

Document of  
**The World Bank**  
**FOR OFFICIAL USE ONLY**

**Report No. P-1885-IND**

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  
TRANSMIGRATION AND RURAL DEVELOPMENT PROJECT

June 25, 1976

**This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.**

### CURRENCY EQUIVALENTS

Currency Unit	=	Rupiah (Rp)
Rp 415	=	US\$1
Rp 1	=	US\$0.002
Rp 1,000,000	=	US\$2,410

### GLOSSARY OF INDONESIAN TERMS

Agraria	- Directorate General of Agrarian Affairs
BAPPENAS	- National Development Planning Agency
BIMAS	- Bimbingan Massal (a farm input-credit package program)
BRI	- Bank Rakyat Indonesia
BUUDS/KUDS	- Agricultural Cooperatives
Bina Marga	- Directorate General of Highways
Desa	- Village
DGT	- Directorate General of Transmigration
Dukuh	- Sub-village grouping of 25-30 houses
Gotong-royong	- Community Self-Help Project
Hak Pakai	- Individual's right of use or exploitation of assigned land
Hak Milik	- freehold title
INPRES	- Provincial Public Works Program
Kabupaten	- Rural District Government
Marga	- Community grouping under Adat Law

### GOI Fiscal Year

April 1 - March 31

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE  
EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO THE  
REPUBLIC OF INDONESIA FOR A  
TRANSMIGRATION AND RURAL DEVELOPMENT PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Indonesia for the equivalent of US\$30 million to help finance a Transmigration and Rural Development Project. The loan would have a term of 25 years, including six years of grace, with interest at 8.85 percent per annum.

PART I - THE ECONOMY

2. The latest economic report on Indonesia "Public Sector Investment and Financial Resources in Indonesia" of May 24, 1976 (1187-IND) evaluated and analyzed Indonesia's public sector investment program in relation to the resource availabilities in the next three years. Country data are shown in Annex I.

3. In most respects, Indonesia's economic performance over the last several years has been impressive. GNP growth has averaged 7.5 percent despite the ups and downs of the international economy, to which Indonesia, being an open economy, is vulnerable. The rate of investment and national savings have risen rapidly, and were both around 19 percent of the GNP in 1974. Net foreign transfers have correspondingly declined as a proportion of GNP. Agriculture output has expanded at an average rate of 4 to 5 percent (with rice production expanding in step), which must be regarded as one of the most satisfactory agricultural growth rates in the region. Modern industry has been set up, and production of fertilizer and cement is expanding at a rate so that within the next two or three years, the country is expected to be self-sufficient. Transport, power and telecommunication systems and other infrastructure have been improved and strengthened. In short, in its third year of the Second Development Plan (1974-79), Indonesia's economy is basically robust and provides a sharp contrast to the situation less than a decade ago.

4. Indonesia, however, is still a very poor country. The increase in oil income due to successive price increases in the past few years, though substantial and valuable, amounted only to about \$20 per capita. The population growth rate, with a declining death rate, is rising and is currently estimated at 2.5 percent, and population pressure on Java has been growing. Substantial new employment opportunities have been created but much more needs to be done to provide employment to new entrants into the labor force and to reduce the existing unemployment and underemployment. General nutrition standards have probably improved, but real wage rates for unskilled

labor are still among the lowest in the region, and have shown only a modest improvement. The Government is committed to the alleviation of these problems. Projects to develop the Outer Islands, ameliorate the lot of the poor farmers, encourage self-help in rural development and improve general living conditions are receiving the Government's closest attention. Compared to the First Development Plan (1969-74), the strategy in the Second Plan is much more socially oriented. However, resources devoted to such projects are still quite small.

5. The country's resource position, balance of payments and the Government's budgetary situation have been dominated in the last two to three years by the developments in the oil sector. First, there were the successive increases in the price of oil in 1973 and 1974, which resulted in its quadrupling to \$12.60 per barrel within a matter of months. With this increase, by mid-1974 the balance of payments and budgetary position of the Government appeared to have improved substantially. A large increase in the foreign exchange reserves and, for the first time, in 1974/75 <sup>1/</sup> a substantial budget surplus amounting to Rp. 325 billion (about \$800 million) were anticipated.

6. In the course of the year, the Government adjusted its expenditure plans. Most items in the development budget were revised upwards, some very substantially, to utilize the prospective surplus. On the current expenditure side, a large and needed increase in the civil servants' salaries was allowed. Over the first six months of the fiscal year, the country's foreign exchange reserves registered an increase of \$650 million from a level of \$930 million at the start of 1974/75.

7. In October 1974, however, 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. With the initial signs of a recession, monetary institutions in the industrialized countries became restrictive, credit became more difficult to obtain and PERTAMINA began experiencing serious financial problems. 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 to stem an incipient crisis and took decisive action. It banned all independent foreign borrowing by PERTAMINA and other public 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

---

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

many of the related procurement contracts. In the course of 1975, the Government also initiated the reorganization of the oil company, and in March 1976, replaced its top management.

8. At about the same time, the recession in the industrialized countries began to affect petroleum consumption, and oil sales from Indonesia began to suffer. Non-oil exports, particularly those of timber and rubber, also began to decline. The volume of oil production (domestic consumption being relatively small) declined sharply, to less than 1.3 million barrels per day (bpd) compared to 1.45 million bpd in the first six months of 1974. In the 1974/75 fiscal year, there was a shortfall of about \$200 million in net oil exports from the levels projected early in the year, and non-oil exports failed to increase at all.

9. These two factors combined to create considerable financial difficulties for the Government of Indonesia. The foreign exchange reserves gained in the first half of the year were lost in the second; by March 31, 1975 these reserves had declined to the level of a year earlier (i.e. \$920 million). On the domestic front, the Government, after the promise of a very large expansion in development expenditures, had once again to revise its plans, this time downwards. A substantial part of the expenditure authorizations for the 1974/75 budget had to be carried over into the next fiscal year, and some other expenditures, relating mainly to subsidies on fertilizer and rice, had to be financed through Bank Indonesia credit. 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 amounted to Rp. 770 billion (\$1.9 billion), about 60 percent higher than the level in the previous year (about 20 percent in real terms).

10. In the first half of 1975/76, Indonesia's foreign exchange reserves declined by a further \$480 million, despite substantial capital inflows, which included two syndicated public 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 percent on an annual basis). Debt service payments on behalf of PERTAMINA were also very large (about \$1 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 \$360 million.

11. Public sector investments continued to rise rapidly in 1975/76. The Government's development expenditures amounted to over \$3 billion (Rp. 1.27 trillion), including foreign project financing totalling \$925 million and fertilizer subsidies amounting to \$320 million. This is more than two and one-half times the expenditure in 1973/74; when adjusted for

price changes it still represents an increase of about 60 percent. A further increase of 50 percent in development expenditures is budgeted for 1976/77.

12. The resources for the Government's own investment plans (excluding government-owned enterprises) have been so far adequate. However, as stated above, the Government has had to borrow over \$1 billion on commercial terms and has had to divert substantial additional financial resources to completing PERTAMINA investment projects which could not be economically reduced further or abandoned. A considerable share of these investments was also financed through domestic credit expansion. Despite a substantial decrease in foreign exchange reserves, overall liquidity increased by over 40 percent, which in turn contributed to domestic inflation at the rate of 20 percent in 1975/76, a rate higher than that prevailing in Indonesia's principal trade partners and competitors.

13. The recent financial difficulties will affect Indonesia'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 large commercial borrowings in 1975 and 1976 (most but not all of which related to PERTAMINA's obligations and projects) by the Government. Debt service in 1976 is now estimated at about \$800 million, which would be about 14 percent of the value of projected exports, with oil exports on a net basis, i.e. net of foreign costs of production and distribution and foreign investment income. Debt service payments on all loans contracted up to December 31, 1975 is likely to reach \$1.25 billion by 1978, before declining as shorter-term maturities are paid off. This excludes obligations contracted by PERTAMINA on account of oil tankers which are currently being renegotiated. This enlarged debt service will, in future years, sharply reduce net resource transfers which were of the order of \$500-600 million in 1973 and 1974, and between \$1 and \$2 billion in 1975 and 1976. To keep the debt service burden manageable, recourse to medium-term commercial borrowing in the next few years will, therefore, have to be kept to a minimum, and certainly much below the 1975 and expected 1976 levels.

14. Confronted with these problems the Government has taken a series of important, far-reaching and difficult decisions. It has decided that foreign borrowing must be cut back sharply from the 1976 projected level of about \$3.4 billion to about \$2 billion in each of the years 1977 and 1978 before being allowed to rise again to about \$3 billion in 1980. With a view to keeping the debt service burden manageable, it aims to effect most of the reduction through a sharp cut in the least concessionary borrowings, especially in the early years. On these assumptions, the debt service ratio is expected to reach 18.5 percent in 1980 and 16 percent in 1985.

15. In view of the expected sharp decline in the net foreign resource transfers, the Government has also decided to increase domestic revenues in the next few years much faster than was originally contemplated and to levels much higher than those likely to result from a mere continuation of the existing tax policies and procedures. The Government also plans to reduce selectively the aggregate size of the proposed public sector investment program. A substantial part of this reduction has already been achieved

by reductions in, and replanning of, the scope and cost of some PERTAMINA projects and by deferment or elimination of others. Further such reductions are planned and renegotiation of the existing contracts is in progress. These actions are aimed at shifting the balance of the public sector investment program back towards a greater emphasis on directly improving the income earning opportunities, productivity and living conditions of the mass of the population.

16. While the recent balance of payments and budgetary difficulties have forced changes in many of the public sector plans, the balance of payments position in 1976/77 is likely to be much better than in the recent past and the long-term prospects for Indonesia's development remain 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 has succeeded in negotiating a further increase in its share of the oil income. The rice stocks are normal and 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.

17. The country has a substantial potential for 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. promise 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 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.

## PART II: BANK GROUP OPERATIONS IN INDONESIA

18. Part I of this Report emphasized Indonesia's plans for and the need to undertake an 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; increase productivity by improving nutritional levels; assist transmigration and other land development in the Outer Islands; 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.

19. As of May 31, 1976, Indonesia had received 37 IDA credits totaling \$561.8 million and fifteen Bank loans amounting to \$842 million. At that date, IFC investments totalled \$58.4 million. At the end of 1974 the Bank 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. The Bank has in the past financed some of the local costs of projects in Indonesia. A limited amount of such financing will continue to be necessary in connection with Bank assistance to the agriculture and social sectors, where projects frequently have a low foreign exchange component. A summary statement of IDA credits, Bank loans and IFC investments as of April 30, 1976, as well as notes on the execution of ongoing projects are contained in Annex II. This is the tenth loan proposed for Indonesia this year and, if approved, would bring total IBRD commitments since June 30, 1975 to \$547 million.

20. To date, agriculture accounts for just over one-third of all Bank/IDA lending to Indonesia, including four projects for estate rehabilitation, six for rehabilitation and expansion of irrigation systems, two for fisheries, and one each for seeds, beef cattle, sugar, agricultural research, food crops extension and smallholder tea and rubber. In the industrial sector, the Bank Group has assisted in four 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.

21. Bank 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 now 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.

22. This would be the twelfth Bank Group assisted project in support of agricultural development in the Outer Islands of Indonesia. Three of these projects concentrated mainly on the rehabilitation of government-owned rubber and oil palm estates in Sumatera and one was designed to test alternative approaches to the development of smallholder rubber in North Sumatera. Other Bank assisted projects with major impact on agriculture development activities in the Outer Islands are a beef cattle development project in South Sulawesi and Sumba; an agriculture research and extension



project with rubber research facilities located in Sumatera; two projects for irrigation development in Lampung and South Sulawesi; two projects for fisheries development in North Sulawesi and Ambon; and a resource survey and mapping project which, inter alia, would inventorize and evaluate land resources available for agriculture and land settlement in the Outer Islands. Highway, shipping and education projects have also supported the development of the rural economy of the Outer Islands.

### PART III: TRANSMIGRATION IN INDONESIA

#### Need for a Transmigration Program

23. Indonesia has a population according to the most recent estimates of about 130 million, which is projected to increase by nearly 2.5 percent per annum through 1986 and at the rate of 2.4 percent thereafter. Population distribution in the archipelago has been strongly influenced by soil fertility. About 75 million, or over 60 percent of Indonesia's population, live on Java which has less than 7 percent of the total land area; the resulting density of over 600 per square km is one of the highest among the world's agricultural countries. About 62 million, or over 83 percent of the Javanese population, live in rural areas. The population of Java is expected to increase by 1990 to about 120 million, of whom nearly 90 million will be in the rural areas; and the rural labor force of about 27 million is projected to increase to about 34 million. Even an accelerated decline in fertility is not expected to affect these projected increases materially. Two-thirds of the total Indonesian population is employed in agriculture, which is the mainstay of the Indonesian economy, accounting for about 40 percent of GDP.

24. The central problems of the economic development of Indonesia are an overpopulated Java, scarcity of fertile land and low levels of productivity. Indonesia has to create productive employment for those now unemployed and underemployed on Java, and to absorb the rapid expansion of its labor force; it has to also increase agricultural production, essentially rice, to feed the increasing Javanese population at adequate levels of nutrition. All land with agricultural potential on the Inner Islands of Java, Madura and Bali has been brought under cultivation. Over 40 million, or over two-thirds of the rural population on Java, operate fragmented, uneconomic holdings; the landless and near landless have been roughly estimated at one-third of the rural labor force. A great majority of the Javanese rural population cannot, therefore, support themselves on farm incomes and must rely on off-farm employment, mainly as laborers. The greater part of the rural labor force is utilized at an extremely low level of productivity. The problem is not one of outright unemployment but of substantial underemployment leading to continuing and widespread rural poverty, a problem which the Government has pledged to tackle in the Second Development Plan (1974-79).

25. Concerted efforts have been made over the First Development Plan period (1969-74) to increase rice production on Java. These efforts have importantly included the rehabilitation and extension of irrigation systems, the introduction of improved varieties and promotion of the use of fertilizer, pesticides and disease control measures through the BIMAS program and subsidization of imported fertilizer under this program, pending the development of more economic domestic output. These efforts have had considerable success in increasing rice output, and continuation and reinforcement of appropriate policies directed toward intensive smallholder cultivation of land in the Inner Islands could yield further, even accelerated, growth in output in the coming years. However, the adoption of new technology in rice production and processing, including a measure of selective mechanization is beginning to have adverse consequences on the already precarious employment situation in Javanese agriculture, where labor use in rice production has been historically more than twice that of the Outer Islands. The employment situation has been worsened further by the increasing commercialization of peasant agriculture and its impact on the traditional Javanese system of production, which gave every villager the right to participate in agricultural production and hence in income. Consequent social changes and new relationships in the villages, have combined with increasing pressure on agricultural land and limited off-farm employment opportunities to promote an inflow of people into Java's larger cities in search of employment and a better livelihood. These trends indicate clearly that the capacity of agriculture on Java to absorb more labor is reaching its limits and that the creation of job opportunities outside agriculture in the Inner Islands and the expansion of agricultural and other production in the Outer Islands are of major importance to help resolve what have been described earlier as the central problems of Indonesia's economic development.

26. Indonesia has sufficient resources of raw materials and energy and a large population which provides a potentially good internal market to help undertake the rapid development of labor-intensive manufacturing industries. Yet per capita incomes are very low and the bottom 40 percent of the population are still well below the poverty level. Therefore, the development of industries and the concomitant growth of the service sectors is not likely to create employment opportunities on a scale that would absorb the substantial increase in the labor force together with the presently underemployed Javanese rural population. Much of the growth in demand resulting from Indonesia's development will be for food and other agricultural produce. Productive income-earning opportunities in agriculture must, therefore, continue to expand and help achieve self-sufficiency in food, which is one of the major objectives of the Government, as well as increase agricultural exports.

27. There are significant opportunities in the Outer Islands for the expansion of agricultural production to meet the above-mentioned needs of a growing population at higher standards of living, for creating employment opportunities to absorb the increasing labor force and to reduce the pressure on land in the Inner Islands. The agricultural potential of the Outer Islands, where land scarcity is less of a problem, could be developed for subsistence

farming of food crops and for tree crops. At present their productivity is limited by sparse population, lack of infrastructure, relatively poor soils and the absence of an appropriate food crop technology.

#### History of Transmigration

28. The Government recognizes that the effective encouragement and organization of transmigration -- the organized relocation of people from the Inner Islands to the Outer Islands -- is important for the resolution of the foregoing problems confronting Indonesia's economic development. The Government views transmigration as a means of providing the landless and other rural poor of the Inner Islands with land assets which offer the opportunity over time for productive labor and increasing income. Official transmigration dates back to 1905, when the Dutch colonial administration attempted to alleviate population pressure in parts of Java by colonization of the Outer Islands. Due to a variety of problems detailed later, many returned to Java; the Government also had to compete with plantation companies which were recruiting labor for the Outer Islands. The movement gathered momentum in the 1930's due partly to the severe economic depression and partly to the better organized recruiting campaigns in Java. The earlier settlements were generally based on irrigated rice lands and heavy reliance was placed on already established settlers helping the transmigrants.

29. Soon after the Second World War, migration out of Java resumed but reliable data is lacking on officially sponsored relocation in the Outer Islands. Conditions in the settlement areas of Sumatera had worsened through poor maintenance of irrigation systems, poor choice of crop, use of inappropriate technology and the resulting deterioration in soil fertility. In the 1950s about 227,000 people (56,000 families) were settled under the program. In 1962 and 1965, 32,000 people from Bali and 53,000 from Java (of whom half came from Central Java), were moved following natural calamities. However, due to budgetary constraints and the Government's desire to establish more successful but also more costly settlements, it is reported that transmigration was reduced to about 197,000 people (47,000 families) in the 1960's. It must be noted that historically there has also been a substantial flow of migrants in the opposite direction, i.e. from the Outer Islands to Java.

30. The Government desires to step up the transmigration program to maximize its contribution to the alleviation of the problems of overpopulation and rural poverty on the Inner Islands. The target for transmigration during the First Development Plan period (1969-74) was set by the Government at 100,000 families and for the Second Development Plan period (1974-79) at 250,000 families. However, 40,500 families were actually settled during 1969-74 and about 7,000 families during the first year of the Second Plan. As the land available for transmigration increasingly requires the more difficult establishment of settlements on uplands or tidal lands, the Government has come to recognize its limited capability to plan and execute such schemes as an important constraint to the implementation of a larger transmigration program commensurate in size with both Indonesia's rural and regional development needs. The target for the Second Plan period was reduced in 1975 to 100,000 families and was more recently revised again to about 87,000 families.

It is now estimated by the Government that 8,000 families will be settled in 1975/76, 22,000 in 1976/77 and 25,000 in each of the following years. The total cost to the Government of the settlement program amounted to \$23.5 million during 1969-74 and is estimated to cost \$324 million during 1974-79.

#### Problems Confronting Transmigration

31. Government settlement schemes in the Outer Islands have had limited success in providing migrant families with improved incomes. In Kalimantan, development is hindered by poor access and rather infertile soils; in Sumatera and Sulawesi most fertile uplands (as distinct from swamp or tidal lands) suitable for irrigated rice production and rain-fed annual crops have now been occupied. Although farm sizes and cropping plans were based primarily on wet paddy, between 1950-65 few new irrigation works were constructed in Sumatera forcing the migrants to practice dry rice (rain-fed) cultivation. The uplands which remain for transmigrants are mostly covered by podsollic soils which possess lower levels of inherent fertility, than the rich, volcanic soils under cultivation in the transmigrants' areas of origin. Many of these upland areas are or have been under shifting cultivation because, under traditional technology, they cannot sustain continuous and economic annual cropping. These problems have been compounded by the process of land selection used in the past for transmigration, under which lands of poor productivity were often identified by the local communities for alienation to transmigrants. Within the limits of present agricultural knowledge, tree crops such as rubber and oil palm, requiring substantial capital investment, offer the main basis for continuous utilization of these soils over large areas. However, a solution to the technical problems of sustained food-cropping on low fertility upland soils may well be found to meet the subsistence requirements of settlements based on slow-maturing tree crops, to avoid settlers' dependence on export crops subject to steep price fluctuations and to help formulate a transmigration program Indonesia can afford.

32. The agro-ecological factors described above, together with serious neglect in providing supporting infrastructure, have combined to reduce farm output in many existing settlements dependent on field crops to a level which is inadequate to sustain a farm family. Many existing settlements have suffered not only from low productivity following soil exhaustion, which left little cash income, but also from isolation from market and population centers.

33. The sociological impact of settling transmigrants on land alienated to the Government from the communal lands of the indigenous population has been substantial on both, because the social and economic organization and cultural pattern in the new environment are different from that of the Javanese settlers. The settlers tend to isolate themselves from the community and maintain their Javanese identity, thereby complicating the integration of the settlements into the Sumateran community, culture and political framework. These attitudes tended to create settler enclaves which have found it difficult to obtain from Local Governments representing the interests of the indigenous population, equal consideration in the allocation of social

services and physical amenities; this in turn has tended to reduce the potential contribution of transmigrant settlements to sound and broad based regional development efforts. However, in funding the local labor-intensive public works program (INPRES), priority has recently been accorded to transmigration districts in recognition of their greater need for improved social infrastructure.

34. The enclave nature of the settlements has been accentuated by their management remaining with the Directorate General for Transmigration (DGT) for 10 to 15 years, instead of reverting to the District Government's (Kabupaten) control at the end of the minimum five-year period laid down by law. This is because the settlements have not become viable within that period. The program preparation, implementation and coordination capacity of DGT needs considerable improvement in order to overcome agricultural and social constraints as well as give the technical support necessary to develop viable settlement plans and the intra-governmental coordination required to implement each settlement project successfully. Successful implementation calls for a high level of technical competence and leadership among project managers to enable them to deal with the complex problems associated with new settlements. Efficient development of the land now available for settlement requires a determination on the part of the Government to improve levels of social, physical and on-farm infrastructure relative to past standards.

#### PART IV: THE PROJECT

##### Project Formulation - General Considerations:

35. The project, which consists of the establishment of a new 4,500 family settlement, upgrading of an existing 12,000 family settlement and technical support for design and implementation of future programs, has been formulated to test possible solutions to the problems and constraints outlined in Part III. Care has been taken to design the project to test for replicability on a larger program scale. Partly for this purpose, project design and implementation rely substantially on existing Government agencies and services. It has been recognized that planning, coordination and implementation of settlement schemes require a capacity not presently available in DGT. The proposed project would therefore test the feasibility of DGT using a number of specialized contractors, which are other Government agencies, semi-autonomous organizations, domestic or foreign enterprises, and consultants, for planning and implementing phases of the settlement program. Efforts to strengthen and improve DGT would focus primarily on establishing the management capability for selecting, directing and coordinating the planning and implementation process.

36. New Settlement: The objective of minimum investment cost requires that new settlement design rely on community self-help (gotong-royong) for physical infrastructure and for social services. A sense of community would be deliberately fostered and market development encouraged by using a village design based on the traditional cluster of 20-25 houses (dukuh) allowing each settler family to live on or close to his land cultivated with food crops,

and have a separate rubber allotment within about 1.5 km of the dukuh. Similarly, a community-based health care delivery system has been designed for the project area to encourage maximum settler participation through the development of village health committees, which would serve as a test for low-cost rural health systems elsewhere in the country.

37. Initial on-farm investments by the Government have been limited to the minimum levels required to assist the settlers in the early years. However, the size of the land grant and the agricultural supporting services to be provided will ensure that the settler, through his own investments and effort, can improve and enlarge his income earning base. Accordingly, the proposed land grant, farm plan, agricultural support services and the level of grant aid provided to each settler family for farm establishment were determined by several important considerations: (a) the land grant should afford the settler family the opportunity for self-sustained growth of per capita income roughly in line with the projected growth of Indonesia's agricultural sector; (b) following the Government's decision that the investment cost should not be recovered from transmigrants, the grant aid provided to the settler should be minimized, by reliance on appropriate term lending and support services programs for subsequent on-farm development; (c) the settlement project as a whole should be economically viable and the economic rate of return should be not less than 10 percent; and (d) the farm unit should be viable even if the expectation that food cropping can contribute one-fourth to one-third of family income should prove too optimistic.

38. Based on these considerations, the new settlement at Baturaja would provide each settler family a land grant of 5 ha, out of which an allotment of 1 ha of block-planted rubber will provide regular income and employment. Each family will have sufficient land to grow food crops and the option to convert food crop land to tree crops using credit at a later date. In addition to the establishment of a small, intensively cultivated house garden (0.2 ha), the basic farm plan envisages the necessity for each family to practice annual food cropping through an input-intensive adaptation of the traditional rotation system on low fertility soils, annually utilizing about 0.5 ha of land in a total area of 2 to 3 ha. Cattle would have to be introduced into this rotation farming system to provide draft power and to improve soil fertility of the garden plot. The annually fallow 1.5 - 2.5 ha would be planted to a legume fodder crop to produce cattle feed and improve soil fertility.

39. The participation of the settler in the development of his farmstead would be enlisted and protected by issue of a certificate of exploitation (Hak Pakai) within three months of settlement to the house lot and within one year to the farm land, followed by full ownership (Hak Milik) within five years to the house lot and farm land and full ownership within six years to the rubber land. Assurances to this effect have been obtained from the Government (Section 3.12 (a) of the draft Loan Agreement). PNP X, <sup>1/</sup> a specialist organization in rubber development, would contract with DGT to clear the land, plant,

---

<sup>1/</sup> A Government-owned rubber and oil palm estate group operating in South Sumatra and Lampung Provinces and assisted by Credit 319-IND (Fourth Agricultural Estates Project).

fertilize and maintain the rubber plantations during the crucial first six years of development, supervise and train the settlers in all aspects of rubber planting, management and exploitation and also create employment for them during the development period. It is expected that depending upon the productivity of the food cropping system, settlers may move towards the loan-financed establishment of additional tree crops as the block-planted rubber comes into tapping and improves their creditworthiness. Food cropping in the new settler allotments would be assisted by the usual Government agricultural support services in rural areas including agricultural credit and extension (BIMAS program), agricultural cooperatives (BUUD's/ KUD's), product processing and marketing, supplemented in the initial years by DGT because of the crucial importance of these services for settler welfare and the long-term viability of the scheme. Assurances were obtained from the Government that village units of Bank Rakyat Indonesia (BRI) would be established by July 1, 1977 to extend the BIMAS program to the settlement area and that by the sixth year agricultural cooperatives would take over the supply of fertilizer and other agricultural inputs and rubber development and marketing functions from PNP X (Sections 3.08 and 3.11 of the draft Loan Agreement). The Government has also undertaken to carry out a study of long-term credit arrangements for adoption in transmigration areas and to review with the Bank the results of the study and a related implementation program (Section 3.13 (b) of the draft Loan Agreement).

40. Existing Settlements: Past settlements including Way Abung in Lampung Province were generally established on 2 ha plots following a general farm model based on irrigation development. Due to lack of Government funds or the physical infeasibility of some sites, sizeable settlement areas had remained as dry land farms and became economically depressed as soil fertility declined drastically. The original investment in roads has deteriorated and often the level of social services, especially schools and health facilities, do not meet provincial standards. Upgrading these existing settlements, of which there may be as much as 100,000 ha, is feasible and could include measures to: (i) upgrade existing physical infrastructure especially with a view to effecting marketing improvements; (ii) upgrade and expand social services to meet provincial standards; (iii) study the feasibility of and build the necessary irrigation facilities; and (iv) introduce a cropping system suitable to the soils. DGT would place major emphasis on the last mentioned aspect. Depending upon the outcome of surveys to be carried out under the project, the Government may also consider the allocation of additional land to the Way Abung settlers.

#### Project Description

41. The Bank would assist the transmigration program in Indonesia through a project consisting of:

##### I. Implementation of two test schemes:

- (a) New settlement at Baturaja (an area of 60,000 ha bordering the trans-Sumatera highway in Sumatera Selatan Province, typical of the under-utilized land being made available for transmigration, with soils of marginal to poor fertility):

- (i) Construction of ten village units to accommodate about 4,500 settler houses (each costing about \$500), with provision of water supply and sanitation facilities, and equipping and staffing health and school facilities in each village. The village centers would include a primary school, health post, mosque, community center, market, civil and project administration and staff housing; and the health system would include provision for primary medical care, malaria control and immunization, environmental sanitation, nutrition and family planning programs;
  - (ii) construction of about 15 km of all weather roads, about 110 km of village roads and about 280 km of farm tracks to establish a low-cost feeder road system in the settlement areas;
  - (iii) block planting 4,500 ha of rubber and maintenance for up to six-years;
  - (iv) distribution of about 4,500 head of cattle (one per settler family); the project would support the procurement, transportation and distribution of cattle from Java or from abroad to the project area and the establishment and operation of cattle holding grounds in the settlement area;
  - (v) the distribution of fertilizer inputs and seeds to support food crop production on about 2,250 ha and establishment and staffing of agricultural credit, extension and cooperative services. A 200 ha seed production farm and nursery would serve as a source of seed and planting material and act as a demonstration area for agricultural extension and rubber tapping; and
  - (vi) the distribution of food and other essential commodities to all settlers during the first year of settlement in accordance with DGT's existing distribution program.
- (b) Settlement Upgrading at Way Abung: A 30,000 ha area on the trans-Sumatera highway in Lampung Province, where about 12,000 families have been settled on 2 ha plots, with soils of the same low fertility, would be upgraded. Way Abung which has been settled in stages over the last eight years was planned as an irrigated farming area. However, only limited development of irrigation has taken place and the feasibility of large-scale irrigation in this settlement area is questionable. Its roads are impassable in the wet season, some physical facilities and on average half the



settler holdings have not been developed; and crop yields remain low because fertilizer application has not been guided by extension advice. The upgrading includes:

- (i) Construction of four secondary schools, health facilities and staff for 22 villages;
- (ii) construction of about 50 km of all-weather roads and 50 km of village roads, with upgrading of a further 50 km of roads;
- (iii) block planting about 2,500 ha of rubber with at least six years of maintenance to benefit 5,000 settlers with up-land holdings clearly unsuited for irrigation development; the rubber and mixed farming system developed for Baturaja will be introduced with the distribution of an additional 5,000 head of cattle to settler families, which had not been benefitted previously from the DGT cattle program;
- (iv) expansion of existing agricultural credit and extension services and reorganizing cooperative facilities in 20 villages;
- (v) surveys of potential irrigation areas, and if required, feasibility studies and preparation of detailed engineering plans for irrigation systems.

## II. Settlement Area Studies

- (a) Monitoring and Evaluation Studies would be carried out to measure the socio-economic and agricultural development of Baturaja and Way Abung settlement areas and to identify project plans conducive to enlisting the participation of the settlers in the establishment of viable farming communities. The results, properly evaluated, would be used to modify planning of future settlements. Studies on settlements and on health services will be undertaken by appropriate local agencies.
- (b) Social and Regional Studies would be undertaken to determine the impact of transmigration schemes generally on regional development in the settlement area and on rural development in areas of settler origin, upon adjacent micro-urban centers and the indigenous farming community and to focus on settler links with their areas of origin.

## III. Program Support

- (a) Expansion of DGT's Planning Capability through technical assistance for identification, survey and initial preparation of 200,000 ha for future settlements by provision of aerial

photography, soil and topographical surveys, land capability appraisal and site planning.

- (b) Research and Testing of food cropping patterns for podsollic soils will be undertaken, and
- (c) Holding Areas for Cattle will be established and operated in strategic locations to serve a distribution program for future settlement areas.

#### Project Cost and Financing

42. The project would be fully implemented over a ten year period at a total project cost of \$70 million. The Bank loan would assist with the financing over a five-year period. During this period, project costs are estimated at about \$56 million equivalent, of which \$30 million would be in foreign exchange. The costs are based on mid-1975 estimates updated to January 1976 prices. The provision for expected price increases, based on estimated international and local price increases has been computed at annual inflation rates as follows: (a) for civil works at 14 percent for 1976, 12 percent each year for 1977-79 and 10 percent for 1980; (b) for equipment and services at 10 percent for 1976, and 8 percent each year for 1977-79 and 7 percent for 1980; and for agrochemicals at 2 percent for 1976 only. Physical contingencies have been applied at 15 percent for all civil works, 30 percent for village roads and for subsistence grants and 5 percent for all other costs. In addition, a special physical contingency of \$1 million has been included to meet the costs if settlers are unable to manually clear foodcrop land and the Government has to intervene with mechanical or chemical land clearing. Detailed cost estimates are given in Annex III.

43. The proposed Bank loan of \$30 million would finance the full foreign exchange cost equivalent to 53 percent of the total cost for the first five years of project implementation. The local costs of the project during this period of US\$26 million would be met by the Government through annual budget appropriations. Since the implementation of the test settlement schemes would not be completed until the tenth year, the Government would also meet the total remaining costs estimated at \$14 million through annual appropriations under the budget until the project is completed. The Government has adopted a consolidated annual budget authorization for this project to coordinate better the activities of several Government agencies which are responsible for the implementation of different project activities. Agreement was reached that modifications in the budget system adopted for fiscal year 1976-77 will only be introduced in consultation with the Bank (Section 3.05 of the draft Loan Agreement). Retroactive financing in an amount of up to \$1 million is recommended for surveys, vehicles, equipment and for civil works necessary for the establishment of the first village at Baturaja for which contracts have been awarded on the basis of local competitive bidding. The proposed loan would have a repayment term of 25 years with a grace period of six years.

## Procurement

44. Contracts for civil works for roads (\$9.2 million) villages and housing (\$6.6 million) and for agricultural support facilities (\$0.7 million) would be awarded on the basis of local competitive bidding among prequalified contractors in accordance with Government procedures which are acceptable to the Bank. Civil works contracts would generally be let on a village by village basis and work would proceed in stages. Each village would be offered for tender either as one village or as three parcels - roads (\$0.40 million), settler housing (\$0.03 million) and the village center (\$0.57 million). However, some road construction may have to be carried out on force account. As the cost per village (\$1.0 million) is small, foreign contracting firms are not expected to show any interest although they could participate. There is expected to be adequate competition, but since most local contractors lack adequate capital, the Government would continue its present practice of providing for advances to contractors of up to 20 percent of the contract value for purchase of equipment and building materials.

45. Block planting of 7,000 ha of rubber and its maintenance for up to six years (\$10.7 million) would be carried out on the basis of a contract already negotiated between DGT and PNP X, since it involves the execution of a specialized, integrated rubber development service and PNP X which has estate operations in South Sumatra and Lampung Provinces is well placed to carry out such a contract in a cost effective manner. Signing of a contract would be a condition of loan effectiveness (Section 6.01(c) of the draft Loan Agreement). Fertilizers and chemicals (\$1.0 million) as well as vehicles and equipment (\$1.5 million) for rubber development would be procured by PNP X following international competitive bidding procedures under Bank Group Guidelines. However, fertilizers and chemicals up to the value of \$100,000 may be procured by PNPX annually on the basis of local competitive bidding.

46. Other vehicles and equipment (\$2.2 million) would also be procured by international competitive bidding. A preference limited to 15 percent of the c.i.f. price of the imported goods or the customs duty, whichever is lower, would be extended to local manufacturers in the evaluation of bids. Local procurement under contracts of less than \$50,000, limited to a maximum of \$300,000 equivalent, would be conducted through prudent shopping after soliciting at least three quotations.

47. Cattle (\$1.9 million) would be procured locally, mainly in Java and Madura, under general purchasing guidelines developed by DGT for use by local purchasing agents, which have been reviewed during negotiations, and finalization of these arrangements is a condition of effectiveness (Section 6.01 (c) of the draft Loan Agreement). If local supply is insufficient to meet project requirements, DGT would procure imported cattle on the basis of at least three price quotations from foreign suppliers of suitable livestock.

48. Consultant services (\$4.7 million) would be contracted on terms and conditions acceptable to the Bank for project implementation and monitoring and for program preparation. Internationally recruited consultants have been estimated at \$60,000 per man-year (including housing allowances, international travel and local transportation costs) on the basis of past

experience in Indonesia. Technical services (\$1.7 million) for aerial photography would be contracted through BAKOSURTANAL (National Coordinating Agency for Surveys and Mapping) and for soil surveys through LPT (Soils Research Institute).

#### Disbursement

49. The proposed loan would be disbursed against (a) 50 percent of the total cost of civil works through certified monthly contractors progress payments; (b) 100 percent of the foreign exchange cost of directly imported vehicles and equipment, 95 percent of the ex-factory price of locally manufactured equipment, and 65 percent of the cost of imported farm equipment procured locally, and 40 percent of the cost for vehicles procured locally after prudent shopping; (c) 100 percent of the delivered cost of agrochemicals; (d) 100 percent of the foreign exchange cost of imported cattle on the basis of bills of sale and 50 percent of the cost of locally procured cattle on the basis of certificates of expenditures; (e) 30 percent of the cost of expenditures for rubber development (other than vehicles, equipment and agrochemicals) against certified quarterly contractors progress payments; (f) 100 percent of the cost of foreign and local consultants for consultant and technical services and (g) at the rate of US\$1,000 equivalent per family settled in a village to reimburse the Government for specific infrastructure expenditures not otherwise paid for, upon completion of village establishment and on the basis of certification by DGT. It is expected that disbursements would be completed within six years of loan effectiveness.

#### Organization, Management and Project Execution

50. The organizational framework at the national, provincial and district levels within which the transmigration program operates is prescribed by law. While responsibility for the execution of the program rests with the Ministry of Manpower, Transmigration and Cooperatives and its Directorate General for Transmigration (DGT), the Government relies largely on the provincial and district governments and organizations for detailed program formulation and implementation. DGT is represented in each province by a Director for Transmigration who is responsible functionally to DGT but administratively to the Governor of the province.

51. In order to strengthen DGT technically and administratively, technical assistance is being provided for program development under a UNDP-financed project being executed by FAO. To carry out several planned externally aided projects, project management units (PMU's) will be set up by DGT with responsibility for managing, coordinating and implementing them.

52. Implementation of the proposed project would be the responsibility of a PMU headed by a project director, appointed in consultation with the Bank and responsible directly to the DGT, assisted by a qualified consultant firm in the detailed planning, coordination and implementation of the various components of the project; the consultant firm will be appointed with the approval of the Bank (Section 3.03 of the draft Loan Agreement). The construction of roads, supply of cattle and all facilities for agricultural support would be undertaken by the appropriate Government agencies under

Memoranda of Agreement with DGT, the signing of which would be a condition of loan effectiveness (Section 6.01 (c) of the draft Loan Agreement). The PMU would prepare the project's budget annually and be responsible for expenditures; the task of project coordination would be achieved primarily through budgetary control. Two site managers would be appointed for Baturaja and Way Abung, respectively. A project accounting unit would be established in the PMU; and an internationally recruited accounting advisor, who would be appointed with the approval of the Bank, would help develop the accounting systems for the PMU (Section 3.03 (b) of the draft Loan Agreement). Appointment of the project director, the two site managers, the head of the accounting unit and of a qualified consultant firm, would be conditions of loan effectiveness (Section 6.01 (a) and (b) of the draft Loan Agreement). A low-cost, direct monitoring system of day-to-day settlement progress, to be operated by the PMU, would be designed and introduced under the project. Quality and cost control of the civil works, rubber plantations and livestock procurement components of the project would be carried out by the PMU (Section 3.10 of the draft Loan Agreement). The rubber plantations on the allotments would be subject to periodic inspection by consultants employed by the PMU.

#### Benefits and Justification

53. The primary objective of the project is to test new approaches to upland settlement development and upgrading of existing transmigration schemes, with a view to overcoming the technical constraints imposed by the poor fertility of the lands available for settlement and ensure that such schemes can be replicated on a scale consistent with the long-term objectives of the Government's transmigration program. The methodology of project planning and implementation adopted for design and agricultural development of these test settlement areas would be institutionalized in DGT, strengthening the technical basis for expanding the transmigration program. Research into the problems of sustained annual cropping on upland soils would contribute to the technical and economic feasibility of future transmigration programs while monitoring and evaluation of experimental aspects would help identify where cost reductions could be achieved or cost effectiveness improved in the future.

54. The resources of the Outer Islands of the Indonesian archipelago are underutilized and the land area under-populated relative to the resource potential. Organized land development by the transmigrants would serve to build new and important economic centers of regional development.

55. Transmigration benefits Java through the organized movement of people from the poorest and most overpopulated regions and would help reduce the pressure on land and relieve underemployment. For maximum impact of transmigration on such critical regions investments should also be made which would create non-agricultural employment in Java. The Government views an enlarged transmigration program as an important part of its overall strategy to overcome the critical problems of overpopulation and unemployment on the Inner Islands (paragraph 28).

56. Net income obtained from food crops, 1 ha of rubber and off-farm employment by a new settler at Baturaja shows a relatively rapid increase from \$492 in year 2 to \$861 in year 10 and a more gradual increase to \$1014 by year 15 levelling off at \$1150. An additional ha of rubber planted by the settler under long-term credit or using his own resources would give the farmer an additional income, which would assist in bridging the replanting period. In contrast, the rehabilitation of existing settlements at Way Abung will improve prevailing farm incomes from \$400 to reach a net annual income of \$970 at full development (years 14-29) reflecting the inadequacy of a total farm size of 2 ha to yield a satisfactory income, given the soils available in the area. While there would be no direct cost recovery from the settlers, the Government would receive revenues from land taxes (IPEDA) paid by them, and from the Rubber Export Tax. At full development in years 1985-1995 this tax would amount to \$240 per year and \$60 per year per settler family in Baturaja and Way Abung, respectively.

57. The economic rate of return is estimated at between 11 and 12 percent for the new settlement at Baturaja at a settlement cost per family of \$5,000 and a total investment cost of \$22.5 million. This return is moderately sensitive to changes in infrastructure cost and the level of the rubber price and would range from 9 to 14 percent on alternative assumptions regarding these variables. The economic rate of return for upgrading the settlement at Way Abung at a cost per family of \$1,520 and a total investment cost of \$7.6 million is about 19 percent; this rate of return reflects the advantage to existing settlement upgrading of sunk investment in on-farm and physical infrastructure. The sensitivity range is between 16 and 25 percent. The weighted average rate of return for these two components of the project would be about 13.5 percent.

58. These rates of return do not take account of the non-quantified benefits which include improved health and nutrition of the settlers and the multiplier effects on the regional economy of capital formation in the area and increased levels of consumption expenditure. It has not been possible to estimate the Government expenditures which would have to be made to maintain and improve standards of rural welfare in the area of settler origin in the absence of resettlement or the benefits which accrue in the area of origin due to the alleviation of population pressure on scarce resources including land.

59. At Baturaja, 1.5 permanent jobs would be created per smallholding, increasing to 2.5 through further, loan-financed, on-farm development. Approximately one additional job per family would be created by the proposed improvements to existing smallholdings at Way Abung.

60. The project would benefit the economy of Indonesia directly in terms of employment creation, increased food production and rubber exports and potential benefits to the areas of settler origin in Java. It would also add to the infrastructure base for the regional development of South Sumatera. Monitoring and evaluation of the test projects would have the benefit of identifying aspects in the design where future cost reductions could be obtained or cost effectiveness increased. The institution building aspects of the project and the closely monitored testing of settlement

designs and agricultural systems would have long-run benefits in ensuring a sounder base for future transmigration programs. Project benefits would accrue to transmigrants whose present and expected future incomes in the areas of origin would be clearly below the relative, if not absolute poverty line. The distributional impact of the project is therefore clearly favorable.

61. Risks. It is recognized that several technical, organizational and budgetary approaches to be employed in this project are of necessity innovative and therefore untested. In particular, the farm plans to be implemented in the new settlement at Baturaja hold the risk that the yields attained in annual rainfed cropping may turn out to be, on average, lower than projected due to the as yet unknown interaction between the proposed farming system, soil characteristics, climate and farming skills. Similarly, the rubber yields attainable under smallholder management might turn out to be lower than projected if the smallholders do not follow the prescribed fertilizer regime and yield to the temptation of overtapping in order to supplement their near-term incomes. Protracted analysis of alternative formulations of pilot settlement projects in Indonesia leads to the conclusion that there are clearly numerous ways to balance considerations of settler welfare, economic feasibility, and replicability. A greater initial investment for the establishment of a larger tree-cropping area, would have provided a greater margin of safety in settler welfare and economic feasibility, but would not have been as compatible with Indonesia's overall resource constraints and with the future replicability of this test scheme on the scale which the Government considers desirable for its transmigration program. The attendant risks of the proposed test scheme have been carefully analyzed and discussed with the Government and it has been concluded that timely provision of extension and other agricultural support services will be able to reduce these risks. Most importantly, however, the Government's decision to proceed with a test scheme which at this stage poses, of necessity, risks to the participating settlers is matched by a commitment to take, if it should be required timely ameliorative action (Section 3.09 of the draft Loan Agreement). On the Bank's side, the decision to participate in the financing of these test schemes will in turn be matched by a commitment to provide for intensive supervision of this project.

62. The Government also recognizes that the realization of benefits from the project depend on several important conditions for project success being met, among which are maximum cooperation being achieved between the PMU, other departments of DGT and the Government agencies responsible for project implementation; the active involvement of organizations at the national, provincial and district levels in planning and monitoring the project; the continued use of a consolidated budget controlled by the PMU; early implementation of the project monitoring arrangements and establishment or improvement in Baturaja and Way Abung, respectively, of the extension services and BIMAS program organization; the earliest possible formulation and implementation of a term lending program for smallholder tree-crop development; and the earliest establishment of the health services with particular emphasis on

the malaria control program. With the assurances obtained from the Government as set out in the foregoing report, the arrangements proposed for project implementation are appropriate for the achievement of these objectives.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

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

64. Features of the Loan Agreement of special interest are referred to in paragraphs 39, 43, 45, 47, and 52 of this report. Special conditions of effectiveness are: (i) the appointment of a project director, a site manager of each of the Baturaja and Way Abung settlement areas and a head of the accounting unit of the PMU; (ii) the appointment of a firm of consultants to assist in detailed planning and implementation and (iii) the conclusion of agreements/arrangements with PNPX and the other Government agencies having responsibility for implementation of the project (Section 6.01 of the draft Loan Agreement).

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

PART VI - RECOMMENDATION

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

Robert S. McNamara  
President  
by J. Burke Knapp

Washington, D.C.



TABLE 3A  
INDONESIA - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOU KM <sup>2</sup> )	INDONESIA			REFERENCE COUNTRIES (1970)					
	TOTAL	1904,3	AGRIC.	1960	1970	MOST RECENT ESTIMATE	BANGLADESH	INDIA	PHILIPPINES **
		279.8		60.0	100.0	130.0	80.0	110.0	220.0
GNP PER CAPITA (US\$)									
POPULATION AND VITAL STATISTICS									
POPULATION (MID-YR, MILLION)				95.4	115.6	124.4	70.8	538.1	36.9
POPULATION DENSITY PER SQUARE KM.				50.0	61.0	65.0	496.0	168.0	123.0
PER 30, KM, AGRICULTURAL LAND				..	..	426.0	..	..	..
VITAL STATISTICS									
CRUDE BIRTH RATE PER THOUSAND				43.0	<u>/a,b</u>	42.0	44.0	38.0	45.0
CRUDE DEATH RATE PER THOUSAND				21.0	<u>/a,b</u>	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	<u>/a,b</u>	47.0	48.0	50.0	56.0
GROSS REPRODUCTION RATE				2.8	<u>/a,b</u>	3.2	3.1	2.9	3.3
POPULATION GROWTH RATE (%)									
TOTAL				2.1	<u>/a,b</u>	2.0	2.7	2.3	3.0
URBAN				..	..	3.6	..	4.0	4.0
URBAN POPULATION (% OF TOTAL)									
				15.0	<u>/a,b</u>	17.0	..	20.0	32.0
AGE STRUCTURE (PERCENT)									
0 TO 14 YEARS				42.1	<u>/a,b</u>	44.1	..	42.0	43.1
15 TO 64 YEARS				55.4	<u>/a,b</u>	53.4	..	55.0	53.4
65 YEARS AND OVER				2.5	<u>/a,b</u>	2.5	..	3.0	3.5
AGE DEPENDENCY RATIO									
				0.8	<u>/a,b</u>	0.9	..	0.8	0.9
ECONOMIC DEPENDENCY RATIO									
				1.3	<u>/a,b</u>	..	..	1.2	1.5
FAMILY PLANNING									
ACCEPTORS (CUMULATIVE, THOU)				..	<u>/a,b</u>	259.3	..	11308.0	354.0
USERS (% OF MARRIED WOMEN)				..	<u>/a,b</u>	..	..	..	4.0
EMPLOYMENT									
TOTAL LABOR FORCE (THOUSAND)				34600.0	<u>/a,b</u>	..	40100.0	22300.0	221000.0
LABOR FORCE IN AGRICULTURE (%)				68.0	<u>/a,b</u>	..	62.0	71.0	71.0
UNEMPLOYED (% OF LABOR FORCE)				5.4	<u>/a,b</u>	2.0	5.4	..	3.0
INCOME DISTRIBUTION									
% OF PRIVATE INCOME REC'D BY-									
HIGHEST 5% OF HOUSEHOLDS				..	<u>/a,b</u>	..	16.7	25.0	..
HIGHEST 20% OF HOUSEHOLDS				..	<u>/a,b</u>	..	42.3	53.1	..
LOWEST 20% OF HOUSEHOLDS				..	<u>/a,b</u>	..	7.9	4.7	..
LOWEST 40% OF HOUSEHOLDS				..	<u>/a,b</u>	..	19.6	13.1	..
DISTRIBUTION OF LAND OWNERSHIP									
% OWNED BY TOP 10% OF OWNERS				48.0	<u>/a,b</u>	..	..	34.0	..
% OWNED BY SMALLEST 10% OWNERS				3.0	<u>/a,b</u>	..	..	1.0	..
HEALTH AND NUTRITION									
POPULATION PER PHYSICIAN				41000.0	<u>/a,b</u>	27650.0	23880.0	7600.0	4800.0
POPULATION PER NURSING PERSON				..	<u>/a,b</u>	8010.0	6960.0	72030.0	5110.0
POPULATION PER HOSPITAL BED				1350.0	<u>/a,b</u>	1720.0	1450.0	8120.0	1620.0
PER CAPITA SUPPLY OF -									
CALORIES (% OF REQUIREMENTS)				89.0	<u>/a,b</u>	89.0	83.0	..	93.0
PROTEIN (GRAMS PER DAY)				43.0	<u>/a,b</u>	43.0	38.0	..	53.0
-OF WHICH ANIMAL AND PULSE				15.0	<u>/a,b</u>	14.0	..	..	16.0
DEATH RATE (/THOU) AGES 1-4									
				..	<u>/a,b</u>	..	..	..	7.0
EDUCATION									
ADJUSTED ENROLLMENT RATIO									
PRIMARY SCHOOL				59.0	<u>/a,b</u>	69.0	54.0	50.0	68.0
SECONDARY SCHOOL				6.0	<u>/a,b</u>	12.0	12.0	15.0	28.0
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL)				12.0	<u>/a,b</u>	12.0	12.0	10.0	12.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)				20.0	<u>/a,b</u>	29.0	28.0	1.0	6.0
ADULT LITERACY RATE (%)				47.0	<u>/a,b</u>	..	60.0	..	..
HOUSING									
PERSONS PER ROOM (AVERAGE)				..	<u>/a,b</u>	..	1.6	..	..
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)				..	<u>/a,b</u>	..	44.0	..	66.0
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)				..	<u>/a,b</u>	..	64.0	..	23.0
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)				..	<u>/a,b</u>	..	39.0	..	6.0
CONSUMPTION									
RADIO RECEIVERS (PER THOU POP)				7.0	<u>/a,b</u>	114.0	..	6.0	21.0
PASSENGER CARS (PER THOU POP)				1.0	<u>/a,b</u>	2.0	3.0	1.0	8.0
ELECTRICITY (KWH/YR PER CAP)				19.0	<u>/a,b</u>	20.0	23.0	11.0	111.0
NEWSPRINT (KG/YR PER CAP)				0.2	<u>/a,b</u>	0.2	0.2	..	0.3

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 and 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>	<u>1960</u>	<u>/a</u> Excludes West Irian; <u>/b</u> 1963; <u>/c</u> 1961-63.
	<u>1970</u>	<u>/a</u> Registered applicants for work.
	<u>MOST RECENT ESTIMATE:</u>	<u>/a</u> Unemployed workers seeking their first job; <u>/b</u> 10 years and over, ability to read and write in either Latin or non-Latin characters; <u>/c</u> Inside only.
<u>BANGLADESH</u>	<u>1970</u>	<u>/a</u> 1966-67, households; <u>/b</u> Registered, not all practicing in the country; <u>/c</u> Government hospital establishments only; <u>/d</u> Approximate enrollment as percentage of population in 6-10, and 11-15 age groups respectively; <u>/e</u> 1967-68.
<u>INDIA</u>	<u>1970</u>	<u>/a</u> Ratio of population under 15 and 60 and over to labor force age 15-59 years; <u>/b</u> 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; <u>/c</u> Registered applicants for work; <u>/d</u> 1967-68; <u>/e</u> 1967.
<u>PHILIPPINES</u>	<u>1970</u>	<u>/a</u> Public education only; <u>/b</u> 1967; <u>/c</u> Imports only.

011, April 30, 1976

DEFINITIONS OF SOCIAL INDICATORS

2	
<u>Land Area (thou km<sup>2</sup>)</u>	<u>Population per nursing person</u> - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.
<u>Total</u> - Total surface area comprising land area and inland waters.	<u>Population per hospital bed</u> - 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.
<u>Agric.</u> - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.	<u>Per capita supply of calories (% of requirements)</u> - 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.
<u>GNP per capita (US\$)</u> - GNP per capita estimates at market prices, calculated by same conversion method as World Bank Atlas (1972-74 basis).	<u>Per capita supply of protein (grams per day)</u> - 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.
<u>Population and vital statistics</u>	<u>Per capita protein supply from animal and pulse</u> - Protein supply of food derived from animals and pulses in grams per day.
<u>Population (mid-yr. million)</u> - As of July first; if not available, average of two end-year estimates.	<u>Death rate (/thou) ages 1-4</u> - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.
<u>Population density - per square km</u> - Mid-year population per square kilometer (100 hectares) of total area.	<u>Education</u>
<u>Population density - per square km of agric. land</u> - Computed as above for agricultural land only.	<u>Adjusted enrollment ratio - primary school</u> - 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.
<u>Vital statistics</u>	<u>Adjusted enrollment ratio - secondary school</u> - Computed as above, secondary education requires at least four years of approved primary instruction; provides general, vocational or teacher training instructions for pupils of 12 to 17 years of age; correspondence courses are generally excluded.
<u>Crude birth rate per thousand</u> - Annual live births per thousand of mid-year population; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.	<u>Years of schooling provided (first and second levels)</u> - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.
<u>Crude death rate per thousand</u> - Annual deaths per thousand of mid-year population, usually five-year averages ending in 1960, 1970 and 1975 for developing countries.	<u>Vocational enrollment (% of secondary)</u> - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions
<u>Infant mortality rate (thou)</u> - Annual deaths of infants under one year of age per thousand live births.	<u>Adult literacy rate (%)</u> - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.
<u>Life expectancy at birth (yrs)</u> - Average number of years of life remaining at birth, usually five-year averages ending in 1960, 1970 and 1975 for developing countries.	<u>Housing</u>
<u>Gross reproduction rate</u> - 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.	<u>Persons per room (average)</u> - Average number of persons per room in occupied conventional dwellings in urban areas, dwellings exclude non-permanent structures and unoccupied parts.
<u>Population growth rate (%) - total</u> - Compound annual growth rates of mid-year population for 1950-60, 1960-70, and 1960 to most recent year.	<u>Occupied dwellings without piped water (%)</u> - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.
<u>Population growth rate (%) - urban</u> - Computed like growth rate of total population, different definitions of urban areas may affect comparability of data among countries.	<u>Access to electricity (% of all dwellings)</u> - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.
<u>Urban population (% of total)</u> - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.	<u>Rural dwellings connected to electricity (%)</u> - Computed as above for rural dwellings only.
<u>Age structure (percent)</u> - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.	<u>Consumption</u>
<u>Age dependency ratio</u> - Ratio of population under 15 and 65 and over to those of ages 15 through 64.	<u>Radio receivers (per thou pop)</u> - 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.
<u>Economic dependency ratio</u> - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.	<u>Passenger cars (per thou pop)</u> - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.
<u>Family Planning - acceptors (cumulative, thou)</u> - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.	<u>Electricity (kwh/yr per cap)</u> - 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.
<u>Family planning - users (% of married women)</u> - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.	<u>Newsprint (kg/yr per cap)</u> - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.
<u>Employment</u>	
<u>Total labor force (thousand)</u> - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.	
<u>Labor force in agriculture (%)</u> - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.	
<u>Unemployed (% of labor force)</u> - 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.	
<u>Income distribution</u> - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of households.	
<u>Distribution of land ownership</u> - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.	
<u>Health and Nutrition</u>	
<u>Population per physician</u> - Population divided by number of practicing physicians qualified from a medical school at university level.	

ECONOMIC INDICATORS

	<u>GROSS NATIONAL PRODUCT IN 1974</u>		<u>ANNUAL RATE OF GROWTH (% , constant prices)</u>		
	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	15.2
Gross National Saving	4251	18.9	5.8	5.1	64.8
Current Account Balance	- 79	0.4	.	.	.
Exports of Goods, NFS (net oil)	4351	19.4	1.5	7.8	0.5
Imports of Goods, NFS	4220	18.8	0.2	10.9	33.2

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1974

	<u>Value Added</u> <sup>1/</sup>		<u>Labor Force</u> <sup>2/</sup>		<u>V. A. Per Worker</u>	
	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

	<u>Central Government</u>			
	<u>(Rp Bln.)</u>		<u>% of GDP</u>	
	<u>1975/76*</u>	<u>1974/75</u>	<u>1974</u>	<u>1973</u>
Current Receipts	2166	1759	17.9	15.0
Current Expenditure	1296	1001	10.2	10.8
Current Surplus	870	758	7.7	4.2
Capital Expenditures	1273	966	9.8	7.3
External Assistance (net)	403	234	2.4	3.2

\*Provisional estimates

<u>MONEY, CREDIT and PRICES</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
		<u>(Billion Rp.)</u>	<u>outstanding end period)</u>			
Money and Quasi Money	330	469	695	987	1452	1995
Bank credit to Public Sector	57	78	16	27	- 36	44
Bank Credit to Private Sector and State Enterprises	306	442	587	928	1364	2619

(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	1492
Annual percentage changes in:						
General Price Index	12.3	4.2	6.6	31.0	40.6	19.1
Bank credit to Public Sector	- 5.0	36.8	- 79.5	68.8	.	.
Bank credit to Private Sector and State Enterprises	77.9	44.4	32.8	58.1	47.0	92.0

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

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

<sup>2/</sup> 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

	1973	1974	1975*
	(Millions US \$)		
Exports:	2173	4351	4778
Oil (net)	564	2169	2957
Non oil	1609	2182	1821
Imports	-2817	-4220	-5474
Resource gap	-644	131	-696
Factor service:	-158	-210	-508
Interest	-46	-64	-224
Investment income	-112	-146	-284
Balance on current account	-802	-79	-1204
Direct Foreign Investment	290	462	506
Net MLT Borrowing			
Disbursements	572	664	2387
Amortization	-87	-80	-248
Subtotal	485	584	2139
Capital Grants	52	62	..
Other Capital (net)	217	-126	-2250
Other items n.e.i	83	-214	-174
Increase in Reserves (+)	325	689	-983
Gross Reserves (end year)	806	1473	590
Net Reserves (end year)	783	1472	489
Fuel and Related Materials			
Imports	4	4	90
of which: Petroleum	2	1	86
Exports			
of which: Petroleum (net)	564	2169	2957

RATE OF EXCHANGE

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

MERCHANDISE EXPORTS (AVERAGE 1973-75)

	US \$ Mln	%
Oil (net)	1897	50.4
Rubber	416	11.0
Timber	602	16.0
Palm oil	132	3.5
Tin	138	3.7
Coffee	99	2.6
All other commodities	483	12.8
Total	3767	100.0

EXTERNAL DEBT, DECEMBER 31, 1975

	US \$ Mln
Public Debt, incl. guaranteed	7875
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..
<u>DEBT SERVICE RATIO for 1975<sup>1/</sup></u>	%
Public Debt, incl. guaranteed	9.9
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

IBRD/IDA LENDING, (April 30, 1976)(Million US \$):

	IBRD	IDA
Outstanding & Disbursed	111.8	338.5
Undisbursed	516.1	223.3
Outstanding incl. Undisbursed	627.9	561.8

<sup>1/</sup> Ratio of Debt Service to Exports of Goods and Non-Factor Services, with oil exports on a net basis (i.e. excluding factor payments and imports of the oil companies).

\*Provisional

. . not available  
. . not applicable

May 19, 1976

THE STATUS OF BANK GROUP OPERATIONS IN INDONESIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of April 30, 1976)

Loan/ Credit Number	Fiscal Year	Purpose	US\$ Million	
			Amount (less cancellation)	
			Bank	IDA Undisbursed
Two credits closed			6.0	
127	1969	Irrigation Rehabilitation	5.0	0.0
154	1969	Highway	28.0	0.2
155	1969	Agricultural Estates	16.0	0.1
165	1970	Electricity Distribution	15.0	0.0
193	1970	PUSRI Fertilizer	35.0	0.0
194	1970	Second Agricultural Estates	17.0	1.9
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	2.4
259	1971	Tea	15.0	3.6
260	1971	Second Highway	34.0	3.4
275	1972	Third Technical Assistance	4.0	0.8
288	1972	Second Education	6.3	4.0
289	1972	Fourth Irrigation Rehabilitation	12.5	1.8
300	1972	Population	13.2	7.9
310	1972	Development Finance Co. (BAPINDO I)	10.0	1.5
318	1972	Inter-Island Fleet Rehabilitation	8.5	3.8
319	1972	Fourth Agricultural Estates	11.0	6.8
334	1973	Second Electricity Distribution	40.0	14.5
355	1973	Beef Cattle Development	3.6	2.3
358	1973	North Sumatera Smallholder Development	5.0	2.9
387	1973	Third Education	13.5	10.7
388	1973	Third Highway	14.0	6.3
399	1973	West Java Thermal Power	46.0	31.1
400	1973	Smallholder and Private Estate Tea	7.8	7.3
405	1973	Sugar Industry Rehabilitation	50.0	29.3
428	1974	Pulo Gadung Industrial Estate	16.5	14.3
436	1974	Private Development Finance Co. (PDFCI)	10.0	8.2
451	1974	Fourth Technical Assistance	5.0	4.0
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)

Loan Credit Number	Fiscal Year	Purpose	US\$ Million		
			Amount Bank	(less cancellation) IDA	Undisbursed
1005	1974	Railway	48.0		45.8
1040	1975	Jakarta Urban Development	25.0		15.2
1049	1975	Five Cities Water Supply	14.5		13.2
1054	1975	Development Finance Co. (BAPINDO II)	50.0		36.8
1089	1975	Second Fertilizer Expansion	115.0		38.1
1100	1975	Sixth Irrigation	65.0		64.4
1127	1975	Fourth Power	41.0		40.8
1139	1976	Fertilizer Distribution	68.0		60.3
1179	1976	Agricultural Research and Extension	21.5		21.5
1197	1976	National Resource Survey and Mapping	13.0		13.0
1236 <u>a/</u>	1976	Fourth Highway	130.0		130.0
1237 <u>a/</u>	1976	Fourth Education	37.0		37.0
		Total <u>b/</u>	628.0	561.8	739.4
		Of which has been repaid	0	0	
		Total now outstanding	628.0	561.8	
		Amount Sold		0.1	
		Of which has been repaid		<u>0.0</u>	
		Total now held by Bank and IDA (Prior to exchange adjustment)	<u>627.9</u>	<u>561.8</u>	
		Total undisbursed	<u>516.1</u>	<u>223.3</u>	<u>739.4</u>

a/ Not yet effective

b/ The following loans were signed after April 30, 1976:

- (i) Loan No. 1250-IND (Second Shipping Project) of May 20 for \$54 million
- (ii) Loan No 1254-IND (Third Fertilizer Expansion Project) of May 20 for \$70 million
- (iii) Loan No. 1259-IND (Fifth Power Project) of May 20 for \$90 million
- (iv) Loan No. 1268-IND (Seventh Irrigation Project) of June 4 for \$33 million
- (v) Loan No. 1267-IND (Food Crops Extension Project) of June 4 for \$22 million

STATEMENT OF IFC INVESTMENTS (as of April 30, 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. PDFCI	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 closing date has been postponed by one year to allow for payment of late accounts.

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, 1977.

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 and, because of higher rice prices, the project will continue to have a satisfactory rate of return. 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 began to operate at full capacity in January 1976 when the new academic year started. 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.

Physical progress of the project which is being executed by PNPX, a Government-owned estate group, continues to be most satisfactory, with plantings of rubber and oil palm ahead of appraisal estimates and in excellent condition. Coffee is a promising crop, while cloves planted in 1974 are growing well. A hybrid coconut seed garden is being established, the first in Indonesia. PNPX management need to pay more attention to cost control and to financial planning. Substantial cost increases have taken place largely due to an expansion in the size of the program compared with the appraisal report. The Government has agreed to provide part of the shortfall in project funding and discussions with the Government are proceeding on a proposed increase in the budgetary allocation. PNPX is keen to participate in smallholder development.

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 18 million text books were 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 now making good progress in 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, due in part to delays in loan signing.

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 was 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 was experiencing delay, but steps have been 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 in 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. A project implementation unit has been established. Substantial progress has been made in establishing and staffing the headquarters of the Agency for Research and Development and in directing and integrating the research work on the four crop/commodity groups to be supported through the project.

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. The project agency, BAKOSURTANAL, has made considerable progress in project implementation. Preliminary designs for project facilities have been completed, detailed design is in progress and tender documents should be ready on schedule by August 1976. Preparation of equipment specifications and planning of aerial photography operations to support detailed resource surveys of the southern Sumatra region are also on schedule. Senior project staff have been appointed.

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.

Loan No. 1250:     Second Shipping Project: US\$54 million Loan of May 20, 1976:  
Closing Date: December 1980.

This loan is expected to become effective on August 30, 1976.

Loan No. 1254:     Third Fertilizer Expansion Project: US\$70 million Loan of  
May 20, 1976; Closing Date: June 30, 1979.

This loan is expected to become effective on August 30, 1976.

Loan No. 1259:     Fifth Power Project: US\$90 million Loan of May 20, 1976.  
Closing Date: March 31, 1981.

This loan is expected to become effective on August 30, 1976.

Loan No. 1269:      Seventh Irrigation Project: US\$33 million Loan of  
June 4, 1976; Closing Date: December 31, 1981.

This loan is expected to become effective on  
August 30, 1976.

Loan No. 1267:      Food Crops Extension Project: US\$22 million Loan of  
June 4, 1976. Closing Date: June 30, 1982.

This loan is expected to become effective on  
August 30, 1976.

INDONESIA: TRANSMIGRATION AND RURAL DEVELOPMENT PROJECT

LOAN AND PROJECT SUMMARY

- Borrower: Republic of Indonesia
- Amount: US\$30 million equivalent in various currencies.
- Terms: 25 years, including six years of grace, with interest at 8.85 percent per annum.
- Project Description: Major components of the project are:
- I. Implementation of two test schemes:
- (a) New Settlement at Baturaja
- (i) construction of ten village centers with about 4,500 settler houses;
  - (ii) provision of water supply and sanitation facilities equipping and staffing health and school facilities in each village;
  - (iii) construction of about 15 km of all weather roads, about 110 km of village roads, and about 280 km of farm tracks;
  - (iv) block planting 4,500 ha of rubber and maintenance for up to six years;
  - (v) distribution of about 4,500 head cattle, fertilizer inputs and seeds to support food crop production on 2,250 ha; and
  - (vi) establishment and staffing of agricultural credit, extension and cooperative services.

(b) Settlement Upgrading at Way Abung

- (i) construction of about 50 km of all weather road, and 50 km of village roads, with upgrading of a further 50 km of roads;
  - (ii) block planting of about 2,500 ha of rubber with up to six years of maintenance, to benefit 5,000 settlers with holdings of uplands clearly unsuited for future irrigation development;
  - (iii) distribution of about 5,000 cattle to those settlers who have not yet participated in the DGT cattle scheme;
  - (iv) expansion of agricultural credit, extension and cooperative facilities in 20 villages;
  - (v) construction of four secondary schools;
  - (vi) health facilities and staff for 22 villages; and
  - (vii) feasibility studies and preparation of detailed engineering plans for irrigation facilities.
- (c) Technical assistance in the implementation of the two test schemes.

II. Settlement Area Studies

- (a) Monitoring and Evaluation Studies to determine the success of the new settlement plans, the agricultural techniques, and the health delivery system employed in these test schemes; and
- (b) Project Studies of alternative farm management systems, especially as regards annual cropping patterns, the role of livestock and the potential

role of different forms of mechanization;  
social and Regional Studies to determine  
transmigration schemes on regional  
development.

III. Program Support:

- (a) Expansion of DGT's planning capability through technical assistance for identification, survey and initial preparation of 200,000 ha for future settlements;
- (b) Research and Testing of viable food cropping patterns for the red/yellow podzolic soils; and
- (c) Holding areas for cattle, established and operated in strategic locations to serve a distribution program for future settlement areas.

Project Costs:

	<u>US\$ Million</u>		
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
<b>A. <u>INVESTMENT COST</u></b>			
New Settlement - Baturaja			
- Roads, Villages & Housing	4.11	3.59	7.70
- Health Services	0.30	0.14	0.44
- Rubber Development	2.69	3.11	5.80
- Cattle Distribution	0.41	0.47	0.88
- Seed Farm	0.17	0.22	0.39
Settlement Upgrading Way Abung			
- Roads & Schools	1.57	2.52	4.09
- Health Services	0.48	0.28	0.76
- Rubber Development	1.43	1.97	3.40
- Cattle Distribution	0.53	0.53	1.06
Project Management Unit:			
- Vehicles	0.03	0.11	0.14
Revolving Fund - Short term Credit	1.05	2.45	3.50
Cattle Distribution - Central Facilities	<u>0.44</u>	<u>0.43</u>	<u>0.87</u>
Sub-total	13.21	15.82	29.03
<b>B. <u>OPERATING COSTS</u></b>			
New Settlement - Baturaja	0.33	-	0.33
- Village Management	0.15	0.08	0.23
- Health Services & Training	0.13	0.08	0.21
- Cattle Distribution	0.27	0.29	0.56
- Seed Farm	0.67	1.35	2.02
- Subsistence Grant			
Settlement Upgrading Way Abung			
- Village Management	0.07	-	0.07
- Health Services & Training	0.19	0.23	0.42
- Cattle Distribution	0.10	0.01	0.11
Project Management Unit:			
Local Staff	0.36	-	0.36
Consultants and Technical Services	0.35	0.84	1.19
Cattle Distribution - Central Facilities	<u>0.38</u>	<u>0.12</u>	<u>0.50</u>
Sub-total	3.00	3.00	6.00
<b>C. <u>STUDIES</u></b>			
Future Project Preparation	1.79	2.14	3.93
Monitoring & Evaluation	1.27	0.47	1.74
Regional Impact Study	<u>0.09</u>	<u>0.21</u>	<u>0.30</u>
Sub-total	3.15	2.82	5.97
Base Cost	19.36	21.64	41.00
Physical Contingency	2.15	3.43	5.58
Price Contingency	<u>5.31</u>	<u>4.93</u>	<u>10.24</u>
 TOTAL COST	 <u>26.82</u>	 <u>30.00</u>	 <u>56.82</u>

Financing:

The proposed Bank loan of \$30 million would finance the full foreign exchange cost or 53 percent of the total cost for the first five year period of project implementation. The local costs of the project during this period of \$26 million would be met by the Government through annual budget appropriations. Since the implementation of the test settlement schemes would not be completed until the tenth year, the Government would also meet the total balance costs estimated at US\$14 million.

Retroactive financing in an amount of about \$1.0 million equivalent is recommended for surveys, vehicles, equipment and for civil works necessary for the establishment of the first village in Baturaja for which contracts have been awarded after local competitive bidding.

Estimated Disbursements:

	----- US\$ Millions -----				
Bank FY	1977	1978	1979	1980	1981
Annual	3.5	7.5	9.5	6.0	3.5
Cumulative	3.5	11.0	20.5	26.5	30.0

Procurement:

Civil works for roads (\$9.2 million), villages and housing (\$6.6 million) and for agricultural support facilities (\$0.7 million) would be awarded on the basis of local competitive bidding to prequalified contractors in accordance with Government procedures which are acceptable to the Bank. Block planting of 7,000 ha of rubber and its maintenance for up to six years (\$10.7 million) would be carried out on the basis of a negotiated contract between DGT and PNP X. Fertilizers and chemicals (\$1.0 million), as well as vehicles and equipment (\$1.5 million) necessary for rubber development, would be procured by PNP X following international competitive bidding procedures under Bank Group Guidelines. Other vehicles and equipment (\$2.2 million) would also be procured by international competitive bidding. Cattle (\$1.9 million) would be procured locally, mainly in Java and Madura and if necessary, from abroad.



Consultants:

Consultants services (\$6.4 million) would be contracted on terms and conditions acceptable to the Bank for project implementation (233 man months), project monitoring (120 man months) and for program preparation (300 man months). Technical services (\$1.7 million) for aerial photography would be contracted through BAKOSURTANAL, and for soil surveys through the Soils Research Institute (LPT).

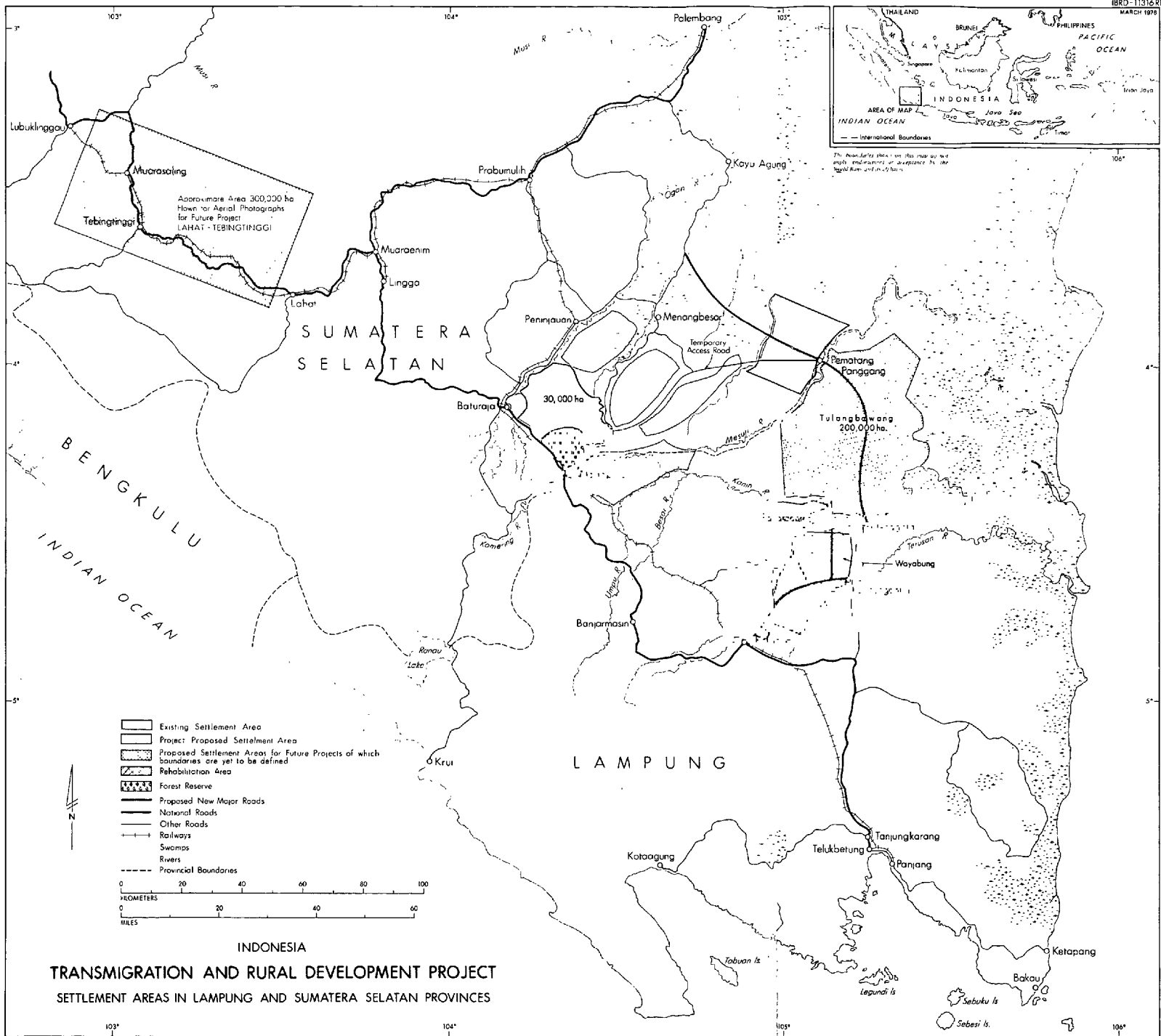
Economic Rate of Return:

The weighted average rate of return for the Baturaja and Way Abung settlements would be about 13.5 percent.

Appraisal Report:

Report No. 1119b-IND dated June 10, 1976. East Asia and Pacific Projects Department.





INDONESIA  
**TRANSMIGRATION AND RURAL DEVELOPMENT PROJECT**  
 SETTLEMENT AREAS IN LAMPUNG AND SUMATERA SELATAN PROVINCES



INDONESIA  
TRANSMIGRATION AND RURAL DEVELOPMENT PROJECT  
WAYABUNG AREA REHABILITATION

- NATIONAL HIGHWAY
- DISTRICT ROADS
- VILLAGE ROADS
- RAILWAYS
- RIVERS

