SPECIAL REPORT

Indonesian coal model contract and coal in developing nations

By James M Otto

A number of world class mines are mining, under development or planned in Kalimantan on the island of Borneo. The Indonesian government has indicated it will use these mines to foster development objectives. This intent has been embodied, to a limited extent, in a model coal development contract which is the main regulatory basis for the major coal projects in Indonesia. This article looks at the government's policies, the terms and conditions of the model coal contract, its success in attracting foreign investment and its possible usefulness as a model for other nations to follow. One Indonesian model contract was presented in detail in Raw Materials Report Vol 8, no 3, 1992.

Dr James M Otto is Assistant Director and RTZ Senior Lecturer, Centre for Petroleum and Mineral Law and Policy, University of Dundee, Dundee, Scotland DD1 4HN, UK.

The mineral endowments of many developing nations remain undiscovered or undeveloped due to a variety of factors. In many cases one of the foremost factors is the lack of sufficient funds within the country to carry out exploration and development work. The lack of internal exploration and development capital coupled with a shortage of specialized expertise leads many developing nations to rely on the transnational mining companies to develop the national mineral endowment. The pool of foreign capital available for developing country sited activities is finite and there is considerable competition among the developing nations to attract mineral sector investment.

The objectives of governments which lead to the development of a mineral sector vary but in most cases is coupled to a policy of promoting development. However, it is well established that many mining operations which are export-oriented have relatively weak linkages with the local economy and may make little contribution to the development process. Governments can act to increase the developmental benefits from mining through a variety of regulatory means. While many governments have announced policies which link development objectives with the exploitation of the mineral endowment, many such policies lack the underlying regulatory instruments which would implement the intent of the stated development objectives. Thus, while there may be a government policy statement indicating that an objective of mineral projects is to promote national or local development, in many cases, the policy is not reflected in the legislation or agreements which set out the terms under which mining may be carried out.

One reason for this is competition. Mining companies are primarily interested in producing minerals and making a profit. Most companies view "development" as the responsibility of the government and not that of the company. Many governments perceive that if they require companies to take on the costs of local or regional development, the companies will lose interest and invest somewhere else. In addition, many nations have come to the realization that the possibilities for creating economic linkages for enhancing minerals-led development are in most cases limited and that the main thrust for development may be better served through maximizing the gains to the nation from the extraction of economic rent from the mineral sector which can then be directed to achieve development objectives.

The purpose of this paper is to look at an example of a developing country which has very clearly indicated its desire to link mining activities to the development process, the means by which this desire is implemented and whether these development requirements have scared away investors.

Policy and regulatory framework

In a series of evolving but consistent policy statements Indonesia has clearly indicated a number of development objectives with regard to the mining industry. It has widely publicized these objectives and has implemented the means of achieving them through contractual terms which bind foreign operators of coal mines in Indonesia.

Maximum welfare of the people

The Indonesian Constitution specifies that the state maintains total sovereignty over the land and mineral resources of the country and that they shall be used and developed for the full benefit and welfare of the people.[1] The intent of the Constitution has been codified in the basic mining law which states "All minerals found within the Indonesian mining jurisdiction in the form of natural deposits as blessings of God Almighty are the national wealth of the Indonesian people and shall, therefore, be controlled and utilized by the State for the maximum welfare of the people."[2]

The topic of utilizing mineral resources to maximize the welfare of the people has been emphasized since the late 1970's in the national mineral policy. This policy has never been issued as a stand alone formal document or decree but has been embodied in a consistent but evolving set of pronouncements by senior government officers responsible for the regulation of the mineral industry.

In 1977, the groundwork was laid for the theme of mining as a means to enhance national and regional development. In a keynote speech the then Minister of Mines stated:

"Mining, which involves the management and utilization of mineral and energy resources, is one of the most important bases for development of Indonesia. It is a source of national income and foreign exchange and must at he same time provide a starting point for the opening up and development of the regions and lay the foundation for industrialization and modernization. The main purpose of mining is to make effective and efficient use of mineral and energy resources, while safeguarding the quality of the environment. This should be based on detailed surveys and through inventories and assessments of resources and also on investigation into the potential for integrated regional development."[4]

The theme of mining as a means to promote development was further expounded on in 1977 by the then Secretary General of the Ministry of Mines who pronounced:

"While in the early days of foreign investment in mining in Indonesia the main emphasis was put on production and foreign exchange earnings, shifting national problems since then entailed slight shifts also in development priorities. Foremost among the contributions expected from foreign companies engaged in mineral development in Indonesia today is the opening up of new centres of development in regions outside of Java, the creation of employment opportunities, the training and advancement of professional and managerial capabilities of Indonesian nationals, and the maximum utilization of domestically produced goods and services."[5]

During the late 1970's and early 1980's a substantial number of exploration efforts by foreign mining companies had been completed or were in the process of being implemented. By the late 1980's Indonesia was widely perceived as being one of the most successful developing countries in terms of attracting foreign investment for minerals exploration. The focus toward utilizing the mineral industry as a means to further development remained central to the stated policy of the government.

In 1986 the Director General of Mining, in an address which emphasized both coal and gold development, noted:

"In line with the guidelines and priorities outlined in Indonesia's IVth Five Year Development Plan, every foreign investment project or joint venture undertaking in Indonesia should endeavour to maximize the utilization of domestically produced goods and services. Foreign investors are also obliged to promote national interest, which among other things includes training and advancement of professional and managerial capabilities of Indonesian nationals, establishing processing facilities in the country, offering shares to Indonesian Nationals, providing opportunities to qualified Indonesian employees to actively participate in the top management of the enterprise, providing support and assistance whenever needed to stimulate local business development .... Furthermore, mining companies in general are expected also to create new job opportunities, and to contribute to the development of new economic growth centres in areas outside Java. Mining projects in isolated areas should not be allowed to develop into economic and social enclaves; on the contrary, efforts should always be made to get the mining community ultimately fully integrated within the economic and social development of the region concerned."[6]

The five year State Guidelines drawn up by the People's Consultative Assembly in 1988, which incorporate the National Development Guidelines, identified the following objectives for the development of the mineral resource endowment:

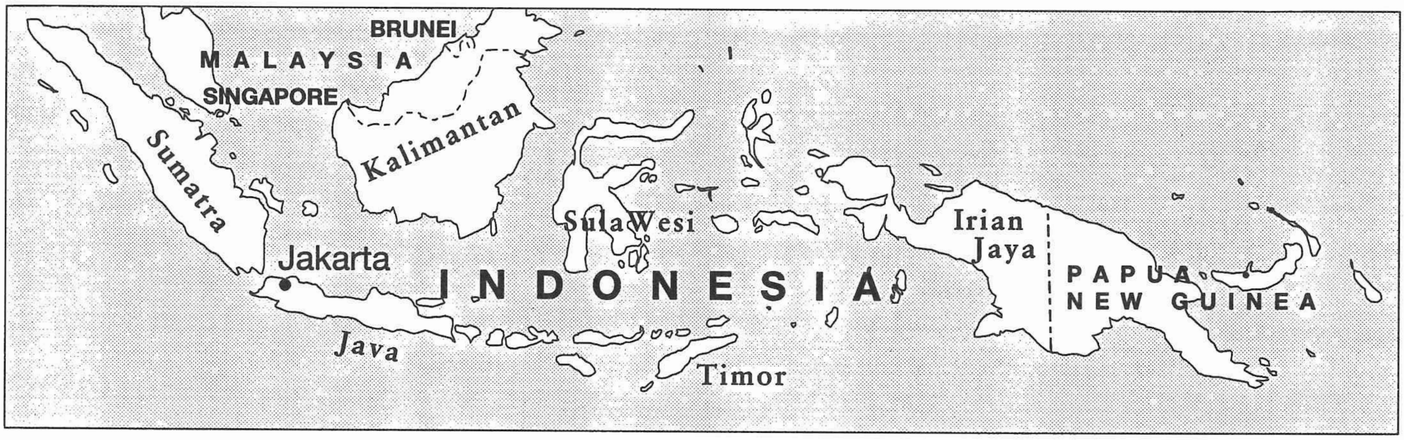
1) To intensify mineral exploration in order to increase national resources;
2) To fulfil the demand for raw materials for domestic industries;
3) To increase export earnings;
4) To support regional development and national economic integration;
5) To promote mineral conservation and environmental protection;
6) To extend national investment in mining;
7) To create and expand employment and work opportunities.

In 1990 the Director of Mines reinforced the national sentiment on foreign participation in mining by identifying the four following primary outcomes expected from foreign companies engaged in the mining sector: regional development, manpower development and transfer of know-how, promotion of local contents, and promotion of value added.[7]

It is evident from these and other pronouncements that senior Indonesian government officers have repeatedly stated a consistent but evolving policy which emphasizes that the nation's expectations regarding mineral development go beyond revenue generation and foreign exchange earnings. Development is a central theme of the Indonesian mineral policy and ten key priority areas for development have been clearly stated by senior policy makers beginning in 1977. These include:

- Integrating mining operations with the economic and social development of the region (and to avoiding mining enclaves);[8]
- Maximizing employment of Indonesians at all levels of the mining operation within the limits of practicality and efficiency;
- Training and advancing professional and managerial capabilities of Indonesian nationals;
- Maximizing the utilization of domestically produced goods and services;
- Insuring that Indonesians will have the opportunity to hold an equity stake in mining projects;

Coal is found in commercial quantities on most of the principal islands of Indonesia. Of special interest at present are the resources in the Indonesian portion of Borneo, known as Kalimantan.



• Providing support and assistance whenever needed to stimulate local business development;
• Safeguarding the quality of the environment;
• Creating new job opportunities;
• Maximizing the downstream potential of minerals and fulfil the demand for raw materials for domestic industries;
• Contributing to the development of new economic growth centres in areas outside Java.

Main policy-elements

All to often, policy remains divorced from practice particulary when it comes to development objectives and implementation. The question then arises as to whether the propounded development objectives of the government have been reflected in the contractual terms and conditions under which coal contractors must operate.

Since almost all larger scale coal mining in Indonesia is undertaken with the participation and assistance of foreign multinational mining companies, the following analysis will be based on the regulatory system for foreign investment in coal mining.

The key laws which form the basis for foreign participation in coal mining are Article 10 of the Mining Act (Law No. 11, 1967), Article 8 of the Foreign Investment Act (Law No. 1, 1967) and Presidential Decree No. 49 of 1981. The combined effect of these laws and the decree is to allow foreign participation in the coal mining industry on a strictly contractor basis.

Almost all large coal mining operations in Indonesia are regulated primarily according to a Coal Cooperation Contract between the state enterprise Perusahhan Negara Tambang Batubara (hereafter Batubara) and the Contractor. Batubara holds the exclusive authority to mine coal in the defined area and the Contractor mines this coal on behalf of Batubara according to the terms and conditions of the contract.

Each of the ten development objectives identified above will be analyzed in light of the terms of the model Coal Cooperation Contract (hereafter CCC) which was being used as the basis of negotiations circa 1990.

Objective 1. *Integration of mining operations with the economic and social development of the region (and to avoid mining enclaves)*

There are five clauses in the CCC which touch on this objective. One clause is clearly intended to directly promote synergism in the local development process while the other four aim to mitigate potential negative impacts of mining on the local communities. The five relevant clauses are described or reproduced below.

"In order to enhance the economic and social benefits to the Region, Batubara and the Contractor will endeavour to plan any infrastructure required by the Coal Operation in the Agreement Area by:

(i) Coordinating such infrastructure planning with local and Regional infrastructure studies undertaken by the Government, together with any studies undertaken by other interested local, foreign and international public and private entities; and

(ii) Assisting and advising the Government, when requested, in its planning of the infrastructure and Regional development which Batubara and Contractor may deem useful to Coal Operations and to existing and future industries and activities in the Agreement Area."[9]

"Batubara reserves the right to withhold approval of the mandatory feasibility study if according to the environmental impact analysis the plan or design "will disproportionately and unreasonably ... limit the further development potential or disrupt the socio-economic status of the Mining Area."[10]

"The Contractor shall include in the feasibility study for each mining operation an environmental impact study the minimum scope of which will be prescribed by Batubara ... to analyze the potential impact of Coal Operations on ... human settlements. The Environmental study will also outline measures which the Contractor intends to use to mitigate adverse impacts."[11]

"Batubara shall arrange for any necessary resettlement of local inhabitants

Table 1

Percentage Indonesians to be employed. Targets

	Years 3	5	8
Unskilled labour	100	100	100
Skilled labour	75	75	100
Clerical	75	90	100
Technical, Supervisory	50	75	85
Management, Professional	50	75	85

whose resettlement from any part of the Agreement Area is necessary and Contractor shall pay reasonable compensation for any dwelling, privately owned lands (including such landownership based on any Indonesian custom or customary laws, generally or locally applicable) or other improvements in existence on any such part which are taken or damaged by Contractor in connection with its activities under this Agreement."[12]

"Contractor shall also have the right to clear away and remove such timber, overburden and other obstructions as may be necessary or desirable for Coal Operations, provided only that the Contractor shall take into account other rights granted by the Government such as graving, timber cutting and cultivation rights, and rights-of-way, by conducting its Coal Operations under this Agreement so as to interfere as little as possible with such rights."[13]

As can be seen from these five excerpts the government has attempted in the CCC to insure that the mining operation is conducted taking into account the local populous. In particular, the CCC provides for mitigation of the negative impacts of the operation. However, the extent to which the Contractor is required to make any direct positive contribution to local or regional development is minimal beyond the requirement to participate in integrated infrastructure planning. In addition, no restrictions or requirements are evident which would dissuade the creation of a mining enclave situation.[14]

Objective 2. *Maximize employment of Indonesians at all levels of the mining operation within the limits of practicality and efficiency.*

The Contractor is required under the CCC to employ Indonesian personnel to the maximum extent practical consistent with efficient operations.[15] The target schedule in table 1 showing the percentage of Indonesians to be employed is included in the CCC.

Objective 3. *Training and advancement of professional and managerial capabilities of Indonesian nationals.*

To insure that the target employment percentages are achieved, the contractor is required to develop a comprehensive training programme which must include: on the job training, training in educational or professional institutions in Indonesia or abroad, or training in operations in foreign countries.

Under the CCC the Contractor is required to treat Indonesian employees on the same basis as expatriates. "There shall at all times be equal treatment, facilities and opportunities in Indonesia for all employees in the same job classification regardless of nationality...."[16]

Objective 4. *Maximize the utilization of domestically produced goods and services*

There is no requirement under the CCC for the Contractor to give preference to local goods or services.

Objective 5. *Insuring that Indonesians will have the opportunity to hold an equity stake in mining projects*

The Contractor is required to offer for sale to the Government or Indonesians a majority equity share of the project according to the following timetable[17]:

by the end of the 5th year	15%
by the end of the 6th year	23%
by the end of the 7th year	30%
by the end of the 8th year	37%
by the end of the 9th year	44%
by the end of the 10th year	51%

Objective 6. *Provide support and assistance whenever needed to stimulate local business development*

There is no reference in the CCC to any requirement whereby the Contractor must directly stimulate local business development. However, the Contractor is required to pay a Regional Development Tax (IPEDA) and other regional taxes and impositions in the form of a lump-sum payment of 100 000 USD per year as from the commencement of construction. This is to be adjusted every two years according to a deflator published by the IBRD.[18] In theory, these taxes could be directed by the Government to support and assist local business development.

While no direct assistance is required to stimulate closer linkages with the local business community, a protection measure has been built into the agreement to insure that other potential projects (such as logging or the mining of other minerals) are not impeded because of coal development under the CCC.

"The Contractor shall be responsible for taking no acts which may unnecessarily and unreasonably block or limit the further development of the resources of the area."[19]

Objective 7. *Safeguard the quality of the environment.*

The primary Indonesian law on the environment was promulgated in 1982[20] and the implementing regulations were brought into force in 1985. The regulations place an obligation on mining companies to undertake and execute an ANDL (environmental impact studies), RKL (environment management planning), RPL (environment monitoring planning) and during exploration a PIL (environment base line study.[21] Additionally, under the terms of the CCC, the Contractor is also required as part of the feasibility study to prepare an environmental impact study and to outline measures to mitigate adverse impacts on the environment.[22] Batubara reserves the right to withhold approval of the mandatory feasibility study if according to the environmental impact analysis the plan or design "will disproportionately and unreasonably damage the surrounding environment ..."[23]

With regard to the extent the Contractor is required to manage environmental degradation a standard of "reasonableness" is explicit in the CCC which states:

"[The] Contractor shall, within the reasonable limits, in accordance with environmental rules and regulations of Indonesia as prevailing from time to time, conduct Coal Operations so as to control waste or loss of natural resources, to protect natural resources against unnecessary damage, and to prevent pollution and contamination of the environment, and in general maintain the health and safety of its employees and the local community. Contractor shall also be responsible for reasonable preservation of the natural environment within which the Contractor operates ..."[24]

Objective 8. *Create new job opportunities.*

There is no provision in the CCC which directly addresses creating new job opportunities. However, it is implicit in any mining project that the project will create employment.[25] Given Indonesia's size of population, over 180 million, mining plays and will continue to play an insignificant role at the national level. However, at the local level mines located in the remote areas, such as the east coast of Kalimantan, may be the main employer outside of subsistence or plantation agriculture.

To minimize the impacts of mine closure on the local labour force provision is made in the CCC that "before suspending operations the Contractor is ... to make a good faith effort to minimize the impact on its labour force."[26]

Objective 9. *Maximize the downstream potential of minerals and fulfil the demand for raw materials for domestic industries.*

The CCC has several provisions which directly address this objective.

"The contractor is required to keep Batubara advised as to technological and economical possibilities of coal conversion processes and if in the Contractor's opinion such conversion would be technically and economically feasible to discuss with Batubara the possibility of developing such conversion taking into account the technical, financial and economic aspects thereof."[27]

If the Indonesian requirement for coal requires that a portion of the foreign investor's coal be diverted to meet this domestic need, provision is made in the CCC requiring the foreign investor to make this coal available to Indonesia. However, certain protection measures are built in to accord the foreign investor protection against unilateral prices impositions and the ability to meet contracted export commitments.[28] Additionally, before suspending operations the Contractor is to consider the effect of such suspension on existing sales commitments to buyers in Indonesia.[29]

Table 2.
Coal resources of Indonesia (Mt)

	Anthracite	Bituminous	Subbituminous	Lignite	Total
Sumatra	14	1 860	1 725	16 925	20 524
Java	–	15	–	12	27
Kalimantan	–	1 632	2 954	3	4 589
S. Sulawesi	–	–	90	–	90
Irian Jaya	–	–	–	4	5
Total	14	3 508	4 769	16 944	25 235

Note: Resources are defined here as deposits of coal whose location, quality and quantity have been mapped. Source: adopted from Haryanto, Dahono, *Economic Feasibility of Foreign Contractors Developing Coal in East and South Kalimantan*, unpublished Master of Science thesis; Colorado School of Mines, Department of Mineral Economics; Golden, Colorado, USA, 1990 and I M Simatupang (ed), *Indonesian Mineral Development Digest*, The Indonesian Mining Association with the Department of Mines and Energy, 1988.

Table 3
Indonesian coal production (t)

Year	Production	Export
1981	398 771	–
1985	2 009 663	999 024
1986	2 664 060	1 053 515
1987	3 087 699	913 920
1988	4 507 780	1 225 709
1989	8 611 599	1 973 244

Source: Kosim Gandataruna (Director General of Mines), *Indonesian Mining Industry Review*, Directorate General of Mines, Department of Mines and Energy, Republic of Indonesia 1990.

Objective 10. *Contribute to the development of new economic growth centres in areas outside Java.*

In this regard there is no provision in the CCC nor is one necessary. Coal is developed where it occurs and the known resources of coal are located primarily outside of Java. This paper will not attempt to analyze the effectiveness of the Indonesian coal cooperation contract in actually achieving the above development objectives on a mine by mine basis. Such an analysis would be valuable but is beyond the scope of this paper which focuses primarily on the linkage between policy objectives and contractual means to implement such objectives. It would indeed be informative to investigate the effects of the above contractual development-linked provisions at a later date when the newly emerging Indonesian operations, which are listed in the next section, have established a track record to support such an analysis.

Have investors been scared?

To attract investors into the mineral sector requires prospective geology (the resource base), a regulatory system which provides the potential for earning and repatriating profits and a reasonably stable political system.[30]

The resource base

Indonesia is the world's largest Muslim nation and has a complex and diverse social system reflecting the fact that its substantial population of over 180 million (world rank: 5) is distributed on over 13 000 islands. Many of the islands enjoy substantial mineral endowments and coal is found in commercial quantities on most of the principal islands. Of particular interest at the present time are the coal resources in Sumatra and in the Indonesian portion of Borneo known as Kalimantan. The principle coal resources of Indonesia are summarized in Table 2. The table indicates that Indonesia has substantial coal resources. Much of the resource base is located geographically close to deep water and many

Table 4.
Coal cooperation contracts

Contract signed	Contractor partners	Original area (ha)	Location
Nov 2 1981	P T Arutmin Indonesia Utah Exploration Inc, USA (BHP Australia)	1 260 000	South Kalimantan
Nov 2 1981	P T Utah Indonesia Utah Exploration Inc, USA (BHP Australia)	797 200	East Kalimantan
April 18 1982	P T Kaltim Prima Coal C R A , Australia British Petroleum, UK	790 000	East Kalimantan
Sep 14 1982	P T Kideco Jaya Agung A group of 4 S Korean companies	254 804	East Kalimantan
Nov 16 1982	P T Adaro Indonesia Emadimsa SA, Spain	148 148	South Kalimantan
April 26 1983	P T Berau Coal Nissho Iwai Corp, Japan Mobil Oil Corp, USA	487 217	East Kalimantan
Aug 21 1985	P T Allied Indo Coal Allied Indonesia Coalfields Pty Ltd, Australia P T Mitra Abadi Sakti, Indo. Transfield Coal Pty Ltd, Australia	844	Parambahan W Sumatra
Nov 15 1985	P T Chung Hua Overseas Mining Development Emro and Tai Power, Taiwan	150 300	South Kalimantan
Dec 31 1986	P T Multi Harapan Utama New Hope Indonesia Pty Ltd, Australia P.T. Asminco Bara Utama, Indo. Mr. Ibrahim Risyad, Indonesia	189 953	East Kalimantan
Jan 30 1987	P T Tanito Harum (private Indonesian company)	123 850	East Kalimantan

Source: Adopted from *Indonesian Mineral Development Digest*, I M Simatupang (ed), The Indonesian Mining Association with the Department of Mines and Energy, 1988.

Table 5.
Government expenditure on development

Fiscal year Expenditure	Total development expenditure (billion rupiah)	Mining development (Per cent of total)
1984/1985	9 954.5	2.4
1985/1986	10 873.9	2.1
1986/1987	8 333.5	2.6
1987/1988	9 479.8	1.3
1988/1989	12 256.0	1.0
1989/1990	13 834.3	0.1
1990/1991(est)	16 225.0	1.3

Source: Ministry of Finance as reported in: anonymous, "The Mineral Sector in Indonesia," UNCTAD 1991.

deposits contain low sulphur coals with excellent export market potential.

The 1990 international coal market was estimated to be approximately 400 Mt of which about 330 Mt was transported by sea. As a percentage of world coal trade, Indonesian exports represents less than 5 percent of the 1990 world total. Indonesian coals are finding customers worldwide including distant destinations such as Florida in the United States.[31] Markets have been identified in Europe for very low sulphur content Indonesian coals and up to 3 Mt of these speciality coals will enter the European markets over the next six years.[32] However, the majority of Indonesian coal will be used to supply the expanding domestic market and the Asia–Pacific region. Future export potential will be further enhanced by the completion of the large vessel Tanjung Bara terminal and the Indonesia bulk terminals.

Indonesian coal production

The production of coal in Indonesia has been increasing rapidly over the past decade and this trend is expected to continue. Table 3 indicates historical production figures for the 1980's. In mid–1992, the Indonesian Director General of mining, Mr. Kosim Gandataruna, indicated that Indonesia's coal output was expected to reach 20MT in 1992, from 13.5Mt in 1991. He also indicated that out of this total only 7Mt would be required for domestic consumption and that the rest would enter the export market.[33] The Mining Journal was more optimistic estimating that 1992 coal production would reach 26Mt with exports rising to reach 19 Mt.[34] Estimates of annual production potential by the mid–1990's range from 50 to 95 million tonnes (note: this would represent about 10 to 20 percent of the 1990-level world export market).

The investors

The increase from 1981 (0.4Mt) to 1991 (20 to 26Mt) has been mainly attributable to mines operating under a CCC. Table 4 lists the principal CCC's in force during the 1980's. Although the government has invested in the mineral sector the amount is small compared to that invested by foreign mining companies (see Table 5).

As can be clearly seen from both the number of CCC's signed and from the rapid increase in coal production, the terms, including those promoting development, of the CCC do not appear to dissuade investment in coal by transnational mining companies.[35] While it is not possible to forecast how much investment would have been made had no development obligations been contained in the model CCC, it is apparent that the balanced approach described in the CCC is acceptable to many of the transnational mining companies. On a worldwide basis, the Indonesian level of success in attracting transnational investment in coal mining is unmatched by any other developing country.[36]

Implications for Other Nations

Governments often voice the goal of utilizing the mineral sector as a means of furthering the national development process. All too often, this goal is merely stated but not made a part of the regulatory system. If it is implemented, politicians and planners may have unrealistic expectations for the sector and place requirements on the industry which will scare away investors. Striking a regulatory balance between national development and company objectives is not an easy task but Indonesia has apparently achieved this balance. While it might be argued that Indonesia has not gone far enough in setting and implementing development requirements for the mineral industry, it has adopted a pragmatic approach which has resulted in significant levels of mineral investment which further, to a limited extent as described in Section I, the development process.

Other nations interested in linking development and mine sector investment may find the Indonesian approach useful as a model. The approach hinges on two levels of government involvement: firstly, a publicized mineral policy which has evolved in a consistent manner and which clearly states the Government's position on its expectations regarding the mineral sector, and secondly, a model contract with standardized and reasonable terms which implement the government's policies.

An Indonesian Director General of Mines summed up his country's philosophy toward the mineral industry in the following statement:

"The Government realizes very well that unlike money in the bank, minerals in the ground do not earn any interest. Therefore, the Government will continue to pursue a pragmatic mineral development policy to attract private investors in mining and to promote the mineral industry in the country."[37]

Development benefits can flow from sustained mineral sector investment[38] but such benefits, particulary those which may be associated with export-oriented mines, may be limited. The key to enjoying these benefits is to maintain the investment flow but on a course which will achieve the maximum benefit for the nation.

Notes

An earlier version of this paper was presented by the author at the second World Coal Institute conference Coal for Development, London 24–26 March 1993.

1. Article 33 of the Constitution.

2. Article 1, *Law No.11, 1967.*

3. Excerpts from speeches and the selected policy statements have been reproduced as published in the two following sources: I M Simatupang (ed), *Indonesian Mineral Development Digest*, The Indonesian Mining Association with the Department of Mines and Energy, 1988 and K Gandataruna (Director General of Mines), *Indonesian Mining Industry Review*, Directorate General of Mines, Department of Mines and Energy, Republic of Indonesia 1990.

4. Introductory speech by the Minister of Mines Professor Dr M Sadli at the first symposium organized by the Indonesian Mining Association: The Indonesian Mineral Industry, its Present and Future, 14–16 June, 1977.

5. Pronouncement by Secretary General of the Ministry of Mines Soetaryo Sigit, 1977.

6. Extract from a keynote address by Minister of Mines Soebroto given at the 1986 Conference Indonesian Mining Industry – General Review".

7. K Gandataruna, *Indonesian Mining Industry Review*, p 10, Directorate General of Mines, Department of Mines and Energy, Indonesia 1990.

8. Although not explicitly stated in any of the policy papers cited in the first part of this paper, one of the government's objectives in the development of the mineral endowment is to use mining projects as one way of providing an infrastructure base to stimulate development and to open up new areas for intensive agriculture.

9. Paragraph 25.2, *Model Indonesian Coal Cooperation Contract* (hereafter CCC), circa 1990.

10. Paragraph 8.4, *CCC.*

11. Paragraph 13.2, *CCC.*

12. Paragraph 19.3, *CCC.*

13. Paragraph 19.6, *CCC.*

14. At least one of the major coal mining operations in Kalimantan is being operated on a mine camp basis. Workers are transported in and out of the mine camp on a work/leave rotational system and no permanent town-site is planned. The work camp approach minimizes the synergistic development potential for local development and constitutes a clear indication of an enclave situation. However, in this particular case, it has been communicated to the author by the mining company involved that the decision to proceed in this manner was in response to the government's informal request to minimize the cultural impact of the mine on the local people.

15. Paragraph 18, *CCC.*

16. Subparagraph 18.6, *CCC.*

17. Subparagraph 26.1.1, *CCC.*

18. Paragraph 11.2, *CCC.*

19. Paragraph 13.1, *CCC.*

20. *The law on environment*, Act. No. 4 of 1982.

21. I M Simuatupang, Social and Community Development Aspects of Mining in Indonesia, *Minerals, Energy and the Environment: The Outlook for the Rest of the Decade*, proceedings of the Third Asia-Pacific Mining Conference, pp 379–390.

22. Paragraph 13.2, *CCC.*

23. Paragraph 8.4, *CCC.*

24. Paragraph 13.1, *CCC.*

25. It has been estimated by Haryonto that under conditions prevailing in Kalimantan that a 6 million metric tonne per year coal mine would require a workforce of approximately 660 personnel (470 hourly support labour and 190 salaried labour). See Haryanto, Dahono, *Economic Feasibility of Foreign Contractors Developing Coal in East and South Kalimantan*, unpublished Master of Science thesis; Colorado School of Mines, Department of Mineral Economics, Golden, Colorado, USA, 1990.

26. Paragraph 20.1, *CCC.*

27. Paragraph 12.6, *CCC.*

28. Paragraph 12.5, *CCC.*

29. Paragraph 20.1, *CCC.*

30. These basic requirements represent only a few of many criteria that companies may apply. For a comprehensive list see J Otto, Criteria for Assessing Mineral Investment Conditions, *Mineral Investment Conditions in Selected Countries of the Asia-Pacific Region*, United Nations ST/ESCAP/1197, New York 1992, pp 6–34.

31. New Trends in Coal Trade, *Mining Journal* Volume 318 No.8179 June 26, 1992, p 464.

32. Ibid.

33. As reported in Indonesian production to jump this year, *Mining Magazine,* July 1992, p 65.

34. Indonesian Coal Output Surge, *Mining Journal*, Volume 319 No. 8195 October 16, 1992, p 270.

35. For a more complete description of the Indonesian mineral sector investment environment see: J Otto, Indonesia: The Effects of A Transparent Regulatory System on Foreign Mineral Investment, *Mineral Investment Conditions in Selected Countries of the Asia-Pacific Region*, pp 99–128, United Nations ST/ESCAP/1197, New York 1992.

36. This is not to imply that other developing countries have not also attracted multinational investment in coal. China, Colombia, Vietnam and others have done so but on a more limited scale.

37. S Sigit, Director General of Mines, Mining Development Policies and the Administration of Mining Legislation in Indonesia, presented at the UNCTC Workshop on Promoting, Regulating and Negotiating with TNCs in the Mineral Sector, pp 8–13 Dec 1986, Katmandu, Nepal

38. See The Contribution of Transnational Mining Corporations to the Asia-Pacific Region, United Nations ST/ESCAP/1188, New York 1992. ■