

Examples of World Bank Lending to Strengthen Chemicals and Waste Management

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IOMC Webinar on Financial
Considerations for Chemical and
Waste Management
Session 3: Mainstreaming
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THE WORLD BANK

Environment, Natural Resources & Blue Economy

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Rationale for Financing the Sound Management of Chemicals and Waste

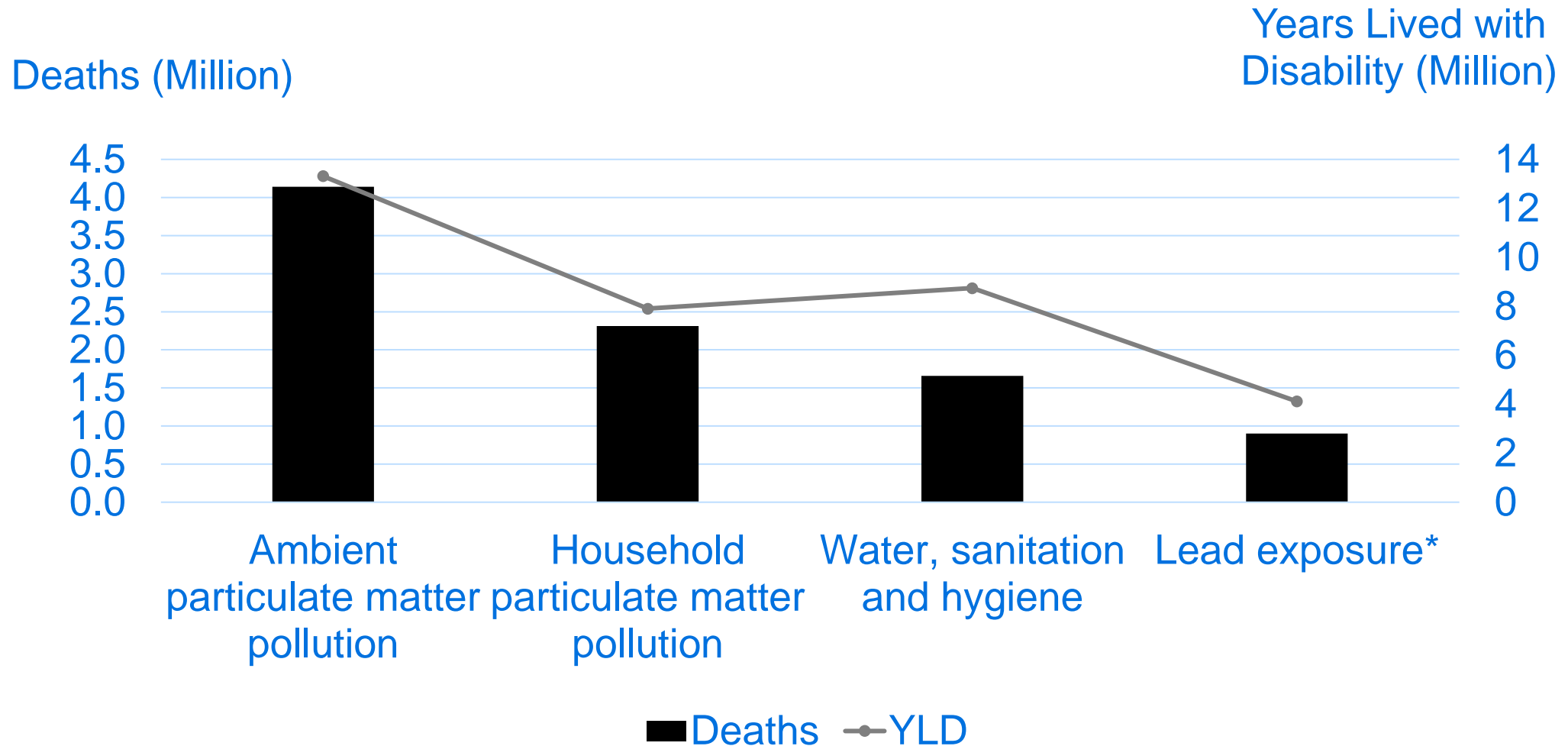
World Bank Loans to Strengthen Regulatory Frameworks

World Bank Investment Loans for Sustainable Chemical Management

Outlook: Scaling up Investments in Chemicals and Waste Management

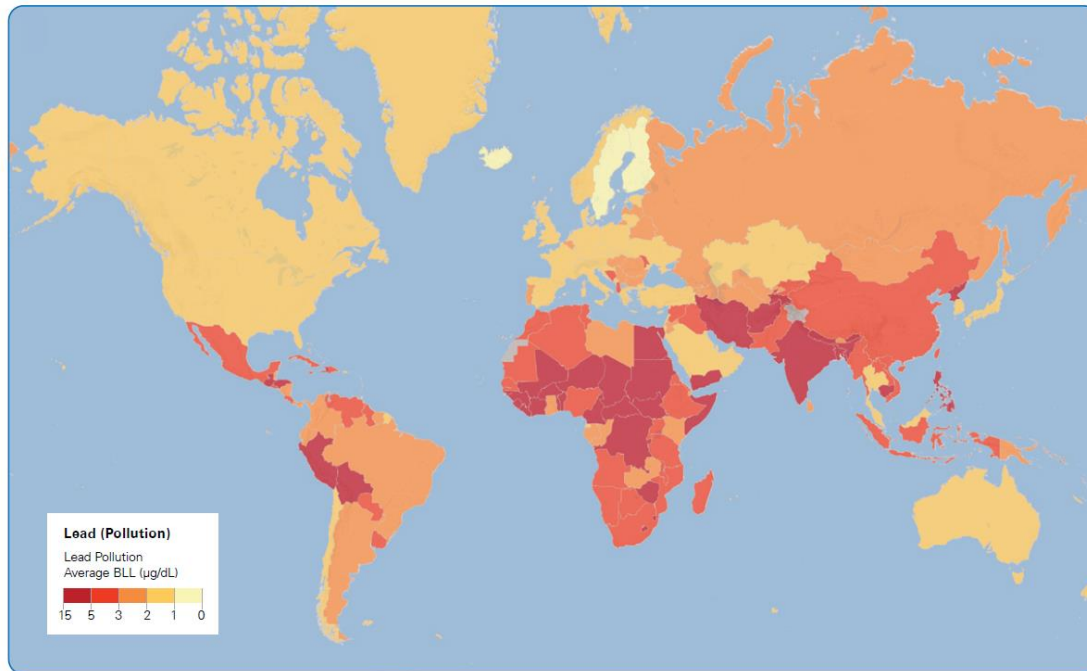


Local Benefits of Chemical and Waste Management



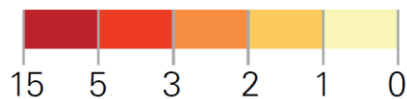
Rising Toll of Pollution and Exposure to Lead

Children's Average Blood Lead Levels by Country (µg/dL)

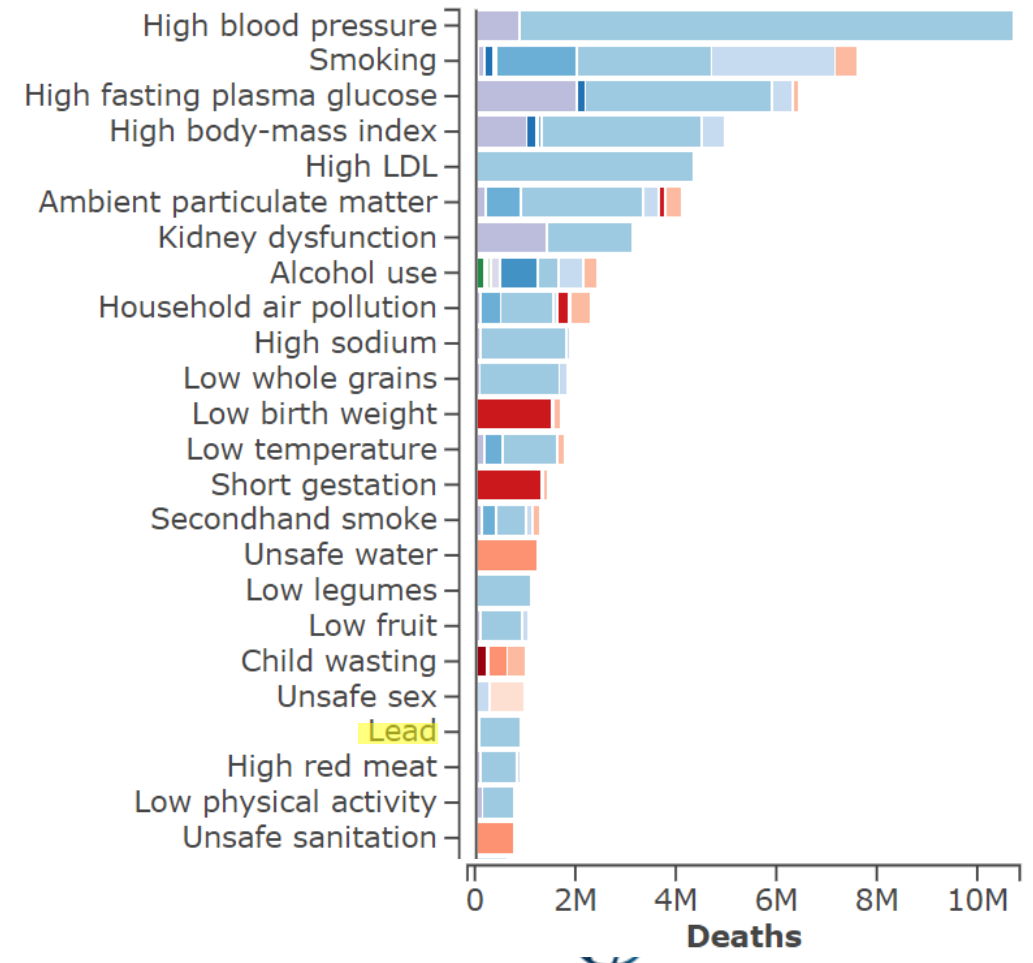


Lead (Pollution)

Lead Pollution
Average BLL (µg/dL)



Source: UNICEF (2020),
based on IHME (2019)



World Bank's Key Services and Products for Government Partners

Technical Assistance

Knowledge Products

Financing

- Development Policy Financing
- Investment Project Financing: Private and Public Sector
- Trust funds and grants

The World Bank Group consists of several closely related institutions

IBRD: The International Bank for Reconstruction and Development (Loans to middle-income and credit-worthy LICs)

IDA: The International Development Association (Interest-free loans and grants to LIC governments)

IFC: International Finance Corporation (Solutions in private sector development)

MIGA: The Multilateral Investment Guarantee Agency
Guarantees of foreign direct investment's noncommercial risks

Building Prosperity, Eradicating Poverty



Development Finance Today



End Poverty



Boost Shared Prosperity



Tackle Climate Change



Advance Sustainability

← Major opportunities for mobilizing private capital to: →

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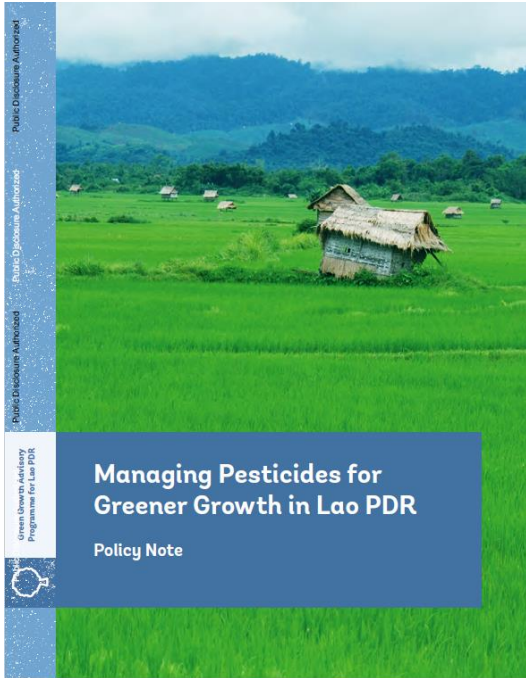
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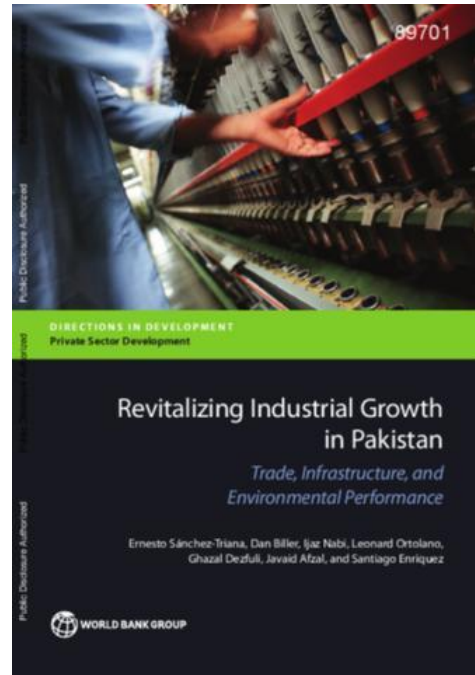
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Analytical Underpinnings of Policy Reforms



<http://hdl.handle.net/10986/35346>



<http://hdl.handle.net/10986/19022>

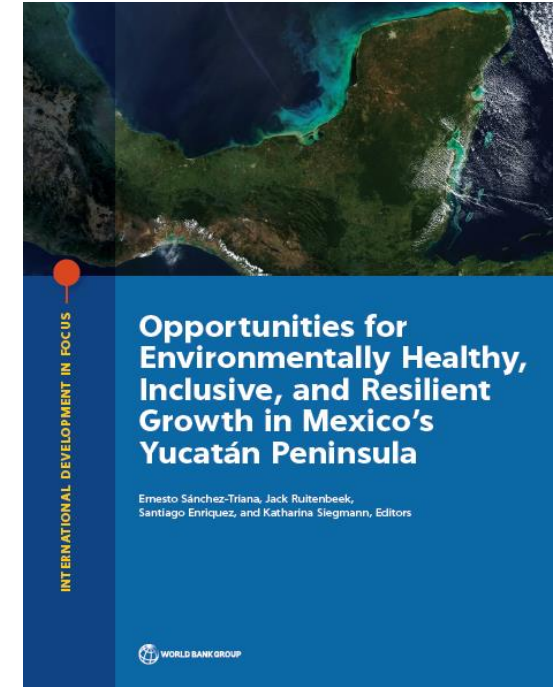


Perspective

Risk Analysis Approaches to Evaluating Health Impacts from Land-Based Pollution in Low- and Middle-Income Countries

Pamela R. D. Williams ✉, Katherine von Stackelberg, Mayra Gabriela Guerra Lopez, Ernesto Sanchez-Triana

First published: 10 February 2021 | <https://doi.org/10.1111/risa.13699>



<http://hdl.handle.net/10986/31724>

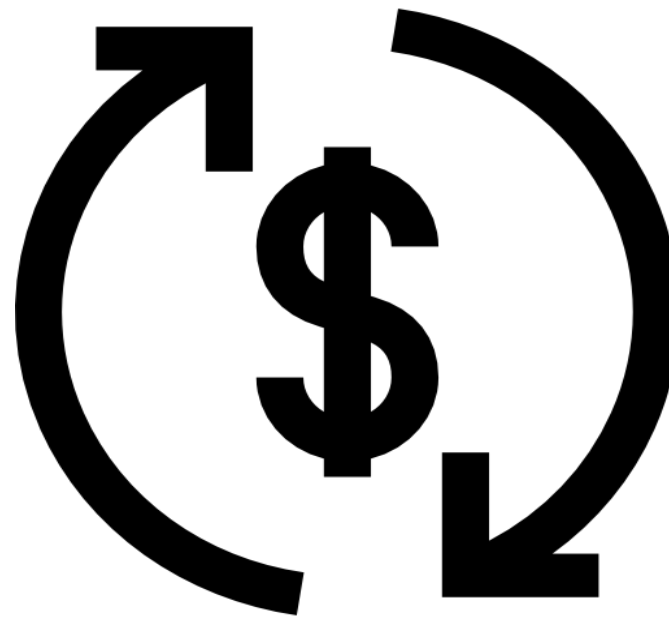
Policy Instruments for the Sound Management of Chemicals and Waste

| Minimum Flexibility ←—————→ Maximum Flexibility Greater Government Involvement ←—————→ Greater Private Initiative | | | | |
|--|---|--|---|---|
| Control-Oriented | Market-Oriented | | | Litigation-Oriented |
| Regulations and Sanctions | Charges, Taxes, and Subsidies | Market Creation | Final Demand Intervention | Liability Legislation |
| Examples | | | | |
| <ul style="list-style-type: none"> • Pollution standards • Ban of lead-based paint | <ul style="list-style-type: none"> • Taxes on pesticides, inorganic fertilizers, or batteries • Subsidies to construct Eco-industrial parks | <ul style="list-style-type: none"> • Deposit-refund systems for pesticide containers, tires or batteries • Tradeable permits for ozone-depleting substances or leaded gasoline | <ul style="list-style-type: none"> • Disclosure legislation requiring manufacturers to publish toxic waste generation • Eco-labelling • Life cycle assessment • Chemical footprint indicators | <ul style="list-style-type: none"> • Damages compensation to plaintive |

Providing Price Signals for Improved Chemical and Waste Management



Fiscal reform



Ensure environmental, climate, health, and economic benefits



Finance to Governments: Policies to Improve the Regulatory Framework for Chemical and Waste Management (1)



Lao PDR: policies to reduce the use of chemical pesticides



Peru: policies to address impacts of past mining operations and account for those of new activities

Finance to Governments: Policies to Improve the Regulatory Framework for Chemical and Waste Management (2)



St. Vincent and the Grenadines: Banning of Single-Use Plastics



Morocco: Extended Producer Responsibility

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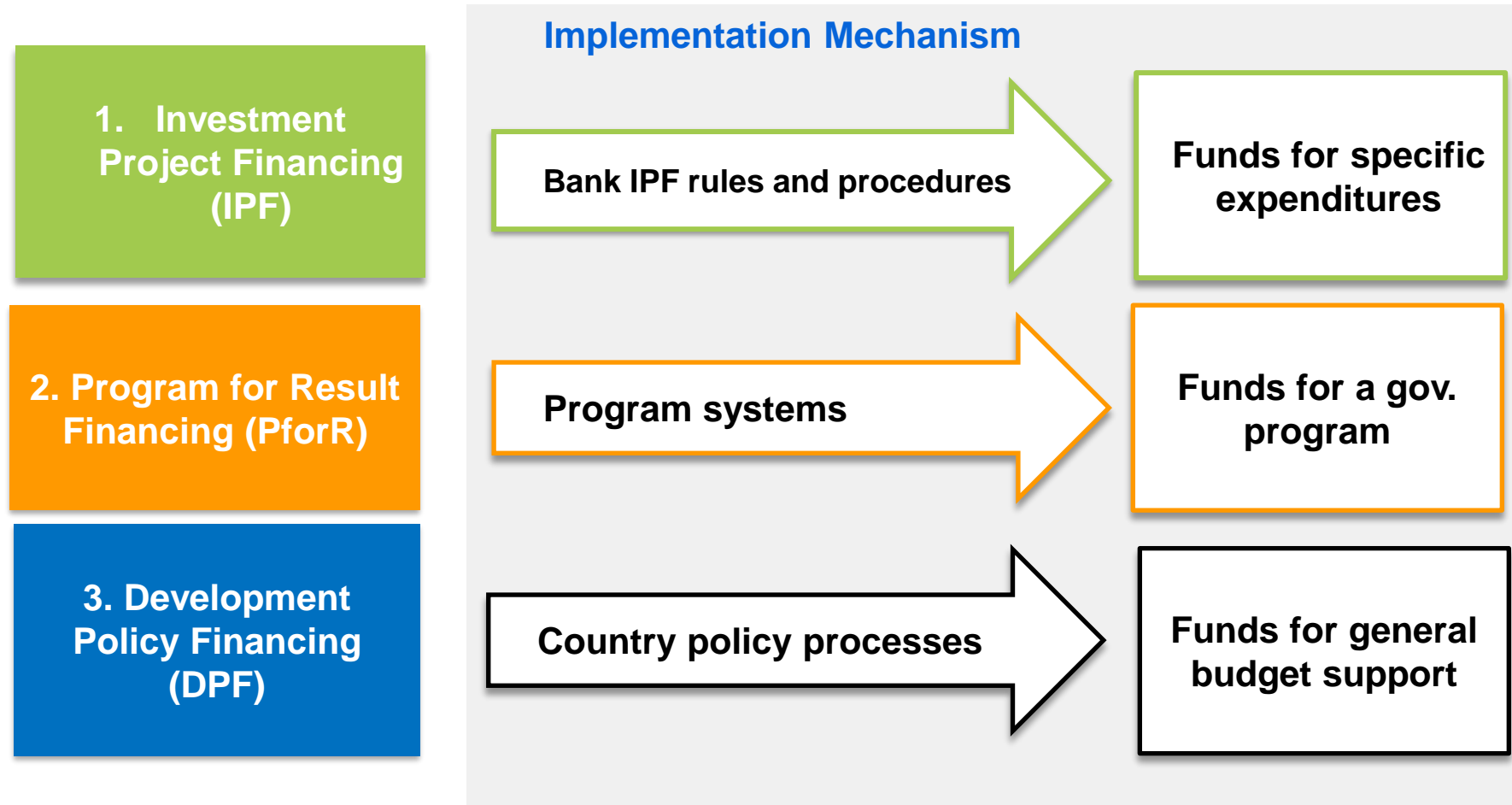


Investment Project Financing

Investment loans, credits and grants provide financing for a wide range of activities aimed at creating the physical and social infrastructure necessary to reduce poverty and create sustainable development

- **Purpose** - supports specific expenditures (e.g., purchasing monitoring equipment; hiring consultants for research and development of alternatives; training; study tours)
- **Disbursement mechanism** - disburses against specific expenditures
- **Implementation** – WB IPF rules and procedures (e.g., Procurement and Financial Management, Environment and Social Framework, Anti-Corruption Guidelines)
- **WB role** – implementation support / supervision of adherence to Bank's rules

Three Complimentary Financing Instruments



WB Portfolio on Toxic Pollutants (2000-19)

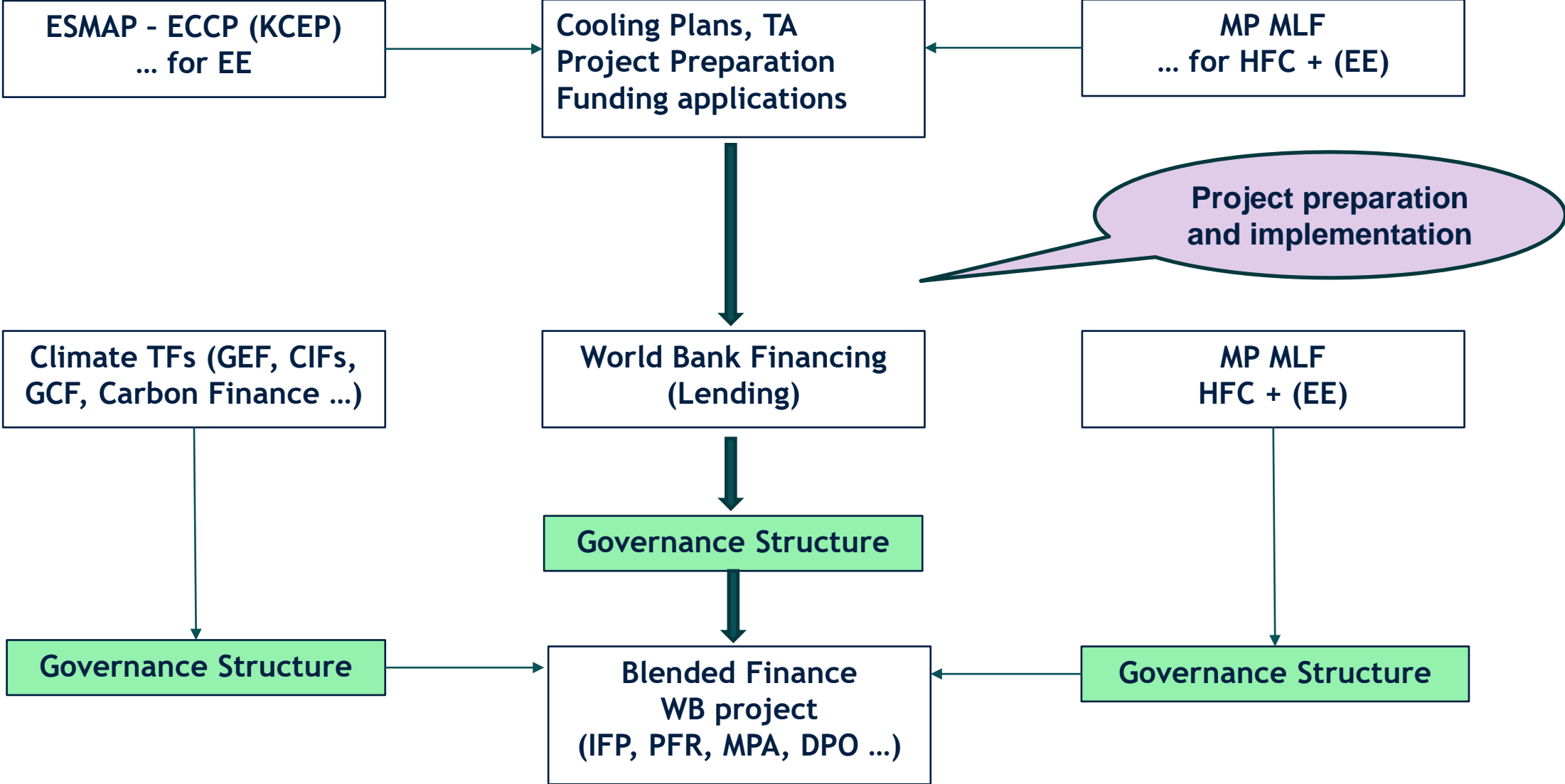
Total World Bank Portfolios 2000-2019 in Toxic Pollutant Management – 104

| | | | | |
|---|-----|---------|-------------------------|----|
| Lending Operations – 59 (18 Active and 5 Pipeline) | | | Analytical Studies – 45 | |
| IPF | DPL | P for R | ASA | KP |
| 52 | 5 | 2 | 37 | 8 |

World Bank Investments in Toxic Pollutant Management (Millions US\$) by Lending Instrument 2000-2019

| | | | |
|--------|-------|---------|--------|
| IPF | DPL | P for R | Total |
| 2355.8 | 468.6 | 770.0 | 3552.1 |

Blending Finance



Environmental Health and Pollution Management Program in Africa

Objective - Reduce exposure to mercury and POPs pollution at pilot sites and strengthen the institutional capacity to manage and regulate mercury use in artisanal small-scale gold mining (ASGM) and e-waste in selected countries in Africa



Rationale for Regional Approach

- Multiple and fragmented approaches to address specific chemicals have not yielded the expected results.
- The transboundary nature of mercury emissions
- The regional causes for mismanagement
- The regional opportunities for solutions
- Comprehensive mechanism to address cross-border issues:
 - Shared natural resources (forests, rivers)
 - Illegal Mercury trade
 - Cross-border migration of miners
 - Different legal frameworks and policies
- Need to understand institutional capacity constraints at national and regional levels



Collaborations within the WBG

Environment and Natural Resources GP

Supported by the Global Environment Facility (GEF)

- A program mitigating environmental risks associated with artisanal and small-scale mining
- Technical assistance components resonate well with the Global Center
- Buy-in and contributions from the Governments of Tanzania, Ghana, Kenya, Zambia and Senegal
- The program is a possible pilot vehicle for the Global Center

DELVE Initiative

Supported by Extractive Global Programmatic Support (EGPS) Trust Fund

- An online database providing ASM data
- It will act as a feeder into Component A of the Global Center
- The Global Center also resonates well with EGPS objectives

World Bank Group Strategies

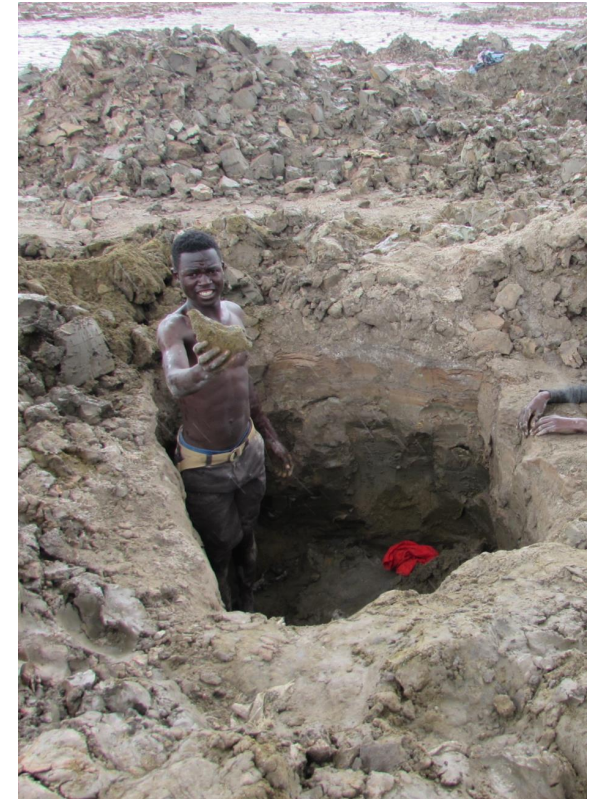
The broader vision for development

- Global Center will reinforce ongoing World Bank Group support to ASM globally
- Global Center will reinforce 11 of the Sustainable Development Goals (SDGs)
- Global Center will support the implementation of international conventions and treaties such as the *Minamata Convention*.

Zambia Mining & Environmental Remediation & Improvement Project



- Flagship project funded with a US\$ 65.6 million WB loan; implemented by the Ministry of Mines and Minerals Development
- Objective is to reduce environmental health risks and Lead exposure on local population associated with the mining; and is built on 4 pillars
 - Remediation of Contaminated Hotspots and Improvement of Environmental Infrastructure
 - Strengthen Institutional Capacity for Environmental Governance and Compliance
 - Health interventions to address lead pollution in children and vulnerable adults
 - Alternative livelihoods, awareness and sensitization
- Target areas: Critically polluted areas of Kabwe, Mufulira, Kitwe and Chingola



Sites Rehabilitated, Strengthened Institutional Capacity



Achievements

- Test 10,000 and treat over 4,000 people especially children with High BLL above 45mg/dl
- Integration of Lead screening and sustained treatment in Kabwe
- Advocating for a healthier environment and responsible mining practices
- Strengthened Environmental Protection Fund and operationalize the Permanent Environmental Fund at Ministry of Mines
- Improved capacity at regulatory agencies with support from the municipalities and honorary inspectors
- Promote safer jobs through livelihood support, targeting vulnerable Community groups in polluted areas
- Increased knowledge levels on dangers of lead pollution and role of the community in lead preventive measures
- Design and ESIA of Infrastructural works in process



China - Huainan Mining Area Rehab Project – Not Just Cleanup



Huainan Mining Area Rehab Project Solution – Integrated Project Design

PDO is to support env. remediation & redev. of JiuDa subsidence site

Component 1. Environmental Remediation and Water Management

- ❑ Env. Remediation
- ❑ Water Stream Rehabilitation
- ❑ Datong dumpsite closure

Component 2. Infrastructure Improvement and Site Utilization

- ❑ Urban infrastructure improvement
- ❑ Site utilization for community development
(tree nursery, flower market, service centers, skills training center)

Component 3. Project Management and Technical Assistance

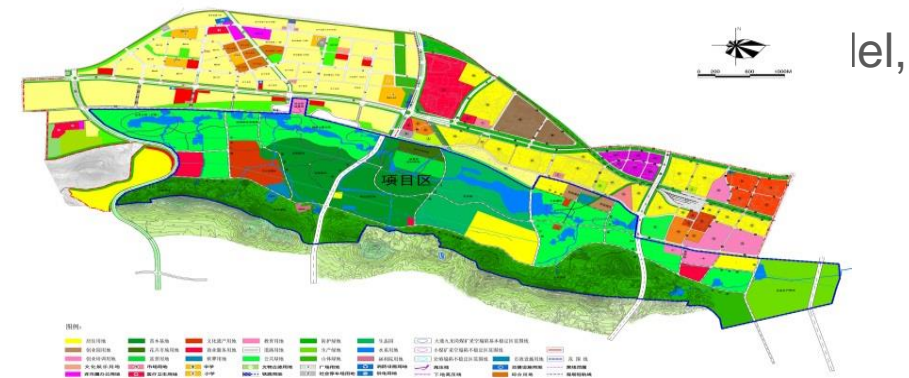
- ❑ Coal-mining subsidence mgt. strategy;
- ❑ Subsidence ecological & geological hazard monitoring
- ❑ Technical standards and guidelines

Integrated Approach:

Remediation with redevelopment

Cleanup with public services & livelihoods

Risk Mgmt. with site utilization



Huainan Mining Area Rehab Project - Redevelopment Investments Central Park of Huainan

WHAT: Leisure park, tree nurseries, flower market, bonsai market, and service centers



WHY: Public interest, financial sustainability, social impacts



WHICH: Selection criteria (compatibility, linkages, FS/market, revenue generating - (training center and museum dropped)



HOW: public company/admin, leasing, private sector and community participation

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PROCLEAN: Supported Activities



Foundational Analytics to build evidence base



TA & capacity-building to enable client countries to improve country and market readiness



Financing: components of projects, or provide grants to spur innovation



Mainstreaming environment and climate risk management

Cross-cutting themes: Inclusion, Climate, Gender, Private Sector, Jobs

Design and implementation of operations in environmental health, management of chemicals, AQM and CE



Chemicals and Waste Pillar

- Scaling up lending and TA
- Making economic case
- *Knowledge* - to strengthen the evidence base for chemicals and HW management and leveraging investments
- *Readiness* - to enhance the Bank's client countries' capacity and preparedness to identify, prioritize and manage chemicals and waste pollution and support preparation for investment operations and support their implementation
- *Financing* - provide grants and co-financing for rapid results and to leverage longer-term investment and policy lending operations
- *Mainstreaming chemicals and waste considerations practices in broader environmental risk management approaches*

Thank you!

