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THE INDONESIAN FIVE-YEAR PLAN:
PROPOSALS FOR RESEARCH

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The following comments on the first Indonesian Five-Year Development Plan, and the proposals for further research, are based on the studies of the M.I.T. Indonesia Project and those of the other projects in the Economic and Political Development Program of the M.I.T. Center for International Studies. Accordingly, this paper does not discuss "project planning." The kind of knowledge which can be derived from the research carried out by the M.I.T. Economic and Political Development Program does not permit evaluation of individual projects within a development plan. It is our general impression that the project planning underlying the Indonesian plan has been competently done. That is to say, given the scale of the investment program and its allocation among major sectors and regions, the selection of individual projects within each sector and region appears to be well based. However, this impression is only a general one and does not reflect careful study of individual projects, which could not be carried out by such a group. Accordingly, our comments and proposals relate to the more general aspects of the plan, in particular to its scale, its sectoral allocation, its regional allocation, its phasing, and its financing.

In commenting on the present draft of the plan framework, we have naturally concentrated on those aspects of it that leave room for improvement. We do not dwell on the many strong points of the plan. Nor do we labor here the point that it was a great achievement for the Bureau to have completed any plan whatsoever in the political and economic environment

*This memorandum is based on a discussion in the Senior Economic Seminar of the M.I.T. Center for International Studies. It reflects the views of all members of the Seminar, but responsibility for the presentation rests with the author alone.

prevailing in Indonesia in the years 1952-1956. We have made that point elsewhere, in our study of Indonesia's Economic Stabilization and Development (New York, Institute of Pacific Relations, 1957). In Chapter 2 of that study it is stated:

If the sole result of the Indonesian Government-United Nations experiment in development planning had been to persuade Indonesians with the ability and experience of the present Director-General (Minister) and his Deputy to devote full time to development planning, the experiment would have been well worth while. And the Agreement has done much more. It has resulted ultimately in the establishment of a planning organization that is very well designed. It has introduced into the process of government a degree of coordination that was previously unknown. It has made government officials much more development-conscious and has helped to improve the administration of the capital budget and of foreign aid. It has made economic development planning as such a topic for cabinet-level discussion. Through press comments on its work the Planning Bureau has aroused more widespread interest in economic development among the literate public. It is providing training to a group of promising young Indonesians. It has provided background information for Indonesian delegations to Colombo Plan and ECAFE conferences, and useful advice on current policy issues. Even more important, the plan presented to the Cabinet is an Indonesian plan, and not merely a plan put together in relatively short order by a group of foreign experts. The chances of its being accepted and executed by the government are therefore much better than is the case with plans which are only a set of recommendations from a group of outsiders.

I. Scale of the Plan

The size of the investment budget in a development plan is the product of three factors: the targets that are set with regard to the rise in per capita income (or in employment); the estimated rate of population growth; and estimates of the incremental-capital-output-ratio (ICOR) or of the incremental-capital-job-ratio. We will discuss each of these in turn.

Targets

It is of course the responsibility of the government of an underdeveloped country to select its own target with respect to growth of per capita income. The degree of ambitiousness in this respect necessarily reflects political and administrative considerations as well as economic and technical ones. However, it is possible to state a few principles regarding targets on the basis of general knowledge of the process of economic growth.

First, the target for increase in total output must be high enough to assure that it will exceed the growth of population and bring at least some measurable and noticeable increase in per capita income. It follows that the target for growth of output must exceed the estimated growth of population by enough to offset probable errors in the estimates. Second, in a society which has not experienced economic growth for generations, the target increase in per capita income must be high enough to bring significant changes in attitudes towards technological progress, propensity to save, supply curves of labor and entrepreneurship, and the like, so as to launch a cumulative process of technological improvement, rising productivity, and rising standards of living.

It does not appear to us that the target set forth in the first Five-Year Plan meet these requirements. The estimates of capital requirements

for launching cumulative growth in Indonesia undertaken by the M.I.T. Indonesia Project suggest that the capital requirements for a "take-off" in Indonesia amount to some Rp. 12 billion to Rp. 15 billion per year. The same conclusion seems to have been reached by the National Planning Bureau; the plan is designed to achieve sustained growth only in the course of the fourth five year period. The first Five-Year Plan calls for net investment of only Rp. 6 billion per year, or 6 per cent of national income. This target does not seem high enough to meet either of the two principles set forth above.

The plan speaks of the "sacrifice" of the current generation for Indonesia's future. In fact, however, the Indonesian development plan involves neither a sacrificial effort for one generation nor an early take-off into steady growth. Only 40 per cent of the expected small increase in per capita income (1.3 per cent) is to be recaptured for future investment, and 60 per cent is to be made available for higher consumption. Thus no "belt-tightening" is called for; on the other hand, an increase in per capita consumption of three-quarters of one per cent per year, starting from the present low level, will not in itself generate enthusiasm for the plan.

Perhaps the authors of the plan felt that in a society that has been essentially stagnant for generations (if not actually declining) it does not matter much whether cumulative growth starts now or in twenty years. However, in the present plan the achievement of steady growth in twenty years depends on the increase of investment from 6.8 per cent of national income in the first Five-Year Plan to 8.5 per cent in the second Five-Year Plan, 12 per cent in the third five years, 16 per cent in the next, and 20 per cent by the end of the fourth Five-Year Plan. These increases in investment are so small that with existing imperfections of national income statistics it would

be very hard to tell whether year-by-year goals are being attained or not; yet even these modest goals require a more rigorous fiscal policy--and thus some enthusiasm for the plan. A stagnant economy is like a stalled car; leaning on it with gradually increasing weight is unlikely to get it started. It needs "a big push". The present plan will not change parameters enough to bring new attitudes, new behavior patterns and the like.

Further delay in launching cumulative growth should be avoided if at all possible. The revolution injected a dynamic into Indonesian society, and every effort should be made to direct this outburst of energy towards economic growth. If too much time is allowed to pass without a major developmental effort this dynamic may be lost.

Moreover, the political situation is clearly unstable. To satisfy the demands of dissident groups, and particularly those of the Outer Islands, it seems likely that the government will be compelled either to engender a united effort "to win the economic revolution", or to provide noticeable improvements in the standard of living in the near future. In point of fact, considering the optimism with respect to ICOR (see below), it is doubtful whether the plan will do more than keep pace with population growth. The present plan will not solve the Javanese employment problem, and it leaves essentially untouched the growing discrepancies between per capita output in Java and on the Outer Islands, which can only aggravate frictions between the Center and the outlying regions. Also, some neighboring countries are doing better than Indonesia relative to their incomes. Will Indonesians remain content with a development plan that brings such meager results?

If the modesty of the plan represents a political judgement of what is possible at this stage, it would be brash indeed for any outsider to criticise it on these grounds. If it is based on the experience of such

countries as India (the scale of the investment budget and the ICOR are the same as in the first Indian Five-Year Plan), however, it represents a mis-application of this experience. Indonesia starts from a much higher per capita income and a much broader resource base than India, and can accordingly start with a more ambitious program than was entailed in the first Indian Five-Year Plan.

It is our conclusion, therefore, that every effort should be made to accelerate the expansion of developmental investment.

The presentation of the investment budget¹ contains an element of ambiguity. The first Five-Year Plan calls for investment of 6 per cent of national income, slightly above the estimated rate of net investment in recent years. The Planning Bureau also says, however, that the rate should have reached 8 1/2 per cent of national income by the end of that period. Clearly, if investment is 6 per cent of national income in the first year of the Five-Year Plan and 8 1/2 per cent in the fifth, total investment over the period as a whole will be in excess of 6 per cent of the national income. Similarly, for the second Five-Year Plan the rate is given as 8 1/2 per cent, although it is estimated that the rate will have reached 10 per cent by the end of that period.

Taking this concept as a basis, the Bureau might restate its targets by assuming that the rate of net investment of 6 per cent of national income is reached in 1958. They might be more cautious with respect to incremental-capital-output-ratios, and assume that it will be 2.5 in the first Five-Year Plan, 3.0 in the second Five-Year Plan, and 3.5 in the third. Finally, they might assume that during the first five years the entire increase in national income is recaptured, and devoted to development purposes. In the second

¹In Ekonomi dan Keuangan Indonesia, November 1956.

Five-Year Plan and the early years of the third, the increase in national income can be divided between increased investment and an increasing standard of living. After ten years 80 per cent of the rise in national income could be allocated to increased consumption. We would then get a pattern of expansion such as that shown in Table A below; "steady growth" is achieved in ten years, with an annual increase in per capita income and consumption of 3 per cent or more from that time on. By shortening the transition from past stagnation to sustained growth such a program would greatly improve the chances of achieving a genuine "take-off".

Population Growth

The estimates with respect to population growth seem reasonable enough, and it is a strong feature of the plan that it allows for some initial rise in the rate of population growth, as a consequence of the present age-distribution, public health measures, and the possible positive impact on fertility of a new wave of industrialization. However, the margin of error allowed in the plan is so small that a population growth of 2 per cent in the first five years (instead of the estimated 1.7) and an ICOR of 3 (instead of the estimated 2) would mean that the present plan would bring no rise whatsoever in per capita income, even if the plan were carried out completely in all sectors, including the private investment and local government sectors. It is therefore of obvious importance that demographic studies be undertaken to determine more accurately the present and probable future rates of population growth.

It must also be recognized that the result of further research may be a conclusion that given the limitations on the scale of investment in the near future, an active population policy, designed to reduce fertility at

least enough to offset expected reductions in death rates, will be a sine qua non for economic growth. The attachment to the team of foreign experts in the Planning Bureau of population experts presumably reflected a recognition of this possibility; but the plan includes no discussion of this problem. The dramatic drop in birth rates in Japan, the initial results of research in India, and the initial results of research in Indonesia undertaken by the Institute of Economic and Social Research in Djakarta, suggest that an active policy with regard to population can be effective. Even such measures as keeping girls in school to the age of sixteen or seventeen might influence birth rates significantly. However, the subject is clearly one that merits further study.

At one stage of the discussion of the development plan, it was thought that an ambitious transmigration program might provide relief for population pressure on Java. The discussion of transmigration in the present plan indicates that this approach to the population problem has been abandoned. It is our view that this course was the correct one; the whole experience with organized resettlement, both in Indonesia and in other countries, suggest that it is not a solution to the problem of finding productive employment for the annual additions to the Javanese population. With total cost of resettlement running at Rp. 10,000 to Rp. 15,000 per family¹ resettling (say) three hundred thousand families a year, so as to absorb the whole of the Javanese population growth, would require a budget of Rp. 3.0 to Rp. 4.5 billion--considerably more than the total development budget of the central government as proposed in the present plan.

¹This figure was given by Dr. Sie and Dr. Pelzer. The official figures for 1953 and 1954 are lower.

On the other hand, it should be recognized that the population problem is a Javanese one, and the use of a simple average population growth for the entire country, together with a single ICOR for estimating capital requirements, may result in a target that is quite unrealistic when it is considered that two-thirds of the population growth takes place on the one small island of Java. The costs of absorbing the population growth into productive employment are much higher than they would be if the population were evenly spread throughout the country. In arriving at over-all targets, capital-job calculations as well as capital-output calculations should be made. The present plan, however, includes no capital-job ratios.

The ICOR

Turning to the ICOR itself, it seems quite clear that the ICOR of 2:0 used as a basis for calculation in the first five years is too low, especially in the light of the composition of the plan, which is rather heavily weighted towards high ICOR projects (see Table B). As was pointed out in my article in Ekonomi dan Keuangan Indonesia, January 1957, there is no record of ICORs this low except during reconstruction periods. Indonesia suffered a good deal of destruction and disruption of economic life during the war and revolution. The ICOR of 1.5:1 implicit in the Planning Bureau's estimates of national income in the past few years may be plausible, considering the amount of rehabilitation and reorganization required, and the opportunities for capital-cheap increases in agricultural output through introduction of fertilizer, seed selection, repair of irrigation systems, replanting of abandoned land, and the like. It is also possible that in Indonesia the "reconstruction period" in this sense should have lasted five years after the transfer of sovereignty.

It would be risky to count on the "bargain-counter" phase lasting five

years more. Some opportunities for capital-cheap increases in output--such as removing squatters from plantation land--still exist. The possibilities of raising output of foodstuffs by increased use of fertilizer and better seed are not altogether exhausted. But the entire agricultural sector accounts for only 13 per cent of the central government's investment budget, and only in this sector can an ICOR below 2:1 be expected. In calculating an aggregate ICOR for the economy, it is the proportion of investment going into capital-cheap projects that counts, not the proportion of total income or employment in the labor-intensive sector. There is little conclusive information on the ICOR in the welfare sector, but it is unlikely that Rp. 1 million spent on public health or education will add (permanently) more than Rp. 500,000 to the national income. The three sectors accounting for three-quarters of the central government investment budget--transport and communications, power and irrigation, and industrialization--can have very high ICORs indeed, probably averaging above 4:1. Private investment is also likely to be rather capital-intensive. The community development sector can of course be capital-cheap, but it is only one quarter of the total and may not bring much permanent increase in national income in a country like Indonesia, where lack of access roads, irrigation systems, and the other kinds of social capital that can be provided on a community self-help basis are not the major bottlenecks. Given the sectoral allocation of the investment budget it is hard to see how the ICOR could average as low as 2:1.

If there were opportunities for substantial increases in per capita output in the peasant agriculture sector one might be more optimistic about the size of the aggregate ICOR. In Indonesia, however, the possibilities of capital-cheap development are limited by the special nature of the problem of Java. Here on this one island are three-fifths of Indonesia's

80 million people, making Java the most densely populated sizable area in the world. Fragmentation of holdings in peasant agriculture has gone as far as it can go and still support families at a subsistence level. The increase in Javanese population of nearly one million persons per year must be taken care of elsewhere in the economy.

It is our understanding that the selection of this low ICOR was based partly on Indian experience under the first Five-Year Plan. However as Table B shows, even the second Indian Five-Year Plan seems somewhat less capital-intensive than the central government sector of the Indonesian plan. Of course, the Indian plan incorporates the community development program, which is perhaps the least capital-intensive of all, while the figures given for Indonesia relate to the central government sector alone. On the other hand, the private investment sector in Indonesia is likely to have extremely high capital output ratios, if indeed the projected level of private investment is achieved. For the only way in which investment of Rs. 10 billion (say, \$5 billion) will occur in the five years covered by the first plan is through a large-scale inflow of foreign capital, which would go into such highly capital-intensive projects as petroleum and mining. Thus it is extremely unlikely that Indonesia will enjoy an ICOR lower than that experienced under the second Indian plan; and the Indian government has recently revised its estimated ICOR for the second Five-Year Plan from 2.3 to 3.5, as a result of lessons learned during the first year of that plan. If this figure were used for Indonesian instead of 2, the present plan would bring no improvement in per capita income in the first five years, even if executed in full and if the population growth does not exceed the estimated 1.7 per cent per year.

Ultimately, of course, the use of ICORs derived from experience of any

other country is always somewhat dangerous. Here is another area in which further research should be undertaken. It would be desirable to estimate ICORs both by sectors and by regions. The aggregate ICORs should then be calculated according to the sectoral and regional distribution of the investment budget. For example, there is some reason to suppose that the ICOR may be lower in Java than in the Outer Islands, since the "infrastructure" (or social capital) is more highly developed on Java than elsewhere in the country. Java is clearly better off than the Outer Islands for railroads, and is somewhat better provided with shipping and airways. It is probably better provided with roads as well. While some Javanese roads have fallen into disrepair, their improvement would be less costly than the construction of new roads in Sumatra and Kalimantan. However, this is precisely the sort of question on which more detailed research needs to be done.

Sectoral Distribution

An obvious weakness of the present plan is that only the investment of the central government can be regarded as in any way assured. Nothing approaching a "plan" now exists either for the community development sector or for the private investment sector.

It is true, of course, that detailed targets with respect to investment and output in these sectors can be rather meaningless. On the other hand, if the projected investment in these sectors--nearly 60 per cent of the total--is really to be carried out, a great deal more attention must be paid to policies to guarantee that the estimated level of investment will in fact be reached in each of these sectors. The community development sector needs much more detailed planning with regard to types of project and personnel

than has been possible for the first Five-Year Plan. The private investment sector needs a clear delineation of policies designed to encourage and direct private investment. These policies should include a clear statement of monetary policy, tax policy, land policy, and foreign exchange policy; definitive foreign investment, mining, and petroleum laws; and effective measures to deal with the squatter problem.

Foreign investment, mining, and petroleum laws have already been drafted. If passed by Parliament, they may well prove satisfactory. However, the questions of land policy, squatter policy, monetary policy, and tax policy designed to direct and encourage private investment, so as to assure the required level and structure of investment for the achievement of targets set forth in the plan, clearly need a good deal more research. Recommendations from the National Planning Bureau are obviously in order, although the Bank Indonesia, the Ministry of Finance, the Ministry of Home Affairs, and the Ministry of Agriculture are also involved in these aspects of development policy. Perhaps some special interdepartmental committee should be set up to work on these problems.

With regard to squatters, for example, the Bureau might consider such possibilities as persuading the planters to turn over to squatters the right to the land if in turn the squatters would undertake to grow plantation products instead of foodstuffs. Another possibility would be to remove the squatters from the center of the plantation to the periphery and turn them into smallholders. Either approach would assure the plantations of adequate supplies of raw materials to maintain the processing plants at full capacity, while providing the squatter-turned-smallholder a market and technical assistance. However, these are all subjects on which further study is clearly needed.

In this connection, the Bureau may find it useful to look at the Philippines Five-Year Development Program, which sets forth clearly policies recommended for the private investment sector. Another strong point of the Philippines plan which might be considered by the Bureau is the statement of "action expected from other government agencies" in carrying out the plan.

Regional Structure

Closely related to the sectoral structure is the regional structure of the plan, which has political as well as economic importance. It is obvious that there is at present a disequilibrium among the major regions of Indonesia, and both political stability and balanced growth would seem to require the achievement of some regional equilibrium. How is this to be done? The present Five-Year Plan includes no clear statement of policy with regard to location of industry. Industrial location should be thoroughly studied, both for the private and for the public sector.

Several related topics suggest themselves for research. One very important question is, "What are the limits to increased output in Javanese agriculture, with the rural population at its present level?" Estimates of potential increases in output through careful use of fertilizer, development of new seed strains especially suited for Javanese conditions, and improved tillage, range from 35 per cent to 75 per cent. It is of the utmost importance to know how long a breathing spell exists before the Javanese rural population must be reduced (through shifting to industrial occupations or to the Outer Islands) in order to avoid a decline in per capita income in Javanese agriculture. It should be obvious that high average incomes for Indonesia as a whole cannot be obtained so long as nearly half the total population is in Javanese peasant agriculture, and per capita incomes in that

sector remain as low as they now are. Moreover, such regionally unbalanced growth could easily result in the political disintegration of the country. Thus the research should not be limited to determining potential increases in output with the present size of holdings, but also should be directed towards estimating potential increases in output per capita if the average size of holdings is increased, Javanese rural population reduced, and more extensive and more mechanized agricultural techniques introduced.

The development of import-replacing industries on Java is one of the most hopeful avenues for development. However, before embarking on large scale investment in such industries, it would be desirable to have estimates of capital-job ratios in various import-replacing industries.

The same is true of the new export industries that might be developed. It would be helpful for future planning to have some idea of the relative capital-job ratios in the petroleum industry, in the production of aluminum, in tin smelting and the like.

One result of such research should be an answer to the basic question, "Should self-sufficiency in foodstuffs be abandoned as a goal, in order to obtain higher levels of per capita income?" It is my hunch that in the Indonesian case, a careful study would suggest that self-sufficiency in foodstuffs is incompatible with truly high levels of per capita income, and that Indonesia's future lies in the direction of increasing industrialization. But the basic research on which such a conclusion could be firmly based has yet to be undertaken.

An important by-product of this research would be a projected pattern of foreign trade and of inter-regional trade. The absence of any such projection is perhaps the major deficiency of the present plan, in the light of Indonesia's continuing balance of payments problems. Later versions of the plan might include a pattern for approach to balance of payments equilibrium both

internationally and inter-regionally. Such a pattern would require more detailed projections with respect to the growth of new industries, both on the import-replacing and on the exporting side.

It is my current view that cumulative economic growth in any country begins when labor becomes scarce in the agricultural sector, so that it pays individual farmers to shift to more extensive and more mechanized techniques. What is the expected impact of the plan on the level and structure of employment? Can labor be made scarce in Java, at some early phase in Indonesia's development?

In general, more attention needs to be paid to the phasing of development over the twenty year period. Projection with regard to population growth, ICOR, and investment alone are not enough. Careful consideration should be given to the kinds of investment that should be made in each five year phase. A kind of historical model should be developed, indicating targets with respect to output and employment in peasant agriculture, plantation agriculture, smallholders' activities, light industries, heavy industries, and the like. The structure of the economy should be plotted throughout the whole twenty year program. This changing structure should then be translated into detailed plans for investment and for particular projects in each of these sectors.

It might even be desirable to construct some kind of input-output table, even if only "x's" can be put in each of the columns. That is, even without detailed statistics as to the precise proportions of inputs derived from other industries, and of allocation of outputs among other industries, it would be very helpful to know what industries are related to industry "A", on the input side and on the output side. Given such information, one could then get a picture of the balanced growth of the economy, and of the implications

of structural change.

Other needed research relates to the relationship of the growth of the labor force to the growth of population as a whole, under varying assumptions with regard to the structure of production. Indeed, the whole question of employment has been rather badly neglected in the present plan. A related question is, "What can be done to absorb seasonal unemployment?" How much seasonal unemployment is there? Could it be absorbed into road construction, airport construction, harbor improvement, land clearing, irrigation projects, and the like? Can plantations make use of seasonally unemployed tanis? Could smallholdings be expanded by using seasonal unemployment? And so forth.

Another gap in the plan is the lack of a detailed program for improving public and private administration. Here too, further research can be done; in this case, the research might be done within the universities themselves, to determine what sort of training at the secondary school and university levels is best designed to produce quickly the cadre of administrators, for private enterprise and for government, that is needed to carry out a development plan.

The Financial Plan

A study of Financing Development With An Application to Indonesia has been prepared by Dr. Paauw and myself. This study analyzes the financial problems in considerable detail (some 500 mimeographed pages). Accordingly, we deal here only with some major aspects of the financial problem.

Obviously, a major question with respect to any economic development plan is the method of financing it. It would be highly desirable for subsequent revisions of the plan to include a detailed analysis of the financial

situation in Indonesia, and a detailed plan for financing the investment program. As a basis for such a financial plan, further research is clearly necessary.

It is the view of Dr. Paauw and myself that the main tax potential exists among the wealthier peasants and small land owners; although expansion of the industrial sector should bring significant increases in revenues without raising tax rates above existing levels. However, the amount of empirical study that was possible for Dr. Paauw and myself was very limited. Much more thorough scrutiny is needed of the tax potential in the heavy industry sector, the small industry sector, the plantation sector, the smallholders sector, the peasant-agriculture sector, the trading sector, and the like. Here again, collaboration with other government agencies, in particular the Ministry of Financing, the Bank Indonesia, the Ministries of Trade and Industry, and the Ministry of Agriculture, is probably called for. However, the financial plan should be presented in the plan document, no matter how much of the research is actually done by other government departments. In this respect, too, the Bureau might find it of interest to study the Philippines Plan.

Further research is also needed with respect to savings potential. As a beginning it would be useful to determine more precisely what is the present level of net savings, and to find out whence the available savings come. This analysis might be conducted in terms of the same sectors as are suggested above for the study of tax capacity.

The relationship between the budget and foreign trade policy needs to be spelled out in greater detail. The size of the budget surplus that will be needed to finance development without inflation will depend a good deal on what assumptions can be made with respect to the balance of payments. The

same is true, of course, with respect to extension of new credits to private enterprise.

There was some difference of opinion in the Seminar with regard to the degree of refinement necessary in the analysis underlying the fiscal plan. My own view is that estimates of the marginal propensities to save, to import, and to pay taxes are not necessary in the Indonesian case--which is a good thing, since in the total absence of national income series, it is hard to see how such estimates could be made. As a policy decision, it can be determined that any increase in government spending should be recaptured in taxes. Net extension of private domestic credit should be limited, as a policy measure, to net increases in private domestic savings not otherwise invested. Equilibrium in the balance of payments should be a third policy objective. Under these conditions the multiplier is one; the national money income will rise by the increase in public and private investment plus any increase in exports. These increases combined might run 3 per cent to 5 per cent of national income over the first ten years of the plan, and would then fall. Thus to prevent inflation the basic budget surplus must be just enough to counteract any difference between such an increase in money income and the increase in flow of consumers goods resulting from the investment (which is unlikely to exceed 3 per cent to 5 per cent of national income). In terms of rough orders of magnitude, it should be possible to make such calculations with the data available in Indonesia. A modest budget surplus would probably do the trick. In any case, it can be determined experimentally, and some margin of error is permissible. A price rise of less than 6 per cent per year, or a price drop of less than 3 per cent, is unlikely to retard economic growth to any significant extent.

Foreign Aid

The present version of the plan regards foreign aid as a residual. The Rp. 200 million per year estimated is of course a very small figure; at present average rates of exchange (say Rp. 20 to \$1.00) this amounts to \$10 million per year, about what has been provided recently in technical assistance alone. The underlying assumption is that if in fact foreign aid proves to be above this figure the investment program can be telescoped.

While this approach may be satisfactory for the first five year tranche of the plan, it would be useful if subsequent revision of the plan incorporated more detailed plans with respect to foreign aid. (Here again, the Philippines Development Program may serve as a model.) Of course, the actual amount of foreign aid received in any year depends on actions of governments other than the Indonesian one; but it should be possible to approximate the right order of magnitude of foreign aid for the first half of any five year period, in terms of amounts of foreign aid already in the pipe line.

In the case of technical assistance, more precision still should be possible. Requirements for technical assistance should be stated for the five-year period covered by each plan. In this fashion technical assistance requests become an integral part of the plan, and there will be more assurance that these requests reflect the actual requirements of the plan.

Political Goals

It would also be desirable if the next version of the plan endeavored to translate into detailed projects the commonly accepted political goals with regard to development: viz., organization of the economy on "cooperative lines", and "converting the colonial economy into a national economy".

I have some reservations with respect to the first goal. It is my feeling that "community-minded" Indonesians believe that the organization

of cooperatives, along the lines suggested in the "middle-way" proposals in Europe during the 1930's, is more consonant with the Indonesian community spirit (gotong royong, musjawarat desa, etc.) than organization in the form of corporations.

I have doubts as to whether this relationship really holds in fact. What institutions and policy measures conform best to the Indonesian conception of a cooperative society remains to be seen. It may not be a society organized into cooperatives; a cooperative may be as ruthlessly exploitative as any other form of enterprise--witness the batik cooperative which endeavors to use its powers to exploit consumers on the one hand and wage earners on the other. Indeed, the modern corporation, with its widely diffused ownership, its old-age, sickness and life insurance, its guaranteed annual wages, its five-year contracts with "escalator" clauses, its profit-sharing arrangements and trade union participation in management, may come closer to the true cooperative ideal than some forms of cooperative organization.

There is, of course, one way in which a corporation can never conform exactly to the Indonesian conception of communal life; decision-making can never be entirely dependent on achieving the appearance of unanimity. Decisions must be based--at least occasionally--on majority opinion. If, for example, trade unions are accorded minor representation in the management, it is out of the question to postpone or avoid all decisions on which differences of opinion between the trade union and representatives and the ownership representatives still prevail.

An interesting aspect of the proposed Five-Year Plan is that it contains an implicit compromise solution to the conflict between the economics-minded and community-minded groups. In effect the plan proposes a special

kind of mixed economy for Indonesia: it includes projects for a large scale government enterprise sector, for a large scale private enterprise sector, and for a community development sector. The implication is that in the first two sectors techniques and organizations will be selected so as to maximize productivity, even if these techniques and forms of organization do not conform with the traditional ideals of gotong-royong, ramah-tamah and kerdja-sama. Thus in these two sectors the plan makes a concession to the economics-minded group which wishes to maximize the rate of increase in national income. The other sector, however, can be organized in conformity with the ideals of a "cooperative society", thus making a concession to the community-minded group which stresses the traditional forms and values of Indonesian village society.

Much remains to be done to translate the cooperative ideal into specific policies and institutions. However, the development plan as proposed by the Planning Bureau leaves the door open to pursuit of the cooperative ideal in the peasant agriculture and cottage industry sector, in which the bulk of the population is now employed, while permitting large-scale industry to pursue efficiency for its own sake. As time goes by and understanding of modern cooperative organization grows among Indonesians, it may be concluded that high productivity and the community spirit can be made consistent with each other in the plantation and industry sector as well.

However, our main point is that this question deserves more careful study than it has yet received. Exactly which economic activities can be effectively carried out within a cooperative structure, and what is the actual impact on village society likely to be?

With regard to conversion of the colonial economy into a national one, it seems to us desirable for Indonesians to get the picture of a growing economy, in which Indonesians are responsible for an increasing share of

the increases in investment. It is in this way that the former "colonial economies" of the United States, Canada, Australia, New Zealand (and now India?) have been converted to national economies. This approach is clearly very different from one of displacing existing foreign enterprises and replacing them with domestic ones, which may result in temporary contraction of total output and income. Thus far the efforts of the various governments to "nationalize" the economy have been limited to reserving certain imports for Indonesian importers. The one clear-cut result of these policies has been to drive some Chinese entrepreneurs from trading to productive enterprises--which develops the economy but does not make it any more "national".

However, this question is clearly one for Indonesians to answer; once again our main recommendation is simply that the whole question be studied objectively, and that an effort be made to set forth a precise series of projects, legislation, and regulations which can have the effect of increasing the role of Indonesians in the economic life of their own country, without excessive sacrifices in terms of productivity.