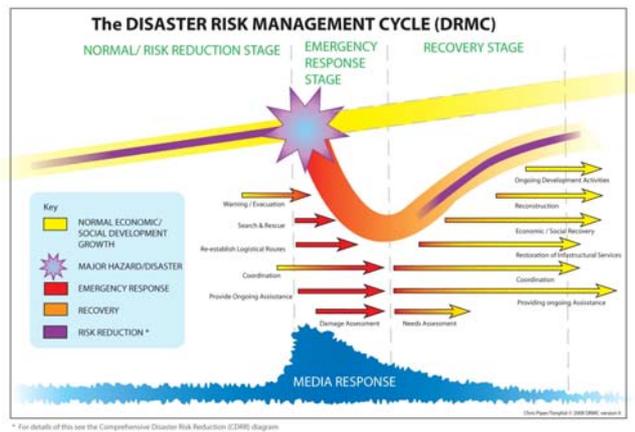


## A TALE OF FOUR DIAGRAMS: Effective Disaster Risk Reduction in an Increasingly Complex World

Whilst the number of people globally being killed from both disasters and conflicts has generally been falling over the past twenty years, the number of people actually affected by disasters has steadily been rising<sup>1</sup>.

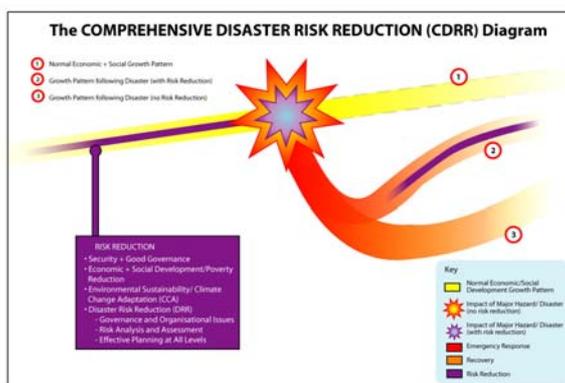
A major challenge for Disaster Risk Management (DRM) or Emergency Management (EM) practitioners over the past few years has been the attempt to increasingly place more attention on the Risk Reduction/Normal Stage of the Disaster Risk Management Cycle (DRMC) – see fig 1, whilst at the same time still maintaining the best possible Emergency Response and/or Recovery initiatives. The DRMC diagram also illustrates the importance of the media in disasters, and the strong correlation between this and access to financial resources. The 2004 Boxing Day Indian Ocean Tsunami highlighted



this *in extremis*, where for the following six weeks, the catastrophic scale of the disaster dominated international newspaper front pages, this contributing to an unprecedented figure of nearly USD 13.5 billion being raised by the international community<sup>2</sup>.

Whilst an effective Emergency Response and Recovery system is of course vital, what is equally important is the need for a range of Risk Reduction initiatives in the Normal/Risk Reduction period. Effective mechanisms here would allow both the impact of a potential

disaster to diminish, and most likely cause the transition from Emergency Response to Recovery to take place more quickly. Risk Reduction here includes a range of four key complementary areas, and these can best be seen in the Comprehensive Disaster Risk Reduction (CDRR) diagram (fig.2). The easiest issue to understand is a system of Disaster Risk Reduction (DRR) initiatives, cumulating in a series of Disaster Risk Management Plans (DRMP) being



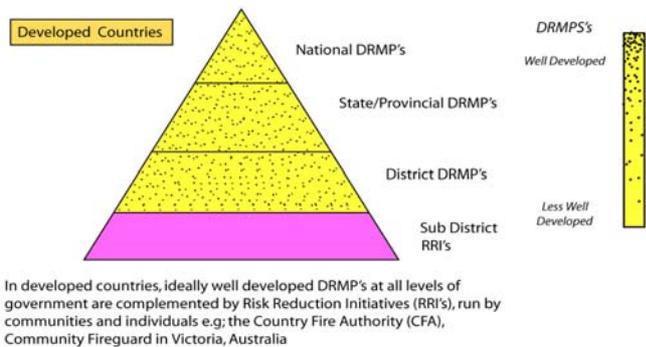
developed from national down to district levels. This work should not develop in isolation however, as it needs to be complemented by a range of other factors. Security and

<sup>1</sup> See the Red Cross World Disaster Report 2007. Between 1997-2006 an average of around 120,000 people per year were killed from disasters; whilst the number affected averaged 268 million annually

<sup>2</sup> See [www.tsunami-evaluation.org](http://www.tsunami-evaluation.org)

good governance is a pre-requisite to allow effective DRMP action to be taken across the country in question. There is also a strong link between vulnerability and poverty, and it is this reason which energises governments in a number of developing countries to push energetically towards economic and social development reform, with a targeted emphasis on poverty reduction. Finally there is the increasingly important factor of climate change, which is leading to more extreme and variable climatic conditions.<sup>3</sup> On a global scale there is an urgent need to deal with the cause of this problem by cutting greenhouse gas emissions. However, countries must also implement adaptation strategies to deal with the impacts of climate change, including the intensification of extreme events such as cyclones, flooding, drought and bushfires. DRR strategies provide an important avenue for reducing vulnerabilities to climate change and have become an increasingly important feature in national adaptation plans.

**The DISASTER RISK MANAGEMENT PLANNING (DRMP) Diagram**

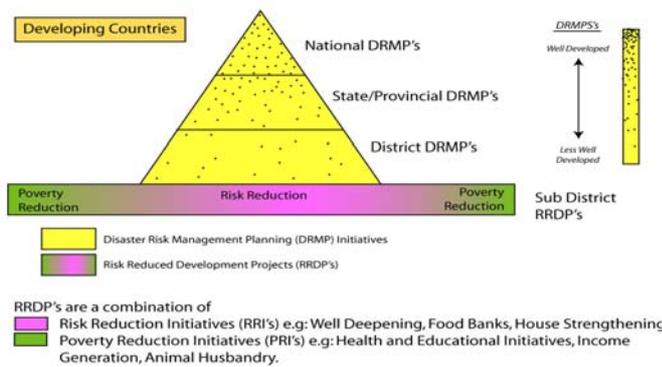


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The development of Disaster Risk Management Plans (DRMPs) ideally need to be developed from national down to district level. Whilst the development of such plans may be well advanced in many rich countries (see fig 3a), the situation in poorer developing nations is likely to be more problematic (see fig 3b).

**The DISASTER RISK MANAGEMENT PLANNING (DRMP) Diagram**

Disaster Risk Management Planning (DRMP's) take place at National, State/Provincial and District levels. This is primarily a Government responsibility. Risk Reduced Development Projects (RRDP's) mainly take place at Sub-District levels, often run by communities and/or NGOs.



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It is in this latter situation that the work of NGOs comes to the fore, where their Risk Reduced Development Projects (RRDPs)<sup>4</sup> can complement government district DRMPs by the implementation of a range of Risk Reduction and Poverty Reduction Initiatives (RRI/PRI's) at sub-district levels.

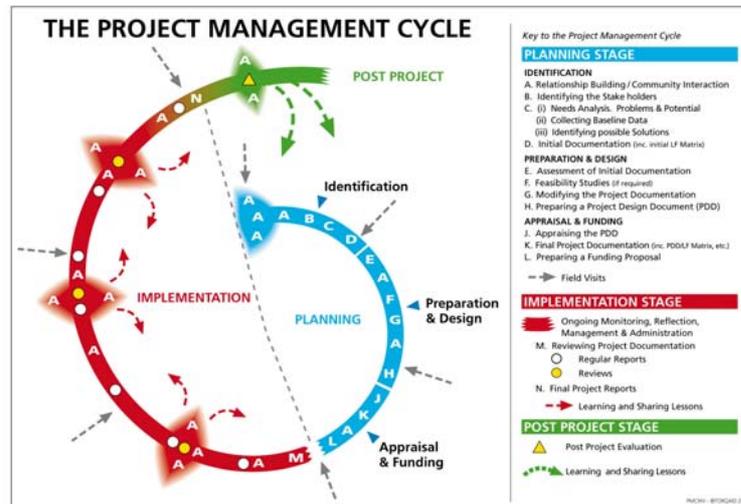
<sup>3</sup> See: Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), available from [www.ipcc.ch](http://www.ipcc.ch)

<sup>4</sup> Or what NGOs tend to more commonly call Community Based Disaster Risk Management (CBDRM) Projects

In returning to the DRMC (fig 1), many initiatives carried out in the Emergency Response Stage ideally should follow the guidelines laid out in the Disaster Risk Management Plans at various levels. More detailed planning can then take place before implementing longer term Recovery Projects or Risk Reduction initiatives.

The use of the Project Management Cycle (PMC) – see fig. 4, can be a useful tool to complete this planning, implementation and post-project process,

where ideally Recovery Projects and Risk Reduction initiatives are completed with close community interaction, ideally built upon strong stakeholder relationships.



\* \* \* \* \*

From the 8-10<sup>th</sup> April 2008, TorqAid facilitated a three day Disaster Risk Management (DRM) workshop down at Torquay, Victoria. Students were able to look at DRM best practice from both Australia and overseas, this including case studies on Tropical Cyclone (TC) Larry and the Indian Ocean Tsunami; and a field visit down the Great Ocean Road. The latter focused on how government departments and volunteer groups<sup>5</sup> carry out risk reduction initiatives with/for bushfire threatened communities.



This Torquay training came on the heels of earlier DRM workshops carried out during the previous four months in Sri Lanka, Bangladesh and Indonesia. During 2008, a further DRM is planned for Bangladesh (Nov), with a composite DRM/PPM<sup>6</sup> also scheduled that month for Aceh.

For more information on DRM training, please contact Chris Piper, TorqAid CEO, on [pipercm@iprimus.com.au](mailto:pipercm@iprimus.com.au) *TorqAid III©April 2008*

<sup>5</sup> These comprising the Department of Sustainability (DSE), and the Country Fire Authority (CFA) Community Fireguard  
<sup>6</sup> Participatory Project Management (PPM)