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REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN
TO
THE REPUBLIC OF INDONESIA
FOR A
THIRD FERTILIZER EXPANSION PROJECT: PUSRI IV

April 29, 1976

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CURRENCY EQUIVALENT

US\$1.00 = Rupiahs (Rp) 415

Rp 1.00 = \$0.0024

Rp 1 million = S2,410

FISCAL YEAR

April 1 - March 31

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENTREPORT AND RECOMMENDATION OF THE PRESIDENT TO THE
EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO THE
REPUBLIC OF INDONESIA FOR A THIRD FERTILIZER
EXPANSION PROJECT: PUSRI IV

1. I submit the following report and recommendation on a proposed loan to the Republic of Indonesia for the equivalent of US\$70 million to help finance a 1,000 ton per day (TPD) ammonia plant and a 1,725 TPD urea plant for P.T. Pupuk Sriwidjaja (PUSRI). The loan would have a term of 15-1/2 years, including 3-1/2 years grace with interest at 8-1/2 percent per annum. The proceeds of the loan would be on-lent to PUSRI at the same repayment term but with an interest rate of 12 percent per annum, including a 3-1/2 percent fee accruing to the Government which will assume the foreign exchange risk. The Saudi Fund for Development (SFD) is also expected to make a loan to the Republic of Indonesia of \$70 million equivalent for the project at 4 per cent interest per annum, for a term of 19 years including 4 years of grace. The SFD loan is expected to be made available to PUSRI by the Government on the same terms as the Bank loan.

PART I - THE ECONOMY

2. The latest economic report on Indonesia "Indonesia: Development Prospects and Needs" of April 15, 1975 (708-IND) described and analyzed the structures of production and incomes, the recent changes in the availability of resources, and the medium and longer-term outlook for the Indonesian economy. Country data are shown in Annex 1.

3. In 1969, at the start of Indonesia's First Five-Year Plan, the per capita income of the Indonesian population was probably no higher than half a century ago. A majority of the population lived below a minimum welfare standard, especially on Java. Most were dependent exclusively or primarily on agriculture, and farms were generally very small. Under-employment was widespread. While the inflation of the mid-1960s had been overcome, infrastructure was still in a very poor condition.

4. The Government's efforts during the First Five-Year Plan period (April 1, 1969 - March 31, 1974) were successful in putting the economy on the development path. Most physical objectives were achieved or nearly so, and there was substantial rehabilitation of run-down infrastructure and Government enterprises in agriculture and manufacturing. Foodgrain production increased by 4 million tons during the Plan period at an average rate of 5 percent per annum. Investments increased at a very fast rate, rising from 9 to 19 percent of GNP. The reliance on foreign financing of Government development expenditures was much smaller (57 percent) than the rate of nearly 80 percent foreseen in the Plan. GDP increased at an annual rate of over 7 percent. GNP per capita, in current prices, reached about \$130 1/ in 1973. The Government instituted programs for the labor intensive

1/ World Bank Atlas.

rehabilitation of infrastructure and other programs which created substantial incomes and employment. In all, however, given the annual increase in the labor force of about one million, one cannot be confident that the employment situation improved during the First Plan period, and it is difficult to judge from available information the extent to which the poorest sections of the population shared in the gains of development.

5. The Second Five-Year Plan (April 1, 1974 - March 31, 1979) builds on the achievements of the First Plan. While the First Plan dealt mainly with the urgent needs for stabilization and rehabilitation under conditions of great scarcity of resources, progress had been such that the Second Plan could give much more attention to such problems as employment, equitable distribution, regional growth, health and education. The Plan identifies a number of specific low-income target groups and, in general, adopts an employment oriented development strategy. It aims at a continued growth in investments, needed both because capital intensity will tend to increase as the rehabilitation phase draws to an end, and because more socially-oriented investments will be made. Overall, the Plan expects GDP to grow at 7.5 percent per annum.

6. Over the decade 1961-71, Indonesia's population grew by 2.1 percent a year. However, as a result of changes in the age, distribution and declining mortality, the current annual growth rate is estimated at 2.5 percent. Even under the most optimistic assumptions with regard to fertility decline, the growth rate would only come down gradually, and the population would nearly double by the end of the century. While Indonesia still has substantial unutilized land reserves in the Outer Islands, these are limited in relation to the expected population increase, and a further large increase in population pressure - already severe on the Inner Islands - must be expected. Since 1969, the Government has been operating and gradually extending a family planning program. The number of acceptors has been increasing rapidly. The Second Five-Year Plan foresees a progressively more vigorous and comprehensive attack on the population problem.

7. During the years 1976-79, average annual additions to the labor force are estimated at 1.2 million, increasing to more than 1.4 million in the years 1980-85. In addition, substantial underemployment exists, and there is the risk that even relatively simple technological improvements may adversely affect existing employment. The Second Plan's projections show that employment growth would almost keep up with the growth in the labor force but even this may prove optimistic. Thus, the employment thrust of the Plan needs to be further strengthened if an appreciable increase in real labor earnings - and a wider spread of the benefits of development - is to be attained.

8. Towards the end of 1973, when the Second Plan was being finalized, prospects for resource availability improved dramatically. In line with other OPEC countries, the Government raised the export price of oil in successive stages from \$3.70 per barrel in April 1973 to \$12.60 per barrel in July 1974. Early in 1974 (and again in 1975) the Government successfully renegotiated the contracts with foreign oil companies, enabling it to retain a greater share of

the oil income. As a result, the net contribution of the oil sector to the balance of payments and Government revenues was expected to increase very considerably; a large increase in foreign exchange reserves and a budget surplus were also anticipated for 1974/75 1/.

9. By October 1974, foreign exchange reserves had risen by \$650 million from about \$1 billion at the beginning of 1974/75 and Government revenues exceeded the levels originally estimated. The Government authorized much higher levels of expenditures, mainly for development, which reflected the improved revenue prospects. However, the recessionary conditions in the industrial countries began to affect the volume of oil exports and production by the middle of the year. Indonesia's low-sulphur oil tended to become overpriced 2/ as world oil demand slackened and output declined from an average of 1.45 million barrels per day (bpd) in the first half of 1974 to 1.31 million bpd in the second half. Proceeds from non-oil exports also started to decline as prices, and in some cases export quantities, fell.

10. In October 1974 also, the first signs appeared of what turned out to be a substantial financial overextension by PERTAMINA, the national oil company. PERTAMINA had undertaken a large and diversified investment program financed to a substantial extent by short-term borrowing. In the third quarter of 1974/75 it started withholding part of the corporate oil tax it had collected on behalf of Government from the foreign oil companies; by the end of the fiscal year a total of Rp 346 billion (\$830 million) had been so withheld and used to meet PERTAMINA's financial obligations. Early in 1975, PERTAMINA failed to meet payments due to some foreign banks, and the Government stepped in and took decisive action. It banned all independent foreign borrowing by PERTAMINA and other Government enterprises and gave Bank Indonesia the sole authority to contract foreign obligations, instructed Bank Indonesia to provide the funds needed to meet PERTAMINA's external obligations, undertook a comprehensive review of the oil company's investment projects and began the process of reducing and re-planning the company's investment program and of cancelling and renegotiating many of the related procurement contracts.

11. The combination, in the latter half of 1974/75, of slackening receipts from exports of oil and other products, and of the need to meet PERTAMINA's short term obligations resulted in a loss of the foreign exchange reserves gained in the first half of the fiscal year; by March 31, 1975, these reserves were at the same level as at the beginning of April 1974.

12. In the first half of 1975/76, Indonesia's foreign exchange reserves declined by a further \$480 million, despite substantial capital inflows,

1/ Indonesian fiscal year April 1, 1974 - March 31, 1975.

2/ The premium on Indonesian oil has recently been reduced by the Government's decision to raise the price of its main crude by 1.5 percent (to \$12.80) as compared with the 10 percent increase in the price of Saudi Arabian light crude agreed at the meeting of OPEC in September 1975.

which included two syndicated public cash borrowings (totalling \$575 million) from the international capital market. With continuing recessionary conditions in Indonesia's principal markets, exports failed to increase while imports rose again (about 30% on an annual basis). Debt service payments on behalf of PERTAMINA were also very large (about \$1.0 billion). In the second half of 1975/76, there was no appreciable change in export earnings, but imports and debt service payments were lower and there was only a small reduction in capital inflows (two more cash loans, amounting to \$475 million, were raised). The country's foreign exchange reserve position was therefore relatively stable in this period and the decline in the reserves for the year as a whole amounted to nearly \$500 million.

13. Balance of payments prospects for 1976/77 are on the whole good. Recovery from the recession appears to be underway in most industrialized countries, commodity prices seem to have bottomed out and oil exports from Indonesia have been rising in recent months. The Government is in the process of negotiating an increase in its share of the oil income. Rice imports are expected to remain at the average level of recent years (Government estimate is 1.4 million tons) but prices are likely to be considerably lower. The country has sizeable stocks of fertilizer and only small amounts are expected to be imported. However, there remains some uncertainty as to the exact magnitude of payments due on account of PERTAMINA's financial obligations, and the outcome for foreign exchange reserves during 1976/77 at this point is difficult to predict.

14. Budgetary revenues in 1974/75 were much lower than had been anticipated at the middle of the year, partly due to the withholding of oil tax revenues by PERTAMINA and partly to the shortfall in oil exports in the second half of the year. The budget was however, still in balance by year's end as the Government reduced or deferred expenditures. The Government revenue in 1975/76 also fell substantially short of the budget estimates, mainly as a result of lower oil tax revenue. To keep the budget balanced, both current and development expenditures were reduced. Revenues, as well as current and domestically financed development expenditures, are now estimated to have been roughly 15 percent lower than originally budgeted.

15. In spite of the shortfall in budgetary revenues, and the administrative difficulties involved in the implementation of some projects, total development expenditures in 1974/75 were Rp 770 billion (\$1.9 billion), about 60 percent higher than the level in the previous year. In 1975/76 they are estimated at Rp 1.27 trillion (\$3.1 billion), including foreign project financing totalling about \$925 million and fertilizer subsidies amounting to \$320 million. This is more than two and one-half times the actual expenditure in 1973/74; when adjusted for price changes it represents an increase of about 60 percent.

16. Preliminary figures indicate that the high growth rate achieved during 1969-1973 was maintained in 1974. In constant 1973 prices, gross domestic product rose by 7.5 percent in 1974. Partial indicators seem to point to slower growth of output in 1975. The inflation rate was very high in the first part of 1974 as, among other factors, world inflation was transmitted through both export and import channels, but abated somewhat later in

the year, partly as a result of the Government's stabilization measures in April 1974. Nevertheless, for the year as a whole it reached 40 percent. While still considerable, the average inflation rate for 1975 was reduced to 20 percent.

17. In the aftermath of the PERTAMINA development, the Government is faced with problems which, although serious, are surmountable. The review of PERTAMINA's projects has resulted in the cancellation or renegotiation of many contracts and reductions in project scope and size. 1/ The Government has more recently undertaken a broader review of projects initiated by various Government departments and other State entities in an effort to bring future expenditures in line with available resources and the priorities set out in the Second Plan. It is screening very carefully any major new programs or projects, since considerable resources will be needed in the next year or two for the completion of projects already initiated.

18. The recent financial difficulties will have a longer-term effect on the country's external public debt service obligations during the rest of the decade. Debt service payments over the next several years will be much larger than previously envisaged as a result of the large borrowings by the Government in the last fiscal year. Debt service in 1976/77 is now estimated at \$700 million, which would be about 12 percent of the value of officially projected net oil and other exports. Debt service payments on all loans contracted up to December 31, 1975 may reach about one billion dollars by 1978, before declining as shorter-term maturities are paid off. This is about \$500 million more per year than the payments projected on the basis of debt outstanding at the end of 1974. With debt service obligations from these borrowings substantially higher than expected earlier (about 13 percent of exports in 1978), the margin for further borrowing on other than semi-concessional terms has now become much more limited. The amounts, terms and purposes of future borrowing therefore need to be kept under continuous and careful review.

19. While the recent balance of payments and budgetary difficulties have upset some of the Government's plans, the long-term prospects for Indonesia's development remain good. The country has a substantial potential for further productive investment, employment and income growth. In agriculture a vigorous pursuit of on-going programs in irrigation, development of new plant varieties and technical services, provision of credit and current inputs, etc., promises to yield high returns. In addition, there are opportunities for the development of new areas, of food and plantation crops - partly in conjunction with a rapidly growing transmigration program. The industrial potential is good, both for modern capital intensive natural resource-based activities and for more labor-intensive, partly export-oriented industries.

1/ The planned capacity of the Krakatau Steel plant for example was reduced from 2,000,000 to 500,000 tons per year and the existing supply contracts were reduced by \$750 million.

PART II - BANK GROUP OPERATIONS IN INDONESIA

20. Part I of this Report emphasized Indonesia's plans for and need to undertake a large investment and development program designed to provide productive work opportunities (with resultant increased incomes) for its presently underemployed and growing labor force. Substantial external financing, the larger part on concessional and semi-concessional terms, as well as a considerable volume of technical assistance, is also required. The Bank is planning to maintain its lending to Indonesia at present levels and in particular to support projects designed to: improve agricultural credit, research and extension; rehabilitate and expand irrigation systems; improve nutritional levels; assist transmigration and other land development in the Outer Islands for and by smallholders; increase non-agricultural employment in the rural areas and small towns, through the establishment of small-scale industries; rehabilitate and expand urgently needed transportation and other infrastructure; assist urban development and the national family planning program.

21. As of April 15, 1976, Indonesia had received 37 IDA credits totaling \$561.8 million and twelve Bank loans amounting to \$628 million. At that date, IFC investments totalled \$58.4 million. At the end of 1974 the Bank Group accounted for about 4 percent of Indonesia's total (disbursed) outstanding public debt; by 1978 it is expected to account for 12 percent of total outstanding debt and 5 percent of public debt service obligations. A summary statement of IDA Credits and Bank Loans as of March 31, 1976 and IFC Investments as of February 29, 1976, as well as notes on the execution of ongoing projects are contained in Annex II. This is the sixth loan proposed for Indonesia this year and, if approved, would bring total IBRD commitments since June 30, 1975 to \$372 million.

22. To date, agriculture accounts for just over one-third of all Bank Group lending to Indonesia, including four IDA credits for estate rehabilitation, six for the rehabilitation and expansion of the irrigation systems, two for fisheries, and one each for seeds, beef cattle, sugar and smallholder tea and rubber. In the industrial sector, the Bank Group has assisted in three projects to expand PUSRI's fertilizer production and distribution capacity, three for development finance companies (Government-owned and private) which play a major role in fostering the growth of industrial enterprises, and one for the Pulo Gadung industrial estate. Loans and credits have also been extended to the transportation, education, telecommunications, tourism, power, population, urbanization and water supply sectors; one loan for a national resource survey and mapping project; and four credits for technical assistance to aid the Government in preparing and formulating its development programs and projects.

23. Bank Group lending to Indonesia started with an IDA Credit in 1968 for irrigation rehabilitation; almost half of all loans and credits have been made since mid-1972, with lending on Bank terms commencing in June 1974. Disbursements on loans and credits are prevailing at satisfactory levels. The Indonesian authorities have become increasingly aware of the delays in project execution caused by cumbersome procedures and the need to establish an effective control system in BAPPENAS (the National Development

Planning Agency). At the Government's request, the Bank has arranged for assistance under the Fourth Technical Assistance Credit (Cr. 451-IND) to help set up a monitoring and control system which it is hoped will lead to better project administration.

24. Future Bank lending gives high priority to the agricultural sector through support of projects to increase rice and other crop production in the Inner and Outer Islands, and the expansion of resettlement efforts on the latter. In addition, the program provides for further socially-oriented projects in the fields of urban development and population. Projects for agricultural extension, ports, power, irrigation and nutrition are expected to be ready for presentation in the next few months.

PART III - THE INDONESIAN FERTILIZER INDUSTRY

25. Increased supplies of fertilizer are crucial to the success of the Indonesian Government's efforts to increase the production of food and cash crops. On the Inner Islands of Java and Bali, where limited additional arable land is available, increased production will depend principally on raising yields which can be achieved through application of additional fertilizer in combination with improved and increased irrigation water supplies and use of high yielding varieties of seeds. As is indicated in paragraph 22, the Bank Group has already provided substantial assistance to the Government in rehabilitating and expanding irrigation systems and increasing the production of fertilizer and high-yielding seeds. In the longer run, the Government is planning to expand its resettlement efforts to open up new areas of production in the Outer Islands. The success of these efforts will depend, in part, on the increased availability of fertilizer as the soils in the outer islands are less fertile than in Java and heavier applications of fertilizer are therefore necessary.

26. Indonesia, with its large reserves of natural gas, offers very favorable conditions for the production of nitrogen fertilizer. P.T. Pupuk Sriwidjaja (PUSRI), established in 1959 as a wholly-owned Government Company, built the first urea plant in Indonesia (PUSRI I), which commenced operation in 1964. While this 100,000 tons per year (TPY) plant is small by present standards, it quickly achieved capacity operation, fluctuating between 84 percent and 104 percent. PUSRI I is expected to need major overhaul by 1978 after 13 years of operation. Another fertilizer plant, Petrokimia, at Gresik in East Java, was commissioned in 1972, and has an annual production capacity of about 45,000 TPY of urea and about 150,000 tons of ammonium sulfate based on the partial oxidation of fuel oil. In 1969, in response to Government requests, the Bank Group assisted in organizing a consortium of international aid agencies, in addition to making a Credit of \$35 million (Credit 193-IND), for the financing of the expansion of PUSRI by adding a modern 380,000 TPY urea plant (PUSRI II). Later, the Government with the help of consultants financed under the First Technical Assistance Credit (135-IND), carried out a National Fertilizer Study which reviewed the agronomic, economic and marketing aspects of fertilizer in Indonesia and developed a program to expand fertilizer production, marketing and consumption. After completion of this study, IDA financed under the Third Technical Assistance Credit (275-IND) the feasibility study for the West Java fertilizer project based on gas supplies in that area. Assistance in financing this plant is now being provided by Iran. At about the same time, PERTAMINA, with financial assistance from private sources, undertook construction of an ammonia-urea plant in East Kalimantan based on newly discovered gas supplies available in that area. The

PUSRI II plant began commercial operations in 1975 at capacity utilization of 76 percent, which is expected to rise to 90 percent in 1976. As PUSRI II was nearing completion, the Government decided in early 1974 to commence PUSRI III, based on additional gas supplies available in South Sumatera, to meet the growing demand for fertilizers. The Bank made a loan of \$115 million (Loan 1089-IND) for this expansion. The construction of the PUSRI III plant is proceeding according to schedule, and when completed will produce 1,725 tons per day (TPD) of urea. In April 1975, the Government decided to start work on PUSRI IV when PERTAMINA's East Kalimantan fertilizer project, designed as a floating plant, began to experience delays because of serious technical and financial problems.

27. Further planning for nitrogen fertilizer production in Indonesia is determined mainly by three factors. First, consumption of nitrogen fertilizer, spurred by Government programs to increase food crop production, is rising faster than anticipated a few years ago. Second, very large deposits of natural gas have been found in North Sumatera ^{1/} and East Kalimantan and, on a smaller scale, in West Java. The resource base for additional nitrogen fertilizer production has thus been greatly enhanced. Finally, recent energy price developments give nitrogen fertilizer plants based on natural gas and serving domestic or regional markets at relatively low distribution costs a competitive advantage over plants based on either coal or hydrocarbons imported in the form of crude oil, fuel oil, naphtha or liquified natural gas (LNG). The Bank's report, "The Fertilizer Requirements of Developing Countries" of July, 1975 identified Indonesia as one of the future suppliers of nitrogenous fertilizers to the countries in East and South-East Asia. In these countries, Indonesian plants would also have a transport cost advantage over competing producers.

28. Fertilizer consumption in Indonesia is characterized by (a) the predominance of the rice crop in agriculture and in total fertilizer usage; (b) the heavy reliance on nitrogen fertilizers, mostly urea for rice; and (c) the concentration of consumption in Java, Madura and Bali, the major rice-growing regions. During 1968-75 fertilizer consumption increased at an average rate of 21 percent annually. In spite of these rapid increases, fertilizer consumption per hectare is still comparatively low in Indonesia, even in Java. Updated demand projections for nitrogen fertilizer show an increase in the expected annual demand by about 10 percent since: first, constraints on fertilizer availability that existed especially in 1973/74 have been overcome by the Government's fertilizer stockpile and increased production from the new plants; second, incentives have been introduced by the Government to boost fertilizer use, mainly by strengthening and expanding the credit program and by maintaining an attractive ratio between the cost of fertilizer and prices for agricultural produce; and third, recommended dosages of urea have been increased. Based on these assumptions, domestic consumption

^{1/} Government plans also include another ammonia-urea plant by 1982 as part of a petro-chemical complex in Aceh, North Sumatera; it is proposed to be a regional export-oriented project with investment from Indonesia and neighboring countries. This project is in an initial stage of planning and has not been taken into account in this report.

of nitrogen fertilizer is expected to increase from 310,000 nutrient tons in 1974 to about 775,000 nutrient tons in 1980 and about 981,500 nutrient tons in 1985.

29. Domestic production of nitrogen fertilizer has lagged behind consumption; only some 54 percent of consumption in 1975 was met from domestic sources. Thus, Indonesia's total imports of fertilizer have increased at an average annual rate of about 20 percent from 1964 to 1973. Bagged urea import prices (c.i.f. Jakarta) increased sharply from \$62/ton in January 1972 to \$424/ton at the end of 1974, and even at this high price, fertilizers in general, and urea in particular, were not readily available in adequate quantity on the world market. Accordingly, the Government initiated a fertilizer stockpiling program to secure an adequate supply to the farmers; imports increased by some 87 percent and 56 percent in 1974 and 1975 respectively, and in the last quarter of 1975 the country's stocks increased to about 1.6 million tons of urea or about two-year's needs at 1975 levels of consumption. Therefore, Indonesia is not expected to have to import additional urea and by the turn of the decade the new production units will provide an ample domestic supply as well as an exportable surplus.

30. The annual production capacity for nitrogen fertilizer, which is some 263,000 nutrient tons at present, is projected to increase five-fold in ten years to about 1.2 million nutrient tons in 1985 when four additional plants are scheduled to be in commercial production: (a) PUSRI III in April 1977; (b) PUSRI IV in February 1978; (c) the West Java plant in July 1979 and (d) the East Kalimantan plant in July 1980. As agreed under Loan 1089-IND (PUSRI III Fertilizer Expansion Project) the Government will from time to time exchange views with the Bank on its plans for meeting the country's fertilizer requirements.

31. As a result of these developments, Indonesia should emerge as an exporter of nitrogen fertilizer by the early 1980's. The exportable surplus is projected to be about 234,000 tons of nitrogen in 1982 ^{1/} and then decline to about 174,000 tons in 1985 as domestic demand increases. The nitrogen fertilizer deficit for the region consisting of the Philippines, Thailand and Malaysia is expected to be about 267,000 tons in 1980 and about 375,000 tons in 1985, even if tentative plans to build urea plants in several neighboring countries are implemented. Indonesia, because of its favorable location, is in an advantageous position to supply these deficits. The Government has agreed with its neighbors on a region-wide market survey to form a basis for coordinated nitrogen fertilizer development plans and for the allocation of markets for exportable surpluses. The Government has agreed with the Bank that by December 1, 1977 a study will be completed of the markets to which nitrogen fertilizer could be profitably exported, and that in consultation with PUSRI, it would adopt an export strategy for such fertilizer based on the results of the study and inform the Bank of such strategy (Section 3.03 of the Loan Agreement).

32. Since no phosphate or potash deposits have been found in Indonesia, phosphatic fertilizer and potash have so far been imported, mostly in the

^{1/} The export surplus could be double this volume if Indonesia builds another ammonia/urea plant at Aceh by 1982 (page 8, footnote).

form of triple superphosphate (TSP) and muriate of potash (MP). Petrokimia plans to build a 330,000 TPY TSP plant at Gresik, East Java. However, even after completion of this plant, Indonesia would need to import substantial amounts of phosphate and potash. Trials to determine the optimal nutrient ratios appropriate to the various Indonesian soils and crops are underway.

33. In 1972, nearly 80 percent of all nitrogen fertilizer was used on Java. With the development of the Outer Islands, Java's share is expected to decrease to about 67 percent in 1980 and about 65 percent in 1985. Since the major gas deposits are on Sumatera and off-shore East Kalimantan, a reliable fertilizer transport and distribution system is required to connect the raw material and production centers with the Java market. PUSRI has established an efficient distribution network to market its fertilizer output, imported fertilizers and related agro-chemicals, currently accounting for the distribution of about 60 percent of all fertilizer consumed in Indonesia.

34. PUSRI operates bulk terminals with bagging facilities and ships urea from Palembang both in bags through vessels which operate among the islands and in bulk, through chartered carriers equipped for unloading at the bulk terminals, where urea is bagged, stored and dispatched for inland distribution. A more optimal solution for fertilizer shipments will be established by more efficient bulk shipping, unloading, bagging and related storage facilities to be installed by mid-1977 under the Fertilizer Distribution Project (\$68 million Loan No. 1139-IND of July 10, 1975). Final design of a transport and distribution system to accommodate the PUSRI IV plant's production will be made when the ongoing National Fertilizer and Pesticides Distribution Study, financed by the above-mentioned loan, is completed in June 1976; bilateral assistance is being sought for the implementation of the system. During negotiations agreement was reached that the additional distribution facilities required for PUSRI IV will be developed in time for the commercial operation of the project (Part C of Schedule 2 to the Loan Agreement); and PUSRI agreed that a financing plan and an implementation schedule for such fertilizer distribution and marketing facilities would be made available to the Bank three months after the completion of the National Fertilizer and Pesticides Distribution Study now underway (Section 2.08 of the Project Agreement).

35. Over 60 percent of the fertilizer consumed in Indonesia is in areas covered by two successful programs for promoting intensive cultivation of food-crops, especially of rice; the BIMAS (Mass Guidance Program) and the INMAS (Mass Intensification Program). The rest of the fertilizer is used mostly by the cash crop and estate sectors. The Bank Rakyat Indonesia (BRI) is the sole credit agency for the BIMAS and INMAS programs, while the estate sector depends on the normal banking facilities to meet its credit needs. Credit for fertilizer purchases in all these sectors is currently provided by BRI and by normal banking facilities at monthly interest rates of 1 to 2 percent and existing arrangements are adequate to ensure that sufficient credit will be available in the future. Fertilizer is sold in village retail "kiosks" or by village unit cooperatives. It is the Government's policy to expand and strengthen these cooperatives and promote them as a main source of input supplies for farmers under the BIMAS and INMAS programs.

PART IV - THE PROJECT

36. In April 1975, in recognition of the assessment by the Government that PUSRI alone has the required technical, organizational, commercial and financial experience to implement rapidly another fertilizer project to meet Indonesia's growing demand, the Government decided to start work on PUSRI IV. The proposed project will increase PUSRI's urea capacity from 1.0 million to 1.6 million TPY. The plant will be located adjacent to PUSRI's existing facility at Palembang, in South Sumatera.

37. The feasibility study for PUSRI IV was completed in 1975. The project was appraised by missions in September/October 1975 and January 1976. Negotiations were held in Washington in March, 1976. The Government's negotiating team was led by Dr. Julianto Moeliodihardjo and PUSRI's team was led by Mr. Kotan Pasaman. Mr. S. Al-Zamel represented the Saudi Fund for Development. The Appraisal Report is being circulated to the Executive Directors separately and a loan and project summary is contained in Annex III.

Project Description

38. The project would consist of: (a) the detailed engineering, construction and start-up of a fertilizer plant at Palembang, Sumatera; and (b) training of PUSRI's staff and staff employed in the national fertilizer industry in the operation and maintenance of plant as well as in financial and accounting procedures. The plant's facilities would include: (i) a single-train ammonia unit with a capacity of about 1,000 metric tons per day; (ii) a single-train urea unit with a capacity of about 1,725 metric tons per day; (iii) a natural gas pre-treatment section; (iv) the usual off-sites and auxiliaries required to support such plant, including inter alia, an ammonia storage tank, urea storage and loading facilities, cooling towers, water treatment facilities, a 15 MW gas turbine power generator coupled with waste heat boiler and expansion of the bag making plant financed under the PUSRI III project. The project is part of a larger program which will also include the development of a gas gathering and distribution system and a fertilizer distribution facility. (Parts B and C of Schedule 2 to the Loan Agreement).

39. Natural gas will be used for both feedstock and fuel and will be obtained from the nearby oil and gas fields in South Sumatera operated by PERTAMINA and STANVAC. Total gas reserves in the area are estimated to be adequate to meet PUSRI's needs over the entire life of the projects and the Government has assured PUSRI that its requirements will be met on a priority basis. Under Loan No. 1089-IND (PUSRI III Fertilizer Expansion Project) the Government is obligated to assure an adequate supply of gas at reasonable prices for PUSRI III. However, PERTAMINA and STANVAC have not been able thus far to agree on a mutually agreeable gas price formula. During negotiations, the Government informed the Bank that it will assist PERTAMINA and STANVAC to agree on the formula and sign a contract at an early date. Gas for PUSRI II is supplied by a gathering and transmission system developed by PERTAMINA which

was redesigned in 1974 to include PUSRI III gas requirements. In response to a Government instruction in early 1975 that PERTAMINA develop a gas supply scheme to cover the additional gas requirements for PUSRI IV, PERTAMINA designed an integrated gas system which will supply all of the Company's requirements (except PUSRI I which is supplied by a gas pipeline operated by STANVAC). In August 1975, PUSRI and PERTAMINA entered into a gas supply agreement obligating PERTAMINA to supply the Company's requirements for PUSRI II, III and IV plants over their respective lives, an estimated 20-year period. PERTAMINA will be the executing agency of the integrated gas project.

40. The PUSRI III project is expected to require gas for initial testing by mid-1976 and the existing gas system developed for PUSRI II is capable of delivering the quantity needed for this purpose. It is also expected that PUSRI III will be ready for final performance tests in early 1977 when its full gas requirements will be needed and, therefore, the looping work from Simpiang to Palembang and extension of the existing gas gathering system to nearby STANVAC and PERTAMINA fields will have to be completed. During negotiations, the Government made available to the Bank a contract between PERTAMINA and Quadra Engineering Company of Canada to complete the most important phase (1-C) of the gas project by February, 1977. Financing for this phase of work is being negotiated with the Export Development Corporation (EDC) of Canada. Should EDC financing or other assistance not be available, the Government would be obligated to finance the gas project from its own resources (Section 3.02 of the Loan Agreement). Further, the Government has undertaken to carry out other phases (1-A and 1-B) of the gas project in time to ensure adequate gas supply to PUSRI IV plant (Part B of Schedule 2 to the Loan Agreement).

Project Cost and Financing

41. The total financing required for the project, including working capital and interest during construction, is estimated at \$186 million equivalent, of which \$145 million would be in foreign exchange. Proceeds of the Bank and SFD loans would cover 92 percent of the foreign exchange costs, with the Government meeting the balance of 8 percent. The Government will also contribute the necessary local currency financing, including working capital. Cost estimates include provision for a physical contingency equivalent to 7 percent of the base cost estimate; this is relatively low due to the advanced stage of the project. Price escalation for equipment (excluding proprietary and critical items valued at \$25 million for which orders have already been placed on fixed price contracts) is based on projected price increases due to inflation in major equipment supplying countries of 9 percent in 1976 and 8 percent per year thereafter. Price escalation for civil works is based on price increases due to projected rates of inflation in Indonesia of 13 percent in 1976 and 12 percent per year thereafter.

42. The incremental working capital requirements of the project are estimated at \$7.8 million. At present, the Company's consolidated accounts show excessive working capital, primarily because of the large inventory of

imported fertilizers held by PUSRI on behalf of the Government (paragraph 29). However, the national fertilizer stockpile accounts will be shown separately by PUSRI starting in 1977 and the Government will continue to make up all the losses resulting from the stockpile operation (paragraph 53). For the purpose of projections, therefore, the stockpile accounts have not been taken into consideration. As a result, the current excessive working capital of PUSRI is forecast to show a sharp reduction from 1977 onwards.

43. The Government will subscribe \$46 million in new equity to PUSRI in foreign exchange and in local currency as required. During negotiations, assurances were obtained from the Government that these funds will be made available to PUSRI in a timely manner and that, the Government would provide promptly the funds needed to complete the project on terms satisfactory to the Bank (Section 3.01 of the Loan Agreement). The financing of the balance \$140 million (75 percent) will be provided on a parallel basis by the proposed loans from the Bank and SFD. The Bank loan to the Government will be on-lent to the Company with repayment over the same period as the Bank loan but with interest at 12 percent per annum, including a 3-1/2 percent fee accruing to the Government which will assume the foreign exchange risk. The SFD loan to the Government is expected to be made at 4 percent interest per annum, for a term of 19 years including 4 years of grace. The SFD loan is expected to be made available to PUSRI by the Government on the same terms as the proposed Bank loan. The Bank loan will become effective after all conditions precedent to the effectiveness of the SFD loan are met (Section 6.01(d) of the Loan Agreement).

Project Implementation

44. In view of the urgent need to increase domestic production of fertilizer as quickly as possible and to make the country self-sufficient in nitrogen fertilizer by 1980, and given the high escalation in equipment prices, it was recognized that there were important benefits in speedy project implementation. Therefore, in response to the Government's request, the Bank agreed that the Company retain, on a negotiated basis, Kellogg Overseas Corporation (U.S.) and Toyo Engineering Corporation (Japan), the contractors for PUSRI II and III, to implement PUSRI IV as well. A project team has been formed to supervise and coordinate the work of the two engineering firms which have performed satisfactorily for PUSRI II and III. Kellogg will have overall responsibility for construction, erection and start-up of the complete fertilizer plant which will be supplied as follows: (a) the ammonia plant and all offsites and auxiliaries are being designed and procured by Kellogg; and (b) the urea plant is being designed by Toyo which would also procure the equipment for shipment to the plant site ready for erection by Kellogg. These arrangements together with standardization in equipment, and reduced spare parts requirements, will significantly reduce the capital costs of the project.

Procurement and Disbursement

45. International competitive bidding (ICB) procedures in accordance with Bank guidelines are being used -- independent of the source of financing

-- for equipment and materials estimated to cost about \$80 million including escalation. Proprietary equipment essential to the process and items in limited supply, which are estimated to cost together about \$11 million and whose timely supply is critical to the efficient completion of the project, are being procured following bidding from lists of qualified suppliers, which have been approved by the Bank. In addition, standardized items worth \$14 million will be procured from the same suppliers as for PUSRI III. Items costing less than \$50,000 equivalent each, and totalling about \$1 million are being purchased from suppliers on the basis of suitability, availability and price. The list of items falling into this category has been approved by the Bank. A preference of 15 percent or the customs duty, whichever is lower, will be allowed to qualified Indonesian manufacturers for the purpose of evaluating international competitive bids. Bid evaluation will be PUSRI's responsibility with assistance as required from the engineering firms contracted and from Scientific Design (U.K.), the Technical Advisor. To expedite deliveries PUSRI has assigned its procurement officers to the main offices of the two engineering firms, in Houston and Tokyo. Engineering and project management services (\$26 million) have been procured as stated in para. 44.

46. The project is expected to be mechanically completed by November 1977 and be in commercial production by about February 1978. The procurement procedures described above would advance by twelve months the completion of the project with consequent savings in capital cost as well as in fertilizer imports.

47. The proceeds of the Bank loan will cover the foreign exchange cost of a part of the imported equipment, materials and engineering services, including project management and pre-operating expenses. A separate list of goods and services has been prepared for SFD financing under a parallel financing arrangement. The SFD loan would also finance a part of local costs associated with those items. It is estimated that by the time the proposed loan is considered by the Executive Directors, \$60 million will have been committed out of a foreign exchange cost of \$145 million, with expenditures amounting to \$20 million. In view of the advanced stage of project implementation, it is recommended that the Bank retroactively reimburse the Government up to \$7 million for expenditures on goods and services (estimated at \$3 million for goods and \$4 million for services) made prior to loan signing.

PUSRI: Organization and Finances

48. PUSRI is generally considered one of Indonesia's best managed large industrial enterprises. PUSRI is a wholly Government-owned limited liability company with a supervising Board of Commissioners (Dewan Komisaris), consisting of representatives of the Ministries of Finance, Industries and Agriculture, and a four-man Management Board (Direksi), which has responsibility for the Company's day-to-day operations. Members of both Boards are appointed by the Government.

49. PUSRI's present staff of about 2,600 is expected to increase by 60 per cent in the next three years. At the same time the Government is

relying upon PUSRI to provide the staff and training facilities required to implement the investment program in the fertilizer industry as a whole. Recruitment of staff for PUSRI IV is expected to begin in January 1977; only the recruitment of graduate accountants is expected to be a potential problem. During negotiations, the Government and PUSRI agreed to review present salary scales, including fringe benefits, of professional staff and submit a report to the Bank by June 30, 1977 (Section 3.06 of the Project Agreement).

50. PUSRI's record of staff training is good. In order to meet additional demands which will be placed on the training system within the next three years, a National Fertilizer Production Training Center will be established under the project, at a total cost of \$1.7 million.

51. Under the current fertilizer marketing system, the Government buys all locally-produced fertilizers at a fixed price and sells it again along with imported fertilizers at a set price to approved distributors including PUSRI. Although PUSRI has been operating efficiently, it made only small profits or incurred losses during 1970-73 because of rising costs of inputs other than gas, and low prices fixed by the Government for locally produced fertilizers. To rectify this situation the Government increased its purchase price of PUSRI - produced urea by stages from Rp 28,200 (\$68) per ton in 1972 to about Rp 63,910 (\$154) per ton in the last quarter of 1974. This price, comparable to the current world export prices of urea (about \$110-150 per ton after peaking to more than \$300 per ton during 1973-74) would, under normal circumstances, be adequate to provide sufficient revenue for PUSRI to be financially viable. However, under a system of fertilizer rationing introduced in Indonesia in October 1973 to control illegal marketing, all whole salers became PUSRI's agents. Therefore, PUSRI has to finance the distribution of not only its own fertilizer but also of imported fertilizers--which in 1975 accounted for twice the volume of PUSRI's own fertilizer sales--and wait up to ten months to be paid for sales to farmers on the basis of vouchers issued by Bank Rakyat Indonesia (BRI) the State Bank for Agriculture.

52. This system has led to excessive receivables and inventories, part of which represent the Government's fertilizer stockpiling program, under which PUSRI's current assets increased to \$380 million equivalent by the end of 1975 and were financed, under Government direction, exclusively by short-term borrowing mainly from BRI at an average interest rate of 1.3 percent per month. Therefore, a combination of factors created a heavy burden on the Company's finances. Agreement was reached during negotiations for the PUSRI III loan that Government would compensate the Company for its marketing losses. The Government also agreed to make up the forecast losses for 1975 by payments in four equal quarterly installments to PUSRI. The forecast of shortfalls for 1976 was to be agreed between the Government and the Company by October 1, 1975. This arrangement was to be operative until the assets in service in PUSRI's marketing department had increased substantially with the execution of the \$140 million Bank-assisted Fertilizer Distribution Project (Loan No. 1139-IND of July 10, 1975) which is expected to be operational in early 1977. Subsequently, a reasonable rate of return on assets in operation was to be ensured by the Government.

53. The Government has not compensated PUSRI fully for its marketing losses in 1975, as it had underestimated the marketing losses for the year and had made inadequate provision in its 1975/76 budget to meet those losses. Events described in Part I (The Economy) also caused the Government serious and unanticipated financial difficulties. Of the 1975 losses the Government had paid \$18.2 million equivalent as of end-March 1976 to cover the losses through the third quarter of 1975. To meet the marketing losses during the fourth quarter, and subsequently, the Government proposed that in view of prevailing budgetary constraints, 50 percent of the marketing losses would be paid to PUSRI within 45 days of presentation by PUSRI of the quarterly financial statements and the balance within four months of the presentation of accounts for each quarter. Usually, PUSRI's financial statements are submitted to the Government 6-8 weeks after the closing of each quarter. The above proposal has been accepted by the Bank subject to a Government commitment undertaking not to ask PUSRI to pay (a) its liabilities on account of interest to BRI before the Company receives payments from the Government to cover stockpile marketing losses; and (b) its principal repayment liabilities on BRI loans to import fertilizers before PUSRI recovers its receivables from the sale of imported fertilizers. Payment of \$9.2 million due to PUSRI by the Government under the terms of the above agreement to cover 50 percent of the fourth quarter 1975 losses have been made on time (April 15, 1976). Further, the Bank has been informed during negotiations that adequate provision has been made in the Government budget for 1976/77 to cover PUSRI's marketing losses and also provide necessary financing for the Company's capital investments.

54. The marketing margin allowed by the Government which fixes fertilizer selling prices is inadequate. The margin has not been increased significantly during the last two years when transportation and other operating costs of the marketing department have increased sharply. The Government has informed the Bank that this issue is being examined by an inter-ministerial committee, and that a decision will be taken following the recommendations of the Committee in June 1976.

55. As agreed under Loan No. 1139-IND (Fertilizer Distribution Project), PUSRI is obligated to propose for the Government's approval by October 1976 a methodology to separate fertilizer stockpile accounts from the normal marketing accounts of PUSRI. During negotiations, PUSRI and the Government informed the Bank that by mid-1977, PUSRI will start reporting the fertilizer stockpile accounts separately in its financial statements.

56. Further, under Loan No. 1089-IND (PUSRI III Fertilizer Expansion Project) the Government has undertaken to withdraw the prevailing fertilizer distribution control system as fertilizer shortages are overcome and fertilizer prices decline to a normal level. During negotiations, the Government informed the Bank that it is awaiting the results of the National Fertilizer and Pesticides Distribution Study now underway, and will, upon completion of that study in June 1976, review the fertilizer distribution control system and initiate measures to reduce fertilizer costs. Such measures would help increase consumption by making fertilizers freely available at a common price and thereby help reduce the fertilizer stockpile. It would also allow producers/distributors like PUSRI to assume direct responsibility for recovering their

receivables rather than collecting them through BRI under the present system, thus reducing the excessive time now required to recover receivables.

57. As noted earlier, the Government sets and controls the price at which domestic fertilizer is sold to the Government, currently Rp 63,900 (\$154) per ton of urea c.i.f. Java. Under the terms of the agreement reached with the Government for the PUSRI III loan, from 1977 the Government is obligated to enable PUSRI to earn at efficient operation a reasonable rate of return on assets in service and to allow adequate debt service coverage at all times. During negotiations these assurances were reaffirmed.

58. As PUSRI I was financed entirely with Government equity, the Company had initially no debt to service. However, with the construction of PUSRI II the outstanding debt of the Company increased sharply with the debt/equity ratio reaching 72/28 in 1973, partly because of negative or low earnings during 1970-73 and partly because the Government delayed the conversion to equity of some of its loans to bring the debt limit to the stipulated level of 50/50 until the full project cost was known. The Government has now converted an appropriate share of PUSRI's debt into equity, bringing the debt/equity ratio to 49/51 at the end of 1975. Confirmation of the amendment of PUSRI's Charter to increase the Company's authorized capital and of the provision of adequate paid-in capital will be a condition of loan effectiveness (Section 6.01 (c) of the Loan Agreement).

Financial Projections

59. Total sales from the project are expected to increase from about \$53 million in 1978 (for 10-1/2 months of operation) to \$73 million in 1981 (the first year of sales equal to full production). Net profit after tax would increase from about \$4.5 million in 1978 to \$17.0 million in 1982, but would decline the following year to \$10 million because the 5-year tax holiday for the project would end in 1982. However, the ratio of net profits to sales in 1983, the first year of tax payment, would still be at a satisfactory level of 14 percent.

60. From the beginning the project is expected to generate enough cash to more than meet its debt service requirements. Beyond 1982, the debt service coverage would weaken because of the assumed tax payments (45 percent of pre-tax profit) but it will still be at an acceptable level.

61. The project's incremental financial rate of return before taxes would be 21 percent (19 percent after tax) which is satisfactory. Sensitivity analyses indicate that the financial rate of return would remain satisfactory even after allowing for the possible adverse effects of a reduction in capacity utilization, a decline in sales, an increase in capital or operating costs or delays in plant completion. Analyses also indicate that the rate of return is more sensitive to decline in sales revenue than to increases in operating and capital costs; assuming a 20 percent decrease in sales revenue the financial rate of return would still be 14 percent.

62. The consolidated projections for PUSRI's entire operations show that during 1976-83 total sales from its production would increase by about 117 percent, and the net profit would increase 2.2 times. The Government has agreed to maintain PUSRI in a sound liquidity position by maintaining an adequate current ratio. The debt/equity ratio of the Company is estimated at 49/51 in 1976 and is forecast to improve significantly to 26/74 in 1983 if all earnings are retained and no further expansion is undertaken.

63. During negotiations, the following undertakings similar to those in the PUSRI II and PUSRI III Agreements were obtained (Articles III and IV of the Project Agreement): (a) PUSRI will have subsidiaries only with the prior approval of the Bank; (b) without Bank consent, PUSRI will not incur additional long-term indebtedness other than (\$361 million equivalent) for PUSRI III, PUSRI IV and the related fertilizer distribution projects if as a consequence the debt/equity ratio would exceed 55/45 for the company; (c) PUSRI will depreciate fixed assets of new projects over 12 years of their operating life and other assets in conformity with sound accounting principles; (d) without Bank consent, PUSRI will not declare dividends except out of accumulated net earnings nor pay dividends, until PUSRI IV shall have produced at 80 percent capacity for 12 consecutive months, i.e. 456,000 tons, or if its current assets would be less than 1.4 times its current liabilities and (e) except for PUSRI III, PUSRI IV and related distribution projects, and normal replacements, PUSRI will not, except for certain specified purposes, invest more than \$5 million per year without Bank consent until PUSRI IV produces at 80 percent capacity for 12 consecutive months, and (f) the Government will help PUSRI maintain a debt service coverage annually of at least 1.5 times by allowing PUSRI adequate prices.

Risks

64. The project design is based on modern commercially proven technology for economically efficient large-scale production, thus minimizing technical and obsolescence risks in the project. Further, urea has been produced and marketed by PUSRI during the last 10 years and it is the most common fertilizer used in Indonesia. However, the project could face financial problems for lack of realistic Government policies regarding fertilizer prices. In the past, the Government responded to PUSRI's financial needs rather slowly. The Government has agreed to meet its obligations without any delay in the future according to the Government formula for payment accepted by the Bank (paragraph 53). In addition, the gas gathering and distribution system for PUSRI III is one year behind schedule. Any further delay in the implementation of the gas project would affect both PUSRI III and PUSRI IV as the system designed for PUSRI III has to be expanded to serve PUSRI IV as well. The Bank is closely watching the progress of the gas project and the Government has agreed to provide promptly adequate funds for the project. Commercial risks in the sale of urea, including possible exports, are also present, but these are considered comparatively minor, since Indonesia will have to use most of the project's output if it is to meet the food requirements of a rapidly expanding population.

Economic Benefits

65. During the late 1960's, world fertilizer prices were depressed due to excess supply and consequently, investments in new fertilizer projects declined sharply. The widespread realization in the early 1970's of the production possibilities of high yielding varieties of seeds used in combination with other agricultural inputs led to a rapid increase in the demand for fertilizer, which was not matched by increased supply. As a result, fertilizer prices increased steeply; the price of urea increased to about \$300 (f.o.b. exporting countries) per ton in 1974 compared to about \$70 per ton at the end of the 1960's. However, after some importing countries built large stockpiles and then stopped buying, prices declined and reached the level of about \$110-150 per ton by April 1976. World fertilizer prices are likely to remain at the present levels until the stockpiles are used up and imports are resumed, but the large-scale expansion at higher investment cost per ton of capacity required to meet future urea demand in the world would require a selling price of \$160-190 (f.o.b.) per ton of urea in 1975 dollars. Deferral of investment in new urea projects due to prevailing low prices may again result in shortages leading to sharp price increases as experienced during 1973-74. Therefore, fertilizer-deficit countries have to depend on increased domestic production to combat periodic surges in world fertilizer prices.

66. The proposal for PUSRI IV is supported by Bank investigations which employed a programming model to determine the least cost solution with regard to investment, production, importation and transportation in the region to meet long-term fertilizer requirements. Indonesia, with its ample and underutilized resources of natural gas, has the potential not only to achieve self-sufficiency in nitrogenous fertilizers but also to emerge as a significant exporter to neighboring countries like Thailand, Malaysia, the Philippines and Vietnam. In this respect, Indonesian fertilizer enjoys the competitive advantage of comparatively low freight costs.

67. For the purpose of the economic analysis of this project, it has been assumed that by the time PUSRI IV begins production in 1978 the world market price f.o.b. for bagged urea would be \$160 per ton in constant 1975 prices. On this basis, the economic rate of return of the project has been estimated at about 29 percent. Sensitivity analysis indicates that the economic rate of return remains very satisfactory (at about 22 percent) under a wide range of possible adverse circumstances, including lower urea prices, increased capital and operating costs, and delays in plant construction.

68. The project would augment annual urea production by 513,000 tons and would contribute to an increase in rice production of about 2 million tons annually. Further, the net foreign exchange savings at full production would amount to \$72 million annually. While the direct employment created by the project would be low at 850 jobs, the project would create substantial indirect employment especially in construction, transportation, storage and distribution of fertilizer, and in the exploitation and distribution of natural gas. An important benefit of the project would result from the provision of training facilities for not only PUSRI personnel but also for staff

of other fertilizer plants, existing or proposed, in Indonesia. Under the training program during the next three years, about 3,800 persons are to be trained in various fields such as finance, administration and accounting, plant operation and maintenance, marketing and distribution.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

69. The draft Loan Agreement between the Republic of Indonesia and the Bank, the draft Project Agreement between the Bank and P.T. Pupuk Sriwidjaja, the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement and the text of a draft resolution approving the proposed loan are being distributed to the Executive Directors separately.

70. Features of the Loan Agreement and the Project Agreement of special interest are referred to in paragraphs 31, 34, 38, 40, 43, 49 and 63 of this Report. Special conditions of effectiveness are the execution of the financing agreement between the Government and PUSRI, the amendment of PUSRI's Charter to increase the Company's authorized and paid-in capital and the execution of the Saudi Fund Loan Agreement and the fulfillment of all conditions precedent to its effectiveness including the right to make withdrawals thereunder (Section 6.01(b), (c) and (d) of the Loan Agreement).

71. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATION

72. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara
President

Washington, D.C.
April 29, 1976

TABLE 3A
SOCIAL INDICATORS DATA SHEET

INDONESIA	INDONESIA			REFERENCE COUNTRIES (1970)		
	1960	1970	MOST RECENT ESTIMATE	BANGLADESH	INDIA	PHILIPPINES **
LAND AREA (THOU KM ²)						
TOTAL	1904.3					
AGRIC.	279.8					
GNP PER CAPITA (US\$)	60.0	100.0	130.0	60.0	110.0	220.0
POPULATION AND VITAL STATISTICS						
POPULATION (MID-YR. MILLION)	95.4	115.6	124.4	70.8	530.1	36.9
POPULATION DENSITY						
PER SQUARE KM.	50.0	61.0	85.0	496.0	168.0	123.0
PER SQUARE KM. AGRIC. LAND	..	..	426.0	860.0	350.0	..
VITAL STATISTICS						
CRUDE BIRTH RATE PER THOUSAND	43.0	<u>/a,b</u> 42.0	42.0	44.0	38.0	45.0
CRUDE DEATH RATE PER THOUSAND	21.0	<u>/a,b</u> 21.0	21.0	21.0	16.0	12.0
INFANT MORTALITY RATE (/THOU)	125.0	<u>/a,b</u> ..	..	140.0	130.0	80.0
LIFE EXPECTANCY AT BIRTH (YRS)	48.0	47.0	51.0	48.0	50.0	56.0
GROSS REPRODUCTION RATE	2.0	3.2	3.1	3.1	2.9	3.3
POPULATION GROWTH RATE (%)						
TOTAL	2.1	2.0	2.0	2.7	2.3	3.0
URBAN	..	3.6	3.2	..	4.0	4.0
URBAN POPULATION (% OF TOTAL)						
	15.0	17.0	18.0	..	20.0	32.0
AGE STRUCTURE (PERCENT)						
0 TO 14 YEARS	42.1	44.1	44.1	..	42.0	43.1
15 TO 64 YEARS	55.4	51.4	53.4	..	55.0	53.4
65 YEARS AND OVER	2.5	2.5	2.5	..	3.0	3.5
AGE DEPENDENCY RATIO						
	0.8	0.9	0.9	..	0.8	0.9
ECONOMIC DEPENDENCY RATIO						
	1.3	..	1.5	..	1.2 <u>/a</u>	1.5
FAMILY PLANNING-						
ACCEPTORS (CUMULATIVE, THOU)	..	234.2	4808.2	..	..	276.9
USERS (% OF MARRIED WOMEN)	..	..	..	..	..	8.0
EMPLOYMENT						
TOTAL LABOR FORCE (THOUSAND)	36600.0	..	40100.0	22300.0	221000.0 <u>/b</u>	12300.0
LABOR FORCE IN AGRICULTURE (%)	68.0	..	62.0	71.0	71.0	51.0
UNEMPLOYED (% OF LABOR FORCE)	5.4	2.0 <u>/a</u>	5.4 <u>/a</u>	..	3.0 <u>/c</u>	7.0
INCOME DISTRIBUTION						
% OF PRIVATE INCOME REC'D BY-						
HIGHEST 5% OF POPULATION	..	..	..	16.7 <u>/a</u>	25.0 <u>/d</u>	..
HIGHEST 20% OF POPULATION	..	..	..	42.3 <u>/a</u>	53.1 <u>/d</u>	..
LOWEST 20% OF POPULATION	..	..	..	7.9 <u>/a</u>	4.7 <u>/d</u>	..
LOWEST 40% OF POPULATION	..	..	..	19.6 <u>/a</u>	13.1 <u>/d</u>	..
DISTRIBUTION OF LAND OWNERSHIP						
% OWNED BY TOP 10% OF OWNERS	48.0 <u>/b</u>	..	..	34.0	..	..
% OWNED BY SMALLEST 10% OWNERS	3.0 <u>/b</u>	..	..	1.0	..	..
HEALTH AND NUTRITION						
POPULATION PER PHYSICIAN	41000.0	27650.0	23800.0	7600.0 <u>/b</u>	4800.0	..
POPULATION PER NURSING PERSON	..	8018.0	6960.0	72030.0 <u>/b</u>	5110.0	..
POPULATION PER HOSPITAL BED	1350.0	1720.0	1450.0	8120.0 <u>/c</u>	1620.0	850.0
PER CAPITA SUPPLY OF -						
CALORIES (% OF REQUIREMENTS)	89.0	89.0	83.0	..	93.0	85.0
PROTEIN (GRAMS PER DAY)	43.0	43.0	38.0	..	53.0	45.0
- OF WHICH ANIMAL AND PULSE	15.0 <u>/c</u>	14.0	..	..	16.0	22.0
DEATH RATE (/THOU) AGES 1-4						
	..	..	..	..	..	7.0
EDUCATION						
ADJUSTED ENROLLMENT RATIO						
PRIMARY SCHOOL	60.0 <u>/a</u>	71.0	80.0	50.0 <u>/d</u>	79.0	119.0
SECONDARY SCHOOL	6.0 <u>/a</u>	12.0	18.0	15.0 <u>/d</u>	28.0	45.0
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL)						
	12.0	12.0	12.0	10.0 <u>/a</u>	12.0	10.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)						
	20.0 <u>/a</u>	28.0	28.0	1.0	6.0 <u>/a</u>	10.0 <u>/a,b</u>
ADULT LITERACY RATE (%)						
	47.0	..	60.0 <u>/b</u>	..	..	..
HOUSING						
PERSONS PER ROOM (AVERAGE)						
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)	..	..	1.6	..	..	..
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)	..	..	44.0 <u>/b</u>	..	..	66.0 <u>/b</u>
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)	..	..	64.0	..	..	23.0 <u>/b</u>
	..	..	39.0	..	..	6.0 <u>/b</u>
CONSUMPTION						
RADIO RECEIVERS (PER THOU POP)						
	7.0	114.0	..	6.0	21.0	45.0
PASSENGER CARS (PER THOU POP)						
	1.0	2.0	3.0	1.0	1.0	8.0
ELECTRICITY (KWH/YR PER CAP)						
	19.0	20.0	23.0	11.0	111.0	235.0
NEWSPRINT (KG/YR PER CAP)						
	0.2	0.2	0.2	..	0.3	1.2 <u>/c</u>

SEE NOTES AND DEFINITIONS ON REVERSE

NOTES

Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961, for 1970 between 1968 and 1970, and for Most Recent Estimate between 1971 & 1973.

** The Philippines has been selected as an objective country for its geographical similarity and because of its apparent advanced stage of economic development.

<u>INDONESIA</u>	1960	/a Excludes West Irian; /b 1963; /c 1961-63.
	1970	/a Registered applicants for work.
	<u>MOST RECENT ESTIMATE:</u>	/a Unemployed workers seeking their first job; /b 10 years and over, ability to read and write in either Latin or non-Latin characters; /c Inside only.
<u>BANGLADESH</u>	1970	/a 1966-67, households; /b Registered, not all practicing in the country; /c Government hospital establishments only; /d Approximate enrollment as percentage of population in 6-10, and 11-15 age groups respectively; /e Up to end of second level.
<u>INDIA</u>	1970	/a Ratio of population under 15 and 60 and over to labor force age 15-59 years; /b AID estimate of labor force in age group 15-59. IERD report gives a figure of 180.4 million based on 1971 population census. The difference is due to changes in the definition of a worker. In the 1971 census, persons were classified only on the basis of their main activities. This led to the exclusion of several categories such as housewives; /c Registered applicants for work; /d 1967-68, households; /e 1965.
<u>PHILIPPINES</u>	1970	/a Public education only; /b 1967; /c Imports only.

RIO, April 21, 1976

DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)

Total - Total surface area comprising land area and inland waters.
Agric. - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.

GNP per capita (US\$) - GNP per capita estimates at market prices, calculated by same conversion method as World Bank Atlas (1972-74 basis).

Population and vital statistics

Population (mid-yr. million) - As of July first; if not available, average of two end-year estimates.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.

Population density - per square km of agric. land - Computed as above for agricultural land only.

Vital statistics

Crude birth rate per thousand - Annual live births per thousand of mid-year population; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Crude death rate per thousand - Annual deaths per thousand of mid-year population; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.

Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Gross reproduction rate - Average number of live daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1960-60, 1960-70, and 1960 to most recent year.

Population growth rate (%) - urban - Computed like growth rate of total population; different definitions of urban areas may affect comparability of data among countries.

Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.

Age structure (percent) - Children (0-14 years), working age (15-64 years), and retired (65 years and over) as percentages of mid-year population.

Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.

Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.

Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth control devices under auspices of national family planning program since inception.

Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment

Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.

Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.

Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of population.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition

Population per physician - Population divided by number of practicing physicians qualified from a medical school at university level.

Population per nursing person - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.

Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; excludes nursing homes and establishments for custodial and preventive care.

Per capita supply of calories (% of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day; available supplies comprise domestic production, imports less exports, and changes in stock; net supplies exclude animal feed, seeds, quantities used in food processing and losses in distribution; requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household level.

Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day; net supply of food is defined as above; requirements for all countries established by USDA Economic Research Services provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein; these standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.

Death rate (/thou) ages 1-4 - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.

Education

Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education, for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.

Adjusted enrollment ratio - secondary school - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational or teacher training instruction for pupils of 12 to 17 years of age; correspondence courses are generally excluded.

Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.

Vocational enrollment (% of secondary) - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions.

Adult literacy rate (%) - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.

Housing

Persons per room (average) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.

Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.

Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.

Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption

Radio receivers (per thou pop) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

Passenger cars (per thou pop) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita; generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.

Newspaper (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newspaper.

ECONOMIC INDICATORS

	GROSS NATIONAL PRODUCT IN 1974		ANNUAL RATE OF GROWTH (% constant prices)		
	US\$ Mln.	%	1960 -65	1965 -70	1974
GNP at Market Prices	22479	100.0	1.9	4.9	5.6
Gross Domestic Investment	4330	19.3	3.3	11.5	19.2
Gross National Saving	4336	19.3	5.8	5.1	64.8
Current Account Balance	6	0.0	.	.	.
Exports of Goods, NFS	6755	30.0	1.5	7.8	0.5
Imports of Goods, NFS	5527	24.6	0.2	10.9	33.2

OUTPUT, LABOR FORCE AND
PRODUCTIVITY IN 1971

	Value Added ^{1/}		Labor Force ^{2/}		V. A. Per Worker	
	US\$ Mln.	%	Mln.	%	US \$	%
Agriculture	4221	44.8	30.5	69.0	138	65
Industry	1915	20.3	3.0	6.8	638	300
Services	3279	34.9	8.3	18.8	395	185
Unallocated	-	-	2.4	5.4	.	.
Total/Average	9415	100.0	44.2	100.0	213	100.0

GOVERNMENT FINANCE

	Central Government		
	Rp Mln.	% of GDP	
	1974/75	1974	1973
Current Receipts	1759	17.9	15.0
Current Expenditure	1001	10.2	10.8
Current Surplus	758	7.7	4.2
Capital Expenditures	966	9.8	7.3
External Assistance (net)	234	2.4	3.2

MONEY, CREDIT and PRICES

	1970	1971	1972	1973	1974	1975
		(Billion Rp. outstanding end period)				
Money and Quasi Money	330	469	695	987	1452	1776
Bank credit to Public Sector	57	129	58	37	2	29
Bank Credit to Private Sector	306	451	555	936	1126	1837

(Percentages or Index Numbers)

Money and Quasi Money as % of GDP	9.9	12.8	15.2	14.6	14.8
General Price Index(Sept. 1966=100)	612	638	680	891	1253
Annual percentage changes in:					
General Price Index	12.3	4.2	6.6	31.0	40.6
Bank credit to Public Sector	- 5.0	126.3	- 55.0	- 36.2	.
Bank credit to Private Sector	77.9	47.4	23.0	68.6	20.3

NOTE: All conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

1/ Conversion at an exchange rate of Rp. 390 = US\$1.

2/ Total labor force; unemployed are allocated to sector of their normal occupation. "Unallocated" consists mainly of unemployed workers seeking their first job.

.. not available
. not applicable

TRADE PAYMENTS AND CAPITAL FLOWS

BALANCE OF PAYMENTS

	1972	1973	1974
	(Millions US \$) Est.		
Exports of Goods, NFS	1757	2957	6755
Imports of Goods, NFS	1875	3170	5527
Resource Gap (deficit = -)	- 118	- 213	1228
Interest Payments (net)	- 46	- 50	- 106
Workers' Remittances	-	-	-
Other Factor Payments (net)	- 318	- 543	1116
Net Transfers	- 364	- 593	1222
Balance on Current Account	- 482	- 806	+ 6
Direct Foreign Investment	258	290	471
Net MLT Borrowing			
Disbursements	447	624	1072
Amortization	- 70	- 138	231
Subtotal	377	486	841
Capital Grants	..	..	..
Other Capital (net)	181	208	- 628
Other items n.e.i	98	147	..
Increase in Reserves (+)	432	325	690
Gross Reserves (end year)	574	806	1473
Net Reserves (end year)	458	783	1473
Fuel and Related Materials			
Imports	4	4	4
of which: Petroleum	2	2	1
Exports	877	1348	4556
of which: Petroleum	877	1348	4556

RATE OF EXCHANGE

Through July 1971	Since August 1971
US \$ 1.00 = Rp. 375	US \$ 1.00 = Rp. 415
1.00 = US \$ 0.0027	1.00 = US \$ 0.0024

MERCHANDISE EXPORTS (AVERAGE 1972-74)

	US \$ Mln	%
Oil	2260	59.1
Rubber	359	9.4
Timber	513	13.4
Palm Oil	93	2.4
Tin	104	2.7
Coffee	84	2.2
All other commodities	410	10.8
Total	3823	100.0

EXTERNAL DEBT, DECEMBER 31, 1974

	US \$ Mln
Public Debt, incl. guaranteed	5895
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..
<u>DEBT SERVICE RATIO for 1974^{1/}</u>	%
Public Debt, incl. guaranteed	7.7
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

IBRD/IDA LENDING (Mar. 31, 1976) (Million US \$):

	IBRD	IDA
Outstanding & Disbursed	93.8	332.0
Undisbursed	367.2	229.8
Outstanding incl. Undisbursed	461.0	561.8

^{1/} Ratio of Debt Service to Exports of Goods and Non-Factor Services, with oil exports net of factor payments and imports of the oil sector

. . not available

. . not applicable

April 21, 1976

THE STATUS OF BANK GROUP OPERATIONS IN INDONESIA
A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of March 31, 1976)

Loan/ Credit Number	Fiscal Year	Purpose	US \$ Million	
			Amount (less cancellation) Bank	IDA Undisbursed
Three credits fully disbursed			11.0	
154	1969	Highway	28.0	0.2
155	1969	Agricultural Estates	16.0	0.1
165	1970	Electricity Distribution	15.0	0.2
193	1970	PUSRI Fertilizer	35.0	0.0
194	1970	Second Agricultural Estates	17.0	2.2
195	1970	Second Irrigation Rehabilitation	18.5	1.0
210	1971	Telecommunications Expansion	12.8	0.2
211	1971	Fisheries	3.5	0.2
219	1971	Education	4.6	0.4
220	1971	Third Irrigation Rehabilitation	14.5	1.7
246	1971	Seeds	7.5	2.5
259	1971	Tea	15.0	3.8
260	1971	Second Highway	34.0	4.1
275	1972	Third Technical Assistance	4.0	1.0
288	1972	Second Education	6.3	4.7
289	1972	Fourth Irrigation Rehabilitation	12.5	1.8
300	1972	Population	13.2	8.0
310	1972	Development Finance Co. (BAPINDO I)	10.0	1.5
318	1972	Inter-Island Fleet Rehabilitation	8.5	4.3
319	1972	Fourth Agricultural Estates	11.0	6.8
334	1973	Second Electricity Distribution	40.0	15.6
355	1973	Beef Cattle Development	3.6	2.4
358	1973	North Sumatera Smallholder Development	5.0	2.9
387	1973	Third Education	13.5	10.9
388	1973	Third Highway	14.0	6.9
399	1973	West Java Thermal Power	46.0	31.2
400	1973	Smallholder and Private Estate Tea	7.8	7.3
405	1973	Sugar Industry Rehabilitation	50.0	30.3
428	1974	Pulo Gadung Industrial Estate	16.5	14.7
436	1974	Private Development Finance Co. (PDFCI)	10.0	8.2
451	1974	Fourth Technical Assistance	5.0	4.1
479	1974	Bali Tourism	16.0	15.2
480	1974	Fisheries Credit	6.5	6.1
514	1975	Jatiluhur Irrigation Extension	30.0	29.4

(Continued)

<u>Loan/ Credit Number</u>	<u>Fiscal Year</u>	<u>Purpose</u>	US \$ Million		
			<u>Amount (less cancellation)</u>		
			<u>Bank</u>	<u>IDA</u>	<u>Undisbursed</u>
1005	1974	Railway	48.0		46.5
1040	1975	Jakarta Urban Development	25.0		16.8
1049	1975	Five Cities Water Supply	14.5		13.2
1054	1975	Development Finance Co. (BAPINDO II)	50.0		37.2
1089	1975	Second Fertilizer Expansion	115.0		49.5
1100	1975	Sixth Irrigation	65.0		64.4
1127	1975	Fourth Power	41.0		40.8
1139	1976	Fertilizer Distribution	68.0		64.3
1179	1976	Agricultural Research and Extension	21.5		21.5
1197	1976	National Resource Survey and Mapping	<u>13.0</u>		<u>13.0</u>
		TOTAL	461.0	561.8	597.0
		of which has been repaid	-	-	-
			<u>461.0</u>	<u>561.8</u>	
		Amount Sold		0.1	
		of which has been repaid		<u>0.0</u>	
				<u>0.1</u>	
		Total now held by Bank and IDA (prior to exchange adjustment)	460.9	561.8	
			=====	=====	
		Total undisbursed	367.2	229.8	597.0
			=====	=====	=====

a/ Approved in FY 1975 but signed in FY 1976.

STATEMENT OF IFC INVESTMENTS (as of February 29, 1976)

<u>Fiscal Year</u>			<u>US \$ Million</u>		
			<u>Loan</u>	<u>Equity</u>	<u>Total</u>
1971	P.T. Semen Cibinong	Cement	10.6	2.5	13.1
1971	P.T. Unitex	Textiles	2.5	0.8	3.3
1971	P.T. Primatexco Indonesia	Textiles	2.0	0.5	2.5
1971	P.T. Kabel Indonesia	Cable	2.8	0.4	3.2
1972	P.T. Daralon Textile Manuf. Corp.	Textiles	4.5	1.5	6.0
1973	P.T. Jakarta Int. Hotel	Tourism	11.0	-	11.0
1973	P.T. Semen Cibinong	Cement	5.4	0.7	6.1
1974	P.T. Primatexco Indonesia	Textiles	2.0	0.3	2.3
1974	P.T. Monsanto Pan Electronics	Electronics	0.9	-	0.9
1974	P.T. FDFCI	Devlp. Fin. Co.	-	0.5	0.5
1974	P.T. Kamaltex	Textiles	2.4	0.6	3.0
1974	P.T. Semen Cibinong	Cement	5.0	1.5	6.5
		TOTAL	49.1	9.3	58.4
		Less: sold or repaid and cancelled	20.2	1.5	21.7
		TOTAL now held	28.9	7.8	36.7
		<u>Undisbursed</u> (including parti- cipant's portion)	5.4	1.5	6.9

PROJECTS IN EXECUTION 1/

Cr. No. 127: Irrigation Rehabilitation: US\$5 Million Credit of
September 6, 1968; Effective Date: March 25, 1969;
Closing Date: December 31, 1976.

All civil works were completed on March 31, 1976. Additional drainage work will be carried out under Loan 1100-IND. The proposed Irrigation VII Project would provide funds for tertiary development under this project and other on-going irrigation projects. The closing date has been postponed by one year to allow for payment of late accounts. The adequacy and timeliness of operation and maintenance of completed irrigation rehabilitation projects has been recently discussed with the Government. As a result the Government has allocated for operation and maintenance for the present fiscal year an amount double that of last year's budget.

Cr. No. 154: Highways: US\$28 Million Credit of June 20, 1969;
Effective Date: October 2, 1969; Closing Date:
December 31, 1975.

Rehabilitation work, of acceptable quality, has been completed. The work accomplished exceeded the project's original target. The program for improved highway maintenance included in the project has been completed. A project completion report is being prepared for issuance before June 30, 1976.

Cr. No. 155: Agricultural Estates: US\$16 Million Credit of June 20,
1969; Effective Date: December 10, 1969;
Closing Date: December 31, 1976.

With improvements in management and much higher international prices, particularly for palm oil, prevailing in 1974, the financial position of the estate groups has improved. The field and factory standards have now been raised to a good technical level and the managements have been advised to concentrate on cost control in order to prepare for the time when produce prices may become less attractive. The combined efforts of the management, consultants and IDA missions to review project implementation are yielding good results. The closing date has been postponed to December 31, 1976 to enable payment to consultants for services for other rubber estates.

1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

Cr. No. 165: Electricity Distribution: US\$15 million Credit of October 29, 1969; Effective Date: June 1, 1970; Closing Date: December 31, 1975.

The closing date was postponed to December 31, 1975, to allow for payment of small amounts outstanding. The project completion report will be prepared in conjunction with that for Credit No. 334.

Cr. No. 193: PUSRI Fertilizer: US\$35 Million Credit of June 15, 1970 (as amended May 21, 1973); Effective Date: January 15, 1971; Closing Date: December 31, 1976.

The urea plant has successfully passed its performance test and is operating at close to 90 percent of rated capacity. The gas gathering and transmission system is also completed and sufficient gas is being delivered to the plant. The closing date has been postponed to December 31, 1976 to allow for delivery and installation of remaining equipment.

Cr. No. 194: Second Agricultural Estates: US\$17 Million Credit of June 15, 1970; Effective Date: February 9, 1971; Closing Date: June 30, 1976.

After initial delays, there have been considerable improvements in management and these, combined with high prices, particularly for palm oil, have resulted in the two estate groups being put in a much stronger financial position. On the rubber group (PNP IV) more effort is necessary to improve agricultural standards and tapping methods. With the rapid expansion of investment of the palm oil group (PNP VI), there is a need to employ expertise in financial planning, control and management, which are now the main constraints to efficient development. This estate group is undertaking action in this respect. The closing date has been postponed by one year to allow payment for remaining equipment, civil works and consultants' contracts.

Cr. No. 195: Second Irrigation Rehabilitation: US\$18.5 Million Credit of June 15, 1970; Effective Date: December 31, 1970; Closing Date: November 30, 1976.

Problems of quality and progress of construction still exist, but the project entity assisted by the consultants are tackling these vigorously, and the situation is improving, although not sufficiently to make up for earlier delays. Costs are likely to be double the overall appraisal estimate, due to inflation, but the Government will provide any additional funds required. Completion of disbursements will be about two years behind the original schedule.

Cr. No. 210: Telecommunications Expansion: US\$12.8 Million Credit of July 13, 1970; Effective Date: February 18, 1971; Closing Date: June 30, 1976.

The project has been completed except for the installation of the telex exchange at Medan, which is now expected to be in service by

June 1976. The delay in completion of the Medan telex exchange was due to late completion of a building to house the exchange. The closing date of the Credit has been extended up to June 30, 1976, which should be sufficient to allow for payments of outstanding contracts. The audit of financial statements for FY1973 is expected to be completed in May 1976 and efforts are being made to ensure timely audit in future.

Cr. No. 211: Fisheries: US\$3.5 Million Credit of July 13, 1970;
Effective Date: January 15, 1971; Closing Date:
June 30, 1976.

The project is about two years behind the original schedule due to delays in engaging consultants and in executing contracts for the shore facilities. There has been a substantial project cost increase but the project is still expected to be financially viable due to the greatly increased skipjack prices. Government has recently appointed new project management. The first stage of operation of project facilities is expected to start shortly.

Cr. No. 219: Education: US\$4.6 Million Credit of November 6, 1970;
Effective Date: January 29, 1971; Closing Date:
December 31, 1976.

Project implementation in the Department of Education is satisfactory. Civil works for the five Technical Training Centers (TTCs) have been completed. About 90 percent of the equipment has been purchased and about 60 percent delivered and installed. All TTCs will operate at full capacity by January 1976 when the new academic year begins. Over 500 technical teachers have completed or are about to complete their training. Technical assistance financed by the U.K. for the project is also satisfactory. Disbursement has improved considerably. Revised total project cost is now about 40 percent above appraisal estimate. The Government will finance the cost overrun. The project is expected to be completed about three months ahead of schedule.

Cr. No. 220: Third Irrigation Rehabilitation: US\$14.5 Million Credit
of November 6, 1970; Effective Date: May 28, 1971;
Closing Date: June 30, 1977.

Construction remains about two to three years behind schedule. The problems which caused this delay - difficulties in preparation of contract document, late financial allocations, heavy rains in the 1973 construction season and, more recently, slow response by GOI to high inflation rates and consequent civil works costs overruns - have been mainly overcome, but time lost cannot be regained. Estimated project cost is 50 percent above the appraisal estimate, but with higher rice prices on the world market, the project's economic rate of return remains over 20 percent. The closing date has been postponed by 18 months as a result of project delay.

Cr. No. 246: Seeds: US\$7.5 Million Credit of May 19, 1971;
Effective Date: December 7, 1971; Closing Date:
September 30, 1977.

Significant progress has been made in the construction of the irrigation infrastructure and in land development at the National Seeds Corporation (NSC). Construction is proceeding satisfactorily and is now 70 percent completed. The inadequacy of NSC management at the operational level is reflected in technical production problems, low yields of seed and high costs of production. Increasing nation-wide production problems caused by prevalent disease, pests and insect losses has resulted in government authorities now giving certified seed production high priority.

Cr. No. 259: Tea: US\$15 Million Credit of June 24, 1971; Effective
Date: September 17, 1971; Closing Date: June 30, 1978.

Agricultural achievements to date have far exceeded appraisal expectations necessitating construction and rehabilitation of three additional factories. Project completion, estimated for December 1977, can probably be advanced by up to one year. Rising costs are creating pressure on available funds and the main challenge for the two PTPs will be to reduce working capital requirements, as well as overhead and indirect costs, and improve labor productivity.

Cr. No. 260: Second Highway: US\$34 Million Credit of June 24, 1971;
Effective Date: August 10, 1971; Closing Date:
December 31, 1976.

Construction work is about 80 percent finished and should be completed by August 1976, about one and a half years behind schedule. The delay was caused largely by slow progress in mobilizing contractors, difficulties in equipment delivery, heavy rains and landslides. The closing date has therefore been postponed by 15 months to December 31, 1976. Design standards for the road sections have been slightly lowered and some savings have been achieved, which, together with other savings have partly offset construction cost increases of 12 percent.

Cr. No. 275: Third Technical Assistance: US\$4.0 Million Credit of
December 29, 1971; Effective Date: February 25,
1972; Closing Date: December 31, 1976.

Progress on this project is satisfactory. The closing date has been postponed by another year to complete disbursements for ongoing studies.

Cr. No. 288: Second Education: US\$6.3 Million Credit of March 9,
1972; Effective Date: June 7, 1972;
Closing Date: December 31, 1976.

This agricultural training project, being implemented by the Department of Agriculture, is about 16 months delayed because of

late appointment of consultant architects, lack of counterpart funds, delays in bid analysis and in awarding contracts. As a result, civil works, which were to be completed already, have not commenced. Furniture and equipment procurement have therefore been deferred. Unlike the physical aspects of the project, the educational aspects are generally on schedule. Total project costs are now estimated to be 90 percent higher than the original estimate. Government has budgeted for the cost overrun. Disbursement, which has been slow, should improve since civil works contracts have now been awarded.

Cr. No. 289: Fourth Irrigation Rehabilitation: US\$12.5 Million Credit of March 9, 1972; Effective Date: May 5, 1972; Closing Date: June 30, 1977.

Civil Works and equipment purchases for the main project, Pekalen-Sampean, are proceeding but completion of civil works will be about two years behind schedule. Due to inflation, project costs are likely to be substantially higher than appraisal estimates. Consultants for the various studies are at work with their counterparts. Disbursements are also on schedule.

Cr. No. 300: Population: US\$13.2 Million Credit of April 20, 1972; Effective Date: November 2, 1972; Closing Date: June 30, 1978.

Progress of this project is generally satisfactory. Steps are being taken to improve preparation and implementation of project components concerned with communications, research and evaluation. All vehicles have been procured and good progress is being made with equipment procurement. The civil works section of the Project Implementation Unit functions well but is underutilized because of delays in making policy decisions. Construction costs will exceed appraisal estimates by 135 percent. Population Education is now being introduced into school curricula after a successful trial. Despite its limitations, the national family planning program, of which the project is an integral part, is expanding annually and showing good results.

Cr. No. 310: Development Finance Co. (BAPINDO I): US\$10 Million Credit of June 7, 1972; Effective Date: August 10, 1972; Closing Date: December 31, 1976.

This credit is fully committed.

Cr. No. 318: Inter-Island Fleet Rehabilitation: US\$8.5 Million Credit of June 28, 1972; Effective Date: October 19, 1972; Closing Date: September 30, 1977.

Progress on this project is slow but funds are expected to be fully committed by September 30, 1977. Due to substantial cost increases, only about half of the anticipated tonnage will be rehabilitated.

Cr. No. 319: Fourth Agricultural Estates: US\$11 Million Credit of June 28, 1972; Effective date: January 30, 1973; Closing Date: June 30, 1981.

The physical progress of the project is ahead of the appraisal schedule. The financial position of the estate group is difficult due to an unsatisfactory debt/equity ratio. Measures to improve the situation are under review.

Cr. No. 334: Second Electricity Distribution: US\$40 Million Credit of September 29, 1972; Effective Date: March 12, 1973; Closing Date: December 31, 1976.

The Jakarta distribution program financed from Credits 165-IND and 334-IND (together \$55 million) encountered implementation delays due to procurement problems and cumbersome management procedures. As a result the project is two years behind the original schedule. These difficulties have been resolved and recent progress is encouraging. No further delays are therefore expected.

Cr. No 355: Beef Cattle Development: US\$3.6 Million Credit of January 31, 1973; Effective Date: May 30, 1973; Closing Date: March 31, 1980.

Several problems have seriously delayed project implementation. Government's budget allocation has been insufficient; and financial management and coordination have been weak. The last supervision mission undertook a thorough project review and its recommendations, which include major changes in project scope and objectives, are presently under discussion with Government.

Cr. No. 358: North Sumatera Smallholder Development: US\$5 Million Credit of February 14, 1973; Effective Date: August 13, 1973; Closing Date: December 31, 1981.

Project performance, which had suffered from severe financial and organizational difficulties, has improved greatly. Physical progress is encouraging; rubber planting and rice intercropping are now on schedule. There is some room for improvement in financial management, in which consultants are assisting. Total project costs are now estimated at about three times the original estimate of US\$10 million. Disbursements are expected to be completed ahead of schedule.

Cr. No. 387: Third Education: US\$13.5 Million Credit of June 1, 1973; Effective Date: August 29, 1973; Closing Date: December 31, 1981.

The project is about 10 months behind schedule, mainly due to insufficient top management staff and paper shortages last year. The paper

shortage has been overcome and about 32 million text books will be printed by January 1976, about four months behind schedule. Steps are being taken to strengthen project management and to improve arrangements for expert services. Measures to improve project implementation have been discussed and agreed with the Government. The book testing and teacher training programs are on schedule, but their results have not yet been evaluated. Procurement of instructional equipment will be completed by early 1976.

Cr. No. 388: Third Highways: US\$14 Million Credit of June 1, 1973;
Effective Date: June 25, 1973; Closing Date:
June 30, 1977.

Construction work on the two North Sulawesi road sections in the project was started early in 1974 under two contracts and is now 60 percent completed. Construction has been delayed mainly because of long mobilization periods and heavy rains. Project costs will likely exceed original estimates (including contingencies) by 57 percent mainly due to sharply escalated prices. The training program has been completed successfully.

Cr. No. 399: West Java Thermal Power: US\$46 Million Credit of
June 22, 1973; Effective Date: August 28, 1973;
Closing Date: June 30, 1978.

Bids received for the first two 100 mw units at Muara Karang were about 65 percent higher than estimated at the time of appraisal. This, together with construction cost increases, has resulted in an increase in the total project cost of more than 100 percent. Government will provide the additional funds required. PLN has satisfactorily met the initial targets in its financial recovery plan provided for under the terms of the Credit Agreement.

Cr. No. 400: Smallholder and Private Estate Tea: US\$7.8 Million
Credit of June 22, 1973; Effective Date: November 30,
1973; Closing Date: March 31, 1982.

Planting is presently slightly behind schedule but it is expected that targets will be achieved or even exceeded by the end of the 1975/76 planting season. Project nurseries are well organized and field work is proceeding well. Also non-participating farmers have benefitted from the project. Total project costs are estimated to be double the amount originally envisaged and project management is attempting to achieve cost reductions. Due to the high prices for tea (about twice the level expected at the time of appraisal), the economic rate of return is still satisfactory.

Cr. No. 405: Sugar Industry Rehabilitation: US\$50 Million Credit of June 26, 1973; Effective Date: April 22, 1974; Closing Date: June 30, 1979.

In view of the rapid and continuing increase in the cost of sugar factory machinery and the more recent shortage of budgetary funds, the scope of the above-mentioned project has been reduced by the deletion of six minor rehabilitations from the project description. The revised project consists of the major rehabilitation of two factories and the construction of a new factory. Credit funds have been reallocated from the minor to the major rehabilitation and to the new construction.

Cr. No. 428: Pulo Gadung Industrial Estate: US\$16.5 Million Credit of September 14, 1973; Effective Date: November 13, 1973; Closing Date: December 31, 1978.

Of 430 ha earmarked for the project, about 270 ha had been acquired by end 1975, and 108 ha had been developed to readiness for occupation. 42 factories are operating on the estate and 35 more are in various stages of construction or commissioning. The rate of new applications for land allotment has been slower in recent months than in the past, and the estate is intensifying its promotional efforts. Overall, operations are profitable, despite an increase in construction costs.

Cr. No. 436: Private Development Finance Company of Indonesia (PDFCI): US\$10 Million Credit of November 2, 1973; Effective Date: March 6, 1974; Closing Date: December 31, 1978.

After a long start-up period and difficulties in finding and recruiting qualified local staff, PDFCI has now reached the operating stage. Commitments have started and are expected to increase rapidly as PDFCI's own operational capability improves.

Cr. No. 451: Fourth Technical Assistance: US\$5 Million Credit of January 2, 1974; Effective Date: February 15, 1974; Closing Date: December 31, 1976.

Progress under the project is satisfactory.

Cr. No. 479: Bali Tourism: US\$16.0 Million Credit of June 14, 1974; Effective Date: December 4, 1974; Closing Date: August 31, 1979.

Project implementation has improved after initial difficulties. Tender documents for all major infrastructure works were issued in January 1976. The earliest possible completion date has shifted from February 1979 to October 1979. Budgetary allocations as requested by the Bali Tourism Development Corporation for FY76/77 are satisfactory. Negotiations with one group of investors are in progress but otherwise investor interest appears to be low. Promotional efforts to attract additional investors have been intensified in 1976.

Cr. No. 480: Fisheries Credit: US\$6.5 Million Credit of June 14, 1974;
Effective Date: January 8, 1975; Closing Date: June 30, 1979.

Lending for fishponds is now on schedule, and the contract for construction of shore facilities at Ambon has been awarded. There may however be some delays in skipjack vessel construction due to procurement problems. Although significant cost increases are envisaged, the project is still expected to be financially viable because of increases in fish prices.

Cr. No. 514: Jatiluhur Irrigation Extension: US\$30 Million Credit
of October 3, 1974; Effective Date: January 10, 1975;
Closing Date: December 31, 1980.

The consultants are designing works and preparing contract documents. The first civil works contract is expected to be let in August 1976, about one year behind the original schedule.

Loan No. 1005: Railway: US\$48.0 Million Loan of June 14, 1974;
Effective Date: August 16, 1974; Closing Date:
December 31, 1978.

Procurement of material and equipment, which had been slow due to poor organization and inadequate budget allocation, has now improved. Bids have been received for most items and the bulk of the contracts should be signed soon. Passenger traffic in 1975 is slightly lower than in 1974, but still higher than forecast; freight traffic has continued to decline due mainly to poor maintenance and inadequate motive power, which should improve towards the end of 1976. Although tariffs were raised in May 1975, increasing passenger revenues by about 25 percent and freight revenues by about 10 percent, the operating ratio is likely to deteriorate further, as operating costs have continued to rise at a faster rate.

Loan No. 1040: Jakarta Urban Development: US\$25 Million Loan of
September 27, 1974; Effective Date: January 15, 1975;
Closing Date: December 31, 1977.

Progress on the Kampung Improvement Program has been very good; costs were less than estimated, allowing additional work to be undertaken. Execution of the Klender Sites and Services Scheme is one year behind schedule due to disagreements about site boundaries. Most consultant contracts commenced early in 1976.

Loan No. 1049: Five Cities Water Supply: US\$14.5 Million Loan of
October 31, 1974; Effective Date: May 21, 1975;
Closing Date: June 30, 1980.

Due to administrative and managerial problems the project is running 8-10 months behind schedule. This delay together

with higher rates of inflation than anticipated is expected to increase project costs 20-25 percent above the appraisal estimate. Water Enterprises have now been established in each of the five cities and good progress has been made in their staffing. The anticipated interdepartmental decree which would govern the relationship of the Water Enterprises to the Central Government's Directorate of Sanitary Engineering has not been issued; it is now proposed to clarify this relationship in a Presidential Decree which is being drafted.

Loan No. 1054: Development Finance Co. (BAPINDO II): US\$50 Million Loan of November 20, 1974; Effective Date: January 14, 1975; Closing Date: December 31, 1978.

Commitments and disbursements initially were slower than expected, but they should increase in the second half of FY76. The progress of this project is satisfactory.

Loan No. 1089: Second Fertilizer Expansion: US\$115 Million Loan of February 28, 1975; Effective Date: April 29, 1975; Closing Date: August 31, 1978.

Work on the PUSRI III project is proceeding according to schedule. Work on the related gas pipeline is experiencing delay, but steps are being taken to expedite implementation.

Loan No. 1100: Sixth Irrigation: US\$65 Million Loan of April 10, 1975; Effective Date: June 20, 1975; Closing Date: June 30, 1982.

Consultants for the project and technical assistance advisors have been selected. Construction work is about five months behind schedule due to the delay in selection of consultants.

Loan No. 1127: Fourth Power: US\$41 Million Loan of June 17, 1975; Effective Date: October 23, 1975; Closing Date: June 30, 1980.

The options for a third 100 MW unit at Muara Karang, which were included in the tenders for the first two units financed under Credit 399, have been exercised. The project is on schedule and expected to be completed during 1978.

Loan No. 1139: Fertilizer Distribution: US\$68 Million Loan of July 10, 1975; Effective Date: August 28, 1975; Closing Date: December 31, 1978.

Progress design is satisfactory. About 60 percent of the equipment and materials required for the project have been ordered.

Loan No. 1179: Agricultural Research and Extension: US\$21.5 Million Loan of December 19, 1975; Effective Date: February 23, 1976; Closing Date: December 31, 1981.

This loan became effective on February 23, 1976.

Loan No. 1197: National Resource Survey and Mapping Project: US\$13.0 Million Loan of February 5, 1976; Effective Date: April 2, 1976; Closing Date: December 31, 1981.

This loan became effective on April 2, 1976.

Loan No. 1236: Fourth Highway Project: US\$130 million Loan of April 15, 1976; Closing Date: December 31, 1980

This loan is expected to become effective on August 13, 1976.

Loan No. 1237: Fourth Education Project: US\$37 million Loan of April 15, 1976; Closing Date: December 31, 1980.

This loan is expected to become effective on July 14, 1976.

INDONESIA: THIRD FERTILIZER EXPANSION PROJECT: PUSRI IV

LOAN AND PROJECT SUMMARY

Borrower: Republic of Indonesia

Beneficiary: P.T. Pupuk Sriwidjaja (PUSRI)

Amount: \$70 million equivalent

Terms: 15-1/2 years, including 3-1/2 years of grace with interest at 8-1/2 percent per annum.

Relending Terms: The Government would onlend the loan proceeds to PUSRI at the same repayment term, but at an interest rate of 12 percent per annum. The Government would bear the foreign exchange risk.

Project Description: The detailed engineering, construction and start-up of a fertilizer plant at Palembang, Sumatera, to manufacture about 1,000 TPD (tons per day) of ammonia and 1,725 TPD of urea; training of PUSRI's staff and staff employed in the national fertilizer industry in Indonesia in the operation and maintenance of plant, as well as in financial and accounting procedures. The plant's facilities would include:

1. a single-train ammonia unit with a capacity of about 1,000 metric tons per day;
2. a single-train urea unit with a capacity of about 1,725 metric tons per day;
3. a natural gas pre-treatment section;
4. the usual off-sites and auxiliaries required to support such plant, including, inter alia, an ammonia storage tank, urea storage and loading facilities, cooling towers, water treatment facilities, a 15 MW gas turbine power generator, a bag making plant and expansion of the existing jetty.

The project is part of a larger program which will also include the development of a gas gathering and distribution system and a fertilizer distribution facility.

Estimated Cost:

Summary of Capital Costs

	In Rp billion			\$ million			%
	Local	Foreign /a	Total	Local	Foreign /a	Total	
Equipment and Spares /b	2.1	34.6	36.7	5.0	83.2	88.2	62.8
Duty and Taxes /c	-	-	-	-	-	-	-
Erection	2.0	-	2.0	4.8	0.1	4.9	3.2
Civil Construction	1.8	2.4	4.2	4.3	5.8	10.1	7.2
Engineering Services & Project Management /d	0.5	10.9	11.4	1.2	26.3	27.5	19.6
Preoperating and Start-up Expenses /e	1.6	1.3	2.9	3.9	3.0	6.9	4.9
Jetty	0.1	0.4	0.5	0.2	1.1	1.3	0.9
Housing	<u>0.5</u>	<u>0.1</u>	<u>0.6</u>	<u>1.4</u>	<u>0.1</u>	<u>1.5</u>	<u>1.1</u>
Base Cost Estimate (BCE)	8.6	49.7	58.3	20.8	119.6	140.4	100.0
Contingencies: Physical Price	0.7	3.3	4.0	1.8	8.0	9.8	7.0
	<u>0.7</u>	<u>2.1</u>	<u>2.8</u>	<u>1.6</u>	<u>5.1</u>	<u>6.7</u>	<u>4.8</u>
Installed Cost	10.0	55.1	65.1	24.2	132.7	156.9	111.8
Incremental Working Capital	<u>2.7</u>	<u>0.5</u>	<u>3.2</u>	<u>6.5</u>	<u>1.3</u>	<u>7.8</u>	
Project Cost	12.7	55.6	68.3	30.7	134.0	164.7	
Interest During Construction	<u>4.3</u>	<u>4.6</u>	<u>8.9</u>	<u>10.3</u>	<u>11.0</u>	<u>21.3</u>	
Total Financing Required	<u>17.0</u>	<u>60.2</u>	<u>77.2</u>	<u>41.0</u>	<u>145.0</u>	<u>186.0</u>	

/a Including indirect foreign exchange requirements of about \$1.0 million equivalent.

/b c.i.f. cost at plant site.

/c Exempt from duty and taxes

/d Including \$1.4 million for bonus for contractors for project completion ahead of schedule.

/e Including \$0.9 million for training services.

Financing Plan:

	<u>\$ Million</u>
Bank Loan	70.0
Saudi Fund for Development Loan	70.0
Government's equity contribution	<u>46.0</u>
Total	<u>186.0</u>

Estimated Disbursements of Bank loan:

Calendar Year	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Annual	39.0	26.5	4.1	0.4
Cumulative	39.0	65.5	69.6	70.0

Procurement Arrangements:

International competitive bidding (ICB) procedures in accordance with Bank guidelines are being used -- independent of the source of financing -- for equipment and materials estimated to cost about \$80 million including escalation. Proprietary equipment essential to the process and items in limited supply, which are estimated to cost together about \$11 million and are critical to the timely completion of the project, are being procured following bidding from lists of qualified suppliers, which have been approved by the Bank. In addition, standardized items worth \$14 million will be procured from the same suppliers as for PUSRI III. Items costing less than \$50,000 equivalent each, and totalling about \$1 million are being purchased from suppliers on the basis of suitability, availability and price. The list of items falling into this category has been approved by the Bank. A preference of 15 percent or the customs duty, whichever is lower, will be allowed to Indonesian manufacturers for the purpose of evaluating international competitive bids. Bid evaluation will be PUSRI's responsibility with the assistance as required from the engineering firms contracted, Kellogg Overseas Corporation (U.S.) and Toyo Engineering Corporation (Japan), and the Technical Advisor, Scientific Design (U.K.). To expedite deliveries PUSRI has assigned its procurement officers to the main offices of the two engineering firms, in Houston and Tokyo.

Technical Assistance:

Kellogg Overseas Corporation will have over-all responsibility for construction, erection and start-up of the complete fertilizer plant which will be supplied as follows:

- (a) the ammonia plant and all offsites and auxiliaries are being designed and procured by Kellogg; and
- (b) the urea plant is being designed by Toyo Engineering Corporation which will procure the equipment for shipment to the plant site ready for erection by Kellogg.

Rate of Return:

28.6 percent.

Appraisal Report:

No. 998-IND dated April 21, 1976
Industrial Projects Department

