**Response to Productivity Commission Report**

**On behalf of James Cook University, compiled by David King, Centre for Disaster Studies and David Henderson, Cyclone Testing Station**

Post-disaster recovery costs will have to occur regardless of the quantity of money spent on mitigation. Reconstruction is unavoidable, politically and socially. The question is the extent to which recovery costs can be transferred to a presumably lesser but more effective expenditure on mitigation.

1. Household and private residential insurance costs are borne by the private sector -- householders and the insurance industry. The report urges an increase in insurance cover, but as this is a private household matter it will require a great deal of education and incentives, as well as disincentives, to prompt people to increase very expensive costs of insurance cover. Home and household insurance may be enhanced by government policy -- campaigns, targeted locations, local government development conditions, or compulsion similar to the vehicle compulsory third-party insurance. However compulsion is perceived by many householders as unfair, as people have chosen to live in hazard vulnerable locations, while others have chosen to avoid such hazardous locations. Insurance does not encourage re-building to a better or higher standard of hazard risk reduction (King et al. 2013). People after the Queensland 2011 floods referred to a desire to "build back better", but hazard adaptation was generally not encouraged by insurance cover. Many householders expressed a willingness to adapt and to reduce risk, but are constrained by a lack of money (Bird et al 2013).

2. Governments experience political pressure from the uninsured and underinsured to provide help in recovering from a disaster. Householders who have taken out insurance are disadvantaged by government assistance schemes. The insured are ineligible to receive government scheme support while uninsured neighbours receive benefits. The 2011 Brisbane floods showed many instances of people waiting for insurance assessment, thereby missing deadlines to apply for government support, and subsequently finding they were not covered by their insurance policies (Bird et al 2013).

3. Relocation is a disaster risk reduction strategy. The cost of relocation of households, residential properties and private enterprises is borne by the private sector -- householders and commercial businesses (King et al 2014). Formal relocation and buyback schemes are high cost government funded strategies that may facilitate the process of retreat and thereby avoid future recovery costs. These may address some of the legacy issues of urban development in hazard prone locations. However these are generally not favoured by local and state governments on whom funding responsibilities primarily fall. This point was made very clearly in the Queensland Flood Commission of Inquiry. The cost of relocation is a disincentive to both the private and government sectors, but relocation, or retreat, will be cheaper in the long term than recovery costs. However, the recovery cost is not a certainty -- the disaster may not happen in any given location.

Protect is the contrasting strategy to retreat. This leads to construction of medium-term control measures such as levees. The report acknowledges that some locations have been rewarded for the construction of levees by a reduction in insurance premiums. A survey of planners (King et al 2013) indicated a total lack of consensus concerning the efficacy or desirability of levees. Box 4.7 refers to Charleville’s protection strategy, but it should be noted that the 2008 floods occurred inside the levee (Apan et al 2010).

4. Residential dwellings reduce recovery costs of hazard impact through building standards (Boughton et al 2011, Henderson and Ginger 2008, King et al 2013). Building standards are compulsory with the cost borne almost entirely by the private sector. This has been most effective in cyclone prone areas but a great deal of development is yet to occur in flood proofing, bushfire mitigation and retrofitting of older buildings more generally. Subsidy schemes may be a necessary incentive. Federal government has pulled funding and support for three things that all offer a significant potential return by reducing the post-disaster costs far more than the initial costs involved. These items are:

1) support for ABCB and National Construction Code

2) support for development of Australian Standards and

3) support for independent technical experts who have no vested commercial interests in codes and standards outcomes (such as CSIRO) to continue to conduct research and be involved in the codes & standards development processes.

5. Residential dwellings may be much less vulnerable to hazards (especially floods and storm surge) than government and private sector structures and infrastructure (King 2005). A primary legacy issue of settlements throughout Australia is that towns and cities were founded with close access to navigable waterways, or at the very least in low topography. The retail and commercial sectors are frequently at the lowest elevations.

6. There is reference on page 161 to governments and private providers duplicating information collection. The sharing of information is not a simple issue. It concerns who the data were collected for and who has paid. The insurance industry is responsible to its clients and shareholders, not to the government. There is a tendency for the insurance industry to hold on to and protect data as they have no mandate to share information that they have collected. Furthermore insurance industry risk assessments may be quite alarming to the general public. Governments may be more conservative in their data collection and publication because of the fear of litigation (referred to in many places in this report). Thus although there is some overlap in data collection there may be a competitive strength in multi agency information gathering that enables alternative uses and explanations of risk. There is however, a need for consistent information.

7. Recommendation 4.4 (page 171) is weak. Policies and guidelines are useful where the community accepts and desires them. However, unless these are supported or specified in planning legislation, such policies and guidelines may not stand up in court if contested. Box 7.3 provides an example of "poor planning" by Gold Coast City Council. This is an example of a poor outcome rather than poor planning, as the council perceived that there were no grounds under law to refuse the development. The fact that Gold Coast has a legacy of hazard vulnerable developments tends to support the idea that further similar development is quite reasonable.

8. The integration of planning and building standards is probably not necessary. They exist as areas of legislation such that land-use development assessments may refer to or specify standards. The planners who administer and stipulate development decisions are quite separate from the primarily engineers who administer building standards. Not only are they separate professions but they are normally employed in different departments of local government. Each profession acknowledges the other and administers its own area of expertise. At local government level these are not likely to be in contradiction. To attempt to integrate planning and building standards may have a detrimental effect of devaluing one or the other.

9. Land-use planning needs detailed mapping at large scales to enable assessment of individual plots of land. For example, ground to less than one or 2 metres, and fine details of drainage, water courses, and even vegetation and local geology are necessary to development assessment. Small-scale maps of whole floodplains to 20 or even 5 m contours are not useful in defining flood risk of specific land parcels. Many small local government councils/Shires have no resources to attempt such detailed mapping and rely on costly consultants or State government generated mapping (page 409). All local governments need their own detailed hazard and risk assessments that are incontestable when used to constrain new developments.

10. Arguments that are made on page 413 for top-down decision-making to override local political considerations are antidemocratic and undermine local government. Responsibility for risk reduction lies very strongly with local government councils, which are poorly resourced and are inevitably prone to development pressures. Overriding local politics will merely generate additional political problems. If planners administered legislation that contained disaster risk reduction conditions, they would be able to control such development pressures themselves.

11. Reference to community consultation and local preferences on page 414 are illustrated by the dilemmas faced by planners who were engaged in recovery in the Lockyer Valley, and at Tully and Hull Heads in North Queensland. Planners did as they are required and carried out extensive community consultation. They met the needs and desires of the local communities in aiding the design of the settlements for recovery. Thus in the Lockyer Valley an extremely rare hazard event was approached with a retreat strategy of relocation and buyback. At Tully and Hull Heads a much higher probability event (storm surge accompanying a severe cyclone) generated community desire to rebuild on the same site. Rationally, the opposite should have occurred at each location. Good quality and sympathetic community consultation led to the outcome in each location. This is not an argument against community consultation, but rather a warning that communities following a disaster are highly emotional and traumatised. It is the role of the planner to listen and advise, but again it is difficult to institute disaster risk reduction for future events without strong legislation that supports decisions that may contradict community sentiment.

12. Planning degrees at universities all need to incorporate disaster and emergency management planning as part of the curriculum. The planning program at JCU includes emergency management and hazard planning in its curricula.

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