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A SUMMARY OF THE INDONESIAN FIVE YEAR PLAN  
Indonesia Project

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## THE INDONESIAN FIVE YEAR PLAN

The Indonesian Five Year Plan for economic development, covering the years 1956-1960, was presented to the Indonesian Parliament in printed form in mid-1956. The Plan is in three volumes, the first presenting the proposed planning law, the second the "plan framework" and major projects, and the third specifications of individual projects. We present here a brief summary of the main features of the second volume, the plan framework. This volume alone contains 277 pages divided into twenty chapters: introduction; population; finance; agriculture, forestry, animal husbandry, and fishing; irrigation; mineral resources; electric power; industrialization; transport and communications; manpower resources; labor relations; education; public health; social welfare; housing; community development; co-operatives; transmigration; public administration; implementation and organization.

### Chapter 1. Introduction

The introductory chapter sets forth in separate paragraphs sixteen major points regarding basic assumptions and the conceptual framework within which the Plan is constructed:

(1) From a practical viewpoint it is not useful to formulate an economic development plan covering more than five to ten years. It is important to provide an analysis of the basic direction of such a plan, which may fulfill within one generation the hopes of achieving a more satisfactory standard of living for the Indonesian people. Such an analysis is presented below.

(2) The Plan is based partly on an analysis of the sequence of events in Indonesia over several recent years, and partly on experience of countries with an economic structure similar to that of Indonesia. Together these studies provide a basic direction to the Plan and indicate the possibilities of development. The Plan framework providing this

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basic direction depends/ (a) basic principles and norms of an universal character, (b) the scope and nature of government responsibility, (c) the reception and attitudes of society as a whole to the government undertakings, and the need for all members of society to cooperate in the execution of the Plan.

(3) At the present time Indonesian net investment, public and private, is not less than 5% of national income.

(4) During the period 1951-1955, while net capital formation was some 5% to 6% of gross national product, the annual increase in gross national product was about 3% per year. Thus the incremental capital output ratio was less than 2:1.

(5) A common estimate of the current rate of population growth is 1.7% per year. The probability is that population growth will increase in ten or twenty years to 2% per annum.

(6) It is hoped that the 3% annual increase in national income can be maintained during the planning period 1956-1960. With population growth of 1.7%, the increase in national income per capita will then be 1.3% per year.

(7) With a marginal savings (and investment) ratio of 40%, 0.52% of per capita national income can be set aside each year for new capital formation.

(8) With 40% of the increase in national income allocated to capital formation each year, 60% of the increase is available for consumption, that is, to raise living standards.

(9) The 40% of the rise in per capita income to be allocated to capital formation will not arise out of a tendency for each individual to become more "savings minded", or for his "propensity to save" to become

higher. It will be the result of responsible government action and measures in the fields of monetary, fiscal, and economic policy. To achieve this level of savings and investment, government measures to stabilize the economy and to create a sound monetary system are essential pre-conditions.

(10) In 1960, at the end of the first Five Year Plan, it is hoped that the level of capital formation will reach the level of about 8% of national income. By 1965, at the end of the second Five Year Plan, we hope capital formation will reach 12% of national income, that is double the current level. In absolute terms, the level of capital formation at the end of the second Five Year Plan will be more than double the current level. All these figures are estimates of the minimum that we can expect to arise from the fruits of executing the Five Year Plan.

(11) The incremental capital output ratio of about 2 holds only for the first Five Year Plan, when new construction is limited and a large share of work and investment must go to the repair of war damage, the elimination of bottlenecks, improvements of existing plant and equipment, and improvement of production methods. The incremental capital output ratio must be expected to rise as time goes by, eventually reaching a level of 4:1.

(12) On the basis of these factors, required capital formation for and the years following twenty years/is estimated. By 1975 a level of capital formation of 20% of national income can be expected. It is reasonable to assume that the ICOR will then be about 4:1 and population growth 2%. Thus in 1975 the increase in national income will approximate 5% per year, or 3% per capita.

(13) At this time Indonesia will have reached "a stage of self-

generating expansion". That is, the economy will already have its own power and dynamic for progress and steady growth, as in the already advanced countries. After 1975, income for the entire population will double in fifteen years. Income per capita will double in twenty-four years. Each generation will thus enjoy a rise in standard of living of 100% over that of the previous generation.

(14) To realize this objective, there must be a period of striving by the present generation during the next twenty years. There will indeed be some improvements in the standard of living even during this period but not to the same degree as after 1975. The present generation will gain a glorious name as builders of Indonesian strength and pioneers of the prosperity and freedom of the Indonesian nation.

(15) Some may feel that the twenty year period is too long, and that the masses will not be so patient in waiting for fruits of the Plan. But if we look back twenty years to 1935, we must feel that twenty years is but a moment.

(16) The twenty year period may be shortened, and the sacrifice and efforts of the present generation reduced, if outside help in realizing the Plan can be obtained. But it will be a more responsible attitude not to base hopes on such outside help. Foreign aid--if it comes--will do no harm, but is better regarded as a supplement to Indonesia's own resources.

Chapter 2.  
Population

Chapter II presents demographic material, most of which has already been made available in one form or another.<sup>1</sup> Figures of population

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<sup>1</sup>See, for example, the submission of the Indonesian Delegation to the ECAFE Conference on population at Bandung; Nathan Keyfitz, "The Population Problem in Indonesia", Ekonomi dan Keuangan Indonesia, 1953, and Keyfitz and Widjojo, Soal-Soal Penduduk di Indonesia, Djakarta, 1954.

growth between 1930 and 1955 are presented for Java and Madura, the Outer Islands, and Indonesia as a whole. Projections are made for the periods 1950-1960 on the basis of alternate assumed rates of population growth of 1.5%, 1.7% and 2%. There is no discussion of population policy.

Chapter 3.  
Financing  
Economic  
Development

The third chapter provides estimates of the financial resources available for the Plan and also a sectoral breakdown of the investment budget. The total Plan calls for investment of Rp. 30 billion over the five years,<sup>1</sup> but details of financing are presented only for the Rp. 12.5 billion to be invested by the central government. The allocation of this Rp. 12.5 billion among categories of projects, and between rupiah and foreign exchange resources, is shown in Table I. The breakdown in terms of major sources is shown in Table II.

Financing "through the budget" appears to mean financing by taxes. The nature of the estimated expansion of deposits as a means of finance is not clear, and there is some indication of confusion between credit expansion and increased savings. In paragraph 3 of this chapter, the Report refers to the rates of increase in per capita deposits in Burma, Ceylon, Pakistan and India. It is concluded that an increase in per capita deposits of \$5.1 per year is possible in Indonesia, in the light of the expansion of deposits per capita in India of \$5.6. Since the expansion of deposits depends mainly on the expansion of credit through the banking system, and in Indonesia particularly on the extent of central government deficit financing through the Bank Indonesia, there seems little point in setting limits to the capacity for deposit expansion. On the other hand, if the purpose is to estimate the expansion of credit that is possible without inflation a more sophisticated analysis would be needed.

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<sup>1</sup>This figure does not actually appear in the Plan Framework but is presented in another Planning Bureau document, "Some Explanations of the Five Year Plan", Economics and Finance in Indonesia, October (in Indonesian) and November (English) 195

The Report says rightly that the possibilities of financing through the securities market is limited. In paragraph 4 it is pointed out that the 3% government bonds issued in 1950 are still selling at only 50% of their face value, yielding about 6%, and that even this figure reflects large-scale purchases by government agencies. It is hoped, however, that after the first Five Year Plan, when financial stability has been established, greater reliance can be placed on the securities market.

It will be noted that very little reliance is put on foreign loans and grants, as indicated in the introductory chapter. It should be clearly understood, however, that this figure does not include foreign private investment. The Report points out that in the past the main sources of foreign loans and grants have been the International Monetary Fund, the Export-Import Bank, the United Nations Specialized Agencies, I.C.A., Colombo Plan, and "some countries or private institutions in Western and Eastern Europe." The possibilities of a loan from the International Bank for Reconstruction and Development and of a Japanese reparations settlement are also mentioned. The readers are reminded that the possibility of attracting foreign capital is influenced by such factors as the foreign policy of the government, internal political conditions, security, the stability of the economy, and financial policy.

With respect to taxation, it is noted (paragraph 2) that the amounts allocated for development are essentially a projection of recent experience. In the budgets of 1953-1955, investment expenditures ranged from Rp. 1.7 million to Rp. 2.4 million. The necessity of keeping government investment within a limit which is possible without inflation is stressed. Completion of projects already underway and maintenance expenditures are not included in the development budget.

Chapter 4.  
Agriculture,  
Forestry,  
Animal Hus-  
bandry and  
Fishing

The proposals in the chapter on agriculture, forestry, animal husbandry, and fishing in the Plan consist mainly in continued efforts along the same lines, but with added emphasis on agricultural training at various levels. Perhaps the most successful efforts to raise output since the transfer of sovereignty have taken place in these fields. The introductory section states that three types of projects have been assigned high priority: first, those which are clearly realizable; second, those which are badly needed; and third, those of a type which has already proved their worth. Considerable importance is attached to the establishment of agricultural schools. Of the total budget for agriculture it is proposed to spend Rp. 50 million for agricultural colleges, especially for the training of teachers in agriculture. Some Rp. 20 million are to be spent on courses and schools for farmers (tanis) especially outside Java. About Rp. 28 million are to be spent for the Office of Community Development Education. Seed selection and improved irrigation will take some Rp. 23.5 million. Fertilizer, 100 tractors, erosion control, combat of plant disease, and experiments with new products such as cotton and rami are other projects. Experimental plots are to be set up. The Department for Development of Tani Activities will have projects for improved cooperation, for the education of tanis (both farmers' men and women), the training of/youth organizations, for assistance to cooperatives, the development of credit institutions, and the education of employees. The Department of Plantations will also have a training program.

The situation with respect to smallholders' rubber is said to be serious, with 20% of the gardens already in bad condition. Planting must be increased over a ten year period, by some 260,000 hectares. New planting should increase from 13,000 hectares in 1956 to 26,000 in 1960



and 39,000 in 1965. Expenditures on the smallholders' rubber program are to increase Rp. 26 million in 1956-1957 to Rp. 52 million in 1960-1961 and Rp. 78 million in 1964-1965.

A good deal of emphasis is put on the need for reforestation, especially in Java where the tree cover is already below the minimal safety level. It is pointed out that reforestation not only protects the land from erosion but also provides the basis for various industries, such as paper, chemicals, cellulose, housing, furniture, matches, and tanning. Tractors and bulldozers are needed for this program.

In the field of animal husbandry, the emphasis will be on experimental animal imports in order to improve breeds, especially of milk cows, Arab horses, and pigs; on improved feeding (there is insufficient pasture). Some swamps, it is said, could be used for running cattle if drained. The control of disease, especially of hoof and mouth disease, is an important part of this program.

So far as sea fishing is concerned, motorized vessels are regarded as of primary importance. Canneries are to be set up, starting with the current year. For inland fishing, the breeding of new types of fish is stressed.

The Office of Land Use Planning must decide on the proper proportions of forests and cultivated lands, the Plan states, and will have projects for flood control. Increased agricultural credit is also regarded as of considerable importance. The division of the five year budget among the various offices in the Ministry of Agriculture are presented in Table 1.

ter 5.  
gation

Irrigation is another field in which the Indonesian government has acquired substantial experience during the past few years. The irrigation

program in the Plan reflects this experience, giving the impression of having been carefully worked out. It is pointed out in the introduction to this chapter that the irrigation projects are regarded as multi-purpose projects, with flood control and drainage as objectives as well as increased production of foodstuffs. However, among the "foundations of the plan" for irrigation, the necessity of providing food for an increasing population is given a primary place. With a population growth of 1.7% per year, the population by 1960 will approach 89.8 millions. In 1955 the production of rice totalled 7,126,329 tons, while imports in that year amounted to 126,983 tons; total consumption thus amounted to 7,253,312 tons. Per capita consumption is equal to 88 kilograms per year or 241 grams per day. Production of maize in 1955 was 1.9 million tons or 60 grams per person per day. The goal of the Five Year Plan is to provide 250 grams of rice and 70 grams of maize per day. Thus by 1960, when the population reaches 89.8 millions, the total requirements for rice will be 8.2 million tons per year. Production of maize meanwhile must rise from 1.9 million tons in 1955 to 2.3 million tons by 1960. In short, production of rice must be increased by 200,000 tons per year. These requirements can be met partly by increased production per hectare, but some expansion of the rice hectareage will also be necessary; thus new areas must be brought under irrigation.

This chapter presents a detailed list of proposed irrigation projects with a map showing their location. The allocation in terms of hectareage and rupiahs by major districts is shown in Table 4. It is interesting to note that less than a quarter of the hectareage, and about the same proportion of the rupiah expenditures, is allocated to Java on which two-thirds of the total population lives. The island which is to receive

the greatest attention with regard to irrigation is Sumatra, followed by Kalimantan.

ter 6.  
ral Re-  
ces

Indonesia has a wide variety of mineral resources, but the quality and quantity of these resources is not clearly known. Among some sectors of the Indonesian community, there is too easy an assumption that high standards of living can be reached in Indonesia simply by "developing our rich natural resources". It is probably against such extreme optimism that the caution marking this chapter of the Plan is directed.

The chapter begins with a "general view" of the importance of mineral resources in the overall Plan. It points out that economic development depends on a good many things besides resources, such as the structure of the government, the political situation, the financial position and the like. At the same time, it is necessary, before constructing a development plan, to complete an inventory of mineral resources. Such an inventory must begin with a general survey of the area as a whole, and then proceed to a more detailed account of particular minerals.

The chapter proceeds to section (A), under the heading General Problems. The section begins with a cautious statement that it is not clear to what degree "non-renewable" resources are a prerequisite to industrialization. If industrialization is defined in the broadest sense, it may be questioned whether presence of non-renewable resources is essential to industrial development. The absence of certain resources can be offset by the presence of others. The most pressing need in Indonesia is to complete the technical research on mineral resources in a systematic fashion.

Paragraph 2 is concerned with "particular problems of minerals". The peculiarities which distinguish the mining industry, as one with

problems of its own may be briefly summarized as follows: (a) mineral resources are fixed in their location and limited in their amounts, (b) the great bulk of minerals is hidden, and their discovery to some extent accidental. This fact gives mineral development a speculative character. Connected with a large risk in the discovery of resources, plus the chance that they will be quickly used up, for example in the case of petroleum. (c) The difficulty of getting at the minerals increases as production continues, and the cost of production rises, (d) the majority of mineral resources last for a long time. Accordingly, the production of secondary minerals must be increased, a fact which creates a problem for the mining industry.

Paragrah 3. The Importance of Mineral Industries in General. The increased efficiency of human productive effort made possible by mineral resources results in increased purchasing power and expanding markets.

Paragrah 4. Methods of Mineral Surveys. Exploration techniques today are very refined, including geo-physical, geo-chemical, photogeometric, photo-geological, gravity and seismic methods, magnetometer work and aerial magnetometer surveys.

Paragrah 5. Areas To Be Surveyed. It is necessary to reduce costs of exploration by delimiting promising areas for systematic investigation. One of the most effective of preliminary approaches is to use general geological data. In general, the Indonesian islands are covered with a heavy mantle of overburden. The second, more systematic phase, which includes core-drilling, is also more expensive. It is worth proceeding to such intensive search only if the results of preliminary exploration are favorable.

The chapter then proceeds to a classification of the Indonesian

islands according to the types of metals that are found in them. The mineral resources of Indonesia are classified into three major types: (a) those which have already been worked for several years (petroleum, coal, tin and bauxite); (b) minerals which are now being worked only in a small way, and production of which can be expanded (gold, silver, manganese, nickel, phosphate, asphalt, sodium, and several minerals of less importance); (c) potential mineral development (the iron ores of South Sumatra, Kalimantan, and Sulawesi; the nickel ores of Sulawesi; the basic ores of Central Sumatra; and lead, copper and zinc of Central Java).

With respect to petroleum, the Report states that the important areas in Indonesia are limited to the Sunda region, although some oil exists in West Irian and Ceram. The figures of oil production for 1954 are presented, and are reproduced here in Table 5.

Natural gas is an important by-product of the petroleum industry. At present the great bulk of it is wasted. It is currently estimated that 1,200,000 tons are lost in the production of approximately 900,000 tons in the process of refining. Only 40,000 metric tons of natural gas are used as a source of power in the petroleum industry itself. Natural gas can be used, however, for important technical industries, such as synthetic ammonia and fertilizer. It can also be used for the generation of electric power.

So far no coking coals have been found in Indonesia, but reserves including brown coal and lignites are substantial. Of the coal mines owned by the government, Bukit Asam is the most important. In 1954 its production reached 647,100 metric tons, compared with the production at Umbilon of only 78,600 metric tons. The mines in East Kalimantan yield

174,100 metric tons. The estimated reserves of bituminous coal at Bukit Asam yield 60,000,000 metric tons. It is still under investigation whether this coal together with the iron ores at Lampung, provides the basis for an iron industry. The production of the government-owned Umbilon mine is now about 80,000 tons of bituminous, non-coking coal, but the total reserves amount to some 200,000,000 metric tons, and thus are greater than those at Bukit Asam. At present, these mines are operating at a loss because production is so low. Unfortunately, to get at these reserves, a mine must be built which is very deep and thus very expensive. The possibilities of increasing production from this mine are currently under investigation.

Tin production is second to petroleum in total value. The greatest proportion of Indonesian tin production comes from Bangka, the rest from Belitung and Singkep. The mines at Bangka are now government owned.<sup>1</sup> Unfortunately, world market conditions do not presently encourage expansion of tin production. There are groups in Europe who are interested in buying tin ore directly from Indonesia, until a tin smelter can be constructed in Indonesia itself. So far as is known to the Department of Mines, there has never been a thorough investigation of the extent of reserves of tin concentrates. The cruder concentrates are usually less than 10% tin by weight. Further study of the tin situation is necessary, and new techniques such as electrostatic and electromagnetic separation processes might be applied.

Bauxite is found in the islands of Bintan, Kojam, and some of the other islands of the Riau archipelago. There may also be some bauxite in south West Kalimantan. The exploitation of bauxite is undertaken by a Dutch firm, NIBEM, in which the Indonesian government has approximately

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<sup>1</sup>The Billiton mines are operated by a mixed enterprise in which the Indonesian government has a majority interest. (ed.)

a 20% share. The bauxite ore consists of about 53% alumina and  $4\frac{1}{2}\%$  silica. The reserves are estimated at 27,000,000 tons, although only 13,000,000 of these represent proven reserves.

The chapter then turns to the production of minerals now being exploited on a small scale, beginning with gold and silver. In the prewar period, between 1900-1940, the great bulk of gold and silver came from Sumatra. A new gold mine at Tjikotok-Tjirotan will be started in 1957 with financing from the Bank Industri Negara.

Manganese is found in Java, especially West and Central Java. The <sup>part</sup> major /of these reserves is being exploited by a Dutch mining concern. However, an effort to estimate the amount of manganese resources in the Djogjakarta area has been made by the National Planning Bureau in cooperation with the local government. Preliminary surveys suggest that these resources are not very large, but are scattered in small clusters which are discontinuous. Reserves of some value have been found at Doi and Halmahera Selatan which are now being exploited by the local government with assistance from the Bank Industri Negara.

Most phosphates are found in Java. Van Bemmelen in his Geology of Indonesia states that phosphates are found in 53 different places. It is clear that the proposed double super-phosphate plant in the industrial development associated with the Asaham Project cannot rely on domestic raw materials alone, but must continue to use imported materials.

Turning to potential mineral deposits, the chapter first refers to the survey of iron and steel possibilities being made by a German team under the direction of the National Planning Bureau. This team is expected to report about the middle of 1957, and that their report will provide a basis for the iron and steel project in the Five Year Plan.

With regard to nickel, it is stated that the survey conducted by the J. G. White Engineers estimates capital investment requirements at Rp. 50 per kilogram of nickel produced.<sup>1</sup>

Section C deals with the economic position of mineral industries in Indonesia. The growth of investment and labor force in these industries is indicated. Output shows more expansion over prewar levels than in the case of agriculture.

Section D of the chapter is concerned with the systematic planning of exploration. Most of it, however, is concerned with exploration already completed or underway. For example, reference is made to the exploration for bauxite in Riau by NIBEM; by J. G. White Engineers for coking coal (here it is mentioned that the reports on the possibilities of using Indonesian coal for coking by the new American process of high temperature carbonization [Disco Process] was negative). The geologists provided under the Colombo Plan have conducted exploration for manganese in the Djogjakarta region; as yet these discoveries are not sufficiently extensive to warrant exploitation. They have also made surveys in connection with the proposed cement plant for the Medan-Toba area. Reference is also made to an expedition sent to South East Kalimantan to search for iron and coal, an exploration important for the proposed iron and steel projects. The section closes with a reiteration of the importance of carefully planned prospecting.

The section concerned with petroleum policy in the Plan begins by pointing out that Indonesia is a country with considerable room for private investment, both national and foreign. It is suggested, however,

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<sup>1</sup>A program of core drilling is being carried out to determine the nature and extent of copper reserves (ed.).



that private investment must be directed towards new projects. As a matter of principle, it is said that the government must create a favorable climate for private investment, both national and foreign, since the government's own capital resources are below the requirements for raising national income. Where it is clear that there is a shortage of domestic capital for investment in some field of importance in the Plan, that field must be opened to foreign investment under rules stipulated in the foreign investment law. The general policy with regard to foreign investment is stated in that law. The government is aware of the important role that has been played by the oil companies in the development of the country. Indonesia benefits from the activities of the oil companies through taxes, foreign exchange earnings and indirect economic contributions. Indonesia does not yet have enough capital to expand the operations of this industry. Meanwhile, domestic consumption of petroleum and petroleum products is rising at a rate of about 10% per year. There is a shortage of technicians and of capital within the country to meet this expansion of consumption and to realize foreign exchange earning potential. As a temporary policy, therefore, the government should grant exploration and development rights to private enterprises with inadequate reserves, while showing a progressive attitude toward the Indonesian economy. Stanvac is in the weakest position with respect to the extent of estimated reserves. NIAM also needs additional reserves. The petroleum policy should include Indonesianization of the exploitation of oil resources in a progressive manner. More Indonesians should take part in the responsible leadership of the oil company. For example, in NIAM, in which the government has a 50% share of ownership,

the leadership is still provided by BPM.

Chapter 7.  
Electric  
Power

The chapter begins with a statement of electric power production as of 1949, relative to population. It is suggested that per capita consumption in that year was perhaps the lowest in the world;

4.6 kilowatt hours in Indonesia, as compared to 410 in Italy, 814 in England, 1,990 in America, and 3,430 in Canada. By 1954 considerable expansion had already taken place, from 387,000,000 kilowatt hours to 812,000,000 kilowatt hours. However, the Five Year Plan calls for considerable further expansion of electric power capacity. The Djatiluhur project will have a capacity of 100,000 kilowatts, and produce 528,000,000 kilowatt hours per year. The Asahan project has a capacity of 102,000 kilowatts, and will produce 585,000,000 kilowatt hours per year.

Chapter 8.  
Industrialization

The chapter is divided into three major parts, the first dealing with priorities, the second with policies, and the third with projects. With respect to priorities, there are two major problems; shortage of foreign exchange, and a shortage of skills and expertise.

There are basic priorities (senior priorities) and secondary (junior) priorities. Among the basic priorities are first the need to provide for essential consumer goods, in order to save foreign exchange. Of second priority are projects which will bring foreign exchange savings or earnings--import replacers or new exports. Third come new capital investment projects which are highly efficient in terms of scarce factors.

Among "junior priorities" production of goods and services in general consumption among the people in Indonesia comes first. Junior priority number two is that existing industries should be maintained and

small industries protected and within reason assisted; the third junior priority is to make the best possible use and distribution of domestic raw materials and skills; fourth, national principle is to be fostered and training advanced; five, existing transportation routes should be exploited in the most efficient manner since new roads are expensive; six, cheapness of products is to be secured; seven, projects that come speedily to fruition should come first where possible, especially if they can earn foreign exchange.

In the Industrialization chapter stress is laid on research training, and credit extension. The research program includes such organizations as the Office of Industrial Research in Djakarta; the Offices of Chemical Research in Bogor, Surabaya and Makassar; the Office of Textile Research in Bandung; the Office of Ceramics Research in Bandung; the Office of Industrial Research in Bandung; the Office of Leather Research in Djogjakarta; and the Office of Batik Research in Djogjakarta. With respect to credit, emphasis is put on the operations of the Bank Industri Negara, but mention is also made of the Bank Rakjat Indonesia, the Djawatan Perindustrian, the Lembaga Djaminan Kredit, etc. (p. 109).

Only the industrial program of the central government has been translated into specific projects in the Plan. The whole industrial program is broken down into three categories of projects: special projects, central projects, and "recommended projects" for local government and private enterprise. Of the total central government budget of Rp. 12.5 billion, Rp. 3,125 billion, or 25%, is for industry and mining. The allocation to the industrial sector alone amounts to Rp. 2,279.5 million,

or 73% of the total allocation for industry and mining. The remaining Rp. 757 million is for the mining sector and with reserves of Rp. 88.5 million.

Of the industrial projects Rp. 1,078 million are for special projects, Rp. 776.5 million are for central projects, and Rp. 425 million for regional projects. In terms of foreign exchange, the requirements are Rp. 735.6 million for special projects, Rp. 351.9 million for central projects, and Rp. 200 million for regional projects. This gives a total of Rp. 1,287.5 million in foreign exchange, or 56% of the total industrialization budget.

Special projects are very important for the <sup>country and</sup> / include: (1) the Asahan complex in Sumatra, which includes the aluminum factory at Belawan, <sup>combined</sup> (2) a / iron and steel project, <sup>industry and</sup> (3) chemical/fertilizer industry, (4) rayon industry. The Asahan project includes the transmission of electric power, the factory for aluminum (including alumina), the factory for super-phosphate fertilizer, a cement factory, harbor and transport facilities, and pulp and paper (pro-memori for the time being). Within the Five Year Plan the electric power capacity at Asahan will be 100,000 kilowatts. The chemical industries will include caustic soda, sulfuric and other acids, ammonia, muriate fertilizer, and super-phosphate. The central government projects include such undertakings as completion of the cement plant at Gresik, the construction of a cement plant at <sup>and Toba</sup> Medan, paper factories at <sup>Kiabak</sup> in North Sumatra, and the like.

No detailed projects are submitted for the local government, and private enterprise sectors. However, a long list of undertakings is provided, and these are divided into those which are recommended by the central government, those which are considered complementary to the

government sector, and others; that is, industries where there is "still an opportunity to work". These are also sub-divided into industrial types, such as food, <sup>beverage</sup> / and tobacco, textiles, heavy industries, clothing and apparel, wood and furniture, and the like.

Chapter 9.  
Transport and  
Communications

A total of Rp. 3,125 million is allocated for transport and communications within the Five Year Plan, of which Rp. 1,169 million will be in foreign exchange. The greater proportion of this sum is allocated to roads and <sup>bridges</sup> / with railroads second. Post, telephone and telegraph comes third, followed by shipping and harbors. It is interesting to note that of the expenditures on roads, the island which will receive the greatest share is Sumatra, with Rp. 390 million, followed by Kalimantan with Rp. 290 million. The allocation for Java, including the special district of Djogjakarta and metropolitan Djakarta, amounts to Rp. 273 million. Road equipment and the like will take Rp. 150 million of the total budget for roads.

The program for railroads is almost entirely a matter of road improvement. The rehabilitation of the important networks in Java and Sumatra will take Rp. 250 million. The Plan also includes the rehabilitation of the railroad network of 164 kilometers in South Sumatra from Kertapati to Tandjung <sup>Enim</sup> / which is important for the Bukit Asam mine. Airports and hangers for Garuda Airways will take Rp. 53.8 million. The harbor program includes a contract with a French company for enlargement of Tandjung Priok harbor, including a new tanker harbor, a third harbor of 500 meters, godowns, etc. and a 300 meter harbor for coastal vessels. Other work will be carried out at Belawan, which includes a new harbor, wharfs, and godowns, at Bandjarmasin, again, with a new harbor, a 200 meter wharf, godowns, etc., and at Balikpapan where a new landing bridge and godowns will be provided.

Chapter 10.  
Manpower  
Resources

As might be expected the program for manpower resources is concerned mainly with training. Figures are presented for the occupational breakdown for 1930 and 1953. In the latter year, some 69% of the occupied population were engaged in <sup>primary</sup> production, 10.5% in industry, 1.5% in transport, 6.2% in trade, 1% in professions, 2.4% in the government service, and 9.5% in other occupations. Some structural change between 1930 and 1953 is indicated by these figures. There has already been a reduction in the proportion of the occupied population in production of raw materials, and an increase in employment in industry, transport, and trade. The biggest increase seems to be in the government service.

Chapter 11.  
Labor  
Relations

This chapter contains a description of the labor legislation and regulations as are now existing.

Chapter 12.  
Education

The chapter presents figures of the increase in the number of students from 1950 to 1955, and also a projection to 1960. The number of children attending schools is expected to increase from 10.9 million in 1956 to 13.5 million in 1960. Attention is drawn to the need for training teachers. The report of the technical education survey team is briefly summarized.

Chapter 13.  
Public Health

Attention is drawn to UNICEF and WHO programs against typhus, dysentery, cholera, etc.

Chapter 14.  
Social Welfare  
and Social  
Security

This chapter deals with both social welfare and social security. Programs on social welfare could not be considered merely as incidental efforts by private institutions of a temporary nature; all government programmes which are aimed to achieve economic security, health, knowledge, welfare, and covering fields as social security, general education, public health and the like are within this scope of social welfare. The role of the government in the various activities of social welfare as aid to the poor, to orphans, rehabilitation of disabled people, and so forth under the present economic conditions should be mainly directed towards efforts to improve the physical capital and knowhow so as to improve productivity and increase per capita income, which in turn will increase the funds available to carry out various measures in this field of social welfare. The responsibility for social welfare must be carried out by the various activities of the society; the government's responsibility in this case lies mainly in giving encouragement, stimulation, aid and control over the activities in the society in the implementation and improvement of social welfare; the Research Institute of the Ministry of Social Affairs and various universities are carrying out research programs in this field. The First Five Year Plan set aside a fund of Rp 12,5 million to be used primarily for research and consultation.

Social security is considered as an integral part of the whole Reconstruction Plan and an amount of Rp 8,3 million is allocated to finance this programme. After giving a detailed outline of the various laws and regulations concerning this subject, the various institutions set up by enterprises or combined efforts between management and labour which are not based on labor legislations,

the various social measures concerning government officials, the chapter deals further with the social security programme and its implementation. Distinction has been made between life in towns and life in rural areas. To try out a system of social security in a village community under present conditions is not yet feasible. It is recommended to strengthen the idea of "gotong-rojong" by way of social measures organized in the most modern way without destroying sound traditions and could serve as the basis for "gotong rojong." Social security measures in towns are concerned mainly with the interest of labor and deals with unemployment, accidents and illness because of work, old age benefits, and so forth. The implementation of such a programme should be given to an autonomous agency working closely together with other departments of the government and under control of the Ministry of Labor.

In order to carry out the programme, the first phase required the training of personnel of certain groups of labor in certain specific areas, whereas broadening of the programme will only take place if the conditions laid down in the first phase have been met.

ter 15.  
ing

As a consequence of World War II and the Revolution, the housing situation in Indonesia is very discouraging. This situation became even worse with the exceptionally high rate of population increase and urbanization. This causes a housing situation in towns that is almost below decent human standards. The housing situation generally in rural areas is also very discouraging. Besides the fact that it is caused by poverty, it is also caused by the traditional way



of building houses which do not meet the basic conditions of health. This situation brought wide consequences in the social wellbeing of the people, but affected also the economic field.

Because the role of the government in the Five Year Plan is limited by budgetary consideration, the government's contribution to take positive measures in this field is very limited. An amount of Rp 95 million has been allocated for this purpose which covers expenses for research and technical assistance.

In the first Five Year Plan, the government will put emphasis upon: research on the techniques of building houses, technical assistance, efforts to simplify administrative procedures and facilities concerning the construction of houses, encouragement to the production of building materials and on gathering of information.

The finance of construction of houses could not possibly be assumed by the government and should be the direct responsibility of the society. Because income of the Indonesian population is low at this time, in order to cope with the financial aspect of the construction of buildings, cooperative efforts as housing cooperatives, foundations and the like must be encouraged and the government should give assistance and direction; important in this respect is that the cooperative efforts must be based primarily upon the forces in the society, rather than be dependent upon government's assistance. Housing credits must be channeled through credit institutions as banks, coops and Community Development organizations.

ter 16.  
unity  
lopment

While the Plan accords considerable importance to the community development sector, there are as yet no clearly defined projects in the community development program, and the central government's participation in it is limited almost entirely to provision of a central organization. The central government is apparently planning to provide only Rp. 198 million over the entire five year period for this purpose.

The introduction to the chapter on community development in the Plan stresses the need for integrated development at the community level, with cooperative efforts in such fields as health, housing, industry, agricultural improvement, credit extension, and the like. These projects should be designed, it is said, so as to produce balanced growth. The introduction does state, however, that concrete industrial and agricultural projects should have precedence over education, health, and the like. It is emphasized that the initiative for community development projects must come mainly from the villages themselves, although the cooperation of the central government with the villages is promised.

A distinction is made between "key" projects and the "extended program". These relate to successive phases of the community development program. The basic unit for planning community development is to be the Kewedanan, a district government involving several villages. The central government will contribute a larger share to the expanded program than to the key projects, which are to be based almost entirely on community self-help and community initiative. The Plan is to begin in the first year with sixteen projects in sixteen "key" development or work districts. In the second year twenty-two district projects will be started and ten expanded program districts will be added. In the third year there will be twenty-eight new key district projects and twenty extended program

district projects. In the fourth year there are to be thirty-four key projects and thirty extended projects and in the fifth year forty of each.

An elaborate organization is proposed for community development. There is first of all a central office or bureau comprising the Prime Minister and representatives of the various ministries and of the National Planning Bureau. This Bureau will have a Secretariat under a Chairman and a technical board composed of the Secretaries-General of the relevant ministries. Similar boards are to be established at the provincial and kabupaten level, with a small secretariat and representatives of the ministries at each level.

Launching of the community development program will require training at various levels. Training programs must be set up for the secretariat, for desa leaders, for various specialists, and for desa school teachers.

The chapter closes with an itemization of steps that have already been taken. In November 1955 delegates were sent to study the community development programs of Burma, Ceylon, India and Pakistan for a period of more than three months. In February 1956 a delegation of women was sent to Burma, India and Pakistan. In May 1956 a nation wide conference was held; and a temporary governmental committee on community development has been set up. Moreover, the original sixteen core work districts have already been selected and training of one hundred and sixty men from these sixteen work districts has been finished. Finally, a seminar conference has been organized with three foreign experts in attendance.

pter 17.  
peration

The chapter on cooperatives in the Plan is concerned mainly with a review of developments that have already taken place in the cooperative program. The number of cooperative organizations increased from 7,667 in 1952 to 11,446 in 1955, and the number of members of cooperatives

from just over one million in 1951 to 1,938,000 in 1955. No specific program or budget for cooperatives is offered in the Plan. The Planning Bureau apparently regards the growth of cooperatives as part of the Community Development Program.

ter 18.  
smigration

The main feature of the proposed transmigration program is its very small scale. Judging by the chapter on transmigration in the Plan, the National Planning Bureau places little faith in transmigration, either as a device for alleviating population pressure on Java, or as a form of agricultural improvement. The total budget provided is Rp. 383 million for the five years, or approximately Rp. 75 million per year. Since the cost of transferring and settling of families has been running close to Rp. 15 thousand per family, this would seem to mean that the Bureau is thinking of a program involving only 5,000 families a year, slightly less than the number of families transferred in 1955. During the first five years, the government will concentrate on two or three districts in South Sumatra as pilot plant projects.

It is stated early in the Chapter that the government wishes to encourage voluntary migration, concentrating on the improvement of roads and other supplementary activities that would assist transmigration. The government also wishes to increase the contacts between the existing communities and the areas from which the people came, in hopes of encouraging further voluntary migration. The government will administer its transmigration program on the same principles as in the Community Development Program. The role of the government will be to move the people, to clear the land, install irrigation, build roads, improve roads and bridges, and provide support for six months. Despite the small scale of the transmigration program, an elaborate organization is provided for it.

ter 19.  
ic Admin-  
ation

One important condition in the implementation of a reconstruction plan, is not yet fulfilled, that of the existence of an efficient governmental agency with officials with sufficient knowledge and experience. It is therefore the government's policy to try continuously to simplify the administration and the regulations, besides improving the capability of the officials.

The main problems facing the government today in public administration are those relating to:

- a. Set up and implementation of the budget.
  - b. Achievement of a definite division of responsibility between the various governmental functions.
  - c. Establishment of a decentralized administration.
  - d. Improvement of the efficiency of the government officials.
- a. Administrative problems may not be a retarding factor to finish a project, and the proposed budget must be submitted to the parliament on the 1st of September. Difficulties however as delayed authorizations and changes in the system of carrying unspent funds to the next fiscal year, caused inaccuracies in the compilation of various ministerial budgets. The above system should be reconsidered so as to guarantee continuity in the implementation. In this respect the various regulations concerning the budget (ICW) which are out of date, and the incompetency of the administrative officials, should be taken into consideration. A State Commission to consider among others the proposals of Mr W. Karahacheff, UN expert, is in the process of replacing the ICW with new legislation on the budget.
- b. Instability in the organizational structure of the Central Government and the re-organizations that have frequently taken place

in the various ministries add to administrative difficulties.

A National Committee (PANOK) to investigate the organizational set up of the ministries established in 1952, and which finished its report in 1954, proposed that changes within the ministries should be regulated by government decrees. Because some parts of Government Decree 1952 No 20, have not yet been implemented, the consequences are: excessive differentiation, duplication, organization and formation of officials which are too big and too extensive. According to this Commission, if its proposals could be implemented, the budget can be reduced Rp 130 million.

c. A condition for local government to develop its economy is the fullest opportunity to carry out its task in this respect organization-wise as well as financial. A clear cut division of the use of financial resources between the Central and Local Government should form the basis of the financial relationship and a draft legislation on this subject is now under consideration of the Parliament. This is also the case with a draft legislation on local taxation. It is of the utmost importance to have new laws concerning above questions.

d. In cooperation with the Ministry of Labour and the National Planning Bureau, a Work Committee on Employment Statistics has been set up headed by representatives of the Ministry of Labour. The committee calculated the total number of Government employees at the end of 1953 at 1,727,548, excluding members of the Armed Forces.

It is doubtful whether the three-fold expansion since 1940 is reduced by the additional tasks of the Government. Public policy

in this respect must endeavour:

- a. to simplify the whole governmental administration (including local government)
- b. to improve skills among employees
- c. to give recognition to capable officials.

In order to simplify the governmental administration , opportunities must be provided to redundant employees to improve their knowledge and skills in other fields. Problems of placement should be carefully studied by a State Committee, and within a limited time concrete proposals should be submitted to the Government.

Chapter 20.  
Planning and  
Organization

The overall planning covers the following efforts:

- a. Long run planning (5,6, or 10 years).
- b. Local planning.
- c. Yearly planning.
- d. Planning policy.
- e. Evaluation of the results.
- f. Compilation and an analysis of statistical information.

Above measures are considered as one unity that could not be divided into parts and should form the basis for the organizational structure.

- a. Since the budget is the most important source of financing, it is necessary to consider and analyze the budget over some subsequent years. Allocation of the development funds among the various economic and social fields is based on priorities which are already decided previously. The highest organ to set up and decide the reconstruction plan is the Economic and Planning Council. Coordination in the preparation of the plan and coordination in the implementation should be done by the National Planning Bureau on behalf of the

Government. Implementation of the development plan in the government sector should be done by the ministries and by agencies set up by the government primarily for that purpose.

b. Local Planning:

Because of inadequate information, the first Five Year Plan concerns mainly problems of national importance, looking at the country as one economic unit. But if we consider the projects in the various fields, it is clear that the Plan also shows a distribution of projects over the whole Indonesian archipelago. In the future local development must be planned accurately; in this respect the interests as well as the capability and the sources in areas itself, should be considered carefully without losing sight of the interest of the nation as a whole.

c. The National Planning Bureau should also be an agency for coordination and preparation in the yearly planning. In this respect, we must mention the existence of the Interdepartmental Committee (PAKIN), a committee of which the members are the Director General of the Planning Bureau as chairman and the representatives of the various ministries. This Committee has the responsibility of coordinating <sup>problems</sup> in the economic and social field and all foreign aid programmes.

The various ministerial budgets concerning development projects should be submitted to the National Planning Bureau to be analysed and discussed with the respective ministries, in order to be submitted together with the ordinary budget to the Council of Ministers and Parliament.



- d. Coordination between the yearly policy and the long term planning could be achieved by combining the two councils, the Economic and Financial Council with the National Planning Council into one Economic and Planning Council as declared by Government Decree 1956 No 15.
- e. The results achieved within a certain period of time can give us a picture how far we are able to implement the Plan and based upon this information, further policies in the various fields could be laid out and the budget for development for the following year could be determined.
- f. One of the difficulties in the preparation of the first Five Year Plan was the lack of quantitative data; for the preparation of the second and the following Five Year Plans, quantitative data should be available in sufficient volume and these data must be reliable. It is further recommended that sample surveys be used to get information in a short period, and that the statistical system be improved by broadening the statistical surveys to obtain better indications regarding various economic activities in the society, especially in regard to national income and production.

TABLE I

THE INVESTMENT BUDGET, 1956 - 1961  
(figures in Rp. millions)

|   | Allocation | Domestic<br>Currency | Foreign<br>Exchange |
|---|------------|----------------------|---------------------|
| I. Agriculture                            | 1,625      |                      |                     |
| 1. Agriculture                            | (= 13%)    | 1,044                | 208                 |
| 2. Transmigration                         |            | 383                  | 80                  |
| 3. Community development                  |            | 198                  | 40                  |
|   |            | <u>1,625</u>         | <u>328</u>          |
| II. Power and Irrigation                  | 3,125      |                      |                     |
| 1. Power development                      | (= 25%)    | 1,750                | 880                 |
| 2. Irrigation                             |            | 1,100                | 204                 |
| 3. Reserves                               |            | 275                  | 104                 |
|   |            | <u>2,850</u>         | <u>1,188</u>        |
| III. Industry and Mining                  | 3,125      |                      |                     |
| 1. Special projects                       | (= 25%)    | 1,078                | 735.6               |
| 2. Central projects                       |            | 776.5                | 351.9               |
| 3. Local gov't projects                   |            | 425                  | 200                 |
| 4. Mining                                 |            | 757                  | 442.2               |
| 5. Reserves                               |            | 88.5                 | 67.3                |
|   |            | <u>3,125</u>         | <u>1,797</u>        |
| IV. Transport and Communications          | 3,125      |                      |                     |
| 1. Roads                                  | (= 25%)    | 1,200                | 240                 |
| 2. Railroads                              |            | 600                  | 187                 |
| 3. Post Office & Telegraph                |            | 495                  | 230                 |
| 4. Shipping                               |            | 350                  | 285.2               |
| 5. Harbors                                |            | 275                  | 138                 |
| 6. Airways                                |            | 100                  | 27.8                |
| 7. Other                                  |            | 105                  | 61                  |
|   |            | <u>3,125</u>         | <u>1,169</u>        |
| V. Education, Welfare,<br>and Information | 1,500      |                      |                     |
| 1. Education                              | (= 12%)    | 1,050                | 157.5               |
| 2. Health                                 |            | 250                  | 25                  |
| 3. Public housing                         |            | 95                   | 9.5                 |
| 4. Labor                                  |            | 25                   | 1.3                 |
| 5. Social welfare                         |            | 12.5                 | -                   |
| 6. Information                            |            | 37.5                 | 8.7                 |
| 7. Reserves                               |            | 30                   | 4                   |
|   |            | <u>1,500</u>         | <u>206.0</u>        |
| TOTAL                                     | 12,500     | 12,500               | 4,688               |

Source: Framework of the Five-Year Development Plan, 1956-1960

(Garis-Garis Besar Rentjana Pembangunan Lima Tahun)

TABLE II  
FINANCING OF THE GOVERNMENT SECTOR  
(figures in Rp. millions)

| Year         | Budget       | Increase<br>in<br>Deposits | Bonded<br>Securities | Total<br>Domestic | Foreign<br>Aid | TOTAL         |
|--------------|--------------|----------------------------|----------------------|-------------------|----------------|---------------|
| 1956         | 1,700        | =                          |                      | 1,700             | 200            | 1,900         |
| 1957         | 1,800        | 320                        | -                    | 2,120             | 200            | 2,320         |
| 1958         | 1,900        | 340                        | 100                  | 2,340             | 200            | 2,540         |
| 1959         | 2,000        | 360                        | 200                  | 2,560             | 200            | 2,760         |
| 1960         | 2,100        | 380                        | 300                  | 2,780             | 200            | 2,980         |
| <b>TOTAL</b> | <b>9,500</b> | <b>1,400</b>               | <b>600</b>           | <b>11,500</b>     | <b>1,000</b>   | <b>12,500</b> |

Source: National Planning Bureau Development Plan 1956 - 1960.

(Garis-Garis Besar Rentjana Pembangunan Lima Tahun.)