

# **Africa Mining Vision**

**February 2009**



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**Africa Mining Vision:**  
**“Transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development”**

This shared vision will comprise:

- A knowledge-driven African mining sector that catalyses & contributes to the broad-based growth & development of, and is fully integrated into, a single African market through:
  - Down-stream linkages into mineral beneficiation and manufacturing;
  - Up-stream linkages into mining capital goods, consumables & services industries;
  - Side-stream linkages into infrastructure (power, logistics; communications, water) and skills & technology development (HRD and R&D);
  - Mutually beneficial partnerships between the state, the private sector, civil society, local communities and other stakeholders; and
  - A comprehensive knowledge of its mineral endowment.
- A sustainable and well-governed mining sector that effectively garners and deploys resource rents and that is safe, healthy, gender & ethnically inclusive, environmentally friendly, socially responsible and appreciated by surrounding communities;
- A mining sector that has become a key component of a diversified, vibrant and globally competitive industrialising African economy;
- A mining sector that has helped establish a competitive African infrastructure platform, through the maximisation of its propulsive local & regional economic linkages;
- A mining sector that optimises and husbands Africa’s finite mineral resource endowments and that is diversified, incorporating both high value metals and lower value industrial minerals at both commercial and small-scale levels;
- A mining sector that harness the potential of artisanal and small-scale mining to stimulate local/national entrepreneurship, improve livelihoods and advance integrated rural social and economic development; and
- A mining sector that is a major player in vibrant and competitive national, continental and international capital and commodity markets.



## I-INTRODUCTION

On 20-22 August 2008, the United Nations Economic Commission for Africa (ECA) convened a meeting of the technical taskforce to draft the new *Africa Mining Vision* in preparation for the First African Union Conference of Ministers Responsible for Mineral Resources Development.

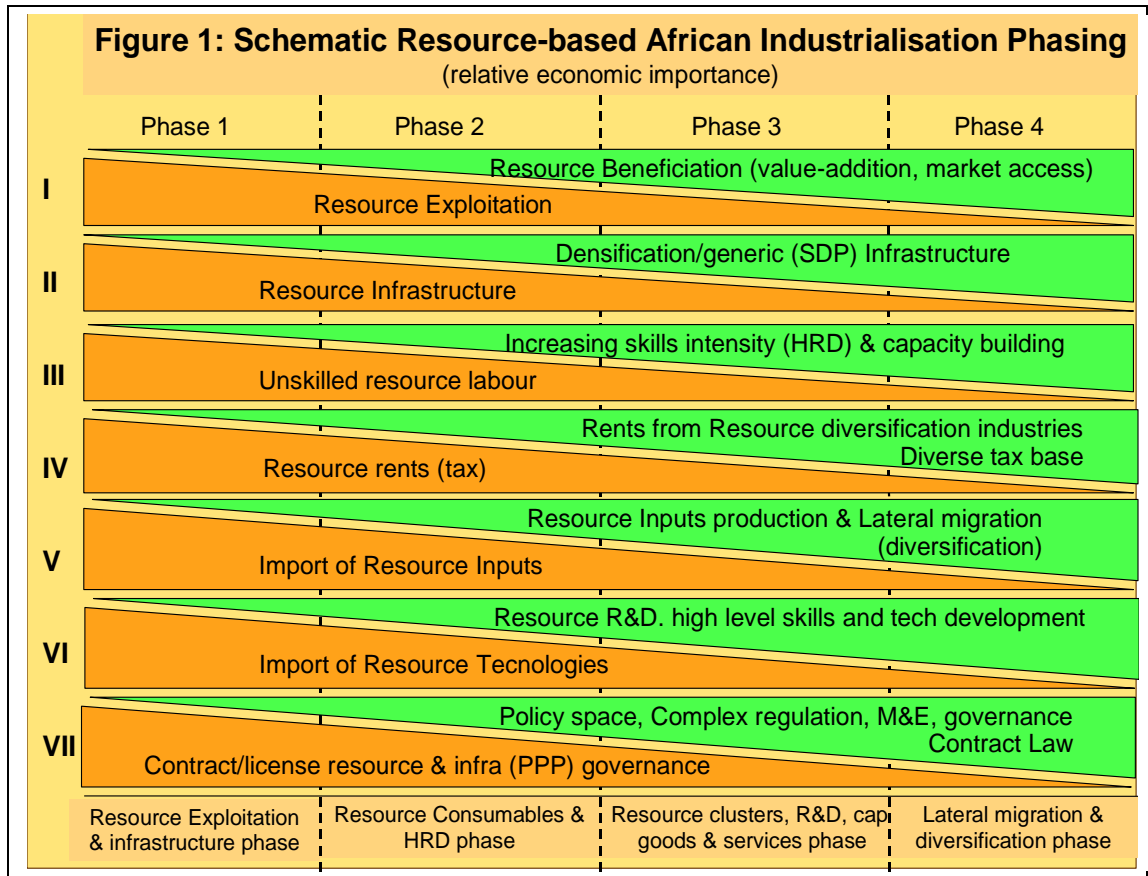
The taskforce, jointly established by the African Union (AU) and ECA, also includes representatives from the African Mining Partnership (the intergovernmental forum of African ministers responsible for mining), the African Development Bank (AfDB), UNCTAD, and UNIDO.

The Africa Mining Vision is informed by the outcomes of several initiatives and efforts made at sub-regional, continental and global levels to formulate policy and regulatory frameworks to maximize the development outcomes of mineral resources exploitation. These include the Johannesburg Political Declaration and Plan of Implementation [chapter 46 and paragraphs (f and g) of chapter 62 (Sustainable development for Africa)] of the World Summit on Sustainable Development, the Yaoundé Vision on Artisanal and Small-scale Mining, the Africa Mining Partnership's Sustainable Development Charter and Mining Policy Framework, the SADC Framework and Implementation Plan for Harmonisation of Mining Policies, Standards, Legislative and Regulatory Frameworks, UEMOA's Common Mining Policy and "Code Minière Communautaire", the Summary Report of the 2007 *Big Table*<sup>1</sup> on "Managing Africa's Natural Resources for Growth and Poverty Reduction" jointly organized by ECA and the AfDB, the work of the International Study Group to Review Africa's Mining Regimes (ISG), to name a few. Annex 1 provides a list of all the initiatives that were taken into consideration during the process of formulation of the Africa Mining Vision.

In establishing a timeframe to implement the Vision, it is important to take into consideration the long gestation period of mining projects, which makes it a relatively special industry. Equally important is the local context and development trajectory. Therefore, the Vision will be implemented in a phased manner (Fig 1). However, the various phases of implementation are not mutually exclusive. Where possible, they can be implemented concomitantly.

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<sup>1</sup> [The Big Table](#) is an initiative designed by the Economic Commission for Africa (ECA) to promote frank and constructive dialogue between African sectoral ministers and their OECD counterparts. The format and agenda are designed to allow for maximum interactive dialogue, with no formal statements. The event is organized by ECA in collaboration with the African Union and the African Development Bank.



## II-BACKGROUND

### *Harnessing natural resources endowments: Key to Africa's development*

Africa is the world's top producer of numerous mineral commodities (Table 1) and has the world's greatest resources of many more, but most of Africa still lacks systematic geological mapping which could bring to light a much greater resource base. Unfortunately, most of Africa's minerals are exported as ores, concentrates or metals, without significant value-addition. There is thus a large potential for mineral beneficiation. Africa also has significant known resources of fossil fuels (oil, gas and coal) and has large biomass and bio-fuels potential (ethanol, bio-diesel), especially in the tropics. In addition, it has massive hydro-electric potential (e.g. Inga 45GW, Congo River 200GW) and largely un-assessed geothermal potential along the Great African Rift Valley.

Table 1: Some leading African mineral resources (2005)

| Mineral   | Production | Rank | Reserves | Rank |
|-----------|------------|------|----------|------|
| PGMs*     | 54%        | 1    | 60+%     | 1    |
| Phosphate | 27%        | 1    | 66%      | 1    |
| Gold      | 20%        | 1    | 42%      | 1    |
| Chromium  | 40%        | 1    | 44%      | 1    |
| Manganese | 28%        | 2    | 82%      | 1    |
| Vanadium  | 51%        | 1    | 95%      | 1    |
| Cobalt    | 18%        | 1    | 55+%     | 1    |
| Diamonds  | 78%        | 1    | 88%      | 1    |
| Aluminium | 4%         | 7    | 45%      | 1    |

*Also Ti (20%), U (20%), Fe (17%), Cu (13%), etc.*  
 \*PGMs: Platinum Group Minerals

Africa's dire need to industrialise is universally acknowledged. The structural transformation of our economies must be an essential component of any long-term strategy to ensure the achievement of the Millennium Development Goals (MDGs) in Africa, eradicate poverty and underpin sustainable growth and development across our continent. The key issue, however, is in the formulation and implementation of workable industrialisation strategies based on our continent's unique strengths, rather than the emulation of strategies that may have been effective in other contexts. A resource-based African industrialisation and development strategy must be rooted in the utilisation of Africa's significant resource assets to catalyse diversified industrial development, as was successfully implemented by several erstwhile resource-based economies in the developed world such as in Finland, Sweden, Germany (especially in the Ruhr region), and the US over a century ago and to some extent in more recently in middle income countries Malaysia, Brazil and South Africa (Box 1).

Resource-based development and industrialization strategies are not a new mantra. The vision that mineral resources could be used to catapult Africa to modernization has been articulated in many African plans and development strategies at national and regional levels (e.g. Lagos Plan of Action, SADC Mineral Sector Programme, Mining Chapter of NEPAD, and, most recently, the Africa Mining Partnership). However, most of those plans and strategies were centred in developing ambitious and grandiose projects designed with a very narrow "mining box" mentality. The projects were very capital intensive and dependent on foreign inputs. Most collapsed because they were inefficient and unsustainable given the low level of infrastructure development, market imperatives and weak knowledge base in the recipient countries.

The experience of resource-based development and industrialization in the Nordic countries reveals that the sustainability and success of this strategy depend on favourable external and internal factors such as natural resources endowments and proactive and deliberate actions from key stakeholders, particularly governments. Specifically, action is required to:

- Facilitate and nurture human resources development and skills formation in tandem with the development of resources technological clusters through the facilitation of research and development (R&D) and the building of knowledge networks and niches involving academia, industry, the government and other players;
- Provide supporting infrastructure including roads, rail ports, energy and water and telecom;
- Encourage the establishment of strong instruments of collaboration (industry/professional associations, Chambers of Mines, cluster councils, incubator/technology packs) and foster agglomeration effects and learning processes by the establishment of a critical mass of key similar, ancillary, related and associated industry players that share information, collaborate and compete to improve the initial factor advantages, enhance competency, reinvention, innovation, technology evolution and spillovers, and diversification;
- Promote local beneficiation and value addition of minerals to provide manufacturing feedstock;
- Promote the development of mineral resources (especially industrial minerals) for the local production of consumer and industrial goods;
- Establish an industrial base through backward and forward linkages;
- Encourage and support small and medium-scale enterprises to enter the supply chain;
- Improve the quality of the business environment, increase private sector confidence and participation, and reduce entry barriers and operating costs to achieve external economies of scale;
- Ensure compliance of industry players with the highest standards of corporate governance, and environmental, social and material stewardship;
- Harness the potential of mid-tier resources that may not necessarily attract major international companies but high net worth individuals, including local entrepreneurs;
- Establish the requisite enabling markets and common platforms for services (raising capital, commodity exchanges, legal and regulatory support, marketing support and know-how);
- Harness the potential of Public Private Partnerships (PPPs); and
- Promote regional integration and harmonization to facilitate factor flows.

Continued innovation and human resources development are key to reducing the dependence on the initial factor endowment (natural resources) and to building and sustaining a locally embedded, competitive and diversified economy. Conversely, where there is underdeveloped human, knowledge, physical and institutional capital, as well as governance deficiencies, insufficient innovation systems, low rates of technology awareness and progress, and inefficient economic and business organization, it is impossible to turn the initial factor endowment into a platform to build successful clusters and diversified economies.

Lessons learnt from experiences in Nordic countries, suggest that it is important to have a shared strategic vision, deliberate and proactive government-led collective action, timely



interventions and coordination of public, private and community interests at all levels in order for a resource-based development and industrialization strategy in Africa to be brought to fruition at the continental level. In addition, there is a need to identify, at national and regional levels, anchor projects that would underpin the strategy.

However, Africa is now in a very different historical and socio-economic environment than the one the Nordic countries confronted. Africa has to face different entry barriers, which are compounded by the weight of the continental debt, its levels of poverty and capacity dearth. In order to realise its significant resources potential, Africa needs to overcome its severe infrastructure constraints. In addition, to avoid the resource “enclave” resources development of the past, Africa needs to ensure that the numerous resource and resource-based economic linkages are realised locally, within the continent.

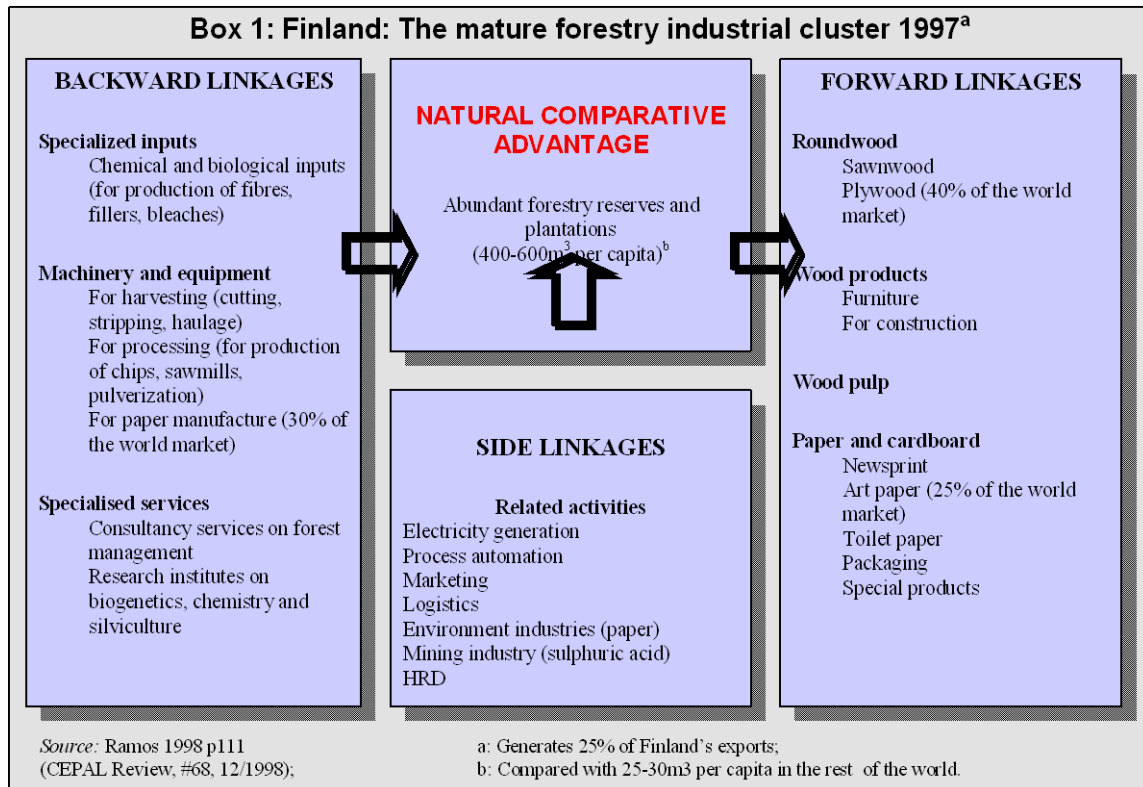
As a first step in achieving these, an African Spatial Development Programme (SDP) has been proposed, consisting of a network of key Development Corridors across Africa to realise the continent’s resources and associated potential. The SDP aims to synchronize infrastructure provision with users to enhance investment potential and to provide economic rigour for infrastructure investments. It helps to vet projects using solid economic/business rationale, thus achieving an effective investment prioritization of infrastructure projects.

For the SDP to be successful there is need to create opportunities for local participation, particularly in the provision of good and services. These opportunities can be discerned if the minerals industry is unbundled to identify entry-points for (i) increasing local upstream support (supplier/input industries) sectors; (ii) enhancing downstream industries based on increased local beneficiation and value addition of goods; (iii) facilitating lateral migration of mining technologies to other industries; (iv) increasing social, human, knowledge and institutional capital (which can be used in other sectors); (v) promoting the development of sustainable livelihoods in mining communities; and (vi) creating small-and medium-sized enterprises and a more balanced and diversified economy with greater multiplier effects and potential to create employment.

The role of regional cooperation and integration in reducing transaction costs, establishing intra-regional synergies, enhancing competitiveness and realizing economies of scale that would catalyse minerals cluster development should not be underestimated. However, for goods, services, capital and other factors to freely flow in the regional spaces, there is need to expedite intra-regional harmonization of laws, regulations and fiscal regimes, among other critical factors.

Such a *Resource-based African Industrialisation & Development Strategy* (RAIDS) based on using Africa’s significant resources endowment (comparative advantage) to catalyse growth in other sectors could provide a viable component of an integrated and sustainable growth & development strategy for Africa. It would maximise the resource sector linkages by building integrated *resource industrial clusters* (up-, side- & down-stream linkages) and the development of high-level skills within the clusters, through accelerated investment into Human Resource Development (HRD) and Research and Development (R&D), to enable Africa to incrementally build a sustainable *competitive*

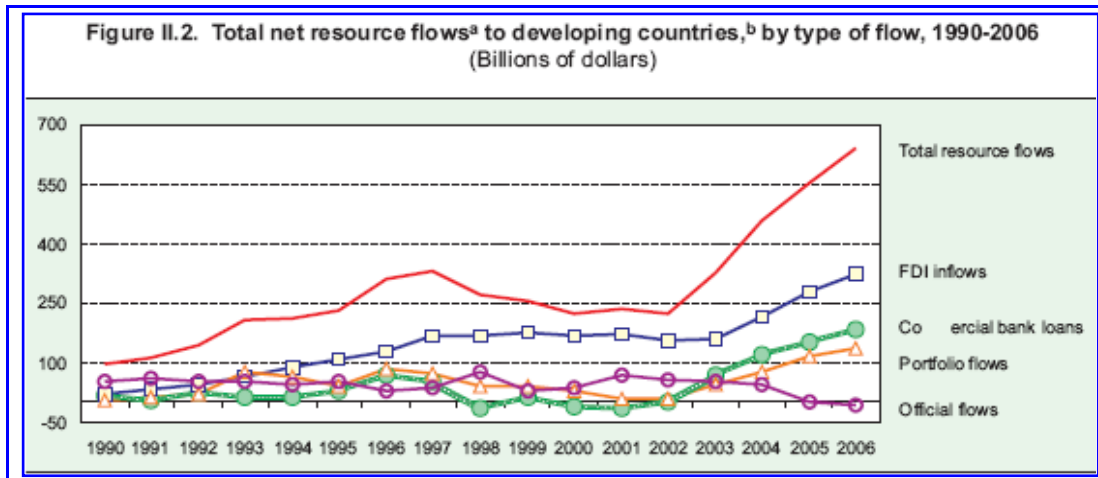
*advantage* off its *resources comparative advantage*. Such a competitive advantage would ultimately be independent of our resource endowments.



***Commodity booms: Traps or windows of opportunity?***

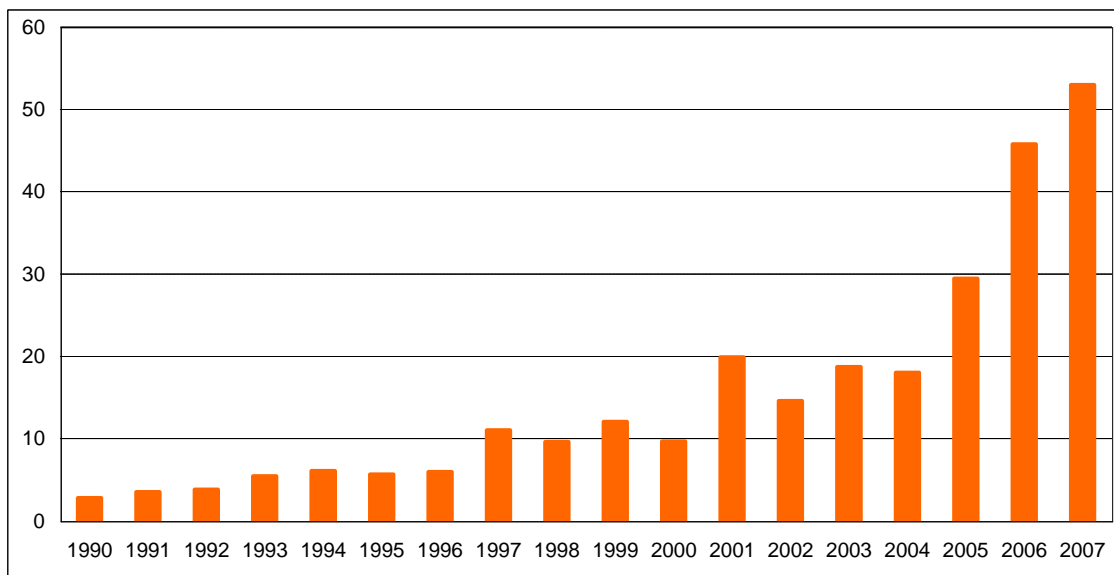
Many African states have recently shown strong growth after several decades of stagnation due to the recent commodities boom provoked by strong demand from China and, to a lesser extent, other emerging economies such as India and Vietnam. Many African states have significant potential for commodities production, especially minerals and consequently, FDI<sup>2</sup> into Africa has displayed a marked upturn since 2002, mainly into the mineral resources sector (Figure 3).

<sup>2</sup> FDI: Foreign Direct Investment



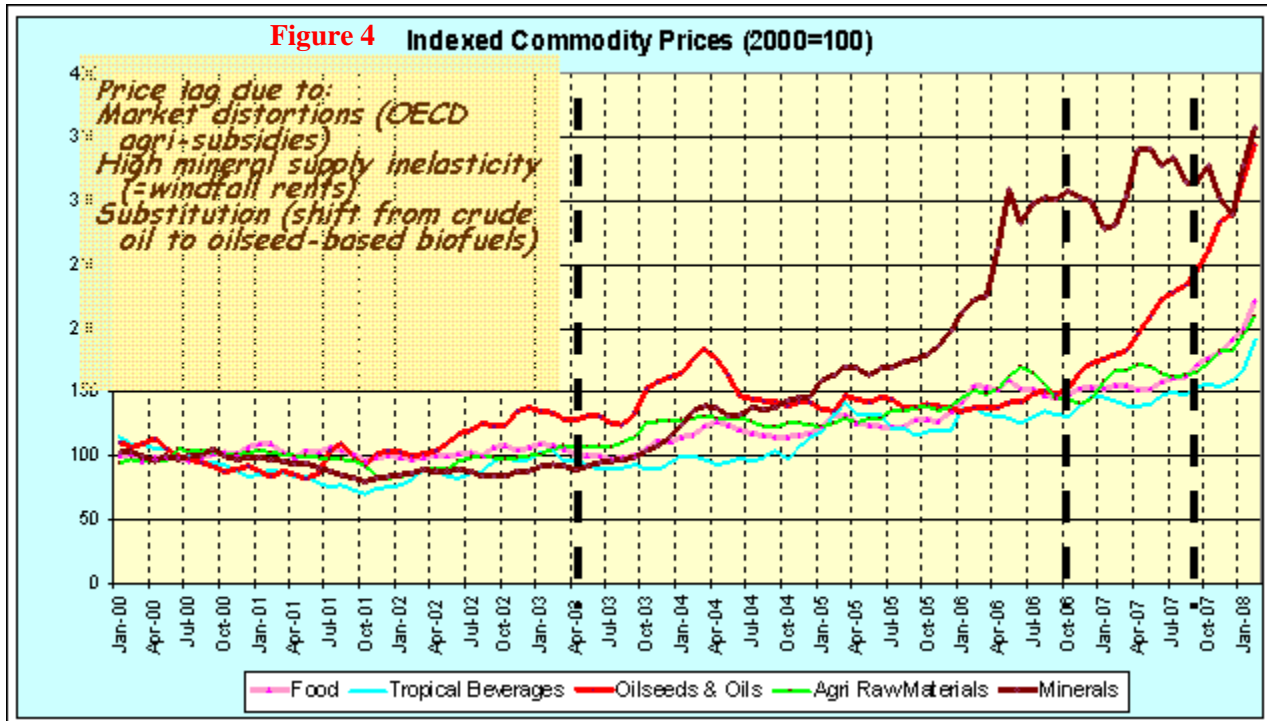
Source: UNCTAD WIR 2007 p34

**Figure 3: FDI inflows to Africa, 1990-2007**  
(Billions of dollars)



Source: UNCTAD, FDI/TNC database ([www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics)).

The resource boom took off in 2003 with dramatic increases in the prices of minerals which was followed by rises in the prices of agricultural bio-fuels feedstock in 2006 and finally other agricultural commodities in 2007 (Figure 4). The price-depressing effects of OECD/developed world agric-subsidies, combined with the mineral supply inelasticity, most probably caused the lag in the price response of agricultural commodities to Asian demand. However, although improved global prices for African commodities is a welcome development for the bulk of the continent's rural-based communities, urgent strategies are needed to ameliorate the impacts of high food prices on Africa's urban poor and vulnerable rural populations. Equally important is to develop local capacity to manage commodity price volatility. The most recent commodity price crash has revealed how seminal this issue is



Source:

Until recently, commodity prices were experiencing a boom characterized by a consistent increase of prices and demand for mineral products, particularly during the period 2002-early 2008. Currently, we are witnessing a severe commodity price correction, mainly fuelled by the credit crunch and financial meltdown, economic slowdown in the United States, and the spectrum of a global economic recession. This has dampened demand for commodity and push prices down. On the medium to longer term though, there is a good possibility that demand for mineral resources will pick up. Key to this will be growth in China and India.

The underlying driver of mineral demand is the metals intensity of global GDP growth. The following graph (figure 5) displays the steel intensity (which is a good proxy for metals intensity) in a unit of global GDP.

Figure 5: Steel Consumption t/\$1 million GDP

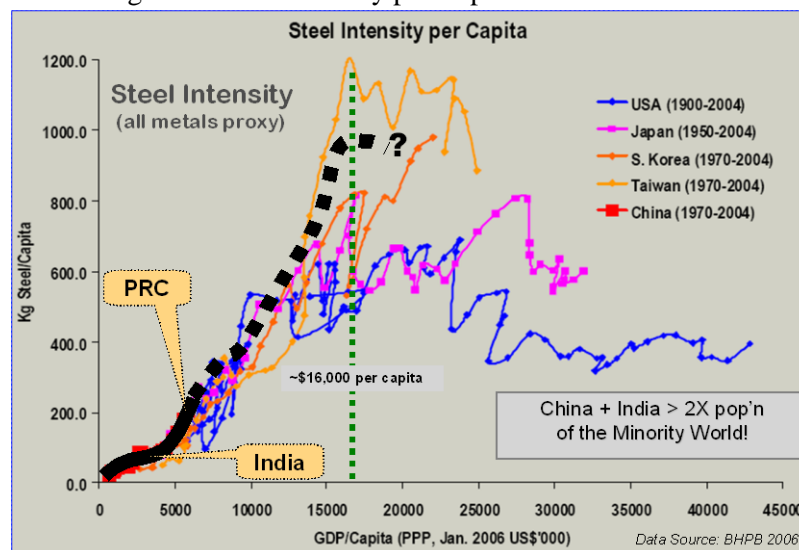
The global steel intensity of GDP shows three distinct phases since WWII:

1. Phase I (1950 to 1984): high intensity - Post WWII developed world reconstruction and increasing buying power within the developed world, resulting in strong minerals demand and prices. Negligible impact in the developing world.
2. Phase II (1984 to 2000): low intensity – developed world infrastructure installed, move to services (only Asian “tigers” in high intensity phase, but too small to impact on global trend). This resulted in over-supply and low prices for most minerals. This gap reflected a failure of continuous global growth due to developed world hegemony over international trade regimes, and widespread use of subsidies (e.g. CAP & steel).
3. Phase III (2000 to present): High intensity (higher than Phase I) as the developing world takes off and trade rules are increasingly revised, reflecting a partial loss of developed world hegemony over global trade systems. Period of high demand and prices. (Figure 6)

Global metal intensity would have been on a continuous increasing trend if global growth had been diffused to more of the world’s people in the 1980’s, instead diffusion was only to the Asian “tigers” with a population of less than 80 million. The diffusion of global growth (and intensity) finally only occurred 20 years later (BRICs<sup>3</sup> et al).

Many African states were still colonies during Phase I and, on gaining independence, established strongly “statist” natural resources exploitation regimes, just before the onset of the low intensity of Phase II, and concomitant weak demand and low prices. This promoted a widespread revision of natural resources regimes in the 1980’s and 1990’s (generally initiated by the World Bank) to attract FDI from the TNCs, typified by low conditionality, low state share of resource rents and low linkages of the resources sector into the domestic economies. Given the new global scenario, these regimes are in urgent need of revision, for the current “boom” to catalyse sustainable development in resource rich African states.

Figure 6: Steel Intensity per Capita



<sup>3</sup> Brazil, Russia, India and China

This graph seems to indicate that, at around \$16k/capita (2006 US\$), the metals intensity of GDP growth tends fall off, no matter when the initial metals consuming “lift-off” phase occurred. Given that China (PRC) is only at about one-third up this high intensity phase, that India is at about a third that of China, and given that they have a combined population approaching three times that of the developed World, it would then be reasonable to assume that the current global high metals intensity phase could continue at least as long as Phase I (see, Steel/GDP graph) or roughly 30 years (1950 to 1980)! This assumption excludes growing intensity from other emerging economies such as Brazil, Vietnam, Indonesia, etc., which if included could make this a 30 to 50 year high intensity Phase.

Thus, provided that the above fundamentals remain robust and hold and unless there is a serious worldwide recession, demand for minerals could grow and a price upturn could occur. This could be driven also by low inventories and supply side constraints generated by the long gestation periods of mining investments, production problems, rising prices for inputs and shortage of skilled labour. The current credit crisis could also drive prices up because restrictions on capital access would mean development of fewer new mining projects, as well as slowing down, postponement or abandonment of expansion projects, which in turn would affect production, and tighten inventories and the supply chain. Most likely, the prices would not reach the historic peaks experienced in early 2008, but would certainly be higher than the low prices of the late 1990s. The big questions are how much recent events affected the overall investment appetite for the sector, how long the crisis will last, and when the upturn will occur. Notwithstanding, Africa should learn from the current collapse in commodity prices and devise tools to minimize its impacts on local economies. These include instruments to better manage revenue volatility, strategies to reduce dependence on commodities and diversify the economies, and efforts to develop internal markets for mineral products with a view to hedging against the vagaries of external markets.

### ***An evolving mining sector: historic enabler of progress in Africa***

Africa has long exploited its mineral resources. In fact, the oldest mines in the world are to be found in Africa such as the Ingwenya mine in Swaziland, which was exploited 20000 years ago for iron ochres for rock paintings. In addition, there are thousands of ancient gold and base metal mines across the continent. In general these mines were integrated into the local pre-colonial economies, providing essential raw materials and high value goods for trade (gold, copper). With European colonial conquest, African mining became integrated into the economies of European countries, providing raw material for their industrialisation.

With independence, Africa’s leaders became preoccupied with enhancing the contribution of the minerals sector to the economic and social development of the continent. In the 1960’s and 70’s, inline with the then prevailing strong assertion of national sovereignty as a follow-up to the end of colonialism, the dominant thinking was that this development could be achieved only if the state had significant or, indeed, full ownership of mining enterprises. That thinking led to the nationalization of large private companies. In a number of countries, such as Ghana, Guinea, and Zambia, the State took

over control of the industry. Hopes were raised that the nationalized sector would be the engine of growth and rapid industrialization, which would provide more significant economic benefits to the nation and improve livelihoods of the people. However, among others, the following factors contributed to the stagnation and, even, decline of the nationalized mining industry: Political interference in business decisions; lack of or inadequate respect for managerial and technical expertise; low reinvestment leading to capital consumption; inability to access finance; and depression of mineral prices.

By the late 1980's, much of Africa's mining industry was in a state of crisis and under-performance. This forced government attitudes to change. There was a fundamental paradigm shift and redefinition of the role of state, from 100% ownership and control, to deregulation and almost complete withdrawal. Many African countries embarked on a radical reform process with the aim of attracting foreign direct investment to rehabilitate their moribund minerals and mining sector. To this end, state enterprises were privatized and efforts and resources were deployed to improve the investment climate. New mineral policies, and legal, regulatory and administrative frameworks more favourable to private investors were formulated and established. Emphasis was put on security of tenure and strengthening of mineral rights. Comprehensive packages of incentives for the mining investor in terms of reduced taxes and royalties were also approved. Associated with a rise in mineral prices, this resulted in a mining boom, increased foreign direct investment and an influx of mining capital, technology and skills.

However, by the late 1990s and at the start of the 21st Century, critics started to argue that the resource boom and the ensuing efficiency gain and rise in export earnings in many mineral economies in Africa were producing questionable welfare gains and development outcomes. They considered most reforms narrow minded and more geared towards attracting foreign investment and promoting exports and less towards fostering local development. It was further argued that the reforms were sectoral-centred and did not take into consideration macro-economic objectives that could spur broader developmental objectives and that they only favoured FDI over local capital development.

Others pointed out that although the benefits of mining to certain national economies could be evident, local costs (environmental impacts and social and cultural disruptions) associated with mining especially to local communities were not being adequately compensated for. Criticism was also vented on the magnitude of special incentives offered to mining companies, which arguably reduce the share of rent on which African governments depend to fund their social and development programmes. There is also the argument that mining has not fulfilled its poverty reduction role and poverty reduction has not been mainstreamed into mining policies, often due to weak linkages into the local, regional and national economies.

The fact that most of the reform process was government-centered has also been a cause of concern. It has been argued that as a reflection of asymmetrical power relations, processes for communication, consultation and decision-making would tend to favor bi-polar initiatives (government and private sector) and outcomes and would not be sufficiently representative and participatory. Thus, development outcomes could be

narrow-minded and only take into consideration government and mining companies' perspectives, without due regard to the views and aspirations of local communities and civil society at large.

In response to new pressures on the minerals industry for an equitable share of benefits and maximization of local impacts for sustainable development, the minerals industry has started searching for a new social contract for mining that could result in integrated development, with diverse economic linkages and increased social well-being, livelihood security and reduced vulnerability of poor communities, but bearing in mind the localised nature of mineral endowments which requires the balancing of local benefits with sustainable national poverty alleviation strategies.

New contractual arrangements and legal instruments to facilitate increased participation by local communities and other stakeholders, as well as new revenue (derived from royalties, income tax, land tax and lease rents, etc) distribution mechanisms for sharing, at local level, portions of centrally collected rents, are being considered as responses to the challenges posed by this new development paradigm. With the same objective, tri-sector-partnerships involving government, the private sector and local communities are being tested to improve government, private sector and local community relations and the social and development outcomes of mining at local level. The same applies to public participation to secure consent for government and industry actions. However, within any polity, a delicate balance has to be struck between resource rent disbursements to resource-rich and resource-poor regions. Ultimately, both are served through investment into physical and human infrastructure, to underpin future national competitiveness.

Some mining companies are departing from their previous approaches to development and community relations, variably characterized as "Strictly business", and "Practical partnerships" to adopt "less instrumentalist and more holistic" corporate social responsibility charters and development approaches that have a better potential to significantly uplift and empower local communities. Also, there seems to be a broader understanding that sustainable development in the mining sector means that mineral development around the globe should be sustainable in environmental, economic and social terms, taking into consideration market dynamics, technological innovation, community involvement, health and safety, environmental impacts, and institutional set-ups.

Thus, it is beginning to be understood by the corporate world that successful mining companies and industries will be assessed according to a triple bottom line, namely financial success, contribution to social and economic development, and environmental stewardship. This principle guided the Global Reporting Initiative (GRI) in preparing the mining and metals sector supplement of its reporting guidelines. The GRI guidelines for mining were completed in 2004 and contain social, environmental and economic indicators that cover several aspects including revenue capture, management and distribution; value-added disaggregated to country level; compensation payments to local communities; employee benefits beyond those legally mandated; and, description of equal opportunity policies or programmes, to name a few. However, they are generally



silent on the integration of mining into the local and regional economies through making the critical up-, down- and side-stream linkages.

### **III-WHY THE AFRICA MINING VISION?**

The decolonisation of Africa unfortunately coincided with a drop in the global metal intensity of use, as mentioned above. Since gaining independence, most African countries has made little progress in integrating their mineral sectors into their local economies, with a few notable exceptions. This was due in part to falling prices and inappropriate policies. The Asian boom provides a new opportunity for Africa to integrate its mineral sector into the local economies through creating the critical linkages. However, this will not happen automatically and will require an African Mining Vision and a set of appropriate strategies and interventions for the realization of that vision.

The key elements to an African Mining Vision, that uses mineral resources to catalyse broad-based growth and development need to be, from looking at successful resource-based development strategies elsewhere, the maximisation of the concomitant opportunities offered by a mineral resource endowment, particularly the “deepening” of the resources sector through the optimisation of linkages into the local economy.

The principal resource endowment opportunities are:

- Resource rents: The use of resource differential and windfall rents to improve the basic physical and knowledge infrastructure of the nation through investment in physical infrastructure and social & human infrastructure.
- Physical infrastructure: The collateral use of the high-rent resource infrastructure to open up other resource potential (such as agriculture, forestry and tourism<sup>4</sup>), to access zones of economic potential with lower returns (e.g. agriculture) that cannot afford their own requisite infrastructure.
- Downstream value addition: The use of the locational advantage (CIF-FOB) of producing crude resources to establish resource-processing industries (beneficiation) that could then provide the feedstock for manufacturing and industrialisation.
- Upstream value-addition: The use of the relatively large resources sector market to develop the resource supply/inputs sector (capital goods, consumables, services).
- Technology/product development: Resources exploitation technologies generally need adaptation to local conditions (e.g. climate, mineralogy, terrain), which provide opportunities for the development of niche technological competencies in the resource inputs sector. This sector tends to be knowledge-intensive and accordingly needs “priming” through investment in resources HRD and R&D. However, several studies have shown that it has the capacity to later “reinvent” itself outside the resources sector through the lateral migration of technological competencies to produce new products for other (non-resource) markets.

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<sup>4</sup> In most African states tourism potential is based on natural resources such as fauna, flora and geomorphology (beaches, mountains, etc.), rather than man-made attractions.

#### IV-CRITICAL CONSTRAINTS AND SUCCESS FACTORS FOR REALIZING THE VISION

The seminal question appears to be why the bulk of African states have not been able to take advantage of these resource endowment opportunities to make these critical linkages in order to underpin diversification, growth & development? Dealing with each in turn, the failures include:

- *Resource rents*: As per the extensive “resource curse” literature, this is the classical diversion of rents into short-term (imported) consumption and, often clandestine, forex<sup>5</sup> outflows, resulting in low levels of reinvestment. However, the root cause is weak governance, particularly the lack of or ineffective appropriate institutions. This often also impacts on the state’s share of the resource rents to the extent that African states with weak governance generally fail to impose resources tax regimes that ensure an equitable share of the rents, particularly windfall rents, due either to a lack of state capacity or the subversion of that capacity to produce overly investor friendly outcomes.
- *Collateral use of resource infrastructure*: To some extent, this is taken advantage by most resource-based African economies, but the development of the other sectors, particularly commercial agriculture, along and within the resource infrastructure “catchments” is often severely constrained by the macro-economic impacts of a resource boom (strong currency or Dutch Disease) and by the failure to invest in and maintain the necessary feeder infrastructure linking to the resources infrastructure.
- *Downstream value addition*: The reasons for this failure are numerous and include the non-availability of other critical inputs, besides the crude resources, necessary for competitive beneficiation, such as energy, as well as the high entry barriers (economies of scale) of many beneficiation process (e.g. iron & steel, alumina/aluminium & copper) and the global corporate beneficiation strategies of the TNCs, who often prefer to send crude resources to a central beneficiation facility in another country, or have a policy of keeping to their “core competence” of resource extraction, and then only make the semi-processed resource available to the local market at a monopoly price (import parity price<sup>6</sup>), if they have a monopoly or oligopoly position in the country concerned. This is arguably also a governance failure to impose minimum levels of beneficiation in the mineral extraction agreement, or to establish an effective competition authority/regulator.
- *Upstream value-addition*: The main failures here are the centralised purchasing strategies of most resource extraction TNCs, the lack of a domestic business sector with the requisite capacity and access to capital to take up these opportunities and the lack of local human resources and technological expertise to establish these, generally knowledge-intensive, industries. Here again good governance is critical in ensuring local content minimums in the resource contracts/licenses and investing in the appropriate HRD and technology development.

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<sup>5</sup> Forex: foreign exchange

<sup>6</sup> Import Parity Price (IPP) is the alternative imported price of the resource (CIF) in a particular country

- *Technology/product development (lateral migration)*: This is closely linked to the previous point, in that, in order to leverage off the resource sector, targeted investment in HRD and R&D is needed by the state and the resources companies. However, the resources TNCs generally centralise their R&D in Minority World countries (often their home bases), which generally have the necessary human resources and R&D infrastructure, including state support/incentives for technology and product development. Yet again this is arguably principally a governance failure to impose HRD and R&D conditions on the resource companies and to facilitate this process through state investment in technical HRD and R&D incentives.

Artisanal and small-scale mining represents a special challenge, which require a separate discussion and different and tailor-made approaches to address the challenges.

Overall, the key strategy in optimising a resource endowment is around the resource regulatory regime, which directly determines the relative “division of the spoils” and indirectly influences the deepening of the sector through down and upstream linkages to the local, national; and regional economies. In this process there are at least five crucial intervention points:

### **1. The level/quality of the resource potential data:**

The less that is known about the potential value of a resource the greater the share of the rents that the investor will understandably demand, due to the high risk of discovering or dimensioning the resource, which may be turn out to be sub-economic. This applies mainly to mineral and energy resources, but also influences the deals struck for other resources such as agricultural terrains, forestry, fisheries and tourism attractions.

Most African states lack basic geological mapping or, at best, are poorly mapped. This increases the risk for investors who consequently demand extremely favourable tax regimes for any operation that may result from their blue-sky exploration. Possible methods for an African state to tackle this “knowledge infrastructure” challenge, include:

- *Increased investment in improving the resources knowledge infrastructure.* There have been numerous studies that have clearly shown extremely high returns to the state from investment in basic geological surveys. In addition to investing in physical infrastructure, Africa and its bilateral & multilateral donors need to also consider investments in their resource knowledge infrastructure. It stands to reason that the more a state knows about the potential value of a resource the greater will be its ability to strike an equitable deal on the division of future rents and benefits accruing from the exploitation of the resource.
- *Self-adjusting resources tax regimes,* which augment with increasing profitability and thus allow the state to garner windfall rents during commodity booms, are preferable for resources than straight tax as a percentage of profit systems. Such rate-of-return (ROR) or profitability based fiscal regimes, are based on profit as a percentage of turnover or revenue rather than straight profit,

but are more commonplace in oil & gas regimes than mineral regimes. One drawback is that they are perceived to be more complicated to determine than straight profit based systems, but this should not be overly problematic for commodities with terminal markets (constant international price fixes) as turnover would simply be a function of volume and a transparent price. The room for creative bookkeeping is mainly in the determination of the profit, which is common to both systems.

- *Competitive auctioning* of prospective resource “blocks”. This is commonplace in oil & gas, fisheries and forestry/logging regimes, but seldom used in mineral regimes. Most African mineral regimes tend to have attractive nationally applicable minerals tax systems in order to attract investors into the exploration of high-risk unknown terrains, no matter the relative prospectivity (“one size fits all” problem). However, there is generally a virtually automatic conversion from an exploration license to a mining license, meaning that once the exploration license is issued, the state has little control over the mining tax regime, no matter how profitable/rich the deposit. In general, mineral investors will tend to have a much better idea of the value of the prospective block than the state and competitive auctioning would, in some circumstances, be an effective method of achieving fair value. However, where there is little or no geo-data, an auction is unlikely to flush out fair value and these terrains would be best governed through a transparent rate of return tax system.
- *Differentiation of resource terrains* based on potential. Following best practice in the oil & gas sector, this system would divide a country into areas of high risk (low geological-data) and areas of low risk over known metallogenic terrains (such as the African Goldbelts, layered complexes, coalfields, the Zambia/Congo Copperbelt, etc.). A fixed rate-of-return based tax system could apply to the former (exploration terrain), whilst the latter (delineation terrain) would be auctioned off as blocks and the state tax-take (rent share) would be the main bidding criteria, in order to flush out the optimal deal for the state. With increased investment in resource mapping (geo-survey) and geo-data acquisition, areas would be reclassified from high risk (exploration: low conditionality, ROR tax system) to low risk (delineation: high conditionality, bid tax system) and vice-versa.

However, there will always be a grey area between known assets (auction) and unknown assets (exploration license) of *partly known* (indicated) resources. This gap could possibly be best dealt with, by allowing a form of PPP<sup>7</sup> exploration (geo-survey), where, if a viable resource is delineated, the private exploration company is guaranteed step-in rights, when the resource is eventually auctioned. This is done in oil & gas exploration, where seismic survey companies are recompensed partly or fully with step-in rights to any blocks later auctioned in the survey area. The size of the “earned” step-in rights (5% to 20%) would be determined by the cost and extent of the exploration programme, as well as the prospectivity of the terrain.

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<sup>7</sup> PPP: Public-Private Partnership

The determination of “known” and “unknown” mineral terrains needs to be transparent and objectively based on sound geo-data. In this regard, existing resource classification systems could be used such as JORC (Australia) and SAMREC (South Africa) that require sign-off by a “geo-auditor” (competent person), but Africa should look to the establishment of a continental system, or “AMREC” (African Mineral Resource Classification) under a continental professional body (such as an expanded Southern African Institution of Mining & Metallurgy: SAIMM).

## **2. *Contracts negotiating capacity:***

The second critical intervention is to improve the capacity of African states to negotiate with the resource TNCs on the resource exploitation regime. Generally these negotiations are extremely asymmetrical, where the TNC is highly resourced and skilled and the state poorly. Thus, one of the most critical interventions of some donors in recent years has been the effort to correct this asymmetry through the contracting of world-class consultants to support the state in these crucial contract/license negotiations and the concurrent development of the state’s own capacity. The African Development Bank is establishing a legal advisory capacity to support its member states in such complex long-term contract negotiations.

Oftentimes, a government would rather take no decision (or delay) on important resource exploitation deals, rather than conclude a bad deal, due to its cognisance of its own weak technical & legal negotiating capacity and fear of botching the deal (with obvious political consequences), which serves neither the African state nor the TNC. These resource exploitation contracts generally tend to have a very long tenure of 20 to 30 years (mining license), making it all the more pertinent to get the optimum deal at the outset. In this respect, it is important to introduce self-adjusting mechanisms that cater for all phases of resource cycles and attempt to put in renegotiating triggers/milestones within the tenure, to adjust for unforeseen developments.

The state’s ability to optimise the leasing (licensing) of its natural resource assets is concentrated at the outset (conclusion of the exploitation contract) as it is difficult to fundamentally renegotiate contracts at a later stage without sending negative signals to investors on the certainty of contracts, with resulting increased negative investment risk perceptions. It is therefore important to identify all the critical resource linkages at the outset (in the resource exploitation contract/lease/license), even if the local economy is not yet in a position to take advantage of such opportunities. The most important aspects in this regard include:

- Equitable share of the resource rents;
- Flexible fiscal regime which is sensitive to price movements and stimulates national development;
- Third-party access to the resource infrastructure (particularly transport, energy and water) at non-discriminatory tariffs;

- The development of the local resource supplier/inputs sector where feasible (particularly capital goods, services & consumables), through the use of flexible local content milestones;
- The establishment of resource processing industries through the use of flexible value-addition (beneficiation) milestones & incentives and the upfront stipulation of competitive pricing of resource outputs/products in the domestic market, for the life of the project;
- The development of local requisite human resources and technological capacity through stipulated investments in training and R&D, preferably in partnership with the state (joint or matching funding); and
- Provisions that safeguard transparency and good governance as well as enforce internationally acceptable safety and health standards, environmental and material stewardship, corporate social responsibility, and preferential recruitment of local staff.

### **3. Ongoing African resources development and governance capacity:**

The third critical intervention area is in creating African capacity for ongoing auditing, monitoring, regulating and improving resource exploitation regimes and developing the resource sector linkages into the domestic economy. This could be facilitated through ensuring that there is a skills transfer dimension in all contracted consultancies during the lease/license negotiations as well as a targeted strategy around the development of such an ongoing resources governance capacity. Given the dearth of people with these skills in Africa, consideration could be given to the pooling of resources with neighbouring states through cross border resources infrastructure regulation (transport authorities, power pools, water catchment bodies, etc), possible joint management of cross-border resource occurrences and the creation of a regional capacity within the regional economic communities. This capacity could also be enhanced through accession to continental and international resources monitoring and oversight bodies such as the African Union’s APRM<sup>8</sup>, the EITI<sup>9</sup> and the Kimberley Process for diamonds certification.

Whilst such African capacity is being built, consideration could be given to the outsourcing of some of the regulatory, audit and monitoring functions, such as the auditing of resource company tax returns, but with skills transfer provisions.

The key element in determining whether or not a resource endowment will be a curse or blessing, is the level of governance capacity and the existence of robust institutions. However, this could be a “chicken and egg” situation for African states, in that they are underdeveloped precisely because they have weak governance and institutions. There are clearly no short cuts out of this conundrum, but it can be argued that the international environment has improved for breaking the resource curse cycle. Some elements of this are:

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<sup>8</sup> APRM: Africa Peer Review Mechanism  
<sup>9</sup> EITI: Extractive Industries Transparency Initiative

- The world is increasingly globalised, with increasing global monitoring and regulatory systems, such as the WTO, the Kyoto Accord (UNFCCC<sup>10</sup>) and the Equator Banking Principles;
- Corruption of African governments is now an offence in most developed countries (it used to often be tax deductible);
- The end of the Cold War has given the major powers less reason to prop up corrupt African governments for political (“anti-commie”) reasons;
- There is much greater oversight of resource TNCs activity in African states by civil society and most now produce a “sustainable development report” based on the Global Reporting Guidelines (GRI);
- There is much more space for local communities, unions and local government to participate in the resource exploitation process and oversight under the new reporting standards (triple bottom line- “sustainable development report”, SIA<sup>11</sup> & SAP<sup>12</sup>);
- There are new global resource and resource rent monitoring systems such as the EITI, Kimberley Process and the recently launched COST (construction industry transparency initiative) for African states to accede to;
- There are new regional and sub-regional monitoring and governance assessment systems such as the African Union’s APRM that countries can accede to; and
- The rise of China and India as resource markets and investors has given African states more options than available under the old “Western” colonial and neo-colonial hegemony.

It is clear that there is no “one size fits all” strategy for strengthening African resource governance and institutions. Nonetheless, there are a few broadly applicable strategies such as accession to international protocols (e.g. APRM, EITI) and the establishment of critical institutions to facilitate the optimal exploitation of natural resources, including:

- Independent judiciary and the use of regional and international protocols;
- Independent competition authorities and integration into regional economic blocks (FTAs, customs unions) to increase market size and the ability of the market to self-regulate competition;
- Infrastructure regulators (transport, energy, water, telecom) and the pooling of limited national resources through cross-border regulators (catchment bodies, transport authorities, power pools, etc.);
- Autonomous Higher Education Institutions (HEIs: universities, colleges) and the linking of these institutions with other regional and international institutions;

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<sup>10</sup> UNFCCC: United Nations Framework Convention on Climate Change

<sup>11</sup> SIA: Social Impact Assessment;

<sup>12</sup> SAP: Social Action Plan.

- Technology development institutions (R&D) together with the private sector (PPPs). Here again, regional R&D projects with neighbouring states would assist in accumulating a critical mass in technology/product development;
- Local independent capital markets (banks, stock exchange) and commodity markets. Here again regional institutions would increase viability by increasing the market size;
- Local DFIs (Development Finance Institutions), particularly for SMME<sup>13</sup> support (access to capital & skills), though the experience of African DFIs has not been particularly positive. Regional or continental institutions might make more sense in terms of pooling resources, attaining a larger market and improved oversight;
- However, the most important institution is the resource exploitation licensing/contracting body, which would benefit from national, regional (RECs), continental (AU- APRM) and international (EITI, KPC) oversight.

### **The Resources TNC “Trade-off”**

In order to rapidly acquire capital and skills, most African states have opted to encourage foreign capital rather than to predominantly rely on the indigenous development of local resource companies. However, ultimately, a resource sector dominated by foreign capital (TNCs & JRCs<sup>14</sup>) is likely to be politically unsustainable or, at least, problematic. In addition, local capital is generally more likely to make the critical resource sector linkages into the local economy due to:

- A better knowledge of local supply opportunities and markets, due to better local networks;
- The lack of a global purchasing network (as per the TNCs) which encourages the local company to find local supply opportunities, such as lime and activated carbon (from coconut shells) for gold processing (these are generally imported by the TNCs in gold producing African states, despite the availability of local limestone and coconut shells);
- The lack of global resource processing (beneficiation) facilities (as per TNCs) necessitates investment by local capital into local facilities to realise value-addition, as occurred in some of the Nordic countries;
- The lack of a corporate strategy of resource exploitation (“dirt digging”) “core competence” (as per most of the TNCs & JRCs) that focuses exclusively on resource extraction and denies the African state the opportunities of resource beneficiation and supplier industries. This is partly due to the fact that, in the early stages of economic development, there is a tendency for the growth of diversified conglomerates (in order to build the requisite corporate capital base for large projects) in many developing countries, such as the “zaibatsu” in Japan, the “chaebol” in Korea, the “Bombay Club” in India and the diversified “Mining

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<sup>13</sup> SMME: Small- Micro- & Medium-scale Enterprises

<sup>14</sup> JRC: Junior Resource Company



Houses” in South Africa and Zimbabwe. Over time, these tend to break up into specialised industry-specific companies. This disaggregating is often accelerated by the re-listing of diversified Majority World companies on to the major Minority World stock markets where, with greater international (institutional) stock holders, they come under immense pressure to “unbundle” and dispose of non-core activities, to realise stock holder value;

- The lack of technology and human resource development capacity (R&D and HRD) outside the African state in the Minority World (as per the TNCs) obliges domestic capital to develop technology (R&D) and skills at local institutions or in-house; and
- Finally, sometimes, an inherent willingness to develop the local economy: The element of “patriotic” capital (often underpinned by greater state and public influence on local companies).

The African state is, for a wide variety of often country-specific reasons, generally typified by an extremely weak domestic business sector. This, more often than not, renders it unable to effectively realise its numerous resource sector opportunities (both within the resource sector and in its “linkage” sectors). In most cases, focussed, country specific, strategies for growing local capital to take advantage of the resource endowment opportunities urgently need to be developed, but there also are a few generic strategies that are worth a mention:

- Access to capital (credit) is probably the most widespread constraint experienced by African businesses and, in addition to facilitating an independent and robust banking system, local and regional Development Finance Institutions (DFIs) could play an important role. DFIs with a clear shareholder mandate and non-political interference in day-to-day running have had a positive impact on the development of local capital. However, it is probably preferable to establish a specialised exploration DFI with the requisite earth science skills to partner local JRCs in high risk exploration projects, such as was done in Quebec in the 1960’s where a specialised DFI was established (Soquem) to build local French-speaking mining capital;
- Partnerships with multilateral and donor agencies as well as philanthropic organisations are becoming increasingly common as risk capital and skills providers in Africa, particularly for SMEs;
- Macro-economic stability gives greater predictability and lowers the cost of capital for new entrepreneurs and is often facilitated through regional integration in the form of common monetary areas and customs unions as well as constitutional provisions that make it difficult for future regimes to negate or override;
- Access to skills for both the entrepreneurs and the staff of new local enterprises is critical and could be enhanced through partnerships with multilateral institutions (World Bank group, UN agencies), neighbouring states and appropriate donor agencies;

- Access to technology is important and could be facilitated by local/regional HEIs (Higher Education Institutions) and R&D bodies and through technology partnerships with the local TNCs facing similar technological challenges;
- Access to the requisite infrastructure is also important and would be enhanced through open-access provisions on infrastructure developed through DFI (TNCs); and
- Finally, arguably the most important vehicle for building local capital are the foreign resource investors (TNCs) who have the requisite capital, skills and expertise, but are not naturally inclined to facilitating the growth of local competitors. Therefore this needs to be built into the exploitation contract license through provisions such as those contained in the South African “Mining Charter”, which include:
  - Local skills development (HRD);
  - Local professional and managerial staff complement targets;
  - Local purchasing targets;
  - Local minority equity (ownership) targets;
  - Local beneficiation targets/milestones;
  - Local R&D targets and incentives; and
  - Establishment of local venture capital funds.

As mentioned, the ability of the State to impose conditions is concentrated at the beginning of the process (when the exploitation license is granted). Therefore it is of seminal importance to get it right from the outset, to avoid messy renegotiations at a later stage.

#### ***4. Improving the capacity to manage mineral wealth:***

One of the mechanisms by which host countries have, in the past, sought to capture mineral rent has been through the establishment of state mining enterprises. Although no longer a preferred instrument, some still exist. In many countries, they have been privatized or dismantled. It is often argued that Government investment in mining projects subject public funds to unnecessary risk and that host Government shareholding in mining companies, even if free, does not offer significant benefits if dividends are not regularly declared. This decision, as to what to do in any particular instance, must be made in the specific context, rather than dogmatically or as a matter of following fashion.

Wholly state-owned mining projects are now becoming rarer and rarer in Africa and in most of the developing world. It is now much more common in mining regimes for the state or a community to take a minority interest by in a mining project. Sometimes, such interest is paid for either up front or from dividends when declared. In other instances, no direct payment is made and the allocation is simply part of the overall division of benefits. Here again, it is necessary to assess concretely whether equity participation is merely a piece of symbolism (sometimes an expensive one) or yields meaningful benefits. In particular such participation ought to be compared with other fiscal

instruments such as royalties. Many States now agree that most of what they wish to achieve through ownership in mining projects can be achieved through the regulatory process or policy and fiscal instruments. This view is based on the assumption that the state has no difficulty attracting private investors, but is unable to raise the required finances and does not have people with the requisite management and technical skills to embark in mining directly. But, if on the other hand, a state possesses the required resources, then it is possible to invest in a profitable and purely commercial operation as in the case of Debswana, a diamond company equally owned by De Beers and the Botswana government. Similarly, the Royal Bafokeng Nation (RBN) in South Africa provides an example of a community, which appears to have done exceedingly well with its participation in mining operations conducted on its land.

Accounting for revenues paid to governments from mining projects has become an important issue of governance. The “Publish What You Pay Campaign” launched by a group of NGOs and the “Extractive Industries Transparency Initiative (EITI)” sponsored by the British government are notable initiatives which are currently keeping this matter in the forefront of the international agenda. Both are now supported by a number of governments, multilateral agencies, companies and civil society groups. However, at the same time, it should be noted that many African governments are still only timidly embracing the EITI principles and related campaigns.

Whilst the attention of national policy makers has traditionally focused on the fairness of the allocation of benefits between mining investors and the host country as a whole, increasing attention is now being paid to the benefits derived by the communities where mining operations take place to ensure that local and national-level concerns and interests are balanced. The benefits to the local community may come in various forms including revenues which accrue to the community because of its location (property rates and land rents); benefits which are the community’s share of central government revenues from mining and non-income benefits such as employment for local residents; assistance to community health and educational institutions; access to the use of mine infrastructure by the general public, etc

A major concern for mineral policy makers in developing countries relates to arrangements for allocating portions of central government mineral revenues to local mining communities, and the management of monies so allocated. The most important issue to address concerning the revenues that go back to the communities (as indeed for revenues retained by central government) is how to utilize and manage the monies. Since mineral deposits have finite lives the economy of any local community, which depends substantially on mining, could in time grind to a halt if the use and management of the community’s share of revenues is not planned properly. Economic diversification to avoid creation of mining communities, which degenerate into ghost towns after exhaustion, is a major challenge. Particular care needs to be taken to train these communities in managing revenues and to strengthen their capacity to engage in meaningful negotiations with both government and private sector and to invest in post-mining economic activities and enabling infrastructure.

Various schemes for managing host country or community mineral revenues exist in a number of countries. Examples of such schemes are the Alaska Permanent Fund (based on oil revenues) and Trust Funds established in the island of Nauru, funded from phosphate revenues. The scheme for the allocation, management and monitoring of revenues to Chad from the Chad – Cameroon Pipeline Project incorporates the idea of setting aside portions of government revenues “for the benefit of future generations”. There are two other aspects of the scheme which could provide a model for other African mineral projects – (a) allocating a percentage of revenues to fund defined priority sectors of the national economy; and (b) having an oversight committee (with membership from the public service and civil society) to manage and monitor revenues paid into the fund. The project has only just commenced operations and it would be interesting to see how the scheme works out in practice.

There may be special arrangements and understandings between mining companies and respective local communities that can significantly promote development of the communities. These include agreements for general public access to certain mine facilities and infrastructure (power lines, roads etc); assistance in the construction and operation of educational and health facilities; and agreement on preferential employment of local labour and on contracting of services from indigenous local companies. For example, mining companies in the Lake Victoria Goldfields in Tanzania have entered into these types of community development arrangements with local authorities. A mining company may also agree to provide some infrastructure for the community in return for a tax credit.

Other major challenges that policy makers have to contend with include how to: (i) create and sustain mineral wealth without compromising environmental, social and cultural considerations, and ensuring a regulatory framework that encourages mineral creation; (ii) invest mineral revenues to ensure lasting wealth; and (iii) improve governance and macroeconomic policy, to address problems such as the Dutch Disease, rent seeking and corruption, the impact of natural resources exploitation on conflict and externalities such as unstable commodity prices.

A resource boom often has several negative impacts on the local economy, which are generally termed the “Dutch Disease” after these were observed following the natural gas boom in Holland in the 1960’s. These include:

- The strengthening of the current account through boom provoked increased resource rents, which tends to strengthen the local currency, causing other sectors to become less competitive, particularly manufacturing which contracts, leading to possible de-industrialisation.
- The sucking in of limited local capital and human resources to the resource boom sector, leading to the underdevelopment of other sectors and consequential increasing macro-economic dependence on the resource boom sector.
- Fiscal instability caused by sudden drops in state revenues (boom/bust resource rents) at the end of the cycle which cannot be matched by concomitant contractions in state expenditure, which in turn results in state deficits, increasing

recourse to debt and inflationary pressure on the local currency. This is a fairly accurate picture of what happened in Zambia in the 1980's, with the fall in copper prices.

A commonly used strategy is to keep windfall rents in an offshore “stabilisation” or “future” fund and not to rapidly expand state expenditure in line with the increasing resource revenues. These funds are then generally invested in a diverse basket of investment instruments (equity, bonds, currency markets, etc.) that will provide reliable revenue streams in future years, such the Norwegian “Future Fund”. However, for countries that lack basic infrastructure, a proportion of these funds might well be better allocated to long-term infrastructure provision projects (roads, rail, ports, energy, water, telecoms, etc.) that would underpin the competitiveness of other sectors (diversification). This would “drip-feed” the boom rents back into the economy over a 10 to 20 year period and could in theory ameliorate the “shock” effect of large forex inflows both on the balance of payments (current account) and the national budget. However, it is extremely difficult for a poor state to resist the demands of its people for immediate, but unsustainable, poverty relief. Therefore such fiscal policies need to be enshrined in law with provisions to make it difficult for a future populist government to use the offshore funds to buy short-term popularity.

Such stabilisation or future funds would also go some way in providing “inter-generational equity” over non-renewable resource extraction, as future generations would be the beneficiaries of the investments into improving the national infrastructural platform. The drip-feeding back of boom revenues would also give time for the development of local infrastructure contracting companies (construction and engineering) as well as supplier companies (cement, rebar, equipment, etc.), rather than exclusively relying on foreign contractors and suppliers (imports).

For African states with insufficient opportunities for long-term infrastructure provision, part of the offshore funds could be reinvested in regional and continental investment funds (such as the Pan African Infrastructure Development Fund- PAIDF<sup>15</sup>) which would provide future revenues to the state as well as facilitate the growth of regional markets for the country's products and lower cost regional products and logistics for its future imports.

## ***5. Addressing Africa's infrastructure constraints:***

A Resource-based Development Strategy is generally severely constrained in many African states by the lack of the requisite infrastructure (especially transport & energy) to realise the natural resources potential. This is particularly true for land-locked countries and, in general, Africa's relative logistics costs are about 250% of the global average because:

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<sup>15</sup> The PAIDF has been established by a group of African state pension funds to develop the continent and provide future revenues to the pension funds..

- Africa is the highest continent (has few navigable rivers) and 93% of Africa is in the tropics (ITCZ<sup>16</sup>, high precipitation), resulting in a greater cost of infrastructure provision and O&M<sup>17</sup>;
- Incoherent European balkanisation resulted in many African states being landlocked (14);
- Africa has only 10% of land within 100km of coast (cf. 18% OECD & 27% Latin America); and
- Only 21% of its people live within 100km of coast (cf. 69% OECD & 42% Latin America).

Due to this constraint, the resources of many African states are “stranded” and cannot currently be exploited, as individual projects cannot afford to absorb the huge costs of the necessary infrastructure due to insufficient rents. Nevertheless, groups of projects or a few high rent projects (generally minerals & energy) could often collectively underpin the infrastructure investments through “use-or-pay” contracts with infrastructure providers. Such pooling of usage usually requires cross-border collaboration as resource terrains seldom follow political boundaries.

Consequently, the huge resources potential of Africa could conceivably be realised through integrated multi-state Development Corridors (Annex 2), rather than another colonial “scramble for resources”.

## **6. The case of artisanal and small-scale mining (ASM):**

### *ASM: A complex profile*

ASM provides 13 to 20 million jobs worldwide while a further 80-100 million depend on it for their livelihoods. In Africa, about 3.7 million are directly engaged in this sub-sector and about 30 million depend on it. It is an expanding sub-sector predicted to triple by 2012. Increasing numbers of people turn to it to seek alternative livelihoods, particularly in marginal areas with limited economic alternatives. In many cases, this is impelled by growing economic crises, (which increases unemployment), and decreasing rural livelihood choices, exacerbated by natural (mainly droughts and floods) and man-made disasters (e.g. conflicts). The possibility of striking it reach quick, serves as a magnet for some miners; the majority are just trying to escape poverty.

ASM is labour-intensive and provides more employment than large-scale mining. Between 15 to 20% of the world’s non-fuel minerals, approximately 18% of Africa’s gold and almost all of the Africa’s gemstones, except diamonds, are produced by ASM. Furthermore, ASM is a precursor to large mines and allows the exploitation of deposits that are not amenable to large-scale mining.

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<sup>16</sup> ITCZ: Inter-Tropical Convergence Zone – high precipitation (ppt)

<sup>17</sup> O&M: Operations & Maintenance.

ASM is also an important factor for income generation. Revenues derived from ASM can increase local purchasing power and have the potential to catalyze SME development and foster local economic multipliers. For example, in Tanzania, where ASM miners are said to earn ten times more than farmers, income from ASM is invested in shops, taxis, bars, guesthouses, and farming. ASM also contributes to foreign exchange earnings, and helps reduce rural to urban migration of the youth.

Despite its positive impacts, the ASM sub-sector is beset with problems of sustainability. The sub-sector has been neglected both locally and in the international development agenda and it does not feature in most national and local poverty alleviation strategies. Much of this is due to the negative perceptions of ASM, which tend to outweigh its positive impacts. Working from a low capital and asset base, most ASM activities are of a rudimentary nature, with little mechanization (Shovels, hoes, picks and wheelbarrows are the tools commonly used). Where there is mechanization, equipment and techniques are inefficient and hazardous to the environment and to the miners. In consequence, productivity, ore recovery and yields are low and income remains at subsistence level. This hinders re-capitalization and upgrading of mining operations and keeps small-scale miners in a vicious cycle of poverty.

The poverty cycle is aggravated by legal and regulatory failures, including failure of governments to recognize and formalize the sub-sector. . Where, there have been efforts to regulate it, the legal frameworks are not adequate and preference is still given to large-scale mining. Most ASM miners do not have security of tenure or access to high-quality and mineable resources. Because of this, they cannot generate adequate income or use their mineral rights as security for funding or to enter into joint ventures with other more capable partners. To this, one can add poor access to financial resources caused by the reluctance of banks and other financial agencies to provide loans and other financial assistance to an unregulated ASM sub-sector. The problem has been worsened by the HIV/AIDS pandemic. Other problems include substance abuse, prostitution, child labour, and gender inequality.

### *The quest for solutions*

The critical challenge for those working in and with the ASM sub-sector is to mitigate its negative consequences and enhance its positive benefits to transform it and maximise its contribution to poverty reduction and creation of resilient communities. For this to happen, there is need to improve the understanding of ASM issues on the policy, regulatory, environmental, health, cultural, society, and economics domain.

There have been notable attempts to develop and deploy appropriate assistance to the ASM sub-sector in several parts in Africa, but most were technology-oriented. Some of the programmes have contributed on a micro scale to improving productivity and reducing localized impacts to the environment. However, results at a macro level were less encouraging. Several reasons could be advanced for this poor performance.

Many past interventions in ASM were top-down, short, ad-hoc, lacked continuity and adequate funding. The focus was mainly on gold and gemstones and less on industrial

minerals, which have greater potential for integration with other sectors of the local economy. In addition, there was poor understanding of the nature of the problem of ASM and its finite and poverty-driven trait. Resource constraints of many governments and organizations limited the scope of their interventions, particularly efforts to formalise the sub-sector, and provide education, training and appropriate technology to ASM miners. Lack of local infrastructure to support research, development and innovation of appropriate technology; and inadequate framework for technology diffusion and assimilation also affected impact. More important however, was the fact that the attempts were isolated and very technical-oriented in nature. Other important societal and techno-economic variables were very often ignored.

Alternative policies are needed to render the sector more sustainable. There is need of a pluralist, holistic and multi-pronged approach that goes beyond providing technology options. It is important to recognise that ASM is both a poverty-driven and a poverty alleviating, finite activity. To raise the profile of ASM and draw more attention and resources to it, there is a need to exploit the sub-sector's broader linkages and identify its entry points to broader development agenda, including the MDGs.

To stop the poverty cycle, the approach should be broadened to include the development of diversified and alternative livelihoods to ASM (artisan training on alternative skills such as carpentry and brick laying, diversifying income sources and broadening non-mining incomes), which would facilitate ASM transitions from artisanal to small-scale mining; from gold and gemstones to industrial minerals; from mining to farming and other businesses; and ensuring that ASM miners "Don't make their sons/daughters also miners, they save and invest in their education, health and knowledge". This should result, respectively, in some miners abandoning mining altogether; fewer miners per unit of area mined; more income for the remaining miners; and ultimately less pressure on the limited resources. This needs to be done in direct consultation and with input from the ASM miners.

### *The Yaounde Vision*

The Yaounde Vision on ASM was adopted during a joint ECA/UNDESA Seminar on "Artisanal and Small-scale Mining in Africa: Identifying Best Practices and Building Sustainable Livelihoods of Communities", held in Yaounde, Cameroon from 18 to 22 November 2002. The Vision represents one of the main frameworks for the development of this sub-sector in the continent. It has been adopted by CASM-Africa<sup>18</sup> and provides a blueprint, which will continue to be relevant in the future. The Vision recognizes ASM as a key poverty-driven and poverty alleviating activity for many African rural economies, with very little entry barriers and frames its development problematique in the broader

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<sup>18</sup> The inaugural meeting of the Communities and Small-scale Mining (CASM) Africa initiative (CASM-Africa took place on 10 August 2005 at the United Nations Conference Centre (UNCC) in Addis Ababa, Ethiopia. Members of CASM-Africa agreed that the new organisation will function as a regional partner of the multi-donor CASM (Global) network whose secretariat is hosted by the World Bank in Washington DC, USA. CASM (Global) and CASM-Africa share an urgent commitment to enhance the positive contribution that the ASM sector can make to development processes in many countries. Its role is to develop and share knowledge, build networks, facilitate projects, provide an advisory and review function on ASM with the goal of transforming ASM into profitable enterprises within sustainable communities.



context of the MDGs. It further recommends that ASM should be integrated into local and regional economic development and land-use plans and strategies, specially the Poverty Reduction Strategies (PRS). The Vision also urges that the mining policies and laws of member States should be reviewed to incorporate a poverty reduction dimension in ASM strategies.

### *The road ahead*

There is no sufficient evidence yet to inform how effective the Yaounde Vision has been in transforming the ASM sub-sector, for, very few countries, if any, have implemented the Vision in its entirety. Notwithstanding, a combination of the measures described above, including the provision of specialized training to miners and adoption of simple strategies for dissemination of technology will certainly yield better results and impact than current practices. Active participation of small-scale miners in the planning, designing, implementation and evaluation of small-scale mining methods and policy is a crucial element for success. It is also important to identify and empower leaders in the ASM communities who can be agents of the change process.

To improve the impact of ASM programmes there is need to improve typification of the sub-sector, and government, donors and CSOs' knowledge on ASM, in particular on local socio-economic and cultural peculiarities and context; differentiation among small-scale miners; the human, social, financial, natural and physical capital assets of ASM "miners"; and other dynamics in ASM communities.

Beyond this and equally relevant, there is need to provide ASM miners with analytical skills and training on sound business management. This can facilitate the transformation of ASM from a transitory and shock-or-coping-responsive activity that takes places in "marginal enclaves" into a serious business and change ASM communities from vulnerable and marginal enclaves of unorganized groups of miners and other actors into integrated and functionally sustainable and resilient communities.

Some of the critical areas that require more work include: mainstreaming ASM in PRS; establishing functional and effective financial schemes for ASM miners; opening-up market opportunities for ASM; enhancing the formalization and the level of organization of ASM miners; improving the delivery of cost-effective and results-oriented ASM services in a context of limited resources; raising the profile of the sub-sector and galvanising interest of the development community; empowering women and eliminating child labour; and addressing environmental and human health issues, including HIV/AIDS and occupational hazards in a more effective manner. This is a huge agenda, which requires an effort at a continental level. CASM (especially CASM Africa) is well positioned to provide leadership in this. CSOs have also been very active in delivering practical and ground-based support to ASM miners. Their contribution is vital and should be mainstreamed.

## **V-TENTATIVE FRAMEWORK FOR ACTION**

The tentative framework for action presented below indicates in a matrix what needs to be done at national, sub-regional and continental levels to implement the Africa Mining Vision. Three stages of implementation have been identified, namely short-term (up to 5 years from the date the vision is adopted), medium-term (5-20 years) and long-term (20-50 years). Where possible, roles and responsibilities have been assigned to key players. The framework should be viewed as a dynamic tool that should be responsive to local context and stage of development of the mineral economy. Thus, trajectories to achieving the vision at country and sub-regional levels will be different. Notwithstanding, Africa will only achieve its ultimate goal of industrialization and development by acting collectively.

| <b>1. ONGOING ACTIONS THROUGHOUT THE TERM OF THE VISION</b>  |  |   |  |
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| * Capacity Building - HRD (Technical, Negotiating, Business, Commodity Markets) & Institutional (strengthening existing & establishing new ones as needed at national/regional/continental levels) |  |   |  |
| * R & D aimed at developing local capacity to support industrialization drive  |  |   |  |
| * Partnership between State and Private Sector, CSO, local communities & other key stakeholders  |  |   |  |
| * Engage Development Partners like AfDB, UN, World Bank, etc and other continent-wide stakeholders like the AMP and producer associations  |  |   |  |
| * AUC/ECA to undertake continental review of performance of countries/sub-regions in applying standards/strategies etc adopted   |  |   |  |
| <b>2. TERM SPECIFIC ACTIONS</b>  |  |   |  |
| <u>Objectives</u>  | <u>Related Actions</u>   |   |  |
|  | <u>Country-Level</u>   | <u>RECs Level</u>   | <u>Continent-Wide</u>                              |
| <u>Short Term [<math>&lt; 5</math> years]</u>  |  |   |  |
| Promote Natural Resources Governance (Manage stakeholders' engagement throughout the mine life cycle; Improve management of transfer payments)   | Mainstream EITI principles and the Kimberly Process Certification Scheme in national policies, laws, and regulations; encourage establishment of national oversight bodies and implicate parliamentarians and independent committees in the monitoring of mining projects; consider decentralization of mineral revenue distribution; build capacity to manage mineral revenue of national and sub-national institutions | To speed up harmonization processes at sub-regional level | Include a natural resources chapter into the APRM. |
| Foster inter-generational equity   | Consider the use of Future Generation Funds and Stabilization Funds; integrate mining in national development plans and poverty reduction strategies.  |   |  |

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| <p>Improve the institutional set-up and strengthen the capacity to implement the Vision</p>     | <p>Develop broad-based consensus on the need for an integrated approach to mineral resources development; disseminate information, raise awareness and build capacity to facilitate implementation of the Africa Mining Vision; establish inter-ministerial committees (mining, finance, industry and trade, infrastructure, education, science and technology, etc) to implement the Vision; sensitize oversight agencies like Parliaments, policy makers, CSOs, etc</p> | <p>Disseminate information, raise awareness and build capacity to facilitate implementation of the Africa Mining Vision.</p> | <p>AUC/ECA to undertake continental review of performance of countries/sub-regions in applying standards/strategies etc adopted. Within the context of the review of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, member States to present a common position on mining (based on the Vision) during the forthcoming CSD 2010-2011 implementation and policy meetings, and mobilize international support to implement the Vision.</p> |
| <p>Foster the establishment of resilient artisanal and small-scale mining (ASM) communities</p> | <p>Formalize ASM and upscale programmes to upgrade knowledge, skills and technology in the ASM sector; mainstream ASM into poverty reduction strategies; ensure gender equality; eliminate child labour; stimulate partnership with government and large-scale mining to facilitate access to technology, skills, knowledge and markets; and strengthen ASM associations.</p>   | <p>RECs to harmonize ASM policies, laws, regulations, standards and codes.</p>   | <p>AUC/AMP in collaboration with Communities and Small-scale Mining (CASM)-Africa to foster the implementation of the Yaoundé Vision on ASM and to spearhead initiatives to formalize and upgrade skills, knowledge and practices in the artisanal and small-scale mining sector. The AUC to anchor efforts to develop continental policies, laws, regulations, standards and codes to promote sustainable ASM.</p>  |
| <p>Progress towards gender equity and the empowerment of women</p>                              | <p>Initiate empowerment of women through integrating gender equity in mining policies, laws, regulations, standards and codes</p>   | <p>Adopt and implement sub-regional gender charters for the mining sector</p>  | <p>The AUC to adopt and implement continental gender charters for the mining sector</p>  |

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| Enhance Africa's bargaining power   | Negotiate/renegotiate contracts to optimize mining development outcomes; build and strengthen the negotiation capacity of public officials through training, study tours, etc; train government officials on minerals marketing, mining taxation and accounting.   | RECs to promote capacity development and build knowledge platforms on negotiation of resource contracts. RECs to foster the establishment of sub-regional commodity exchanges.  | AUC/AMP to adopt a sustainable development chart and scorecard to promote standardization of contracts at continental level. African Development Bank (AfDB) through the African Legal Support Facility (ALSF) to promote capacity building on contract negotiations/mining taxation and accounting and facilitate access to Centres of Excellence and expertise on the subject. Other international bodies including the UN to follow suit. AUC to promote the establishment of continental commodity exchanges. |
| Promote safe and responsible mining and material stewardship  | Improve mining regulatory regimes adopting the highest environmental, social, occupational, safety & health standards; strengthen enforcement capacity.  | RECs to adopt common mining regimes   | AUC to promote continental harmonization of mining regimes  |
| Increase the level/quality of the resource potential data   | Member states to fund more regional mapping and mineral inventory programmes and upgrade their geoscientific information base including cadastral systems.   | RECs to adopt and implement sub-regional mapping and mineral inventory programmes including through the use of modern remote sensing techniques; RECs to scale-up efforts to standardize information capturing and dissemination methods and approaches (e.g. stratigraphy, legends, etc) | AUC and the AMP to develop a continent-wide mapping and mineral inventory programme in coordination with the Organization of African Geological Surveys and mobilize the necessary resources to implement it.   |
| Improve public participation (Consultation and information sharing/participatory decision making/dispute resolution mechanism) in the mining sector | Mainstream Strategic Environmental (and Social) Assessment (SEA), Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) into national policies, laws, and regulations; domesticate in national policies, laws and regulations relevant provisions on public participation of the Aarhus Convention and Equator Principles; strengthen and build capacity to | RECs to adopt and implement sustainable development charters and guidelines for development and management of transboundary mineral resources.  | AUC to spearhead efforts to mainstream relevant CSR provisions into continental codes and standards   |

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|   | <p>enforce the new provisions; all mining companies to develop and adopt CSR charters in accordance with the mining supplement of the Global Reporting Initiative; governments and CSOs to promote capacity building programmes to strengthen the capacity of local communities to make informed decisions.</p>   |   |   |
| <p>Eliminate human rights abuses and the possibility of natural resources fueling conflicts</p> | <p>Develop methodologies and tools for conflict risk analysis and mainstream them into planning frameworks; Include conflict dimensions and structural risk factors in PRSPs; Consider initiatives to decentralize revenue distribution and allocation; Ensure broad-based, active and visible involvement of affected communities in the approval, planning, implementation, and monitoring of mining projects. Build platforms for consensus building on priorities and options for the development and management of mineral resources; Make SEAs, EIAs, and SIAs mandatory tools for project approval; consider local distribution of mineral revenue; establish multisectorial oversight bodies to ensure broad participation in the decision making, monitoring and evaluation of mineral projects. Mining companies to develop and implement CSR charters. ICMM to develop and enforce adherence to guidelines on natural resources governance</p> | <p>RECs to develop guidelines for the development and management of transboundary mineral resources. Promote fora for member States to share experiences and build knowledge on natural resources governance.</p> | <p>AUC to integrate the peace and security dimension of natural resources into its existing conflict prevention and early warning, as well as conflict management and peacemaking and peace support policies and programmes; AUC to develop codes of conduct for mineral resources development and ensure that international agreed norms and standards are adhered to; popularise and promote the domestication into national policies, laws, and regulations relevant provisions of the EITI, EITI ++, Kimberley Process; APRM to include a chapter on natural resources governance. Consumer groups and shareholders to put pressure on companies to comply with international standards and norms. Relevant bodies of the African Union to establish and/or strengthen existing mechanisms for monitoring and enforcement of compliance with African and other international standards and UN resolutions to combat impunity and abuse; and document and expose malpractice, improve the monitoring and enforcement of UN sanctions and embargoes, and implement relevant</p> |

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|   |   |  | recommendations of UN Panels of Experts.  |
| Improve physical and knowledge infrastructure   | Deploy rents to start development of physical infrastructure and social infrastructure  | RECs to identify mineral resources projects that can anchor development corridors  | AUC to promote the NEPAD Spatial Development Programme (SDP)                            |
| Capacity building   | Institute educational reforms, including standardization of qualifications, curricular, etc. to provide capacity to realize the Vision. Governments to promote technology innovation hubs   | Strengthen the existing training centers and assist on establishment of new ones. RECs to promote standardization of mining curricula and of mining qualifications | AUC to promote the NEPAD programme on the establishment of Centres of Excellence.       |
| Capital Mobilization  | Governments to harness the potential offered by PPPs; governments to institute innovative approaches to improve domestic savings and channel domestic savings to finance national projects/programmes   | RECs to promote the establishment of sub-regional capital markets to mobilize regional capital to finance regional projects/programmes                             | AUC/AfDB/ECA to promote continental investment for a; expand the scope of Mining Indaba |
| Optimize land use options and promote environmental stewardship and social responsibility | Governments to entrench use of SEAs, EIAs, and SIAs; Chambers of Mines to popularize the ICMC Community Development Toolkit and the Global Reporting Initiative (GRI) Mining and Metals Sector Supplement and ensure that mining companies adhere to these instruments; Governments to mainstream public participation principles into mining policies, laws, and regulations; Companies to adhere to Corporate Social Responsibilities (CSR) charters; and coordination of government department to be optimized | Promote the NEPAD Spatial Development Programme (SDP) to optimize land use   | Promote the NEPAD Spatial Development Programme (SDP) to optimize land use              |

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| Harness the potential of partnerships                                       | Build tripartite partnerships between Government, private sector, and CSOs.  | Promote regional cooperation and integration  | AUC to champion partnerships with EU, China, India and other bodies              |
| <b>Medium Term [5 -20 years]</b>  |  |   |  |
| Strengthen the enforcement of standards/ legislations/ codes/etc            | Improve the legal and regulatory framework and increase public awareness and participation; Develop enforcement strategies with credible and strong criminal sanctions/ licence revocation; ensure consistency and predictability; develop explicit and clearly defined rules and guidelines to reduce the scope for conflicting interpretations |   |  |
| Development of socio-economic infrastructure                                | Implement NEPAD SDP  | Implement NEPAD SDP   | Implement NEPAD SDP  |
| Lateral migration/ Upstream value-addition                                  | Build national clusters for technology innovation and adaptation   | Establish Knowledge Based Centre of Excellence; scale-up harmonization of skills and standards to facilitate factor flows | Implement NEPAD programme for the establishment of African Centres of Excellence |
| Improve the value chain and maximize diversification of economies           | Resource diversification (creation of conducive environment for development of back ward and forward linkages, value addition especially semi processing and cluster development, with technology sharing among countries) intensified and also investment of rent/capital generated through resources into other sectors                        |   | Initiate Resource, especially financial, mobilization                            |
| <b>Long Term [&gt; 20 years]</b>  |  |   |  |
| Maximize local economic multipliers and spillovers                          | Diversification away from mineral resources, based on linkages (final processing) but also investment of rent/capital generated through resources into other sectors   | Effective & efficient coordination of planning & implementation of continent-wide strategies & measures                   | Self-sustaining financial and commodity markets established and functioning      |
| R & D aimed at developing local capacity to support industrialization drive | Strengthen R&D for development of innovative solutions and strategies to address the nation's development challenges and support the industrialization drive;  | Establish a regional-wide alliance for research and strategic development   | Establish a continent-wide alliance for research and strategic development       |



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|   | Enhance establishment of clusters and promote the creation of Development Corridors   |  |   |
| Diversified, vibrant, and globally competitive industrialized African economy             | Adequate local capacity built to respond to technological as well as other needs for industrialization                            |  | Maintain and keep functioning the Knowledge Based Centre of Excellence          |
| Integration into regional economic blocks   | Speed up the ratification of relevant regional protocols and mainstream its provisions in national policies, laws and regulations | Promoting regional collaboration and integration towards a common commodity market | Establish a mechanism for regional integration based on common commodity market |
| <b><u>Must Dos</u></b>  |   |  |   |
| * Securing the buy-in and commitment of the Member States and other key stakeholders      |   |  |   |
| * Contextualize and adapt the continent-wide strategies to country/regional specificities |   |  |   |

## **VI-WAY FORWARD**

The approaches described above offer hope that the legacy of mining in Africa can be improved. However, more needs to be done to achieve change. Policies, legal and regulatory frameworks to facilitate equitable participation by local businessmen, communities and other stakeholders in mining activities need to be refined, as well as tools to improve revenue (derived from royalties, income taxes, land taxes, lease rents, etc) distribution at local level. Transparency and efficiency in the management of revenue paid to various governmental authorities has become an important part of the mineral policy agenda. Mechanisms for enhancing these are still in the early stages of implementation, but have significant potential for improving the public benefit in many resource rich African countries. They need to be coupled with efforts to strengthen institutional capacities and competencies at government and other levels for efficient long-term planning, prudent management and smart spending, saving and investment of mineral wealth. The Africa Mining Vision has been developed to provide a credible blueprint to addressing the challenges listed above. It hinges on developing a new integrated development approach to mineral resources exploitation rooted on strong political will and commitment, capable and visionary leadership, strong administration, a good understanding of Africa's advantages and the dynamics of mineral commodities, maximizing the potential of regional integration, and building partnerships for change. To succeed, it needs champions.

## **Annex 1: Initiatives in Search of a New Social Contract to Mine**

The beginning of the 21<sup>st</sup> Century saw a flurry of initiatives to improve mining development outcomes. A non-exhaustive list of the most important ones is listed below. The outcomes of these initiatives informed the formulation of the Africa Mining Vision:

- The Second Conference of African Ministers Responsible for the Development and Utilization of Mineral and Energy Resources in Africa, held from 21-22 November 1997 in Durban, South Africa, adopted the “Durban Declaration on the Sub-regional and Regional Cooperation for the Development and Efficient Utilization of Energy and Mineral Resources in Africa”, which among others committed the continent to deepening the on-going reforms and to creating a conducive environment to enhance the flow of domestic and foreign investment to the minerals and energy sectors.
- The Kimberley Process began in May 2000 in Kimberley (South Africa) as interested governments, NGOs and industry groups sought to come up with a practical way to prevent illicit diamonds from entering the legitimate diamond trade. It is a unique initiative by government authorities, the international diamond industry and NGOs to stem the flow of so called ‘blood diamonds’ – rough diamonds used by rebel movements to finance wars against legitimate governments. These have contributed to fuelling devastating conflicts in a number of countries in Africa. The Kimberley Process is now composed of 43 participants, comprising states and regional economic organizations, including the European Union.
- In November 2000, UEMOA member States agreed to adopt a common mining policy and legislation, including a harmonised fiscal code in an effort to foster sub-regional harmonisation. The main objectives of this policy are:
  - the institution of an attractive environment for mining investments;
  - the diversification of mining outputs;
  - the transformation of minerals where they are produced;
  - the co-existence of industrial mines and small informal mining; and
  - the preservation of the environment.
- The World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa, from 26 August to 4 September 2002 introduced a section on mining/metals in the Johannesburg Plan of Action (JPOI). These efforts resulted in paragraph 46 of the JPOI on mining/metals. It recognizes that mining/metals can contribute to sustainable development when relevant issues are properly addressed, i.e. with good governance. The focus of the paragraph covered the whole life cycle from mining to metals in recognition of the fact that issues that occur at any stage of the life cycle also have consequences for the other stages.
- The Extractive Industries Transparency Initiative (EITI) was launched by UK Prime Minister Tony Blair at the World Summit on Sustainable development in Johannesburg, September 2002. Its aim is to increase transparency over payments by companies and revenues to governments in the extractive industries. The EITI

supports improved governance in resource-rich countries through the full publication and verification of company payments and government revenues from oil, gas and mining.

- In November 2002, a joint ECA and UNDESA Seminar on “Artisanal and Small-scale Mining in Africa: Identifying Best Practices and Building Sustainable Livelihoods of Communities”, held in Yaounde, Cameroon, adopted the Yaounde Vision on Artisanal and Small-scale Mining. The Vision Statement reads: “Contribute to sustainably reduce poverty and improve livelihoods in African artisanal and small-scale communities by the year 2015 in line with the Millennium Development Goals”. The key strategies to realize the vision include formalizing and reflecting artisanal and small-scale mining (ASM) issues in national legislation and codes and integrating ASM into rural community development programmes and Poverty Reduction Strategies.
- The MMSD report, “Breaking new ground”: Mining, Minerals and Sustainable Development was published in 2002. This report analyses the role of the mining sector in the transition to sustainable development and provides a basis for a strategic and ongoing process for the implementation of sustainable development principles in the mining and minerals industry.
- In 2003, UEMOA adopted a Common Mining Code (Code Miniere Communautaire), which contains a unified legal framework for minerals exploration and mining in the territory. The Code sets forth the mineral ownership, the types of minerals subject to regulation and their legal regime, the access to mineral rights, the rights and obligations of the mineral title’s holder, the special incentives granted during exploration and exploitation stages, and the settlement of disputes.
- The Extractive Industries Review (EIR) initiated by the World Bank Group to discuss its future role in the extractive industries with concerned stakeholders was completed in 2003 and EIR recommendations were published in the final report entitled “Striking a Better Balance”. The aim of this independent review was to produce a set of recommendations within the context of the World Bank Group’s overall mission of poverty reduction and the promotion of sustainable development.
- In 2003, the International Council on Mining and Metals (ICMM) adopted the ICMM Sustainable Development Framework. It is a key tool to assist members to improve their sustainable development performance. The Framework is made up of four elements – 10 Principles, supported by public reporting, independent assurance, and sharing good practice. The Principles seek to cover “important aspects of sustainable development”, including corporate governance, health and safety, human rights, responsible product design, environment and biodiversity, social, economic and institutional development, appropriate materials choice, public engagement and independently verified reporting arrangements. These Principles are:-
  - ❖ Implement and maintain ethical business practices and sound systems of corporate governance.

- ❖ Integrate sustainable development considerations within the corporate decision-making process.
  - ❖ Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
  - ❖ Implement risk management strategies based on valid data and sound science.
  - ❖ Seek continual improvement of our health and safety performance.
  - ❖ Seek continual improvement of our environmental performance.
  - ❖ Contribute to conservation of biodiversity and integrated approaches to land use planning.
  - ❖ Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.
  - ❖ Contribute to the social, economic and institutional development of the communities in which we operate.
  - ❖ Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders
- In February 2004, thirty African mining ministers and/or their representatives launched the African Mining Partnership (AMP), with the aim of championing and coordinating mining and mineral-related initiatives under the auspices of NEPAD. The ministers identified mining programmes and projects in six key areas: Artisanal or small-scale mining; harmonisation of mining policies; environment and sustainable development; beneficiation and value addition; human resource development; and promoting foreign investment and indigenous participation in mining ventures. AMP's current efforts to formulate the "African Mining Policy Framework" and the "Sustainable Development Charter for Africa's Minerals and Mining Sector" are of key relevance to mineral policy formulation on the continent.
  - In 2004, a multi-stakeholder working group co-convened by the GRI and the ICMM developed the Global Reporting Initiative (GRI) Mining and Metals Sectors Supplement to accompany the GRI 2002 Sustainability Reporting Guidelines. The supplement together with the guidelines contains indicators to allow tracking of performance against the ICMM SD Framework. By identifying and targeting economic, environmental, and social performance issues and indicators specific to the mining, minerals, and metals industry, the supplement assists companies to address these issues in a common fashion, producing more relevant, meaningful and comparable reports.
  - The 2007 Big Table on "Managing Africa's Natural Resources for Growth and Poverty Reduction" was co-organized by ECA and the African Development Bank on 1 February 2007, in Addis Ababa, Ethiopia. The objective of the 2007 Big Table was to promote frank discussions on the challenges of effectively managing Africa's natural resources for growth and poverty reduction and frame an agenda for future action. The issues discussed included natural resources governance; ownership, participation and inter-generational equity; bargaining

power, value and the role of emerging global actors; environmental stewardship; and capacity, partnerships and regional integration.

- SADC Mining Ministers adopted a framework for the “Harmonisation of Mining Policies, Standards, Legislative and Regulatory Framework in Southern Africa” in March 2007. An Implementation Plan, to translate the framework into an operational programme of activities, has also been developed. The Harmonisation Implementation Plan has eight themes or areas of work based on categories of related activities. This was endorsed by a SADC meeting of experts from both the private sector and Senior SADC government officials and is due for approval by the Ministers of Mines in August 2008. The themes and their objectives, as prioritised by the SADC experts are as follows:
  - ❖ **Policy, Regulations and Administration:** the aim is to adopt similar objectives for national mining policies and align administration procedures in the sector;
  - ❖ **Geological and Mining Information Systems:** this aims at standardising geological data as well as increasing the availability of geological information to stimulate investment in the industry;
  - ❖ **Human Resources and Institutional Capacities:** this seeks to improve the quality and quantity of available skills, and standardise qualifications as a basis for the free movement of skills in the region;
  - ❖ **Safety, Health and Environment:** focuses on developing and implementing a common set of health, safety and environmental standards across the SADC mining industry;
  - ❖ **Investment promotion:** aims at institutionalising SADC-wide mining investment forums, providing investment related information and targeting infrastructure development in potential mining areas;
  - ❖ **Value Addition, Innovation and Research and Development:** to promote downstream value creation through the assembly of information on tariffs and market opportunities and developing a system of innovation to increase the competitiveness of SADC mineral value chains;
  - ❖ **Artisanal and Small-Scale Mining:** this targets the upgrading of the knowledge and skills of small-scale and artisanal miners, as well as providing information and services to address their traditional lack of access to such services; and
  - ❖ **Social Issues and Gender:** this seeks to encourage linkages between communities and mineral developments, and uplift the role of women in mining.
- The International Study Group to Review Africa’s Mining Regimes (ISG) was established in October 2007 by the United Nations Economic Commission for Africa (ECA) following the 2007 Big Table with a view to conducting a review of Africa's current mining regimes and proposing recommendations on how the transformational potential of the mining sector can be enhanced. It comprises leading African and international academics and practitioners of natural resources law, economics, public policy and management.

- In February 2008, the Tenth Ordinary Session of the Assembly of Heads of State and Government of the African Union adopted a Decision on the Action Plan for the Accelerated Industrial Development of Africa and a Declaration on Africa's Industrial Development which recognized the role that Africa's mineral resources can play to promote development and the industrialization of the continent.
- The EITI ++, was launched by the World Bank in 2008 with the objective of supporting selected countries, mainly in Africa, to formulate and implement policies and adopt measures throughout the entire mineral resources value chain by addressing upstream and downstream issues (such as licensing, procurement, ownership, corporate social responsibility, sustainable development, etc.).
- In 2008, as a follow-up to the 2007 Big Table, the African Development Bank (AfDB) established the African Legal Support Facility (ALSF). The key objective of the ALSF is to eliminate the asymmetry of expertise and imbalance of knowledge in addressing the challenges posed by venture funds and in complex commercial transactions, especially relating to natural resources. The facility will have two main programme areas, namely (i) the establishment of legal advisory service, and (ii) capacity enhancing and capacity building programme.

## **Annex 2: African Development Corridors (DCs)**

Development Corridors (DCs) were first implemented in Southern Africa under the South African sponsored SDIs (Spatial Development Initiatives) after their liberation in 1994.

The NEPAD Secretariat and the African Development Bank have recently adopted DCs as an important tool for configuring, prioritising and promoting inter-related infrastructure and large-scale economic sectoral investments in defined geographic areas (also referred to as Spatial Development Initiatives) as a means to:

- Promote trade and investment led economic growth;
- Optimise the utilisation of infrastructure;
- Encourage value-added processing (beneficiation); and
- Enhance the competitiveness of African economies.

The DCs contemplated under the NEPAD SDP strategy are informed by experience with “SDIs” in the southern African region, the first of which was the successful Maputo Development Corridor (MDC) between South Africa and Mozambique in 1995.

The MDC was first conceptualised in 1994 as a rehabilitation project on an already existing but non-operational transport corridor by the transport departments of the two cooperating governments, but was expanded into the first DC (SDI) by incorporating all the economic sectors into the SDI. As a successful initiative it provides useful lessons both positive and negative. On the whole however, it provides a demonstration effect for other development corridors (SDIs) in Africa and elsewhere, particularly for states, like Mozambique, that have inherited non-existent or destroyed infrastructure.

The MDC initiative has to date helped facilitate over \$5 billion in private sector investments into regional infrastructure development, industrial development and natural resources exploitation and beneficiation. Key infrastructure investments included the N4 Maputo Toll Road, the management agreement with Liverpool’s Merseyside Docks and Harbour Company to upgrade and operate the Maputo Port, improvements to the Lebombo Border Post, the construction of two high voltage electricity lines from Duvha (SA, near Johannesburg) to Maputo through a SA-Mozambique electricity utilities JV (Motraco) and the development of the Pande/Temane gas field in Mozambique and the construction of a pipeline to SA<sup>18</sup> by Sasol (SA) and ENH (Mozambique).

Focusing scarce investment resources to achieve maximum impact, the African SDP provides a means to facilitate integrated economic development platforms based on the promotion of key large-scale anchor (usually in minerals beneficiation) investments & related upstream and downstream investments. They also provide a strategy to catalyse sustainable sectors (agriculture, tourism, resource-processing) and in doing so, provide a tool for introducing a spatial focus to planning for Africa’s infrastructure and economic

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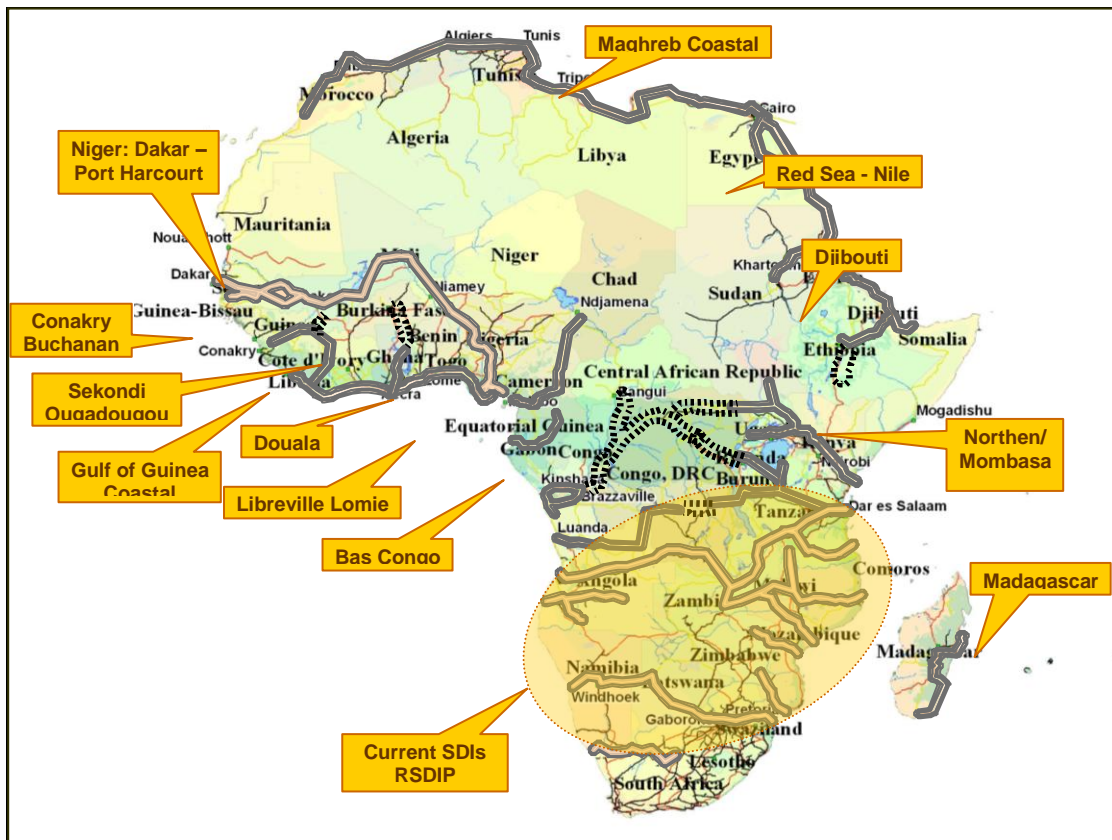
<sup>18</sup> SA: South Africa



development. DCs, however, cannot provide a panacea to substitute for other development strategies, especially those required for social delivery.

The SDI model provides a practical way to achieve a regional approach to development which goes beyond the limitations of multi-country projects, encouraging a sustained process of integrated development within a region defined by its economic potential rather than its political boundaries.

Potential Resource-based African Sustainable Development Corridors:



Source: Mintek 2007.

An African DC desktop study has shown the potential of continent-wide network of development corridors, examined. It makes the case that Africa’s physical and social infrastructure needs are so large that they cannot be met in any reasonable timeframe without substantive contributions from the private sector. Given the current high prices being obtained globally for Africa’s mineral wealth, Africa needs to harness this opportunity to achieve the modernisation of its own economies on the back of this global demand. Further, mineral resources exploitation should be used to finance infrastructure through sustainable revenue streams. In this way infrastructure could be made available and affordable to allow for the additional exploitation of private investment opportunities in agriculture, agro-processing, forestry, tourism, etc.

### *Collective Self-Reliance*<sup>19</sup>

Development Corridors could be configured to strengthen African governance through “collective self-reliance” by establishing cross-border institutions both for the DC itself (Heads of State Multilateral body) and the associated infrastructure and facilities, such as:

- DC governing organ (Heads of State Multi-lateral);
- DC investment promotion and smooth operation agency (the latter is embodied in the Maputo Corridor Logistics Initiative, MCLI<sup>20</sup>, by the private sector DC users);
- Cross-border electricity energy entities (e.g. the Motraco JV<sup>21</sup>, between the South African and Mozambican utilities, and the Gas Pipeline PPP between SASOL and the two governments);
- Cross-border transport concessions (PPPs) such as the MDC highway (TRAC<sup>22</sup>);
- Joint border post administration (to facilitate rapid transit) such as the planned “one-stop” MDC border post;

Such a strategy of “collective self reliance” through DCs could pool the meagre resources of participating states as well as broaden the ownership of the DC utilities which would militate against unilateral intervention by any one participating country. It could also draw on the resources of a DC member country with stronger governance capacity, whereby a MIC (Middle Income Country) could indirectly support governance in the neighbouring participating states, such as the role of South Africa in southern Africa. Furthermore, as DCs are regional initiatives, they could draw on governance support from the regional economic communities (RECs), such as SADC, COMESA and ECOWAS, where appropriate.

In the longer term, DCs will inexorably draw the participating countries into greater regional economic integration which could have positive governance impacts through the sharing of best practice and the dilution of the impact of a negative political shift in any one of the partners.

Resource-based Development Corridors provide concrete expression of a resource-based African industrialisation & development strategy and are the integrating mechanism for the critical deepening of the African resources sector through up-, down- and side-steam linkages into the local, national and regional economies.

However, such a strategy requires a high level of commitment from neighbouring African states and a concomitant willingness to work together for the common good of their respective peoples.

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<sup>19</sup> The term “collective self-reliance” was first popularised in establishment of the SADCC by the Frontline States (in the struggle against apartheid) in 1980.

<sup>20</sup> MCLI: [www.mcli.co.za](http://www.mcli.co.za)

<sup>21</sup> Motraco: [www.motraco.co.mz](http://www.motraco.co.mz)

<sup>22</sup> TRAC: Trans-African Concessions, [www.tracn4.co.za](http://www.tracn4.co.za)

### *Possible DC Implementation Structure & Processes*

DCs are clearly “owned” by the participating states and oversight would generally be by the Heads of State multilateral. However, the day-to-day running of a DC would be by the Project Manager (PM) and his/her team. The PM could be “housed” in:

- a) A dedicated DC structure, set up specifically to establish DC and which could later evolve into the ongoing DC investment promotion capacity;
- b) The REC;
- c) AU through its NEPAD implementing agency;
- d) A DFI (regional or national, such as the housing of the Mtwara DC PM in the Tanzanian NDC, or the SA SDI programme in the DBSA).

The DC PM could be supported by the AfDB (and other local, regional and international DFIs), AUC-NEPAD and “International Partners” (ADCP concept). This is captured in the indicative organogramme below:

A DC establishment follows a series of sequenced steps or phases, though adaptations generally need to be made to cater for specific local circumstances or characteristics.