

# Natural Resources & AFRICAN ECONOMIC DEVELOPMENT Research & Trends

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Canadian Council on Africa's Conference  
Calgary, Alberta

*November 28-29 2006*

*African Development Bank*



# Presentation Outline

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- Definition
  - The Resources Curse Theory: Myth or Reality?
  - Africa: Key Issues in Oil, Gas & Mining
  - Sustainable Development & Natural Resources
  - The Role of Government
  - The African Development Bank
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# DEFINITION

Economists define natural resources as the « gifts of nature »

**Mineral resources are part of a country's stock of capital,  
« natural capital »**

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## *Two main groups*

- Renewable natural resources:  
land, water, forestry, wildlife, fisheries, and biodiversity*
- Non-renewable natural resources:  
fossil fuels like oil and gas  
metallic minerals like gold and platinum  
non-metallic minerals, such as gypsum and clay.*

## *Other Definitions*

- Non-depletable: natural resources such as wind, tidal and solar energy*
- Life-sustaining: natural resources such as air and water sustain life*
- Lootable (e.g. diamonds), controllable, concentrated in one location or diffuse, or sensitive to intensive foreign interests such as oil and gas, therefore prone to inviting conflict.*



# Minerals, oil and gas are depletable and non- renewable natural resources

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Only efficient exploitation  
produces positive results

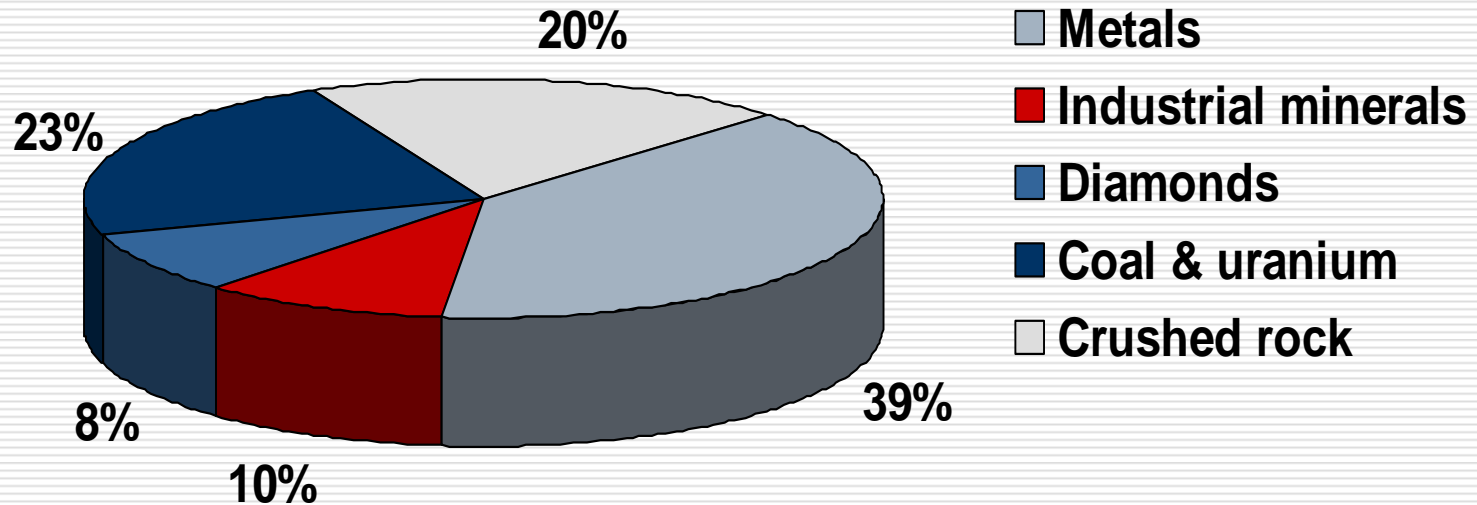
**A TRUE WINDOW OF  
OPPORTUNITY**



# VALUE OF WORLD MINING

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**YEAR 2004 TOTAL      ~ 465 billion USD**

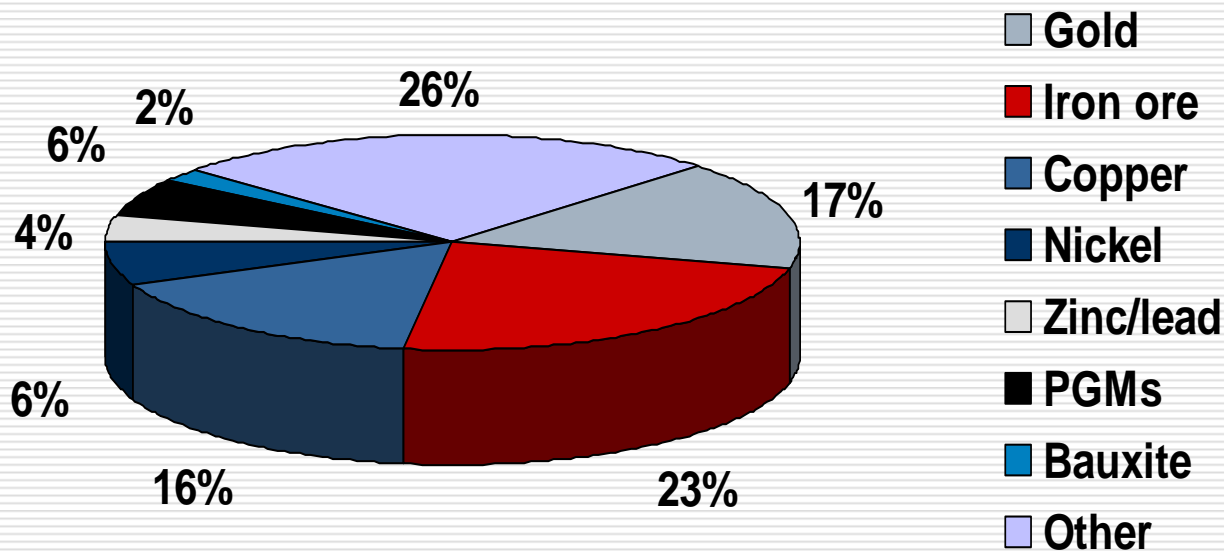


Source: Raw Materials Group, Stockholm 2006.

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# METALS VALUE AT MINE

YEAR 2004 TOTAL ~ 200 billion USD



Source: Raw Materials Group, Stockholm 2006.

## THE RESOURCE CURSE THEORY: MYTH OR REALITY?

# What is the 'Resource Curse'?

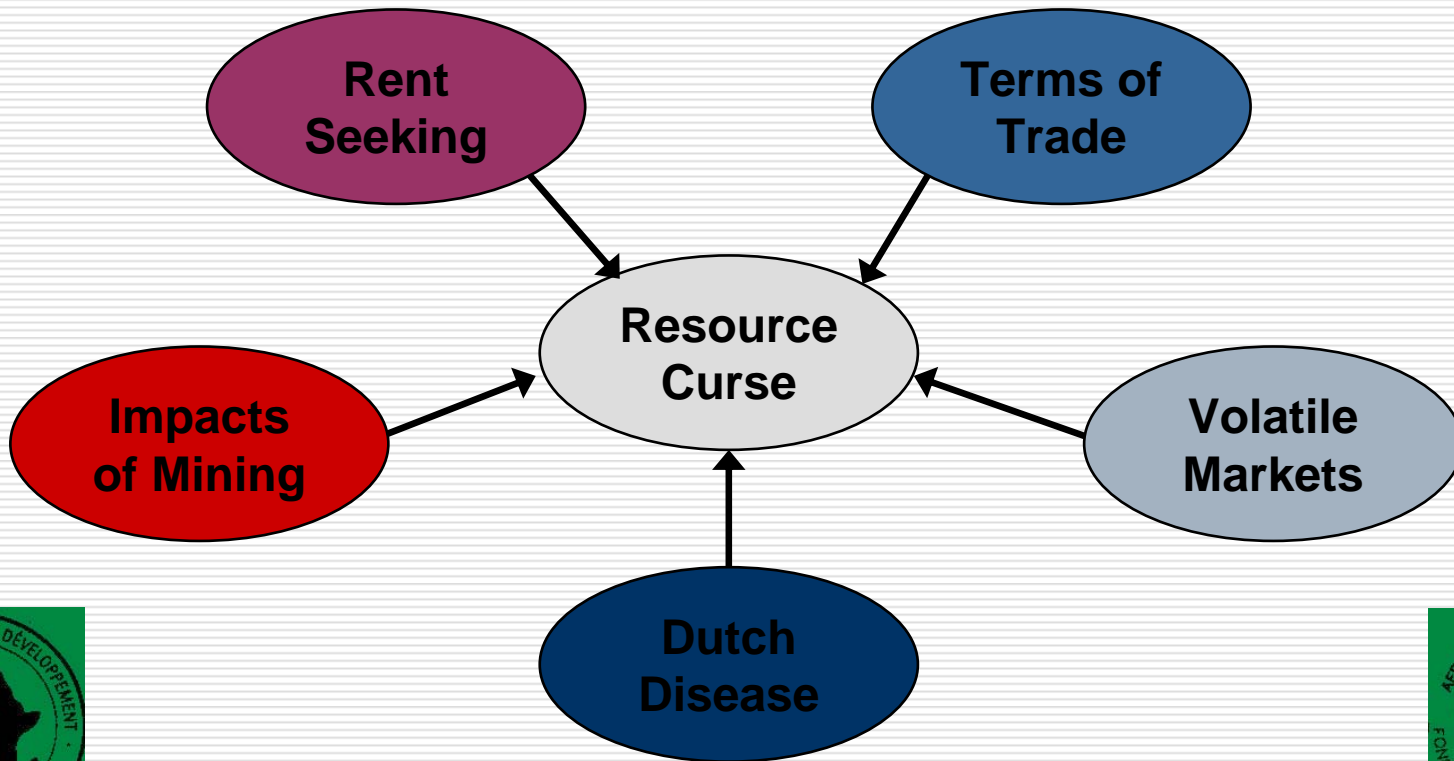
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- *The Resource Curse theory argues that mineral resources may inhibit economic development*
- *Studies have suggested that long term growth rates for countries that are mineral dependent are lower than expected*
- *In addition, it is claimed that mineral dependence is at least correlated with, and may be the cause of, poor social and environmental management and corrupt behaviour, leading to poverty at both the national and local level*



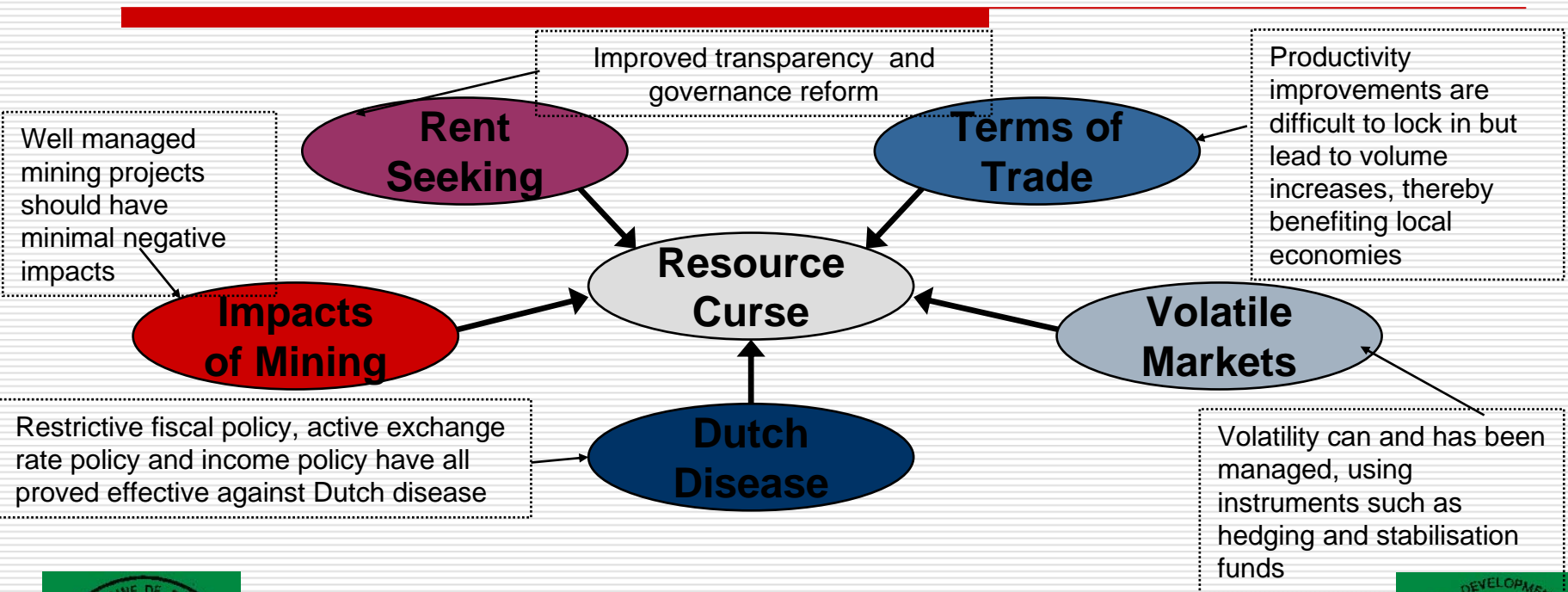
# THE RESOURCE CURSE THEORY: MYTH OR REALITY?

## Why would mineral resources inhibit socio-economic development?



# THE RESOURCE CURSE THEORY: MYTH OR REALITY?

All these challenges can be met



# THE RESOURCE CURSE THEORY: MYTH OR REALITY?

All these challenges can be met

## Resource Industry Linkages

1. UPSTREAM  
Value-addition  
Beneficiation  
Export of resource-based articles



2. SIDE STREAM  
Input industries:  
machinery, equipment,  
consumables, services,



3. Technological Linkages:  
"Nursery" for new tech clusters,  
adaptable to other sectors

# AFRICA: KEY ISSUES ON OIL, GAS & MINING

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## Africa's potential is significant

- 85% of world's reserves of PGM
- 76% of world's reserves of phosphate
- 97% of world's reserves of chromium
- 64% of world's reserves of manganese
- 46% of world's reserves of zircon
- 40% of world's reserves of titanium
- 38% of world's reserves of rutile
- 42% of world's reserves of diamonds
- 68% of world's reserves of cobalt
- 40% of world's reserves of gold, etc



# AFRICA: KEY ISSUES ON OIL, GAS & MINING

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Africa's mineral resources base is significant representing over 1/3 of the world's total

23 out of 53 African countries (over 1/2) export earnings mainly derived from oil, gas & mining activities

General failure to transform resource wealth into sustainable development – The Resource Curse

Financing approach is inadequate in view of development needs



# AFRICA: KEY ISSUES ON OIL, GAS & MINING

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Operational set-up grossly inadequate for sustainable development of the natural resources sector (infrastructure, institutions, markets, etc.)

Huge Technological and Financial Gaps

Issues of Governance

Marginal Socio-Economic Development Impact continues...



# AFRICA: KEY ISSUES ON OIL, GAS & MINING

*more on where we are!*

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1. Resource-based (primary commodities) exporters of minerals such as gold, coal, PGMs, bauxite, copper, diamonds, phosphate, etc.
2. Exporter of non-processed agricultural commodities (coffee, coton, wood, meat, etc.)
3. Increasing manufactured exports, but off a very low base
4. Poor logistics infrastructures



# AFRICA: KEY ISSUES ON OIL, GAS & MINING

*With further obstacles...*

*the WTO/Doha struggle continues...*

**Tariffs:**

**> value-added, > duties**

**NTBs: eg "REACH",  
enviro, health, labour, etc.**



# Sustainable Development & Natural Resources

## WHAT ARE WE LOOKING FOR?

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### Development that brings about

*Aggregate advances in quality of life that extend indefinitely beyond the life of a given project, generation, etc.*

*Knowing that*

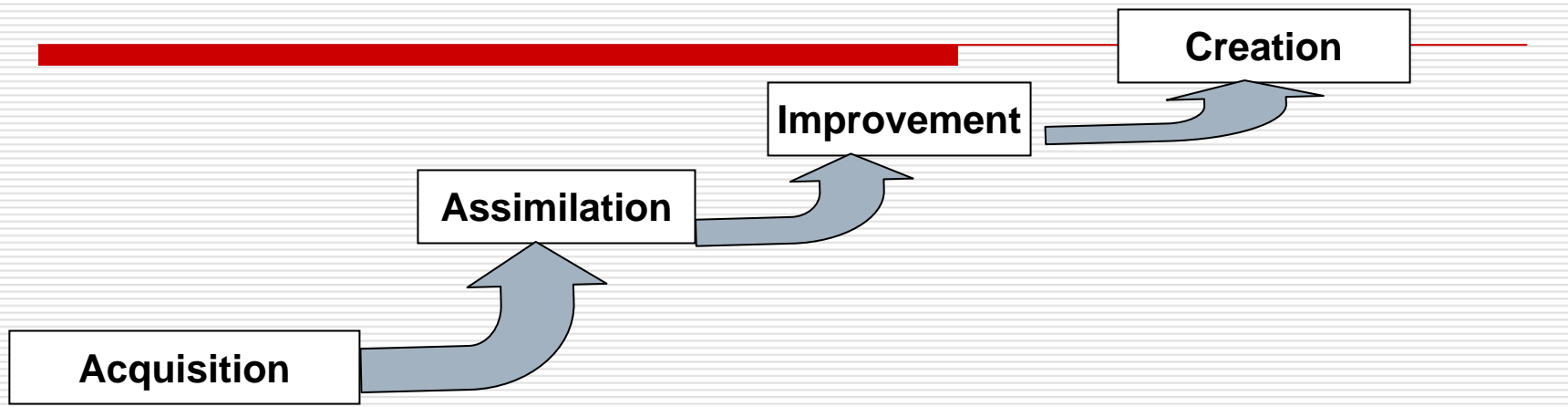
### Sustainable development can

*Start at any level of social development*



# Sustainable Development & Natural Resources

## TRADITIONAL INNOVATION SYSTEM DEVELOPMENT MODELS



S&T & R&D  
Stages

*Imitation*

*Internalization*

*Generating*

Development  
Stages

Developing  
Country

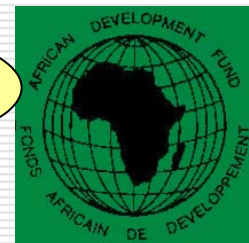
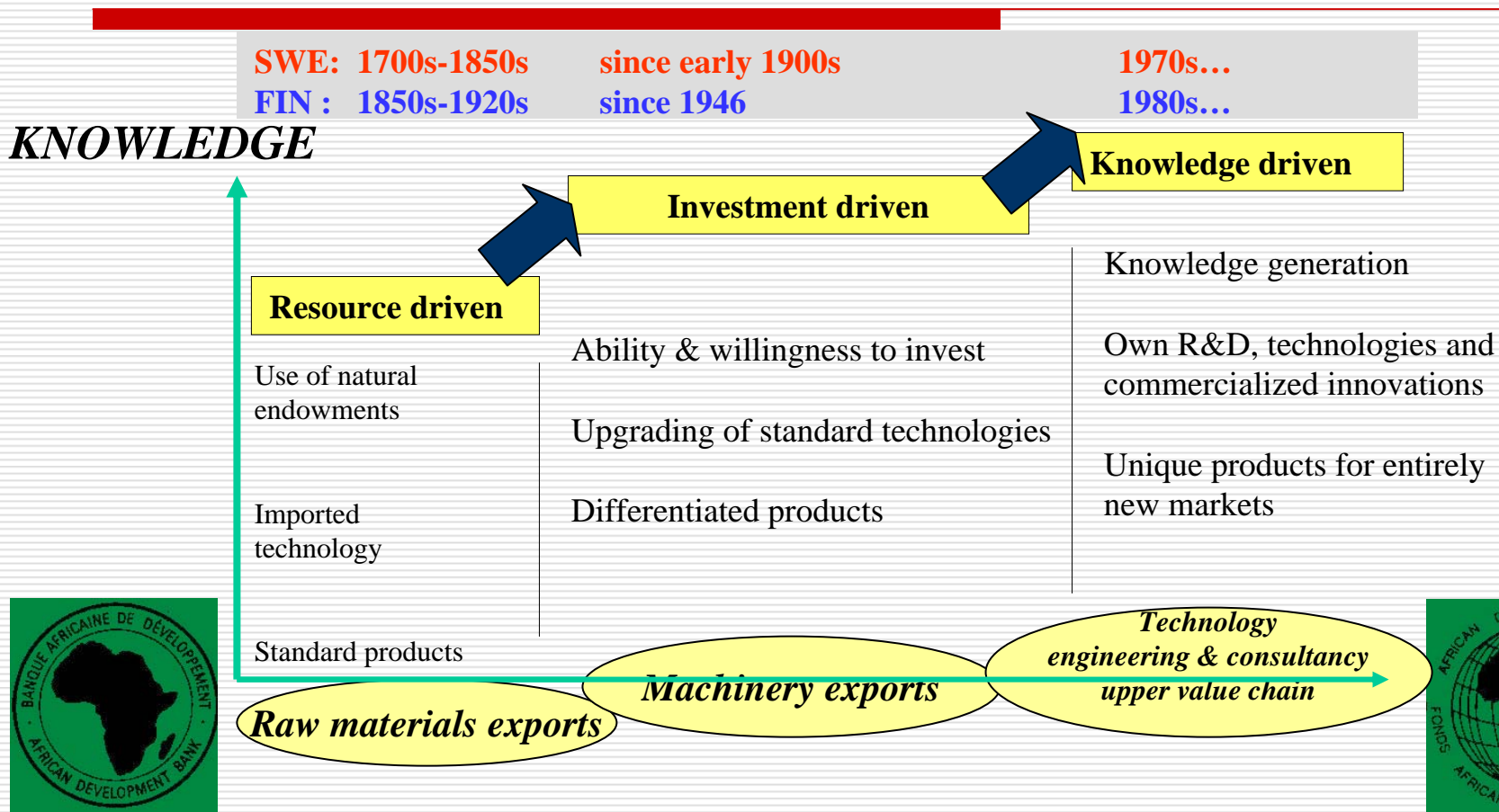
Newly-Industrializing  
Country

Advanced  
Country



# Sustainable Development & Natural Resources

Resource based economy made sustainable:  
Swedish and Finnish development paths



# Sustainable Development & Natural Resources

## **Critical Factors**

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- Time
  - Critical mass
  - Entrepreneurs and dedicated people
  - Demanding customers (local & International)
  - Flexible organisation and management
  - Rivalry and co-operation
  - Continuous knowledge development
  - National Pride
  - Political & economic stability
  - Provision of logistics & infrastructure
  - Ability to attract (& retain) needed skills
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# Natural Resources as an Engine of Growth

The Core issue to be addressed in this conference!

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- ❑ Co-operation and networking amongst cluster stakeholders
  - ❑ How can governments, International development agencies and business co-operate to drive growth and foster sustainable of natural resources in Africa?
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# The Role of Government

*A few success stories like Botswana*

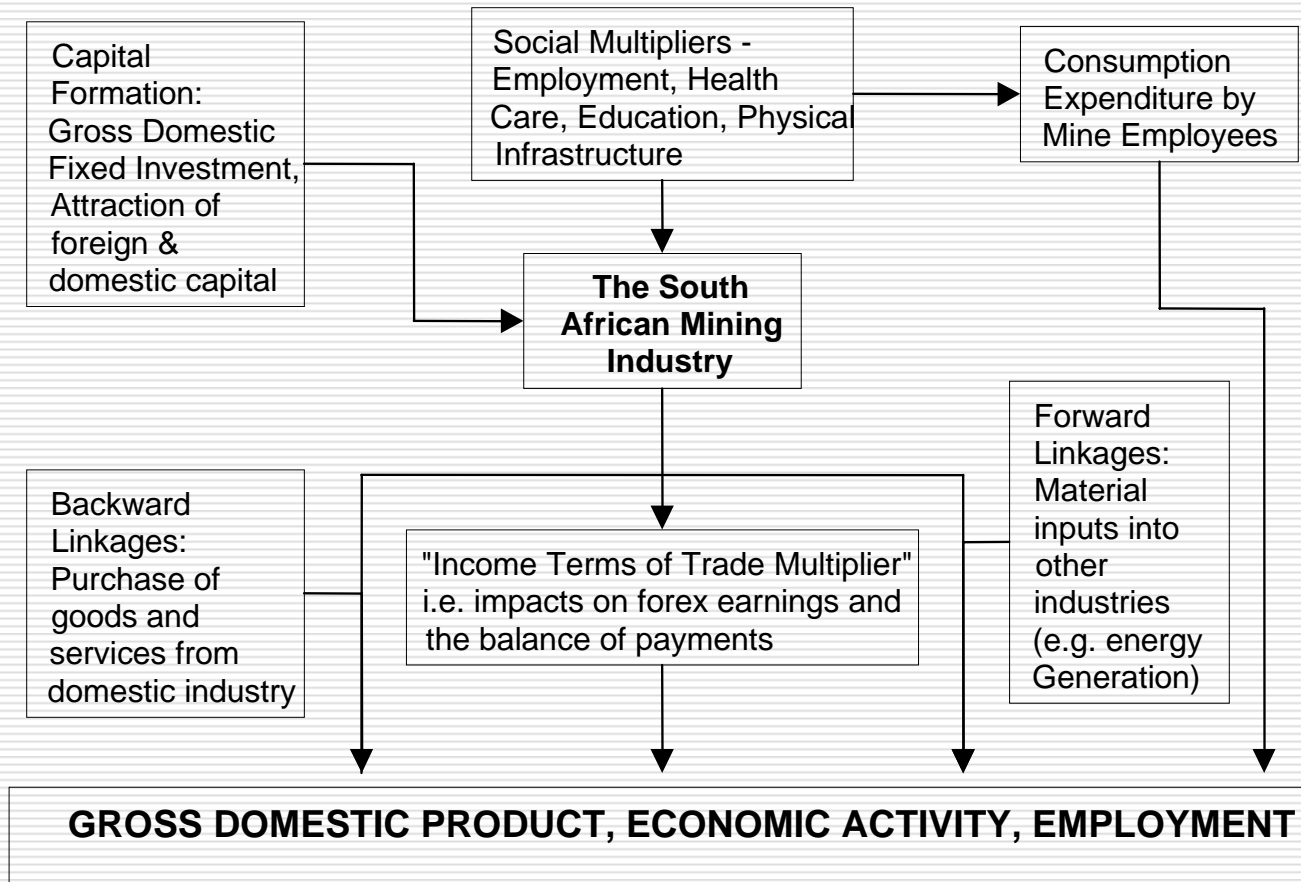
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Botswana has seen three decades of minerals-driven real per capita income growth of more than 7 per cent per annum on average

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# The Role of Government

*A few success stories like South Africa*



# The Role of Government

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The strategy looks at

- **Proactive Government Actions** for:
    - broadening the economic base
    - developing not only direct “upstream” and “downstream” linkages between mining and other sectors
    - developing various indirect activities, particularly “sidestream” supply and support activities
    - developing induced contributions to maximize development and social outcomes
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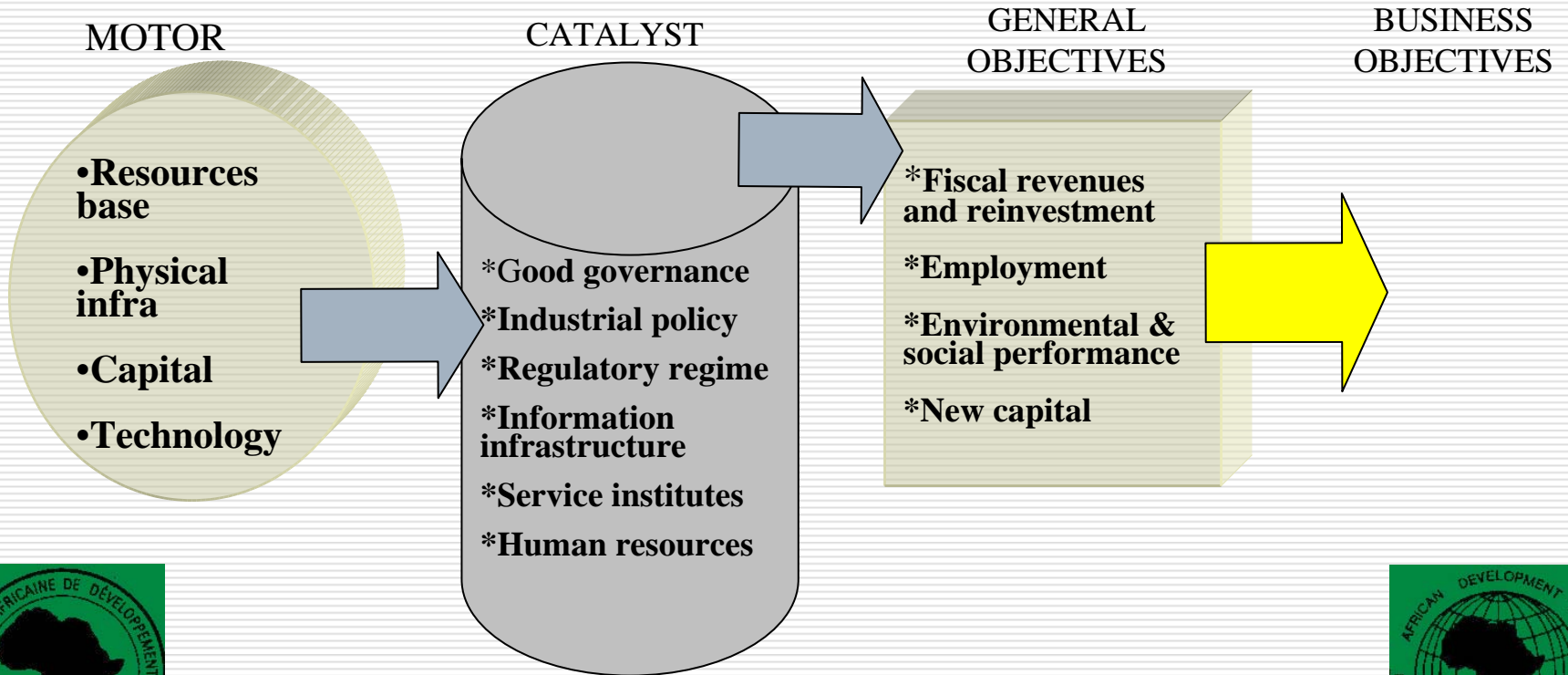
# 3 important categories of policies by Government

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- ❑ **An Effective Taxation Policy for Natural Resources Development**
  - ❑ **Policy to encourage a Change in Consumption patterns and inter-sectoral shifts**
  - ❑ **Policy that emphasizes adjustment in the spending pattern over time**
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# The Role of Government

## A THREE INTEGRAL BLOCK PROCESS



# The Role of Government

*Promote efficient direct support to the sector...*

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- Understand what sustainable development means
- Improve management of natural resources
- Volunteer to undertake reforms
- Encourage investment in the sector
- Exploit natural resources for the benefit of present & future generations
- Use wealth generated to gradually fund economic diversification away from the natural resources sector
- Give priority to industrial development
- Adopt strategic partnership building approach that benefits the community



# Natural Resources

A FAST GROWING SECTOR IN THE

## AFRICAN DEVELOPMENT BANK

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- ADB is gradually gaining acceptance of its lead role on issues of economic development as related to Africa
  - ADB has recently redefined key most sectors of interventions: infrastructure, mining, energy, environment and women empowerment



# Natural Resources

A FAST GROWING SECTOR IN THE

## AFRICAN DEVELOPMENT BANK

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Today, the Bank is keen to help resolve one of the most striking paradoxes of the African continent where countries with vast mineral wealth are among the poorest in the world



# Natural Resources

A FAST GROWING SECTOR IN THE

## AFRICAN DEVELOPMENT BANK

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The possession of abundant natural resources remains a major asset for the African continent and a viable channel to eradicate poverty



# Natural Resources

A FAST GROWING SECTOR IN THE

## AFRICAN DEVELOPMENT BANK

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Today, the Bank's emphasis is on building a renewed global partnership between Africa and the international community, based on a shared purpose, agreed responsibilities, and mutual accountability.



# Natural Resources & AFRICAN ECONOMIC DEVELOPMENT Research & Trends

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*Many Thanks,*

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ADB Mineral Specialist

