

'Investing in Innovation for Climate Resilience 2013-16'



UNDERSTANDING THE CONCEPT OF RESILIENCE

Issues

The concept of resilience can provide a **new and useful perspective on sustainable development**. At its core is the idea that development processes should not and must not threaten the ability of future generations to share the earth's resources, as previous generations have been able to. State and regional governments, multi-national corporations, local industry and the inhabitants of the Coastal Zones are under increasing pressure to **balance economic growth with social responsibility**, including respect for human rights and traditional cultures. Furthermore, all organizations involved in Coastal Zones and occupants of these areas are being asked to take greater responsibility for their ecological "footprint".

Resilience can be regarded as **an operational tool for recognizing, improving and measuring corporate sustainability**. Whilst the definition of 'Resilience' may appear to be very close to the definition of 'Sustainability', they are not synonyms:

- Resilience is basically about **recovery and adaptation to change** while sustainability is mainly about survival and continuing existence.
- Resilience is stressing the importance of **assuming change and explaining stability**; instead of assuming stability and explaining change.

There is an inextricable relationship between **social wellbeing, economic development and environmental sustainability**:



Figure 3.1: Relationship diagram between social wellbeing, economic development and environmental sustainability.

Sustainability is often misinterpreted as a goal to which we should all aspire. However sustainability is not a reachable state; it is one fundamental characteristic in a dynamic, evolving system. **Long-term sustainability will occur as a result of continuous adaptation (resilience) to changing conditions**. It cannot be assumed that nature will be infinitely resilient, and neither should it be assumed that it is possible to predict the cycles of change that may occur in the future. A sustainable culture should be based on a dynamic world-view in which growth and transformation are inevitable. In such a world, **innovation and adaptation will enable human societies – and enterprises – to flourish in harmony with the environment**.

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A resilience approach accepts this interpretation of sustainability. There is not one single stable state in a social ecological system, instead the system will be exposed to different 'shocks' that challenge its fundamental identity and make it dynamic. **A resilient system is able to absorb shocks and adapt** (and therefore remain sustainable) without changing its fundamental structure and function. **The concept of resilience needs to be at the centre of strategic thinking about the actions that shape the future management of the Coastal Zones. Resilience needs to be applied to people, agencies and organizations as well as the environment.** The lack of resilience in political and governance processes and procedures is a major impediment to advancing sustainability.

Land administration systems are the subject of constant change and therefore require an in-built resilience to ensure they do not become out-dated. Resilience of land administration systems can be understood by looking at natural disasters such as hurricanes and tsunamis. The resilience of a land administration system and how it is governed plays a key role in recovery and reconstruction efforts following natural disasters. **The resilience framework is highly appropriate for trying to not only understand the role that land administration systems have played in past disasters, but more importantly how these systems can be strengthened to better support recovery and reconstruction in future disasters.**

There are many instances where projects come to an end without having made provision for immediate succession planning. If development is the managed process of change designed to improve the conditions of members of a society, then sustainable development should **balance the exploitation of resources, the direction of investments and the advancement of technology** in a manner that affords the same opportunity to future generations.

Change is inevitable, to what extent can only be guessed, but today's generation should not be frightened of it, nor shrink from addressing it. There is a need to change both the mindset and the toolkit for managing change in coastal zones. Most importantly, every tool at our disposal should be used for sound, effective, rational and unencumbered coastal management, rooted in equity and a social justice framework.

The way forward

Pressure to develop the Coastal Zones will continue, the challenge is to introduce mechanisms which will provide for equitable treatment of all those who live, work or invest in them. One of the many challenges of introducing resilience analyses is to define what constitutes the 'fundamental structure and function' of a system.

The concept of protecting the rights of future generations seems remote in the face of the many contemporary and often seemingly conflicting business pressures. Typically many governments and businesses fear that the creation of strategic policy on sustainability will simply involve expenditure without any tangible result. There is **a need to reinforce the message that economic, environmental and social progress can be mutually supportive**, and the business case for sustainability rests on enhancing intangible value drivers rather than directly generating financial profit.

There are real barriers to be overcome to ensure that the concepts of resilience and sustainability are understood and translated into strategy and policy; and then delivered by those working on the ground in everyday practical decision-making situations. Using a new language that is **relevant to business interests**, rather than relying on stakeholder pressures and the moral force of arguments may overcome many of the barriers to the drive for sustainability. This requires **viewing the enterprise as closely allied to a variety of social, environmental, and economic systems**. This in turn necessitates that land administration systems focus on parcels of land that are undergoing the most change or which may be susceptible to change.

There is **a need to bring together groups of government officials and professional bodies and for them to take a holistic view of the strategies and policies which impact on coastal zone management**. In addition they need to agree on the **tools, mechanisms and information systems needed to inform decision-making** in all areas, from land and property tenure to marine ecology, and overall spatial planning and development.

There is a need to ensure that capacity building is undertaken at all levels in countries that are managing the Coastal Zones; within Universities and Continuing Professional Development (CPD) or Life Long Learning (LLL), and in a number of associated professions – Architects, Engineers, Land Professionals (this includes, Land and Hydrographic Surveyors, Cadastral Experts, and Environmental Surveyors), Lawyers and central and local government (municipality) officers.

Source: INTERNATIONAL FEDERATION OF SURVEYORS (FIG)

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