Vulnerability and Resilience at a glance

Vulnerability management is emerging as a critical part of any sustainable development strategy. It focuses not only on conditions now, but also on likely conditions in the future. It examines risks of hazards, natural and acquired abilities to resist damage (natural resilience and acquired vulnerability), giving us the opportunity to balance strengths and weaknesses.

Vulnerability is the tendency for an entity to be damaged.

Resilience is the opposite of vulnerability and refers to the ability of an entity to resist or recover from damage.

Entities can be physical (people, ecosystems, coastlines etc) or abstract concepts (societies, communities, economies, countries etc) that can be damaged (responders).

Damaged mangroves on Tongatapu, Tonga

Vulnerability and **resilience** are two sides of the same coin. Something is vulnerable to the extent that it is not resilient.

Overall vulnerability (OV) is the result of many vulnerability factors working together. For example, we might be concerned with the OV of a country. It includes information on the risk of hazards, natural resilience and acquired vulnerability.

Hazards are things or processes that can cause damage, but can only be defined in terms of the entity (responder) being damaged. For example, a cyclone is a hazard to an island. Each hazard is associated with a level of risk.

Natural resilience (also known as intrinsic resilience) is the natural ability of an entity (responder) to resist damage. We would say that a person with a strong immune system is naturally more able to resist a cold than someone with a poor one.

Acquired vulnerability (also known as extrinsic resilience) is vulnerability gained from damage in the past. We might say a person who drinks and smokes would damage their immune system and be less resilient to a cold than someone who lived a healthier lifestyle.

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What is Vulnerability?

What is Resilience?

INFORMATION PAMPHLET

http://www.sopac.org/Projects/Evi/index.html

What is Vulnerability?
What is Resilience?

Healthy, productive and protective environments, social systems and economies are the basis of *sustainable development* and *human welfare*.

The environment is the source of all our raw materials and absorbs the pollution from our activities. In turn, whilst going about our daily business (social and economic) we use the environment and convert its resources and natural services into those that directly support us. The problem is that all of these systems can be damaged, overloaded, or prevented from meeting our needs. By our own choices we can to a large extent determine our own quality of life, the condition of our lands and opportunities for future generations.

Eratap Lagoon, Efate, Vanuatu

Oxford Dictionary
Vulnerable / *adj* / **Vulnerability** / *n* / hurt, harmed or attacked easily, especially because of being small or weak.
Resilient / *adj* / **Resilience** / *n* / ability to quickly recover from shock, injury, depression.

Vulnerability is a new way of looking at an age-old problem. Instead of focusing just on what has been going wrong in the past and the effects of hazards, vulnerability gives us the opportunity to focus on getting things right for the future. As a future-focused approach, vulnerability is a way of using strengths and strategically improving weaknesses.

What do we mean by vulnerability?

Vulnerability refers to the tendency of something to be damaged. The opposite of this is *resilience*, or the ability to resist and/or recover from damage. When we talk about vulnerability, we are automatically also talking about resilience because the two are opposite sides of a single coin. That is, something is vulnerable to the extent that it is not resilient, and *visa versa*.

Vulnerability *Resilience*

The interesting thing about vulnerability is that it can be examined at different levels for different issues. That is, it can be used to look at a single issue, or to assess a complex entity such as a country.

The idea of vulnerability/resilience applies equally well to physical entities (people, ecosystems, coastlines) and to abstract concepts (social systems, economic systems, countries). The factors that cause the damage are known as *hazards*, each of which will be associated with some level of *risk*, or likelihood of occurring.

Vulnerability/Resilience for a single issue

Simple vulnerability (V) can be examined for a single issue. That means for any one issue, we could make an assessment of the likelihood of something being damaged in the future. For example, the vulnerability of a beach to storms might be high (and its resilience therefore would be low).

Vulnerability at a higher level

We can also examine vulnerability/resilience in an overall sense for a collection of issues (OV). This might mean a whole country or even a region. Overall vulnerability would then be the result of many factors working together. In overall vulnerability we need to consider three aspects of a problem. These are: (1) the risk of hazards, (2) the natural resilience and resistance to damage (also known as intrinsic vulnerability), and (3) the acquired resilience / vulnerability to damage.

Why focus on vulnerability?

The vulnerability of our environmental, social and economic systems is made up of more than just the risk of disasters and good or bad management. It is not just about climate change, or globalisation, or trade agreements. It must also include an understanding of how well any system (environmental, social and economic) can cope with any hazards that may come its way and that might harm it. It would be impossible to work towards good quality of life and growth for countries under a sustainable development model if no account were made of the damage that can occur from internal and outside influences.

For development to be sustainable, we clearly need to learn to manage our vulnerabilities. We need to be able to understand and/or manage hazards, natural resilience and acquired resilience. This understanding for the first time opens up opportunities for improving our overall vulnerability because it forces us to examine the problem from all angles, instead of just focusing on the risk of disasters. Vulnerability management is emerging as a critical part of any sustainable development strategy.

Wakaya Island, Fiji