Summary

Recent years have been characterised by volatile insurance markets as well as by opportunities for changing the approach to underwriting catastrophe risks. The volatility has at times made insurance not affordable or unobtainable. The opportunities for change have come from information technology and from hazards research and engineering. The insurance industry has been slow to embrace the opportunities. Another factor looming on the horizon is climate change. Also, there needs to be a reassessment of the way insurance is used as a response mechanism of financial compensation for losses.

With respect to existing buildings, the favourable benefit/cost ratio of retrofitting may not be generally recognised but it is there to be known. Prescriptive retrofitting guides for domestic properties and more rigorous engineering approaches for public buildings should be promoted and encouraged by incentives. The most effective incentive would be a rational premium pricing system which is related to the vulnerability of the building to the relevant hazards.

With respect to future construction, the regional authorities ought to put in place the four ingredients for success in mitigating damage from the natural hazards of earthquakes, hurricanes and torrential rain – laws, regulations, modern standards and effective enforcement systems. The most important of these and the most difficult one to implement is effective enforcement. Without effective enforcement the laws, regulations and standards are likely to be a waste of time and money.

Insurance does not directly mitigate damage. Indeed it may actually have the opposite effect in making communities comfortable with the prospect of financial compensation for losses. However, insurance can provide the impetus for mitigating losses. This is so with the Factory Mutual approach and with decennial insurance in the French Antilles. In both cases the provision of insurance is contingent on independent assessments of the design and construction of the buildings. International donors and lenders should follow the example of Factory Mutual and not rely solely on their procurement procedures in order to be reasonably assured of the satisfactory performance of their funded projects.

Designing to the minimum standards of codes means that you are aiming to construct the worst building that the law would allow. The “multi-tier” code concept should be examined whereby better-than-code buildings command higher values and attract lower insurance premiums.

Country enforcement systems should be rated. Insurance premiums should be related to the Code Enforcement Grade of the country. This would be a very effective way of improving the codes, standards and design and construction practices throughout the region.

Education and training are keys to success. In the case of the design professions, education at universities must focus on the fundamentals of science and technology. The post-graduation formation of the professional should be based on structured, on-the-job training culminating in professional certification examinations. Education and training are also required for all of the other groups associated with the building industry – insurers, financiers, regulators, technicians and artisans.

Means must be found to improve data collection, analysis and dissemination with respect to losses in the insurance industry. It is recognised that such data are usually closely guarded for commercial reasons. However, a way could be found to overcome this confidentiality barrier. Data, sanitised and made anonymous, should be used by researchers to assess quantitatively the benefits of engineering actions on the financial performance of the insurance industry.

Engineering actions are capable of reducing losses to tolerable levels. The question is: do we really wish to do so?

At the end of the day financial incentives for better design and construction would have the best chance of making a positive difference.