

Disaster Risk, Climate Change and Sustainable Development Governance in Asia and the Pacific

Dr. Komal Raj Aryal

There is mounting evidence that Asia and the Pacific are undergoing weather patterns more extreme than previously experienced, attributable to the effects of global climate change. Reduction of the impacts of climate change is gaining importance in the international agenda. Increasing intensity and frequency of climatic hazards are impacting negatively upon environmental and socio-economic systems. Disasters such as flooding, mudslides, forest fires, cold wave and heat wave, storm surges, decreases in ground water and droughts are issues in the arena of governance of sustainable development in the region. Many countries from the region are struggling to cope with frequent disasters that are believed to originate from climate change. In the last three years we have seen major floods and mudslides induced by high intensity rain in Republic of Korea, Vietnam, China, Sri Lanka, Nepal, India, Thailand, Myanmar, Vanuatu, Pakistan and Bangladesh. Disaster risks associated with climate change have the potential to affect us all, and the indications are that the risks, both in the Asia and the Pacific region and globally, are likely to increase in the future.

Finding ways to avoid the impacts of climate change is a major challenge to all. The geography of Asia and the Pacific is complex, encompassing as it does, everything from the rural mountainous area of Nepal to the urban and sophisticated area of “Songdo Future City” of Incheon. In rural Asia, the economy relies upon agriculture whereas in urban Asia the economy is dependent upon industries and infrastructures. In the past 50 years, Asia was extensively engaged in industrial production for local, regional and global consumption. At the same time, various urban centres of Asia have emerged as major hubs for global economy. The by product of high tech manufacturing are increasing and as a result climates are changing, leading to frequent localised disasters that affect the global economy. The experience of flooding in Thailand’s economy: according to the BBC News (20 February 2012), Thailand’s economy has declined sharply. Major local and multinational companies including Honda and Sony have been affected by flooding. These industries have had to cut their profit margins as production disruptions became commonplace.

People in Asia and the Pacific have been living with risk for a long. The history of climate change related disasters in Asia and the Pacific is notorious and well documented. Recent events include Cyclone Nargis which killed a reported 138,000 people in Myanmar in 2008; the 2010 floods in Pakistan which directly affected an estimated 20 million people; 2011 Flooding and Australia, Thailand, Philippines, 2011 urban landslides and heavy rain in Republic of Korea, and the extensive wildfires in Russia during 2010, attributed to the combination of drought and extreme temperatures. The impacts associated with such events are widespread and increasingly complex, as society, infrastructure and our relationship with the environment becomes more intertwined and interdependent.

My experience with historical disaster events in Nepal shows that repeated climatic disasters events push already affected communities to vicious poverty cycle. On the one hand, frequent small-scale disasters frequently have a greater impact in terms of casualties than large-scale disasters. On the other hand, repeated disasters encourage industries to relocate to the area where frequencies of disasters are low, thereby reducing economic opportunities for the people living in and round the disaster-prone areas. This leaves local communities at risk of hunger.

It is time to work together to reduce risk at the local level to control our future changes in the way we operate within our world. Firstly, we need to bring people from different disciplines of endeavour, ranging from the natural, social, physical and engineering sciences, together to work for disaster risk management. Secondly, we need to reach consensus about how to integrate risk management as a foundation within science. United Nations World Conference on Disaster Risk Reduction has adapted Hyogo Framework for Action HFA (2005-2015) in 2005.

Hyogo Framework for action 2005-2015

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation
2. Identify, assess and monitor disaster risks and enhance early warning
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels
4. Reduce the underlying risk
5. Strengthen disaster preparedness for effective response at all levels

Source : http://www.icsu-asia-pacific.org/resource_centre/ISDR_Hyogo-framework-for-action_HFA.pdf

Since then United Nations organisations have been accelerating disaster risk reduction activities as a way to improve the capacity of all nations to reduce the impact of natural hazards. Huge amounts of funding have been allocated to facilitate the implementation of existing plans. However, the midterm evaluation report recommends more education and training activities before implementing HFA implementing local level plans. Sustainability and effectiveness of initiatives depend on the leadership of the institute that initiates resilience building in the region.

In the context disaster risk reduction in Asia and the Pacific, we need a thorough local socio-political risk analysis, to support current objectives. Currently, local level interventions are primarily of the “project” and not of the “process” type; they fit the notions of risk management initiatives at the local level rather than local based risk management as such. Ownership and sustainability of the processes and results are therefore in question and, consequently, so is the role that local risk reduction can play in sustainable development governance. Disaster effects are wide reaching.

Disasters are increasing. Unless everyone is involved in the relevant risk avoidance activities, somebody (and it might be you) will suffer the consequences. But the worst thing is that it is very likely that the population impacted will be universal. Disaster effects at the local level seem avoidable, but repeated disaster events of increasing magnitude will soon be unavoidable. Resources in the disaster impact areas will become increasingly difficult to access or generate, and this will have national impact through food supply and industrial manufacturing, which will then generate an international impact. This is not an isolated phenomenon; disasters are proliferating, and climate change is involved in the process. Halt the climate change and you will at last slow the process of deterioration.

Use of local analyses of vulnerability, risk would promote a more comprehensive, localised view of risk and its causal factors. But participatory local climatic risk analysis is still organised from the perspective of disaster risk as such and not very often as part of an overall diagnosis of local development activities need and the factors that promote disaster resilience locally. More often than not it is climate change and therefore climatic disaster risk that is at the centre of concern and not development in a more general sense. It is of global and local importance that Asia and the Pacific get a handle on this situation while we still have the opportunity.

How we can strengthen sustainable development governance in Asia and the Pacific?

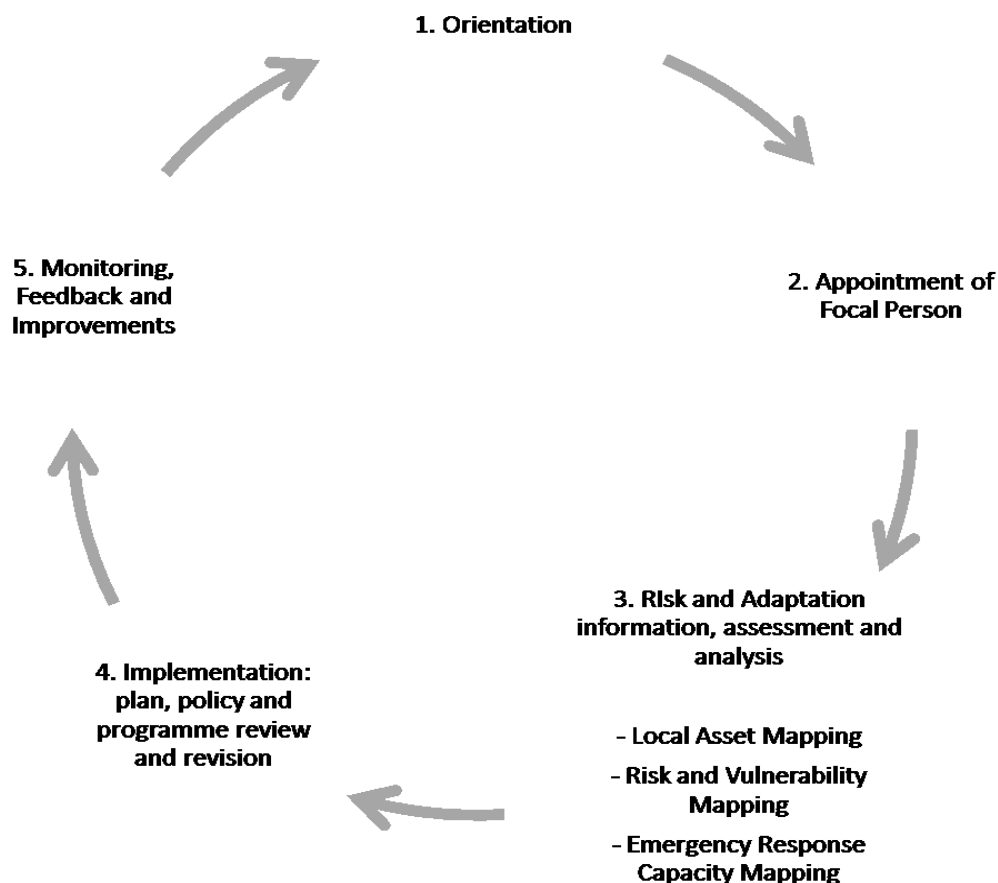
In the recent years every government in the region has had to cope with the effects of a substantial number of weather related incidents exposing the vulnerability of their populations. Climate Change can affect sustainable development governance in two ways; slow onset impacts (drought; prolonged wet periods); and sudden and rapid impacts (typhoons, floods, heavy snow, long dry or wet spells, glacial lake overflow, landslides). Often, sudden and rapid impacts of climate change will come without warning leaving the population little or no time to react. Experience of previous incidents has shown that such events are rarely straightforward and often leave victims in a vulnerable state. Government departments at all levels are then faced with complex situations.

People have been known to survive the slow-onset impacts of climate change for many years and have developed adaptation strategies. Recent increases in the sudden and rapid impacts of climate change mean that governments in Asia and the Pacific region should expect these types of incidents every year. To manage the complex and multiple impacts of sudden and rapid climate change events, the government departments have a responsibility to integrate risk reduction and adaptation strategies jointly and apply a cross-cutting approach for sustainable development governance. Following the publication of the HFA, reports from NGO's, development banks and other agencies have repeatedly highlighted the role and duties of government in overseeing Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) integration. However, it is seldom the case that strategies for strengthening institutional capacity are identified. The focus is often on improving

community awareness and all too often cultivating awareness within and across governmental communities is overlooked.

While it is reasonable to expect that all the heads of government departments have an understanding of the vulnerability, risks, hazards and the principles of Disaster Risk Reduction and Climate Change Adaptation, it is likely that specialised training will be required for the individuals charged with developing and implementing policy depending on the scale and complexity of the local situation. The extent to which DRR-CC policy integrations for sustainable development governance are carried out is a matter for individual department heads and it is likely that decisions will be based on comprehensive pre and post disaster risk assessments.

Proactive stance sustainable development governance through government integration of DRR and CC. For this reason, pre-disaster risk assessment is considered a key component of the approach. For this I like to recommend a procedural approach for integrating DRR and CCA into development planning across all sectors of national government using the following five-step approach:



Many governments in Asia and the Pacific regions have separate central departments for dealing with disaster risk and for dealing with climate change adaptation. Both the departments are designed to tackle risk locally. These departments should either be combined, forming a new DRR and CCA department or encouraged to form a joint coordination body at the central (national) level to oversee integrated risk and adaptation policy formulation. Both departments will consist of team members who have valuable knowledge on DRR and CCA in the regional and international contexts and a merging of this information will facilitate a more streamlined and efficient perspective for evolving DRR and CAA strategies for sustainable development governance plans.

All national government departments should liaise with the centralised DRR and CCA department or joint coordination body to ensure that all departments obtain an operational knowledge-base for integrating risk reduction and adaptation into the departmental policies and programmes. This will also ensure continuing interoperability with HFA2005-2015 and the National Adaptation Programme and procedures as government officials develop their own capacities and understanding.

The propose of above five steps are to provide awareness on integrated disaster risk reduction and climate change adaptation policy, departmental coordination and operational procedures relevant to minimise the impact on sustainable development governance in Asia and the Pacific regions. It must be emphasised however, that this is only guidance: each disaster is different and each government will need to exercise professional judgment to reduce impact locally according to the circumstances present.

For sustainable development governance to be successful, local risk assessment needs to be implemented at all levels of government, across all sectors. Cross-sector working will be essential to avoid the emergence of duplicated or conflicting policies. Best practice and policy should be disseminated between local, national, regional and international levels to maximise knowledge-sharing and strategy effectiveness. As well as information-dissemination in the form of seminars, providing those in other sectors with the opportunity to observe practical examples of local risk assessment policies being implemented on the ground can often serve to strengthen the understanding of what sustainable development governance can achieve.