Mineral resources and development in Africa

This document follows on from the strategy for the productive sector in Africa adopted by the Interministerial Committee for International Cooperation and Development (CICID) in May 2005. It proposes strategic guidelines for France’s cooperation in the mineral resources sector. These guidelines have been produced after consultation with a panel of French and African experts and should not be seen as priorities decided unilaterally. They are guidelines, necessarily general in nature, that aim to structure a dialogue between stakeholders and partners. Ultimately, the choice of sectors and cooperation actions is made by the partner countries and organisations of French public assistance within the various cooperation steering bodies, whether bilateral, regional or multilateral.
# Contents

Preamble ................................................................................. 27

1. **Background** ................................................................... 31
   1.1. *A rapidly changing global market for mineral resources.* .................................................. 31
   1.2. *Africa is special* .................................................................................................................. 32
       1.2.1. *Small share of present market but real potential.* ......................................................... 32
       1.2.2. *Two types of mining in Africa.* .................................................................................... 32
       1.2.3. *Rising prices and development.* ................................................................................ 33

2. **General principles for cooperation action** ......................... 35
   2.1. *Integrate the sectoral approach in its context.* ................................................................. 35
       2.1.1. Recognise the relations between rule of law and sectoral governance of mineral resources ............................................................................................................ 35
       2.1.2. Recognise the specific needs of extractive industries ...................................................... 36
       2.1.3. Recognise interdependency and co-responsibility, and increase consistency .................. 36
       2.1.4. Recognise that information is asymmetrical and compensate for it ................................. 36
       2.1.5. Reconcile protection of environmental capital and extraction of mineral assets ............. 36
   2.2. *Act at all relevant levels geographically.* ............................................................................ 37
       2.2.1. National ......................................................................................................................... 37
       2.2.2. Regional economic communities .................................................................................. 38
       2.2.3. International ................................................................................................................ 38

3. **Strategic guidelines for bilateral cooperation** ..................... 39
   3.1. *Produce the information necessary for sectoral governance.* ............................................. 40
       3.1.1. Regional networks to monitor the African mining sector .................................................. 40
       3.1.2. Update geological, economic and technological data ....................................................... 40
       3.1.3. Support partnerships for transparency .......................................................................... 41
   3.2. *Develop training capacities.* ............................................................................................. 42
       3.2.1. Strengthen regional cooperation in higher education ....................................................... 43
       3.2.2. Develop technical courses. ............................................................................................ 43
   3.3. *Support sustainable development.* ................................................................................... 44
       3.3.1. Facilitate dialogue between stakeholders in environmental protection and mineral extraction ......................................................................................................................... 44
       3.3.2. Support the development of local companies and corporate social responsibility (CSR) .... 44
       3.3.3. Professionalise small-scale mining .................................................................................. 44

4. **Targeted action by French development cooperation** .......... 45

**Logical framework** ................................................................ 46

**Bibliography** ...................................................................... 48
The massive increase in emerging countries’ demand for raw materials has created an unprecedented situation. There is pressure on supplies and a sharp rise in metal prices, with an average threefold increase since 2002.

The market capitalisation of the major transnational mining corporations has followed this trend. This is evidence that the rise in metal prices is likely on average to be a long-term one.

The upward revaluation of mining assets held by companies and states increases the competition between operators to acquire rights to new mineral reserves and to secure transport routes. This global competition generates tensions of various sorts — commercial, territorial and social.
In the rush for resources that are known to be finite, Africa is the object of flattering attention. Those states whose economies depend on this primary sector see the prospect of having greater resources to finance their societies in their movement towards sustainable development. But for this opportunity to be seized, a number of challenges need to be met.

1. The distribution of the profits from extracting resources between governments, mining companies and social groups is the subject of complex, difficult negotiations that involve stakeholders with highly asymmetrical power within a changing context: historic or new industrialised countries, global industrial groups and developing countries. African leaders note that the contractual frameworks established in the past with their foreign investors do not enable them to take advantage of price rises; they are now seeking to change these conditions in order to share the economic rent from mining more equitably.

2. The proper use of mineral resources for a country's long-term economic and social development is not automatic. GDP growth in the primary sector does not necessarily shift an economy towards processing and services, job creation and more widely shared growth. The reasons are:
   - An economic model that is a self-contained concession or platform is often the rule;
   - The poorly managed injection of large amounts of foreign currency may have counter-productive macro-economic effects;
   - The allocation of the new resources to appropriate priorities for development is not always subject to national debate and sufficient control.

3. Insufficiently controlled extraction and processing of resources cause externalities both environmental (destruction of forest cover, water pollution, etc.) and social (working conditions on informal or industrial mining sites, impact on local communities).

In all, the known and/or potential resources of a country's subsoil may be at the same time a source of difficulties and fragility and also a hope for the future.

Governments and major companies are the main players in the mining sector. Whatever their sovereign rights, producer countries in the South need international companies, which possess the technology and capital, to make good use of some of their resources. Governments have the double responsibility of negotiating mining contracts and properly managing the financial returns. But the constraints of global competition are considerable. A fair equilibrium can only be achieved if the international community involves itself in the matter. Turning non-renewable natural resources into assets for development (shared growth, political stability, sustainable environment, peace) requires binding collective commitments.

The responsibility of the donor country community is involved in two ways: (i) economic — the security of their own supplies via the work of the international companies based in their countries, and (ii) international mobilisation for development — more than official development assistance, which is the catalyst, it is a tax system based on dynamic local economies that will
finance development in the long term. In this respect, the mining and energy sector is a major factor. It requires careful discussion of the consistency of policies for growth and development.

In Africa, French companies hold leading positions (oil, uranium, nickel, manganese). Deeply involved in local economies, they are major stakeholders in those economies and their development. France also offers training courses in earth sciences and oil and mining engineering that are open to non-nationals. Our research institutes (Ecoles des Mines, Agency for Geological and Mining Research (BRGM), Research Institute for Development - IRD) are well placed to support the acquisition of the new knowledge required to exploit and manage Africa's resources. Not least, French international solidarity organisations work alongside their partners in the South on all the development problems that overlap with the extraction of mineral resources.

The above questions mainly concern the extraction of non-energy raw materials (bauxite, iron, copper, cobalt, gold, diamonds, etc.). These are areas immediately affected by changes in the international environment, in which African leaders express an urgent need for cooperation. The hydrocarbon sector is also booming, as crude oil prices rise. There is a common core of knowledge between the mining and oil industries, particularly in training; consequently it is important to remain attentive to any needs that may occur in this field. But the political and economic aspects of the two businesses are quite different:

- In sub-Saharan Africa, hydrocarbons are exploited by international companies with little involvement in the host countries' economic and industrial fabric. But existing production-sharing rules enable these countries to enjoy considerable income when prices are high. After many historical controversies, there is now an accepted international practice in oil for sharing the economic rent between the host country and the operators.

- In the case of the mining industries, the economic, social and environmental success of development projects depends on proper cooperation between governments and operators. These projects generate infrastructure for the country's development, help train managers and qualified staff in a range of disciplines, and contribute to the creation of local sub-contracting firms. In addition to their financial effects, their impact in terms of integration and impetus for development is considerable, as may be seen from the examples of Botswana, Brazil, Chile, Mauritania, Morocco, etc.
Geology and major ore deposits of Africa
1. Background

1.1. A rapidly changing global market for mineral resources

The situation has changed radically in the last five years because of demand from the new industrial countries (BRIC), led by China, the “world’s building site and workshop”, and the depreciation of the dollar, in which prices are denominated.

Oil prices have risen from $20 a barrel in 2002 to over $100 in 2008, and hydrocarbons provide over half of global energy consumption (oil 35% and natural gas 21%).

After some thirty years of price stagnation, non-energy minerals have risen in a similar manner. Copper has risen from $2,000/t in 2002 to $5,500/t, with a peak at $8,000/t in 2007. Nickel has risen from $7,000/t in 2002 to $30,000/t in 2008, with a peak at $50,000/t. The gold price is more speculative: from $300/oz in 2002 it rose to more than $1,000/oz in 2008. The prices of other minerals (aluminium, uranium, iron ore) have risen in a similar manner.
The major international mining companies have seen their profits soar. The cumulative net profit of the top three global mining groups (Rio Tinto, BHP Billiton and Anglo American) rose from $4.3 billion in 2002 to $26.9 billion in 2006. Their market capitalisation has risen from less than $100 billion in 2002 to over $400 billion in 2008. Anglo American issued dividends to the tune of $10 billion in 2006. The sector is concentrating into vast global groups. Meanwhile, Brazilian, Chinese and Russian companies are increasingly active as investors and operators for basic metals (aluminium, iron, copper).

Most analysts consider that demand is likely to remain high, because it is based on major developments in emerging countries (urban population doubling in 30 years, unprecedented construction of infrastructure). Consequently, at the present rate of consumption, global reserves appear to be limited. They may even face exhaustion, although the concept of “reserves” for minerals is closely linked to price. The quest for new reserves is leading to a sharp scale-up in mineral exploration and negotiation of concessions. This exploration is involving the development of “junior” companies from historic or new industrialised countries. The result is that the current mineral landscape consists of extremely large transnational companies, new investors (BRIC) and a large number of juniors.

This sharp, rapid rise in metal prices is a source of volatility and destabilises the long-term contracts that regulate the sector.

1.2. Africa is special

1.2.1. Small share of present market but real potential

Africa plays little part in the trade in manufactured goods and services, and accounts at present for a low proportion of the production of and trade in the major metals (iron ore, 4%; bauxite, 11%; copper, 4.5%; nickel, 5.5%). However, the continent is the object of great attention in the minerals sector. With the exception of South Africa, it is relatively under-explored and open to foreign investors. In the present state of knowledge, Africa is believed to possess a significant proportion of global reserves: 30% of bauxite, 60% of manganese, 75% of phosphates, 85% of platinum, 80% of chrome, 60% of cobalt, 30% of titanium, 75% of diamonds and nearly 40% of gold. Sub-Saharan Africa produces 7% of global oil production and known reserves are of a similar magnitude.

In all, although Africa is not quite a “geological scandal”, as Jules Cornet described Katanga, its possession of major resources may well make the continent a leading player for some minerals. This is the justification for the junior companies’ keen interest, despite the considerable investment needed to exploit the deposits.

1.2.2. Two types of mining in Africa

a) Small-scale miners and informal mining

Five to six million people in Africa (20 million in the world) engage in “small-scale mining”, often as a side job with farming. A number of minerals are suitable for this purpose, from building materials to precious stones (diamonds) and gold. In this way are produced 20 million carats annually (30% of African production,
$900m) and 50 tonnes of gold (10% of African production, $1bn). In Ghana, the second-largest gold producer, income from gold panning injected into the country’s economy is greater than that from industrial mining.

This small-scale or informal activity has a direct effect on local rural economies. But, if poorly managed, its impact may be negative:
- smuggling endangers the rule of law and may even finance civil war;
- physical danger from mining (subsidence);
- wasted reserves as a result of superficial extraction techniques;
- poor development as a result of the living conditions of workers migrating to the sites, often seasonally; health risks from prostitution, poor school attendance by children working in the mines, alcoholism and drug use;
- pollution of the environment (by mercury, for example: Ghana imports 5 tonnes annually for gold amalgamation, and this is released into the environment), and deforestation;

The social and environmental impacts that need to be considered in the case of industrial mining require a specific approach in the case of small-scale mining.

b) Industrial mining

The industrial investment that is used for most mining comes largely from foreign companies. Foreign Direct Investment (FDI) has the advantage of providing capital, technology and market outlets. The investment decision is made first to meet industrial needs as part of a global approach whereby transnational corporations (TNCs) seek to take advantage of variable production costs and optimise tax exposure. As part of their long-term policies, international groups analyse investment opportunities for exploration and acquisition. As demand grows after years of low prices, they are now highly active. Since it requires ten or so years for an industrial project to develop, companies continually plan ahead, manage a number of projects at once and opt to mothball some. In addition, integrated groups working in the various production stages seek to divert their profits to those countries where taxes are lowest.

Initially, public-sector enterprises were major operators in Africa. Except for a few of the largest (such as SNIM in Mauritania), they have now made way for the private sector. The result is that, generally speaking, governments are no longer the biggest operators but do retain 10-20% stakes in mining projects in order to have a say in activities of strategic importance for the country, and in some cases to earn income from its minerals.

1.2.3. Rising prices and development

a) Difficulties in establishing sectoral governance at national level

At national level, minerals raise problems of governance.

The rise in commodity prices automatically leads to growth in mining company profits, higher GDP in producing countries and an improvement in those countries’ debt-to-export ratios. But if value added in the country remains low, if tax revenue rises less quickly than commodity prices, and if this revenue is not efficiently allocated, then higher prices do not produce sustainable development. At present, African producing countries consider that they do not sufficiently profit from growth in this sector. They are tending to re-examine the legal and regulatory frameworks established in the 1960s, and the mining agreements signed with foreign investors.

Is a different allocation of the economic rent from minerals possible? Can a renegotiation of
the agreements be envisaged? Does the arrival of new partners improve the host countries’ negotiating position in financial and/or industrial terms?

Even before resources are extracted, the systems for granting research and exploration permits do not always present acceptable guarantees of transparency and equity. The states concerned rarely possess the geological and land tenure information infrastructure they could use to optimise their concession of mineral rights. Earlier or alternative uses of the land concerned, the rights of native communities and opportunities for rehabilitation or compensation are difficult to assess. It is also difficult to ensure the independence of the relevant authorities with respect to special interests.

The resources from the extractive industries are not always satisfactorily integrated into public finances. Often parliaments and public opinion do not have access to the evidence (contracts and revenues) that would enable them to exercise their rights. Poor knowledge of revenues necessarily arouses expectations and suspicion, particularly since information about surging prices is now widely commented upon by better-informed media and those people and organisations that express opinions and criticisms concerning government data are subject to pressure. With the implementation of international instruments such as the Extractive Industries Transparency Initiative (EITI), the revenues that governments receive from mineral resource extraction are beginning to be a little more visible.

b) Geopolitical implications

Some crises in Africa are caused or maintained by the actual or potential wealth from mineral resources. The magnitude of the economic issues involved in raw materials generates tensions and weaknesses at various levels:
(i) local, in the case of “rushes” where resources can be exploited by small-scale operators or people find employment with industrial operators; (ii) national, concerning the distribution of revenues between regions and central government, with conflicts and even armed rebellion; and (iii) between neighbouring countries, for the control of potential wealth lying on poorly defined borders or affected by smuggling.

Conflicts arise between local players for the control of mineral resources, and in some cases outside interests aggravate armed conflicts by financing one side or the other.

c) Need for consolidation of governments and international cooperation

Even where governments effectively exercise sovereignty over their resources, the inadequacies (institutional, economic, technical and scientific) of some African countries place them in an asymmetrical position in negotiations with international companies; the sales of these companies are sometimes ten times as large as the host-country’s GNP, as in the case of Rio Tinto, which in 2007 posted not sales but profits twice the size of Guinea’s GNP.

In a shifting market, negotiations to revise the sharing of revenues and risks provide many examples of the difficulty of striking a balance between Africa and the rest of the world. “[R]eliance on TNCs [transnational corporations] may also raise concerns associated with unequal bargaining strengths, ownership and control over non-renewable resources, rent-sharing, transfer pricing practices and various environmental and social costs.” (UNCTAD, World Investment Report 2007.)

Some countries are invited by international investors to take part in huge projects without having the expertise necessary to negotiate balanced agreements and evaluate impact, which sometimes causes the long-term mothballing of certain mineral deposits.
2. General principles for cooperation action

2.1. Integrate the sectoral approach in its context

2.1.1. Recognise the relations between rule of law and sectoral governance of mineral resources

Consolidation of the rule of law (freedom of the press and association, responsibility of parliament, transparency and proper management of public resources and procurement, etc.) and quality of leadership have a direct impact on the transparency of mining contracts, exports and revenues received by governments and their use within a strict budget framework. It is also essential to build governments’ capacity to manage the various technical aspects required to make decisions and achieve a fair balance of information concerning the resources subject to concession. A government may well call on international experts for advice in its negotiations with international companies, but it must still have the means to exercise its sovereignty, such as geological, mineral and land ownership data, and must be able to monitor contract execution.
2.1.2. Recognise the specific needs of extractive industries

Improved infrastructure (transport and power) and a legal business environment favourable to private investment require a comprehensive approach to economic development. This may be part of a regional policy. But increasing the sector’s contribution to national value added requires action targeted on keeping the processing stage in the country and developing subcontracting and services associated with mining. Mineral extraction, which cannot be offshored, could then be managed as part of a regional development policy integrating other economic activities, with a sharing of responsibility between the company and the government.

Encouraging the local processing of raw materials is an objective for all African leaders in the sector, who wish to create value added locally. But this can be difficult in some sectors:
- Subcontracting in the oil sector requires a knowledge of highly technical industrial processes available only to a few specialised global corporations;
- Local processing often requires a large supply of cheap energy (as with bauxite-aluminium);
- Qualified labour is a prerequisite. There are examples of rapid improvements in this respect: the cutting and polishing of rough diamonds and semi-precious stones are done locally in an increasing number of countries (Angola, Botswana, Madagascar, Namibia).

Managers in mining companies are increasingly “nationals”. But because of the specific requirements of mining disciplines, expatriates are still often used. Training senior managers and employees in the local country is often hampered by inadequate national training capacities. Pooling training resources regionally would also be a way of providing an effective response.

2.1.3. Recognise interdependency and co-responsibility, and increase consistency

Since the non-renewable mineral resources in Africa are of international interest, wherever the working may occur, they need to be managed optimally at global level. The interests of the industrialised and developing countries (especially in Europe and Africa) converge for proper management of the resources.

Since transnational corporations are major players in Africa, their home countries (OECD or newly industrialised countries) and their shareholders ought to have some influence on their social responsibility.

Since, in order to make aid effective, the international community has the stated objectives of greater government responsibility for their budgets and higher internal taxation, greater attention should be paid to increasing the revenues from the exploitation of mineral resources.

2.1.4. Recognise that information is asymmetrical and compensate for it

The globalisation of mineral extraction is a fact. Industry concentration justifies creating an international system of cooperation to make available to the players the information, expertise and mediation resources if necessary.

“International organizations can facilitate learning opportunities from studying and comparing the positive and negative experiences of different mineral-rich countries. Initiatives at the regional level might be useful… Well-informed governments are… better able to… negotiate with TNCs.” (UNCTAD 2007.)

2.1.5. Reconcile protection of environmental capital and extraction of mineral assets

The environmental impact of mining is considerable in and around mining sites, and even at a distance when pollutants contaminate water courses (mercury and gold-panning) or the air (dust). For that reason, during the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, the World Conservation Union (IUCN) and the International Council on Mining and Metals (ICMM) began a “dialogue” in order to prepare a guide to best practice. Assessment of the immediate impact on the environment and its resilience and of feasibility of environmental protection and/or restoration
measures are now key features of mining projects. In practice, it is the agreements between companies and governments that make it possible to minimise or compensate for losses of natural capital during mining. In this respect, the resources the government possesses to exercise its responsibility to monitor operations and implement policies to protect the quality of the environment are crucial.

2.2. Act at all relevant levels geographically

2.2.1. National

“Host-country governments bear the main responsibility for ensuring that the exploitation of their extractive industries yields benefits that support development objectives.” (UNCTAD 2007.)

Mineral resources are national assets. The creation or consolidation of sectoral governance and investment depend mainly on action at country level. Bilateral cooperation should be part of international support for national policy approved by the competent bodies.

In line with its commitments to aid effectiveness, France will support (and participate in) any consultation mechanism between the international community and national authorities to define and implement national policy and strategy for the mineral sector.

The financial instruments France can use at national level comprise:
- with respect to cooperation in education and research, support for civil society and economic and financial governance, subsidies awarded by the “Solidarity with developing countries” programme run by the Directorate-General for International Cooperation and Development (DgCID) of the French Ministry of Foreign and European Affairs;
- with respect to support for national sectoral administration and the funding of public or private investment, loans or grants, depending on action and country, from the French Development Agency (AFD) Group.

French official assistance co-finances projects with governments, its other technical and financial partners and sector players (in this case mainly companies), as part of a programme approved by the relevant national authorities.

The French initial training system is available for cooperation action. CESMAT, a network of mining schools and universities, offers a wide range of in-service courses open to non-French partners.

The expertise of specialist establishments (such as BRGM, the French Petroleum Institute - IFP) and research teams (mining schools, IRD, universities) is also available.
French solidarity organisations are already committed to a number of international initiatives concerning improved management of the sector. They will increase their involvement.

French companies in the sector, as part of their own objectives, are channels for transferring expertise and experience. Most of them have signed up to international initiatives (Global Alliance - GA, EITI) and have made commitments to CSR and financial information about their activities, according to the agreements with partner countries. France will recommend that these companies apply current OECD standards on all their mining sites.

2.2.2. Regional economic communities

Regional cooperation under the auspices of regional economic communities (RECs) is necessary for a number of reasons:
- The formation of regional economic areas involves a common external tariff, tax convergence, free circulation of goods, capital and persons, common standards that apply to mining and other sectors;
- Mineral products exported by landlocked countries use regional infrastructure;
- The energy security of major industrial sites may depend on regional connections and common hydroelectric plants;
- Cross-border trade in high-value products, whether informal or criminal, requires close cooperation between enforcement services;
- Few countries possess training capacities for all the skills required at the various levels of specialisation: regional university cooperation could fill the gap.

In all, a regional sectoral policy for mineral resources requires three pillars:
- a set of “directives”;
- a technical, economic and social monitoring unit for the sector;
- a capacity-building programme, based on networking national institutions and specialisation for some of them.

As part of its support for the formation of regional economic areas, the French development cooperation system will, with its other partners, support RECs that have sectoral policies, such as WAEMU.

2.2.3. International

The international community can support the development of a mining industry favourable to sustainable development in various ways:
- creating and enforcing international rules on product quality, transparency of product flows and financial flows (EITI and Kimberley Process);
- financing investment and consolidating governance at national and regional level (development banks, European Commission);
- supporting independent consultancy or arbitration bodies that countries can use in their negotiations with investors.

France, as a member country of these international bodies, will support these initiatives, particularly at European level.
3. Strategic guidelines for bilateral cooperation

The Logical Framework appended analyses all the issues likely to be included in an international cooperation strategy for the mineral resources sector. The purpose of partnerships is to improve the contribution of mineral resource extraction to sustainable development. This purpose comprises three objectives:

- **Obtain and manage the information necessary to assess and then exploit the resource**: this information is necessary for decision-making by stakeholders;
- **Improve attractiveness, governance and transparency**, in order to invest and share profits and allocate them via explicit choices shared among stakeholders;
- **Move from a rent-seeking economy to a shared-growth economy**: employment, decent jobs, company creation and technology transfer are essential for development.

The strategic guidelines for French development cooperation specified here, including their thematic and geographical options, correspond to this framework.

**Thematically**, these options are based on the advantages France has in terms of education and research for French-speakers and the experience it has recently acquired in bilateral and regional cooperation programmes.

**Geographically**, the criteria adopted (detailed below) combine the importance of the sector for the country, the amount of work required to achieve good governance in the sector, and relations between French and local experts.
Discussion at European level about a division of labour between Member States and the Commission shows that it is ultimately partner countries that determine the configuration of the support they wish to receive. The proposals contained in this paper should not be seen as priorities decided unilaterally.

3.1. Produce the information necessary for sectoral governance

3.1.1. Regional networks to monitor the African mining sector

The consolidation at REC level of information provided by economic operators, administrations, academics and civil society would make it possible to make instructive comparisons and analyses of development trends in this sector and of best practice. Such a communication tool would facilitate the dialogue between players that is necessary for regional sectoral policies or the harmonisation of national policies. The mineral resources sector’s contribution to development could be analysed in a number of ways:
- its macroeconomic impact on the country’s major indicators (trade balance, GDP, value added, national accounts);
- economic impact in terms of the number of local jobs, wages paid, effects on local economic activity from induced jobs, infrastructure created, subcontracting, etc. and also its contribution to the life of society;
- social impact on the families of employees in the sector (income, social benefits, access to healthcare, education, essential services — water, energy, sanitation — and leisure activities, social promotion, participation in local life, trade union activity, etc.);
- environmental impact of the various phases of mining (exploration, extraction, rehabilitation) on the site and its periphery (concentration of population, effluents).

A regional monitoring unit could be set up to build on the experience acquired by the GISAfrica project and SDIMI (Sustainable Development Indicators in the Mining Industry). This approach, which must be an integral part of an REC strategy, requires:
- the creation of national multi-player expert groups, to set objectives and define both the operating framework of the monitoring unit and the indicators to be monitored;
- a regional operating team to supply the monitoring unit with data;
- execution of studies;
- regular online publication of comparable national results.

3.1.2. Update geological, economic and technological data

a) Geological data

Existing geological data (maps and resource inventories), although often partial, are the essential basis for assessing potential, informing investors and granting exploration permits. Updating and extending these data requires the formation of research teams, fieldwork and the use of modern technology. The production, maintenance, management and analysis of permanently updated data require techniques and skills that need to be regularly developed. The importance of this basic documentation is such that where it does not exist, expensive modern resources need to be mobilised with external financing. France can contribute to this together with the multilateral donors (World Bank, AfDB, EU). Also to be considered are skills transfer and the definition of transparent rules of access to this highly valuable information. Because of its strategic nature, this information must be held and managed at national level. However, some of the information can be shared at regional level because of the continuity of geological systems.

b) Economic and technology watch

An understanding of global markets, analysis of economic information and its accompanying technological developments are factors of
strategic importance in assessing potential, deciding on investment and negotiating with economic operators whose objectives need to be understood. This can also be used to analyse the approach of international operators. Any national capacity-building programme must consequently include a function of watch, information and strategic analysis. This function may operate at regional level within the monitoring unit mentioned above, with support from a network of training establishments.

A number of French bodies offer courses targeted on African needs in France or locally: IFP (French Petroleum Institute), CESMAT (raw materials higher education centre) and CIFEG (International Centre for training and Exchanges in the Geosciences).

c) Assessment of the sector’s economic impact on development

Recent publications (UNCTAD 2007, UNECA 2007) stress the gap between foreign direct investment (FDI) in the extractive industry sector in a country and that country’s development in terms of human development and social progress. To examine this situation, economic studies at national and regional level or of the mineral sector are necessary to measure the sector’s impact.

Since the 1990s, reforms in the mineral resources sector have recommended opening up to FDI. The Multilateral Investment Guarantee Agency (MIGA) of the World Bank plays an important role here. At present, however, the World Bank and the other multilateral institutions (UNCTAD, European Commission) are not entirely sure of the impact of FDI on the development of host countries and the support these countries should have in their negotiations with investors. France is ready to contribute to this examination.

3.1.3. Support partnerships for transparency

a) Contribute to the Extractive Industries Transparency Initiative (EITI)

The extractive industries transparency initiative (EITI) launched in 2002 is designed to increase transparency concerning the income flows generated by the extraction of mineral resources. In particular, it encourages companies to publish what they pay countries, and countries to declare what they receive. An audit is used to reconcile the various declarations. By February 2008, 27 countries had signed up to implement the initiative, 22 were candidate countries to be validated, of which 15 in sub-Saharan Africa.

France has been a member of the EITI management system since the start and belongs to the management committee of its Multi-Donor Trust Fund (EITI-MDTF). French companies and NGOs are members. In 2006-2007, France contributed $800,000 to the trust fund dedicated to implementing the initiative and managed by the World Bank.

The EITI is still developing. Not many countries have yet achieved full compliant status and relations with civil society representatives have sometimes been strained. France will continue to support the EITI and encourage its partners not only to join but also to comply with their commitments.

b) Facilitate equitable and sustainable partnership agreements between governments and companies

Companies expect favourable financial and operating conditions from host countries. Host countries hope to receive revenues that correspond to conditions on the world market. The contractual relations that are established when companies set up operations are crucial, because they determine the value of the wealth created and the share the host-country can retain locally. The contracts may also stipulate a clear allocation of
the two parties’ responsibilities and obligations in areas related to operations (infrastructure, social services, security, environment). France will support multilateral initiatives to improve the quality of the agreements between companies and governments, renegotiation where necessary and extension to allow for social, environmental and security aspects. The proposal discussed at the World Bank forum held in Conakry (10-11 March 2008) to create a facility to help countries renegotiate agreements will receive France’s close attention.

c) Strengthen the Kimberley Process

The Kimberley Process to combat the illegal trade in raw diamonds that finances civil wars in Central and West Africa is by all accounts a success: 44 producing countries covering most of the trade are members. Since it began, conflicts financed by diamond smuggling have declined. This is the most convincing example of certification for natural resources.

France is a stakeholder in the Process via the European Union and attends plenary sessions. In addition to the administrative aspects relating to the certification of gems in circulation, the Kimberley Process requires action at source. In Africa, the prime source of illegal diamonds is small-scale mining, which can amount to all of a country’s production (Guinea, Central African Republic (CAR), Sierra Leone, Liberia) or a major part of it (DR Congo, Angola). Any initiative for the control and sustainable development of the small-scale sector will improve the chances of monitoring the production and cross-border trade of diamonds.

France will support those countries that wish to implement the Kimberley certificate by helping them to evaluate their production capacity and providing them with know-how for certification. Furthermore, because of the importance of having cooperation on cross-border trade between neighbouring producer countries, France will support the regional initiatives that are developing as part of the Process, such as ADPA (African Diamond Producers Association).

Similarly, France will support initiatives seeking to improve the traceability of certain sensitive products (precious and semi-precious stones, coltan, copper, etc.) from poorly managed sectors, which cause the same sort of problems as diamond smuggling.

d) Support civil society organisations in the South

The social, environmental and governance dimensions of any mining programme require particular attention from civil society organisations at national and international levels.

NGOs, for example, have launched campaigns for transparency in the extractive industries or to assess environmental impact. France will support their action.

Nationally, the creation of informed dialogue between companies, authorities and citizens requires informed and trained organisations of local civil society. It is expected that specialist international NGOs will contribute to this. France will support any initiatives they take in this respect.

3.2. Develop training capacities

The training of African senior managers is a short-term necessity for national authorities (teachers, administrators) and companies faced with rapid growth. Cooperation activities should meet this immediate need and support it over time. As is the case with all technical and scientific fields, the establishment of stable links between African training bodies and international reference centres is both a way of strengthening current curricula and an objective in its own right of development cooperation.
The internationalisation of research and training is essential, particularly in the use of rapidly changing leading technologies. Similarly, regional cooperation is necessary for two reasons of general application: a regional training policy with specialisation of courses among establishments enables economies of scale affecting the quality of diplomas, and this is a powerful means for creating a regional community of experts.

Consequently, the following proposals are based on these principles:
- training for experts and trainers (mining, law, economics, environment, technical, etc.);
- support for regional networks of training establishments;
- creation of links between training establishments in Africa and Europe, including France.

3.2.1. Strengthen regional cooperation in higher education

Because of the size of the student population in each country, the regional opening-up of courses offered by national higher education establishments and specialisation with a view to regional complementarity should be encouraged. Each specialist establishment with a regional scope will have year-groups large enough to justify the investment in laboratory equipment and teaching staff. This policy of support for centres of excellence is already being implemented by France, including the earth sciences via its support for the Institute of Petroleum Studies (IPS) in Port Harcourt (with Total and IFP) and the EMIG in Niamey (with Areva).

“Regional higher education alliances for mineral resources in Africa” could be created that would receive support from France and the University Agency for Francophonie (AUF), and also from Europe and corporate sponsors.

As part of this sort of network, recognised specialist centres with regional scope could be identified on the basis of their current capacities and nearby activity sectors so as to create links with companies, on the model of the specialist Institute for water and the environment (I2E) in Ouagadougou.

For example, earth sciences courses for the oil sector could be located in countries such as Angola and Nigeria, courses for the mining sector in countries of the Sahel (Niger, Guinea, Mali), and courses on the environment and mining law in countries that have skill centres in these areas.

The creation of this sort of network in West and Central Africa (including non-French-speaking countries) would need to be devised by specialist establishments, taking advantage of developments in higher education in Africa (BMD courses, opening of higher education to the private sector). France would support any feasibility study for that purpose, using its own higher education and research establishments.

Once feasibility is established and stakeholder support confirmed, the resources France would use to support the approach would be the following:
- participation in coordinating the network;
- programme of grants for jointly-supervised doctoral theses to train researcher lecturers in disciplines for which needs have been identified: earth sciences and environment, mineral resource economics, world markets, management, economics, business law;
- competitive research programmes in partnership between African, French and European establishments;
- twinning with French laboratories and establishments to supervise research work, update curricula; provide short internships for African teachers and missions by French teachers.
- upgrades for scientific and technical facilities (investment, training and maintenance).

3.2.2. Develop technical courses

Companies and administrations (for technical controls) need supervisory staff and technicians.

Training in Africa is usually linked to a particular operating site (SNIM in Mauritania, EMAIR in Niger, Boké school in Guinea), with the result that administrations are not able to carry out the controls laid down in the regulations and mining companies use expatriate staff, which deprives the host countries of qualified jobs.
The circulation of technical knowledge is essential for the creation of small firms to enrich the local industrial fabric.

In partnership with the companies, France will support capacity building in vocational training. As with higher education, the feasibility of regional complementarity will be studied with the governments and companies concerned.

3.3. Support sustainable development

3.3.1. Facilitate dialogue between stakeholders in environmental protection and mineral extraction

Mineral extraction can conflict with other development objectives such as the conservation and sustainable management of renewable natural resources. A consensus needs to be achieved before mining starts. Support should be given to consultation and decision procedures among stakeholders (administrations, companies and civil society) and the studies required for informed decision-making that considers negative externalities and technical means for limiting or compensating for them.

3.3.2. Support the development of local companies and corporate social responsibility (CSR)

The mineral resource sector does not only involve major companies and exporting. A local sector usually develops for all types of building material. And subcontracting and associated services develop in the mining sector, even though because of their highly technical nature, these are usually provided by international companies. With the range of financing instruments provided by the French Development Agency (AFD) Group, France is able to support the development of local companies in the mining sector and associated services.

In line with its mission, AFD will support directly or via financial institutions companies in the mining sector in the implementation of corporate social and environmental responsibility, within companies and in the zone of impact of their activities. Particular attention will be given to action that directly benefits communities living near mining sites.

3.3.3. Professionalise small-scale mining

The living and working conditions too often observed in small-scale mining operations are not inevitable. The legal no-go areas that grow up around deposits are not inevitable either. These situations have been abundantly described in the literature but until now few corrective programmes have been proposed to improve them.

It is possible to support the emergence of small local firms whose economic, social and environmental effects would promote local development. This involves:
- recognising their activity with a specific institutional framework (concerning land tenure);
- on-site training in best practices, adapted to the social context, and supported by technology transfer;
- adapting the offering of services: public (administration, law and order), basic (water, sanitation, communication), social (healthcare, education) and financial (microcredit, banking);
- strengthening professional organisations in their role of information and professional consultation.

French development cooperation action would consequently concern the following points:
- Nationally, contribute to local development programmes at small-scale mining sites, including, if necessary, the various dimensions described above; support national initiatives to organise the sector;
- Subregionally, develop a capacity to train self-employed miners, in a form to be decided, with the aim of experience-sharing and capitalisation and in the medium term of providing host countries with vocational training centres;
- Support research into social organisation and the economic circuits that will lead to proposed models of social and economic organisation with a view to local development;
- Internationally, participate actively in the World Bank’s Communities and Small-Scale Mining (CASM) initiative and attempt to make it more operational.
4. Targeted action by French development cooperation

The action of the French development cooperation system must be directed towards those countries that wish it and where mining is a major issue. To that end, four criteria are considered:

1. Economic and social importance of the small-scale mining sector in the country by volume of activity and extent of problems caused, or its importance in world markets;

2. Needs and desire for reform in the sector’s institutional framework, particularly the treatment of environmental and social impact and the creation of profit-sharing mechanisms for local communities;

3. Short- and medium-term development potential, where geological data are favourable and investors are actively interested;

4. References of French operators and stakeholders likely to implement cooperation action in this sector, including French companies likely to support such action.
At least thirteen countries in France’s Priority Solidarity Zone meet these criteria:
- Central Africa – Congo-Brazzaville, Cameroon, Central African Republic, Gabon;
- West Africa – Guinea Conakry, Niger, Nigeria, Mali, Mauritania, Senegal;
- Southern Africa (SADC) – Angola, Democratic Republic of the Congo, Angola, Madagascar.

This analysis determines ECOWAS and EMCCA as the areas where regional approaches could be supported.

In a number of SADC countries (those mentioned, plus Botswana, Namibia, South Africa and Zambia) the mining economy is an engine of growth and retains enormous potential. The largest mining players in Africa are South African companies. Because of the skills the region possesses and the role that Southern African countries are now playing in the development of Africa’s resources, any development cooperation initiative in the mining sector at continental level must include them.

Similarly, North Africa, which has oil, gas and major mineral resources, is able to support other countries on the continent. In these two subregions, cooperation with France means active industrial partnerships and higher education courses.

In addition, the initiatives of the African Union Commission and ministers of natural resources would be supported.

### Purpose: improve the contribution of mineral

<table>
<thead>
<tr>
<th>Objective</th>
<th>Sub-objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Manage the information necessary to exploit assets</td>
<td>11 Acquire and manage geological information</td>
</tr>
<tr>
<td>12 Manage economic mining information</td>
<td></td>
</tr>
<tr>
<td>2. Improve the attractiveness, governance and transparency in the sector</td>
<td>21 Improve the policy and contract bases of sectoral governance</td>
</tr>
<tr>
<td>22 Capacity building for staff and institutions</td>
<td></td>
</tr>
<tr>
<td>23 Share information between stakeholders and public opinion</td>
<td></td>
</tr>
<tr>
<td>3. Move from a primary economy to a shared-growth economy</td>
<td>31 Promote an industrial sector</td>
</tr>
<tr>
<td>32 Increase national value added</td>
<td></td>
</tr>
<tr>
<td>33 Professionalise small-scale sector</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Level of responsibility</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>111 Earth sciences training and research</td>
<td></td>
</tr>
<tr>
<td>112 Updating geological maps</td>
<td></td>
</tr>
<tr>
<td>113 Inventory of mineral resources</td>
<td></td>
</tr>
<tr>
<td>114 Management of national documentation</td>
<td></td>
</tr>
<tr>
<td>115 Promotion of mining potential</td>
<td></td>
</tr>
<tr>
<td>116 Evaluation of production and product traceability</td>
<td></td>
</tr>
<tr>
<td>121 Access to and training in international economic information</td>
<td></td>
</tr>
<tr>
<td><strong>transparency in the sector</strong></td>
<td></td>
</tr>
<tr>
<td>211 Mining policy consistent with other sectoral policies: environment, investment, territory, infrastructure</td>
<td></td>
</tr>
<tr>
<td>212 Mining investment code</td>
<td></td>
</tr>
<tr>
<td>213 Mining land registry</td>
<td></td>
</tr>
<tr>
<td>214 Decisions on contract negotiation to balance interests of governments and companies</td>
<td></td>
</tr>
<tr>
<td>215 Support for international initiatives and implementation of commitments made (Kimberley Process, EITI, product agreements)</td>
<td></td>
</tr>
<tr>
<td>221 Training of stakeholders and managers in negotiating and monitoring contracts</td>
<td></td>
</tr>
<tr>
<td>222 Strengthening professional associations</td>
<td></td>
</tr>
<tr>
<td>223 Operation of a national sectoral multi-player consultation framework</td>
<td></td>
</tr>
<tr>
<td>224 Modernisation and adaptation of relevant authorities (evaluation agencies, inspectorates, EITI offices)</td>
<td></td>
</tr>
<tr>
<td>231 Publication of revenues (government) and payments (companies)</td>
<td></td>
</tr>
<tr>
<td>232 Publication of companies’ CSR data</td>
<td></td>
</tr>
<tr>
<td>233 Measurement of economic, social and environmental impact</td>
<td></td>
</tr>
<tr>
<td>234 Freedom of comment in parliaments and civil society</td>
<td></td>
</tr>
<tr>
<td><strong>economy</strong></td>
<td></td>
</tr>
<tr>
<td>311 Facilitate foreign and national investment</td>
<td></td>
</tr>
<tr>
<td>312 Optimise public shareholdings</td>
<td></td>
</tr>
<tr>
<td>313 Finance company development</td>
<td></td>
</tr>
<tr>
<td>314 Finance companies’ environmental and social upgrades</td>
<td></td>
</tr>
<tr>
<td>315 Finance transport and energy infrastructure</td>
<td></td>
</tr>
<tr>
<td>321 Develop subcontracting and associated services</td>
<td></td>
</tr>
<tr>
<td>322 Develop processing</td>
<td></td>
</tr>
<tr>
<td>323 Vocational training</td>
<td></td>
</tr>
<tr>
<td>331 Technical and entrepreneurial training</td>
<td></td>
</tr>
<tr>
<td>332 Organisation and control of marketing</td>
<td></td>
</tr>
<tr>
<td>333 Innovation and technology transfer</td>
<td></td>
</tr>
<tr>
<td>334 Public services in mining areas</td>
<td></td>
</tr>
<tr>
<td>335 Integration of small-scale mines in rural land management</td>
<td></td>
</tr>
</tbody>
</table>
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