

Developing a Framework for Private Sector Engagement in Adaptation

Based upon the World Economic Forum study:
**Building Resilience to Natural
Disasters: A Framework for Private
Sector Engagement**

World Economic Forum
in cooperation with



THE WORLD BANK



United Nations
International Strategy for Disaster Reduction

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Fundamentals for Private Sector Engagement

There are a couple of key prerequisites that we recommend for sustainable, impactful public-private partnership development:

- 1) A clear, economic, if not business case, for private sector engagement**
- 2) A clearly defined need or “ask” from the public sector**
- 3) Strong interest and willingness from both sides to partner**
- 4) Allocation of adequate resources and time to develop partnerships**
- 5) Robust governance structures, including accountability and transparency, and strong project management**

Defining Adaptation

As a starting point, we have roughly defined adaptation as consisting of four main sets of measures:

- 1) Cross-sectoral activities required for effective adaptation planning and implementation**
- 2) Actions targeted to adapt to specific sectoral impacts of climate change**
- 3) Development activities aimed at vulnerability reduction and improvement of the adaptive capacity of affected communities**
- 4) Mainstreaming of climate change into development policy and planning**

Potential Private Sector Engagement (1) Foundational / Cross-Sectoral Measures

COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

Activity	Relevant Industries
Meteorological data collection and analysis	<ul style="list-style-type: none"> • Telecommunications
Multi-faceted risk assessments	<ul style="list-style-type: none"> • Insurance and reinsurance
Scenario planning	<ul style="list-style-type: none"> • Professional services
Economic analysis	<ul style="list-style-type: none"> • Professional services • Financial services
Strengthening of fiscal resiliency	<ul style="list-style-type: none"> • Insurance and reinsurance • Financial services
Development of adaptation technologies	<ul style="list-style-type: none"> • Engineering • Agribusiness • Energy • Healthcare
Improvements in disaster preparedness	<ul style="list-style-type: none"> • Logistics • Telecommunications • Healthcare • Engineering
Awareness raising and communication	<ul style="list-style-type: none"> • Media • Retail and consumer goods
Institutional development	<ul style="list-style-type: none"> • Professional services

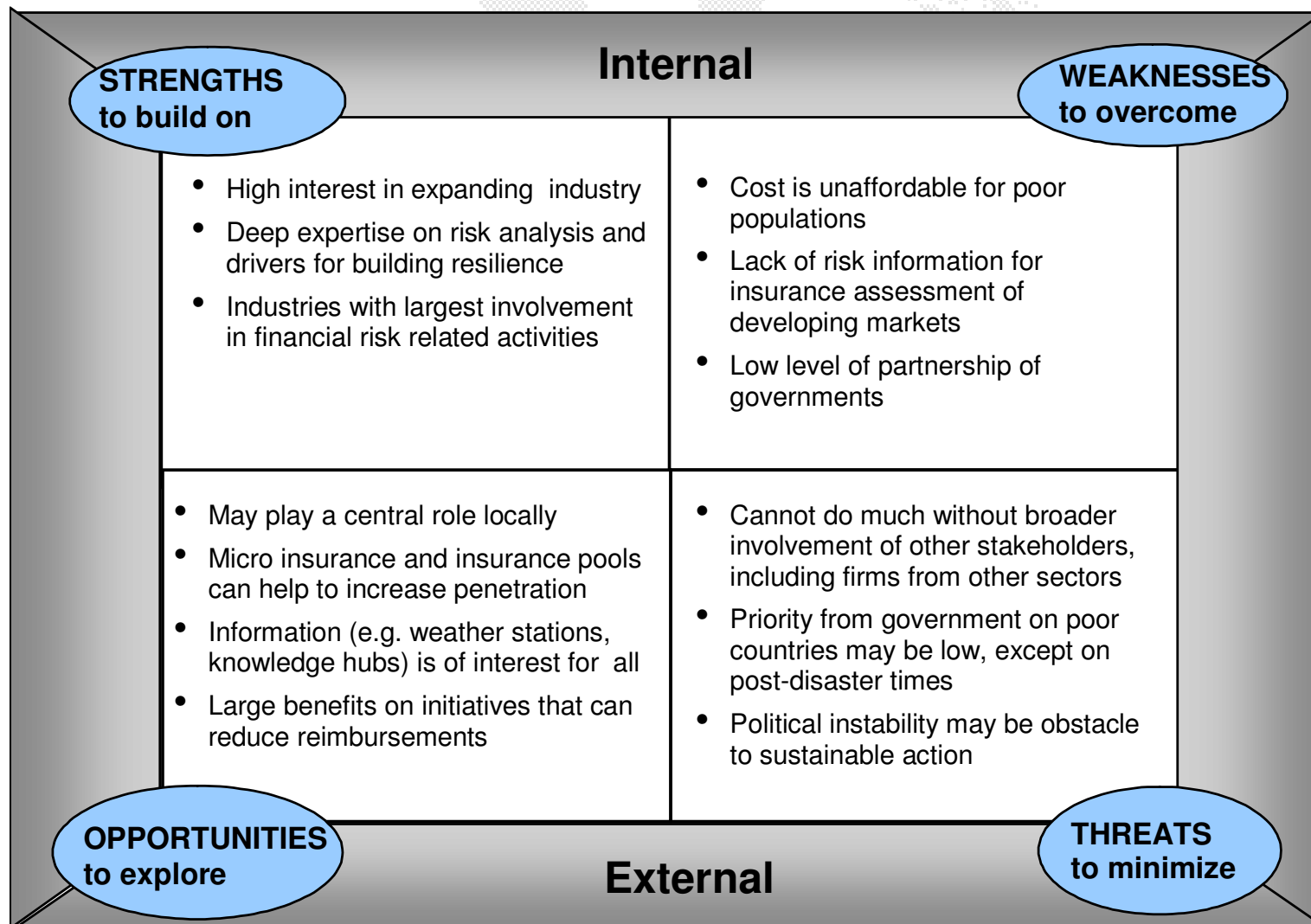
Potential Private Sector Engagement (2) Sectoral Activities

Sector	Examples of Sectoral Activities	Relevant Industries
Water	<ul style="list-style-type: none"> -Groundwater and rainwater harvesting -Increased desalination -Protection of water catchment areas -Improved systems of water management -Development of flood controls and drought monitoring 	<ul style="list-style-type: none"> -Engineering and construction -Telecommunications
Agriculture and Food Security	<ul style="list-style-type: none"> -Changes in agricultural practices (planting and harvesting times, fertilizer use, pest control, etc.) -Improved irrigation techniques -Development of tolerant crop varieties -Improved extension services 	<ul style="list-style-type: none"> -Agribusiness / food and beverage firms -Retail and consumer goods
Infrastructure / Settlement (including coastal zones)	<ul style="list-style-type: none"> -Improvement of key coastal infrastructure and human settlements -Integrated coastal zone management -Improved coastal planning and land use legislation 	<ul style="list-style-type: none"> -Engineering and construction
Human Health	<ul style="list-style-type: none"> -Improved disease surveillance systems -Development of early warning systems -Improved preparedness and emergency response 	<ul style="list-style-type: none"> -Telecommunications / IT -Logistics -Healthcare -Engineering
Ecosystems (terrestrial and marine)	<ul style="list-style-type: none"> -Improvement of natural resource management systems -Improved species monitoring and identification -Creation of protected areas and biodiversity corridors -Development and maintenance of seed banks 	<ul style="list-style-type: none"> -Extractive -Telecommunications / IT -Manufacturing -Fishing -Agribusiness

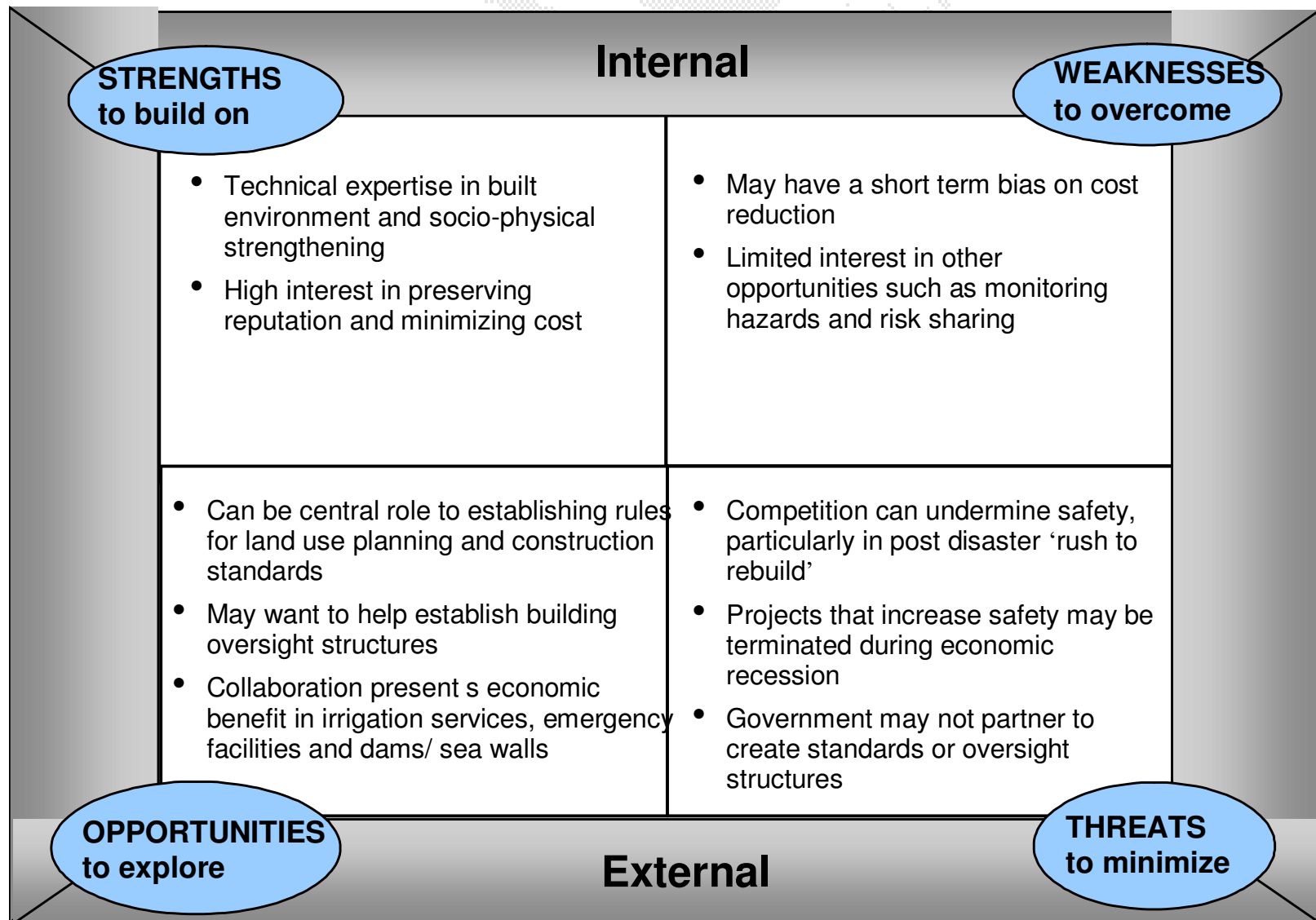
Potential Private Sector Engagement (3) Development Activities Aimed at Vulnerability Reduction

Key Focus Areas	Relevant Industries
Income and food security	<ul style="list-style-type: none"> • Agribusiness / food and beverage
Education and health systems	<ul style="list-style-type: none"> • IT • Telecommunications • Healthcare
Urban planning and provision of public services and infrastructure	<ul style="list-style-type: none"> • Utilities • Engineering and construction
Gender equality	<ul style="list-style-type: none"> • All

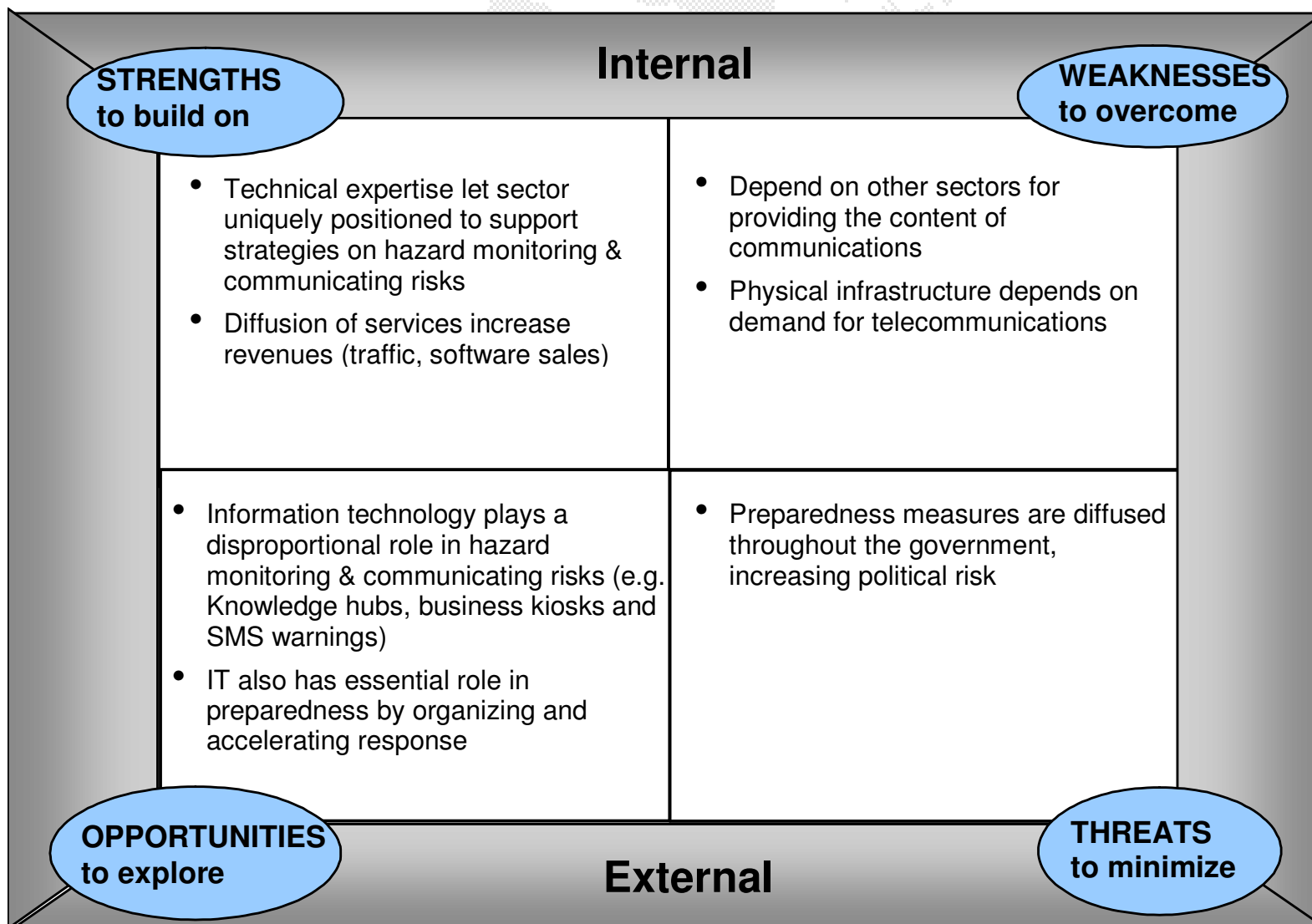
Insurers and Reinsurers



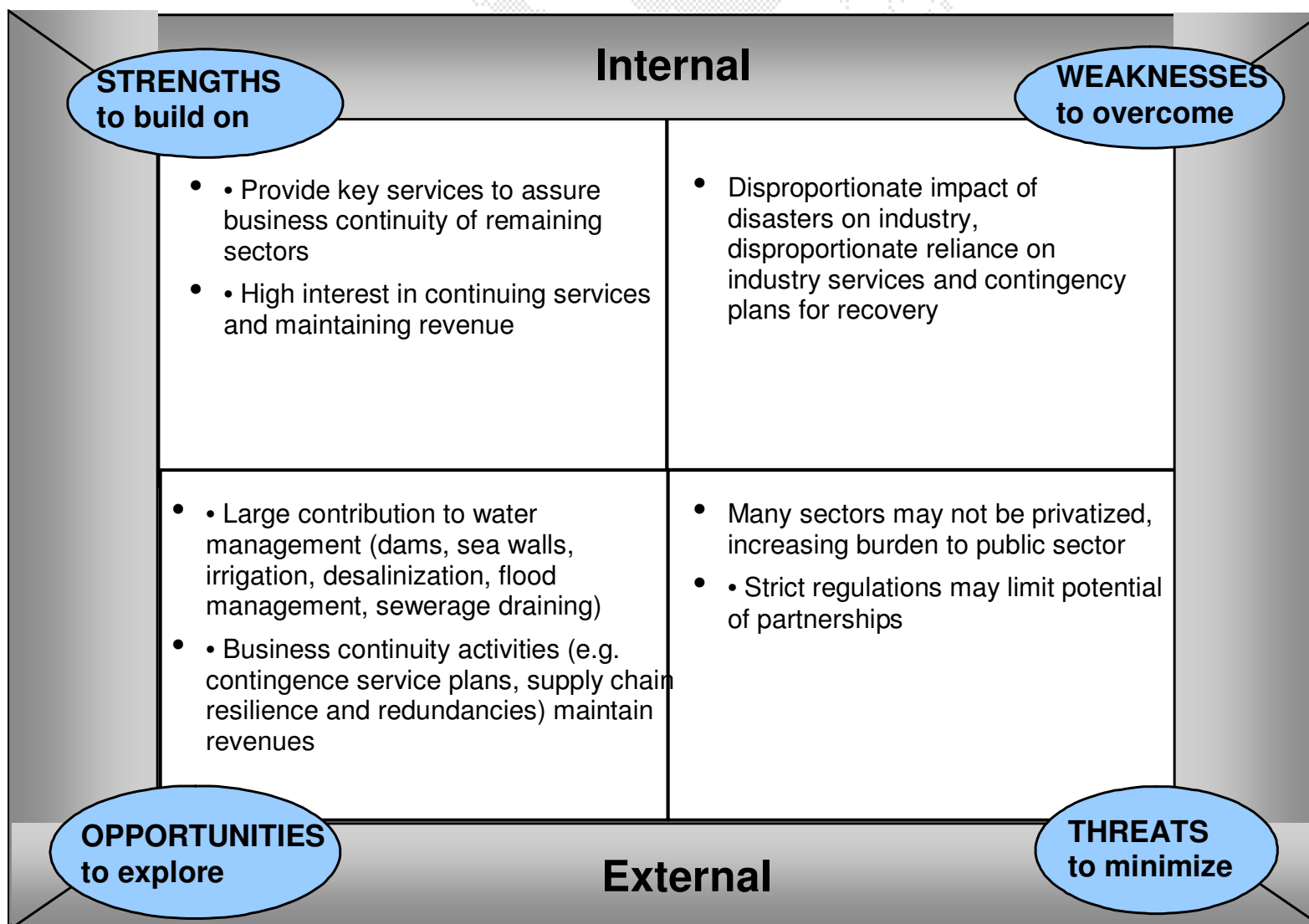
Engineering and Construction



ICT and Telecommunications

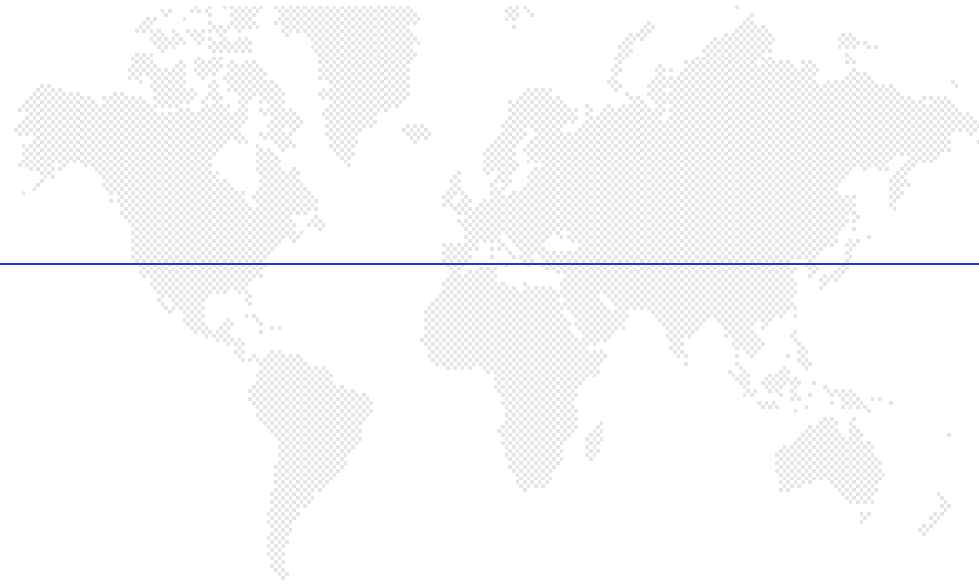


Utilities and Transportation





Backup



Areas of Opportunity for the Private Sector

Figure 1: Opportunities pertaining to potential losses (examples):

Potential Losses	Areas of Opportunity			
	Monitoring Hazards & Communicating Risk	Socio-Physical strengthening	Sharing Financial Risk	Disaster Preparedness
Natural & environmental resources and buffer zones	Forecasting, loss modeling, satellite reporting, diffusion of information and links to communities	Dams/sea walls, watershed and floodwater management, irrigation services, environmental standards	Weather derivatives	Flood management, GIS databases
Built environment	Automatic alarm systems, community warning systems, reporting and public transparency for infrastructure risk assessment	Land use planning, building codes, Construction standards & oversight, retrofitting, sewerage draining, community classification	Disaster insurance pools, catastrophe bonds, mandatory catastrophe insurance for business and homeowner loans	Contingency service plans, sewerage draining, desalinization plants, protection of power sources
Business & Economic continuity	Business Information Kiosks	Supply chain resilience, disaster proof screening of investments/ loans	Index-based insurance, risk swaps, micro insurance	Staff training, market for redundancies, diversification of communications technologies
Human & social capacity	SMS warnings to mobile users, diagnostic kits, inclusion of disaster management into education and curricula	Campaigns for vaccinations and against slash and burn agriculture (forest fire prevention), and terracing in rural areas	Reporting/public transparency for infrastructure risk assessment, micro insurance	Early warning alarms and systems, shut down and evacuation plans, emergency facilities, online inventory of emergency supplies, digital platforms for disaster management

Figure 2: Areas of Opportunity are mutually reinforcing

