



# **Trade and Environment Capacity-Building for Government Officials**

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## **Module I: Intersection between Trade and Environment**

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# OVERVIEW: FIVE HYPOTHESES

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- a) Trade Affects Environmental Quality (direct and indirect)
- b) Trade Policy Affects Environmental Quality
- c) Trade Policy Affects Environmental Policy (policy-to-policy or regime links)
- d) Environmental Quality Affects Trade (example: collapse of fish stocks, water depletion, climate change)
- e) Environmental Policies Affect Trade (example: WTO TBT notification covering green goods)



# OECD ANALYTICAL FRAMEWORK

- a) Scale Effects
- b) Compositional or Structural Effects
- c) Technology Effects
- d) Product Effects
- e) Regulatory Effects



# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

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## First Argument:

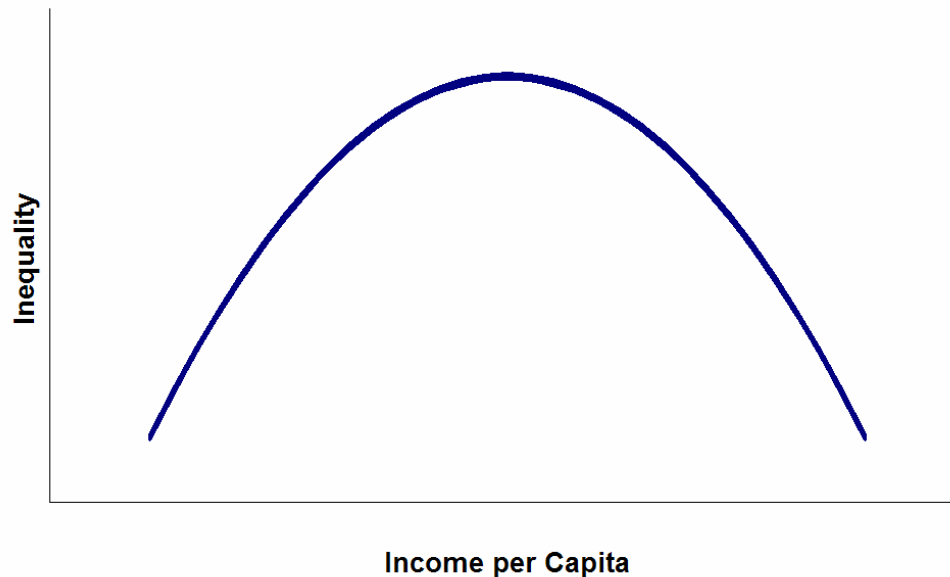
Trade Expansion **Benefits** Environmental Quality

- i. Trade-Growth-Poverty Nexus
- ii. Trade-production specialization-efficiency gains nexus



# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

Environmental Kuznets Curve Debate  
from Grossman & Krueger





# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

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## i. Win-Win Trade Environment Outcomes:

1. Subsidies
2. Environmental Goods and Services

## ii. National Coordination among ministries



# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

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## Second Argument:

Trade Expansion **Harms** Environmental Quality

### Scale Effects:

- i. Uruguay Round generates addition US\$550 billion to global GDP
- ii. Doha Round to contribute US\$110 billion to global GDP
- iii. Negative scale effects accelerate resource depletion; global pollution (EKC constraints)



# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

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**In Search of Evidence**



# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

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## Environmental Assessments of Trade

- a) Differs from project-specific environmental impact assessment (EIAs)
- b) US, Canada, EU, NAFTA CEC Environmental Assessments
- c) Example: NAFTA Mexico Findings



# FIRST HYPOTHESIS: TRADE AFFECTS ENVIRONMENTAL QUALITY

## Environmental Assessments of Trade (cont'd)

- d) Problems:
  - i. Comparable Baseline Data
  - ii. Reliable Indicators
  - iii. Isolating Relationships: Trade Liberalization Impacts versus other Economic Policies (Correlation versus Causation)
- e) Scenarios and debate over models
  - i. (CGE versus econometric)



## SECOND HYPOTHESIS: TRADE POLICY AFFECTS ENVIRONMENTAL QUALITY

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- a) Washington Consensus Debate:  
Liberalize, Privatize, Deregulate
- a) Budgetary Effects on Regulatory  
Compliance/Enforcement



# THIRD HYPOTHESIS: TRADE POLICY AFFECTS ENVIRONMENTAL POLICY

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- a) Policy-to-Policy: Regime Coherence
- b) Trade Rule Consistency – WTO and RTAs



# THIRD HYPOTHESIS: TRADE POLICY AFFECTS ENVIRONMENTAL POLICY

## Trade Rules Constrain Domestic Environmental Regulations

- a) Main Debate – like products and production process methods (PPMs)
- b) Environmental Policy – sources of pollution and life-cycle assessments
- c) Trade Policy – product performance and border-to-grave
- d) GATT and WTO issues and disputes:
  - i. Eco-labels and certification (TBT)
  - ii. Tuna-Dolphin; Shrimp-Turtle; Asbestos;
- e) Dueling Science – US-EU Beef Hormones and US-EU genetically modified organism



# THIRD HYPOTHESIS: TRADE POLICY AFFECTS ENVIRONMENTAL POLICY

## Trade Rules Constrain Multilateral Environmental Agreements

- ◆ 250 MEAs – 20 contain trade measures (Montreal, Basel, CITES, Stockholm, Rotterdam)
- ◆ notification and prior consent requirements (Montreal, CITES, Stockholm, PIC) complement TBT and other WTO notification systems
- ◆ Trade bans – CITES and Basel ban (1995) – could contravene GATT Article XI
- ◆ Main issue – discriminatory Measures Against non-Parties:
- ◆ Montreal Protocol and beyond



## FOURTH HYPOTHESIS: ENVIRONMENTAL QUALITY AFFECTS TRADE

Scale effects from trade accelerate resource depletion

Resource depletion has feedback loop that constrains production

Example: 60-70% of global fish stocks at risk due to over-exploitation

- i. IUCN red-list of endangered commercial fish stocks
- ii. Response: WTO debate on rolling back fish-subsidies



## FOURTH HYPOTHESIS: ENVIRONMENTAL QUALITY AFFECTS TRADE

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Trade Specialization, Intensive Agriculture and  
Environmental Impacts:

- i. 60-70 percent of water use for agricultural production
- ii. depletion of groundwater aquifers
- iii. contamination of freshwater from nutrient and agro-chemical inputs



## FIFTH HYPOTHESIS: ENVIRONMENTAL POLICIES AFFECT TRADE

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Annual expenditures on environmental protection = US\$600 billion

Largest category of WTO TBT notification:  
Relate to environmental requirements  
(approximately 15%)



# FIFTH HYPOTHESIS: ENVIRONMENTAL POLICIES AFFECT TRADE

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Competitiveness Fears

Race-to-the-Bottom or Race-to-the-Top?



# FIFTH HYPOTHESIS: ENVIRONMENTAL POLICIES AFFECT TRADE

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New policies:

- i. Renewable portfolio standards
- ii. Product take-back and producer responsibility schemes (eg EC)



# FIFTH HYPOTHESIS: ENVIRONMENTAL POLICIES AFFECT TRADE

Climate Change Regime: 2006 -- \$30 billion

- i. 2007 expected to double – EU-wide trading system; Kyoto Clean Development Mechanism
- ii. Carbon Offsets for this meeting = approximately 44 tons of carbon offset @ US\$ 29 tonne



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# THANK YOU

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