, grasp the possibility of creating a new, visionary approach to these problems, which so bedevil other countries, too, creating new cities, safer mines and safer roads. But we need the political and social will to do it. We need to recruit everyone to the task from their first day of school. It is not rocket science and it can be made fun, even for five year olds.

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