

## ICMM's Resource Endowment initiative (REI): Issues and Implications







Extractive industries, fiscal systems and human welfare: national policy and local development in Peru, Chile and Bolivia

University of Manchester/ICMM seminar October 24th 2008

Alan Roe
Oxford Policy Management

## Mineral Wealth CAN be a positive force for Socio-Economic Development - BUT !!!!!

Oxford Policy Management

- Some 50 countries with significant dependence on mineral exports\* e.g.: South Africa, Australia, Democratic Republic of Congo, Peru, Philippines, Ghana, Chile, ...
- \$ billions of extra revenues for mineral-rich countries from soaring commodity prices



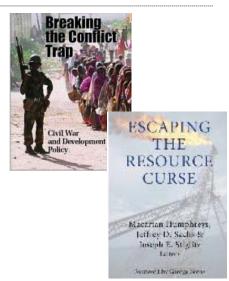
#### Resource blessing?

The REI case studies show that Mineral exploitation CAN drive growth, poverty reduction & help achieve major socio-economic gains BUT – against this



#### Resource curse?

- Conflict (read Ross, Collier, Humphreys etc)
- Poverty
- Economic stagnation
- Corruption
- Political instability



<sup>\*</sup> Ratio of exports of metals and ores to total exports > 20% over time. Source: ICMM Resource Endowment

<sup>&</sup>quot;Analytical Framework" p25; Source for graph data: The Economist

## THREE Main Topics



- 1. The Objectives and Evolution of the Resource Endowment Initiative (REI)
- 2. Some Basic Initial Findings Generally including for Chile/Peru
- 3. Specific Issues and Challenges in Peru

# TOPIC ONE - REI Objectives and Evolution



- The Impact of Natural Resource Extraction on Socio-Economic performance has generated lively debate
- BUT this debate (in poorer countries) is seriously bogged down in the proposition that natural resource endowments are almost inevitably a 'curse'.
- There is much historical (Australia, Canada, RSA) and recent evidence (Chile, Ghana) that this is not necessarily the case.
- REI set out initially merely to see what factors differentiate the more successful from the less successful country cases?
- But it also sought to:
  - Move forward Policy and Academic debate
  - Suggest Practical lessons for companies, governments and other stakeholders

#### Limitations of Resource Curse Econometrics

Oxford Policy

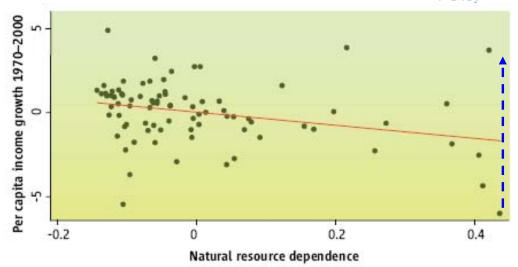
Source: C. N. Brunnschweiler and E. H. Bulte in *Science*, May 2008)

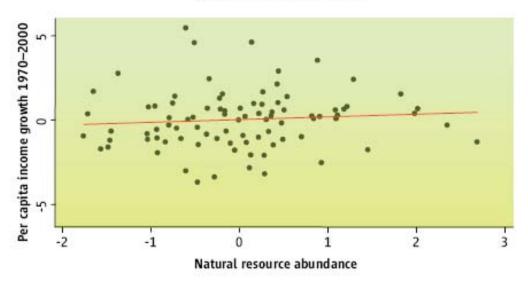
Regression fits of natural resources and economic growth 1970–2000.

(Top) Natural resource dependence in 1970;

(Bottom) World Bank total natural wealth data (log values) measured in USD per capita in 1994.

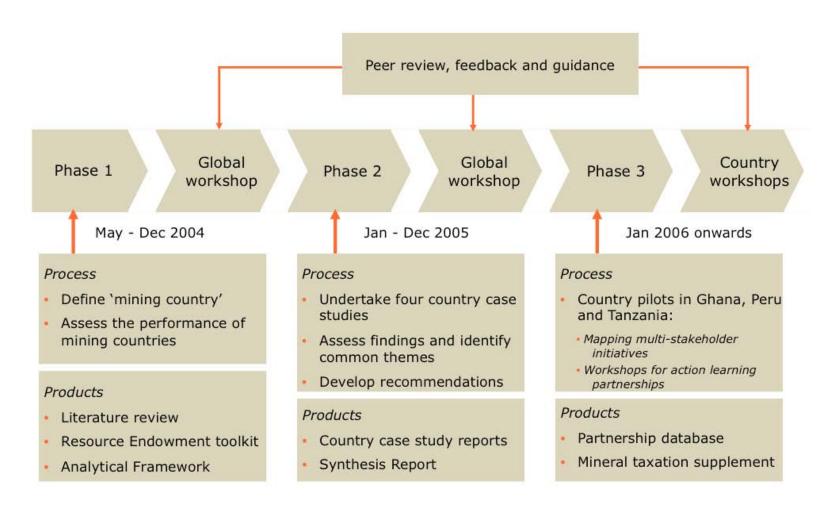
Note also the time-series periods encompass periods of fundamentally different political economy in most countries including Chile and Peru





## REI Work Program 2004 - 2008





### Phase 1: The Analytical Framework



- Seeks to capture how differences in institutions and governance\* may influence socioeconomic outcomes and how these relate to mining activities.
- Looks to identify common features (economic, institutional ...) across 'well performing' mining countries which may have helped to foster sustainable private sector activities
- Explores proposition that CSR or multilateral initiatives are important and necessary. But if institutions and governance are weak these are not sufficient for positive socioeconomic outcomes to be forthcoming

<sup>\*</sup> Governance relates to the capacity of a country's formal and informal institutions to design, implement and enforce policies that benefit the wider public and improve private sector effectiveness

## Phase 2: Country Case Studies



TWO detailed studies (Peru and Ghana) and 2 comparator studies (Chile and Tanzania)

Some fundamental differences:

- Peru middle income country (GDP-PPP>\$4,500) with medium HDI rank of 85/177 countries
- Chile more advanced middle income country (GDP- PPP around \$10,000) and "high" HDI rank 43/177 countries
- Ghana poor country (GDP-PPP<\$1,500) and low HDI rank 131/177 countries also agrarian dependent
- Tanzania even poorer (GDP PPP <\$1200) and low HDI rank 162/177 countries large agrarian dependence

Together these four countries provide a wide spectrum against which to examine the impacts and problems of mining

# Phase 3: Developing Improved Partnerships



- The Phase 2 Case Studies indicated that much improved Collaborative Action is needed in all countries to capture the full potential socio-economic benefits of mineral wealth
- This can benefit from new ideas about partnership approaches between companies, governments, social representatives (including NGO's) and donor agencies
- Individual partners have specific responsibilities, comparative advantages, and contributions to make – but collaboration is fundamental
- It was suggested that these principles apply to each of SIX distinct clusters of recommendations

# Five Partnership Areas Identified for Detailed Attention



#### These Six are:

- Enhanced Revenue Management
- Local Economic including Regional Development Planning
- Mining and Poverty Reduction
- Socio-Economic Development including Artisanal Mining
  - Local Procurement
- Dispute Resolution and Communication

The clusters in the Phase 2 Synthesis Report provide a preliminary identification of possible (new or extended) actions and responsibilities for (i) companies, (ii) host governments, and (iii) development organisations and the voluntary sector

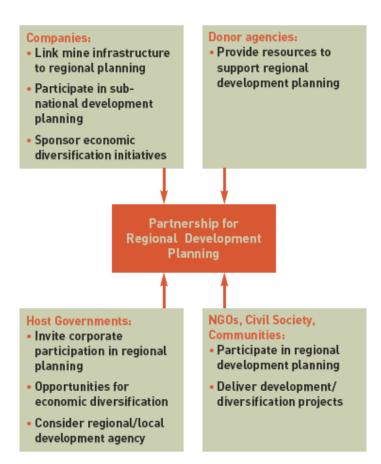
Of course, the emphasis will differ significantly by country.

## Phase 3: Ghana Example



## Example of recommendations: Local and regional planning – Phase 2 CONCEPTUAL

Figure 3: Mining and Economic Development – Regional Development Planning



# From broad recommendations to REALITY

The REI Phase III Stakeholder Workshop in Accra – February 2008

1.recognised that the new District Development Fund is a sound example of harmonisation with

- Government committed to a systematic District Assembly review process and new budget support for districts both for capacity building and projects
- Donors committed to a far more harmonised use of their large donor funds at local level (led by CIDA) to support government efforts

2.agreed that there was no obvious practical impediment to the large local socio-economic spending of mining companies being embraced as a **third** element in this partnership in the mining-affected

districts of Ghana

3.committed publicly to support company, Ministry of Finance and donor efforts to establish this enhanced partnership

**NB** This was one of FIVE priority partnership actions agreed at the Workshop (from a much longer list that the REI research had identified).

#### **TOPIC TWO - Selected Results**



#### Phase 1

This Phase Identified 33 mining countries and their relative successes over the past 20-30 years in terms of:

- (a) economic growth, and
- (b) various social/poverty indicators
- No unambiguous successes, huge variability across mining countries, but also no basis for assuming inevitability of negative outcomes ('resource curse')
- Good economic management and governance can (partly) 'explain' differences in outcomes.
- What are the conditions for (i) good economic management and (ii) good governance arrangements? What do (i) and (ii) mean in practice?

### **Country Rankings on Different Criteria**



		All 8 growth indicators g	iven equal	All Regional compariso	10	All Income-group compar	,0		
All 12 Indicators given equal weight		weight		poverty) given equal weight		poverty) given equal weight		Social Indicators given equal weight	
COUNTRY Score	12	COUNTRY Score	8	COUNTRY Score	6	COUNTRY Score	6	COUNTRY Score	4
Chile	12	Botswana ****	8	Chile	6	Chile	6	Chile	4
Botswana ****	9	Chile	8	Ghana	6	Malaysia	6	Ghana	4
Tunisia	9	Mozambique	8	Mexico	6	Botswana ****	4	Malaysia	4
Ghana	8	Tunisia	6	Namibia	6	Mozambique	4	Mexico	4
Malaysia	8	Colombia	4	Tunisia	6	Tunisia	3	Colombia	3
Mexico	8	Ghana	4	Botswana ****	5	Colombia	2	Tunisia	3
Mozambique	8	Guinea	4	Colombia	5	Ghana	2	Guinea	2
Colombia	7	Guyana	4	Guinea	5	Jamaica	2	Jamaica	2
Guinea	6	Jamaica	4	Mali	5	Mexico	2	Jordan	2
Jamaica	6	Malaysia	4	Morocco	5	Guinea	1	Mali	2
Mali	6	Mali	4	Senegal	5	Jordan	1	Morocco	2
Morocco	6	Mauritania	4	South Africa	5	Mali	1	Namibia	2
Namibia	6	Mexico	4	Guyana	4	Morocco	1	Peru	2
Senegal	6	Morocco	4	Jamaica	4	Peru	1	Senegal	2
South Africa	5	Namibia	4	Mauritania	4	Senegal	1	Suriname	2
Guyana	4	Senegal	4	Mozambique	4	Suriname	1	Togo	2
Mauritania	4	South Africa	4	Tanzania	4	Bolivia	0	Botswana ****	1
Tanzania	4	Tanzania	4	Gabon	3	Central African Republic	0	Gabon	1
Gabon	3	Gabon	2	Malaysia	2	Congo, Dem. Rep.	0	South Africa	1
Jordan	2	Zimbabwe	1	Togo	2	Gabon	0	Zimbabwe	1
Peru	2	Bolivia	0	Zimbabwe	2	Guyana	0	Bolivia	0
Suriname	2	Central African Republic	0	Jordan	1	Liberia	0	Central African Republic	0
Togo	2	Congo, Dem. Rep.	0	Peru	1	Mauritania	0	Congo, Dem. Rep.	0
Zimbabwe	2	Jordan	0	Suriname	1	Namibia	0	Guyana	0
Bolivia	0	Liberia	0	Bolivia	0	Niger	0	Liberia	0
Central African Republic	0	Niger	0	Central African Republic	0	Papua New Guinea	0	Mauritania	0
Congo, Dem. Rep.	0	Papua New Guinea	0	Congo, Dem. Rep.	0	Philippines	0	Mozambique	0
Liberia	0	Peru	0	Liberia	0	Sierra Leone	0	Niger	0
Niger	0	Philippines	0	Niger	0	South Africa	0	Papua New Guinea	0
Papua New Guinea	0	Sierra Leone	0	Papua New Guinea	0	Tanzania	0	Philippines	0
Philippines	0	Suriname	0	Philippines	0	Togo	0	Sierra Leone	0
Sierra Leone	0	Togo	0	Sierra Leone	0	Zambia	0	Tanzania	0
Zambia	0	Zambia	0	Zambia	0	Zimbabwe	0	Zambia	0

# Socio-economic performance, 1950-2003



Bette	er Performers	Weaker Performers			
Better Performers	Generally Better Performers	Weaker Performers with relatively better performance in a few economic (E) and social indicators (S)	Clearly Poor Performers		
Chile Botswana Malaysia Tunisia Ghana Mexico	Colombia Guinea Jamaica Mali Morocco Mozambique Namibia Senegal	South Africa (E) Tanzania (E) Guyana (E) Mauritania (E) Gabon (E + S) Peru (S) Suriname (S) Togo (S) Jordan (S) Zimbabwe	Bolivia Central African Republic DR Congo Liberia Niger PNG Philippines Sierra Leone Zambia		

### Phase 1 - The REI Toolkit



- Phase 1 also developed a Toolkit methodology for systematically capturing the socioeconomic impacts of mining projects on host communities and countries at the local, regional and national level
- It is built on the foundations of the more discursive Analytical Framework which guides all of Phase 1
- It is designed to enable mining companies or other stakeholders to capture socioeconomic impacts beyond the narrow project impact assessment
- It combines a macro (national) dimension with a micro (local and community dimension.
- Combines both qualitative and quantitative data collection
- It includes a more detailed check list of issues on "governance" beyond the normal sub-set of quantifiable measures

## **Key Stages of the Toolkit**



#### Definition of the country context

- 1. Profiling the mining activity(ies) to be assessed
- Documenting country economic and social performance/ outcomes over a relevant period in a number of economic and social dimensions
- Assess the project/micro impacts of the mining activity(ies)
- 4. Assess the proximate (or possibly more immediate) causes of outcomes e.g. improved macro performance and better governance
- Assess the broader (macro or governance) causes of performance/outcomes

Toolkit application should involve 50 – 80 person days of work for a 'new' country

#### **Selected Results – Phase 2**



TWO detailed studies were undertaken (Peru and Ghana) and 2 comparator studies (Chile and Tanzania)

#### **Country Similarities**

- Severe economic instabilities macro instability and structural distortions in 1970s and/or 1980s
- Three (Chile, Peru, Ghana) have emerged from periods of autocratic (often military) government only in the past 15-20 years. (Tanzania's autocracy was arguably more benign)
- Peru and Ghana were almost 'failed states'
- Visibly strong resurgence of commercial mining in the past 10-20 years, but also longer mining history
- The countries provide a set of cases to assess how mining inter-relates with general economic and political reform

#### **Levels of Analysis - Framework**



- Quantitative analysis of contributions to
  - (a) Economic Growth (total and non-mineral GDP growth, exports, FDI, employment, public revenue) and
  - (b) Social Development/poverty reduction (HDI, MDGs)
  - at (i) the national level, (ii) the regional level, and (iii) the local mine level ⇒ including in-depth review of impact of one large mine (Peru: Compania Minera Antamina; Chile: Escondida)
- Assess (the more standard) possible linkages between mining investments and (a) and (b) in terms of both economic policies and governance ⇒ resource curse arguments
- Examine (less standard) linkages/causes involving more complex dimensions of the ⇒ Governance Taxonomy

# Common Features Mineral Benefits - An Inverted Pyramid



- 1. FDI (up to 80% of all FDI) Mining dominates the recent flows in the two poorer economies where FDI pre-reform was negligible(75%+ of total) but was also absolutely large in Chile and Peru
- 2. Exports (40% +) Mining again rapidly rose to dominate totals in both Ghana and Tanzania (more than 40% of total). Large contribution in the other cases
- 3. Government Revenues (up to 20%)— Mining as one of the largest tax paying sectors in most cases (10-17% of tax revenue in Ghana and already 3.5% in Tanzania)
- 4. GDP (circa 3-5%) mining as a capital-intensive industry is typically only 3-5% of the national total
- 5. Employment (< 2%)— mining is typically providing directly only 1-2% of total employment

NOTE – Big numbers at the NATIONAL Level. But biggest environmental, displacement and other disruptions at LOCAL/COMMUNITY Level with relatively few jobs to provide mitigation.

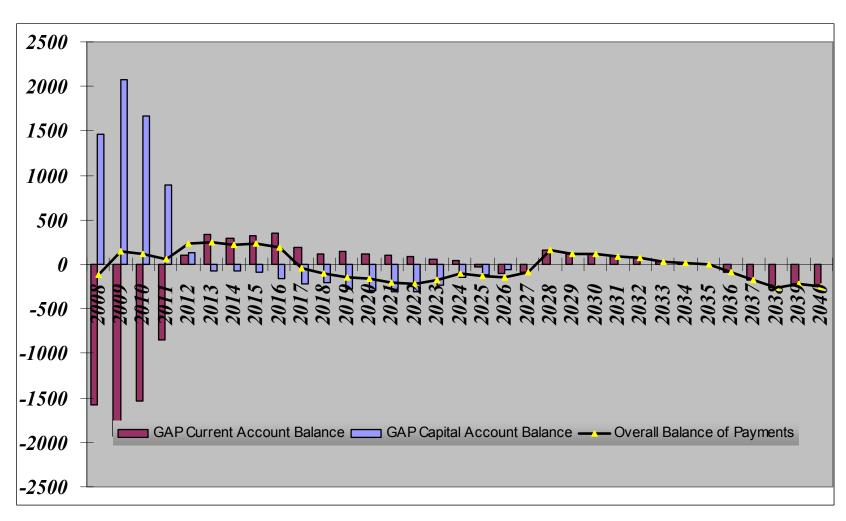
# (a) Macroeconomic outcomes: Higher and more stable GDP growth



- The substantial recovery in mining investment has contributed to improved growth performance in all four countries
- IF the counterfactual is the perpetuation of the prereform economic performance, then the post-mining period demonstrates an improved record in all cases
- This most evident is Ghana (since 1987) and Tanzania (since 1997), but a similar connection is found in Chile and Peru – see graphics that follow
- Non-mineral GDP growth has been positive in all four cases. It has been higher than that of regional comparators, except in the case of Peru.

## But Note the Inherent Problems of Assessing Macro Impacts – example of the B of P

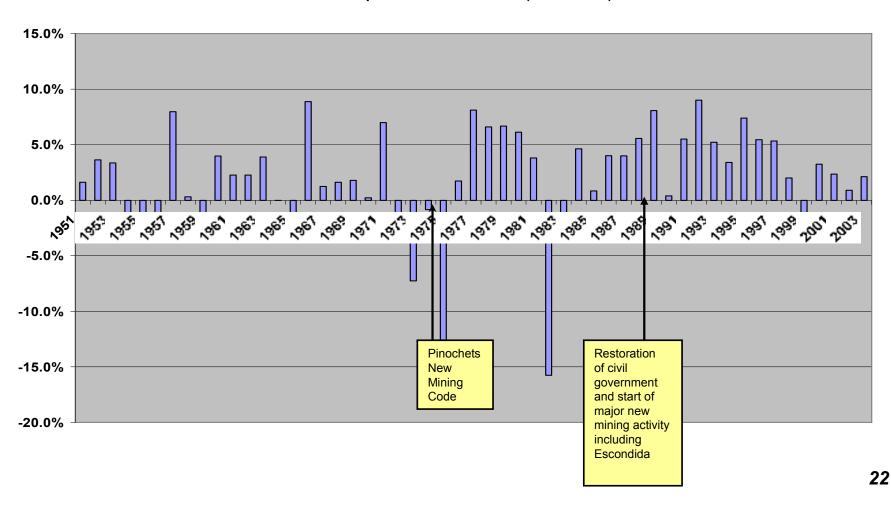




# Chile – per capita growth 1950-2003 (ppp \$ 1990) – Source is Angus Maddison, University of Groningen



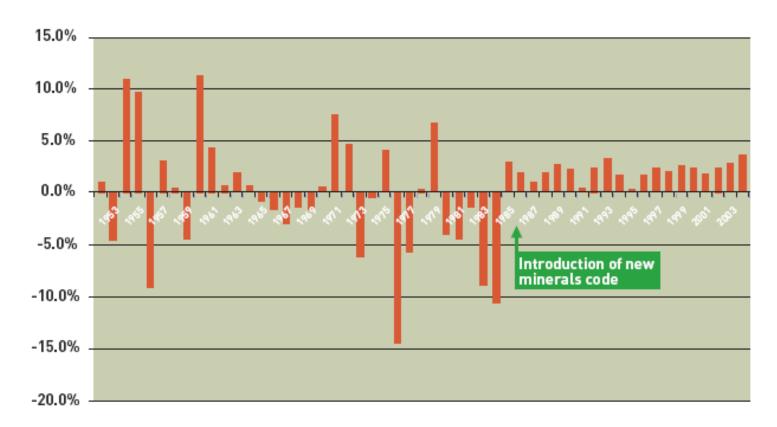
#### Chile: Per Capita Growth 1950-2003 (PPP \$ 1990)



### Mineral Legislation: Ghana



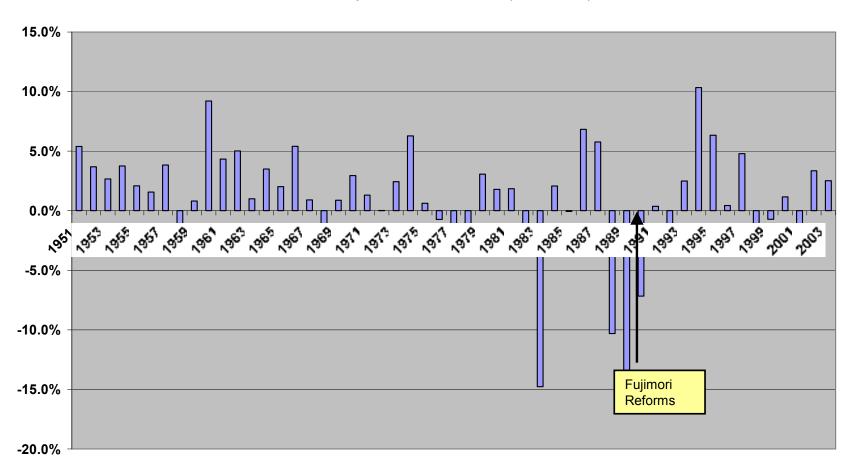
Figure 1: Ghana Per Capita Growth Rates: 1950 - 2003 (PPP 1990\$)



# Peru – per capita growth 1950-2003 (ppp \$ 1990)



Peru: Per Capita Growth 1950-2003 (PPP \$ 1990)



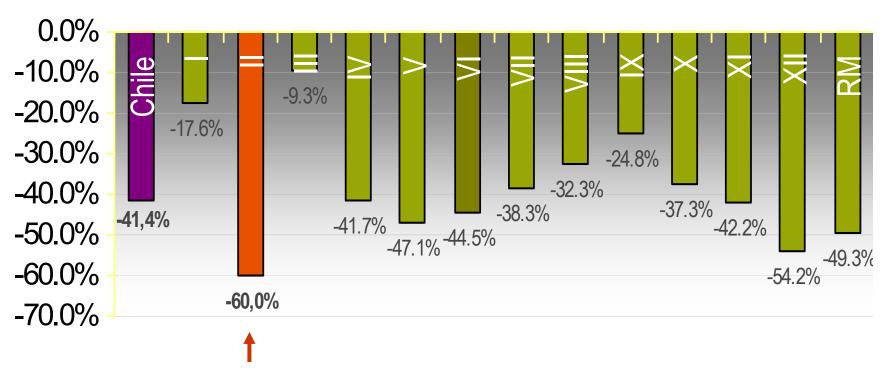
# (b) Social Development/Poverty Reduction: Outcome varies by country



- Reduction in poverty levels have been significant at both the national and the local level in Chile, and also in Ghana.
- In Chile the proportion of people living below the poverty line has decreased from nearly 40% in 1990 to about 20% in 2002. Improvements were largely driven by increasing employment opportunities.
- In contrast in Peru the poverty situation appears not to have changed significantly – some very recent improvements. More than half the population continues to live in poverty and nearly a quarter lives in extreme poverty
- Tanzania based on shorter period seems more like Peru than Ghana.
   But remember our earlier mine life cycle diagram.
- Conclusion: A mining resurgence can be associated with significant poverty reduction. But this is by no means an automatic outcome.

# Chile changes in poverty incidence by region, 1990-2003





Region II where Escondida is located

## **Key Success Factors seem to be Multi- Facetted**

Oxford

Oxford Policy Management

REI results show that the prospects of Mineral Wealth becoming a POSITIVE depend on all of <a href="mailto:these">these</a> but can be further enhanced by <a href="mailto:these">these</a>

- Already well known factors
- Focus of ICMM findings

- Sound national macroeconomic management
- Some revenue transparency
- Mechanisms to avoid mineral revenues funding conflict / violent disputes over their distribution
- Standards of national governance (to a degree)
- Responsible behaviour by companies
- Implementation of key international initiatives: EITI, Voluntary Principles, Kimberley Process, etc

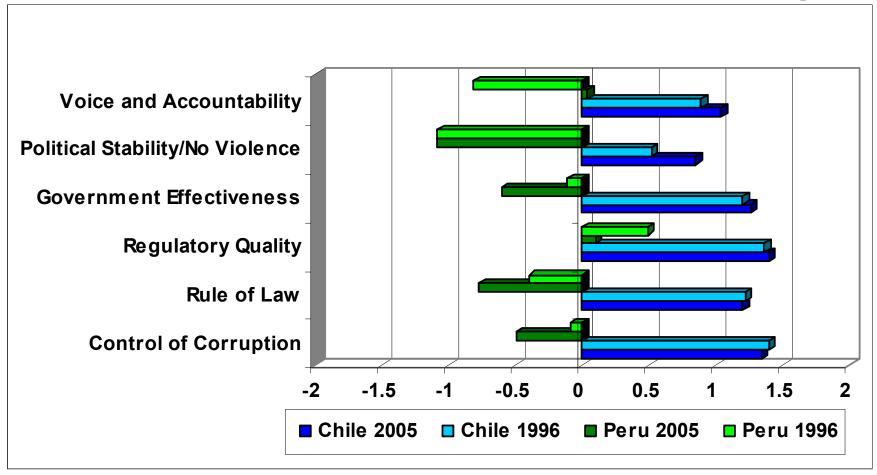
- Standards of governance at regional and local levels
- Nature/quality of the collaboration and partnerships between governments (at different levels), firms, donors & NGOs to tackle SIX key challenge areas, including:
  - Dispute resolution
  - Social development
  - Boosting Local inputs
  - Regional planning
  - Poverty reduction
  - Revenue management

Note – this emphasises the inherently LOCAL nature of mining and the governance needed to support it more effectively

These **SIX** areas were identified from the case studies for more detailed study in the REI (Phase III) pilots in Ghana, Peru and Tanzania

# Governance as conventionally measured provides only a partial explanation





World Bank Governance Indicators Key: a score of -2.5 is the worst, with a score of +2.5 being the best

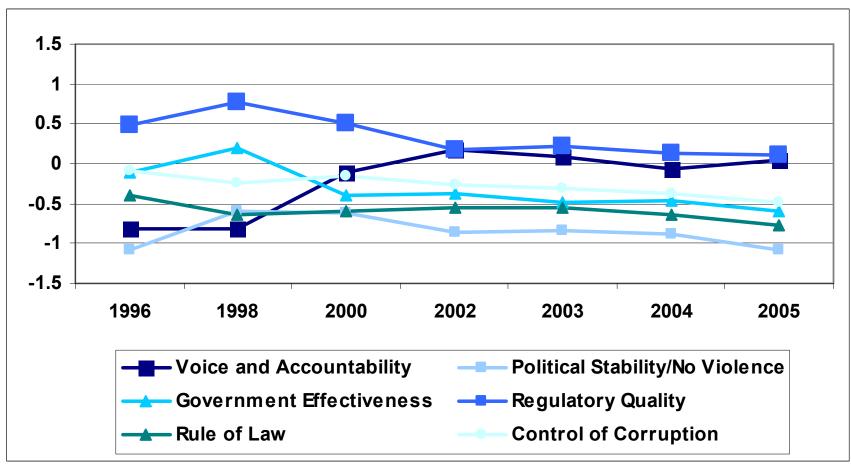
### More Generally...



- Governance improvements in 3 of the 4 countries have been quite limited relative to the benchmarks of good practice
- Those minimal improvements can even leave in place the high levels of authoritarianism seen in both Ghana (Flt Lt Rawlings in 1983) and Peru (Fujimori in the 1990s) - possibly necessary to drag both of these countries back from the brink of their economic meltdowns.
- Chile is now an outlier in this regard but may not have been when its mining and economic recovery began.
- But the clear economic and social gains we see in some of the countries, suggest that even relatively minor (threshold) improvements in governance may yield significant results in terms of exploiting more fully the potential benefits of mineral revenues.
- Seriously improved governance even in the success cases -emerged as an evolutionary process that extended over a lengthy period of time - once some minimal political and economic stability was established: Ghana and Chile again
- Generalizing the previous point, it is highly unlikely that failed or even weak states can expect to see "good" governance happen or be imposed overnight particularly if there are no economic improvements to strengthen the arms of the reformers.
- Improving governance is a difficult and complex political process for which it is unlikely that one generic blueprint exists.

## Peru - Governance: Limited time series, threshold improvements in the 1990s, trade-offs since 2000





# TOPIC 3 Selected Issues and Challenges in Peru



#### **Recent Developments**

- The Peruvian mining industry has participated significantly in the global minerals boom.
- Since the opening-up in the early 1990s, the country has become the world's largest producer of silver and is very significant also in copper, zinc and gold
- There are nearly 1,000 mining firms, of which 160 are categorized as large or medium sized entities.
- Nine out of 18 ICMM member companies are present
- But the industry as such is not cohesive
- The recent surge of mineral investment, coupled with the boom in mineral prices, has provided a large boost to Peru's economy
- Growth was over 10% percent in the first half of 2008, on the back of growth of 9% in 2007: already its fastest pace for over a decade.

# Partnership Issues – Revenue Management



- Revenue management is a key issue at the national and sub-national level
- It links closely the decentralisation process. Peru already has an unusually high level of mineral revenue sharing (c.f. Chile and Tanzania)
- there have been dramatic increases in 'Canon Minero' revenues and transfers in recent years (tenfold since 2004) but this has had questionably "on-the-ground" benefits
- The growing level of responsibilities of sub-national governments entities has not been matched by an equal increase in either financial or human resources. And general tax collection funds are poorly targeted to expenditure programmes
- Additionally pressures on sub-national governments has led to much waste such items as bull
  rings and over-engineered government office buildings not nearly enough emphasis on the
  efficient use of available funds.
- Some initiatives have started to focus on improving planning and public expenditure management
  of the Canon Minero and other public funding sources at the regional and local level. Typically
  these initiatives are piloted in selected regions or municipalities with much variability
- There is a big disconnect between the monitoring of the Canon Minero and the monitoring total natural resource revenue as proposed by the EITI.
- There is a clear common interest in enhanced revenue management large mining companies, international and national civil society organisations, donor agencies and those regional governments where regional political representatives are keen to put mining revenue to good use. Some mining companies are less keen.
- There is also insufficient less emphasis on how to achieve the structural and incentive changes that could result in improved spending of revenues.

# Partnership Issues – Regional Economic Development



- There are procedures in place to facilitate both local and regional planning (e.g. the Government's Modernisation and Decentralisation Programme)
- But in practice regional development plans would appear to be largely absent, dated or driven by the interests of a few individuals.
- This has negative implications for the planning and budgeting processes of other subregional government entities.
- It also provides a weak basis for integrating the separate expenditures on infrastructure and services of the mining companies (although Antamina is providing some support to government to help the regional planning process
- Efforts are also underway to draft plans within the context of the current budget cycle.
- Also the rollout of decentralisation, may result in political pressure to deliver better goods and services and so greater incentives for sub-national government entities to develop and adopt multi-year planning tools.
- There is a common interest in regional development planning regional governments, domestic civil society organisations, donor agencies and the larger mining companies. But between regions responses differ – explianed by differing attitudes towards mining, differing relations between regional, provincial and local governments, and differing capacities of regional governments.

# Partnership Issues – Poverty Reduction



- Poverty remains a huge challenge for Peru despite recent improvements: around 40% of Peru's population live below the poverty line. Those problems are not confined to mining areas.
- Symptoms include highly deficient access to basic services such as health, education, housing, clean water etc remains
- Causes include the remoteness of many parts of the country where poverty is highest, but also the absence of effective government administrations (local government capacity).
- Planning for and spending of social budgets is frequently poor
- Many mining companies are contributing directly to the improvement of some of these services via mine level socio-economic investment, and more recently the Voluntary Support Funds: but with variability across the industry.
- In some cases mining companies have assumed responsibilities in the absence of government leadership. But this creates its own problems. e.g. moral hazard for companies with perceptions of their role and obligations being greatly inflated
- Regional and local governments ought to have an interest in collaborating more actively
  with mining companies that provide significant direct social investment (including via
  VSF). Civil society organisations can and do play an additional partnership role as
  service providers

#### Partnership Issues-Local Content



- There are no formal requirements for mining companies to develop local supply chains to sell to the mining operations: volumes of indirect employment are typically relatively low (cf Chile).
- Individual companies have taken different approaches to this issue.
- Some larger and medium-sized Peruvian companies have set up micro-enterprises around their mining operations: e.g. Yanacocha and Goldfields. Others do little.
- In addition some civil society organisations have collaborated to identify the institutional constraints to raising local content and creating additional local employment opportunities (Xtrata and Care).
- Support for enhancing the local content and employment impacts of mining is potentially available from regional and district governments, large and medium sized mining companies, donor agencies, civil society organisations and local chambers of commerce.

### Partnership Issues – Socio-Economic Development



- There are many individual examples of company spending contributing directly to local S-D Development e.g. Antamina and fishing enterprises and Barrick and trained tourism professionals
- But there are also many constraints that limit the scale and effects if such initiatives the quality of secondary schooling, poor infrastructure, an unfavourable institutional environment (e.g. complex processes for licensing, and national-level wage arrangements that render local unskilled labour uncompetitive.
- Additionally donors and companies have been active in helping to give effect to Law No. 27651 which provides for the formalisation of artisanal miners.
- However, the formalisation process is transaction-cost intensive and much more support is needed (examples of practical help so far include the work of CONSUDE and the Poderosa mining company).
- Again support for enhancing the local content and employment impacts of mining ought to be available from partnerships of regional and district governments, large and medium sized mining companies, donor agencies, civil society organisations and local chambers of commerce.

# Partnership Issues – Disputes Resolution



- Disputes between mining and other economic interests seem to have increased recently - some 21 overt social conflicts directly related to mining in 2006-07 for example.
- But disputes have been common since following (i)the 1990s reforms of the sector and (ii) the new large scale operations.
- Both these developments may have caused uncertainty about future livelihoods but also raised expectations about compensation etc.
- Recently the unrest has begun to affect more Peruvian-owned firms
- Various initiatives monitor and mediate conflicts around mining at the national and the sub-national level.
- But in the event that a conflict arises at a particular locality the procedures for conflict resolution would appear to be rather ad hoc. (e.g. in a recent conflict in Cajamarca, the regional government responded by asking the Prime Minister to manage it).
- Resolving disputes through a more orderly and institutionalised process should be in the interest to all those stakeholders that participate in the national (and sub-national) Mining Dialogue Table. Unfortunately some mining companies do not participate in this forum. Some companies are known to emphasise the national government's responsibility to resolve disputes and seem less favourable to settling disputes within a multi-stakeholder forum.

#### **Conclusions – Last Words**



- Broad-based income and employment generation is the ideal route to an effective absorption of mining into the national economy (Chile exemplifies this) - but this cannot emerge quickly in formerly very weak economies
- Existing redistributive mechanisms appear not to be particularly successful in this regard (Peru especially but also Ghana).
- Deepening governance reforms (especially public administration reforms) is critical to ensuring a more effective absorption of mining activity into its inherently local settings
- But this probably means greater fiscal decentralisation and fuller empowerment of local and regional authorities in most cases – but capacity must be built in parallel
- Pending the establishment of effective local capacity, the partners (companies, governments and donors) need to adapt behaviour to deal with various different situations
- There are many unexploited partnership arrangements that could help to bring about significantly larger social and economic gains in mining countries.

### For further information....



