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INFLOW OF FUNDS AND NEW TECHNOLOGIES IN THE MINERAL SECTOR OF DEVELOPING COUNTRIES AND ECONOMIES IN TRANSITION: COMPLEMENTARITY BETWEEN THE ROLES AND OBLIGATIONS OF INVESTORS AND INVOLVED PARTIES OF HOST COUNTRIES CONSIDERING THE INTRINSIC VALUE OF MINERAL DEPOSITS AND ACCRUED BENEFITS

Assessment of benefits accruing to host countries from the inflow of funds and technology for mineral development

Report of the Secretary-General

SUMMARY

The present report was prepared in response to Economic and Social Council decision 1994/308. The report takes into account an assessment of host country benefits received to date and provides for suggested ways and means of facilitating complementarity between the roles and obligations of host Governments and of investors in the development of mineral resources within the framework of sustainable development.

Special attention has been focused on major areas of change since the second session of the Committee on Natural Resources, including, inter alia, the deepening of institutional structures required to support private investment and the corresponding positive changes under way in the financing of mineral resources; private sector response at the local level to host Government social policy concerns; and the unique approach taken by a number of mining companies in the development and training of personnel world wide.

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* E/C.7/1996/1.

The report also underscores the continuing importance of the United Nations system, the World Bank and International Finance Corporation (IFC) system and other multilateral and bilateral agencies, utilizing a multi-disciplinary approach in the ongoing formulation and implementation of mineral resource and related area policies; in the reform of legal, regulatory and fiscal systems; in the provision of direct technical assistance; and in the role of facilitating the development of sustainable institutional and physical infrastructure necessary to support an environment conducive to meeting the needs of private investors while simultaneously enhancing the ability of host Governments to meet socio-economic objectives.

Recognition has also been given to the overall importance of involving local communities in the planning of new mines. An executive of a major international mining firm phrased the concept well, "the real market is not the consumer of our product, but rather the consumer of our presence".

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INTRODUCTION

1. The present report has been prepared in response to Economic and Social Council decision 1994/308 and upon the request of the Committee on Natural Resources at its second session from 22 February to 4 March 1994 contained in its resolution 2/10. The report takes into account an assessment of host country benefits received to date and provides suggested ways and means of facilitating complementarity between the roles and obligations of host Governments and of investors in the development of mineral resources within the framework of sustainable development.

2. Since the second session of the Committee, in February and March 1994, developing countries and countries in transition have seen an expansion of the inflow and form of funding and technical expertise from the international private sector. Fundamental to this expanded inflow has been the increased confidence generated within the private sector, including the banking and insurance sectors, as a result of the willingness of country administrations to demonstrate a continued responsiveness to private investor concerns in the area of policy development, in the development and enhancement of stable and transparent mining and investment codes, and in the development of supportive administrative frameworks. The United Nations system, the World Bank and International Finance Corporation (IFC) system and other multilateral and bilateral organizations have continued to provide invaluable support in the formulation of national mineral sector policies, in the enhancement of legal and fiscal systems, in facilitating forums for multi-disciplinary dialogue and in the deepening of necessary institutional infrastructure. The consultative and responsive multi-disciplinary approach has been well received and maintaining it is increasingly important for both developing countries and countries in transition in order to gain the support of long-term investment and the accompanying technology transfer.

3. Directly tied into this process has been the continued dissemination of individual country information through the very successful investment seminars and round-table discussions which have enabled private companies, financial institutions and technical advisers to gain a better understanding of various countries and their risk factors, and to develop good working relationships with private and government officials and the multilateral and bilateral aid institutions, all with a view towards creating a sustainable economic and environmentally sound base of operations on which to build within the various countries.

4. There are perhaps three very significant movements under way since the last session. First, is the very positive movement stemming from increased confidence generated by having more stable frameworks in place - that of a changing of investment structures accompanied by a broadening of participants in individual investments. Rather than the initial very simple structure of a pure equity investment by an individual foreign investor where risk was self insured, a number of joint venture investments have concluded and have been structured to include a mix of equity and non-recourse project debt, with insurance provided by either private or agency insurers. Battle Mountain’s Kori Kollo project in Bolivia and Zarafshan-Newmont Mining’s gold project in Uzbekistan are examples

of this form of structuring. Second, is the movement towards increased globalization of broader issues supported by various independent and industry groups including inter alia, environmental issues and social issues such as including the human rights of indigenous people and artisanal workers. Third, and perhaps most significant, is the recognition that in order to succeed in the long term and produce a win-win situation, input is required from many participants in addition to host Governments and foreign investors. There is a requirement to balance the needs of all parties and to develop physical, social and institutional structures which create and support a solid environment for long-term sustainable economic and social development. An executive of a major international mining firm focused this requirement: "the real market is not the consumer of our product, but rather the consumer of our presence".

5. A commonality is developing with respect to the concepts that mining projects should benefit both investors and the host country, that Governments should design transparent regulatory and fiscal regimes which achieve investors' objectives of profitability but also at the same time achieve the Governments' objectives of revenue generation and economic and social development. In particular, concerning the host country, the mining project should benefit the economy as a whole, encourage and develop local industries to meet the needs of the people and should offer an opportunity for education and training of nationals and ensure transfer of technology. It was also recognized that the private sector objectives may not be harmonious with host Government objectives, but mechanisms should be put in place to support complementarity of roles. 1/, 2/

I. AN ASSESSMENT OF HOST COUNTRY BENEFITS ACCRUED TO DATE

A. Overview

6. In the mid-1970s, foreign and private investment in the mining sector in many jurisdictions including Africa, Latin America and the Asia and Pacific region, was politically identified as encroachment on national sovereignty and an instrument of foreign domination over national economic development. Such investment was also thought to lead to an excessive drain on foreign exchange, a deterrent to industrial development and distortion of prices, actions detrimental to a developing country.

7. The above trends were rapidly reversed during the mid-1980s. Most countries were dissatisfied with their state owned, controlled and operated mining companies, which failed to achieve their purposes or did so at high cost (they absorbed a large share of government budgets in the form of subsidies or capital infusions). Moreover, they were faced with severe financial constraints (inadequate local funds, difficulties in raising loans from international markets and severe debt burdens due to restrictions on commercial bank lending). Thus, foreign investment oriented mineral projects became attractive, divestiture and restructuring of State-owned companies commenced and the governments of a number of countries began shifting development strategies towards relying on the private sector to lead economic growth. In line with this, the majority of African, South-East Asian and Latin American countries have adopted policies designed to improve the environment for private

investment. Since 1985, over 75 countries have introduced or are in the process of introducing new mining laws/policies.

8. Since the last session in 1994, the United Nations system, the World Bank and IFC system and the multilateral and bilateral organizations have continued to provide assistance to developing countries and countries in transition in the area of policy development, the implementation of laws, regulations and enforcement procedures that are considered to be fair and well-thought-out and to provide both consistency and stability for planning purposes; in upgrading geological information; in hosting regional mineral investment promotional forums attended by government officials and representatives of international mining companies and relevant agencies; and in capacity building and the training of nationals to monitor the activities of mining companies.

9. Reforms are slowly taking hold. The move by a number of countries towards a more stable business environment has increased the level of confidence within the international private business and commercial sectors, including commercial lending institutions and suppliers, thus facilitating the movement towards creating more stable, long-term investment situations. Vigorous adjusters, like Ghana in Africa and Chile in South America, are being joined by a host of countries including those with economies in transition such as Uzbekistan and Kazakstan, where the initial results for attracting investment are high, particularly in the gold sector. While there is still much left to be done, the countries where the natural resources are most prominent and where the reforms are most advanced are beginning to display perceptible improvements in their business and social environments including the associated multiplier effects. The private sector is slowly responding through increased financial investment, the development of primary and ancillary industries and businesses around mining, the implementation of education and training programmes for local workforces, the transfer of technology and the deepening of institutions required to sustain growth. However, while most developing countries and countries in transition are enthusiastic about encouraging foreign investment in mining, not all are capable of making the necessary macroeconomic changes and implementing the necessary legal and fiscal regimes that would be acceptable to the international mining community in a timely manner.

B. Supportive frameworks and attraction of capital

10. The initial results of implementing supportive frameworks as a means to attract foreign investment are evident in many jurisdictions within both the developing countries and economies in transition. Also evident, is the importance of multilateral agencies in providing financial support and risk mitigation in order to provide stability to complex deal structures.

11. Four examples are cited in this regard: Viet Nam, Ghana, Uzbekistan and Bolivia.

Viet Nam

12. Since the late 1980s, the Government of Viet Nam, with assistance from the United Nations and other advisers, has been consciously working towards

developing a regulatory framework to promote and support investment in its mineral sector. The country has potential for base metal, precious metal and industrial mineral development, and has known reserves of coal. In 1989, the Government enacted a Mineral Resources Ordinance, which is the present regulatory framework for control of mining activity. In 1990, an Atlas of Mineral Resources was published by the ESCAP secretariat which assisted the country in bringing its mineral resource potential to the attention of the international mining community. In 1991, draft Mining Laws and regulations aimed at providing a framework for foreign investment were formulated and subsequently discussed at a round-table conference, convened in Hanai in 1991 by ESCAP, and attended by representatives from private mining companies, Vietnamese officials and relevant United Nations agencies. The Mining Law was then developed under a project funded by the United Nations Development Programme (UNDP) executed by the Department for Development Support and Management Services of the United Nations Secretariat and co-financed by the Government of Australia. During this process a second round-table conference was held. The draft mining law was submitted to the national Assembly in early 1996. With the passage of this Law and the development of a fiscal framework, it is envisaged that international mining companies will increase activities in Viet Nam.

Ghana

13. Gold mining has played a significant role in the economic development of Ghana for many years. Ghana is tenth in the world in gold production and in Africa is second only to South Africa. Since 1979, conscious efforts have been made to liberalize and privatize the Ghanaian economy with an emphasis on fiscal and monetary responsibility. Through the assistance of the International Monetary Fund (IMF) and other supportive multilateral agencies and donor nations, efforts to establish appropriate regulatory and fiscal frameworks to encourage private investment have been made. In 1986, the Minerals and Mining Law was promulgated embodying the initial terms and conditions required to support investment. Subsequently, in an effort to broaden political stability, the IMF and donor nations implemented multi-party democracy in 1991.

14. As a result of the efforts within Ghana to devise frameworks supportive of private investment, including vigorous adjustments in socio-economic policy in concert with the IMF and the IFC, the underlying economy has shown improvement, and the Government has received tangible economic benefit for subsequent redistribution.

15. In 1993, GDP stood at US$ 7.256 billion; GDP growth rates were 4.8 per cent and 3.8 per cent for 1993 and 1994, respectively. These are currently estimated to reach 5.5 per cent and 5.0 per cent for 1995 and 1996, respectively. The Ashanti Goldfields Company Limited, which produced 853,740 ounces of gold in 1994 (of an overall total of 1,409,606 ounces for Ghana) was publicly floated in 1994, yielding US$ 454 million for the Government. Ghana’s exports reached US$ 1.219 billion with gold contributing US$ 548 million. The industry depth is also improving with key private investors in gold, such as Lohnro Plc, United States Pioneer Group, Golden Shamrock and Gencor. As a result of increasing confidence in Ghana, the existing IFC financing for Ashanti was recently replaced by a revolving dollar/gold facility structured without political risk insurance or a senior corporate sponsor guarantee. As Ghana moves forward,

assuming no substantial downturn in the general economic and political situation, the basic legal, tax and accounting frameworks are in place to support investment. Further fine-tuning is desirable and development of appropriate environmental legislation would be seen in a positive light.

Uzbekistan

16. Uzbekistan is well endowed with mineral resources having 93 types of mineral commodities concentrated in 850 deposits and 1,600 occurrences. Uzbekistan possesses world class deposits of gold, copper, lead and zinc and is the second largest gold producer among the Commonwealth of Independent States (CIS) with the annual output of between 60-80 tons bringing the revenue of around US$ 790-910 million per year. Other major deposits are natural gas, tungsten, natural salts, aluminium and various types of industrial minerals and construction materials.

17. In line with a new economic development and reform policy proclaimed on 21 January 1994, the Investment Round Table on International Business Prospects in Uzbekistan was jointly sponsored in Tashkent from 9 to 11 March 1994 by the Government of Uzbekistan in cooperation with the United Nations Conference on Trade and Development, the United Nations Industrial Development Organization and UNDP. The Investment Round Table provided a platform for constructive dialogue among executives of transnational corporations, high level government officials of Uzbekistan and senior ministers as well as executives of investment promotion boards of neighbouring Asian countries. The central purpose of the Investment Round Table was to sensitize high-level decision makers on major issues relating to foreign direct investment and to put them in a better position to conduct and supervise negotiations with transnational corporations within the context of attracting foreign direct investment. As a direct impact of the meeting, a new Foreign Investment Law was enacted by the Supreme Council of Uzbekistan on 5 May 1994, and was followed by the new Mining Law enacted on 23 September 1994.

18. A large number of mining companies and financial institutions are now showing a keen interest in investing in economically feasible mining ventures. The target minerals are mainly gold and copper with other base metals, such as lead and zinc. An Investment Promotion Seminar in the Mining Sector of Uzbekistan was organized by the Government with assistance from the United Swiss Bank in Tashkent in 1992. This resulted in the setting up of two mining ventures with Newmont Mining Corporation and Lohnro Plc for gold mining projects in Uzbekistan with a level of investment of US$ 220 million and US$ 250 million respectively. As a result of the project economics and infrastructure, the operating and technical expertise of Newmont, the structural reforms in Uzbekistan and assistance provided by the (then) newly formed European Bank for Reconstruction and Development (EBRD), the Newmont-Zarafshan project was able to be financed internationally, using a syndicate of 13 international banks and the EBRD, with political risk insurance provided through the United States Overseas Private Investment Corporation (OPIC) and MIGA. 3/ It was the first internationally syndicated loan for a country of the former Soviet Union and the first instance of EBRD co-financing with commercial banks. The financial structuring of the joint venture subsequently received the accolade of "1993 Deal of the Year" from Project Finance International magazine. In its progress

towards developing a market economy, the Zarafshan project was seen as strategically important, as the country will derive tangible economic and social benefits from this enterprise.

19. In order to promote further foreign investment in the mining sector of Uzbekistan, the State Committee on Geology and Mineral Resources with the assistance of mining and legal consultants has just completed documentation for a tender for mining of two other major gold deposits in Uzbekistan. It is expected that the level of foreign investment in the gold mining industry of the country by the year 2000 will then far exceed US$ 1 billion and this will make it possible to double the current gold production of 80 tons to 160 tons, leading Uzbekistan to the rank of the five top gold producers in the world.

20. Uzbekistan has given high priority to creating sectoral development concepts and guidelines for the restructuring of its mining and metallurgical industries and for the prevention and mitigation of environmental damage related to the mining sector. It wants to strengthen its natural resources base where possible and set standards to guide development and to attract the private sector, both national and foreign. The establishment of a legal, fiscal and regulatory framework conducive to foreign investment, safety in coal mining, management training, privatization of mining enterprises issues, the introduction of environmentally-sound pollution prevention technologies and the drafting of an internationally acceptable environment law are all high priority areas of interest. Uzbekistan is also placing strong emphasis on the exploration and development of its mineral resources, particularly gold and base metals. Along with the above, the government is in urgent need for in-depth economic analysis of the sectoral demand and export requirements for various mineral commodities such as potash, phosphate, fluorspar, soda ash, base metals, rare and rare-earth minerals.

<u>Bolivia</u>

21. Bolivia is a 170-year-old independent, land-locked country with great ecological diversity located in the heart of South America. The Government is a representative constitutional democracy with executive, legislative and judicial branches. The country is extremely poor with the GDP per capita in 1994 at approximately US$ 800. Bolivia has a work force which is either already highly educated and trained or is very willing and able to become so.

22. Since 1985, Bolivia has enacted a series of laws which has facilitated attracting foreign investment, including an Investment Loan which provides <u>4</u>/ equal opportunities to foreign investors; a Mining Law, which includes tax provisions; and there is unrestricted convertibility and flow of foreign currency. Bolivia has also enacted a general environmental law and is now working on specific regulations that will apply to mining.

23. In 1993, the country elected a new President who is instituting El Plan de Todos (the Plan for Everyone). The principal points are: the Capitalization Programme, which is Bolivia’s form of privatization in which private companies commit to work programmes in return for 50 per cent ownership and operating control of major State entities; the Popular Participation Plan, a way of

decentralizing government, money and controls; reform of education; judicial reform; and the Plan for Sustainable Development.

24. Most of the preconditions for reform are now seen to be in place and are being appreciated by foreign businesses, local businesses, international creditors and donors. In 1991, there were only four foreign mining companies in Bolivia. The count now exceeds 40, including Battle Mountain, RTZ, Kenmore, Billiton, Barrick Gold, Orvana, Echo Bay, Teck etc. The GDP is growing at a rate of 4 to 5 per cent and local inflation is in control in the 8 to 10 per cent range. In addition, the country continues to work with key advisers and agencies such as the IMF and World Bank.

25. Probably the most significant mining development as a result of the changes has been the Kori Kollo joint venture between Battle Mountain and Zeland. The Kori Kollo mine had been in operation since 1985. In its first phase, it was an oxide heap leach facility producing up to 50,000 ounces of gold per year in concentrate. Through Battle Mountain's technical and operating skills and financial resources, a sulphide facility was developed. In 1994, the mine produced 313,000 ounces of gold and 1 million ounces of silver, and had the distinction of becoming the largest gold mine in South America.

26. It is also important that owing to the structural changes in Bolivia, Battle Mountain provided bridge financing, with senior loans subsequently provided by the IFC, which is a World Bank affiliate; by OPIC; and by the Corporación Andina de Fomento (CAF), a Pan-Andean group of which the Bolivians own a part. Other benefits to Bolivia include transfer of technology to recover gold from sulphide material, operating skills and the development of local social programmes through the development of the Fundación Inti Raymi.

C. Socio-economic development

27. In certain of the more advanced developing countries, the early introduction of radical reforms into mineral development policies and the associated fiscal and regulatory environments aimed at attracting private funds into the mining sector and at securing foreign expertise to improve the management and efficiency of State-owned, controlled and operated companies, are slowly starting to show benefits with respect to impact on the socio-economic area.

28. In Chile for example, a country which has moved to a truly export market economy, social and economic indicators have improved steadily. 5/ These have been supported by sustained output growth which has, since 1990, allowed the Government to place a strong emphasis on social policy, including poverty alleviation.

29. In terms of social indicators, the unemployment rate, which surpassed 20 per cent in the worst moments of the recession of the early 1980s fell to about 6 per cent in 1994; the percentage of the population below the poverty line declined to 29 per cent in 1994 from 45 per cent in 1987; and key indicators of overall social welfare including infant mortality, life expectancy, malnutrition, adult literacy and educational attainment have

improved, all placing Chile in a favourable position relative to other middle income economies.

30. In terms of economic indicators, inflation has dropped to just below 9 per cent in 1994, from about 20 to 30 per cent in the early 1980s. There has also been noticeable expansion in financial sectors including:

(a) An increase in financial assets to more than 80 per cent GDP, with deposits in private pension funds accounting for nearly 50 per cent of the total;

(b) An increase in the national savings rate to more than 25 per cent of GDP from 12 per cent in 1985;

(c) A strong balance of payments resulting from rapid export growth;

(d) An increase in net international reserves to in excess of US$ 14.3 billion by the end of September 1995 - a level more than twice the level of public sector external debt;

(e) External debt to GDP ratio now in the region of 4 per cent from 117 per cent in 1986.

31. In addition, there has been a deepening of the overall economic base with diversification into sales of non-traditional products offshore such as manufactured goods, fruit and fish products.

32. During this same period, the Government has actively pursued a social policy intended to alleviate poverty and to reverse the sharp declines in ratios of expenditures on social services and social infrastructure to GDP. This has been achieved by increasing pensions and social subsidies; undertaking major programmes in basic education, job training, health infrastructure and project funding for the poor; and by reforming labour legislation including raising minimum wage rates. Special care was taken to ensure that social policy did not undermine macroeconomic stability. In order to maintain public finances on a sound footing while simultaneously meeting social commitments, the Government implemented tax reforms by widening the tax base; increasing tax rates; restructuring tax brackets to increase progressivity of personal income tax; and by raising excise taxes to finance an increase in pensions and educational spending.

33. In less mature situations, where the supportive social and economic infrastructure is not as advanced, some foreign companies are working at the community level to provide direct social and economic support that should become self-sustaining. In Bolivia for example, as part of the joint venture’s effort to support the local community surrounding the Kori Kollo project, the Fundación Inti Raymi was formed. The organization is funded and nurtured by Inti Raymi, with some funding from others. Its goal is to provide education, vocation, nutrition, animal husbandry and social improvement for the people in the area of the Kori Kollo mine.

D. Technology transfer

34. While heap leach technology is well proven as a means of extracting gold from low grade deposit, its application has, until recently, been resident with companies operating in North America and Australia. The transfer of this technology to developing countries and countries in transition as a result of change to the respective business environments is noteworthy.

35. Exploraciones Eldorado, S.A. de C.V., the Mexican subsidiary of Eldorado Corporation Ltd., a Canadian junior mining company, is currently operating a 50,000 oz/year gold mine in the State of Sonora, which uses heap leach technology. A second gold mine, applying this same technology, is under construction and is expected to commence production in August 1996 at a rate of approximately 25,000 oz/year. Without the transfer of this technology, which allows for the economical exploitation of very low-grade ore bodies, neither deposit would be in development. The Company currently employs a local work force of approximately 200 people at its operations and, owing to the project economics and operating environment now in place in Mexico as a result of structural reforms, has recently put in place a US$ 20 million credit facility to support further development of its Mexican operations. Additional small low-grade deposits are now being mined by Mexican subsidiaries of North American mining companies employing this same technology.

36. Perhaps one of the most significant applications of transfer of heap leach technology is in the Zarafshan-Newmont Gold Project in Uzbekistan, at a project cost of US$ 150 million. Principally, heap leach technology is being employed to re-treat low-grade ores already stockpiled on surface, adjacent to one of the largest gold mines in the world, which would otherwise have remained untreated.

E. Training

37. Critical to the ongoing ability of companies to operate efficiently in developing countries and economies in transition is the availability of a competent workforce and the ability to utilize technology advances at all levels of operations. At Exploraciones Eldorado’s operations, Mexican nationals are being trained to operate these properties to North American standards in all areas, including technical, geological, accounting, treasury, planning, management, security, safety, language skills etc., under the guidance of experienced nationals and expatriates, with the view to transferring personnel to other opportunities within the Group in Mexico and, in the future, to other opportunities world wide. BHP, a major Australian based international mining corporation with operations world wide, is spending millions of dollars on management training programmes which will not only develop host country nationals to senior management levels in the host country, but is designed to train host country nationals to become "expatriates" in other geographic jurisdictions outside the host country of origin. Training is essential to the lifeblood of mining organizations operating locally and in international jurisdictions.

F. Environmental protection

38. The 1990s have seen the trend towards the globalization of environmental legislation and standards in industrialized countries, developing countries and economies in transition. This trend has been led by the international mining companies and financial institutions, multilateral organizations and lending agencies; and developing countries and the economies in transition themselves.

39. A significant policy shift was seen at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro. The most important result of this Conference was the world-wide change in environmental awareness, leading to the adoption of the concept of sustainable development. The conference aimed at building and furthering the global partnership towards taking a balanced and integrated approach to environment and development questions. This approach has been reinforced by subsequent international conferences.

40. Governments of developing countries and economies in transition are continuing to address the need for standards by developing and implementing environmental regulatory systems. Assistance for this is being given through various channels, including the World Bank and other multilateral and bilateral organizations. The Department for Development Support and Management Services of the United Nations Secretariat is providing support through the organization of workshops aimed at increasing the consideration of the environmental aspects of mining activities. Topics addressed have included pollution-control technologies, waste disposal and air-quality monitoring, site reclamation, environmental legislation, environmental management planning and environmental auditing. The result is a further homogeneity of standards world wide.

41. Concurrent with the development of policy through multilateral institutions is the ongoing efforts of the International Council on Metals and the Environment, which comprises the majority of the major companies involved in the international mining community. The group was initially formed as a central voice for the international mining community on environmental issues, and it provides information to Governments and multilateral institutions on issues related to the development and coordination of world-wide environmental standards for the mineral resource industry. Members undertake to follow the same environmental standards as their home country regardless of the jurisdiction of operation. This requirement to meet or exceed home country requirements is further reinforced by the project finance covenants and guarantees related to environmental compliance, and it responds to the global pressures of highly organized environmental groups.

42. While environmental legislation is becoming more homogeneous, more focused and more site-specific, monitoring and implementation by individual countries still remains an outstanding issue. It is important to focus, as a priority, on formulating specific legislated environmental policies and guidelines in each country and to assist in capacity building to achieve a monitoring process in order to ensure that companies will be properly monitored and that local communities will be protected.

II. PERCEIVED ROLES AND OBLIGATIONS OF HOST GOVERNMENTS

43. In order to provide an enabling environment to encourage and maintain long-term private investment on the one hand and meet the socio-economic expectations of the country on the other, host Governments are inevitably finding themselves in a conflict of interest situation. Governments will therefore need to position themselves to find complementary mechanisms to facilitate meeting the expectations of these multiple constituents. Host Governments are expected to provide stable and transparent regulatory and fiscal environments including supportive administrative frameworks while at the same time providing acceptable socio-economic environments.

A. Private sector expectation

44. In order to attract and maintain long-term private sector mining investments, the role of the Government is changing from that of regulator, owner, operator of a decade ago, to that of regulator, promoter and facilitator. The private sector expects host Governments that are serious about attracting long-term investment to operate within a sound macroeconomic environment; offer a modern legal and fiscal framework; be prepared to participate in ensuring that environmentally related obligations are predetermined and sustainable mining practices are followed; and offer competent public mining institutions. 6/ A Government's policies should recognize that there are a number of characteristics unique to the mining industry, including, inter alia, that the industry is high risk, is capital intensive, a price taker and remotely located; that mines have finite lives and therefore restoration requirements; and that there is generally State ownership of a resource. 7/

45. In this regard, a sound macroeconomic environment should offer prudent and stable policies supportive of an open, export-oriented business environment, including the right to market products externally and the right to import equipment and supplies, assured access to foreign exchange at free market rates, and the ability to repatriate profits and keep funds offshore.

46. The legal and fiscal frameworks should provide assured access to land for exploration, clear and transparent rules and procedures, security of tenure from exploration through production, a stable and equitable fiscal regime, equal opportunity to foreign investors and access to international arbitration. In this highly competitive international arena for securing mineral sector investment, particularly from multinational companies, the need for stable, transparent, straightforward legislation and policies cannot be over-emphasized. The global applicability of this principle is reflected in the fact that since 1985 over 75 countries have introduced or are in the process of introducing new mining laws and policies.

47. In addition to offering a sound economic environment and a modern legal and fiscal framework, host Governments need to establish a sound environmental framework. This is extremely important for international mining companies whose home country directors can be personally held accountable for breach of environmental regulations, who must provide corporate guarantees and warrantees under the terms and conditions of project financing and who are increasingly

under pressure from highly organized environmental groups. The key criteria include the need to have predetermined environmentally related obligations, identification of anti-mining lobby groups and host Government involvement in ensuring environmentally sustainable mining practices. This can be accomplished by introducing a consultative process with involved stakeholders, introducing necessary laws and regulations in consultation with world-wide industry and multi-disciplinary groups, developing technical norms and standards, collecting environmental baseline data and protecting locally affected groups and indigenous people.

48. As a final area of concern, the private sector expects host Governments to offer competent public mining institutions and look to strengthening and deepening public institutions to support investment in the mineral sector. This might include, under the Ministry of Mines, a mining department, geological survey office and an environmental office. Offices should be staffed by competent individuals, be adequately funded and the mandate, authority and accountability should be clear. Intergovernmental relationships and responsibilities should also be readily transparent.

49. In terms of a detailed framework of reference, criteria for assessing investment potential of individual countries by mining companies fall into a number of recognized categories. A more detailed list of criteria is included in annex I. Over the past five years, many international mining companies have been successful in entering into agreements for exploration and mining and the criteria adopted by them in decision-making have varied from one country to another.

B. Local expectations

50. Local population concerns highlight improvement of living standards, access to opportunities, increase in social equity and environmental consideration. In particular, concerning the host country, the mining project should benefit the economy as a whole, encourage and develop local industries to meet the needs of the people and should offer an opportunity for education and training of nationals and ensure transfer of technology.

51. The host Government’s role should include the strengthening of social institutions to increase social equity; achieving sustainable economic growth including extracting an appropriate "economic rent" through fiscal policy and/or direct royalty at the operational level; and achieving environmental sustainability. Social policy and programmes geared to increasing social equity might include: poverty alleviation, basic education, job training, health infrastructure, project funding for the poor, labour equity, including minimum wage and job security, and movement towards pension provisions.

III. PERCEIVED ROLES AND OBLIGATIONS OF INVESTORS

52. Private investors, like host Governments are responsible to more than one constituency. Private investor constituents include, inter alia, shareholders, employees, host Governments, the communities in which they operate, bankers, suppliers, customers etc.

53. The overall responsibility of the investor is to provide the necessary skills to operate competently in many areas, including the technical, commercial, legal, environmental and safety fields and to be the prime arranger of project financing. In return, it is expected that the investor should be allowed the opportunity to operate profitably and repay outstanding principal and interest and achieve returns on the investment of capital and management in order to reward shareholders for their support and risk-taking.

54. While investors, as good corporate citizens, have an obligation to operate responsibly within technical and legal frameworks, they also have a moral and ethical responsibility to their employees to provide training, a safer work environment and fair and equitable compensation; and to support various industry groups and committees within the host country.

55. At the local operations level, investors are increasingly taking on the responsibility for labour force, job training and enhancement; technology transfer of skills, such as engineering, treasury functions and management, in addition to process technology and geoscientific technology; and health care. In addition, at the local community level around mine-sites, companies are providing enhancement to existing schooling programmes, health-care programmes - both medical and dental, including preventative care programmes and support through provision of social workers and also providing physical infrastructure such as water-wells, schools, health clinics and recreational facilities.

56. Many companies are realizing that the best political risk insurance available is the full support of the local community in which they work. Governments at the local, state and federal level are subject to change. Assisting in capacity building of the community, including supporting local businesses is becoming more commonplace. Another key element in attaining the goal of sustainable development is having effective participation in the decision-making process of local communities that surround a potential mine. The World Bank recently conducted a review of 20 to 25 projects and concluded that effective public participation resulted in the sustainability of long-term objectives of both communities and projects.

IV. POSSIBLE MECHANISMS AVAILABLE TO SUPPORT AND FACILITATE THE COMPLEMENTARITY OF PARTICIPANT ROLES AND OBLIGATIONS

57. A number of possible mechanisms are available to support and facilitate the complementarity of participant roles and obligations. These are described below.

A. International multilateral and bilateral programmes

58. The United Nations system, World Bank and the IFC system and other multilateral and bilateral organizations have provided invaluable assistance to industry and host Governments in respect of mineral resource technical support and advice; training of national staff in all skills required in mineral resource development; hosting of regional promotional round-table forums to facilitate dialogue between industry, Government and facilitating organizations; institutional structuring and reforms; capacity building; provision of research on trends in mineral, fiscal and legal policies; and for commodity supply and demand studies. In addition, as project funding in emerging markets requires a multi-disciplined approach, including the cooperation and coordination of foreign investors, commercial banks, multilateral and bilateral banks and agencies, the multilateral and bilateral banks and agencies have supplied much needed risk mitigation through co- and re-insurance, through lending of structured finance and through provision of senior loan guarantees which have enabled private investors and local joint venture partners to invest in projects in various jurisdictions. The World Bank and IFC system also supplies funding and technical support for deepening of country institutional structures which assist in developing the long-term sustainability within the financial and socio-economic environment.

B. Government-industry groups

59. The Chamber of Mines, or equivalent groups, have historically provided an effective industry forum within individual countries and/or provinces for the exchange of views, the lobbying of industry concerns to Government and as a means of dealing with common issues arising within the industry. Supplemental to this forum has been individual commodity group forums at an international level to facilitate technology transfer, market intelligence and to deal with specific issues arising within the industry. The Gold and Silver Institute, the International Lead and Zinc Study Group, the World Gold Council and the International Council on Metals and the Environment are examples of groups formed to facilitate transparency in the market, exchange views and deal with specific industry issues such as environmental sustainability. In addition, national and international technical groups such as the Society of Mining Engineers (SME) in the United States, have provided a valued forum for technology and information sharing.

C. Multi-disciplinary bilateral Government-industry groups

60. Multi-disciplinary bilateral Government-industry groups have been active for many years as OECD countries, joined together to facilitate trading relationships and establish common understandings. The Canada-Korea Business Association is an example, where professionals, including lawyers, accountants, engineers and businessmen from many industries, including mining, forestry, banking etc., meet annually, alternating between Canada and Korea, to discuss respective market, political, trade, shipping and other issues with a view to broadening trading and business relationships.

D. Social policy management contracts and foundations

61. It is increasingly recognized that the principles of community involvement in mining activities are fundamental to the concept of sustainable development, which requires a balance of environmental, social and economic factors within the input of all concerned. Co-management of environment and resources and involvement in decision-making are key elements that affect the community. Corporate managers are not the only ones with a stake in sustainable mining policies. The "stakeholders" include workers, neighbours, investors, community and the environment itself. Mining companies have vested interest in developing supportive relationships within the local community to include job-training, health and welfare programmes, education and to assist in the development of local enterprise. For example, in Bolivia, the Inti Raymi Foundation was established to meet these needs with respect to the Kori Kollo mine. One means of addressing communities' concerns is through the development of participation agreements. In order to ensure sustainable and stable operations of mining companies, it is essential that a new "social contract" be negotiated between communities and mining companies, to ensure that communities obtain new terms and conditions which better safeguard their long-term interests.

62. International mining companies are now aware that it is essential that a working relationship be maintained with the communities if they wish mining operations to continue smoothly. The Declaration of the World Summit on Social Development 8/ of March 1995 reiterates the importance of governance, through a participatory, transparent and accountable administration. In a typical minerals agreement, a tripartite arrangement with equal representation from the corporation, the local Government and the community is perhaps the best possible supervisory mechanism. Such a mechanism is increasingly included in good neighbour agreements.

E. Policy formulation; legal structure

63. Institution building within individual countries is critical to the development of social structures, sustainability of financial flows, transfer of technology and corresponding real economic wealth. The ongoing policy formulation with respect to mineral tenure development, investment codes, legal and fiscal frameworks, environmental management and social development is essential, along with the subsequent formalization through the legal system. The process has in many instances only begun, particularly for many economies in transition, and is likely to be one of the key elements in supporting complementarity between host country objectives and investor objectives.

V. RECOMMENDATIONS

64. It is recommended that the following mechanisms be used to support developing countries and countries in transition in setting up and maintaining the necessary framework to encourage foreign and local investment in their mineral resources, in such a manner as to facilitate long-term sustainable development within their domestic mining sectors and their economies.

A. International multilateral and bilateral programmes including advisory services

65. The United Nations system, the World Bank and IFC system and other multilateral and bilateral agency organizations should continue to be fully utilized in order to:

(a) Provide funding for research on and assistance in the development and implementation of appropriate mineral resource, investment, legal, fiscal, environmental and other related policy and procedural frameworks to improve the enabling environment in order to attract and secure long-term private investment;

(b) Assist in the development of more streamlined and competent institutional frameworks for mining including, under the Ministry of Mines, a mining department, geological survey office and an environmental office with the individual mandates, authorities and accountabilities clear and readily transparent;

(c) Provide technical assistance in the compilation of individual country geological resource data including geological surveys, maps, centralized computer data bases, mining title management systems based on the Geological Information System (GIS) etc.;

(d) Provide access to in-depth market research reports, including analysis of sectoral supply-demand and export requirements, price forecasts etc., for various mineral commodities on an as needed basis;

(e) For countries in transition, provide research and background information on private lending institutions and on private mining companies;

(f) Provide mining, financial and legal assistance in the structuring and documentation process for privatizing mining assets and in the negotiation of mining and mineral investment agreements;

(g) Assist in the negotiation and preparation of export policies, regional and bilateral trade agreements and tax treaties;

(h) Conduct multi-disciplinary international round-table forums with host Government officials, international mining companies, banks, funding institutions, suppliers, technical advisers, senior agency lenders and advisers, non-governmental organizations etc., as a means of education and idea exchange, and offering a forum to deliberate on issues of concern and as a means for all parties to gain a better understanding of various countries, their risk factors and their geological/mining potential;

(i) Assist in the development of appropriate social and economic policies around the issue of education, health, poverty alleviation, human rights, rights of artisanal workers;

(j) Assist in training of national staff in the many areas associated with mineral resource development;

(k) Assist host Governments in setting up a regulatory framework and subsequent mechanisms to monitor environmental practises and degradation with respect to mining, as well as capacity-building programmes for the government staff;

(l) Assist with the monitoring of investment trends;

(m) Continue to support the role of multilateral and bilateral banks and agencies in the provision of structured finance including loans and equity; senior lender guarantees; political risk insurance and re-insurance; in the development of small supporting businesses, through soft loans; and in the development of internal financial institutions through loans and guarantees and the introduction of stock exchanges etc.

B. Government-industry groups

66. Government and local business representatives should be encouraged to participate in national and international industry and technical groups as a means of facilitating technology transfer, gaining market intelligence, raising and keeping apprised of industry-wide issues and concerns and as a means of formulating long-term relationships with other industrial, government and financial leaders. Local and national Chambers of Mines should be fully activated and supported in order to act as an effective vehicle for handling industry-wide concerns and effectively working with the appropriate governmental bodies.

C. Social policy management contracts

67. It is now widely recognized by foreign investors that local communities must be involved in the decision process regarding development of mineral resources in their own communities, and that sustainability comes with the development of local social, physical and business infrastructure, including the development of local enterprises. The best political risk insurance is the support of the local community. Governments, both regional and federal, change over time. Increasingly, technology transfer, contribution towards health, education and job training can be effected at the local level. This is being recognized in practice by many mining companies now operating in developing countries and economies in transition. For some, informal programmes have been started whereby scholarships are provided to promising high-school students in order to pursue education in neighbouring towns or outside the state or country at recognized universities; local health facilities are upgraded to include hospitals, doctors and first aid programmes; dental programmes are instituted within the village; drinking water facilities are installed etc. Other companies have instituted more formal programmes under the auspices of foundations that go beyond job training and provision of health facilities to include support to encourage local small business enterprises, opportunities for advancement of women. As countries advance in setting up frameworks, it may be the time to consider including some form of social contract within the overall mining contract that assists with the process of achieving sustainability within a community perhaps even after the original "engine for growth" has departed.

D. Policy formulation; legal structure

68. Policy formulation, instituted within the legal and regulatory framework as promulgated by laws, is the most stable and transparent mechanism to instil confidence in a regime. This applies to mineral tenure, mining codes, tax regimes, investment regimes, environmental regulations, social policy and the like. Sustainability is achieved by capacity building in many discrete areas in order to facilitate long-term development. It is recommended that in line with the development and subsequent promulgation of laws pertaining directly to the minerals sector, that policy formulation take place concurrently in the socio-economic and financial sectors as well.

VI. CONCLUSION

69. In the past decade, many developing countries and economies in transition have recognized that private sector investment in mineral resources can provide a significant contribution to a country's economic base, and they have shifted development strategies towards relying on the private sector to lead economic growth. As an initial step, Governments, through the assistance of the United Nations, the World Bank and other multilateral and bilateral agencies, have adopted policies and put in place the initial frameworks designed to improve the enabling environment for this investment.

70. Reforms are slowly taking hold, and in the countries where the reforms are most advanced, perceptible improvements in the business environments are noticeable, and the private sector is responding through increased direct investment in the minerals sector with a corresponding multiplier effect into the economy, i.e. with job creation, the development of local small- and medium-sized enterprises and capacity building in physical, social and economic infrastructure.

71. While investment in the mineral resource sector can provide base-level contribution towards the socio-economic development goals of a country, mineral resources and capital, are by their very nature, finite resources. Therefore, the policies and supportive frameworks being instituted must take into account the overriding long-term country goal of sustained economic growth and sustainable development. Devising and implementing mechanisms that support the complementarity of roles between host Governments and investors are therefore paramount. As developing countries and economies move towards the next stage of capacity building, recognition must be given to the dual responsibility of providing an environment conducive to private investment while providing a foundation for achieving social equity.

Notes

1/ Economic Commission for Africa, submission for the preparation of a report to the Committee on Natural Resources at its third session, dated 26 July 1995.

2/ Economic and Social Commission for Asia and the Pacific, "Trends in legal/institutional arrangements for investment promotion in mineral exploration and development in the ESCAP region: review of mineral development policy and plans, including mining legislation, taxation and investment promotion issues" (undated).

3/ Don Newport, "A case study of the Zarafshan-Newmont Gold Project, Uzbekistan", paper presented to the Seminar on Project Finance for Mining in the Emerging Markets, Denver, Colorado, September 1995.

4/ R. Dennis O'Connell, "Battle Mountain Gold Company's Bolivian experience", paper presented to the Price Waterhouse Mining Conference, San Francisco, California, July 1995.

5/ International Monetary Fund Survey, "Chile's prudent policies have yielded sustained growth and reduced poverty", 6 November 1995.

6/ Peter van der Veen, "Attracting private sector mining investment", paper presented to the Seminar on Project Finance for Mining in the Emerging Markets, Denver, Colorado, September 1995.

7/ Robert B. Parsons, "Taxation policy and mineral investment", Price Waterhouse paper.

8/ See Report of the World Summit for Social Development, Copenhagen, 6-12 March 1995 (A/CONF.166/9), chap. I, annex.

Annex

LIST OF CRITERIA FOR PRIVATE SECTOR APPRAISAL OF MINERAL SECTOR INVESTMENT CONDITIONS

The following "investor check-list" a/ itemizes the major criteria used for private sector appraisal of mining investment conditions abroad. It is based on a global survey and augmented from subsequent additional research.

Geological criteria

General mineral abundance

Efficient and helpful government offices (geological survey, department of mines, ministry for lands, financial offices, central bank)

Perceived geological potential compared with competing jurisdictions

Availability of reliable geoscientific information (e.g., topographic maps, geological maps, air photo coverage, airborne geophysics, geochemical data and geological reports)

Organization and accessibility of geoscientific information, reports in common form, preferably in English, centralized database, readily available

Historical production

Ability to apply geological assessment techniques

Availability of local trained personnel

Mines survey department

Availability of local laboratories

Political criteria

Long-term national stability

Regime stability

Consistency and constancy of mineral policies

Internal security

Stability of neighbouring countries

Availability of foreign investment insurance

Good governance - transparency and accountability

Open versus closed market economy

Indicators in place to formalize open market economy:

Privatization

Institutionalization of secure mineral tenure embodied in mining code

Democratic linkages

Access to external dispute settlement mechanisms such as international arbitration of conflicts

Development of social policy, i.e., health services, education, land reform, income redistribution, training

Entrepreneurial skills in place

Presence of domestic investment in productive sector

Regulatory criteria

Modernized mining code

Workable mineral legislation

Stability of exploration/mining terms

Mineral ownership

Surface/land ownership

Access to water rights

Security of tenure, length of tenure exploration and mining

Quality of mineral titles system

Ability to track private deals on top of original tenure

Right to transfer ownership

Availability of a mineral agreement to supplement or in place of mining code

Dispute resolution such as international arbitration

Level of bureaucracy

Procedural efficiency and clarification of administrative competency

Simple, effective and efficient permitting system

Rating for overall simplicity

Rating for consistency

Rating for completeness

Availability of good local mineral resource lawyers

Effective and transparent legal system

Fiscal criteria

Tax method and level of taxes (profit-based or not, fixed or not)

Ability to predetermine tax liability

Availability of accelerated depreciation

Availability of investment tax credits

Availability of reinvestment credits

Exploration cost treatment

Export-import credits

Stability of fiscal regime

Tax treaty with home country

Expatriate tax treatment

Competitiveness with other jurisdictions

Monetary criteria

Realistic foreign exchange regulations

Allowance for external accounts

Ability to repatriate profits

Ability to raise external financing to fund projects

Presence of strong local stock exchange

Presence of global banking institutions

Efficiency in monetary transfers

Operational criteria

Majority equity ownership held by company

Company has management control

Degree of established infrastructure and utilities

Experienced local workforce availability

Climatic conditions

Physical lay of land

Altitude

Availability of support services such as fabrication/maintenance/local geotechnical services

Transportation infrastructure, e.g., roads, railway, air, river, deep sea ports

Common language spoken

Constraints on use of expatriate staff

Restrictions on hiring, firing and negotiating wages

Technology required

Strength of labour unions

Additional support services

Effective communications systems, internal/external

Transferability of operating permits

Marketing criteria

Geographic location - proximity to end markets including access to transportation networks

Presence of internal markets

Presence of local competitive smelting and refining capability

Export/import policies and restrictions, e.g., mandatory sales of product to central bank

Regional trade agreements

Outlook for demand/price

Environmental criteria

Legal requirements for environmental protection

Ability to predetermine environmental-related obligations

Anti-mining groups

Relative sensitivity of environment

Profit criteria

Measure of profitability (internal rate of return, net present value, payback periods)

Competitive cost position

Other criteria

Prior company experience

Company employee prior experience

Specialized company expertise

Experience of other firms, joint venture partner experience

Helpfulness of government offices (geological survey, department of mines, ministry for lands, finance offices, central bank)

Availability of information on government, administration, fiscal, regulatory policies, geological information

Availability of key government personnel locally and abroad

Risk containment strategies available

Availability of political risk insurance (debt and equity portion)

Bilateral/trilateral protection treaty in place or negotiable

Mine development agreement

Degree of World Bank and other multilateral agency involvement in project, in country

Legislated protection for investors against expropriation, and currency inconvertibility

Notes

a/ Initial list, prepared for the Economic and Social Commission for Asia and the Pacific by Dr. James Otto, Assistant Director, Centre for Petroleum and Mineral Law and Policy, University of Dundee, United Kingdom, 1992; subsequently revised by Diana Manson and Associates, Ltd., Canada.
