Economic Diversification, Sustainable Development and the Impacts of Response Measures

Expert Meeting on Economic Diversification, Implementation of Article 4, Paras. 8 & 9 of the Convention

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Overview

- Context
- Economic diversification and sustainable development: a framework for discussions
- Vulnerability to response measures
- Issues for consideration:
    - Integrating sustainable development
    - Technical assistance for diversification
    - Fostering increased investment

Context

- Article 4.8 of the Convention:

"In the implementation of the commitments in this Article, the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on:

…

(h) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; …"

Context

- Article 4.10 of the Convention:

"The Parties shall, in accordance with Article 10, take into consideration in the implementation of the commitments of the Convention the situation of Parties, particularly developing country Parties, with economies that are vulnerable to the adverse effects of the implementation of measures to respond to climate change. This applies notably to Parties with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives."

Commodity Dependence

- Commodity dependence drives the need for diversity, making countries vulnerable to response measures
- Focus: states with a narrow basket of exports (typically commodities); over-dependence = vulnerability

Export Structure of Developing Countries

	Fuels			Non-fuel primary commodities			Manufactures			Other		
	1980-1983	1989-1992	1999-2003	1980-1983	1989-1992	1999-2003	1980-1983	1989-1992	1999-2003	1980-1983	1989-1992	1999-2003
Developing countries	38.8	22.5	18.0	26.0	19.7	12.7	31.4	55.7	68.1	3.9	2.2	1.2
Lat. Am. & Caribbean	23.3	22.6	16.2	42.9	40.7	25.7	32.6	35.9	56.6	1.3	0.9	1.5
Africa	40.8	47.9	50.6	32.7	24.9	24.0	12.7	15.7	23.0	13.8	11.5	2.4
West Asia	70.0	73.4	72.2	11.5	8.6	6.1	16.8	17.7	21.0	1.7	0.2	0.6
East and South Asia	18.5	7.2	4.9	24.3	15.1	9.1	54.9	76.5	84.8	2.3	1.2	1.1

Vulnerability of LDCs and SIDs

- Vulnerability is a function of:
  - Nature and magnitude of impacts
  - Capacity to adapt and recover
- LDCs and SIDs are vulnerable to climate change impacts, but also potentially to the impacts of response measures – for example, taxes on aviation fuels might reduce tourism to SIDs.

Economic Diversity

- Easy to identify its absence, difficult to foster
- Some lessons from experience:
  - No blanket prescription; circumstances matter
  - Measures to foster better investment climate are effective
  - Some industrial policy measures may work; many will not

Economic Diversification and Sustainable Development

- Agreement at Tehran expert meeting, and in mandate from Decision 5/CP.7: diversification needs to be pursued as part of broader effort to achieve sustainable development

Literature Survey: The "Resource Curse"

- Countries rich in oil or minerals do not show higher rates of growth – sometimes lower.
- Aspects of the problem:
  - Volatility of commodity markets
  - The "Dutch disease"
  - Institutional impacts (rent-seeking)

New Consensus on the "Resource Curse"

- Resource rich states are going to continue to exploit their resources
- Oil and mineral resources are neither a blessing nor a curse *a priori*, but rather represent potent opportunities
- The constructive approach: how to successfully exploit the opportunities, avoid pitfalls that others have suffered

Commodity Dependence and Sustainable Development

- Need to account for resource depletion, investing proceeds to create non-declining wealth
- Looks for win-win-win solutions that achieve environmental, economic and social objectives simultaneously

Vulnerability to Response Measures

- Impacts may come in several ways:
  - Changes in Annex I income, changing export volumes
  - Spillover effects: e.g., from measures to increase energy efficiency
  - Direct taxes or levies on fossil fuels, reducing demand
  - Terms of trade effects

Vulnerability: Coal

	Coal exports as share of GDP	Share of exports to OECD	Share of exports to rest of world
China	2.6%	71.9%	28.1%
Columbia	20.6%	70.8%	29.2%
Indonesia	18.2%	48.7%	51.3%
South Africa	21.6%	68.2%	31.8%

Vulnerability: Coal

- Pershing (2000): GDP drop between 1% (Indonesia) - 4% (South Africa)
- Knapp (2000): possible increase in energy-intensive exports
- IEA's alternative scenario: demand drops by 23% by 2030 (increased efficiency, fuel-switching)(but note that this includes non-Annex I actions)

Vulnerability: Oil

	Value of petroleum exports	Share of GDP	Petroleum exports to N. America, W. Europe, Japan	Petroleum exports to rest of world
Algeria	23,062	27.4%	83.4%	16.6%
Indonesia	11,191	4.4%	47.6%	52.4%
IR Iran	34,289	20.3%	56.8%	43.2%
Iraq	17,751	77.2%	96.6%	3.4%
Kuwait	26,363	50.9%	79.7%	20.3%
SP Libyan AJ	18,653	64.3%	93.0%	7.0%
Nigeria	32,337	45.3%	64.4%	35.6%
Qatar	11,694	41.1%	65.4%	34.6%
Saudi Arabia	106,189	42.7%	49.1%	50.9%
UAE	38,099	36.9%	48.5%	51.5%
Venezuela	29,379	27.7%	81.5%	18.5%

Vulnerability: Oil

- Müller (2005) survey: all negative, from 0.2% drop in GDP to 5.5%
- IPCC (2001): similar range, all negative
- Iran (2003): USD (1995) 90 million loss by 2010 (0.52% loss in welfare)
- IEA Alternative Scenario: price drop of 15% by 2030, relative to baseline scenario (absolute increase).

Vulnerability: Gas

- No consensus
- IPCC (2001): range from –36.4% to +15.3% change in demand relative to baseline
- Ghasemszadeh and Alawadhi (2000): similar results
- IEA Alternative Scenario: 10% drop in demand by 2030 relative to baseline.

Issues for Consideration

- Integrating sustainable development in diversification strategies
- Technical assistance for diversification
- Encouraging foreign and domestic private sector investment

Sustainable Development in Diversification Strategies

- Energy regimes are an obvious area of focus: win-win-win. $17 trillion in new investment needed 2004 - 2030.
  - E.g., development and dissemination of new energy-related technologies
- Strategies may, though, have nothing to do with energy, climate change
- Need to be country-led, appropriate to circumstances

Technical Assistance for Diversification

- What is the nature of the problem?
- Resource curse literature is helpful:
  - Volatility and Dutch disease are issues of fiscal management. But how to distribute appropriated rents?
- Essentially the need is for sound policy advice (Integrated Framework provides interesting model)
- Potential sources: SCC Fund, GEF, IFIs, private sector

Encouraging Foreign and Private Sector Investment

- Similar challenges to those faced in fostering economic diversity
- Few analysts support blanket-type measures: focus on quality of investment, not quantity.
- International investment agreements only useful as part of broader strategy

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Background paper:

http://unfccc.int/meetings/items/3639.php

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