

Climate Insecurities, Human Security and Social Resilience
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Integrating the Security Aspects of Climate Change in Development Agenda in Asia and the Pacific



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Overview

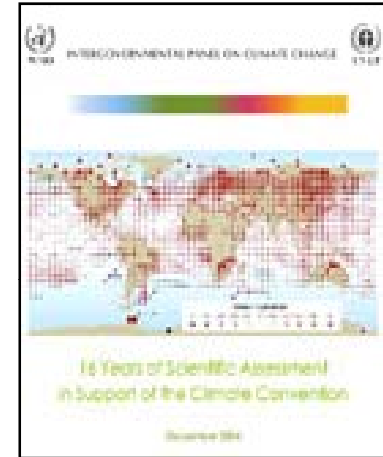


- Security Aspects of Climate Change and Development
 - Current Debate at UN Fora
- Directions for Development Policy Response
- Opportunities for Green Growth and Low-carbon Development
- Enhancing Human Security Dimensions
- Emerging Support Measures/ Initiatives

Global Consensus on Climate Change

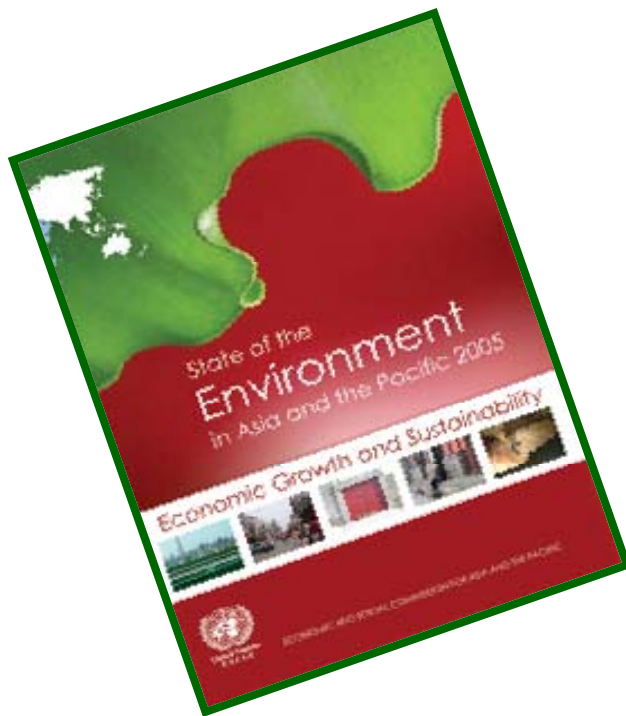


- **Warming of the climate system is unequivocal**
- **Warming caused by human activities has likely had a discernible impact on many physical and biological systems at the global level**
- **Adaptation will be necessary to address unavoidable impacts**



- **The costs of urgent action to avoid serious impacts are far less than the damages expected**
- **Urgent international action required for accelerating mitigation, combating deforestation and enhancing adaptation efforts with financial and technological supports**
- **Bali Roadmap was set towards a framework beyond 2012 to be agreed upon by COP15**

State of the Environment in AP 2005/2010



- **Five Yearly Regional Report since 1985**
- **Provides overview on the State of the Region's Environment, including Regional Impacts of Climate Change**
- **Discussed policy direction for future Sustainable Development in the Region.**
- **2010 Report being developed jointly by ESCAP/UNEP/ADB with focus on enhancing Resource Efficiency and Resilience as Policy Response to the Region's Multiple Challenges**
- **To be Submitted to Five Yearly Ministerial Conference on Environment and Development in Asia and the Pacific, forthcoming to be held in September 2010 in Kazakhstan**

Climate Change as Security Threat



UN Security Council debate, April 2007

- ❖ **Climate Change is impacting on:**
 - **Our Environment, Health and Life**
 - **Our Economy and Livelihood**
 - **Our Peace and Security**

- ❖ **Impacts on Potential Drivers of Conflict**
 - **Energy**
 - **Water**
 - **Food and other natural resources**
 - **Population movements**
 - **Border disputes**

Concerns getting Evident



Increasing Highlight on Food / Energy Conflicts

❖ CC Impacts on Agriculture :

- Changes in Temperature / Weather Pattern**
- Water Availability**
- Sea Level Rise / Sea Water Intrusion**
- Disaster**
- Displacement of rural communities**
- Energy-intensive Inputs (Fuels, Fertilizer Chemicals, etc.)**

❖ Competition between Energy / Food :

- Growing demand for Biofuels**
- Competing uses of Agro-products / Land**
- Rising Commodity Price!**
- Food Scarcity exacerbated**

UN Resolution 63/281



- ❖ **UN General Assembly adopted a Resolution on **Climate change and its Possible Security Implications** on 11 June 2009**
 - **Very general – No specific provisions on development policies**
 - **No Sponsors from Continental Asian countries**
 - **Main concern about very real prospect of disappearing of many small island nations**
 - **Some disagreement on roles of different UN fora.**
 - **Debate will continue in 2010 after submission of Secretary General's report.**
 - **Meanwhile, invite the relevant UN organs, **as appropriate and within their respective mandates**, to intensify their efforts in considering and addressing climate change.**

Development for Climate Security



The Task

- ❖ **What - Integrating the Security Aspects of Climate Change in Development Agenda**
- ❖ **Who - Primarily, Governments at all levels**
- ❖ **How - Strategic Response to Climate Change**

UN ESCAP

- ✓ **Biggest regional arm of UN with function of socio-economic development forum / think-tank**
- ✓ **Multi-disciplinary expertise / Multi-ministerial outreach**
- ❖ **To promote Preventive Approach in the context of Human Security**
- ❖ **Assists Developing Member States to build Climate Friendly and Climate Change-resilient Society**

Action Focus

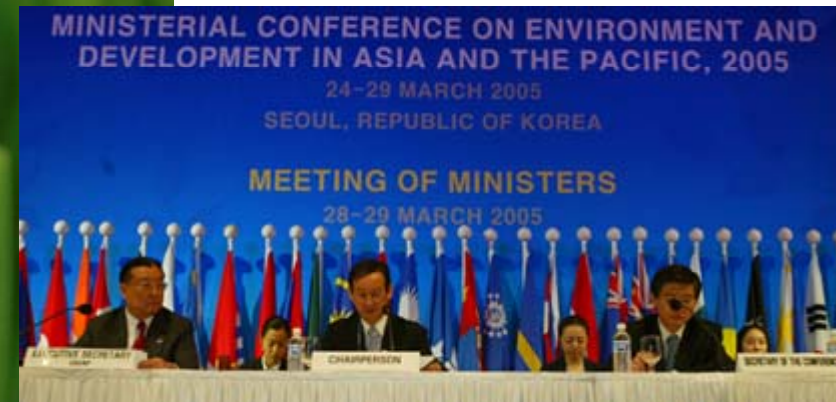


- ❖ **Building Climate Friendly and Climate Change-resilient Society**
 - **Mitigate Climate Change as much as possible**
 - ✓ **Limiting the increase of GHG emissions while maintaining Socio-Economic Progress**
 - **Enhance long-term resilience to possible impacts of Climate Change**
 - ✓ **Promoting a holistic/integrated approach rather than sector-by-sector responses**
 - **Maximize Socio-economic Co-benefits**

Green Growth: ESCAP's overarching highlight since 2005



- Adopted as the strategy for Asia-Pacific at the 5th Ministerial Conference on Environment and Development (**MCED 5**, March 2005, Seoul)
- Achieving **rapid growth** without compromising environmental sustainability
- Attaining **MDG 1** (poverty reduction) & **MDG 7** (environmental sustainability) at the same time
- Focusing on Environmental Sustainability & Ecological Efficiency (**Eco-efficiency**)



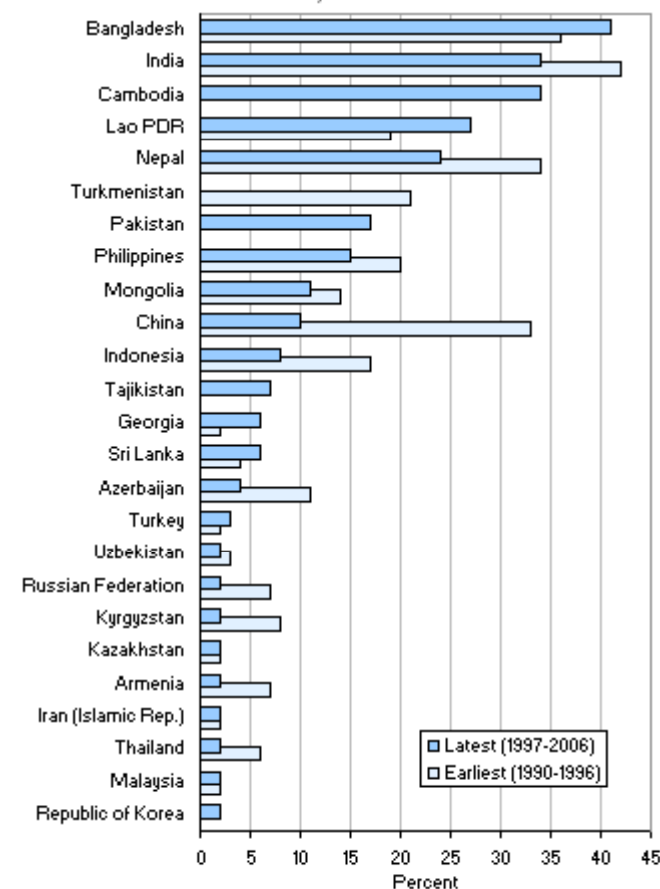
AP region needs economic growth to meet socio-economic challenges



- Poverty
 - 641 million living with less than 1 US\$ per day
- Health
 - 4 million children die before age of 5
 - Maternal mortality: 300 deaths per 100,000 live births
- Access to services
 - 400 million urban residents without access to sanitation
 - 566 million rural residents without access to clean water
 - 800 million without electricity

Source: ESCAP, ADB, UNDP (2008) "A future within reach"

Figure 16.1 Percentage of the population living below one dollar [1993 PPP] per day in Asia and the Pacific, 1990-2006



Source: ESCAP Statistical Yearbook 2007

AP Crisis in Environmental Sustainability

Asia-Pacific is already living above its 'environmental means': Despite its relatively low-impact consumption patterns, its carrying capacity is already being exceeded

(ESCAP State of the Environment Report 2005)

LIMITED CARRYING CAPACITY

- Population density 1 ½ times the global average
- Freshwater available: 3,920m³/cap/yr vs. South America 38,300m³.cap/yr.
- Productive area available per capita: 60 % of the global average
- Arable land per capita: 80 % of the global average

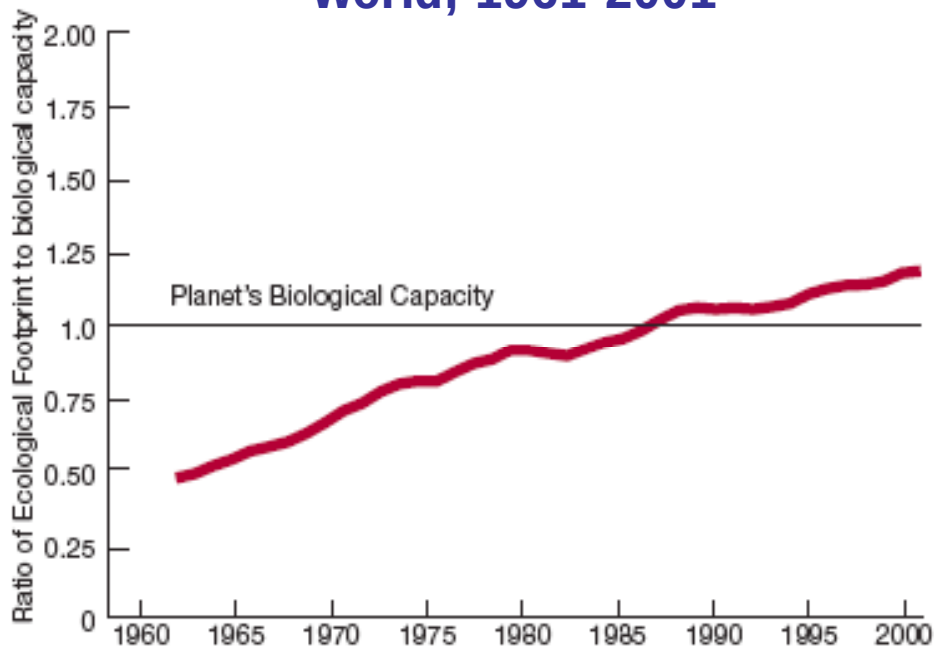


Asia-Pacific Ecological Footprint

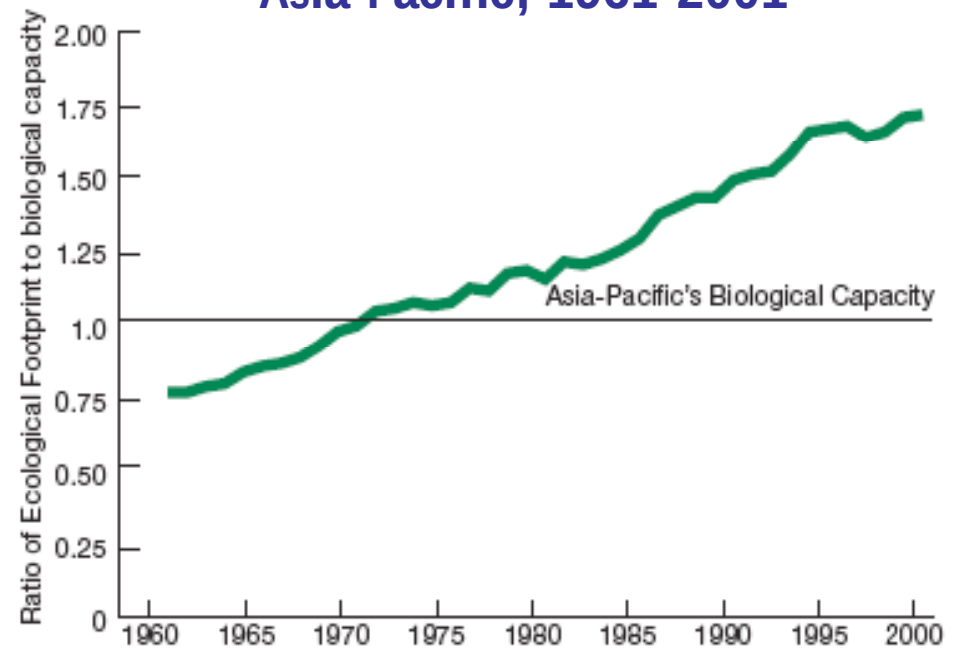


	GDP/capita (US\$)	Bio-capacity (GH/capita)	Eco-footprint (GH/capita)	Eco-deficit
Asia-Pacific	5,800	0.7	1.3	-0.6

World, 1961-2001



Asia-Pacific, 1961-2001

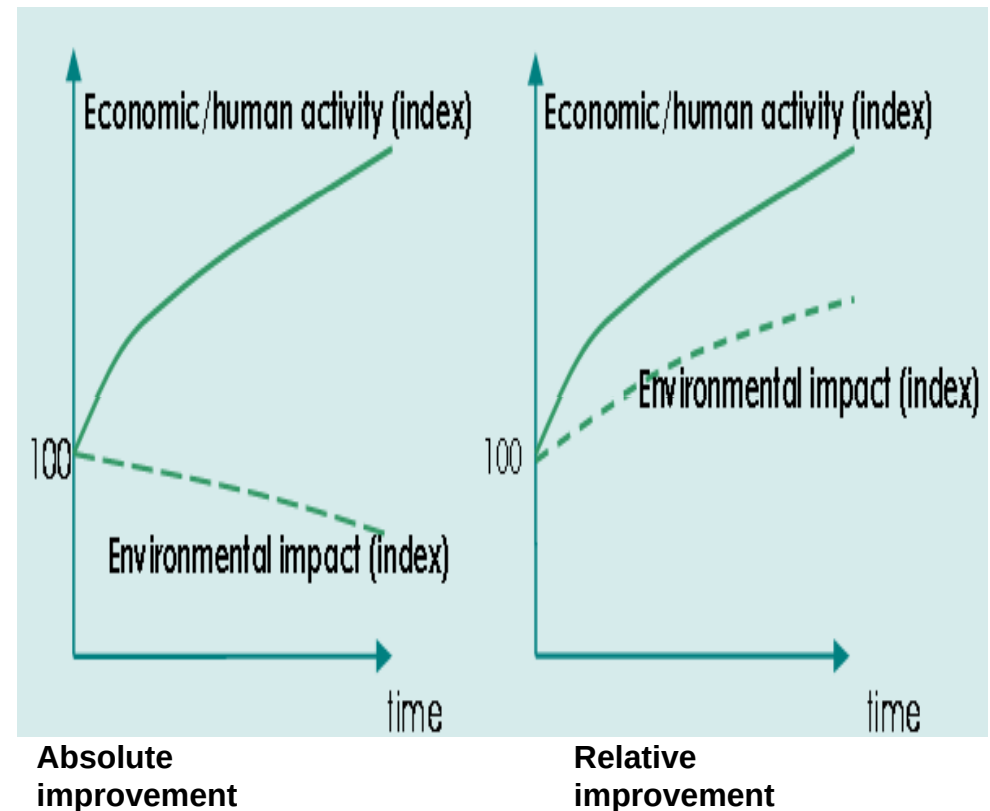


Source: WWF Living Planet Report Asia-Pacific 2005

Highlights on Eco-efficiency



- How to maximize growth opportunity with minimum damage on environmental sustainability?
- Maximizing outputs = economic “goods” while minimizing resource inputs and environmental “bads” = Eco-efficiency
- Application from company level to society level





Different Patterns of Growth

- Economic Growth aims at Maximizing outputs
= economic “goods”
- Environmental ‘bads’ increases as well
= economic externality or market failure
- Different Patterns of Growth bring different pictures
 - Ecological Footprint
 - Japan (4.3), UK (5.6)
 - USA (9.7), Australia (7.0)
 - ROK (4.4)
 - Energy Intensity
 - Japan (157), Hong Kong (94)
 - ROK (258), Russia (537)

Decoupling Growth and Ecological Burden



- **What makes the difference?**
 - **Socio-Economic Structure**
 - **Infrastructure**
 - **Consumption Pattern, Lifestyle**
 - **Public Policy, etc.**
- **Some examples - Transport Sector**
 - **Infrastructure**
 - **US - mainly Motorized**
 - **Japan, EU - Integrated Networks - Railway / Motorway**
 - **Vehicles**
 - **Small Car: Korea 4%, Japan/EU 24%**
 - **Large car: US 60%, Korea 30%, Japan/EU 20%**

Green Growth in CC Context = Low Carbon Development



Challenges in Climate Actions

- **Development Need for Sustaining Economic Growth**
→ **Making Climate Actions compatible with Sustained Economic Growth**
- **Competition with a number of other Socio-economic priorities**
→ **Needs a Holistic win-win Approach (“Co-Benefits”)**
- **Limited Financial /Human / Technological Resources**
→ **Needs a Resource Efficient Approach**

The Answer is Green Growth - Low Carbon Development
... or Low Carbon - Green Growth

Strategic Response for Climate Security



Strategic Response to Additional Risks by Climate Change

- Continue / strengthen ongoing national efforts for coping with existing risks, e.g. enhancing disaster prevention/ preparedness / response capacity
- Strengthen international platforms for co-ordinated natural resource management
- **Holistic/integrated approach** rather than sector-by-sector responses
 - A number of Sectors to address
 - Different Priorities for Countries
 - Limited Resources and Competition amongst Sectors

Strategic Adaptation



Action Components

- **Mainstream adaptation consideration** in ALL development actions
 - **Reduce knowledge gaps** by strengthening regional and national mechanisms for scientific assessment, forecasting and information sharing.
 - Upgrade NAPA to integrate with overall national development planning in long-term (Infrastructure, Water Resources Development, Agriculture, Industry, etc.), towards building **more climate-resilient society**
 - Strengthen **natural foundation** such as water, land and ecosystem by sound natural resources management to buffer the impact
 - Financing and Technology Transfer
 - Engaging ALL Stakeholders, incl. Private Sector
 - Enhancing OVERALL Capacity

Towards more Resilient Society (1)



From Reactive to Anticipatory Adaptation

Example in Agriculture Sector

Reactive Adaptation

- Erosion control
- Dam construction for irrigation
- Changes in fertilizer use and application
- Introduction of new crops
- Soil fertility maintenance
- Changes in planting and harvesting times
- Switch to different cultivars
- Educational and outreach programmes on conservation and management of soil and water

Anticipatory Adaptation

- Development of early warning systems
- Development of tolerant/resistant crops (to drought, salt, insect/pests)
- Research and development
- Soil-water management
- Diversification and intensification of food and plantation crops
- Policy measures, tax Incentives /subsidies, market-based options

Towards more Resilient Society (2)



From Reactive to Anticipatory Adaptation

Example in Water Sector

Reactive Adaptation

- Improved management and maintenance of existing water supply systems
- Protection of water catchment areas
- Protection of groundwater resources
- Groundwater and rainwater harvesting and desalination

Anticipatory Adaptation

- Better use of recycled water
- Conservation of water catchment areas
- Improved system of water management
- Water policy reform including pricing and irrigation policies
- Development of flood controls and drought monitoring

Linking Adaptation and Mitigation



- ◆ **Adaptation to climate change is necessary** to address impacts resulting from the warming which is already unavoidable due to past emissions
- ◆ However:
 - Adaptation alone cannot cope with all the projected impacts of climate change
 - The costs of adaptation and impacts will increase as global temperatures increase
- ◆ Mitigate GHG emissions to scale down the impact of climate change and socioeconomic loss
- ◆ **Making development more sustainable** can enhance both mitigative and adaptive capacity, and reduce emissions and vulnerability to climate change < **Green Growth**

Highlighting Socio-economic Co-benefits



- ◆ Mitigation / Adaptation Actions often have co-benefits
 - ✓ Non-climate environmental issues (air pollution, etc.)
 - ✓ Energy saving/ energy security
 - ✓ Public health
 - ✓ Saving public expenditures
 - ✓ Traffic jam
 - ✓ Business Opportunity / Economic Competitiveness for Poverty alleviation
 - ✓ Urban safety / Crime prevention
 - ✓ Equitable Mobility (Gender, Aged, Disabled, etc.)
 - ◆ Co-benefits provides opportunities for economized approach to adaptation / access to non-climate change investments
 - ◆ Adaptation provides opportunities for participatory governance for collectively envisioning the society's future
- > *Enhances Overall Human Security Dimensions!*

Support Measures



- ◆ International humanitarian assistance addresses short-term needs for interventions to respond to insecurity factors related to disasters
- ◆ Existing international platforms to be strengthened,
 - ✓ Coordinated natural resource management, e.g. Mekong River Commission;
 - ✓ Joint meteorological programmes, e.g. Typhoon Committee, Panel on Tropical Cyclones
- ◆ **Bali Action Plan** called for international cooperation to support urgent implementation of adaptation actions, through *inter alia*
 - ✓ Vulnerability assessments
 - ✓ Prioritization of actions
 - ✓ Capacity-building and response strategies
 - ✓ Integration of adaptation actions into national planning

Emerging Initiatives



- ◆ Increasing numbers of donor agencies attempt to integrate climate change considerations into their project formulation / appraisal process
- ◆ In the framework of coordinated One UN Approach,
 - ◆ UN Secretary General takes the lead in “Seal the Deal” campaign , and advocates a post-2012 deal, including
 - ◆ Exemplar deep cut in GHG emissions by developed countries
 - ◆ Mechanism for awarding/incentivising developing countries’ climate actions compatible with sustainable development
 - ◆ Regional Commissions, including ESCAP, promotes regional / subregional cooperation
 - ◆ Policy dialogues for coordinated climate actions
 - ◆ Promoting region-specific innovative approach (e.g. Green Growth for Asia-Pacific)
 - ◆ UN Country-team coordinates National-level actions
 - ◆ Coordinates integration of climate responses into development actions
 - ◆ Promotes enabling policies to facilitate innovative finance and technology transfer
 - ◆ Capacity Building

Exemplar Initiatives



- *OECD Policy Guidance: Integrating Climate Change Adaptation into Development* aims to: i) promote understanding of the need to mainstream adaptation in development co-operation; ii) identify appropriate approaches for integrating adaptation into development policies at national, sectoral, project levels and at local contexts; and iii) identify practical ways for donors to support developing country partners.
- *Asia Pacific Gateway to Climate and Development*, jointly developed by UNESCAP and the Government of Japan, provides a web-based information platform to assist countries to make concrete efforts to address climate and development by capturing two focal areas; Co-benefits Approach (mitigation) and Integrating Adaptation into Development.
- EU Technical workshop on *Climate Change and International Security*, Bangkok, September 2009, to produce regional scenarios on climate change and security.

Thank you for your attention



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WEBSITES

Environment and Development Division	http://www.unescap.org/esd/index.asp
Green Growth	http://www.greengrowth.org
SINGG	http://www.singg.org

