Review: The Preliminary Global Chemicals Outlook

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Review

- Preliminary GCO: Process
- Preliminary GCO: Content

Formation of Steering Committee

- Academics (4)
- Government (4)
- Industry (2)
- NGO (2)
- UNEP & other IGOs

Three Pillars

- Pillar I:
  - Trends and Indicators
    - Production, trade, use and disposal of chemicals
    - Health and environmental impacts
- Pillar II:
  - Economic Implications: Making the economic case for sound chemicals management
- Pillar III:
  - Instruments and Approaches for Sound Chemicals Management

Documents finalized in November 2009

- Rationale and Goals
- Scoping Document and Research Proposal
- Technical Annex: Preliminary Data Review

Steps to create these documents

- Preliminary outlines & literature reviews
- First meeting: Sub-committees formed
- Background papers
- Second meeting: background papers presented & discussed
- Background papers revised & merged into single document
- Comment & review process
- Final product divided into three papers: Rationale; Scoping Document & Research Proposal; and Technical Annex

First Pillar: Trends & Indicators

1. Introduction

First Pillar: Trends & Indicators

2. Trends in production, trade, use and disposal of chemicals
   - 2.1 Number of Chemicals on the Market
   - 2.2 Trends in the Chemical Industry
   - 2.3 Toxic Metals
   - 2.4 Pesticides
   - 2.5 Nanomaterials
   - 2.6 Illegal use, transport, & disposal of chemicals
   - 2.7 Products containing toxic chemicals
   - 2.8 Electronic waste

3. Trends in health & environmental effects of chemicals3.1 Lack of information on health and environmental effects of chemicals
   - 3.2 Environmental effects
   - 3.3 Data on health effects and exposures
   - 3.4 Making use of existing toxicological and ecotoxicological data.

Second Pillar: Economic Implications

- Goals & background of the analysis:
  - Moving beyond the traditional economy/environment trade-off
  - Making the case for investing resources in sound chemicals management
  - Benefits include economic development, poverty reduction, maintenance of environmental services, and protection of human health.

Second Pillar: Economic Implications (cont'd)

4. Economic Benefits of Sound Chemicals Management
   - 4.1 Mapping Costs of Inaction and Benefits of Sound Chemicals Management
   - 4.2 Costs of inaction
     - 4.2.1 Loss of ecosystem services
     - 4.2.2 Environmentally attributable fraction modeling
     - 4.2.3 Costs of failing to manage chemicals soundly: existing studies
   - 4.3 Methodological considerations for economic analysis
     - Limitations of cost-benefit analyses
   - 4.4 Economic benefits of sound chemicals management
     - 4.4.1 Economic benefits of pollution prevention activitieS
       - Benefits of sound chemicals management for risk liability
     - 4.4.2 Economic benefits from sustainable agriculture

Economic Implications (cont'd)

4.1 Mapping Costs of Inaction and Benefits of Sound Chemicals Management

Categories of value

- Use value
  - Direct
  - Indirect
- Non-use value
  - Existence
  - Bequest
- Option value

Economic Implications (cont'd)

4.2 Costs of inaction

4.2.1 Loss of ecosystem services

4.2.2 Environmentally attributable fraction modeling

4.2.3 Costs of failing to manage chemicals soundly: existing studies

- Economic benefits of REACH.
- Costs of chemicals in California (USA)
- PCB remediation costs
- Costs of children's environmentally attributable illnesses (USA)
- Costs of birth defects (USA)
- Costs of pesticides
- Costs of mercury pollution & exposure

Economic Implications (cont'd)

- 4.3 Methodological considerations for economic analysis
  - Limitations of cost-benefit analyses
- 4.4 Economic benefits of sound chemicals management
  - 4.4.1 Economic benefits of pollution prevention activities
    - Financial savings from pollution prevention
    - Benefits of sound chemicals management for risk liability
  - 4.4.2 Economic benefits from sustainable agriculture
    - IAASTD findings

Third Pillar: Instruments and Approaches for Sound Chemicals Management

5. Instruments and approaches for sound chemical management
   - Controlling Chemical Pollution
   - Remediating Contaminated Sites and Managing Waste Chemicals
   - Preventing Chemical Pollution
   - Managing Chemicals in Products
   - Managing Chemical Information
   - Promoting Safer Chemical Alternatives
   - Alternatives assessment
   - Generating Safer Chemicals
   - Tailoring Chemical Policies to Enhance Economic Development
   - Comprehensive Chemicals Policies
   - Basic elements of a chemicals control system
   - Infrastructure and capacity building needed to achieve the Sound Management of Chemicals
   - The need for basic legislation covering division of tasks between authorities and industry

Third Pillar: Instruments and Approaches for Sound Chemicals Management (cont'd)

- 6. Financing Sound Chemicals Management: Challenges and Opportunities
- 6.1 The need for financing
- 6.2 Integration of Sound Chemicals Management with Development Strategies
- International commitment to integration
- Operationalizing the commitment
- Solutions
- 6.3 Internalizing Chemicals Management Costs
- The logic of cost internalization
- International commitment to cost internalization
- Examples of successful cost internalization
- Potential magnitude of cost internalization
- Operationalizing the commitment to cost internalization