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STUDY BY THE STAFF OF THE U.S.

General Accounting Office

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Energy's Role In United States And Indonesian Relations

Indonesia has been a dependable source of incremental petroleum imports to the United States. Expectations are that it can continue to be relied upon provided that sufficient new oil reserves are identified and developed in a timely manner, and that political and economic stability is maintained. More significantly, Indonesia's strategic and political importance to the United States evokes concern over Indonesia's efforts to develop and capitalize on its petroleum resources and seems to form the basis for a mutuality of interest that governs relations between these two countries. Relevant issues are discussed in this report.

UNITED STATES GENERAL ACCOUNTING OFFICE

Staff study.

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PREFACE

One objective of GAO's continuing work in the international energy area is to analyze the potential for secure sources of petroleum at reasonable prices. Indonesia is now an incremental source of petroleum at reasonable prices for the United States, and expectations are that Indonesia as a source of petroleum will continue to be reliable in future years, provided sufficient new oil reserves are identified and developed, and political and economic stability is maintained.

Indonesian oil comprises about 5 percent of total U.S. petroleum imports. Although this volume cannot be considered vital to overall U.S. energy needs, it represents a non-Arab source.

The producer-consumer relationship between Indonesia and the United States has been based on a number of factors, including the

--low sulfur content of Indonesia's crude;

--demand for a low-polluting energy source on the U.S. West Coast;

--key role of U.S. oil companies in Indonesia;

--transportation advantage to U.S. markets; and

--perception that Indonesia is a reliable supplier.

Indonesia produces approximately 1.6 million barrels of oil a day, of which 1.3 million barrels is exported--almost all of it to Japan and the United States. A key to Indonesia's continued ability to produce and export petroleum lies in increasing or at least maintaining its present level of reserves of 10 to 15 billion barrels through successful exploration and development. As a result of the worldwide recession, Indonesia's unilateral changing of contract terms, and uncertainties arising out of a 1976 U.S. tax ruling on American contractors' production sharing payments to Indonesia, exploration and development efforts fell sharply between 1975 and 1977. As a consequence, a decrease in oil production of as much as 200,000 barrels a day may occur over the next several years. Projected increases in domestic consumption may further reduce the quantity of oil available for export. The Indonesian Government has recently offered new incentives to step up exploration and development.

Indonesia's ability to fully exploit its energy resources will, to a large extent, determine its economic viability and political stability. Although Indonesia's economy is believed to be relatively stable for the present, there is an element of fragility because of its heavy dependence on petroleum export revenues and its need for continued foreign assistance.

Continued exports of oil and gas are critical to ~~its~~ the country's economy. Petroleum exports account for 70 percent of Indonesia's overall foreign exchange earnings and 50 percent of its budget revenues. The United States imports nearly 44 percent of Indonesia's exported petroleum and Japan imports 48 percent.

Indonesia is the world's fifth most populous country ~~with an estimated 135 million people~~ and is among the poorest of the developing nations despite its oil revenues. The United States has provided substantial amounts of military and economic assistance, including bilateral grants, loans, and food shipments, in satisfaction of commitments made through various international organizations which coordinate assistance to Indonesia.

Indonesia's strategic and political importance evokes the concern of the United States over Indonesia's efforts to develop and market its energy resources. Lying astride three great waterways of South Asia, Indonesia's air and sea lanes afford vital communication links for both commercial and military traffic.

Though officially nonaligned, Indonesia has frequently demonstrated a cooperative attitude toward the West and has acted as a bulwark against Communist expansionism in Southeast Asia. Moreover, being a mixed economy favorable to private capital investment, Indonesia could provide a non-Communist model for Third World development.

Indonesia's strategic and political importance to the United States coupled with Indonesia's need to export its oil seem to form a mutuality of interests that would assure a continued, though incremental, supply of oil to the United States.

We obtained information from and the views of nearly 100 U.S. and Indonesian officials representing 39 public and private agencies, organizations, ministries, departments, and firms in the United States, Indonesia, Hong Kong, and Japan. (See app. I.)

Copies of this study are being sent to the Director, Office of Management and Budget; the Secretaries of State, Treasury, and Energy; and the appropriate congressional committees.

C. D. Hylander

for J. K. Fasick, Director
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Contents

ABBREVIATIONS

ASCOPE	Asean Council on Petroleum
ASEAN	Association of Southeast Asian Nations
BKPM	Capital Investment Coordinating Board
GDP	Gross Domestic Product
IGGI	Inter-Governmental Group on Indonesia
LNG	Liquefied Natural Gas
MIGAS	Ministry of Mines and Energy
OPEC	Organization of Petroleum Exporting Countries

CHAPTER 1

INDONESIA'S ABILITY TO PRODUCE OIL AND GAS

At one time, Indonesia was a leading petroleum-producing country but now ranks 11th among oil-producing nations, with estimated reserves of 8 to 15 billion barrels of oil and an average daily production of 1.6 million barrels. Indonesia's ability to raise the level of known reserves, contain domestic oil consumption, and successfully substitute alternate sources of energy will determine the volume of petroleum available for export.

KNOWN PETROLEUM RESOURCES

Indonesia's light crude oil has one of the lowest sulfur contents of any crude oil in the world, which makes it highly desirable from an environmental point of view. However, geological formations make these oil resources expensive and difficult to explore and develop.

Through our discussion with Indonesian Government officials, we determined that there is no "official estimate" of recoverable reserves. However, the consensus of various knowledgeable sources is that recoverable petroleum reserves consist of 8 to 15 billion barrels, as shown below.

Oil and Gas Journal	10 billion barrels
Caltex Pacific Indonesia	8 to 12 billion barrels
U.S. Geological Survey	10.4 billion barrels
Indonesian Ministry of Mines and Energy	10 to 15 billion barrels

OIL AND GAS PRODUCTION

Oil production in Indonesia has increased an estimated 20 percent since the quadrupling of oil prices began in 1973. In 1977, oil production reached 615 million barrels, an average of almost 1.7 million barrels a day, representing a 12-percent increase over 1976 production levels. This level of production placed Indonesia 12th among the world producers and 8th among OPEC members for 1977. On a regional basis, Indonesian oil production accounted for over 80 percent of Southeast Asia's total oil production.

Indonesian Crude Oil Production For The Last 5 Years

Year	Daily average	Annual total
	(millions of barrels)	
1974	1.370	501
1975	1.310	477
1976	1.510	550
1977	1.685	615
1978	1.620	591

Officials of Pertamina, the national oil company, believe that the reserve to production ratio presently about 10:1, may be on the decline. Indonesian energy officials forecast possible declines of as much as 5 percent a year in oil production in 1978 and 1979. This prediction was based upon the very low level of exploration carried out during the past 2-1/2 years and the rapidly declining rates of production typical of Indonesia's comparatively small reservoirs. Furthermore, marketing problems, particularly with respect to the U.S. West Coast, could cause Pertamina to shut-in excess capacity in the near future. Indonesian officials told us they hope that recent increases in exploration and development activities will result in sufficient new reserves being identified, developed, and brought into production to sustain present levels of production.

The official estimates of future production levels over the next 4 years are:

Fiscal year:	1979-80	1.62	million	barrels	a	day
	1980-81	1.70+	"	"	"	"
	1982-83	1.78	"	"	"	"
	1983-84	1.80+	"	"	"	"

Every day, the Caltex concession produces over 800,000 barrels of oil, almost half of Indonesian daily production. Approximately 20 percent of the current production of 1.6 million barrels comes from the rich fields in the Caltex concession. Minas field, the largest, produces over 340,000 barrels a day by itself. Since the Minas field was first discovered in 1944, more than 2 billion barrels of oil have been produced; it is believed that 1 billion barrels are left, although production has apparently peaked. With current technology and economics in the oil industry, it is anticipated that this field will remain economically productive for a number of years although at declining rates of production. None of the fields in the Caltex concession or any other producing area onshore or offshore are nearly as large as Minas.

The production and marketing of natural gas is assuming increasing importance and may eventually become Indonesia's most important hydrocarbon resource in terms of exports and feedstocks. Gas production totaled nearly 543 trillion cubic feet in 1977, registering a gain of 74 percent over 1976. Currently, most gas in Indonesia is either flared or capped. Conservation of natural gas has been assigned a high priority by the Government's energy planners, and Pertamina already has taken steps to ensure the more efficient use of this valuable hydrocarbon in the future. Among the projects recently completed, in process, or under consideration are

--a natural gas liquids recovery plant,

--gas processing plant in East Kalimantan,

--a liquid petroleum gas plant in West Java, and

--gas pipelines to bring gas from offshore facilities to centralized processing plants onshore.

Indonesia has also embarked on two significant liquefied natural gas (LNG) projects in the Badak field in East Kalimantan and the Arun field in North Sumatra. The first phase of each project was completed in 1977. Together, these projects are expected to generate nearly $8.0 billion in net foreign exchange earnings between 1977 and the end of the century.

The degree and speed with which Indonesia develops its natural gas resources depends largely on the development of dependable long-term markets for LNG. The manufacturing, processing, and shipping of LNG requires a large capital investment; therefore, long-term marketing commitments are necessary before Indonesia can justify proceeding to develop this resource to capacity.

INDONESIA'S NATIONAL ENERGY POLICY

Indonesia's national energy policy is guided by the basic philosophy of the Indonesian Government regarding the exploitation of natural resources, including oil and gas.

Article 33 of its 1945 Constitution states that "all the natural wealth on land and in the waters are under the jurisdiction of the State and should be used for the benefit and welfare of the people." Accordingly, the Government of Indonesia considers petroleum to be a strategic asset for use in accelerating national development and has generally followed a policy of bringing its oil out of the ground as quickly as possible to generate development capital. In carrying out this policy, Indonesia has relied heavily on the use of foreign technology and capital for petroleum development, with the stated understanding, however, that Indonesia should participate to the fullest extent possible in this development.

The primary thrust of Indonesia's national energy policy is aimed at accelerating investment and exploration for new oil and gas and at developing, on a priority basis, non-oil sources of energy to meet rapidly increasing domestic demand and thereby conserve oil for export.

In recognition of the important contribution of the petroleum sector to Indonesia's economy and internal development plans (see pp.24-28), the Government elevated national energy authority to the Cabinet level. Energy policy formulation units were consolidated, and it was announced in 1978 that a National Energy Board would be established to develop and coordinate energy policies. As stated by the Minister of Mines and Energy, Indonesian's energy policy will focus on

--domestic energy conservation,

--diversification away from oil in meeting increasing domestic energy consumption,

--more rapid rural electrification, and

--a thorough classification of Indonesia's energy resources.

According to the U.S. Embassy's annual petroleum report, the Government of Indonesia recognizes the importance of timeliness in implementing these policies and estimates that, in the next 5 years, Indonesia will concentrate on maximizing oil and gas production while beginning efforts to diversify the sources of domestic energy consumption.

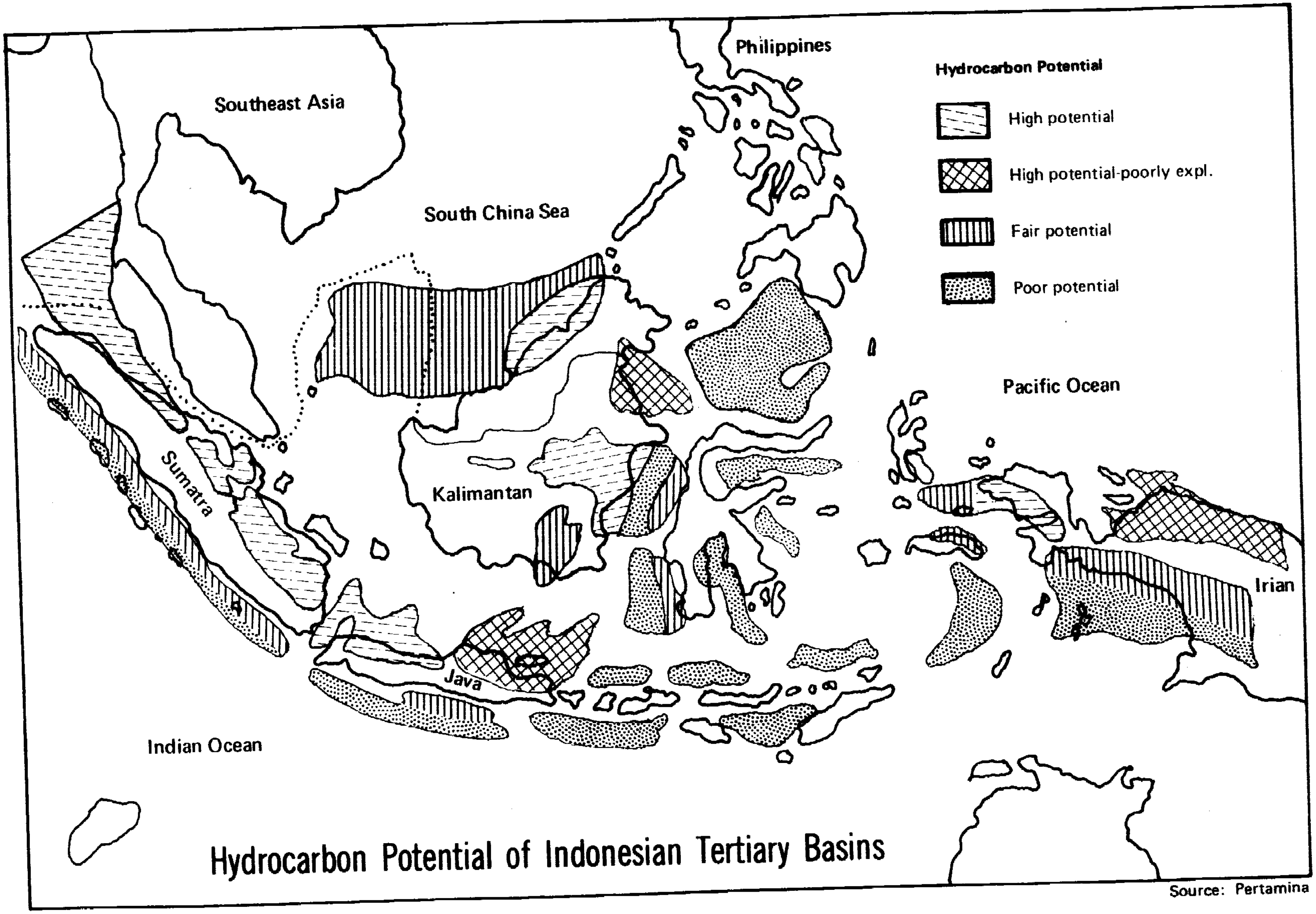
EXPLORATION AND DEVELOPMENT

Assuming reserves of 10 billion barrels and production of 1.6 million barrels a day, Indonesia could run out of petroleum in 15 to 20 years unless new reserves can be found. To maintain present production levels, exploration and development must identify sufficient new reserves in a timely manner. A senior Indonesian Government official, in his "Doomsday speech," highlighted this prospect and called for reduced levels of petroleum consumption, and urged the nation to switch to alternate sources and forms of energy to the extent possible.

New petroleum reserves identified through successful exploration and development efforts hold the key to sustaining Indonesia's petroleum production. (See map, p. 6.) Exploration increased steadily during the early 1970s but fell off drastically in 1976 and 1977 because of the worldwide recession and the consequent decrease in oil demand. This decline was further exacerbated by Indonesia's unilateral changing of contract terms and an unfavorable U.S. tax ruling which disallowed a tax credit for certain payments made by U.S. firms to the Government of Indonesia. The Government appears to have realized that the gains from the unilateral contract changes were short lived because early in 1978 Indonesia offered additional incentives to encourage the resumption of exploration and development.

Indonesia's relative attractiveness as a place to search for oil and gas appears to be improving. The American Embassy's annual petroleum report noted that new profit incentives have encouraged plans by some companies to undertake expanded investment in exploration. The new terms make it attractive for companies with an existing production base to explore further in the same contract area, but the adequacy of incentives for wildcat exploratory drilling is less certain.

There is some disagreement between Indonesian Government officials and oil companies as to whether the new incentives will achieve the results desired. There appeared to be a qualified consensus among the Indonesians with whom we spoke that the incentives presently being offered would be adequate to stimulate exploration efforts. The Minister of Mines and Energy told us that the Government recognizes the need to aggressively pursue exploration and development if future oil production goals are to be met. The Director General of Pertamina pointed out that, since offering new incentives to foreign oil companies, companies' exploration and development budgets for 1978 have increased substantially. He concluded, however, that even this might not be sufficient to



Hydrocarbon Potential of Indonesian Tertiary Basins

Source: Pertamina

achieve the desired results and expressed the hope that an even greater effort would be undertaken in the future. He further stated that additional incentives may be needed but believes that improved market conditions will provide them.

Representatives of two major U.S. oil firms commented that the April 1977 incentive package encouraged further exploration, but only in low-risk areas. They believe the current incentive package is not sufficient to stimulate activities in higher risk areas, particularly in remote jungle areas. Substantial wildcatting was expected in 1978 and 1979, but a sustained effort will be predicated on the number of new discoveries.

Despite the diminished levels of exploration activities over the past couple years, a senior Pertamina official told us that exploration has increased discoveries of commercial oil wells by 45 percent in the last 3 years and is presently achieving a 23 percent success ratio for commercial finds overall. 1/

PERTAMINA AND THE ROLE OF FOREIGN OIL COMPANIES

The national petroleum company, Pertamina, oversees all petroleum-related operations in Indonesia and is solely responsible for ensuring that all of Indonesia's domestic energy requirements are satisfied. Working closely with the Ministry of Mines and Energy, especially with the Directorate of Oil and Natural Gas (MIGAS), Pertamina provides substantial input into petroleum policy formulation and assumes primary responsbility for its execution. Refining and marketing are Pertamina's strong suits, while its production is only about 84,000 barrels a day. Indonesia's output presently averages 1.6 million barrels a day. Pertamina production for 1978 is expected to be about 5 percent of the country's total.

Most of the petroleum exploration, development, and production activities in Indonesia are carried out by foreign oil companies operating under various compensation arrangements: contracts of work, production-sharing contracts. (See app. II.)

1/To be considered a "commercial find," a new discovery must have a potential capacity of 300 to 1,000 barrels a day for onshore wells (depending on development costs) or 2,000 barrels a day for offshore finds.

These foreign oil companies have played a continuing key role in the evolution of Indonesia's oil and gas industry, producing more than 90 percent of the total. (See app. III.) American firms (presently over 20 U.S. companies) account for nearly 85 percent of total production.

While the foreign firms' compensation has been diminishing over the years, most firms' representatives with whom we spoke expressed the opinion that the incentives on existing production operations are sufficient. They expressed doubt, though, that the present incentives were sufficient to entice companies to aggressively pursue exploration and development in high-risk areas.

According to a senior Pertamina official, it appears that industry is looking for a 40-percent return on investments involved in "finding costs" and approximately a 25-percent return on investment in general on their development costs though this is highly variable, depending upon operating costs and recovery risks.

Pertamina, realizing that additional incentives may be necessary to stimulate exploration and development in less promising areas, now offers a new variation of the basic production-sharing contract, called a "joint venture" or "joint operation" contract. Under the terms of this arrangement, onshore areas previously reserved for exploration and development by Pertamina are made available to foreign oil companies that agree to share with Pertamina all exploration and development costs on a 50-50 basis. Normal production-sharing terms are then applied to the contractors' 50 percent. Through July 1978, four foreign oil companies--Conoco, Total, Deminex, and Teikoko--have signed "joint venture" contracts. Put simply, the contractor's share of total revenue after allowances for cost recovery is 7.5 percent. From the foreign contractors point of view, this type of contract offers the opportunity to explore areas otherwise unavailable. Pertamina officials believe that this arrangement will be effective because already it has accelerated the pace of new exploration. Whether this type of contract will continue to spur investment depends, in part, on the remaining number of attractive onshore areas that can be offered.

In 1967 Indonesia pioneered "production sharing agreements" designed to obtain needed foreign technical assistance while at the same time assuring that it controlled and derived the ultimate benefit from its oil and gas resources. Pertamina has 60 such contracts with 30 foreign oil companies. One unique feature of this contract is that it provides for sharing actual crude production, rather than proceeds from the sale of oil. Pertamina retains overall guidance and management control of production facilities and equipment.

Indonesia seems to recognize the vital role and contributions of foreign oil companies in developing its oil and gas resources and has provided high-level assurance that new investments are welcome and will be protected. Furthermore, the Indonesian Government's successful and disciplined handling of the Pertamina fiscal crisis has won respect abroad and restored a general sense of confidence in the economy to the international banking and financial community. Indonesia's relative attractiveness as a place to search for and produce oil and gas has apparently improved as attested to by foreign firms substantially increasing their exploration budgets. Numerous statements by President Suharto and senior Cabinet officials have sought to assure foreign companies that oil sector investment is top priority and that the Government understands company needs for incentives, stability, and profits. The extent that the Indonesian Government is successful at communicating and demonstrating a commitment to these principles will, in large measure, determine the continued role and contributions of foreign oil companies in developing Indonesia's oil and gas resources.

GROWING DOMESTIC CONSUMPTION

Indonesia's energy consumption has been increasing at an annual rate of 13 percent while economic growth is estimated to be 7 percent. Petroleum consumption now comprises 90 percent of Indonesia's energy use and has been increasing at an annual rate of nearly 15 percent since 1971. Since industrial use accounts for most of domestic consumption, Indonesia's development goals depend on adequate domestic energy sources.

We were told by several senior Indonesian Government officials that growing domestic demand for oil would not affect nor diminish the availability of petroleum supplies for export because domestic requirements are expected to be satisfied by substituting alternate energy sources, conservation, and increasing domestic reserves. As a form of substitution, Indonesia plans to import approximately 200,000 barrels a day of cheaper, low-quality Middle East crude oil for domestic consumption and is trying to develop other energy sources. A U.S. Embassy official believes the annual growth of domestic oil consumption in Indonesia could be reduced at best by about 7 or 8 percent, which is significantly lower than the current rate of increase.

Possible energy alternatives to oil include coal, hydroelectric, geothermal, and possibly nuclear power. Coal has been designated as the primary domestic alternate energy source, and Indonesia is making a concerted effort to develop its huge Sumatran coal reserves for domestic power generation. The Minister of Mines and Energy estimates that coal reserves are 10 billion tons and that 5.5 million tons a year will be produced by 1985. The World Bank has pledged an initial $10 million in loans and it is anticipated that domestic coal production will reach 9 million tons by 1992.

Hydroelectric and geothermal power are planned for rural electrification. Solar and nuclear power are considered to have potential, but, according to the Minister of Mines and and Energy, the Government has made no commitment to their use at this time.

One of the biggest drawbacks to use of non-oil energy fuels is that the necessary infrastructure is practically nonexistent and would be very costly to develop. On the other hand, the petroleum sector has a well established infrastructure. Indonesia's ability to capitalize on this resource for satisfying domestic energy consumption needs and supplementing energy exports will be limited. At the time of our fieldwork, gas flared or capped represented about 55 percent of gas production in the country.

PETROLEUM PRICING AND ROLE WITHIN OPEC

Since 1962 Indonesia has been a member of the Organization of Petroleum Exporting Countries (OPEC)--an international oil cartel. Indonesia accounts for only 3 to 5 percent of the OPEC's total production.[1] Consequently, Indonesia has minimal leverage in shaping OPEC policy or influencing pricing decisions and is referred to as "OPEC's quiet member."

The Indonesian Government perceives itself as a moderating influence within OPEC. During our discussions with senior MIGAS and Pertamina officials, we were reminded that Indonesia

--did not participate in the Arab oil embargo of 1973 nor boycott the companies that resisted that effort;

--has acted to restrain price increase proposals by OPEC members on several occasions; and

--has been a reliable supplier of petroleum to established customers, including the United States, and this policy will continue.

A MIGAS official stated that Indonesia's decisions are guided by its long-range self-interests; nevertheless, he pointed out that the United States has been a beneficiary of Indonesia's policies in the past.

Concerning oil-pricing policy, we were told that the Government of Indonesia is guided by its desire to see stability in the international market and a reasonable maintenance of the country's purchasing power. Pointing to the financial and economic chaos and subsequent recession following the 1973-74 world oil price increases, the MIGAS official said that Indonesia strongly believes there is a need for price restraint in the future to avoid similar problems and economic disturbances, and that Indonesia seeks long-term stability which can only be realized in an environment where oil prices do not fluctuate drastically. He indicated that Indonesia will therefore seek price increases in modest, incremental amounts that will maintain the real purchasing power of oil revenues, but not increase the price in real terms.

Unlike other OPEC countries, Indonesia does not adhere to a "posted price" policy. Pertamina, in marketing its own crude, has adopted a "realized price" concept which involves sulfur and quality differentials. Although this "realized price" is related to Middle East market sales and posted prices, Pacific area buyers have historically paid a relatively higher premium for Indonesian crudes because of its premium quality and transportation differentials. According to the U.S. Embassy's annual petroleum report, Indonesia has had to revise its pricing system occasionally in order to stay price competitive.

ADEQUACY OF U.S. REPORTING EFFORT

In recognition of Indonesia's importance and potential as an energy producing/exporting nation, the Department of State has assigned to the American Embassy in Jakarta a full-time petroleum officer to monitor and report on the energy situation. The petroleum officer's duties include

--extensive personal contacts with Indonesian energy officials in the Ministry of Mines and Energy (particularly with MIGAS), Pertamina, and U.S. oil companies;

--firsthand inspections of exploration and development projects and sites; and

--formal and informal reporting on both a routine and ad hoc basis.

The relations between Indonesian officials and the American Embassy appear to be quite cordial and an excellent rapport has been established. Indonesian officials conveyed to us their sense of confidence, respect, and credibility in the Embassy's reporting which has resulted in a high degree of cooperation over the years. Our work indicated that the petroleum officer's efforts were current and adequate to keep abreast of Indonesia's petroleum development efforts. The Embassy's effort culminates in an annual energy report that is comprehensive and thorough in examining the political, economic, and technical factors that affect Indonesia's ability and willingness to produce energy supplies. We were told by senior Indonesian officials that the information contained in these reports accurately reflects Indonesia's energy situation at the time.

CHAPTER 2

ECONOMIC PERFORMANCE: KEY TO POLITICAL STABILITY

The Indonesian Government sees the lack of economic development as the greatest threat to Indonesia's political stability. Consequently, it has assigned development the highest priority. To meet this challenge, Indonesia will have to make optimum use of its petroleum resources as well as two of its most underdeveloped resources--labor and land. Furthermore, its continued ability to attract foreign investment and to secure loans and other assistance will remain vital for the foreseeable future.

Indonesia is the world's fifth most populous country and among the poorest. With a 1977 population estimated to be between 135 and 138 million (a 15 percent increase from the 1971 census), its per capita income is one of the lowest in the world.

Indonesia's economic performance over the years has been erratic. The exploitation of its petroleum resources for the most part has funded development programs. In the late 1950s and early 1960s investments declined and the general economy deteriorated under the Sukarno regime. Expanded Government expenditures and insufficient revenues resulted in growing budget deficits, spiraling inflation, and general shortages of basic consumer goods. A change of governments in 1966 gradually brought about an economic recovery which lasted through 1975 when another slowdown in capital investment and fiscal mismanagement by Pertamina, the national oil company, led to another crisis. While Indonesia appears to have overcome this latest crisis, its economic prospects for the future remain somewhat clouded. Much remains to be done, and many basic needs of the poorer segments of Indonesia's population are yet to be satisfied.

EMPHASIS ON DEVELOPMENT

A series of 5-year development plans which began in 1969 are designed to foster economic growth and promote the general well-being of the people. The first 5-year plan, covering fiscal years 1969 through 1974, sought to achieve its goals primarily through increased Government investments. It emphasized the rehabilitation of the economy as its major objective, particularly increased agricultural production and development of transportation systems. A report by the Jakarta Branch of the Bank of America states that, during the first 5-year development plan, working opportunities were created for 5.6 million people. The single most important goal was for an increase of 47 percent in rice production during the period. Most production targets of the first plan were fulfilled with the exception of rice, fertilizer, and cement production. Government development expenditure during the First Plan increased to approximately 7 percent of the gross domestic product (GDP), which was also less than expected. However, agricultural output expanded at an average rate of 4.5 percent a year and the foundations for modern industry were laid. During this period, the annual rate of economic growth exceeded 7.5 percent while domestic savings and investment also rose rapidly.

The second 5-year plan, ending in fiscal year 1979, sought to improve living standards by stressing agricultural and food production. Specific objectives included the provision of adequate food and clothing, greater employment opportunities, expanded infrastructure development, and promotion of equitable social welfare. Under this plan, Government development expenditures amounting to over $20 billion were expected to account for 44 percent of total investment. A fourfold increase in oil prices between 1973 and 1976 resulted in greater than expected foreign exchange earnings and domestic revenues, and the Government was able to exceed planned development expenditures. Implementation of development projects was accelerated, particularly for agriculture, mining, and public enterprises. GDP grew about 7 percent in fiscal year 1976-77. The goal of real GDP growth under the second plan was set at 7.5 percent per year, and the targeted real annual per capita growth at 5.2 percent.

For the first 2 years of the second plan, fiscal years 1974-75 and 1975-76, the Bank of America reported a greater availability of foreign exchange resources and Government revenue than envisaged in the plan: foreign exchange reserves in April 1977 exceeded U.S. $2 billion. However, the increase in revenue was partially offset in real terms by higher costs of development projects due to global inflation.

It is expected that the preparation of the next 5-year plan will be completed before April 1979 and development priorities will continue to focus on economic development. Emphasis will lay upon the agricultural sector and accelerating the development of the industrial sector in order to develop the capacity to process raw materials into basic material and finished goods. According to President Suharto, the new development plan will continue to be based on a Development Trilogy: equitable social conditions, economic growth and national stability. Although contributions from the petroleum sector will remain significant, it is anticipated that the value of non-oil exports will be greater than the net value of oil and LNG exports by the third year of the plan.

ECONOMIC INDICATORS ENCOURAGING BUT PROSPECTS UNCERTAIN

Indonesia is a developing country which faces the typical economic problems and challenges associated with development and growth. By virtue of its size, soil and natural resources, Indonesia has the potential for self-sustaining economic development. Unlike some other developing nations, Indonesia is rich in natural resources, particularly oil and gas, which provide a strong economic base for funding internal development programs.

The economy of Indonesia has historically been based on small-holder agriculture (primarily rice), estate agriculture (rubber, palm oil, coffee, tea, and other export products), and mineral exploitation (oil and tin). Oil was discovered in Indonesia in 1883 and was subsequently commercially developed by the Dutch. A Constitution adopted by the Republic of Indonesia in 1945, mandates that Indonesia's natural resources are to be controlled by the Indonesian Government and are to be exploited for the greatest welfare of its people. In the late 1950s and early 1960s, however, investments declined and general economic conditions deteriorated. Expanded Government expenditures, excessive foreign borrowing, and insufficient revenues resulted in growing budget deficits, spiraling inflation, and general shortages in basic consumer goods.

Shortly after a change in government in 1966 following an abortive Communist-led coup, the new administration adopted an economic policy which sought to slow inflation, rehabilitate the economic infrastructure, increase export production, and foster adequate production of food and other basic necessities for the population. The new Government, under the leadership of General Suharto, pursued a stabilization policy, whereby Government revenues were supplemented by international financial assistance, inflationary financing of budgetary deficits was curbed, money supply growth was moderated, restrictive trade and foreign exchange controls were removed, and a new foreign exchange system was adopted. New laws were enacted to provide incentives for both foreign and domestic investments, new financial assistance was sought, and the substantial foreign debt contracted prior to 1966 was rescheduled.

Overall, these measures proved effective in improving general economic conditions. Economic activities increased particularly in the export sector and rice production as GDP recorded gains of 6.5 percent a year from 1966 through 1970. Moreover, the new government was eventually successful in reducing the annual rate of inflation. Export increases averaged 13 percent annually from 1966 through 1970 and by 47 percent between 1970 and 1976. The same period witnessed a rapid growth in imports--17 percent annual average between 1966 and 1970 and 35 percent from 1970 through 1976.

A slowdown in capital investment, a world recession, and fiscal mismanagement by the national petroleum company, Pertamina, led to another economic crisis in 1975. However, with financial assistance provided by foreign donors through the Inter Governmental Group on Indonesia and prudent fiscal management by the Indonesian Government, the crisis apparently was averted. Nevertheless, Indonesia must overcome major economic hurdles before permanent economic stability can be realized. Consequently, for the foreseeable future economic stability will remain contingent upon continued foreign assistance and foreign investment, favorable balance-of-payments position, and the Government of Indonesia's ability to contain inflation.

The Government of Indonesia announced on November 15, 1978, that their standard of currency would be devalued 33.6 percent against the U.S. dollar. As a result of this decision, the rupiah--which has been pegged at 415 to the U.S. dollar since 1971--will now be valued against a basket of unspecified currencies--currently 620 Rp. to U.S. $1. In their public statements, ministers reportedly stressed that the main aim of the devaluation was to promote non-oil exports and to encourage growth of local manufacturing industries, both of which closely reflect the Government's long-range balance-of-payments concerns.

Despite its precarious economic situation, the Indonesian economy appears to be making significant progress. (See app. IV.) The economy grew at a rate of around 6 to 7 percent in 1977, and the International Monetary Fund views 1977 as a high point in the nation's recovery. It is expected that Indonesia will continue to enjoy a favorable balance-of-payments position. In 1977-78 the value of exports increased by 20 percent and official foreign exchange reserves rose by about $650 million. According to the World Bank's assessment, Indonesia's overall balance-of-payments position will not deteriorate significantly despite less favorable export prospects than were previously projected. Indonesia's international foreign exchange reserves of $2.2 billion in the first quarter of 1978 represented the equivalent of 4 months of current imports and are expected to show a further small increase in 1978-79. The limited increases projected for 1978-79 were expected from a leveling off of oil revenues, with only minor improvements in the non-oil sector.

One indicator of economic progress in the developing world is the ability of a country to finance development while decreasing its reliance on foreign aid. During the late 1960s and early 1970s, well over half of Indonesia's total development expenditures were financed from external sources, but the proportion has now declined to a little over one third, or about $2.1 billion annually or 17 percent of budget expenditures. The World Bank notes that from 1974-75 to 1978-79, Indonesia's development expenditures will total about $22 billion compared with $3 billion during the late 1960s.

Another indicator is the rate of inflation. Indonesian prices rose by only 7 percent in 1977-1978, compared with 12 percent in 1976-77, and 20 percent in 1975-76. The decline in the value of the U.S. dollar, which directly affects import prices, and the recent currency devaluation may make restraining inflation more difficult in the year ahead.

Debt service thus far has remained on schedule. The 1975 financial crisis nearly doubled Indonesia's external debt, from $6 billion at the end of 1974 to $11.5 billion 3 years later. Debt service payments then doubled from $0.5 billion in 1975 to $1.2 billion in 1977. The Government has since negotiated new loans with more favorable terms, and the American Embassy expects these new loans to improve the Government's debt service requirements over the next few years. However, the financial burden imposed by the Pertamina crisis and continued borrowing will require careful debt mangement.

A senior U.S. bank official in Jakarta pointed out that many other countries have much larger debt ratios but do not have Indonesia's oil resources. It is anticipated that many of Indonesia's investment-incurred debts will pay for themselves; i.e., borrowings for development projects will generate foreign exchange when the projects are completed. The bank official believes it unlikely that Indonesia will be involved in a major loan default. From our discussions with officials and review of key documents and studies, it appears that the Indonesian economy is viewed with cautious optimism.

Most of the officials with whom we spoke were optimistic concerning Indonesia's economic prospects (at least for the next 3 to 5 years barring unforeseen circumstances); however, their view was qualified on the basis of the Government's ability to successfully address a number of contemporary domestic issues and to maintain current levels of oil production and exports.

AREAS FOR CONCERN

Indonesia's relatively slow progress has resulted from complex social, historical, and geographic factors. Among the more serious problems facing Indonesia have been lack of education and training to support infrastructure development. This has been further compounded by the mismanagement and neglect which, under previous administrations, plunged the country into economic chaos and financial bankruptcy.

Indonesia's rapidly growing population remains a threat to continued economic stability. Economic achievements have been limited and all too frequently have failed to reach the masses. Serious problems face the country, particularly with regard to meeting domestic food requirements, creating jobs for a rapidly expanding labor force, and making the bureaucratic apparatus more efficient and responsive.

Despite a decline in the population growth rate from 1971 through 1976 (primarily as a result of a population planning program), the overall growth of about 2 percent will still add to the already pressing population problems. As of 1977 the population was estimated to be between 135 million and 138 million, an increase of 15 percent from the 1971 census. The country's population which more than doubled since World War II, is expected to exceed 200 million by the year 2000.

Indonesia's per capita income remains one of the lowest in the world, amounting to less than $225 in 1977. In addition, the U.S. Embassy in Jakarta reports that "effective full time unemployment" (essentially unemployment and underemployment) is about 33 percent. An estimated 1 million new workers enter the labor force every year, further aggravating the situation.

Closely associated with overpopulation is the food shortage. Although agriculture is the mainstay of the domestic sector, Indonesia is not self-sufficient in food production. Rice is the staple food and principal agricultural crop, and, in recent years, production was plagued by unfavorable weather and pests. Consequently, Indonesia had to import rice in substantial quantities, which had a negative impact on its highly favorable balance-of-trade position. For Indonesian fiscal year 1977-78 about 2.3 million metric tons of rice were imported, nearly one-fourth of total international rice shipments. Fortunately the 1978 crop was unexpectedly productive so, for at least the immediate future, one problem has been mitigated.

The food problem is expected to be the focal point of governmental development efforts, but there are no easy solutions. Emphasis has been on increasing rice production, and yields are among the highest in tropical Asia; however, greater availability and higher incomes have stimulated domestic consumption faster than production.

Finally, foreign capital investment in Indonesia has declined in recent years although the recent devaluation may improve the investment climate. If an upsurge is not forthcoming the significance of petroleum export revenues in financing Indonesia's economic development will assume a proportionately greater importance. Moreover, extraordinary initiatives will be required to maintain or increase the growth of non-oil exports.

NEED FOR FOREIGN ECONOMIC ASSISTANCE

Indonesia is a member of the International Monetary Fund, the International Bank for Reconstruction and Development (World Bank), the International Finance Corporation, the International Development Association, and the Asian Development Bank. At the present time, most financial assistance is provided by the governments and international organizations participating in the Inter Governmental Group on Indonesia (IGGI) which was established in 1967 to assist Indonesia in restoring economic stability in the wake of the Sukarno period. Current membership in the IGGI consists of Australia, Austria, Belgium, Canada, France, the Federal Republic of Germany, Indonesia, Italy, Japan, the Netherlands, New Zealand, Switzerland, the United Kingdom, and the United States. Representatives of the International Monetary Fund, World Bank, Asian Development Bank, and the United Nations Development Program participate in meetings of IGGI; while representatives of Denmark, the Organization for Economic Cooperation and Development, the European Economic Community, and the United Nations Children's Fund attend meetings as observers.

Since its formation IGGI has met regularly to discuss the economic and financial situation of Indonesia and its need for financial assistance. It has been functioning as an international forum where Indonesia's need for foreign financial assistance is assessed and assistance from major donor countries and international organizations is reviewed. While its recommendations are not binding on the Government of Indonesia, IGGI nevertheless exerts considerable influence through its annual review and assessment of Indonesia's economic development.

In recent years, IGGI financial assistance has consisted primarily of grants and long term loans to finance development projects. Specifically, during the past 8 years (1970-77), IGGI members accounted for 93 percent of total loan commitments, 95 percent of gross disbursements, and 99 percent of net resource transfers to Indonesia. Slightly less than half of the total loan commitment was provided as official developmental assistance. During the same period, member nations also provided grant aid totaling just over $800 million directly to Indonesia on a bilateral basis.

IGGI members have made general commitments of financial assistance, ranging from $645 million in fiscal years 1971-72 to $1,210 million in 1977-78. These commitments have aggregated to $7 billion over the 7-year period. Of $1,210 million committed in fiscal year 1977-78, $713 million was accounted for by the international aid organizations (the World Bank and the Asian Development Bank) and the remaining $497 million by member governments including, among others, the United States and Japan. During the same 7-year period, the Government signed agreements with IGGI members on programs or projects providing for financial assistance amounting to $5.1 billion.

At the IGGI meeting held in May 1978, members pledged financial assistance amounting to $2.5 billion. The members pledged to provide 70 percent or $1.75 billion of this amount on concessional or semi-concessional terms. Approximately one-half of this amount will be provided by the World Bank, the Asian Development Bank, and other multilateral institutions. The other half will be provided by bilateral donors of which Japan is the largest, pledging $256 million, followed by the United States which pledged $186 million.

U.S. economic assistance to Indonesia was begun in 1948 and through fiscal year 1978 totaled $2.4 billion.

U.S. ECONOMIC ASSISTANCE TO INDONESIA

	Marshall Plan FY 1949-52	Mutual Security Act FY 1953-61	Foreign Assistance Act FY 1962-74	FY 1975	FY 1976 (note a)	FY 1977	FY 1978 (estimates)
	(million)						
I. Loans	$ 17.2	$ 27.1	$ 542.5	$35.0	$ 52.6	$ 28.9	$ 63.2
II. Grants	90.3	93.3	104.2	11.6	13.3	15.3	11.6
III. PL 480 Title I		93.7	713.0	40.9	59.6	143.9	118.2
IV. PL 480 Title II		6.6	86.0	7.1	5.3	6.0	4.7
Total	$107.5	$220.7	$1,445.7	$94.6	$130.8	$194.1	$197.7

a/Includes transitional quarters.

Source: United States Agency for International Development, Jakarta, Indonesia.

In addition to its assistance programs and contributions, the United States traditionally has taken between 15 and 25 percent of Indonesia's exports and has been the source of between 10 and 20 percent of its imports. The U.S. Government also offers insurance and guarantees from the Export-Import Bank for shipments to Indonesia, and the Overseas Private Investment Corporation offers specific risk guarantees for U.S. investors in Indonesia.

Indonesian officials cited the importance of the U.S. role in fostering economic stability and development and expressed the hope that the United States would continue to be a dependable, stable market for Indonesia's petroleum products and would continue to provide bilateral assistance through pledges to IGGI. The officials said Indonesia would further benefit if the U.S. Government would:

--Permit Indonesia to participate in the strategic oil stockpile program.

--Increase and facilitate technology transfers.

--Provide a final decision on pending LNG matters.

--Provide greater assistance and facilitate training of Indonesians at U.S. academic institutions.

--Refrain from implementing legislation and regulations, especially in the tax area, that would tend to discourage U.S. industries' assistance, investment, and participation in Indonesia's petroleum industry and overall development efforts.

With respect to the last item, the Indonesian officials referred to the Internal Revenue Service's ruling which disallowed as tax credits, certain payments by U.S. oil companies to Indonesia. Although the IRS later allowed the tax credits, it was necessary for the Government of Indonesia to revise its laws to accommodate the U.S. tax rulings and to amend all existing production-sharing contracts with U.S. oil companies. The IRS ruling was a factor in diminished oil companies' investments, exploration, and development, and consequently reduced oil production and revenues forecast for the next several years. They expressed the hope that, in the future, the U.S. Government would be more sensitive to the international consequences and repercussions that U.S. domestic regulations may have. In this particular instance, they pointed out that net U.S. tax revenues to be gained by the IRS ruling would be relatively small in terms of overall U.S. receipts yet it would cause Indonesia considerable economic and administrative dislocations.

UNCERTAIN FOREIGN INVESTMENT CLIMATE

To carry out and meet development goals, Indonesia will have to rely on substantial foreign investment capital. Based upon the very low level of capital investment made over the last several years, it appears that foreigners do not perceive the investment climate in Indonesia as very attractive.

In 1976 the number of foreign investment project approvals fell to 34 from a level of 43 in 1975 and the value declined from $1.77 billion to $450 million during this period. In the first quarter of 1977, the value of projects approved was less than half those achieved in the fourth quarter of 1976. Moreover, the trend toward diminishing investment continued in the non-oil foreign investment sector in 1976, when only $228 million in new foreign investment approvals was recorded. On the basis of experience, it is probable that only half of the $228 million approved will actually be invested; this compares with a 10-year average since 1967 of $510 million a year. With the exception of the worldwide 1974-75 recession, the decline in foreign investment in Indonesia in the non-oil sector of the economy has been attributed by U.S. Government and business officials mainly to internal factors.

The overall business and investment climate in Indonesia can be best characterized as uncertain. Bureaucratic red tape and uncertainties regarding Government intentions with respect to "Indonesianization" of management and ownership of joint ventures has further dampened investor interest. Moreover, its increased take from existing oil contracts and the several unilateral petroleum contract changes in 1975 have damaged Indonesia's reputation.

In addition, business contracts generally lack sufficient specificity and clarity and place undue reliance upon vague promises or guarantees of future performance. One U.S. businessman claimed that the Indonesians "just don't take contracts seriously enough." Another was quoted as saying, "A firm contract forms the basis for negotiation." Therefore, Indonesian contracts are considered by some to be insufficient bases for making heavy capital investments, especially investments which must be amortized over long periods.

Indonesian regulations also lack specificity and clarity. This problem is further compounded by a bureaucracy that is repeatedly characterized as cumbersome and difficult to work with. An inordinate amount of time is required to cut administrative red tape, even for a country in its developmental stage. Consequently, there are frequent delays which translate into additional costs.

Indonesia's adoption of Third World economic programs and rhetoric reportedly has further contributed to the uneasiness of foreign investors. As long as such uncertainty prevails, investors will be reluctant to make long-term commitments.

Finally, according to American Embassy and U.S. business officials, corruption is still a decisive factor in Indonesia although the Indonesian Government has taken measures to address the problem. In a 1977 speech on the economy, a senior Indonesian Government official emphasized that despite the skepticism regarding the permanent impact of the Government's anti-corruption drive, the country's leadership was aware that its ultimate credibility and prestige are at stake.

Other problems, such as shortages of managers and skilled labor, high costs, and inadequate infrastructure, also tend to discourage investment and do not lend themselves to short-term solutions. The Government of Indonesia is aware of the need to improve the investment climate and has taken some steps to do so. Two decrees signed by President Suharto at the beginning of October 1977 were designed to clarify and streamline investment policies and procedures. They give far greater authority to the Capital Investment Coordinating Board (BKPM) which must approve all investments. Under the terms of the second decree, all licenses, permits and financial incentives will be BKPM responsibilities. Excluded from the provisions are mining and forestry. BKPM has recently published a list of industries and activities open to foreign investors with and without incentives.

CRITICALITY OF PETROLEUM REVENUE

Petroleum accounts for nearly 70 percent of Indonesia's gross export earnings and over 50 percent of its governmental revenues. Thus, it is vital to Indonesia's stability and the key ingredient of the country's overall economic structure. Any major decrease in demand by Indonesia's customers would adversely affect the country's economy.

Impact on economy

Because of anticipated decreased oil production and increased domestic consumption, medium-term prospects for growth and for improving the balance of payments are clouded for at least the next 2 years. Without oil revenue growth, a severe constraint on the allocation of resources for development is likely. The World Bank has projected that in 1978-79, the net value of oil and gas exports is likely to remain around the 1977-78 level of about $4.5 billion and the value of other exports is likely to increase by only $100 million to $3.6 billion. It also has estimated that oil production would have to increase at an annual rate of 3.5 to 5 percent through 1985 just to remain stable. However, production declined in 1978 and is expected to increase only marginally through 1984. At the same time, domestic oil consumption threatens to absorb an increasing share of production.

Sectors of the economy hardest hit and most immediately affected would include those dependent upon imports of foreign goods and services and those that required Government capital investment. According to an Indonesian Government official, declining oil revenues would affect all sectors of the economy inasmuch as use of oil revenues is not restricted to any particular sector of the economy.

He also said that no critical point had been identified below which a decrease in oil production or revenue would bring on economic collapse or instability. Although moderately reduced oil revenues would be a setback for Indonesia's development plans, it would be difficult to foresee economic calamity or collapse in the country short of a massive crop failure.

A World Bank representative drew similar conclusions by saying that a sharp decrease in oil revenue would be a major setback in the short term, but the Government could possibly manage the situation over the long run, provided progress is made in developing the non-oil export sector. It remains a fact of life that the Indonesian economy enjoys little flexibility in compensating for a decline in oil revenue. He believed that a 5-percent overall growth rate is the minimum required to prevent economic crisis and that this is attainable within reasonable variations, including fluctuations in petroleum production or revenue.

A Jakarta representative of a major U.S. bank also characterized petroleum as the crucial factor for Indonesia's continued stability. An International Monetary Fund representative believed that the Indonesian Government has made a good assessment of the country's petroleum supply/demand situation.

Uncertainty of future exports

Indonesia enjoys little flexibility in marketing its crude oil inasmuch as most of it is marketed to only two countries--Japan and the United States. These two countries are considered "natural markets" for Indonesian crude because of

--transportation advantages;

--increasing demand for a low polluting energy source;

--the suitability of their refineries for processing the low sulfur, waxy residue crudes; and

--their enduring marketing relationships.

The 1978 Embassy Petroleum Report indicates that Japan imports roughly 634,000 barrels a day (48 percent) while U.S. imports average 500,000 barrels (36 percent) of Indonesia's oil exports of 1.3 million barrels a day. Another 100,000 barrels is exported to Trinidad refiners, who process it and then sell it to U.S. markets. Therefore, the United States actually consumes 44 percent of total Indonesian oil exports.

Indonesian Crude Exports

Country	1975	Percent of total	1976	Percent of total	1977	Percent of total
	------------	millions of barrels	----------			
Japan	178.3	49	194.9	43	231.3	48
U.S.	129.2	36	181.7	41	178.0	37
Trinidad	37.7	10	44.9	10	37.2	7
Philippines	5.6	2	8.3	2	10.4	2
Others	12.3	3	19.6	4	27.3	6
Total (note a)	363.1	100	449.2	100	484.2	100

a/May not add due to rounding.

Vital U.S. market

A senior Indonesian official stressed the importance of energy's role in shaping U.S. and Indonesian bilateral relations; Indonesia's economic planning counts on continued U.S. purchases of Indonesian petroleum and its economy could sustain grave consequences should petroleum sales decrease.

Nearly 8 percent of U.S. crude oil imports come from Indonesia. The largest U.S. market for Indonesian oil is the West Coast. West Coast demand softened in 1978 due primarily to the return of normal rainfall levels to California's reservoirs permitting the use of hydroelectric power and increasing use of natural gas by California's public utilities as a primary generator fuel. We were told that most States have regulations prohibiting the use of natural gas for electric power generation but that, because of environmental concern and greater availability of local supplies, California continues to rely on natural gas as the primary energy source for its public utilities.

The uncertainty of future U.S. demand for Indonesia's petroleum exports is compounded by the lack of a U.S. national energy policy. Because of continuing balance-of-payments deficits and a weakening of the U.S. dollar, there is considerable pressure within the United States, as well as from U.S. economic allies, to reduce present levels of petroleum imports to ameliorate the U.S. imbalance of payments. Such a move to reduce net imports, by quota or through tariffs, could have serious consequences on Indonesia's anticipated oil sales to the United States.

It appears that future demand for Indonesian oil on the U.S. West Coast will be determined largely by the availability of natural gas, hydroelectric power, and Alaskan crude oil shipments as well as by the availability of refinery facilities that are structured to refine crude oil with Indonesia's peculiar characteristics. The imposition of import duties on foreign oil could be a key determinant. Finally, the environmental standards established by the State of California will largely determine the need for future imports: the stricter the criteria, the better the prospects for imports of Indonesia's crude oil.

Indonesia is also generally recognized as having substantial reserves and developmental potential for natural gas conversion into liquefied natural gas. Although LNG is more limited in use and expensive to produce, process, and export than crude oil, it is an important energy source and offers the advantage of being low polluting. Both the United States and Japan have shown substantial interest in importing Indonesian LNG, but to date only Japan has taken the necessary steps to do so. Indonesia signed a 20-year sales contract with U.S. buyers on LNG in late 1973 and has been waiting ever since for the approval regarding the conditions for the sales in the contract. The delayed U.S. decision on LNG imports has resulted in

--costly delays in Indonesia's LNG infrastructure development,

--uncertainty over the availability of supply to the United States when needed, and

--irritation to the Indonesian Government over the U.S. handling of the matter.

Indonesian Government officials told us that the anticipated LNG income is important to Indonesia's medium and long-term planning. By the mid-1980s, Indonesia plans to export annually up to 800 billion cubic feet of LNG to Japan and the

U.S. West Coast markets, generating $4.7 billion in foreign exchange receipts. We previously reported on the "Need to Improve the Regulatory Review Process for Liquefied Natural Gas Imports" (ID-78-17, July 14, 1978).

NON-OIL RESOURCES

Indonesia's many islands offer a large reservoir of low cost labor and a wealth of natural resources. In addition to oil and gas, the abundant mineral resources include nickel, copper, bauxite, iron ore, and tin. Timber is also a valuable resource found in abundance. Furthermore, Indonesia's soil is well-suited for growing rice, rubber, coffee, palm oil, sugar, tea, and spices. Timber, rubber, palm oil, tin, and coffee exports account for over 20 percent of Indonesia's non-oil exports. The United States imports rubber, tin, coffee, tea, palm oil, and spices from Indonesia.

CHAPTER 3

STRATEGIC AND POLITICAL IMPORTANCE OF INDONESIA

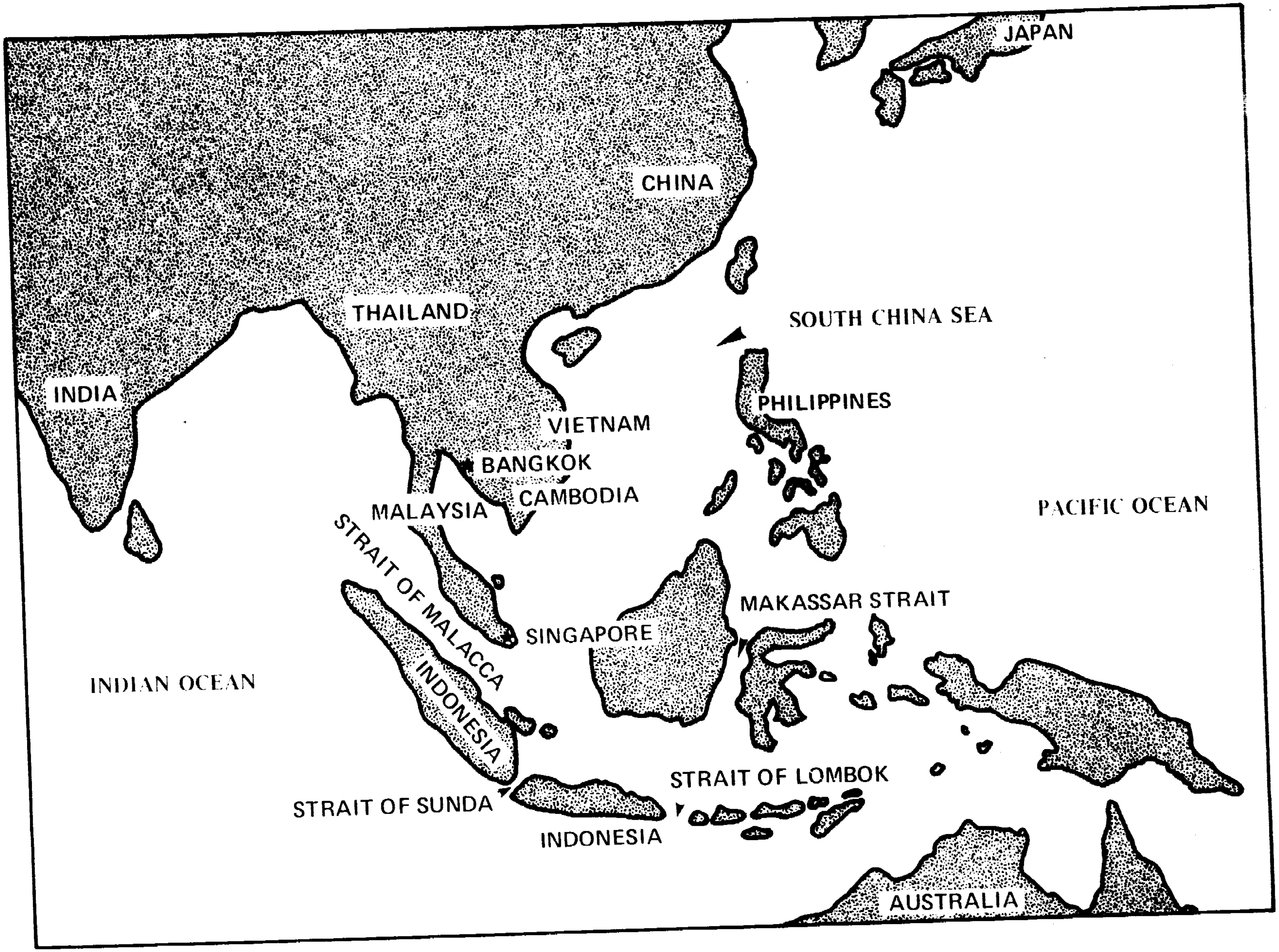
Indonesia is an archipelago consisting of over 13,000 islands spread over more than 735,000 square miles. A former colony of the Netherlands and occupied during World War II by the Japanese, Indonesia declared its independence in August 1945. However, it was not until December 1949 that its sovereignty was finally recognized by the Netherlands.

The Indonesian Government officially represents itself as nonaligned, but it has frequently demonstrated its opposition to communism and Communist expansionist policies. Overcoming 300 years of colonial rule by the Dutch, as well as occupation by Japan in World War II, Indonesia is emerging as a politically and economically stable nation.

STRATEGIC LOCATION

Indonesia is strategically located across the shortest sea route from the Suez Canal to China, Japan, and the North American West Coast. It sits astride Japan's lifeline to Middle East oil and dominates the strategic Malacca, Lombok, and Sundra Straits, which are the main corridors between the Indian and Pacific Oceans. The sea and air lanes through and adjacent to Indonesia afford U.S. military ships and planes vital access to the Indian Ocean. (See map, p. 30). Moreover, 90 percent of the oil exported from the Middle East travels through the Indian Ocean at some point in its journey to its final destination. Should hostile forces interfere with these shipments or a conflict arise in the Persian Gulf, a timely U.S. response is considered critical. Elements of the U.S. Pacific Fleet are located in Japan and the Philippines, and if U.S. forces had to respond quickly to military action in the Indian Ocean or Persian Gulf, passage through these air and sea lanes would be essential. Should passage be impeded, U.S. defense efforts would be substantially impaired.

In 1971 and 1972, Indonesia and Malaysia began to enforce their respective 12-mile offshore limits by announcing certain restrictions on commercial and military vessels passing through the Strait of Malacca. Additional constraints and restrictions were enforced against commercial shipping passing through the Strait for reasons of maritime safety and pollution control. Moreover, the Strait is not technically considered an international sea lane by Indonesia and Malaysia, although both acknowledge its use


JAPAN
CHINA
SOUTH CHINA SEA
THAILAND
INDIA
PHILIPPINES
VIETNAM
BANGKOK
CAMBODIA
MALAYSIA
PACIFIC OCEAN
STRAIT OF MALACCA
MAKASSAR STRAIT
SINGAPORE
INDONESIA
INDIAN OCEAN
STRAIT OF LOMBOK
STRAIT OF SUNDA
INDONESIA
AUSTRALIA

for international navigation. Given the vital importance of continued passage to U.S. defense interests, it would appear that maintenance of the United States-Indonesia relationship would offer the best prospects of continued unimpeded U.S. passage.

In addition, the United States is seeking, in the context of current international Law of the Sea negotiations, to reconcile its interest in unimpeded navigation with Indonesia's desire for international recognition of its control over what it considers Indonesian waters. According to an Embassy official, the current Government of Indonesia accepts U.S. and Japanese interests in maintaining freedom of access to the sea lanes.

IMPORTANCE TO U.S. POLITICAL INTERESTS

Indonesia is of strategic interest to the United States not only because of its location, but also because of its contribution to regional development and stability.

Indonesia is a founder and leading member of the non-aligned movement, and according to senior Embassy and State Department officials, appears destined to play a leading strategic role in Southeast Asia and the developing world. Since the aborted 1965 Communist coup attempt, the Government has assumed an anti-Communist domestic posture. Economically, it has shifted toward a market-oriented approach to internal development and consequently has actively sought aid and investment from the West.

Politically, Indonesia is officially unaligned. Though it has adopted Third World economic programs and rhetoric, it frequently has demonstrated a cooperative attitude in its dealings with the West and is adamantly anti-Communist despite the fact that it maintains official relations with several Communist nations. According to a U.S. Embassy report, Indonesia is a moderating influence on other developing countries, opting for a cooperative rather than a confrontational approach in addressing issues that have tended to divide developing and developed countries.

Southeast Asia has a long history of political and economic instability although recent progress toward stability has been marked. This is of particular concern to the United States, arising out of its active involvement in Southeast Asian affairs since World War II. The United States perceives that Indonesia has great potential as a non-Communist pro-Western stabilizing force in that region which would be consonant with U.S. political and economic interests.

Indonesia assumes its leadership role primarily under the aegis of and participation in the Association of Southeast Asian nations (ASEAN) a regional organization formed in 1967 consisting of Indonesia, Malaysia, the Philippines, Singapore, and Thailand. ASEAN's primary objective is to create "a peaceful, prosperous, and resilient community through joint cooperation with the view of strengthening economic progress and social stability," as well as promoting closer cultural ties. ASEAN is not a military alliance, and the organization stresses the economic aspects of the group's relations.

Indonesia is the largest and most populous country within ASEAN and has consistently stressed its ties with ASEAN, identifying ASEAN's role in its own development plans. As stated in Indonesia's second 5-year development plan:

> "ASEAN is one of the means available for improvement of regional stability in South East Asia. Hence, the realization of regional cooperation through ASEAN is an integral element of overall national development."

Although ASEAN's accomplishments to date have been limited, U.S. Embassy officials believe it is increasing in importance and could be a significant influence against Communist influence and expansionism. The United States has kept a low profile relative to ASEAN in the past because it did not want to give the appearance of interferring in regional matters. However, ASEAN has made overtures to the United States, seeking greater assistance. Formal meetings between ASEAN and the United States were held in Manila in September 1977 and in Washington in August 1978 to explore greater U.S. assistance and cooperation in promoting the goals and objectives of ASEAN. In keeping with ASEAN's charter, the agenda for those meetings focused on economic and trade issues.

Because of the strategic importance of petroleum and its role in the development of the economies of Southeast Asian countries, the ASEAN Council on Petroleum (ASCOPE) was created to promote active collaboration, cooperation, and mutual assistance in the development of the region's petroleum resources. It appears that Indonesia will assume a predominant role in both ASEAN and ASCOPE by virtue of its size and wealth in mineral resources.

THREATS TO CONTINUED STABILITY

Indonesia's ability to sustain economic development, provide for the needs of its people, and more equitably distribute the wealth will determine whether political and economic stability is to prevail. Because of Indonesia's geographic, religious, and ethnic diversity, its Government has a deep-seated fear of its society coming apart through violence; Indonesia has endured two unsuccessful Communist coups and several separatist rebellions. According to the U.S. Embassy in Jakarta, the strongest opposition to the Suharto presidency is centered in the Muslim groups, which claim that their views and political strength are not properly represented in the existing political institutions because of Government pressure and manipulation. Muslim opposition groups include both the Unit Development Party and Muslim extremists. We were told that there are also a small number of radical Muslims agitating for an Islamic state, but they lack sufficient support to pose any real threat to stability.

Student opposition groups are perceived as having the potential for disruption. Early in 1978, student demonstrations protested the lack of progress in resolving numerous social and economic problems and in eliminating corruption.

An Embassy official told us that the extent and magnitude of the disorders is not fully known, although several hundred students were arrested. Most of these students were supposedly released after the conclusion of the March 1978 Assembly; however, the circumstances and conditions which gave rise to the dissatisfaction have not been resolved and the potential for renewed demonstrations is great. Nevertheless, senior Embassy and Defense Department officials do not believe the students have sufficient influence to seriously threaten the stability of the Government.

Separatist movements that are a cause for concern have been active in Aceh on the northern tip of Sumatra, in Irian, Jaya; and in East Timor. However, U.S. Embassy and Defense officials do not believe these groups present a serious threat to the Government under present circumstances and conditions.

The Government's response to and handling of demonstrators, separatists, and alleged insurrectionists have given rise to numerous allegations of human rights violations, which it has taken steps to address. The major human rights problem in Indonesia has related to persons detained without trial for alleged complicity in the abortive 1965 coup attempt, originally numbering over 300,000. According to a senior Department of State official, most of these detainees were freed a number of years ago. Indonesian Government figures show that approximately 32,000 remained in detention as of 1976. In December 1976, the Government announced the release of 2,500 of these detainees and a phased 3-year plan for the release or trial for the over 29,000 it claimed then remained in custody. Ten thousand prisoners were reportedly released as scheduled in both 1977 and 1978 and the Government on several occasions reaffirmed its commitment to release or bring to trial the approximately 10,000 remaining prisoners before the end of 1979. According to senior State Department officials, the United States has been encouraged by these favorable developments.

Senior U.S. Govenment officials with whom we spoke believe that, barring intervention from outside forces and interests or an unforeseen collapse of authority or economic disaster, the Indonesian Government appears to be capable of handling internal threats to security and stability at least over the next 5 years. Moreover, they see no evidence that dissident student groups or separatists movements are receiving equipment from outside sources.

INDONESIA SEEKS CONTINUED U.S. MILITARY ASSISTANCE

Indonesia has continually expressed concern over its ability to adequately defend itself against external aggression and has viewed with alarm what it perceives as the Communist subversion attempts throughout Southeast Asia, particularly from Vietnam and the People's Republic of China.

U.S. Defense officials characterize Indonesia's armed forces as having professional leaders but as being poorly equipped and marginally trained. An estimated $1.5 billion, or 15 percent of Indonesia's national budget, was earmarked for military activities during fiscal year 1978, and the Government is currently developing a modest program to modernize and standardize equipment.

In 1978, it was estimated that the Indonesian armed forces consisted of:

Category	Personnel
Army	180,000
National police	90,000
Navy	25,000
Air Force	20,000
Other	15,000
Total	330,000

This is a modest force, considering the size and geographic dispersion of Indonesia. Moreover, Indonesia has insufficient equipment and weapons to repel a major external attack.

Because of Indonesia's strategic importance, the United States began supplying military assistance in 1950 under the U.S. grant-aid program. This continued until 1965, when former President Sukarno requested that it be suspended. While Sukarno was in power, Indonesia bought large quantities of military equipment from Communist countries to further Sukarno's policy of armed confrontation with Singapore and Malaysia. According to an Embassy briefing document, the Soviet Union provided military equipment, including jet aircraft and naval vessels, with an estimated value of $1 billion. Indonesia's rapid military expansion ended with the attempted Communist coup in September 1965. U.S. military aid resumed in 1967, and, from fiscal years 1967 to 1973, U.S. grant aid totaled about $73 million.

Since 1973 the United States has demonstrated support for Indonesia's defense effort by concluding the following security assistance and military sales agreements with Indonesia.

	Fiscal year					
	1974	1975	1976 (note a)	1977	1978	Total
	(millions)					
Military Assistance Program (note b)	$13.8	$15.2	$25.8	$17.6	$18.1	$90.5
Foreign military sales:						
Credit	3.5	5.0	23.1	23.1	40.0	94.7
Cash	0.1	51.6	3.9	10.1	(c)	65.7
Total	$17.4	$71.8	$52.8	$50.8	$58.1	$250.9

a/Includes transition quarter.
b/Includes Military Assistance Programs Material and International Military Education and Training Program.
c/Not available.

A U.S. Defense official at the Embassy told us that in 1972 a study group from the National Security Council analyzed Indonesia's defense requirements and came up with a series of projects. To date, the U.S. Military Assistance Program has provided, among other things, light infantry equipment, such as rifles and mortars, for two airborne brigades of 2,000 to 3,000 men each, and professional and technical training. Fiscal year 1978 was scheduled to be the last year for the equipment portion of the program; however, the U.S. Department of Defense has requested $3.1 million to continue training projects.

U.S. foreign military credit sales are designed to assist developing countries in making the transition from the military assistance program to cash sales. Indonesia first received this type of credit in fiscal year 1974 and through 1978 had received $94.7 million to purchase C-130 aircraft, helicopters, ammunition, rockets, and rocket launchers. In support of the Government of Indonesia's effort to maintain an adequate defense capability, the United States has agreed to sell Indonesia a squadron of F-5E aircraft, a squadron of A-4 aircraft, and an M-16 rifle coproduction facility. The aircraft are to be used to provide modern training for its air force, and the M-16 would become the standard small arm for the Army. This equipment would also begin to standardize Indonesia's arms with other countries' in the region. We note that all the credit approved or proposed for Indonesia through fiscal year 1980 would be required to cover the cost of the F-5E aircraft alone.

ORGANIZATIONS INTERVIEWED BY GAO DURING THIS STUDY

ORGANIZATION		LOCATION
U.S. Government:		
Executive departments	Departments of Agriculture, Commerce, Defense Energy, State, and Treasury	Washington, D.C.
Executive agencies	Agency for International Development	Washington, D.C.
Overseas missions	American Embassy	Jakarta, Indonesia Tokyo, Japan
Military mission	CINPAC Command Headquarters	Honolulu, Hawaii
Other	Export-Import Bank	Washington, D.C.
	Library of Congress	Washington, D.C.
	Overseas Private Investment Corporation	Washington, D.C.
U.S. business firms and organizations:		
Finance	Bank of America	Jakarta, Indonesia
	Chase Manhattan Bank	Jakarta, Indonesia
	Citibank NA	Jakarta, Indonesia
	Morgan Guaranty Trust Co.	New York, New York

Petroleum	Caltex Petroleum Corporation	New York, New York
		Washington, D.C.
	Natomas	San Francisco, Ca.
	Union Oil Company	Los Angeles, Ca. Jakarta, Indonesia
Other	Rand Corporation	Los Angeles, Ca.
	Walter J. Levy Consultant Corporation	New York, New York
Academic Institution	Cornell University (Modern Indonesia Project)	Ithaca, New York
State of California	Energy Commission	Sacramento, Ca.
	Public Utilities Commission	San Francisco, Ca.
Republic of Indonesia:		
Ministries	Mines and Energy	Jakarta, Indonesia
Agencies	MIGAS	Jakarta, Indonesia
	Bappenas	Jakarta, Indonesia
National Petroleum Co.	Pertamina	Jakarta, Indonesia
International Business Firms and Organizations:		
Financial	International Bank for Reconstruction and Development	Jakarta, Indonesia Washington, D.C.
	International Monetary Fund	Jakarta, Indonesia Washington, D.C.

APPENDIX I

Geological Services	Geological Services Ltd.	Singapore
	Geological Services International	Singapore
Petroleum	Caltex Pacific Indonesia	Jakarta, Indonesia
	Cities Services East Asia, Inc.	Singapore
	IIAPCO	Jakarta, Indonesia
	Perta Oil Company	Central District, Hong Kong
	Philips Petroleum Company/Far East	Singapore
	Unocal Corporation	Singapore

INDONESIAN OIL CONTRACTS: BACKGROUND

A. Contract of Work

The first revised contract-of-work agreements were concluded with three companies in 1963, replacing previous concessional arrangements. In essence, contract of work agreements provided for a 60-40 equity split in favor of Pertamina, cost recovery for the company and domestic consumption. This latter payment was based on a certain percentage of annual production, limited to 25 percent. Management, operational, and marketing control were retained by the companies. The Indonesian Government has announced its intention of either terminating all contract-of-work arrangements in 1983 or converting them to production-sharing contracts.

B. Production Sharing

The production-sharing concept was developed by Pertamina in 1967 and featured a number of then unique assumptions about the relationship between Pertamina and the foreign oil companies: (1) the state oil company provides overall management control; (2) crude oil, not profits, is divided between the company and Pertamina; (3) both partners share in the problems and benefits of their activities. Hence, close cooperation is ensured. This concept was intended to permit Pertamina to do what it could do best--provide overall guidance to companies operating in a foreign country and take care of any political or bureaucratic problems, thus freeing the companies to do what they were best capable of doing--look for and develop new sources of oil and gas.

In addition to the basic points mentioned above, most production-sharing contracts originally specified that: (1) all nonleased equipment brought to Indonesia by a company becomes Pertamina property from the date it enters the country; (2) companies bear all exploration expenses and risks; (3) if oil or gas is produced, contractors may recover costs in kind; (4) the remaining oil becomes net operating income and is subject to a profit-sharing split, originally 65/35, in favor of Pertamina; (5) there may be direct Indonesian equity participation if a company commences production; (6) each company must provide pro-rata crude oil for domestic consumption, reimbursable at 20 cents per barrel in proportion to its share of total production; (7) companies pay bonuses depending on the level of production; (8) companies relinquish up to half of the contract area over a specified period; and (9) if production exceeds a certain level, companies may make some form of investment in refineries or other facilities related to the petroleum sector.

In early 1974 contract-of-work agreements, as well as the post-1967 production-sharing arrangements, were modified in order to compensate for new profit situations resulting from the rise in world oil prices. A new profit-sharing formula replaced the previous split in order to boost the Government's "take." The former basic split (e.g. 60/40 or 65/35) was applied only to the first $5.00/barrel (tied to an inflation index) as realized by producers. The "base barrel" is currently calculated at $6.27/barrel. Hence, on this portion, a 60/40 or 65/35 split (in most cases) prevailed; on the remainder, a split of 85/15 was operative. Contracts were further modified in the GOI/Pertamina share increases to 85 percent for production up to 150,000 b/d; 90 percent for production between 150,000 and 250,000 b/d; and 95 percent for production over 250,000 b/d. These 1974 and 1975 changes now pertain only to contract-on-work arrangements. For terms of production-sharing contractors, the revised terms of 1976 replaced the above modifications.

Source: American Embassy - Jakarta
Annual Petroleum Report/1977

1977 CRUDE PRODUCTION IN INDONESIA, BY COMPANY

	Total (barrels)	Average b/d	Percent of total production	Percent of change from 1976
Arco	45,666,229	125,113	7.0	3
Asamera	3,250,222	8,905	0.5	-32
Associated Australia	365,732	1,002	0.1	-14
Caltrez (note a)	304,206,385	833,442	49.4	- 1
Cities Service	797,709	2,186	0.1	-13
Roy M. Huffington (HUPFCO)	5,724,717	15,684	0.9	19
ILAPCO	41,470,934	113,619	6.7	21
IMPEX	62,673,812	171,709	10.2	85
Lemigas	284,745	780	-	6
Mobil Oil	1,749,532	4,793	0.3	-
Pertamina	30,705,437	84,124	5.0	- 2
Petromer Trend	28,656,143	78,510	4.7	3
Phillips	2,278,407	6,242	0.4	-
Redco	184,161	505	-	-24
Stanvac (note b)	11,973,427	32,804	1.9	2
Tasoro	4,152,205	11,376	0.7	-14
Total	41,867,091	114,704	6.8	191
Union	29,115,889	79,770	4.7	5
TOTAL (note c)	615,122,777	1,685,268	100.0	12

a/Includes Calasiatic and Topco
b/Includes PISI Corridor Block
c/May not add due to rounding

In 1977 Pertamina produced 85,000 barrels a day, contract-of-work companies 845,000 barrels a day, and production-sharing companies 760,000 barrels a day. About 36 percent of Indonesia's current production comes from offshore oil. As recently as 1971 offshore production accounted for only about 4 percent of Indonesia's oil output.

SOURCE: American Embassy - Jakarta
Annual Petroleum Report/1977

INDONESIAN KEY ECONOMIC INDICATORS

Exchange rate: US $1.00 = 415 Rupiah

	1976	1977	% CHANGE	1978 Est.
Population (millions)	132	135	2.0	137
GDP (at current prices-$ millions)	37,335	-	-	-
Per capita GDP (current prices $)	a/274	-	-	-
Cost of living index (note b) (1966-100)	1,873	2,094	11.8	-
Money supply ($ million)	3,863	4,872	25	5,850
Foreign investment approvals ($ million)	424	455.8	8	500
Gold and foreign exchange reserves ($ million)	1,220	2,420	98	2,700
External official debt (disbursed million $)	8,112	9,917	22	11,137
Debt service ($ million)	567	987	74	1,299
Government budget (note c) ($ million)				
Routine expenditures	3,856	5,011	30	5,716
Development expenditures	4,627	5,224	13	5,915
Routine revenue	6,755	8,396	24	9,560
Direct borrowing	1,729	1,839	6	2,063
Balance of payments (note c) ($ million)				
Balance of payments	1,001	651	-35	277
Current account	- 802	- 562	-30	-1,185
Exports				
Oil (net)	3,710	4,494	21	4,641
Non-oil (fob)	2,863	3,489	22	3,586
Non-oil imports (cif)	6,167	7,144	15.8	7,873
U.S.-Indonesian trade (note d) ($ million)				
Indonesian exports to the U.S.	3,004.3	3,491.3	16	-
U.S. share of total (%)	33	32	3.0	-
Indonesian imports from the U.S.	1,034.6	762.6	-26	-
U.S. share of total (%)	13	9	-31	-

Main exports from the US Calendar year 77 in millions of dollars: machinery 287; rice 70; wheat 50; cotton 63; chemicals 60; soybeans 29; transport equipment 87.

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a/This is IMF estimate; IBRD estimates $220
b/62-item Indonesian index
c/Indonesian fiscal year April to March 1977
d/Calendar year

SOURCE: American Embassy - Jakarta

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