



UNEP Finance Initiative
Innovative financing for sustainability

Adaptation and the Financial Sector: Achieving a Triple Dividend

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The Big Picture

- **Climate change is a real risk already for all countries, but especially in developing nations**
- **The Millennium Development Goals may be impossible to achieve**
- **A new “Triple Dividend” approach is needed:**
 - *Integrating adaptation with sustainable economic development and disaster management*



The Financial Sector Perspective

- **Impacts may cost up to 1 trillion USD in a single year by 2040;**
- **Financial firms and institutions are already responding to the challenges innovatively;**
- **But many markets are not viable commercially;**
- **A public/private partnership approach could provide the seed capital and skills needed.**

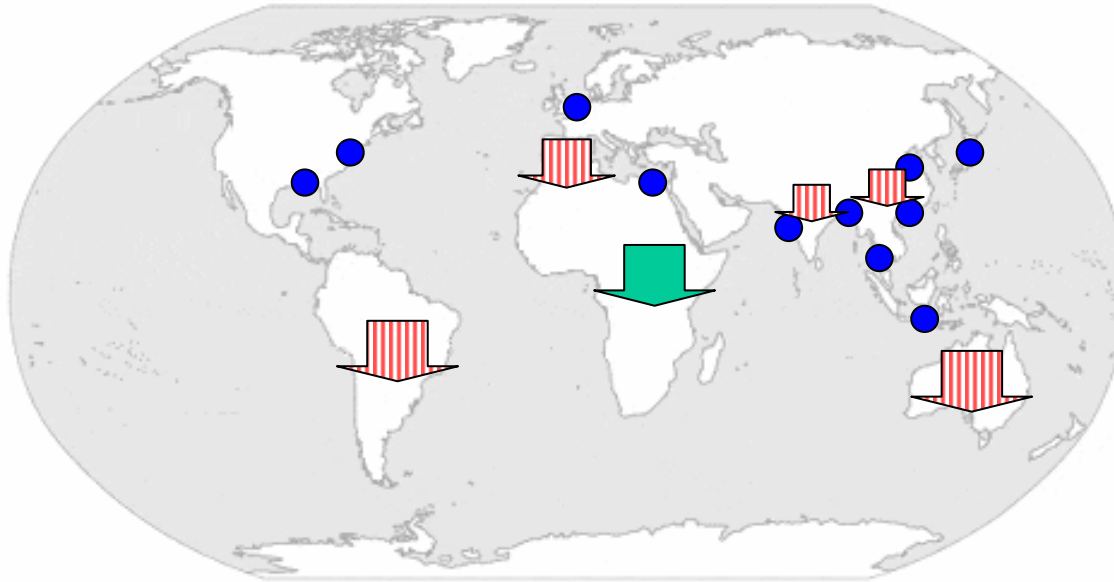


Recent scientific findings are alarming

- **Whatever we do to cut emissions, the climate will continue to change until at least 2040;**
- **It will be difficult to remain within the EU's safety threshold of a 2 degree C rise;**
- **There are numerous "tipping points" which could precipitate a sudden major change;**
- **New extremes are appearing more often:**
 - *50,000 died in the 2003 European heatwave;*
 - *The 2005 hurricane season was the worst ever;*
 - *"100 year" temperature highs in the UK now happen every 12 years.*



Key impacts – Coast, water, food



Three delta regions will produce 80% of China's GDP by 2050

- Coastal conurbations prone to sea level rise and storms ●
- Lack of pure water ↓
- Falls in crop yield ↓



Can we achieve the Millennium Development Goals?

Climate Change could...

- **Endanger economic development by costly disasters;**
- **Prevent social development by reducing resources;**
- **Worsen health by heat, poor water, irregular food;**
- **Destabilise the climate system;**
- **Create international tensions;**
- **Overwhelm disaster recovery plans.**



The \$1 trillion business-as-usual outlook

- **Weather impacts cost around \$100 billion per year on average at present**
- **So by 2041 the annual loss would average \$800 billion**
 - *the costs double every twelve years in real terms*
 - *due to climate change, wealth, location and other factors*
- **By then at least once the cost would hit \$1 trillion**
 - *peak years come one year in three*
 - *they cost from 50% to over 100% more than the "trend" value*
- **Even that is an under-estimate**
 - *economic growth would slow, and investment would falter*
 - *ecological assets are not included*



Effective Adaptation

- **Adjusting to the expected effects of Climate Change (positive or negative) is a vital complement to mitigation;**
- **It particularly affects:**
 - *The poor, who have no safety-net or capital;*
 - *the natural world, which changes slowly;*
 - *Sectors with long lead-times (infrastructure, utilities, forestry);*
 - *Institutions with lengthy liabilities like pension funds.*

People need to be made aware, and consulted;

- **Processes must be re-engineered to allow for climate change:**
 - *Small changes at planning stage can have big benefits.*



Economics of Adaptation

- **Disaster relief is not the best way to manage risk**
 - *Slow to arrive, hard to budget for, vulnerability persists.*
- **Economic development can be set back enormously**
 - *Costs can be multiples of GDP;*
 - *Other projects are shelved to fund relief (World Bank).*
- **Financial disciplines like cost-benefit analysis are essential**
 - *Resources are limited, so correct pricing is essential;*
 - *Risks vary hugely; unless costed, vulnerability will increase.*



Triple Dividend Adaptation

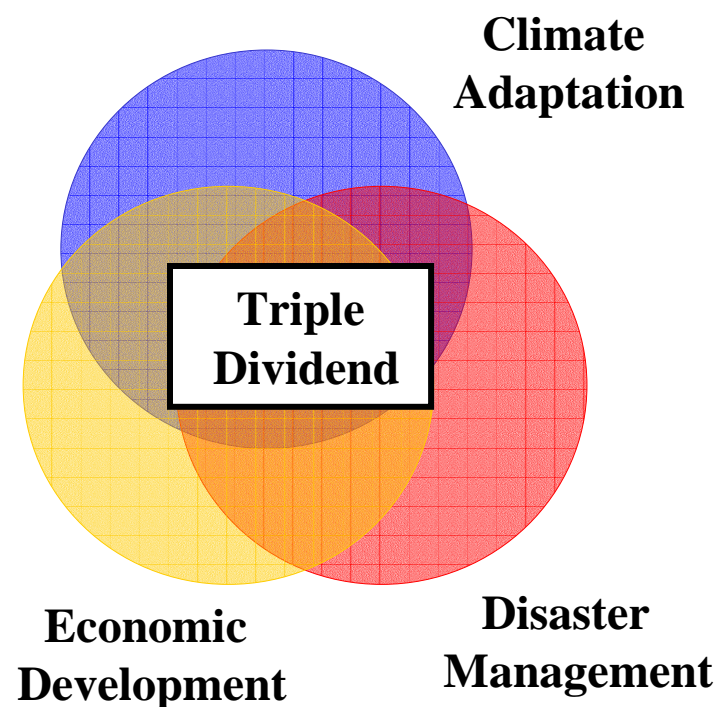
Adaptation is development:

Removing the root causes of vulnerability (low incomes, lack of diversity, disease, etc) enhances resilience and generates wealth.

And it's good disaster management:

Small changes in design can save multiples later and pre-funding can speed recovery.

Policies that integrate adaptation with disaster management and economic development can repay with a **Triple Dividend** in effectiveness.



Climate Change and the Finance Sector

- **General**

- *Disasters or resource shortages could depress economic activity;*

- *Recognition of CC is slow, but risk management tools do exist.*

- **Insurance**

- *A major concern is catastrophe claims on property insurance;*

- *The industry is already actively adapting and innovating.*

- **Banking**

- *Loans could be exposed if insurance is restricted;*

- *Specifications for project finance ignore climate change.*

- **Asset Management**

- *Equities and property investments could be exposed;*

- *Hedge funds are investing in catastrophe bonds.*



Public Private Partnership

- **Financial scale of adaptation is huge**
 - *To capitalise disaster insurance could take about \$600 billion;*
 - *To capitalise microfinance globally might need \$200 billion;*
 - *To climate-proof new projects could take \$40 billion per year.*
- **Often, markets are not commercially viable**
 - *Private sector has to meet the market's profit expectations;*
 - *With limited resources, it has to pick "chunky" projects;*
 - *And navigate many non-climate based risks.*
- **Private sector could complement public sector funds**
 - *Analysis and consultancy e.g. risk models, regulatory framework;*
 - *Administration and distribution;*
 - *Capital, where the conditions are right.*



Barriers to Progress

- **Financial** - implementation is beyond developing country resources
 - returns are not commercial
- **Cognitive** - lack of climate data and impact studies
 - poor understanding of climate change urgency
 - lack of education
- **Institutional** - little co-ordination/awareness of “triple dividend” synergy
 - unhelpful regulations
 - poor governance



Recommendations for *Policymakers*

- **Mainstream climate change – it must be integral to policymaking for all levels and areas;**
- **Integrate adaptation with other priorities to achieve a “Triple Dividend” in the return on scarce resources;**
- **Improve the knowledge base about climatic hazards, specifically weather data which will improve the efficiency of financial activities linked to natural resources;**
- **Enable the private sector to operate more effectively in developing countries through good governance and stability;**
- **Prepare for a new scale of disasters. Reduce risks, organise funding, and ensure that recovery is efficiently managed.**



Recommendations for *Financial Institutions*

- **Support policymakers in the transition to “Triple Dividend” adaptation;**
- **Supply innovative products and services for climate markets e.g. weather derivatives, micro-finance;**
- **Factor CC into all decisions for planning, portfolio management and client transactions;**
- **Be prepared for “worst case” disasters.**



Thank you
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