# GVR at a Glance

- How much are disasters costing us?
- Is disaster risk going to increase in the future?
- Have we made progress in reducing risk over the last years?
- What continues to drive disaster risk?
- Where do we go from here?

# Managing disaster risk for sustainable development with: Is it possible?

## The disaster burden is real

The total direct cost of disasters is equivalent to that of major diseases. An average of 42 million human life years are lost in disasters each year, equivalent to the number of years lost to tuberculosis. This burden is should red by those with lower incomes: of all the life years lost, more than 80 per cent are lost in low and middle-income countries.

### **Losses from Disasters remain high**

Disasters continue to cause significant damage, both in terms of lives lost and assets destroyed. Mortality is concentrated in very intensive disasters; therefore, it is difficult to perceive trends over relatively short periods of time. However, mortality from smaller-scale events continues to increase.



A large amount of damage occurs in small disaster events; constantly eroding essential development assets.

### **Damage due to extensive risk since 1990**



This is a particular problem for low and middle income countries that already struggle to maintain and invest in new public infrastructure and services.

# **Future losses represent a substantial** opportunity cost

Losses are expected to increase in the future, unless disaster risk is managed more successfully.

Expected annual losses are now estimated at US\$314 billion in the built environment alone.

### Life Years Lost



**Global Assessment Report** on Disaster Risk Reduction

# 2015

### **Global multi-hazard average annual loss**



Multi-Hazard 147-244 Average Annual Loss (AAL) [million US\$] Earthquake, flood, cyclone wind, storm surge and tsunami

245-420 421-927 928-3,300 >3.300

Many countries would not pass a stress test of their fiscal resilience to a 1-in-100-year loss event.

### **Global multi-hazard average annual loss**



### Implications of disaster risk for development capacity Madagasca Honduras Jamaica Greece Philippines Haiti Guatemala Iran nic Republic Viet Nam

Japan

India

ited States of America

lew Zealand

# **Climate Change modifies disaster risk**

In most cases, climate change will increase the risk of disaster loss. In the Caribbean basin, climate change will contribute an additional US\$1.4 billion to the expected average annual losses from cyclone wind damage alone.

### Estimated future losses from tropical cyclones compared to capital stock, investment and social expenditure in SIDS



Implications for Development Capa	city
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Index = composite index, ranging from 1 (low implications) to 100 (severe implications) Implications for Social Expenditure Implications for Capital Stock and Gross Savings Implications for Capital investment and **Total Reserves** 

Countries will be affected in different ways: while for Greece, the potential of economic growth will be affected, the challenge facing middle income countries like the Philippines is one of social development.

# Can disaster risk be reduced?

Over the last 10 years, there has been significant progress in developing institutions, policies and legislation for disaster risk reduction.

Further, capacities for risk assessment and identification, disaster preparedness, response and early warning capacities and in reducing specific risk have been significantly strengthened.



Progress has been limited in most countries, however, in managing the underlying drivers of risk.

Size of gap for 1-in-100-year event [2005 million US\$]

421-927 928-3,300 >3.300 No 100-year event gap Countries with less than 5 records of monetary losses and therefore higher levels of uncertainty

Countries as diverse as Algeria, Chile, Greece, Indonesia, Iran, Nicaragua, Pakistan and the Philippines would be severely challenged.

Managing risks, rather than managing disasters, now has to become embedded in the very DNA of development, **Prospective** risk management, which seeks to avoid the accumulation of new risks; **Corrective** risk management, which seeks to reduce existing risks; Compensatory risk management to support resilience in the face of residual risk.

Annual global investment of US\$6 billion in appropriate disaster risk management strategies would generate total benefits in terms of risk reduction of US\$360 billion.

This is equivalent to an annual reduction of new and additional average annual loss by more than 20 per cent.

Disaster risk can be reduced and it makes good financial sense. In fact, investing in disaster risk reduction is a precondition for developing sustainably in a changing climate.



