

Chapter IX

The Implementation of Plans

War is easy; it is waging it that
is difficult.—Napoleon Bonaparte

PROMISE AND PERFORMANCE

WITHOUT QUESTION planning has helped promote growth in less developed countries. The visible evidence in many countries of the results of planned expansion of transport, communications, ports, power, industry, irrigation, and community facilities is too plain to be argued away. Nor have the benefits of planning been limited to construction and increases in physical capacities. The process by which development is planned, whether implemented well or poorly, often forces the introduction of new attitudes and procedures which are essential to improved administration and decision-making in a country and its government.

But even when the intangible values of planning are taken into account, an examination of postwar planning history reveals that there have been many more failures than successes in the implementation of development plans. By far the great majority of countries have failed to realize even modest income and output targets in their plans except for short periods. What is even more disturbing, the situation seems to be worsening instead of improving as countries continue to plan. Thus the United Nations has reported that

the actual growth in income and output of the developing countries during the first part of the nineteen sixties has generally not been sufficient to offer assurance that the target of the Development Decade will be reached. For the developing countries as a whole, the annual rate of growth in gross domestic product over the first four years of the present decade amounted to 4 per cent. Instead of the acceleration that was hoped for, this denoted a deceleration over the pace of advance recorded in the nineteen fifties. . . . Expressed in *per capita* terms, output during recent

years has been increasing annually by only 1.5 per cent; this is to be compared with an annual rate of increase of over 2 per cent between 1955 and 1960 and of nearly 3 per cent between 1950 and 1955.¹

In Asia, where countries have had more experience with planning than those of any other region, ECAFE found that

the rates of economic growth generally recorded in the . . . region in the early sixties had, in fact, fallen short not only of the planned targets but also of the growth rates of the 1950's. The conclusion derived from the secretariat's long-term economic projections was both significant and alarming; unless fundamental changes and improvements in economic structure and policy were made in time, the region as a whole would most probably not be able to grow faster than at an annual rate of 4.2 per cent, . . . [compared with the considerably higher rate of 6.4 per cent at which national planning authorities in the region were aiming] for the period up to 1980.^{1a}

With the exception of Japan, Pakistan, Thailand and Taiwan, growth rates during recent years have been disappointing in most Asian countries. Thus, the first four years of Indonesia's Eight-Year Development Plan produced little. The Plan provides that proceeds from eight large so-called B-projects (in the oil, timber, fisheries, copra, rubber, tin and aluminum branches of the economy) are to supply most of 240 billion rupiahs needed to finance 335 so-called A-projects (in the food, clothing, industrial, communications, distribution and other branches of the economy). Since none of the eight B-projects had been realized at the Plan's half-way mark, only 200 of the 335 A-projects could be begun and far fewer completed.

The widening gap between promise and performance is also well illustrated in India. In that country, national income increased by 3.4 per cent annually during the period of the First Five-Year Plan (compared with a target of about 2 per cent); 3.7 per cent during the period of the Second Five-Year Plan (compared with a target of 5 per cent); and only 3.1 per cent during the first three years of the Third Five-Year Plan (compared with a target of 5.4 per cent). Moreover, per capita income during the first three years of the Third-Plan period

¹ UN. Department of Economic and Social Affairs. "Chapter 1, Problems and Policies in the Development Decade," p. 8.

^{1a} UN. ECAFE. *Draft Report of the Conference of Asian Economic Planners*, pp. 2-3.

rose only by about 1 per cent (compared with an annual target of 3 per cent). For the Third Five-Year Plan period as a whole, the Planning Commission estimated a shortfall of 20 per cent in the target for the Gross National Product.²

But the bleakness of the vista is by no means limited to Asia. In Africa, few plan targets are achieved. For example, in Morocco none of the targets in the Five-Year Plan for 1960–64 was realized and the Plan itself was virtually scrapped in 1962. The targets of Nigeria's Six-Year Plan are not being realized. Other African countries, including Dahomey, Gabon, Sierra Leone and Upper Volta, have abandoned or replaced their plans before they were scheduled to end. Some have had to extend the periods of their plans when it proved impossible to implement them in the time originally set. As this book was going to press, the UAR announced that it would be necessary to extend the period of its Second Five-Year Plan to seven years in order to reach plan targets. In Latin America, also, significant deviations of actual from planned development are common. Thus, there is little prospect that Venezuela will achieve the 8 per cent annual growth rate called for by its 1963–66 Plan; Colombia's four-year development plan appears to have fallen far short of its targets, and Chile and Ecuador are encountering difficulties in carrying out their ten-year plans.

Nor is the inability to implement plans a problem only for countries with mixed economies. Although plan targets of countries which are members of the Council of Economic Mutual Assistance (COMECON) have been kept at fairly constant levels, growth rates have been declining. Among COMECON's eight active members—the Soviet Union, Poland, Czechoslovakia, East Germany, Hungary, Rumania, Bulgaria and Mongolia—annual growth rates have fallen from 13.3 per cent in 1951–55 to 10.4 per cent in 1955–56 and to 8.6 per cent in 1961–63.³ Even Yugoslavia, which has been more successful than most developing countries in fulfilling plan targets, ran into difficulties in 1961 and 1962 and had to abandon its Five-Year Plan. Nevertheless, the plan implementation record of the socialized countries, especially that of Yugoslavia and more recently Rumania, is far better than the record of most mixed-economy countries.

Any attempt to judge the success or failure of a development plan raises questions about the validity of the criteria used to make the

² *Economic Times*, October 11, 1964.

³ *New York Times*, March 11, 1965 (reporting on an article in *International Affairs*, published in Moscow).

judgment. There are those who contend that the proper test of a plan is not whether it achieved targets, but whether it was instrumental in getting development projects and programs started, advanced or completed, or in getting policies and measures adopted when these things would not have been done without the plan. They feel, therefore, that a plan has not failed if it has achieved results in one or more sectors and not in others. Moreover, they consider the procedure by which a plan is formulated a sufficient good in itself to justify a plan because it stimulates planners and others to think in terms of coordinating a nation's development efforts for a longer period than was customary. Those who feel this way tend to believe that almost any plan is better than no plan.

There is no denying that most if not all plans produce some worthwhile results. In this sense, no plan can be said to have failed in all aspects and almost any plan can be considered to be a step—however short—toward promoting development. But aside from the inherent difficulty of determining whether certain things were done because of a plan which would not have been done without it, the proposed standard is inadequate because it compares a plan with no plan at all. This approach may be justifiable for a first plan, although in the light of what is known about planning it is debatable that it is even then; but it can hardly be accepted as a test for later plans. It is demanding too little to ask whether a plan merely improved results somewhat over no plan, especially when performance has been palpably poorer than it might have been under prevailing conditions. A more realistic measure of plan implementation is the extent to which reasonable plan targets have been achieved. The record reveals that among less developed countries only a very few have succeeded in more or less consistently achieving reasonable plan targets over a period of a decade or more.⁴

⁴ By "reasonable" targets is meant those which competent planners determine are within the capacity of a country's resources and other capabilities. This excludes the plans of some countries whose targets are so patently overambitious that there is little chance from the outset that they will be attained. It is thus appropriate to ask whether plan targets were fixed on the basis of realistic evaluations of the likely level of resources, the efficiency of the public administration and government leaders' will to advance development; and whether, given the plan targets and existing circumstances, it would have been possible through appropriate action within the reach of the political authorities to achieve the targets. Because the first approach discussed above reflects satisfaction with little, it can lead to resignation if not complacency; because the second approach is postulated on the supposition that something has gone wrong when reasonable targets are not

Sectoral Shortfalls

Countries which fail to meet reasonable plan targets almost always have the greatest shortfalls in agriculture. For instance, not more than 83 per cent of the production target for agriculture is expected to be achieved during India's Third Five-Year Plan period as against 90 per cent of the target for industry. While many of Spain's four-year development plan targets were easily reached and even exceeded in the first year of the Plan, agricultural production declined by 3 per cent.⁵ At the end of Pakistan's First Five Year Plan, it was found that the greatest successes had been scored in the industrial sector; in agriculture, only about half the planned investment had been carried out with large shortfalls in output. Similar relationships are generally found in other countries.

Since agriculture's contribution to the Gross Domestic Product of most less developed countries is high—e.g., it ranges from 34 to 56 per cent in the developing countries in the ECAFE region—the failure of agriculture to attain targets is often the main factor accounting for lower than planned growth rates. Thus, ECAFE reported that it is the poor performance of the agricultural sector which largely explains the failure of most economies of the region to grow as rapidly as desired.⁶ Not only does a lagging agricultural sector reduce output directly; it

achieved, it can lead to a search for the factors which resulted in the shortfalls and to the accumulation of information based on experience which can be put to good use later.

If targets in a plan are not so unrealistically high that they are beyond reach or so low that they are too easily fulfilled, they constitute as good a measuring device as one is likely to find for determining the success or failure of plan implementation. That is why they are almost universally used for the purpose. Nevertheless, they have shortcomings. For example, although shortfalls from realistic plan targets must be considered failures, whatever the cause, fulfillment or overfulfillment does not necessarily signify success in implementing plans. The plan may have had little or nothing to do with the results. Thus, output in the Philippines, particularly in the private sector, has increased to the level of targets in various Philippine plans. But since the plans have never been adequately implemented or even adopted by the Government in most cases, the plans have not appreciably influenced the rate of growth. Perhaps it might be said of these plans that they were good forecasts but it can hardly be claimed that plan targets have been "fulfilled" or that Philippine development plans have been successfully carried out.

⁵ *Financial Times*, February 24, 1965.

⁶ UN. ECAFE. "Economic Development and Planning in Asia and the Far East," *Economic Bulletin for Asia and the Far East*, December 1964, p. 21.

also exerts a depressing influence on other economic sectors. In the ECAFE countries,

lack of agricultural raw materials has tended to reduce the volume of current production in certain industries. Balance of payments difficulties, arising from increased imports and/or decreased exports of agricultural products (especially foodstuffs), have reduced the foreign exchange funds available for financing imports of both industrial raw materials and capital goods, thus adversely influencing both the current and future level of industrial activity.⁷

The socialized countries have also been brought to the realization that they must allocate a greater proportion of investment funds to agriculture than they have in the past if their economies are to expand more rapidly. For example, the First Secretary of Poland's Communist Party has stated that the failure to earmark more resources for farming accounts for the fact that

agricultural production has turned out to be a bottleneck in our national economy and the main cause of the troubles we are now facing both on domestic and foreign markets.⁸

In the mixed economies, performance in realizing industrial targets is almost always better in the private than in the public sector. However, while the private sector may fulfill more of its targets in a plan than the public sector, increases in private investment and output are likely to occur in industrial branches whose growth was not envisioned in development plans. As a typical case, in the first two years of India's Third Five-Year Plan, total investments by private entrepreneurs apparently kept pace with Plan expectations, but there were nevertheless serious shortfalls from planned investment in the machine tool, cement, fertilizer and metallurgical branches of the private industrial sector. Consequently, the actual composition of private investment is turning out in India, as it often does in other countries, to be substantially different from what is called for in the Plan. Nevertheless, in many countries which have expanded output and income, it is the growth of the private sector—often in ways inimical to plan provisions—which accounts for most of the increase. This has been true, for example, in Pakistan, the Philippines and Thailand, among other countries.

⁷ *Ibid.*, p. 4.

⁸ *New York Times*, December 15, 1963.

MANIFESTATIONS OF FAILURE

Failure to carry out development plans may manifest itself in a variety of ways. Sometimes, there is an overemphasis on financial targets to the detriment of physical targets; sometimes, a country demonstrates a chronic inability to invest in soundly conceived targets. There are almost always extended delays in the execution of projects and programs, and higher than expected costs. Frequently, also, inferior construction and the selection of low-yield projects aggravate difficulties. Finally, after projects are completed, there may be an inability to make full use of new facilities.

Overemphasis on Financial Targets

Because some governments consider investment virtually synonymous with development, they have emphasized the fulfillment of the financial investment targets in their plans rather than the physical output targets which the investments are aimed at achieving. They have sometimes seemed to act as though the attainment of production targets follows automatically, or with minor additional effort, the realization of financial investment targets. Thus, the Indian Planning Commission has been criticized for talking and behaving as though the primary goal of the development effort was to reach a certain level of investment rather than a certain level of production:

This is, however, to mistake the means for the objective: the fundamental *objective* of the plan is to attain the higher levels of output, and it is these levels of future output which have to be kept in balance as between one product and another, if the plan is to be a coherent one. The capital expenditures are a very important means of helping to attain these outputs, but they are not an objective in themselves; if some other method of raising output could be discovered during the plan period (e.g., by the use of better seeds instead of costly irrigation schemes) then the essence of the plan would be fulfilled, even if the capital expenditure were far below the original figures.⁹

The orientation toward achieving financial targets has frequently led, in other countries as well as in India, to the neglect of physical

⁹ Reddaway, W. B. "Importance of Time Lags for Economic Planning," p. 227.

planning and programing. Thus, Burma's Ministry of National Planning reported that, in Burma,

executing agencies have their operations so exceedingly oriented toward financial planning that the physical aspects of project implementation are relegated to a minor position.¹⁰

In governments which measure plan achievements primarily on the basis of how quickly instead of on how well money is spent, the spending rate is likely to be higher than the ability to evaluate and prepare soundly conceived projects and programs. Not surprisingly, therefore, financial targets in these cases are often fulfilled or overfulfilled, while physical output targets record serious shortfalls. For instance, in India, mounting plan outlays have not always been accompanied or followed by the realization of physical targets. In Nepal, also, preoccupation with investment

led to the expenditure targets being attained in some programmes though the physical targets in most cases remained beyond any immediate grasp.¹¹

Underspending

Although Nepal sought to increase investment, it was unable to put all the funds it had available to effective use. During the First Plan period in 1957-61, the Government was able to spend only a third of original planned expenditures.¹² Although performance improved, only two-thirds of budgeted development funds were spent in the period of the Three-Year Plan in 1962/63-1964/65.

Such lack of "absorptive capacity," which essentially reflects an inability to invest in soundly conceived development programs and projects that can be carried out well and operated economically upon completion, is a common characteristic of less developed countries.¹³ In

¹⁰ Burma. Ministry of National Planning. *Second Four-Year Plan for the Union of Burma* (1961/62 to 1964/65), p. 88.

¹¹ Pant, Y. P. "Nepal's Planned Development," p. 475.

¹² Shah, Rishikesh. *On Planning and Development*, p. 13.

¹³ But it can also be found in more advanced countries. According to France's *Cour des Comptes*, administrative bottlenecks in the French Government accounted for the fact that, in 1960, 44 per cent of the money voted for navigable waterways, 62 per cent for flood control, 42 per cent for fishing ports and 78 per cent for administrative buildings remained unspent (*Washington Post*, May 30, 1963).

Asia, Africa and Latin America, many countries have found it impossible to invest all their available funds in well-prepared projects and programs. Criticism has been heard in India's Parliament "every year regarding overbudgeting and lapses," i.e., the inability of expenditures to reach the level of budgetary allocations.¹⁴ In Iraq, Syria and other countries in the region, underspending has been frequent. Morocco has had to carry forward large unspent sums from one annual budget to the next. So have Ghana and Nigeria. Tunisia and other African countries have been able to spend only a part of foreign funds made available to them, while in Latin America, also, "domestic appropriations and available foreign financing often are not spent within the original timetable."¹⁵

Some countries find it difficult to spend both domestic and foreign financial resources; others find it much more difficult to spend domestic than foreign funds. For example, Burma found it relatively easy to commit and spend foreign exchange because it required little more of operating organizations than the calling for tenders and the awarding of contracts for imports.

Their outlays tended to lag, rather, on the domestic side where more action on their own part was called for. Thus the Telecommunications Department accumulated vast stores of communications equipment from abroad considerably in advance of completion of the buildings in which the equipment was to be installed. Much spoilage resulted, and it was necessary later, after underground cables for the new dial telephone system in Rangoon had been laid, to rip them up and replace them.¹⁶

However, many countries find it hard to make productive use of foreign resources available to them. Thus, donor nations and international lending agencies frequently find that recipient or borrowing countries are unable to draw down proceeds of grants and loans without long delays. In a study which the World Bank made of 255 of its loans to member countries with original closing dates¹⁷ prior to

¹⁴ UN. Inter-Regional Workshop on Problems of Budget Classification, etc., *Relationship Between Planning and Government Budgeting in Developing Countries* [Part II], p. 16.

¹⁵ OAS. Inter-American Economic and Social Council, Special Committee I, etc. *Programming for Development: Five Urgent Problems*, p. 9.

¹⁶ Walinsky, Louis J. "Burma," pp. 42-43.

¹⁷ The closing date is the last date on which loan proceeds may be withdrawn by a borrower.

June 30, 1963, it found that 60 per cent of the loans required one or more extensions and 20 per cent required three or more extensions. The study also disclosed a marked slowing down in the annual speed with which the loans were being drawn down by borrowers during 1961-63 as compared with 1957-60. What makes these results especially noteworthy is that they refer to loans which were made in many cases for projects in relatively advanced stages of preparation and readiness to proceed with execution.

Repeated shortfalls in spending available development funds are a certain indication that something is wrong with the way plans are formulated or implemented or both. Aside from random causes, like the illness of a project manager or consultant or failure to obtain foreign deliveries on time, a variety of reasons may account for the "inability to spend." To begin with, many operating ministries, departments and agencies are unable to assess with reasonable precision their capacity to disburse funds effectively. When they prepare budgetary estimates they tend to be unduly optimistic about how much they can invest well. This can lead to highly inflated budgetary estimates. For instance, Iraq proposed to spend twice as much in the 1964/65 fiscal year as it had spent the year before. Since there was a scarcity of well-prepared projects and limited construction capacity besides, it was almost inevitable that there would be shortfalls. According to Syria's Ministry of Planning, inability to utilize budgeted funds in that country was also due to "the appropriation of relatively large amounts to projects whose studies were not completed."¹⁸

The head of Pakistan's Planning Board attributed slow disbursement of budgetary investment allocations in his country to "poor phasing of projects or the failure to adhere to time schedules";¹⁹ and in East Pakistan, chronic underspending was attributed to a lack of administrative organization, an absence of effective programs and projects, and a lack of technicians and other human resources.²⁰ According to one Finance Minister in Ceylon, disbursements of budgeted investment funds in his country were not made when expected mainly because of

¹⁸ Syrian Arab Republic. Ministry of Planning. *Annual Report on the Economic and Social Development Plan, 1960/1961*, p. 13.

¹⁹ Hussain, Z. "Organization and Responsibilities of the Pakistan Planning Board," p. 28.

²⁰ UN. ECAFE. "Some Social Aspects of Development Planning in the ECAFE Region," p. 13.

the lack of trained staff, the inadequacy of existing organizations to meet the increased demands of development and the dilatory effects of certain existing financial regulations.²¹

In Morocco, large proportions of the funds allocated to projects were not utilized because many ministries and agencies were unable to meet the construction schedules laid down for projects,²² while Tunisia found it difficult to use U.S. credits because it was unaccustomed to U.S. specifications and working methods.²³ Foreign loan funds to Colombia have gone unused for long periods because autonomous or semiautonomous entities have been unable, usually because of inflation and failure to get government approval for compensatory price increases for the services they sell, to assemble enough pesos to pay local expenses for projects whose foreign exchange costs are to be financed by a loan from abroad.²⁴

Underspending can increase development costs, reduce investment and growth rates, and distort the planned pattern of investment. Besides indirect losses on idle funds, a borrower may lose money directly from delayed use of loan proceeds because commitment or other interest charges generally must be paid on loans even before the proceeds are used. When disposable funds are only partly spent, resources which might have been used for other projects and programs are immobilized, thereby reducing the rate of investment and, frequently, the rate of growth and development. Inability to use proceeds of foreign and international loans or grants over extended periods may result in their lapsing. Since such loans and grants are generally tied to a specific project or program, the proceeds usually cannot be transferred to others. When a government attempts to use unspent domestic investment funds by transferring them from operating organizations which cannot spend their appropriations to those which can, the resulting shift may alter the planned composition of investment. Even without such transfers, underspending tends to distort planned investment since the rate of underspending usually varies among operating organizations. For example, the Moroccan Ministry of Agriculture used as little as 30 per cent of its annual budgetary investment allotments,

²¹ Snodgrass, Donald R. *Ceylon: An Export Economy in Transition*, pp. 36-37. (Quoting Felix R. Dias Bandaranaike. *Budget and Economic Growth*. Presented to Parliament on July 27, 1961, p. 10.)

²² Waterston, Albert. *Planning in Morocco*, pp. 43-44.

²³ *Financial Times*, November 26, 1963.

²⁴ *New York Times*, November 17, 1963.

while the Ministry of Public Works spent 75 or 80 per cent of the funds made available to it.²⁵ In most countries of Latin America, also,

the Ministry of Public Works has been the most proficient at project preparation and execution. Having more experience with construction projects than other operating ministries, it has generally been able to spend an average of 70 to 80 percent of the appropriations granted it. In contrast, those ministries now faced with the tasks of investments in health, community development, and others, often find it difficult to spend as much as half of their investment appropriations.²⁶

Since planned public investment patterns rarely coincide with the relative spending capacity of operating organizations, uneven rates of spending frequently play havoc with plan targets and planned composition of investment.

Delays in Execution

When financial outlays lag behind targets, projects and programs generally take longer to complete than was expected. Long delays in executing projects are frequent, in socialized as well as in mixed-economy countries. Thus, average construction time of high-priority plants in Poland took two years longer than had been foreseen in the Six-Year Plan.²⁷ Ex-Premier Khrushchev complained that while chemical plants usually are built in two years in Western countries, in the USSR,

because of shortcomings in the organization of construction we build some plants in four or five years.²⁸

Similar lags are common in other countries. In Ghana, Syria and Chile, among many other countries in their respective regions, projects have taken longer to finish than was expected. The World Bank survey mission to Spain reported that

in several sectors, many projects are begun with limited funds so that all of them take a long time to complete. . . . The average

²⁵ Waterston, Albert. *Planning in Morocco*, p. 43.

²⁶ OAS. Inter-American Economic and Social Council, Special Committee I, etc. *Programming for Development: Five Urgent Problems*, pp. 9-10.

²⁷ Montias, John M. *Central Planning in Poland*, p. 66.

²⁸ *Washington Post*, August 13, 1964, quoting the then Premier.

time for completion appears to be about three years, which it should be possible to cut in half.²⁹

According to Iran's central planning agency, the Plan Organization,

a majority of Plan Organization's industrial projects have taken significantly longer to execute than originally scheduled.³⁰

The Mid-Term Appraisal of the Third Five-Year Plan by India's Planning Commission made it clear that many important projects scheduled to be completed by the end of the plan period in 1965-66 would have to be carried over into the fourth plan period. Another Indian study indicated that three-fourths of the private projects surveyed experienced unforeseen construction delays which averaged eight months above their expected period of gestation.³¹ Delays were even longer in the public sector. For steel plants, installation of various units lagged from 13 to 18 months, and for heavy electrical plants, from one to two years. Similar delays occurred in the completion of fertilizer, machine tool, alloy and tool steel, and other projects.³² In fact, few projects progressed on schedule; completion on time was a rarity.³³

The costs of delays in carrying out projects and programs are higher than less developed countries can afford. If interest during construction is included, every extension of the period of execution adds to the cost.³⁴ But interest is only part of the cost to an economy; there are also the annual losses in production foregone and income unearned. Delays in completing a project which is to supply a commodity for export can reduce foreign exchange earnings substantially. It has been estimated, for example, that a delay of one year in starting Kiriburu iron ore exports to Japan from Vizagapatam in India was equivalent to a loss of about \$20 million in foreign exchange. The cost to a country of delays in completing an import-substitution project can also be great. Thus, India paid out considerable amounts of foreign exchange which might have been saved, and lost potential farm output besides, when

²⁹ IBRD. *Economic Development of Spain*, p. 62.

³⁰ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 72.

³¹ *Economic Times*, November 11, 1963.

³² *Economic Times*, December 25, 1964.

³³ *Economic Times*, October 26, 1963.

³⁴ Where capital can earn (or as economists say, when the opportunity cost of capital is) 10 to 12 per cent, as is true in many developing countries, the cost of completing a project in 5 or 6 years instead of 3, may add 25 to 35 per cent to the economic cost of a project.

fertilizer plants were not completed as scheduled. Because of the delay, foreign exchange had to be used to import fertilizers. Since foreign exchange was scarce, only limited amounts of fertilizer could be imported and this resulted in limiting increases in agricultural output.³⁵

In countries where prices are rising, extension of scheduled construction periods also raises costs above what they would be if projects were executed in time. There are other ways in which costs may increase, either directly or indirectly, because of long delays in carrying out projects. Thus, even before a project is completed, maintenance of, or repairs to, insufficiently protected parts finished early may be required. Changes in technology or in the market for a product may occur which alter the value of a project as originally designed. In Spain, for example,

a conspicuous case of this is the new railway lines which have been and are still being built. Some of them, when first conceived, may very well have had a function, but with increasing use of the automobile and the airplane, the need is rather to reduce the number of rail lines than to add to it.³⁶

High Costs

Because of delays in executing projects, as well as for other reasons, actual costs of projects often turn out to be substantially higher than originally estimated. During Pakistan's First Five Year Plan period, for instance, final costs in some cases were as much as 260 per cent above those predicted in original project reports, with the average about 160 per cent.³⁷ According to a high official of Pakistan's Planning Commission, cost increases for important projects in the Second Five Year Plan period have ranged from between two to nine times above original cost estimates.³⁸ Iran's planners reported that

it is the rule rather than the exception that . . . [industrial and mining] projects have cost significantly more than their original

³⁵ Patel, H. M. "Some Administrative Problems," pp. 299-300.

³⁶ IBRD. *Economic Development of Spain*, p. 62.

³⁷ Bell, David E. "Allocating Development Resources: Some Observations Based on Pakistan Experience," pp. 96-97.

³⁸ Haq, Mahbub ul. *Strategy of Economic Planning: A Case Study of Pakistan*, p. 193.

estimates. In other words, we have bought less for our money than we thought we would.³⁹

The same situation prevails in many if not most other countries. According to Prof. Arthur Lewis, one-time Economic Adviser to the Government of Ghana, in that country,

projects cost twice as much as they should, contractors make enormous profits, works are badly designed or badly built, and everything takes much longer to achieve than was expected.⁴⁰

In Greece, large public works often cost too much, besides being badly designed and delayed in construction;⁴¹ while in the United Arab Republic, expenditures for projects have constantly exceeded original cost estimates.⁴² Cost estimates for the three Indian publicly owned steel plants, their townships, ore mines and quarries were typically wide of the mark. The Second Plan first provided 4,250 million rupees to finance their construction, but estimates had to be increased, first to 5,590 million and then to 6,200 million rupees.⁴³ The foreign exchange for the plants, which was initially estimated at about 2,290 million rupees, had to be raised to 3,020 million rupees.⁴⁴ At the end of the first two years of India's Third Five-Year Plan, estimates indicated that, in the public sector, costs had risen above original estimates by 23 per cent for industrial projects, by 27 per cent for transport and communications projects and by 38 per cent for minerals projects.⁴⁵ In the private sector, they were 25 per cent higher.⁴⁶

Besides being costlier than expected, public sector projects often cost much more than similar ventures in the private sector. During Pakistan's First Five Year Plan period, for example, the cost of industrial projects was frequently "higher than the costs of execution of similar projects in the private sector."⁴⁷ According to Iran's Plan

³⁹ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 71.

⁴⁰ Lewis, W. Arthur. "On Assessing a Development Plan," p. 5.

⁴¹ Columbia University School of Law. *Public International Development Financing in Greece*, p. 112.

⁴² Wheelock, Keith. *Nasser's New Egypt: A Critical Analysis*, p. 172.

⁴³ India. Planning Commission. *Third Five-Year Plan*, p. 454.

⁴⁴ UN. Seminar on Industrial Programming. *India's Experience in Industrial Planning*, p. 39.

⁴⁵ *Economic Weekly*, Vol. XV, No. 50, December 14, 1963, p. 2048.

⁴⁶ *Economic Times*, December 25, 1964.

⁴⁷ Pakistan. Planning Commission. *Report of the Panel of Economists on the Second Five Year Plan (1960-65)*, p. 26.

Organization, publicly owned plants in that country were often more expensive to build than private ones:

A comparison of the investment costs of the Plan Organization and private projects in the textile, cement and oil extraction industries shows that it costs the country much more to build these plants under public than under private entrepreneurship.⁴⁸

In India, also, iron ore mines have cost much more than similar enterprises in the private sector. As a consequence, costs of production are often uncompetitive.

In many countries, public sector projects have proved to be unprofitable for long periods after completion and have had to be heavily subsidized by their government, thereby reducing the amount of funds available for development. This was true in Iraq, for example, where out of five large government owned cement, textile and sugar plants operating in the early 1960's, three showed losses. At the same time smaller, privately owned plants operating in the same sectors were producing substantial profits.

Inferior Construction

Besides delays in completing projects and higher than expected costs, projects are often shoddily built. Vaguely defined or otherwise inadequate or inappropriate specifications, poor siting, the use of defective or other improper materials, poor workmanship, construction under adverse weather or other conditions, or inadequate quality control and supervision of contractors may result in the construction of works or facilities which either cannot perform as expected or soon deteriorate. Thus, in one Latin American country welded seams of pipe for the pressure penstock and inverted syphons connecting canals on a hydroelectric project developed so many leaks that the pipe appeared to be part of an irrigation scheme instead of a system for funneling water to electrical equipment. In Cambodia, a road originally estimated to cost \$15 million and completed for \$30 million deteriorated so much in two years that repairs costing \$2.7 million had to be made.⁴⁹ Because of defective concrete work in the construction of the Rourkela

⁴⁸ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 72.

⁴⁹ *Washington Post*, June 7, 1961.

steel plant in India, additional work at an estimated cost of 800,000 rupees (\$160,000) had to be carried out.⁵⁰

Low Yields

In many countries, also, considerable amounts of capital are invested in large projects with little prospect of more than negligible returns. The World Bank survey mission to Spain suggested that some irrigation projects under way in that country were unlikely to yield results commensurate with their cost.⁵¹ During the period of Pakistan's First Five Year Plan, officials tended to overemphasize big projects and to ignore small ones which were crucial for increasing agricultural production. In part, this could be attributed to the preference of foreign lending and donor agencies for large projects, since one large project is simpler to finance than a series of smaller ones. But the tendency of officials to concentrate on large projects went beyond the requirements of foreign aid and lending agencies.⁵²

Unused Capacity

Inadequate utilization of completed projects is another important reason for disappointing results obtained from development plans. Time may cure this problem, but a country's economy may in the meantime derive little benefit from investment, or worse, may be subjected to difficult strains. Thus, overinvestment in industry to the neglect of agriculture has caused considerable pressure on the balance of payments of some countries. In the Philippines it was estimated that, because of overexpansion, existing industrial plants in 1957 were operating at a level of only about 50 per cent of rated capacity. But to raise operations to only 70 per cent of capacity would have strained the balance of payments because it would have required a substantial increase in foreign exchange for raw material imports from 55 to 73 per cent of total merchandise imports. At the end of the fourth year of Pakistan's First Five Year Plan, many of Pakistan's large-scale industrial plants were also operating at an average of 50 per cent of capacity. In Pakistan, too, increases in plant operations would have required

⁵⁰ *Economic Times*, December 25, 1964.

⁵¹ IBRD, *Economic Development of Spain*, p. 63.

⁵² Waterston, Albert. *Planning in Pakistan*, pp. 61-62.

considerable increased expenditures of scarce foreign exchange. Idle industrial capacity in India and Taiwan has also been substantial at times. Because of these conditions in countries in Asia, the ECAFE quite understandably considered that

the question is whether fuller utilization of existing plants should not be given priority over installation of new industrial undertakings, or whether agriculture should not be allowed to catch up with industry.⁵³

While incorrect assessment of the market can lead to overinvestment and unused capacity, there are many instances where underutilization of existing plants is due to inadequate provision for required complementary investment. In some cases, no provision has been made for related facilities or works; in others, where provision has been made, the complementary works may not be completed in time. In either event, there is a period during which little or no benefit accrues from a project. In Spain, for example, benefits from irrigation projects have been delayed because one agency with funds completed its part, while another agency with less money was unable to carry out its part of a project in time.⁵⁴ And

in this category also fall[s] . . . a costly housing project far out of Tehran destined for government employees where out of the 1,000 apartments completed to date not one has been occupied. . . . There is no road leading to the site, there are no shops, and there is no water. Neither is there a school.⁵⁵

In some countries, projects handled by one ministry have been completed before a program or project for the supply of raw materials handled by another ministry. Thus, a ramie plant initiated by Indonesia's Ministry of Industry was completed three years before the complementary project to expand ramie cultivation was begun by the Ministry of Agriculture. Meanwhile, since domestic production of ramie was sufficient to keep the factory operating for only six days a year, more expensive raw material had to be imported. Similarly, production in a government coal mine, in which new equipment had been installed, had to be cut back because inadequate provision had

⁵³ UN. ECAFE. "Economic Development and Planning in Asia and the Far East," *Economic Bulletin for Asia and the Far East*, December 1961, p. 12.

⁵⁴ IBRD. *Economic Development of Spain*, pp. 62-63.

⁵⁵ Olsen, P. Bjørn and Rasmussen, P. Nørregaard. "An Attempt at Planning in a Traditional State: Iran," p. 234.

been made by the government railroad to haul the coal.⁵⁶ The Plan Organization reported that in Iran's publicly owned jute, olive oil, vegetable oil and sugar processing plants, inadequate attention was paid to the need to supply the plants with agricultural raw materials. As a result, there was "a serious problem of getting adequate quantities of acceptable raw materials to operate the plants at high operating rates";⁵⁷ in Nigeria, a canning plant built by the Northern Nigerian Government had to close down because of inadequate supplies of vegetables and fruits; and in Iraq, a government sugar factory constructed to use locally grown sugar beets has had to process imported raw sugar because of the unavailability of domestic supplies, and a publicly owned cigarette factory, built to provide an outlet for domestic tobacco, has had to process imported tobacco because it could not find the right type and quality of tobacco in the country.

In India, also, phasing was imperfect in the public sector. According to the official Committee on Plan Projects:

Storage capacities of head works of water supply schemes have been expanded without a corresponding increase in the treatment plant, conveying mains or in the distribution system. Buildings in residential colonies are put up much in advance of the services with the result that they remain unoccupied for a long time resulting in loss of revenue and the added consequence of damage to structure by way of pilfering or breakage. Projects are delayed for want of completion of small items which though insignificant from a financial point of view may yet have a halting influence on the project as a whole. Bearings for bridges, sewerage, pumps, etc., can be quoted as examples of this category.⁵⁸

In India's heavy industry, while cement capacity was completed long before it was needed, steel capacity lagged badly.⁵⁹ The three publicly owned steel plants in India have been at the core of planned industrial development in that country. Yet in 1961-62, steel output in the three plants was only equal to 48 per cent of their combined capacity. Although 90 per cent of the Bhilai plant's capacity was being utilized,

⁵⁶ UN. ECAFE. *Economic Survey of Asia and the Far East, 1961*, p. 113 [citing, Indonesia. State Planning Bureau. *Report on the Execution of the Five-Year (1956-1960) Development Plan*, pp. 188, 208].

⁵⁷ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 72.

⁵⁸ Vedagiri, T. S. "Planning and Programming of Projects Since Independence," p. 21.

⁵⁹ Lewis, John P. "India," p. 99.

capacity utilization was 45 per cent in the Durgapur plant and only 29 per cent in the Rourkela plant. In the same year, the privately owned plants at Jamshedpur and Burnpur were producing at 87 per cent of their combined capacity.⁶⁰ Since 1961/62, steel output in the three plants has continued to be below target. According to the United Nations,

the continuing gap between output and capacity cannot be explained only by teething troubles of the new plants. Inadequate preparations for the capacity utilization by advance action on raw materials, transport and other services and training of technical and managerial personnel have led to the under-utilization of the capacity. It was not realised that it takes somewhat longer to develop mines and quarries and to establish fully serviceable traffic links than to construct the steel plant proper. . . . Out of the five coal washeries projected in the Second Plan to serve public and private steel plants, only two were ready before the end of the Second Plan period and neither of them achieved rated output capacity. Due to the inadequacy of preparatory studies, a few raw materials reckoned upon from nearby sources of supply were found to be unsuitable. . . . This led to lengthening of transport lead from other sources and added to the strain on . . . railway transport.

. . . The shortage of trained personnel . . . primarily resulted from under-estimation of the requirement. The requirements of senior engineers for the higher supervisory posts and for plants maintenance was estimated at 120. The estimate has been revised to 350. The estimate of junior engineers has been revised from 1,200 to 1,750 while that of skilled workers and operatives has been increased by 2,000 to 19,000.⁶¹

The failure of one government agency to train personnel needed for completed projects undertaken by another also helps account for much unused capacity. In Iran, as in other countries, schools and hospitals which were built at considerable expense could not operate effectively because teachers and nurses had not been trained by the appropriate agencies for the purpose.⁶²

⁶⁰ UN. Seminar on Industrial Programming. *India's Experience in Industrial Planning*, p. 37.

⁶¹ *Ibid.*, pp. 38-39.

⁶² Olsen, P. Bjørn and Rasmussen, P. Nørregaard. "An Attempt at Planning in a Traditional State: Iran," pp. 233-234.

But more often, under-utilization is due to bad planning by the sponsoring agency. For instance, in Spain, where investment in ports has concentrated on construction of quays and breakwaters, wharves have not been utilized adequately for lack of cranes. A comparatively small expenditure for cranes and other equipment would have saved much time in loading and unloading ships and greatly increased the use obtained from ports and, thus, the returns from the investment.⁶³ In Pakistan, benefits from irrigation and multipurpose projects under the jurisdiction of East Pakistan's Water and Power Development Authority were delayed because officials concentrated most of their attention on the engineering aspects of the projects to the neglect of their agricultural aspects. Thus, when dams and subsidiary canals had been completed, it was often found that feeder canals to farms which were to use the water had not been built and that other preparatory work had not been carried out.

In some countries, inadequate amounts of working capital have prevented public sector plants from operating at high levels. The Iranian Plan Organization, for example,

found that in estimating the capital requirements for particular projects much too small an allowance has been made for the liquid capital needed to operate the plant after it is built.⁶⁴

While in India,

lack of foreign exchange for spare parts and raw materials accounted for much under-utilization of existing industrial capacity.⁶⁵

But much more than lack of funds, scarcities of experienced and competent plant managers and other managerial personnel are responsible for unused capacity. Thus, India has a serious shortage of managers in the higher echelons of private industry and commerce, as well as in public sector undertakings. According to the report of an official committee, 20,000 managers were required during the third plan period, but only 12,000 were trained. Consequently, it will be necessary during the fourth plan period to make up the shortfall by

⁶³ IBRD. *Economic Development of Spain*, p. 63.

⁶⁴ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 73.

⁶⁵ UN. Seminar on Industrial Programming. *India's Experience in Industrial Planning*, p. 41.

training 35,000 managers for industry, commerce, construction and transportation.⁶⁶ Some governments are unable to mobilize managers for their enterprises even when they are available because they pay as little as one-fifth or even one-tenth as much as similar private plants for supervisory staff. As a result, government plants in these countries, e.g., Iraq, are unable to obtain experienced management officials who know how to organize procurement, production and sales activities adequately to permit full use of plant capacity.

WHY IMPLEMENTATION LAGS

Many factors, usually in combination, account for a country's lack of attention to physical as well as financial targets, underspending, abnormal delays in executing projects, higher than expected costs, shoddy construction, selection of low yield projects, underuse of completed facilities and, consequently, failure to fulfill plan targets. The catalog of causes of poor plan implementation is long. Some causes are the result of circumstances over which a country has little control. In this category are civil disturbances and political upsets, droughts, excessive rainfall or floods and other natural calamities which interfere with construction or output, and unforeseeable declines in world prices of export commodities which reduce local currency and foreign exchange resources. Sometimes, a country is only able to influence events partially, if at all, as when foreign or international donors and lenders take longer than was expected to make available foreign exchange resources for projects which they had agreed to help finance. Rising foreign and domestic prices and labor costs frequently make planners' estimates wrong, especially when their effect is intensified by undue delays in executing projects.⁶⁷ But the lack of success in implementing plans is in large part attributable to poor planning.

Dispersal of Resources

Thus, unduly ambitious plan targets, as well as poor financial controls, account for many failures to carry out projects and achieve

⁶⁶ *Economic Times*, February 6, 1965.

⁶⁷ Rising prices can affect adversely projects in the private sector as well as those in the public sector. In addition, increased taxes can raise costs and delay completion of private investment projects.

plan targets. In some countries, projects are started without sufficient funds or with the overcommitment of available financial resources. A development effort which may have started with a core of much-needed projects may be augmented greatly with many less essential and dubious schemes which obscure plan objectives and make public investment appear to be moving in all directions at one time. This has happened in Korea during the execution of the Five-Year Economic Development Plan for 1962-66. The OAS has reported that in Latin American countries there is a prevailing tendency

to scatter investment funds in small amounts among an excessively large number of individual projects. This habit is born of a marked reluctance to withstand political pressure for public works. The practice has the unfortunate result of retarding unnecessarily a large number of projects . . . and [bringing about] . . . a dispersion of resources on many . . . projects from which little fruit can be derived over the short run.⁶⁸

This problem also has had serious effects in the USSR. In 1963, the head of the Soviet State Committee for Construction Affairs severely reprimanded local authorities who permitted construction to begin simultaneously on an excessively large number of projects. The newspaper, *Pravda*, revealed that in the four years ending in 1963, the number of unfinished projects had risen from 160,000 to 195,000. In addition, the value of uncompleted buildings and uninstalled machinery had also risen. As a result, a large part of recent Soviet investment had failed to contribute to current growth.⁶⁹

When funds run out, construction on projects stops all along the line and no new projects, however promising, can be started for a long time. One example from Iran is typical of similar situations in other countries. According to the planners themselves, the

Plan Organization has started projects before it had all the necessary money to finance them. Consequently, the resource reductions of the past year have forced a cancelling of projects not yet started and [the] cutting back [of] others. [As a result of the shortage of funds] there is no room whatsoever for thinking of starting new construction projects for another three and one-half years. This is a pity, for no plan can foresee *all* possible projects at the start, and

⁶⁸ OAS. Inter-American Economic and Social Council, Special Committee I, etc. *Programming for Development: Five Urgent Problems*, pp. 10-11.

⁶⁹ *New York Times*, July 14, 1963.

some funds should be reserved in all sectors for adding new projects as time goes by.⁷⁰

In the USSR, enterprises and economic organizations had so overspent and overcommitted themselves that Ex-Premier Khrushchev found it desirable to suggest to the 22nd Communist Party Congress that a moratorium on all new capital construction be imposed for a year.⁷¹ More recently, the Hungarian Government had to counteract the spread of its investment resources over too many projects by ordering a reduction of one-third in large investment projects.⁷²

When governments are forced to cut down on the number of projects in process of execution in this way, it is very difficult to do so without upsetting the smooth implementation of the plan. Where they do not reduce the number of projects to conform to the level of resources, budgetary deficits may cause inflationary pressures to develop, as well as pressures on the balance of payments. In either event, achievement of targets is likely to be more difficult.

Lack of Discipline

Another major reason for lags in implementation is the widespread failure of governments to maintain the discipline implicit in their plans. In many countries plans govern actual developments to a much smaller degree than one would suppose from a reading of progress reports. What is planned and what is done often bear no discernible relation to each other. This was true, for example in colonial Nigeria, where development plans had only a limited effect in determining what developments in fact occurred.⁷³ It has also been true of other parts of Africa. Thus, most of the important economic expansion of colonial East Africa occurred independently of the development plans in the area and "owes nothing to them."⁷⁴

Most countries make only a token effort at co-ordinating fiscal, price, monetary, credit and other economic and financial policies with the requirements implied in their plans. Plans are prepared by a planning agency in one corner of a government and policy is made by various

⁷⁰ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, pp. 73-74.

⁷¹ Goldman, Marshall I. "Economic Controversy in the Soviet Union," p. 500.

⁷² *New York Times*, January 10, 1965.

⁷³ Schatz, Sayre P. "The Influence of Planning on Development: The Nigerian Experience," pp. 460-462.

⁷⁴ Great Britain. *East African Royal Commission, 1953-1955, Report*, p. 95.

bodies in other corners. There is usually little communication among them. In the Philippines, for example,

the policies and programs of the government's departments and agencies, up to the 1960's, bore no relation to the provisions of the country's development plans. The Budget Commission prepared fiscal programs with priorities that differed from those included in the plans. The Central Bank ignored the plans in controlling credit and in allocating foreign exchange. The Development Bank adopted its own lending program. The other departments and agencies proceeded as if the plans did not exist.⁷⁵

If, as in Venezuela, an import licensing system exists, there is little evidence that licenses are issued in accordance with national development plans. In most developing countries, if projects and programs are carried out, they are unlikely to follow the priorities implicit in national plans.

Well-established criteria and procedures for including public sector projects and programs in a plan are the exception instead of the rule; if procedures have been established, they are more often "honor'd in the breach than the observance." The selection of highway, power, port and other projects is more often than not based on political decisions taken with little reference to the economic merits of the projects or the available alternatives. Political leaders, accustomed to look on public works as political plums or as means of providing employment in favored constituencies, do not easily understand and accept the concept of public works as infrastructure for development. In Iraq,

Nuri-al-Sa'id, frequent Prime Minister (and even when not in office, the key figure in Iraqi politics), thought of development in terms of constructing more and more physical works which could be 'turned over' to the people in elaborate dedication ceremonies. He failed to realize that these physical structures provided only some of the tools for progress and did not in themselves constitute development.⁷⁶

The maintenance of traditional ways of behavior frequently means that plans are not taken seriously and that they have little chance of being carried out. In Burma, for instance, casual decisions made by political leaders, especially the Prime Minister, disrupted efforts to implement

⁷⁵ Wilcox, Clair. *Planning and Execution of Economic Development in South-east Asia*, p. 10.

⁷⁶ Tesdell, Loren. "Planning for Technical Assistance: Iraq and Jordan," p. 394.

plans.⁷⁷ At the last moment in the annual programming process, the Prime Minister occasionally superimposed new projects on those already included in the plan which

put intolerable strains on the program and required the planners either to scramble for new resources or to rephase other essential projects already incorporated in the program—and sometimes to lose control over program outcomes.⁷⁸

In most countries, the central planning agency is politically weaker than the operating ministries, departments and agencies. Operating organizations usually get their way regardless of allocations in a plan. In some Latin American countries, co-ordination of ministry programs is made especially difficult because individual ministers sometimes operate like potentates who do not feel bound by cabinet decisions. This has also been true in some African and Asian countries. For example, in Senegal, operating ministries acted as they wished with the result that the priorities outlined in the Plan were upset.⁷⁹ In Ceylon, also, there was little unity in the Cabinet and each ministry put forward projects which often were unrelated to plans.

In some countries, one ministry, department or agency may be more effective than others in preparing and carrying out projects. In these cases, the criterion for allocating funds tends to be based on the operating organizations' efficiency rather than on actual needs. This happened in Malaya. The Road Department was able to build highways so rapidly that it outran operating organizations in other sectors. As a consequence, the Plan was not followed. During the first Plan period in Pakistan, almost every ministry and department sought and sometimes obtained approval of projects which had not been envisaged in the Plan. Organizations which could submit a large number of projects had an advantage over those which could not. Politically powerful agencies received backing for their projects despite opposition of the central planning agency. While the Planning Commission is widely accepted today and tries to allocate resources for projects objectively, according to a high planning official,

the process by which the competing claims of various departments are finally resolved and accommodated in the Plan is by no

⁷⁷ Hagen, Everett (ed). *Planning Economic Development*, p. 24.

⁷⁸ Walinsky, Louis J. "Burma," p. 44.

⁷⁹ Chaigneau, Yves (Conseiller Technique au Secretariat d'Etat au Plan et au Développement). *Réflexions Sur La Planification au Sénégal*, p. 18.

means a perfect one and it is still weighted in favour of the more aggressive and well-organised departments which may not always be the more deserving ones.⁸⁰

In Burma, also, high priority projects were held back because departments and ministries concerned lacked enthusiasm or capability.

Programs for manufacturing industry and electric power, on the other hand, went forward on an accelerated and enlarged scale, and in a rather undisciplined way, because of the drive and power status of the responsible minister who was able to obtain not only larger allocations but also a greater degree of freedom in their use than had been provided in the plan.⁸¹

In many countries, reductions in requests for funds by operating organizations are more likely to be made by the budgetary authority than the planning agency. Such reductions often are not in line with what an existing plan requires. In practice, therefore, there is frequently little connection between plans and budgets. For example, during the period of Morocco's first Five-Year Plan for 1960-64, the capital budget was supposed to include only projects which came within the purview of the Plan. Nevertheless, projects were included which had no discernible relationship to it. If the highest dignitary in the country unexpectedly promised a community a new road or facility, the project was simply added to the budget.⁸² Nor were semipublic agencies like the National Development Board or the Office for Industrial Research and Participation, both of which financed development projects, noticeably restrained by the Plan.⁸³ Experience shows that autonomous or semiautonomous agencies are particularly difficult to subject to the discipline of a plan.

Because plans seem to have little influence on government decisions in some countries, the point is sometimes made that these countries can hardly be said to be planning. When the Chairman of the National Economic Council in the Philippines resigned, his report to the President opened with the statement that, in the Philippines,

it is meaningless, at this stage, to talk of national planning. It is meaningless because neither the Philippine government nor any of

⁸⁰ Haq, Mahbub ul (Chief of the Perspective Planning Section in the Planning Commission). *Planning Agencies*, p. 4.

⁸¹ Walinsky, Louis J. "Burma," pp. 37-38.

⁸² Waterston, Albert. *Planning in Morocco*, p. 43.

⁸³ *Ibid.*

its agencies is in any position to draw up a meaningful national plan. The whole public administration system . . . militates . . . against *implementing* a plan. The 'five year plans' we have had during the whole post-war period were not really plans but merely statements of general aspirations. . . . There has really been no national economic planning in this country. The government organization is not capable of it.⁸⁴

This is apparently also the consensus among most students of Philippine planning.⁸⁵

Similar comments have been made for other countries. Even India has not escaped them. Because the Government has not always manifested a sense of urgency in taking measures needed to execute plans and to counteract activities and events which impede implementation, some Indian economists have taken the position that India does not really plan. Thus, one well-known Indian economist wrote:

It is my contention that, in spite of all claims to the contrary, planning as such does not operate in India today. There are only schemes of public expenditure or of aid to private or co-operative enterprise. There is no co-ordinated conscious effort to lead development along predefined lines. As a consequence, development proceeds largely as if in a *laissez faire* regime. . . .⁸⁶

If this be a case in which a point is carried too far, it at least focuses attention on the well-known fact that even in India, discipline in implementing plans is frequently weak.

Inadequate Preparatory Work on Projects

By far the greatest number of failures to carry out public sector projects and programs at reasonable cost and in reasonable periods of time are traceable to inadequate project selection and preparation. Few less developed countries are fully aware of the necessity for selecting soundly conceived projects with potentially high yields, defining their scope with clarity, estimating their national currency and foreign

⁸⁴ Roxas, Sixto K. *Organizing the Government for Economic Development Administration*, p. 1.

⁸⁵ Golay, Frank. *Environment of Philippine Economic Planning*, p. 1; also Higgins, Benjamin. *Economic Development Principles, Problems, and Policies*, pp. 746-747.

⁸⁶ Gadgil, D. R. *Planning and Economic Policy in India*, p. 140.

exchange requirements with a sufficient degree of accuracy, and laying down realistic schedules for their execution; fewer yet have the administrative capacity and the political will to cope with these needs and, especially, to carry out plan projects and programs in accordance with carefully developed programs of action.

The process by which good projects are selected and properly prepared follows well-defined lines. Ideally, the choice of projects for inclusion in a plan is preceded by sector studies. A sector study is an analysis of an economic sector which outlines the basis for a co-ordinated development program for the sector and makes a preliminary identification of the nature, size and scope of the most promising projects within the terms of the sector analysis. Thus, a sector study for electric power might seek to identify the regions in a country which have the greatest need for electric power, the desirable relationships between thermal and hydroelectric power facilities, and the projects which appear to be most worthy of further investigation. A transportation sector study might assess the relative development needed in air, sea, river, railroad and highway facilities, including the need for ports, the relationship between trunk and feeder roads, etc., and indicate which potentially desirable projects in each branch required further study. A sector study for industry might indicate the relative merits of developing light as against heavy industries, given the nature of a country's natural and other resources and possibilities, and it would indicate which projects in branches recommended for development were worth further investigation. And a sector study for agriculture would seek to identify the relative prospects of development in forestry, animal husbandry and cropping for domestic consumption or export and make suggestions for further study in one or more of these branches and for projects to process their production. Good sector studies take time to arrange and complete. They are rarely carried out in less than a year or a year and a half. They are also costly.

When a potentially desirable project has been identified, whether by a sector study or otherwise, a feasibility study needs to be made to determine whether it is practicable and justified. A feasibility study involves a detailed examination of the economic, technical, financial, commercial and organizational aspects of a project. It aims to produce all the information required to determine whether and how a project can be carried out in accordance with sound principles and at a cost which is lower than the contribution it can be expected to make to a country's development.

Feasibility studies vary according to the sector and problems involved. Thus, a pipeline is being considered for moving petroleum products between the Terai area and Katmandu in Nepal. Normally, pipelines have too large a capacity to be economic or practicable where the movement of material is as small as it will be in Nepal. But there exists a possibility that a small diameter line can be constructed which would be economic if it were constructed through the mountains instead of over them. A feasibility study could determine both the technical and economic practicability of the proposed pipeline. Another kind of feasibility study would be required if a proposed project were a plant to produce a commodity or a service. Such a study would require careful investigation of the likely market demand for the plant's production, the best location for the plant and its proper size, the availability and prices of required raw materials, the number and kind of workers needed and their availability, manpower training requirements, costs of production, reasonably firm estimates of the plant's construction time and costs, etc.⁸⁷ If the establishment or expan-

⁸⁷ A financial appraisal of a project's costs and benefits is generally made in terms of market prices to determine if it is self-liquidating and if it is likely to yield an appropriate return to its sponsors. Although it may be used to assess the financial profitability of public sector projects, it is more generally applicable to privately sponsored projects since private entrepreneurs usually have no alternative to market prices. But a financial appraisal of costs may be an inadequate measure of the real economic costs and benefits of a project to a country as a whole. Thus, if some market prices are subsidized (as when a government can borrow at interest rates below market rates) or inflated (as when the prices of imported machinery, equipment or materials are increased by duties), prevailing prices may be artificially out of line with each other and with world prices. If many people are unemployed and there are no alternative opportunities for employing them, prevailing wage levels may also exaggerate the "true" value of labor for a project from the point of view of a country's economy.

If the true or economic cost of a project is to be determined in situations where market prices are out of line (the economist might say where prevailing prices do not equilibrate supply and demand), it may be necessary to "adjust" the prevailing prices by estimating the extent to which they deviate from "equilibrium" prices. The adjusted prices, variously known as "shadow" or "accounting" prices, are then substituted for prevailing prices and used to determine real costs and benefits to an economy and to compare the project under consideration with other projects on a comparable basis. With the use of "shadow-pricing" techniques it may be found that a project which promises to produce a financial profit on the basis of market prices is nevertheless likely to yield a much lower rate of return than alternative projects, thereby making a shift in investment resource allocation desirable. A government may therefore wish to subject proposed private investment projects, especially if they require considerable foreign exchange or other scarce resources, to economic analysis before approving the project, if approval is re-

sion of port facilities are under consideration, a feasibility study might start with a traffic forecast for exports and imports. Since in most less developed countries, exports comprise a few bulky items and imports consist of a larger variety of commodities, different ways of handling the two will have to be studied. To forecast the movement of exports through the port, estimates may have to be made of production and likely sales abroad for domestic commodities. Thus, in Nigeria, Ghana or the Ivory Coast, the outlook for cocoa would have to be considered. In Nigeria or Senegal, the future of groundnuts production would have to be studied. On the basis of such forecasts, requirements for docks, sheds and warehouses would have to be calculated. Cost and revenue projections for a port handling the estimated traffic would then be determined, the organizational aspects of the project surveyed, etc.⁸⁸

Such studies, when carefully made on the basis of realistic assumptions, can yield sound judgments on the feasibility and desirability of a proposed investment in terms of benefits to its sponsors and to the economy of a country.⁸⁹ Without a careful feasibility study it is usually impossible to ascertain what benefits are likely to be obtained for money invested and how one project compares with alternative projects. While good feasibility studies cannot eliminate all investment risks or provide an infallible guide to the selection of desirable

quired; it is, of course, desirable to apply "shadow-pricing" techniques to public investment proposals.

Shadow-pricing technique is particularly useful for analyzing alternative investments on a comparable basis. By substituting shadow prices for actual prices for all investment opportunities, planners can determine the "opportunity costs" for investing resources in different ways. Shadow-pricing technique can also permit valid comparisons to be made of a public sector project with a private sector project to determine which would be more desirable from the point of view of an entire economy.

Because the extent of differences between market prices and shadow prices, as well as the state of shadow-pricing technique, is surrounded by considerable uncertainties, it is not always easy or possible to obtain reliable shadow prices to substitute for prevailing ones. In some cases, only crude estimates of shadow prices can be made. These considerations sometimes restrict the use of shadow-pricing as a practical matter.

⁸⁸ UN. ECA. *Comprehensive Development Planning*, p. 20.

⁸⁹ Care must be taken in selecting a suitable firm without vested interests in a proposed project to make the study. In Iran, for example, preliminary studies were in many cases found to be based more on hope than on realistic assumptions; this is especially likely to be the case where the study of a plant's desirability is made by a foreign firm interested in selling machinery as well as advice. (Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 71.)

projects, they are particularly useful in identifying especially bad projects and especially attractive ones, identifying the crucial variables in a project and setting standards for controlling construction and operating costs.⁹⁰

Feasibility studies, like sector studies, are often time-consuming and costly. Thus, the feasibility study for the steel plant at Bokaro, India (which involved the use of 150 technicians, engineering surveys by five subcontractors and the use of data supplied by 33 firms), took a year to complete and cost \$686,344. Moreover, it was estimated that the work of verifying the assumptions in the study concerning the availability and cost of raw materials which the plant would require would be a considerable additional undertaking in terms of personnel, time and money and that it would take two years or more to find satisfactory long-term solutions to basic raw material problems.⁹¹ The Bokaro plant is an exceptionally large project which is expected to cost over \$1.5 billion. But feasibility studies for much smaller projects may take more time to complete than the feasibility study for the Bokaro plant. Thus, it may take five years to determine whether enough water flows in a river to provide adequate quantities for a hydroelectric power project costing only a small fraction of what the Bokaro plant will require.

Once the feasibility of a project has been determined, preliminary and then detailed engineering and other preparatory work can begin. This includes the design of the project on a specific location; the preparation of working drawings for construction; the phasing of component elements to insure that they are ready when needed;⁹² the preparation of detailed specifications, lists of quantities of materials required, unit or other detailed cost estimates; financial requirements

⁹⁰ *Ibid.*

⁹¹ *New York Times*, April 28, 1963.

⁹² Even for a relatively simple project, phasing involves the setting up of time schedules for acquiring land, staffing, providing housing and communications for the project, procuring stores, materials and equipment, securing spare parts and installing workshop facilities for repairs and maintenance of machinery used in construction, etc. For a complex, integrated project like the Bokaro steel plant, phasing requires that *timely* provision be made for adequate rail transport both during construction and operational phases, ample supplies of water and power, expansion of coal mining and coal washing facilities, the establishment of quarries and other mineral sources, the construction of adequate highways, a new town site for workers and managerial staff, training facilities (it is estimated that 8,200 Indians out of a total of 20,000 men needed for the entire plant, will have to undergo training before production gets under way), etc.

and returns during construction and for a period after operations begin (including their timing in the form of a "cash flow" chart or table), etc. The time needed for preliminary and detailed engineering studies varies, but they often take a year or more to complete. In preparing a highway program, for example, it is not uncommon for two or more years to elapse between a sector study and the detailed engineering of the roads included in the program. It is taking about three years to complete the engineering work on the 435-mile Darien Gap section of the Inter-American Highway through the rain forests of Panama and Colombia, at an estimated cost of well over \$3 million. In the case of hydroelectric projects, it may take five to ten years or more to complete the necessary feasibility and engineering studies. Thus, the time involved in carrying out careful sector, feasibility and engineering studies for a project may well exceed the time needed for construction.

It is partly because procedures used to choose and prepare good projects take a long time to complete that there is a great dearth of such projects ready for execution in most less developed countries. Foreign and international lending and donor agencies, which generally are unwilling to commit funds for projects which are not based on sound preinvestment and other studies, are frequently hard put to find enough well-prepared projects to help finance in less developed countries. This may even be true where, as in Malaya, there are many projects being carried out, if they were not studied adequately before execution.

In some countries, shortages of technicians or funds make it difficult to carry out preparatory studies; but these are no longer insurmountable impediments since international and foreign lending and donor agencies are increasingly making available funds and technical assistance for preinvestment studies and surveys.⁹³

In many less developed countries, requisite feasibility and other

⁹³ Thus, Mr. George D. Woods, President of the World Bank, has indicated that because

there is very little value in planning unless it is solidly based upon knowledge of the resources available and of the technical and economic feasibility of particular projects [the Bank had decided to offer more help to under developed countries] in organizing and financing feasibility studies either of promising projects or of the development of specific sectors of the economy. (*New York Times*, March 8, 1963, reporting on Mr. Woods' Address to the UN. Economic and Social Council.)

studies are not carried out largely because the need for them is not fully appreciated. In some countries, one encounters a strongly held belief that time and money spent on preinvestment and careful technical, economic and financial studies are wasteful because they seemingly delay, and increase the cost of, the execution of projects.⁹⁴ According to Afghanistan's Minister of Planning, lack of technicians and the time factor were both involved in his Government's decision to proceed without preinvestment and other studies.

There was the lack of personnel qualified to make engineering studies to determine costs and economic benefits of proposed projects. Much the same was true with respect to surveys of natural resources such as water, minerals, gas and oil. Such preinvestment studies are time consuming, and the Government felt a strong urge to get started with development.⁹⁵

According to the Planning Commission of Pakistan, preparatory work on public sector projects in that country also was frequently lacking and "impatience and enthusiasm frequently took the place of prudence and engineering judgment."⁹⁶

Because of the lack of good feasibility and other studies for projects, actual costs, benefits and construction time often deviate substantially from original estimates. In the absence of reliable data which carefully prepared studies produce, sponsors of public sector projects tend to overestimate the benefits and underestimate the costs and time needed to complete projects, with the result that projects almost always look much better on paper than they are in reality. Sometimes, overestimation of benefits and underestimation of costs and construction time are the consequence of ignorance; sometimes, it is because sponsors seek to persuade budget or other authorities to approve the start of their projects. Experience has taught many sponsors of public investment projects that once construction has begun, it is generally easier to obtain allocations to keep a project going than it was to get the first allocation, even if costs greatly exceed original estimates. In some

⁹⁴ The World Bank has often encountered this attitude among would-be borrowers. A government official in one country complained that if he acquiesced to all requests for preinvestment and other studies which the Bank wanted his government to carry out, "all the good projects would be delayed and all the bad ones would go forward unhindered."

⁹⁵ United Nations Conference on the Application of Science and Technology, etc. *Planning Machinery in Afghanistan*, p. 4.

⁹⁶ Pakistan. Planning Commission. *Second Five Year Plan, 1960-1965*, p. 201.

cases, estimates turn out to be wrong because they are based on the assumption that materials and equipment for a project will be paid for in cash when there is little likelihood of this. Thus, India's Third Five-Year Plan estimated foreign exchange requirements for projects on the assumption that machinery and equipment would be obtained from the cheapest sources of supply for cash, although the planners foresaw that the estimates would not stand up if projects were financed by countries whose equipment and other prices were higher than cash prices.⁹⁷

Iran's Plan Organization found that the absence of soundly prepared preinvestment studies almost always opened the door to "letting personal prejudices and interests determine the selection of projects."⁹⁸ Because preliminary investigations and surveys essential to the formulation of well-conceived projects were rarely carried out for projects in Pakistan's Second Five Year Plan, operating departments and agencies generally presented projects for approval which had been prepared hurriedly on the basis of their financial implications without much information about the physical or management problems which were likely to be encountered. The financial data submitted were often only rough cost estimates based on untested assumptions or on price schedules which were already or would soon be outdated. Often only guesses were included for the cost of land, materials, machinery or construction. Cost-benefit ratios were frequently unrealistic.⁹⁹ Describing the way projects were selected and the results obtained, a high official of Pakistan's Planning Commission wrote that the procedures followed reduced

project formulation and planning to a state of mockery. In retrospect, many projects would not have been undertaken if their true

⁹⁷ India. Planning Commission. *Third Five-Year Plan*, p. 460. While more realistic costing procedures can greatly reduce discrepancies between estimated and actual costs, there will always be some unforeseeable events which will increase costs. Some of these eventualities can be covered by the provision of reasonable contingency allowances; others cannot. Thus, if a project is to be partially financed with tied foreign loans or grants, it may be difficult to estimate the cost since it depends ultimately on which country helps finance the project. Prices charged by aid-giving countries may vary by as much as 50 per cent. Time needed to carry out a project also depends on when financing becomes available.

⁹⁸ Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 71. The Iranian steel project was cited by the planners "as an example of a major project that should have had a thorough and independent feasibility study many years ago."

⁹⁹ Waterston, Albert. *Planning in Pakistan*, pp. 114-115.

costs and benefits had been known before their commencement.¹⁰⁰

It is after inadequately prepared projects have been approved and begin to run into difficulties, which greatly increase costs and delay execution, that the value of careful preinvestment and engineering studies becomes apparent to officials in developing countries. It then becomes apparent that a well-prepared project has merits beyond its value for attracting external financial assistance. For example, the Cuban Government sought to save time by purchasing a series of ready-made, "package" or "turnkey" plants to manufacture products which were being imported in quantity. Preinvestment studies were not made to determine the economic desirability of the plants. Many of the plants turned out to be poor investments, not least because the foreign exchange requirements for imported raw materials, supplies, spare parts and equipment put an even greater strain on the balance of payments than the imported manufactures had. Commenting on this experience, the Cuban Minister of Industry conceded that because his Government was

racing against time and worked without a sound plan, we started building factories and committed grave mistakes because we had failed to conduct adequate studies. . . .¹⁰¹

In Iran, the Plan Organization reported,

the result of bad planning is bad plants. A very serious result of bad plants is the demoralization of the engineers and administrators who are assigned to them. This is already a problem of some recently completed projects. . . . Men with good training hate to be assigned to 'a horse they know can never win.'¹⁰²

Moreover, bad planning also was responsible for raising costs of plant construction.

Although domestic price inflation has accounted for some of these cost over-runs, the major cause has been faulty planning and an almost complete absence of financial and administrative controls

¹⁰⁰ Haq, Mahbub ul. *Strategy of Economic Planning: A Case Study of Pakistan*, p. 193.

¹⁰¹ *New York Times*, March 26, 1965.

¹⁰² Iran. Plan Organization. *Review of the Second Seven Year Plan Program of Iran*, p. 71.

during the construction period. Much 'tighter' planning before projects are approved could have saved large sums of money.¹⁰³

In India, failure to carry out project studies which provided accurate and detailed cost estimates resulted in serious underestimations of foreign exchange requirements during the period of the Second Plan. Indeed, directly and indirectly, the lack of preinvestment and other studies was largely responsible for foreign exchange shortages.

The errors in estimation of foreign exchange requirements resulting from the inadequate preparation of industrial projects, inadequate scrutiny of projects from the viewpoint of maintenance imports and defective formulation of interdepartmental projects and failure to synchronise their execution over time are the principal factors responsible for aggravating the foreign exchange shortage difficulties in India.¹⁰⁴

In Pakistan, especially in agriculture, projects were retarded unduly because of problems encountered in acquiring land which the sponsoring agency assumed would be available as soon as funds were obtained. In some cases, no specific site for a project had been selected. After the project was approved, it was found that land was either unobtainable or more expensive than expected. Or because of shortages of water, inadequacies of soil, lack of communications or necessary technical personnel, execution of the projects was impossible or much delayed, and required basic revisions or much higher costs. Inadequate procurement machinery also caused execution of many projects to lag. Delays usually increased costs, which in turn made it necessary for various government bodies to re-examine and re-approve the projects. Such revisions and reviews sometimes delayed the project's progress as much as the physical limitations.¹⁰⁵

In some countries, it is not uncommon to find that engineering plans for a project are being prepared only as construction moves forward, and in some cases, there is not even a complete set of engineering plans after the completion of the project. Even when a project has been well engineered and surveyed, occasional changes in specifications after construction begins are sometimes made necessary by unforeseen problems. But when construction starts before thorough engineer-

¹⁰³ *Ibid.*

¹⁰⁴ UN. Seminar on Industrial Programming, *India's Experience in Industrial Planning*, p. 43.

¹⁰⁵ Waterston, Albert. *Planning in Pakistan*, pp. 114-115.

ing and other studies have been completed, alterations, extensions and additions to a project may be so frequent that the project which finally emerges is often substantially different from what was visualized when it was begun. In such cases, delays of two or three years and doubling or tripling of original cost estimates are not unusual.

Lack of Engineering Supervision

A sponsor who has not seen fit to expend the time and money to prepare preinvestment and engineering studies for a project is even less likely to engage engineering consultants, at a charge which may approximate 5 per cent of the total cost of construction, to supervise the project's execution. In some cases, even if engineering and other studies have been carried out for a project, sponsors have been known to balk at engaging engineering or other technical consultants to supervise execution of the project.

But the engagement of a reputable and experienced firm of engineers or other qualified technicians to supervise the execution of a project is a characteristic of a well-organized operation. Such firms, which usually specialize in engineering design and consulting and do not engage in construction work, exist in most advanced countries and, increasingly, in developing countries. The consultant's prime responsibility is to protect the interests of the project's sponsors and to insure that contractors and others carry out the project in accordance with approved design and specifications at the lowest possible cost and in the shortest possible time consistent with quality considerations. The consultant firm provides the project's sponsor with a variety of services. It may prepare tenders for bids, analyze bids received, advise on the selection of experienced contractors, help set up work procedures, provide field supervisory personnel, render progress reports on the project, recommend solutions to problems which arise, and act as the sponsor's adviser on all other technical aspects of the project.

If experienced engineering supervision is not available during the construction phase of a project, the likelihood is that the project will move from one crisis to another. Construction contracts may be awarded to the lowest bidders although they lack the experience, equipment or financial resources to perform the work. When this happens, as it did for one public sector project in India, the project suffers. In the Indian case, for example, two contractors who were not qualified to carry out projects of the size involved were selected

because their bid was much below other bids. The Management Group which subsequently reported on the project stated that "many of the later project delays could be traced to this initial decision."¹⁰⁶ As the Management Group pointed out:

Extremely low bids need to be carefully scrutinized, as well as the ability of the low bidder to execute satisfactorily a contract of the size and nature proposed.¹⁰⁷

These are tasks which supervisory engineers, but few government agencies by themselves, are qualified by experience to carry out. Inadequate supervision may also result in a lowering of construction standards and the use of inferior materials; or the need for a sponsoring agency to deal on a day-to-day basis with many contractors which may cause undue delays.¹⁰⁸ Since most operating organizations in less developed countries which sponsor projects are more accustomed to dealing with routine situations than with irregular and unforeseen events, delays become chronic and costs mount.

Administrative and Procedural Delays

Even without such problems, procedural and administrative delays constitute one of the commonest contributing causes for the failure to implement plans. In many governments, extraordinary lapses of time occur before a problem or a need for action is recognized, between the time it is recognized and a decision is made what to do about it, and finally, between the time a decision is made and it is carried out.¹⁰⁹

A great deal of time is often spent in discussing preliminary matters. Much time may be absorbed in settling the question of whether a project should be carried out in the public or the private sector; if the former, which foreign or international agency's collaboration and what

¹⁰⁶ Management Group. Committee on Plan Projects. "Management Planning in Public Enterprises," pp. 398-399.

¹⁰⁷ *Ibid.*, p. 389.

¹⁰⁸ For example, Iran's planners reported that delays in executing industrial projects were caused, among other reasons, by the Plan Organization's

inexperience and lack of equipment of many building contractors chosen to do the work, the over-centralization of Plan Organization's control procedures so that almost no questions are settled at the site but . . . [had to] be referred to Tehran, . . . and administrative delays within the Plan Organization . . . (Iran. Plan Organization. *Review of the Second Seven Year Program of Iran*, p. 72).

¹⁰⁹ Morgan, Theodore. *Economic Planning—Points of Success and Failure*, p. 14.

terms should be sought, if the latter, under what conditions.¹¹⁰ Procrastination is much in evidence. In Iraq, for example, some projects first studied almost ten years ago have been repeatedly studied since then without a decision having been taken whether or not to proceed with them. Procrastination in the public sector manifests itself in innumerable ways, including delays in starting technical, financial, economic, and other studies needed to make decisions about the feasibility of a project; selecting one project from among several alternatives; deciding on whether construction is to be handled by a government agency, a private contractor or some other body; scrutinizing and evaluating bids; deciding on forms of contracts; entering into contractual relations with engineers and construction contractors; placing orders for materials and equipment; dealing with contractors (e.g., making payments for work done and approving deviations from original specifications); training personnel; selecting a site; starting procedures to acquire land or rights of ways; and getting necessary approvals from government units.¹¹¹ The principal ways in which governmental administrative and procedural delays usually hamper private industrial developments are through lags in the processing of import and other licenses and in approving releases of foreign exchange to private investors for machinery, equipment, materials and spare parts. These and other administrative problems seriously impede private investment in many less developed countries.

RELATING PLAN FORMULATION TO IMPLEMENTATION

The Problem Posed

With many factors accounting for the inability of most countries to achieve targets in their plans, a question arises whether one factor—more than any other—is responsible for this inability. Until very recently, it was thought that the key element in the planning process was the formulation of an economically consistent plan. While the importance of a well-prepared plan based on clearly defined development objectives is indisputable, it was not generally realized, as it is

¹¹⁰ Reddaway, W. B. "Importance of Time Lags for Economic Planning," pp. 231, 233.

¹¹¹ An example of the last item is the publicly owned coal washing plant at Kargali in India, which was delayed ten months because of lags in getting permission from the State Government to construct roads, the foundation and drainage system for the project (*Economic Times*, December 25, 1964).

not yet realized in some places, that a consistent plan does not insure implementation any more than an inconsistent one. When the plans they had prepared were not implemented, planners trained as economists assumed, and still assume in some circles, that the failure to achieve targets was mainly attributable to errors in computing and allocating resources or to errors in basic data. Such errors were not difficult to find. Targets had sometimes been set too high, financial availabilities, especially foreign exchange, and other resources had been overestimated, capital-output ratios were too low, the level and rate of growth of population had been underestimated, resource allocations among sectors had been faulty, and so forth.

Conscious of the inadequacies of the data with which they had to work and some of the techniques used to formulate plans, planning experts and practitioners re-doubled their efforts to get governments to improve basic statistics, while they sought to refine their concepts, sharpen their tools of analysis, broaden the coverage of plan formulation to include manpower and other aspects formerly ignored, and introduce more sophisticated and advanced econometric techniques. Adjustments were made in planning models, input-output matrices were prepared, and experimental attempts were sponsored to introduce simulation technique, operations research and shadow pricing, and to substitute curvilinear for linear programming in the construction of planning models.

Formulation vs. Implementation

But even as plan formulation methodology advanced, implementation remained inadequate and even worsened. This eventually led some to conclude that the major problem in planning for less developed countries was not plan formulation, but implementation. Thus, the ECAFE, which has been in the forefront of institutions promoting the use of econometric techniques for projections and plan formulation, nevertheless came to the unhappy conclusion that, although in many Asian countries,

plans are prepared with a great amount of care so as to make them as comprehensive, realistic, specific and consistent as possible, their implementation is often partial, slow and inefficient. This may lead to results worse than those expected to follow in the absence of any plan.¹¹²

¹¹² UN. ECAFE. "Economic Development and Planning in Asia and the Far East," *Economic Bulletin for Asia and the Far East*, December 1961, pp. 30-31.

The failure to implement plans is a popular subject of discussion among those interested in Indian planning. Thus, Professor D. R. Gadgil, in a generally critical account, found little to criticize in India's Second Five-Year Plan; instead he directed most of his comments to the failure to implement the Plan.¹¹³ Barbara Ward wrote that

it is not unfair to say that from the beginning Indian planning has been stronger on formulation than on implementation—or, less pompously put, on thinking things out rather than getting things done.¹¹⁴

India's respected *Economic Weekly* contended that

the drafting of the Plan has become an end in itself. In the maze of words, the task of implementing the Plan most efficiently has often been lost sight of. . . . There is still no sense of urgency;¹¹⁵

while in a well-known comment, the late Prime Minister Nehru agreed that

we in the Planning Commission and others concerned have grown more experienced and more expert in planning. But the real question is not planning, but implementing the Plan. That is the real question before the country. I fear we are not quite so expert at implementation as at planning. . . .¹¹⁶

Similar sentiments have been heard in other parts of the world. In Ethiopia, where the First Five-Year Plan was kept secret for half of the Plan period and, even when released, was never accepted as a program of action by the agencies which were supposed to carry it out, an economist in the University College of Addis Ababa distinguished between two types of planning:

In a discussion of planning in Ethiopia it is essential to draw a distinction between planning as an advice and planning as a programme of action. The plan may be divorced from implementation. This was to a large extent the case in Ethiopia.¹¹⁷

¹¹³ Gadgil, D. R. *Planning and Economic Policy in India*, p. 51.

¹¹⁴ Ward, Barbara. *Plan Under Pressure: An Observer's View*, p. 31. John P. Lewis had much the same view:

The Indians are better talkers than doers, better planners than executors. . . . Too often the execution is half-hearted, inept, or bogged down in cross-purposes. (Lewis, John P. *Quiet Crisis in India*, p. 5.)

¹¹⁵ *Economic Weekly*, Vol. XIII, Nos. 27, 28, 29, July 1961, p. 1023.

¹¹⁶ Nehru, Jawaharlal. "Annual Address by the Prime Minister," p. 435.

¹¹⁷ Gulilat, Taye. "Approach to Economic Planning in Ethiopia," pp. 130–131.

But Ethiopia is not the only African country where plan formulation has been divorced from implementation. An ECA planners' group which considered the problem concluded that,

in some African countries there is not enough political and economic stress put on implementation of plans. Thus planning becomes limited to setting the targets and not much effort is made towards carrying the plans out. Preparing the plan becomes art for art's sake with very few practical results.¹¹⁸

The gradual awakening to the realization that plans do not implement themselves, and that specific measures must be adopted if plans are to be converted from expressions of aspiration to programs of action, has led to considerable discussion about what role the planner should play in implementation. Many persons—among them planners and planning experts—hold the view that a planner's training and predilection as an economist equip him only to prepare integrated plans which economize on the use of scarce resources in a way calculated to yield the highest possible returns from investment within limits prescribed by plan objectives. They feel that he has no special competence to deal with the question of how plans are to be implemented because this aspect of planning largely involves administrative, institutional and political factors.

Whether consciously or not, those who maintain this position see or imply a major difference or even a clear-cut separation between plan formulation and implementation. They consider a plan to be a product of a few specialists in a central planning agency who have need for only limited recourse to other government organizations. (They have experience on their side because, in fact, most plans *are* prepared by a few technicians operating in virtual isolation from the rest of government.) They point out that, in contrast, implementation of a plan necessarily involves the preparation and execution of projects by many people dispersed throughout a government and the private sector of an economy. Thus, one foreign planning expert in Ghana wrote that

the techniques of planning [i.e., plan formulation], which are developing by leaps and bounds, . . . can be applied and adopted comparatively easily. Their application and adaptation in every country involves only a small and exclusive group of experts. Project-planning [i.e., the preparation and execution of

¹¹⁸ UN. ECA. *Report of the Meeting of the Expert Group on Comprehensive Development Planning*, p. 5.

projects] requires many more engineers and economists. . . . Implementation is different from the plan, for the latter is made only once while the former is going on day by day, hour by hour, in the most varied fields.¹¹⁹

The word "planning" is often used, as it was used by the author of the preceding quotation, to refer to the formulation of plans, but not to their implementation. The conceptual separation of "planning" from "implementation" is more than a matter of semantics: it is symbolic of an attitude which prevails widely among planners. Nevertheless, experience shows that nothing is more conducive to bad planning than the separation of plan formulation from provision for, and follow up on, its implementation. Nothing can be more parochial than restricting the planning function to the mere manufacture of plans without reference to what is needed for their implementation. Planning cannot leave off where plan formulation ends and action to execute a plan begins. As we have seen, every target must be accompanied by policies and measures which have been devised specifically to fulfill it—otherwise, it becomes only a forecast or a projection. But more than this, policies and measures adopted to achieve targets must undergo constant review, and targets or instruments of policy may have to be adjusted in the light of experience gained during the period of execution. Planning may begin with the formulation of a plan as a guide to implementation, but implementation becomes, at a later stage, a guide to revision of the original plan. The whole process is organic and continuous, with plan preparation blending into implementation, then into revision of the plan, and again into implementation and the formulation of the next plan, *ad infinitum*.¹²⁰

It is, then, undesirable to separate conceptually the preparatory and executory phases when referring to planning. Planning must encompass both the preparation and execution of plans.¹²¹ This means that such activities as the preparation and execution of sectoral surveys, feasibility and other preinvestment studies; the preparation and execution of projects and programs in the public sector; the formulation and

¹¹⁹ Bognar, J. "The Importance of Devising Effective Machinery for the Implementation of Development Plans," p. 78.

¹²⁰ The term "feedback" has been borrowed from cybernetics to describe this process.

¹²¹ As will be seen later, those who implement a plan may be, and generally should be, different from those who formulate it. But those who formulate plans must respond promptly to events during implementation by adjusting the plan appropriately.

application of policies and measures for stimulating and guiding private investment; reporting and evaluating plan progress, and more, are all part of what is meant by planning:

The final element of a well-conceived development plan is the provision for its implementation. This includes the organization of the planning function and its administrative relationships with the chief executive, the policy-making and operating departments of the government, and the legislature; the assignment of responsibilities of carrying out its component programs; the relationship of the plan to the national budget; the roles of the fiscal and monetary authorities; the provisions for progress reporting and evaluation; and the selection and training of planning personnel.¹²²

Where plan formulation is viewed as an exclusive or isolated element divorced in practice if not in theory from plan implementation, as it has in fact been viewed in many countries, one finds that planners pay little attention in their plans to the choice of means to be employed to achieve plan targets. This is why most plans almost always provide detailed information only about *what* is to be achieved, but not about *how* to go about securing development objectives or targets,¹²³ or about *who* in government or elsewhere should be responsible for carrying out the required tasks. The case of Nigeria's National Economic Plan for 1962-68 is illustrative of the widely held belief that a plan comes first and that measures to implement it can be postponed until after the plan has been accepted and put into effect. Policy changes needed to achieve the planned allocation of resources and to implement targets were not included in the Plan; instead, they were left to be initiated at a later time by the various ministries concerned with the various programs.¹²⁴ Even in the case of India's Third Plan,

the most glaring defect . . . is the almost complete absence in it of provision for techniques with which the Plan would be implemented.¹²⁵

Many planners consider their job is finished when they have prepared a plan and that it is up to others to work out the detailed policies

¹²² Colm, Gerhard and Geiger, Theodore. "Country Programming as a Guide to Development," p. 51.

¹²³ Kannappan, Subbiah. "Planning Pitfalls in India," p. 319.

¹²⁴ Clark, Peter Bentley. "Economic Planning for a Country in Transition: Nigeria," p. 284.

¹²⁵ Gadgil, D. R. *Planning and Economic Policy in India*, p. 51.

and measures needed to implement the plan. Even among those who recognize that they have an obligation to suggest policies and measures, few think in specific terms of what is required to achieve the targets in their plans. The organic link between the targets in a plan and the policy or other measures required to achieve them is a concept which many planners and political authorities find difficult to grasp; this is equally true of the idea that a target is not really a target unless and until specific economic and financial policies and administrative and organizational measures are adopted to implement them. The need to provide incentives to stimulate private entrepreneurs to behave as envisaged in a plan is little understood; nor is there adequate appreciation that before a plan's targets can be attained, consumption may have to be curbed, the rate of domestic savings may have to be increased by taxation, or credit may have to be reduced or redirected.

The failure of most planners to indicate precisely what must be done to execute their plans has tended to intensify the belief that the problems of plan formulation are different and separable from those of implementation. Thus, a former head of the Philippine National Economic Council wrote as follows about the dichotomy between plan formulation and implementation in his country:

In the past, efforts to establish economic planning in the Philippines were overly obsessed with the writing of economic plans rather than with the establishment of a meaningful planning process. Assistance from outside economic consultants served often merely to emphasize this obsession. It is normal for economists to be more interested in the internal content of an economic plan than in the planning process as such. It is the plan as a document which embodies the problems that are interesting to economic theory—the form of the planning model, the handling of the variables, given assumptions, projection techniques, target and policy variables, parameters of behavior, etc. It is in the formal preparation of plans that the particular expertise of economists is most useful.

The establishment of a planning process is an exercise of quite a different character. Here the problem is not one of producing an internally consistent and analytically elegant document. The task is to spread a planning habit, establish rational economic calculation as the common norm for decision-making, and have this

accepted by those responsible for making decisions. It is a problem of organization and management.¹²⁶

There can be little doubt that the prevailing separation of plan formulation from implementation has been exacerbated by the concentration of planners' attention on economic factors to the virtual exclusion of organizational and management factors which predominate when a plan is being implemented. Professional planners and planning experts appear to be divided into two main groups: one tends to believe that better planning depends on further improvements in their imperfect planning instruments (as witness the preoccupation with model building, simulation and input-output technique), while the second tends to feel that the shortcomings of the planning process reflect the inadequacies of the administrative and political environment within which plans must be carried out more than any deficiency of planning technique. But whatever their position, planners are little likely to concern themselves with the problems of public administration and politics.

Importance of Administration and Politics

Public administration is crucial to planning for two reasons: firstly, because the successful implementation of a plan is largely a matter of proper organization and administration, and secondly, because in most less developed countries the possibilities for economic growth, based on available real and financial resources, greatly exceed the organizational and managerial capacity to attain these possibilities. When, therefore, planners fix plan targets solely on the basis of economic potentialities and fail to take appropriate account of organizational, managerial and administrative limitations, plan targets are likely to be set at unrealistically high levels; and if, in addition, the planner ignores the restriction which political instability or a government's lack of commitment to development imposes on economic potentialities, the targets in his plans generally turn out to be beyond reach. For the fact is that in most less developed countries the greatest obstacles to implementation are administrative and, more especially, political rather than economic.

¹²⁶ Roxas, Sixto K. *Lessons from Philippine Experience in Development Planning*, pp. 47-48.

Importance of Political Support. Examination of the available evidence makes it clear that in countries with development plans, lack of adequate government support for the plans is the prime reason why most are never carried out successfully. The Report of the Conference of Asian Economic Planners, which met in Bangkok in October 1964, listed many factors which caused actual performance to deviate from targets in the plans of countries in the ECAFE region. But it singled out one factor as the most important:

Above all, if Governments have not made planning an article of faith and pursued planning objectives wholeheartedly it is not surprising that actual performances have not sometimes measured up to expectation.¹²⁷

History demonstrates that where a country's government is reasonably stable and its political leaders give a high priority to development, the country generally develops even when there is no formal plan. Conversely, in the absence of political stability, and firm and continuing government support, development plans, no matter how well devised, have little chance of being carried out successfully. The cardinal lesson to be learned from the planning experience of developing countries is that sustained governmental commitment is a *sine qua non* for development. For example, Pakistan's planning experience gives dramatic evidence of the overriding importance of governmental support. Although the planners of Pakistan's First Five Year Plan produced a development plan with targets well within the limits set by available economic and financial resources, the Plan could not get very far without the help of the Government. Given that support from a strong and stable leadership, the Second Five Year Plan promises to overfulfill its main targets and objectives.

The experience has been similar in other periods and countries. In the 19th century, Japan, with fewer resources than Burma, China, India or Indonesia (it had only skilled manpower and waterpower), nevertheless became the most industrialized country in Asia. In large part, development was made possible because of sustained effort supported by a determined government. In the 20th century, the histories of such diverse countries as Mexico, Israel, Yugoslavia, the USSR and China (Mainland and Taiwan) give ample evidence of the

¹²⁷ UN. ECAFE. *Draft Report of the Conference of Asian Economic Planners*, p. 6.

importance of firm and continuing support from a stable government for the development of a country.

Although political leaders in many countries talk a great deal about their great concern with the development of their countries, only a few follow up on their words with appropriate action. In some countries, government leaders adopt measures to stimulate development, but too often these are piecemeal, inadequate and poorly administered. The extent to which a government with a plan pursues policy and other measures which planners tell them are essential for the implementation of the plan usually provides a reliable index of that government's commitment to development planning. The evidence reveals that, on the basis of this index, many governments fall short.

One hears much about the need to find ways and means to imbue the people of this or that country with an understanding of their country's plan and to evoke their desire to participate in the planning effort. But another problem precedes this one: How can political leaders be made to become more deeply committed to the economic development of their countries? In many countries, political leaders give other matters higher priority than they give to development. Among these are nationalism, internal politics, defense, territorial expansion, the formation of international alliances or power blocs, and short-run economic problems. It may be that at a given time in a country's history, one or more of these may be more important for a country's welfare and future than its development. But it must be recognized that the relegation of development to a subordinate place in the scale of values of a country's political leaders cannot help but depress development efforts and, hence, the results of development planning.

Importance of Economic Incentives. Experience shows that until the political leadership of a nation becomes deeply committed to development, the people are unlikely to show much interest in national planning objectives. If a country's leaders make development one of their central concerns, experience shows that the people can be interested. But except temporarily, e.g., during or immediately after a war or other catastrophe or upheaval, people are not likely to become concerned with development objectives solely because of appeals to their patriotism, devotion to abstract ideals or altruism. Direct government controls over economic activity, or threats of imprisonment or other punishment, are even less effective.

The evidence teaches that the best long-term method of eliciting

behavior which conforms to planning objectives is to make it profitable for people to act in ways required to achieve those objectives. Where governments have replaced restrictive administrative controls on the private sector by well-devised and adequate economic incentives, the results in increased economic activity have usually been too clearly linked to the change in approach to be misunderstood. In Pakistan, for example, government officials as well as competent outside observers agree that administrative restraints seriously hampered industrial growth during the First Plan period; they also agree in attributing the high rate of industrial progress during the Second Plan period largely to the reduction of government controls over imports and foreign exchange and the introduction of a system of tax incentives and bonuses which encouraged businessmen to expand plant capacities and output. In Pakistan's agriculture, also, the use of incentive prices played an important part in increasing production. As we have seen, Yugoslavia has had extraordinary success in the use of economic incentives. Since the early 1950's, when it replaced centralized controls based on the Soviet model with decentralized management of the economy, Yugoslavia has evolved a system of incentives in which workers and enterprises are paid largely in accordance with their output. These incentives have proved to be so effective in raising production that other Eastern European countries, notably Czechoslovakia, but also Poland and Hungary and even the USSR, are adopting major elements of the Yugoslav system.

The importance of having a vigorous, adaptable and capable entrepreneurial class can hardly be overestimated. This is true for countries with all kinds of political and economic systems, for the task of organizing a country's productive forces toward achieving the most effective use of resources and the highest rates of development must largely fall to entrepreneurs, whether they operate primarily as private businessmen, government officials or enterprise managers.¹²⁸ While it takes time to develop a viable and enlightened entrepreneurial class, experience shows that the process can be greatly speeded if a government is sufficiently committed to development to override dogma and provide adequate economic incentives to attract the right individuals.

The Necessity for Political Commitment. In the public sector, as in the private sector, then, it is the attitude of a country's political leaders

¹²⁸ UN. ECAFE. "Economic Development and Planning in Asia and the Far East," *Economic Bulletin for Asia and the Far East*, December 1964, p. 23.

toward development which primarily determines the success or failure of plans. In carrying out public investment plans, the level of administrative efficiency is important. But the extent of a political leadership's commitment to the plans is crucial since, as Woodrow Wilson pointed out, "politics sets the tasks for administration."¹²⁹ Even for government leaders wholeheartedly committed to the task, it is no easy matter to reform the ways of an inefficient administrative and organizational government structure, nor can it be accomplished in a few years. But such commitment is a necessary condition for reform. With it, reform is possible; without it, it is not. Here again, Pakistan's experience provides important lessons. When Pakistan's political leaders were too immersed in political issues to give the lead, fundamental administrative and organizational reforms which the First Plan required for its successful implementation were not forthcoming. Mere talk, of which there was a great deal by government leaders, about the importance of development did not significantly change the attitudes and performance of a civil service oriented toward the maintenance of law and order and tax collection, or bring about essential organizational reforms. But when a new Government in 1958 created the proper atmosphere by giving strong and unfailing support to the Second Plan, and used its powers to adopt policies and measures to give effect to the Plan's objectives, conflicts of interest among officials were resolved, administrative bottlenecks were broken, intractable problems were overcome, and the civil service responded to the will of the Government. The lesson is clear: good administration and activity below depend heavily on firm and constant commitment of the political leadership above.¹³⁰

Measuring Inept Administration and Political Commitment

The planner may not be able to do much about a government's administrative inefficiency and its lack of political commitment or will to develop. But if in preparing his plans he ignores these critical factors, which together constitute the main limitations on the ability of most less developed countries to realize their economic possibilities, he does so at his peril; for in ignoring them he does in fact separate his

¹²⁹ Riggs, Frederick W. "Relearning an Old Lesson: The Political Context of Development Administration," p. 71.

¹³⁰ Waterston, Albert. *Planning in Pakistan*, p. 4.

activities and the plans he formulates from the real world outside a central planning agency.

Yet, as previously indicated, most national development plans have been formulated on the basis of what planners considered feasible, given available resources or, alternatively, what they considered minimal, given the rate of population growth or the level of unemployment. The plans they have prepared have therefore been primarily concerned with a country's economic possibilities or needs and have been little related to its administrative capacity to carry out the plans or to its will to develop. But economic potentiality or need is not enough to insure implementation of development plans. A country's development largely depends on how much its people and government want it and how much they are willing to pay for it. Unless a plan takes adequate account of a country's administrative and managerial capacity, and its will to develop, as well as its economic potential, the plan is not really so much a plan as it is a hortatory instrument of propaganda. It can hardly be surprising then that most plan targets are never achieved. Because targets are set on the basis of what is possible or desirable instead of what is likely, they usually are set so unrealistically high—not in terms of potential or need, but in terms of administrative capacity and will to develop—that they never have much chance of being fulfilled.

A good plan is realistic and a realistic plan does not set unattainable targets. Hence, a plan cannot be considered good if its targets are attainable only in the unlikely event that a government, which has previously shown little inclination or capacity to do so, introduces major land, administrative and other reforms. Yet, planners frequently base their targets on such unfounded suppositions. Thus, the growth targets in Pakistan's First Five Year Plan were probably well within the economic capacity of the country if the Governments in power at the time had made reasonable efforts to carry out the land reforms, make the fundamental administrative, organizational, procedural and other changes, and train the large numbers of technicians and managers which the planners indicated were needed to implement the Plan. The Governments did not do so, nor was there ever a strong likelihood that they would. The evidence indicates that the planners were unduly optimistic about what could be accomplished in Pakistan in a period when coalition governments were following each other with such rapidity that all public business was seriously impeded.¹³¹

¹³¹ *Ibid.*, p. 68.

Nor can a plan be considered good when the fulfillment of its targets requires a government in a less developed country to introduce many organizational and administrative innovations and to do so early in a plan period in order to make the necessary impact on the plan's implementation. For example, Ethiopia's Second Five-Year Development Plan for 1963-67 proposes that many new organizations be created to improve administrative and organizational efficiency, presumably to insure implementation of the Plan.¹³² Among these are a new investment bank, an agricultural development agency, a foreign trade corporation, a water resource agency, an agency to deal with land reform, and many other agricultural, forestry and fishery organizations. Since the proposed organizations were still on paper when the Plan was issued, they were likely to require most of the Plan period before they became accepted and approved by the competent authorities, not to mention the creation, staffing and carrying out of their responsibilities in an effective manner. They cannot be expected, therefore, to contribute much to the fulfillment of the targets in the current Plan.

If planners are to set realistic targets in their plans, they must somehow find means to measure quantitatively administrative inadequacy and the lack of political will to develop. These measurements are essential if planners are to "discount" the overly optimistic results usually obtained by the formulation of plans solely on the basis of economic potentialities. It is, of course, no easy matter to obtain these measurements; but it is not impossible. For example, a simple method was described earlier in Chapter VIII for quantifying the cost of administrative inefficiency, in terms of money and time, on the basis of the historical gaps between original estimates and actual performance for projects and programs in each sector. Such data are easily obtainable wherever projects and programs have been carried out. Indeed, the data are likely to be easier to get and more reliable than most of the statistics used in preparing the economic aspects of a plan. These data could be used to adjust cost and time of construction estimates furnished by sponsors of projects and programs where their previous estimates have been shown to be overoptimistic, thereby providing planners with more dependable estimates of what projects are likely to be completed during a plan period and what their cost will be. The

¹³² It is not clearly stated whether the successful implementation of the Ethiopian Plan depends on the establishment of the proposed institutions. This is typical of the vagueness with which planners generally prescribe for the implementation of their plans.

prudent use of such data can go a long way toward closing the gap between promise and performance, by reducing inflated estimates of the promise.

In connection with the formulation of the Fifth Plan, French planners introduced a refinement in political decision-making which lends itself, with appropriate modification, to the indirect measurement of a government's "will to develop." The French procedure is described in the section on plan targets in Chapter V. It will be recalled that it involved having the French Government decide *before* the draft plan was prepared what measures it proposed to take on specific basic policy issues. Thus, the draft plan which the planners produced was based on *known* government policies.

The same approach can be employed in less developed countries. If planners set up for each major policy area feasible alternatives from which political authorities can make a choice before a plan is drafted, planners can determine the combined impact of these choices on the rate of growth¹³³ and construct their plan accordingly. In the process of selecting the alternatives which suit them most, the political authorities will be supplying concrete and specific information about the extent to which they are prepared to adopt policies and other measures for furthering development which, collectively, will constitute a veritable measure of their "will to develop." Thus, if planners provide political authorities with, say, three levels of possible tax revenues (e.g., one based on current taxes, a second based on a moderate rise in specified taxes and a third based on specified substantial increases in the level of taxation), the selection made by the political authorities will not only provide the planners with an important datum for drafting their plan but will also provide them with an indirect indication of how far the authorities are willing to support development objectives with concrete measures in the tax field. A similar approach can be used to determine the level of domestic and foreign borrowing; the distribution of government receipts between development and nondevelopment expenditures, economic and social welfare projects, and advanced and backward regions; the level and direction of credit to be extended to industry and agriculture for specific purposes; monetary policy; the extent to which a government is prepared to provide increased incentives for productive investment in the

¹³³ Following the French example, planners can calculate a preliminary rate of growth for the period of their proposed plan by projecting the trend in the years immediately preceding the proposed plan period.

private sector; the government's wage or "incomes"; and so forth.

The alternatives which the planners prepare must be capable of being implemented. Thus, it means little if the political authorities agree to a substantial rise in taxes if the tax authority is inefficient and incapable of handling the increased workload. If there is uncertainty on this score, planners have to get expert advice on whether the tax office can be strengthened in time to take on the additional tasks involved. In addition, the administrative and organizational changes needed to give effect to each alternative have to be spelled out for the political authorities so that they fully appreciate the cost and effort which each alternative involves.

Since the level of a political leadership's "will to develop," even when generally high, is likely to vary from one policy area to another, planners would be well advised to narrow the area of decision-making and prepare alternatives for decision-makers in as many relevant areas as possible. However, it should be understood that the political "will to develop" encompasses more than political commitment to development. A government, although firmly committed to development, may consider it necessary or desirable for political or social reasons to divert substantial resources from productive economic projects to education, health, housing or other social welfare programs even if this would result in reduced rates of growth, at least in the short run; or, also for reasons of politics or social justice it may deem it necessary or desirable (e.g., as in Pakistan and Yugoslavia) to allocate investment resources in a way which will help equalize the distribution of incomes among regions instead of in the most efficient way. This, too, could reduce or postpone benefits during a plan period. Thus, the reasons why a political authority may not be prepared to support the most effective policy for immediate growth may vary, and may not even be known. Nevertheless, the procedure outlined here for measuring the political "will to develop" would provide planners with the effects of a government's policy decisions, whatever their motivation, and permit them to formulate a plan based on a government's known policies for the proposed plan period.

The procedures recommended here are not as radical as they may seem. In practice, planners make such alternative calculations and selections in preparing their plans.¹³⁴ The only changes proposed here

¹³⁴ Implicit in every plan are assumptions and policy decisions of many kinds. But because they are implicit rather than explicit, political authorities often fail

are that political authorities, not the planners, choose the main assumptions and policies on which a plan is based, that the political authorities be involved in the planning process much earlier than is usual, and that they make decisions about policy and other measures *before*, not *after*, a plan is drafted. If political authorities are not prepared to do this, or if they are unwilling or unable to make changes in policy required to accelerate the rate of development, it will become evident that they are not yet ready for comprehensive planning. In that event, planners would be well-advised to shift to some form of partial planning more suited to prevailing conditions.

The suggestions made for building into development plans the quantitative effects of political and administrative limitations are intended to show what can be done to make plans reflect problems which are almost certain to be encountered during implementation. Other ways can undoubtedly be found for accomplishing the same purpose. More important than the specific method is the need for broadening the scope of quantitative technique to encompass political and administrative factors, as well as the economic factor in the formulation of plans. The point emphasized here is that it is not enough for planners to refine techniques of economic analysis and ignore techniques for measuring the effects of administrative inadequacy and lack of political commitment to development.

If the three basic elements which enter into the planning process—economic potential, administrative capacity and political will to develop—are all taken into account in plan formulation, plan targets are bound to be more in line with a country's real capacity to achieve its economic potentialities.¹³⁵ Since these plan targets are likely to be lower than those set in most plans (which, however, are almost never realized), development plans would focus attention squarely on the

to appreciate the policy and administrative implications of the plans they adopt. Sometimes, planners include in their plan a list, usually general in nature, of the policy and administrative changes required to achieve plan targets. But as previously pointed out, government leaders usually have great difficulty relating specific policies with specific targets. Consequently, policy, organizational and administrative changes are usually postponed or forgotten after a plan has been prepared and adopted.

¹³⁵ Because a realistic evaluation of a country's administrative and political capacity to implement plans would probably result in higher cost and longer gestation estimates for projects and programs, estimated capital-output ratios are likely to be higher than if the estimates were based on the usual criteria. In effect, this would reduce the estimated amount of growth obtainable from a given outlay of resources.

administrative and political problems which limit plan implementation in most countries, and on the high cost they exact in reduced rates of development. If a plan accurately indicates how little can be accomplished to achieve economic potentialities because of existing administrative frictions and political inaction, some governments may be moved to come to grips with the real obstacles to plan implementation. Hopefully, this could lead eventually to the adoption of appropriate measures to improve economic policy and public administration and, more immediately, to a redistribution of development resources more in line with the practical possibilities for implementation.

There are further benefits to be obtained. By narrowing the area of decision-making the planner would be improving the process by which decisions are made in many countries. In spelling out in detail the feasible alternatives in each policy area and pointing out the effect of each decision on the size of the plan and the level of its targets, the planner would be helping decision-makers acquire a better understanding of the planning process. By requiring political leaders to give explicit consideration to the difficult choices imposed upon them by the desire to develop, the planner would be educating them to the need to think in the specific and selective terms essential to the achievement of plan objectives. By getting political authorities to participate in plan formulation at an early stage, the planner could get decision-makers started on needed policy changes and administrative reforms long before a plan period begins. Too frequently, discussion of policy and administrative changes required to implement a plan begins only after the plan has gone into effect. Moreover, by requiring policy-makers to indicate *before* a plan was drafted what policies and measures they were prepared to adopt, planners would be able to draw up a plan "to order" on the basis of the choices made, thereby making the political leaders fully responsible for the plan. This is as it should be.¹³⁶ Finally, by basing their plans on what political leaders had indicated they were prepared to do in the fields of policy and administration, instead of on what planners think should, or hope will, be done, plan formulation could exert an influence on the course of events. Plan formulation would then become in fact, what it is in

¹³⁶ There is, of course, no assurance that political leaders would adopt the measures and policies they indicate they will adopt. In that case, the onus is theirs and the planner does not share responsibility for the failure to implement the plan, as he does when he formulates his plans on the basis of policies which political leaders have not approved.

theory, a rational and efficient way of mobilizing and organizing productive resources for development, and the separation which now exists in most countries between plan formulation and implementation would tend to disappear.

IMPROVING IMPLEMENTATION

Improving the Conditions of Implementation

It would be useful and an improvement over current practice, then, for plan formulation to take account of political and administrative limitations on economic potentialities. But planning would have little justification if it only brought the targets of a plan down to levels which more accurately reflected the actual capacity of a country to attain them. A prime purpose of planning must be to improve implementation to make it possible to accelerate the rate of development.

However, the difficulties of improving implementation should not be underestimated. Shortfalls in achieving plan objectives and targets have brought home to many planners and government authorities the need to pay much more attention to improving plan implementation. But even where governments have tried to do this, results have generally not been good. For example, the Report on India's Third Five-Year Plan stated that

the greatest stress in the Plan has to be on implementation, on speed and thoroughness in seeking practical results, and on creating conditions for the maximum production and employment and the development of human resources.¹³⁷

In conformity with this declaration, the Government formulated specific measures for strengthening development administration and informed Parliament that

the vigorous and punctual implementation of the Plan today forms the core of administrative activity.¹³⁸

Yet despite the Government's resolve and the measures taken, the gap between plan targets and actual performance was greater in the Third

¹³⁷ UN. Inter-Regional Workshop on Problems of Budget Classification, etc. *Relationship Between Planning and Government Budgeting in Developing Countries* [Part II], p. 3.

¹³⁸ *Ibid.*

Plan period than ever before. In other countries, too, attempts to improve plan implementation have rarely brought quick results.

In part, this is because improved implementation of plans largely depends on improvements in administrative and organizational efficiency which necessarily take time to carry out. Where governments are prepared to make superficial changes, but not the basic changes required to reform public administrations, only piecemeal improvements are possible, and these reflect themselves in similarly piecemeal advances in improved plan implementation. But even in countries with a political leadership firmly committed to development, and hence where more comprehensive reforms are possible, it must be expected that fundamental changes in public administration and organization will take place slowly.¹³⁹

Although improvements in administration are important, they are only part of the problem. This is because the effectiveness with which a plan is implemented is to a great extent determined by the amount of preparatory work which preceded its formulation. Thus, a resolve to spend more time and effort on implementing a *current* plan is unlikely to yield much result. The time for that resolve was in the *previous* plan period. In the current plan period, with few exceptions, a government can only resolve to start action to implement the plan in the *next* plan period. It does little good for planners to prepare a macro-economic plan with growth targets which promise much, unless pre-investment and investment studies are sufficiently advanced on a sufficient number of projects and programs to give effect to the plan's targets. Similarly, there is no point in increasing the size of a plan, as India is doing for its Fourth Plan, if preparatory work has not started

¹³⁹ Various devices exist for speeding administrative reform, but the methods used will vary, mostly on the basis of whether or not a country's political leadership is firmly committed to development. Where it is not, the "nucleus approach" outlined in Chapter VIII is probably the most practicable approach. But where a government's commitment to development is well established and a broader approach to administrative reform is feasible, consideration should be given to the establishment of a standing, high-level commission, with responsibility for supervising the organizational and administrative reforms called for in the country's development plans. The central planning agency should be represented on the commission and the commission should advise the central planning agency on administrative and organizational reforms required to implement plans. The effectiveness of the commission will largely depend on the support it receives from government. Experience shows that where such a commission has been set up without the government being prepared to support it, it had little effect. This happened in Venezuela.

long before on the increased number of projects and programs needed to implement the larger plan.

Because it usually takes several years to identify and prepare soundly conceived projects and programs needed to implement a plan, it is too late for planners to become concerned about them only when a plan is being formulated. If little has been done long before to start sector, feasibility and engineering studies, there is not much planners can do at the point when a plan is being formulated except to note the lack of projects and programs needed to carry out their plan. Thus, Thai planners indicated that for the first phase of their National Economic Development Plan,

the formulation of projects left much to be desired and large sums had to be provisionally held in reserve subject to reallocation after subsequent review of specific projects.¹⁴⁰

The same procedure had to be followed for East Pakistan in Pakistan's First Five Year Plan and the lump sum set aside was never fully utilized during the plan period because of a persistent insufficiency of projects. In Syria, also, the Five-Year Economic and Social Development Plan included many projects for which suitable studies were not well advanced.

Even where the need for sector, feasibility and engineering studies is recognized, at least to meet the requirements of foreign lending or donor agencies, enough "lead time"¹⁴¹ is rarely allowed to complete studies in time for reasonably accurate cost, benefit, construction time, and other estimates to be included in over-all plans. As a result, there are frequently not enough projects prepared in sufficient detail to be included in development plans. Because of this, plans often contain only generalizations about projects and programs. For example, Ethiopia's Second Five-Year Development Plan contained the following statement:

In the course of the elaboration of the Plan, for understandable reasons the micro-location for each new industrial project could

¹⁴⁰ Thailand. National Economic Development Board. *National Economic Development Plan, 1961-1966, Second Phase: 1964-1966*, p. 14.

¹⁴¹ "Lead time" refers to the time that elapses between the inception of a project and its completion. A project which takes three years to construct may easily require a lead time of six years or more to allow time for initial sector and feasibility studies, and engineering designs to be prepared. If realistic allowances are also made for administrative delays, lead time for a project which should take six years may increase to as much as ten years.

not be foreseen. It will be possible to make a decision on this only on the basis of detailed studies and investigation of all the factors and conditions concerned, but new projects should be erected in all parts of the country providing the feasibility studies allow it. The location of the new industrial projects will have to be decided primarily according to the raw material and power sources, transport facilities, and the marketing and consumption analyses with the view of maximizing the returns and profitability.¹⁴²

For a large proportion of the projects included in India's Third Five-Year Plan, reasonably precise information about their costs, benefits and other attributes was not available and only preliminary data about them could be included in the Plan.¹⁴³ In addition, as the Minister for Steel, Mines and Heavy Engineering reported, it was discovered that

many of the Third Plan projects are not possible of implementation during the Third Plan because they are still in the preparatory stage and are nowhere near the implementation stage.¹⁴⁴

Closing the "Project Gap." Just as planning on the macro-economic level is a continuous process, preparation or programing of projects on the micro-economic level must become a continuous process if the "project gap" which frustrates most plan implementation is to be closed. In the private sector, this is largely a matter of providing suitable incentives to private investors and eliminating administrative, legal and other regulations and procedures which tend to dampen the interest of domestic and foreign investors. In the public sector of most less developed countries, it requires that programing machinery be set up in operating ministries, departments and agencies, with suitably trained staffs, supplemented by outside technicians and consultants.

These are the means; the end is to accumulate enough well-designed projects and programs to meet all foreseeable needs for projects on which construction should begin in the next few years. Since it is often impossible to foretell before feasibility studies are completed whether a project is economically and technically sound, more projects need to

¹⁴² Ethiopia. Office of the Planning Board. *Second Five-Year Development Plan, 1955-1959 E.C.*, pp. 192-193.

¹⁴³ UN. ECAFE. *Speed and Efficiency in Development Administration*, pp. 12-13; and India. Planning Commission. *Third Five-Year Plan*, p. 280.

¹⁴⁴ *Economic Times*, December 1, 1965, reporting on the speech by Mr. C. Subramaniam to the All-India Manufacturers Organization in Madras on November 30, 1965.

be studied than are likely to be required. The best way to meet the continuing need for new projects is to build up and maintain a "stock" of well-prepared projects from which a suitable variety and number can be selected to provide a steady flow of new projects to be added to those already in process of execution.

It must be expected that some of the projects studied will never be carried out. Nevertheless, the money, time and effort expended to prepare them are likely to be greatly outweighed by savings from projects which are used. Because such projects would be ready for execution whenever resources become available, costly delays could be avoided. In addition, the existence of a supply of well-prepared projects ready for execution would make it easier for a country to secure foreign financing for its development activities.

Once a stock of projects has been accumulated, it is easy to maintain. If annual operational plans allocate resources for starting new pre-investment and other studies each year, as well as for the continuance of such studies in progress, a stock of projects can be replenished as projects are removed for execution. But to build up a stock of projects, in the first instance, is a difficult task for most less developed countries. It requires that many feasibility studies be started at once for as many promising projects as can be identified. The number of such projects which can be identified can usually be greatly increased by sector studies. It is therefore desirable, also, to start sector studies going for the most important sectors in an economy.

In most less developed countries, the simultaneous preparation of many sector and feasibility studies cannot be carried out without the help of outside consulting and engineering firms; nor can the whole operation usually be set up without outside technical assistance. There is also a need to provide financing for the program, a large part of which is likely to require foreign exchange. Part of these requirements may have to come from domestic resources, but supplementary financing from abroad may also have to be arranged. But where such financing is arranged and effective use is made of outside skills, much can be done. For example, in Pakistan, over 100 project and program feasibility studies, besides a number of important sector surveys, were carried through at the same time in a specially organized "crash program." The program was inaugurated early in the Second Plan period to build up a stock of projects for the latter part of the Second and, especially, for the Third Plan period. The availability of a large number of projects "ready to go" not only has made it possible for

Pakistan to obtain increased foreign aid, but also helps account for its success in fulfilling and exceeding its plan targets.

Evaluating Plan Progress

As pointed out in Chapter V, flexibility is an essential element of development planning because changing conditions, as well as operational laxity, make deviations from original plan targets unavoidable. A central planning agency must therefore constantly review and assess progress in relation to events. It must seek to identify potential bottlenecks as early as possible, determine their causes, evaluate the extent to which deviations threaten the attainment of plan objectives and suggest measures for dealing with problems.

To perform these functions properly a central planning agency should prepare timely quarterly, semiannual and annual evaluations of plan progress. Almost none does so on a quarterly or semiannual basis and few prepare annual evaluations. Where evaluations are prepared, they often are issued long after the end of the period to which they refer. The best that most planning agencies seem able to do is to issue a mid-term report in a four- or five-year planning period and a review of performance at the end of the planning period, often long after the close of the period concerned.¹⁴⁵

Reporting Systems. But the fault is not all the central planning agency's. Since implementation of a plan is decentralized in many operating organizations, evaluation of a plan's progress depends on complete, accurate and timely reports on the progress of sector programs and projects. These are almost never available for all projects and programs.

In countries where operating organizations are required to prepare progress reports on prescribed forms by specified dates, many reports do not follow the forms and reports are often late. Some operating

¹⁴⁵ For example, the Indian newspaper, *Economic Times*, reported in its issue of November 8, 1963:

The Second Five-Year Plan ended more than two and a half years ago, but we still do not have a complete review of the Plan operations and results. The Third Plan will shortly enter the fourth year, but the progress for the first year (1961-62) of the Plan period was released only a short while ago.

Even so, the Indian Planning Commission issues progress reports more frequently than planning agencies in most other countries.

organizations submit correct and timely reports, but others exaggerate the progress made on their projects and most fail to report essential data. Information furnished is often too vague and sketchy for a central planning agency to be able to assess the progress made. Progress may be reported in percentage terms without adequate criteria for determining whether the progress made is better, worse or equal to what had been expected. Many operating agencies do not establish physical and financial criteria against which to measure progress, nor do they maintain up-to-date records on the physical or financial progress of their projects.¹⁴⁶ They, therefore, cannot furnish accurate and meaningful information on the status of their projects or programs.

To some extent, the inadequacy and tardiness of reports may be due to an operating organization's hesitation to reveal undue delays in execution; but they are as likely to be caused by apathy toward reporting, the importance of which is often not made apparent to reporting officers. In some cases, the general lack of enthusiasm for progress reporting is a reaction to the elaborateness of the forms used and the multiplicity of reports on the same projects which operating organizations must send to various government offices. Many of these factors have been responsible for inadequate progress reporting in Pakistan. According to a high planning official in that country,

reports on various projects are filled in half-heartedly and too late to be of much use in the planning process. By the time the Planning Commission learns that a particular project is going to cost about two to three times as much as was originally anticipated, the project is nearly half finished and beyond the point of no return.¹⁴⁷

But in many countries, even inadequate reports on the progress of projects are never sent to central planning agencies. Thus, Ecuador's National Board of Economic Planning and Coordination reported that in that country,

since there are no systems of communication between the line agencies and the central planning office there has not been a firm basis for a periodic evaluation of the progress made in the

¹⁴⁶ In keeping with the greater interest in some countries in the financial rather than the physical aspects of a project, progress reports often contain information about money spent but little or nothing about physical progress.

¹⁴⁷ Haq, Mahbub ul. *Planning Agencies*, p. 6.

execution of the plans, therefore causing difficulties in making the adjustments necessary due to changing conditions.¹⁴⁸

Because of the inadequacy of plan evaluation activities and the ineffectiveness of progress reporting by operating agencies, some countries have set up evaluation boards or committees to study projects which have either been completed or are being executed to see what can be learned. India, for example, has a number of evaluation bodies in the Central Government and the states. Some of their work has been useful, especially in calling attention to mistakes commonly made in executing projects, suggesting norms or better organization, and proposing methods and standards for improving the execution and management of projects. But much of their work has merely ended up in a report which,

in addition to becoming a substitute for action, merely adds to the growing number of reports which pile up on the desks of people too busy to read them.¹⁴⁹

Such "post-mortems," however good, cannot take the place of a current reporting and evaluation system because they almost always become available too late to permit needed remedial action to be taken for the projects to which they refer. This is inevitable because they are prepared by outside investigators who must probe for facts in a variety of places before they can establish their accuracy. Outside investigators cannot substitute for insiders if timely information is to be obtained on a regular schedule. For an effective current reporting system, what is needed is a two-way communication system between a central planning agency and operating organizations.

¹⁴⁸ Ecuador. National Board of Economic Planning and Coordination. "Chapter IV. The Organization for the Plan for Economic Development and the Administrative Reform," p. 7.

¹⁴⁹ Gross, Bertram M. *Activating National Plans*, p. 20. For example, *Economic Times* of February 16, 1965, reported that the Indian Programme Evaluation Organization (PEO) has submitted 13 reports on various projects which, according to the *Economic Times*, achieved little: "Irrespective of these reports the nation continues to spend crores [tens of millions] of rupees on these projects with disproportionately low return compared with the expenditure. The PEO has also pointed out various drawbacks in the implementation of many other schemes like minor irrigation, distribution programme for improved seeds, soil conservation and family planning. But the question arises whether the planners have taken adequate notice of these findings and whether the necessary measures have been taken to improve the situation."

A central planning agency must make explicit the kind of information it requires if operating agencies are to produce data, periodically and promptly, which can be combined quickly to evaluate a plan's progress. While this requires a uniform pattern of reporting, it does not necessarily require the same form for all projects. In fact, the size of individual forms can be reduced and their clarity increased if different forms are used for different kinds of projects. For example, power, industrial, agricultural, educational and health projects can and should be reported on different forms which nevertheless permit the combination of the physical and financial data they supply.

The shorter and simpler the reporting form, the more likely the information will be forthcoming. Project supervisors, understandably interested primarily in carrying out their projects, tend to think of progress reporting as an interference with their main activity. In these circumstances, voluminous or complex forms get short shrift and defeat their purpose. In the UAR, for instance, reporting forms were so complicated to fill out and time-consuming (e.g., the progress reporting form for construction of industrial projects was a folder of 20 pages which required data for 14 different tables) that few of the ministries bothered to complete the forms. Those that did usually provided inaccurate data and sent their reports late. Eventually, the forms had to be scrapped.

In contrast, Malaya (now a part of Malaysia) uses a form for construction projects whose simplicity and effectiveness would be hard to improve upon. The form for each project has 12 rectangles, one for each month in the year. Each rectangle is divided diagonally from bottom left to upper right into two triangles. An appropriate symbol is entered in each of the 12 upper triangles which indicates the expected progress of the project each month of the year.¹⁵⁰ Every month, the agency responsible for executing a project must enter the symbol recording actual performance in the appropriate lower triangle. If performance is on schedule, it is entered in black; if ahead of schedule,

¹⁵⁰ The following standardized symbols are employed:

- A—Preliminary action (including acquisition of site).
- B—Detailed planning (including the preparation of surveys, designs and specifications).
- C—Purchase of equipment (or machinery, if required).
- D—Tenders and awards of contract.
- E—Project under construction or otherwise being executed.
- F—Project completed.

it is entered in green; if behind schedule, in red. If projects are behind schedule, the report must give reasons for the delay. Anyone concerned with a project can therefore tell at a glance when it is lagging.¹⁵¹

Copies of the same form are sent to all ministries and departments interested in a project, as well as to the central planning agency. In some countries, however, requests for reports from several government agencies may require a project director to fill out a large number of different forms periodically. In Pakistan, for example, project directors have had to provide 10 to 50 different reports on a simple project each quarter to meet the demands of various government agencies. Project directors have complained that the large number of reports they must prepare periodically, plus the voluminous correspondence they give rise to, greatly reduces the time they can give to the execution of their projects.

The reporting interval needs to be fitted to the needs of different kinds of projects. The reporting period in Malaya is a month. This is satisfactory for some projects which can record appreciable progress in that time, but it is too short a period for other projects which progress more slowly. Where there is little progress on a project within a reporting period, reporting officers tend to delay reporting since they see no point in repeating the previous month's report. In most countries, an interval of three months has generally been found suitable for most projects, but it may not be possible to report progress on some slow-moving projects, like those for agricultural research, in intervals of less than six months. In contrast, for fast-moving projects like some building and road construction work, it may be desirable to have monthly or even fortnightly reports.

The time limit for the submission of progress reports must also be determined by reference to the kind of projects involved. Usually, reports should be submitted within one month after the close of a reporting period. In the case of simple projects, the time limit can be reduced to 15 days. But where information has to be gathered from several sources, this time limit is generally inadequate. This was the experience, for example, when West Pakistan had a 15-day time limit. It was found that data on the progress of education programs, each of which usually comprised a number of smaller projects in various parts

¹⁵¹ Thong Yaw Hong, *Building Institutions for Preparing and Executing Development Plans, the Malaysian Experience*, pp. 16-17; and Wilcox, Clair, *Planning and Execution of Economic Development in Southeast Asia*, pp. 29-30.

of the Province, could not be collected and entered on reports in less than a month after the close of the reporting period.¹⁵²

The setting up of a reporting system for all projects and programs may be too difficult for some countries to carry out at one time. If so, it would be preferable to establish partial progress reporting. For this purpose, priorities have to be set up for including only the most important projects in the reporting system. Such an approach was recommended by a Working Group of the Indian Planning Commission created to consider ways of improving progress reporting and evaluation in the various states of India; the suggestions of the Group illustrate the establishment of reporting priorities in one situation. The projects and programs considered of sufficiently high priority for inclusion in state reporting systems were those (a) of a pilot nature; (b) showing persistent shortfalls, lags and difficulties; (c) considered to be "impact" or "crash" projects or programs; (d) involving large outlays; (e) relying for their success on the co-operation and participation of the people and local institutions; and (f) for the benefit of backward areas.¹⁵³

Even if a good reporting system is set up, it will not work unless the political authorities in a country support it. In Burma, for example, a reporting system was designed which met planning needs. Regular progress reports were to be supplemented with special reports where necessary, but

when in practice it proved impossible to get the supervising authorities to pay attention to these reports, the basic objectives [of the reporting system] were abandoned.¹⁵⁴

In contrast, in Malaya, the authorities' exacting and continuing demands for up-to-date, accurate and complete information make officials all along the line respond with alacrity to the requirements of the reporting system. The Cabinet periodically reviews the progress of development plans on the basis of reports received from the districts, each of which has its own plan embodied in a "red book."¹⁵⁵ The

¹⁵² Khan, Jehanqir. *Progress Reporting—How Can We Achieve the Contemplated Objectives*, p. 5.

¹⁵³ *Economic Times*, February 16, 1965.

¹⁵⁴ Walinsky, Louis J. "Burma," p. 49.

¹⁵⁵ The book is colored bright red to make it conspicuous. It is three feet by four feet to make it difficult to mislay. It contains a basic map of the district concerned which can be placed under any of a number of map tracings in the book. One tracing shows road projects in the district plan, another schools, a third industries, a fourth

Deputy Prime Minister, who is in *de facto* charge of planning, also calls for monthly briefings, which may be convened on short notice. Because of this, every official responsible for a program is expected to keep himself fully informed at all times about the course of his program.

Reviews and briefings are carried out in a "National Operations Room," adjacent to the offices of the Deputy Prime Minister and the Economic Planning Unit. The National Operations Room contains the red books of all the districts, progress reports, wall maps and charts¹⁵⁶ depicting the status of development programs in each economic sector throughout the country. Each ministry in charge of a program must enter up-to-date data on the map and chart depicting its program. The Operations Room is equipped with movie and slide projectors, a lectern and a public address system with tape recorder. Ministers or department heads must give the briefings called for by the Deputy Prime Minister. Briefings are recorded and retained in the National Operations Room for reference purposes. The Deputy Prime Minister's instructions require that briefings be concise and precise, and that they refer to the wall maps, charts and progress reports.

In addition to these briefings in the capital, the Deputy Prime Minister and other officials regularly tour the states and districts. The Deputy Prime Minister makes frequently unannounced visits to each of the 70 districts at least once a year and sometimes as many as three or four times. These visits to each district permit him to discuss problems with the local people, mobilize their support and participation in implementing projects and eliminate bottlenecks on the spot. The Deputy Prime Minister, frequently accompanied by high officials concerned with the various programs, tries to make on-the-spot decisions to resolve problems and, where necessary, allocates additional funds to carry out specific tasks or works from a special fund he controls for the purpose. In every state and district he visits he is briefed on the status of the territory's projects and programs. Each state and district

waterworks, etc. When a tracing is placed over the basic map in the red book, the exact location of each project can be determined. A pocket adjoining each tracing contains written summaries of the projects in order of priority in the economic sector concerned. Each red book thus provides all the information needed for anyone to visualize a district's development projects. (Wilcox, Clair. *Planning and Execution of Economic Development in Southeast Asia*, pp. 26-27; and Thong Yaw Hong. *Building Institutions for Preparing and Executing Development Plans, the Malaysian Experience*, p. 11.)

¹⁵⁶ The charts contain information transferred from progress reports. Like the progress reports, entries are made in black, green or red to indicate whether projects are advancing on time, ahead of schedule or behind schedule, respectively.

has its own operations room, with its red book(s), wall maps, charts, etc. Since there is no telling when the Deputy Prime Minister or another high official may arrive without prior notice, state and local officials tend to keep the data in their operations rooms up to date, and what is more important, keep themselves informed on the progress of their projects and why any may not be progressing as expected. In this way, officials know what needs to be known and everything that is known about projects is exposed for all to see in the operations rooms instead of being locked away in a file which might not be accessible.

The use of a standardized system of records on the Malayan federal, state and district levels enables any official in the operations room at any level to see for himself the status of development projects in the territory concerned. The system reduces unnecessary paper work, correspondence and red tape because the common pattern of recording and procedures permits problems to be resolved by telephone. An official can put in a call to another and, by referring to maps and charts they both maintain in the same way, clear up any point much more quickly than by writing.¹⁵⁷ This has helped reduce congestion at the center of government and enabled officials concerned with development to act swiftly in response to changing circumstances.¹⁵⁸ The methods employed have proved to be so successful that it is proposed to extend them to all the states which comprise the Federation of Malaysia.¹⁵⁹

Other countries have sought to model their reporting and plan evaluation systems on the Malayan "Operations Room" pattern. Thus, the Ministry of National Development in Thailand set up an Operations Room, and a Presidential Economic Operations Center was established in the Philippines. But while these were equipped with wall maps, charts, audio-visual aids and other trappings, they proved to be ineffective because they lacked the prime factor which accounts for the success of the Malayan evaluation and reporting system: someone in high authority to put the full force of his office behind the system on a continuing basis.

Analysis of Projects. Just as the basic technical requisite of a good evaluation system is a good reporting system, the basic technical

¹⁵⁷ Moynihan, M. J. *Ops Room Technique*, pp. 14-15.

¹⁵⁸ Thong Yaw Hong. *Building Institutions for Preparing and Executing Development Plans, the Malaysian Experience*, p. 19.

¹⁵⁹ *Ibid.*

requisite of a good reporting system is prior analysis of projects and programs which permits realistic time schedules and cost estimates to be set up as criteria against which to measure progress. The whole process—plan evaluation; progress reporting on the plan, sector program and project levels; and the analysis of the projects for the purpose of setting goals against which to measure and evaluate progress—must be seen as a series of closely interrelated steps in which prior detailed analysis of each project is the key element.

This is because the reports which operating agencies send to a central planning agency must reveal whether progress on a project or program has been slow, satisfactory or fast. Such reports are possible only if the time required to complete a project or program has first been analyzed and divided into reporting periods and a set of specific financial and physical goals have been predetermined for each period. Otherwise, it may not be possible to judge whether progress indicated for a reporting period is satisfactory.

Goals set for a project or program are likely to vary from one reporting period to another. Thus, when a project or program has just begun, it generally shows little progress in early reporting periods because most of the time is spent on preliminary work. As work gains momentum, however, progress may be expected to be faster than in previous periods. But unless a time schedule and cost estimates have been worked out for each reporting period, it is not possible to determine whether progress in any period is what it should be. For this purpose, a schedule and a cost estimate for the project as a whole are worth little, since actual progress is generally made in a series of small steps on a variety of jobs. Indeed, a reliable time schedule or cost estimate for a project or program as a whole can be estimated only by adding up how long it will take and how much it will cost to complete the many tasks which must be done before the entire project is completed.

It is therefore essential for the purposes of progress reporting that a project be divided into a series of discrete segments (e.g., selection of a site, acquisition of land, issuance of tenders, erection of a plant, purchase and installation of machinery, construction of an access highway, training personnel for the plant, etc.) for which specific time schedules and cost estimates can be set for each reporting period. The segments of the project and the goals set must be consistent with the way orders will be placed and contracts awarded. If, for instance, a plant with three major components is to be built, each by a different

contractor, separate time schedules and cost estimates have to be set up for segments of each of the three components in the project. If the goals cut across contractors' areas of operation, the contractors' reports will be difficult to reconcile with the goals. A similar approach is necessary when several government organizations work on different aspects of a project or program. Such divisions of a project are in any event essential if operating organizations are to check on and maintain appropriate control over the progress of their projects and programs.¹⁶⁰

When goals are set for clearly defined jobs to be performed by each contractor, government organization or project director, means are provided by the periodic reports they prepare to measure the per-

¹⁶⁰ A number of programing techniques which have recently come into wide use in the United States and the United Kingdom are being applied to development projects to separate them into basic components for facilitating both control and reporting functions. These include CPA (Critical Path Analysis), PERT (Program Evaluation Review Technique), RAMPS (Resource Allocation and Multi-Project Scheduling) and SPAR (Scheduling Program for Allocating Resources). Two of these techniques, CPA and PERT, are generally similar and are the most frequently used. To illustrate, CPA requires that, on the basis of a careful analysis, a project be divided into a "network" of individual jobs showing the sequence in which each job has to be done and the time it is expected to take. By presenting the time sequence for each job as a line or "path," a graphic presentation is made of the project from start to finish as a series of separate paths which merge eventually at or just before the finish of a project.

The path (or job) which takes the longest to complete is the limiting or "critical path" for a project. Anything which can be done to reduce the length of the critical path reduces the time needed to complete the project. Since all the "non-critical" paths require less time to complete, there is no point in trying to reduce the time it takes to complete them if it involves increased expense. Instead, every effort needs to be made to transfer unused manpower and other resources from noncritical paths to the critical path to reduce its length.

A variety of advantages are claimed for CPA (and the other techniques). It not only permits a project to be divided into component parts for reporting and control purposes; it also can provide a reliable prediction of a project's completion date. It focuses attention on the more important aspects of a project, thereby making possible improved utilization of resources and reductions in the time it takes to complete a project. Moreover, it provides a common, easily understood language for every person, government organization and contractor engaged on a project; they can, therefore, better comprehend their own relationship to the project and fit their activities into the entire operation with minimum friction. Finally, it facilitates coordination of the efforts of the various participants working on a project.

CPA and the various other techniques can also be used to assure that complementary projects are dovetailed or "phased" so that each related project is finished when needed. In this way, time and money is not wasted, either by delays in completing complementary projects or components of projects, or by completing them before they are needed.

formance of those responsible for carrying out a project. If a project is going poorly, it then becomes possible to determine whether those who are carrying it out are primarily responsible or whether inadequate results are due to factors beyond their control.

If actual costs and physical progress have not corresponded to the original goals, it is important to revise them, taking account of the experience gained. This may merely involve rescheduling work which has not been completed as originally scheduled. But if discrepancies between goals and performance are great, it may require reappraisal of an entire project to see whether it pays to go ahead with it. In some cases, it may be better to discontinue the project and take a loss rather than continue with it and lose a lot more. Where, after reappraisal, a decision is made to continue with a project, review and revision of goals may nevertheless make it apparent that prompt steps need to be taken to obtain additional financial or other resources to complete the project. It is important to recognize mistakes and problems early. Periodic review and revision of goals based on past experience help reveal errors and make it possible to foresee and deal with difficulties before they become serious.

SUMMARY AND CONCLUSIONS

Planning has done much to help promote growth in less developed countries, but there have been many more failures than successes in the implementation of development plans. In fact, very few less developed countries have succeeded in consistently achieving reasonable plan targets over an extended period. Moreover, the gap between promise and performance appears to be widening.

The greatest shortfalls are usually in agriculture. Since agriculture's contribution to the output of most less developed countries is high, the failure to achieve agricultural targets mainly accounts for lower than planned rates of growth. In the mixed economies, successes in realizing industrial growth targets have generally been greater in the private than in the public sector. It is the growth in the private sector—often in ways inimical to plan provisions—which usually accounts for most of the increases in a country's national income.

Some governments tend to overemphasize the fulfillment of investment targets to the neglect of physical targets because they believe that investment virtually insures development. Concentration on how

quickly rather than on how well money is spent often leads to serious shortfalls in output targets. Because of a scarcity of well-prepared projects, many countries find it difficult to invest all the money they have available on such projects. They also experience abnormal delays in executing projects, higher than expected costs, shoddy construction of projects, selection of low yield projects and under-utilization of completed facilities which, taken together, explain why plan targets are often unfulfilled.

Causal factors, which vary greatly, are only partially within a country's control. But, in general, most of the problems which arise are attributable to poor planning. Failures are traceable to unduly ambitious targets and poor financial controls, the widespread failure of governments to maintain the discipline implicit in their plans, token efforts to co-ordinate economic and financial policies as required by plans, the absence of general criteria and procedures for selecting projects and programs in accordance with plan objectives, and, perhaps the most common reason for failure, inadequate project selection and preparation.

The great dearth of good projects ready for execution in most less developed countries is only partly due to the long time it takes to choose and prepare them. The main reason is that the need for the requisite sector, feasibility and engineering studies is not fully appreciated. Without proper studies, the actual costs, benefits and construction times often deviate substantially from original estimates, and sponsors of projects almost invariably overestimate the benefits and underestimate the costs and the time needed to complete them.

Administrative and procedural delays also constitute one of the most important reasons why plans are not implemented. In many governments, extraordinary lapses of time occur before a problem or a need for action is recognized, between the time it is recognized and a decision is made what to do about it, and finally, between the time a decision is made and it is carried out.

The failure of most planners to indicate precisely what must be done to carry out plans has tended to intensify the belief that the problems of plan formulation are separable from those of implementation. The tendency to separate plan formulation from implementation has been exacerbated by planners' preoccupation with economic factors to the exclusion of organizational, administrative and political factors. This gives rise to serious problems because in most less developed countries, the greatest obstacles to implementation are administrative and, especially, political, rather than economic.

The available evidence makes it clear that in countries with development plans, lack of adequate government support for the plans is the prime reason why most are never carried out. Conversely, the cardinal lesson that emerges from the planning experience of developing countries is that the sustained commitment of a politically stable government is a *sine qua non* for development. Where a country's political leadership makes development a central concern, the people can also be interested through the judicious use of economic incentives. And, although it is never easy to reform administrative and institutional inefficiency, commitment by political leaders is a necessary condition for reform; without it, reform is impossible.

If planners are to set realistic plan targets, they must find means to measure, quantitatively, administrative inadequacy and the lack of political "will to develop." These measurements are essential if planners are to "discount" the overly optimistic results usually obtained by the formulation of plans solely on the basis of economic potentialities alone. Administrative inefficiency can be measured by reference to previous discrepancies between original estimates and actual performance for projects in each sector. The political "will to develop" can be measured by requiring political decision-makers to select, in each of a series of relevant policy areas, one of several practicable alternatives which collectively indicate the extent to which a government is prepared to take concrete measures to further development. If these decisions precede plan formulation, planners can prepare their plans on the basis of known government policies instead of the planners' estimates of what a government might do.

If the three basic elements which enter into the planning process—economic potential, administrative capacity and political will to develop—are all taken into account in plan formulation, plan targets are bound to be more in line with a country's real capacity to achieve its economic potentialities. Since these plan targets are likely to be low, plans would focus attention on the administrative and political problems which limit plan implementation in most countries. By bringing home to government leaders the full impact of these limitations and presenting them with specific alternatives for overcoming them, planning could become in fact, what it is in theory, a rational way of mobilizing and organizing productive resources for development. The separation which now exists in most countries between plan formulation and implementation would then tend to disappear.

But planning would have little justification if it only brought the targets of a plan down to levels which more accurately reflected the

actual capacity of a country to attain them. A prime purpose of planning must be to improve implementation to make it possible to accelerate the rate of development. Because it takes several years to identify and prepare soundly conceived projects and programs needed to carry out a plan, it is too late for planners to become concerned about them only when a plan is being formulated. Just as planning is a continuous process, preparation of projects must be continuous. In the public sector, this can best be accomplished by building up and maintaining a "stock" of well-prepared projects from which to draw on.

As pointed out, planning requires periodic evaluation of plan progress. But the evaluations prepared by most central planning agencies are not sufficiently frequent and timely. This is not entirely the central planning agency's fault. Plan evaluation depends on accurate, complete and timely reports by operating organizations and these are practically never available for most projects and programs in process of execution. For an effective current reporting system to operate, a two-way communication system must be set up between a central planning agency and operating organizations. The planning agency must make explicit the kind of information it requires. Forms must be short and simple if they are not to defeat their purpose. The forms used must be "tailored" to the needs of different kinds of projects and, as far as feasible, one form should be used for reports to all government agencies concerned with a project. The reporting interval and the time limit for progress reports must also be determined by reference to the kinds of projects involved.

Just as the basic technical requisite for a good evaluation system is a good reporting system, the basic technical requisite of a good reporting system is prior analysis of projects which results in the setting up of realistic time schedules and cost estimates as criteria against which to measure progress. For this purpose a schedule and a cost estimate for an entire project are worth little since actual progress is generally made in a series of small steps on a variety of jobs. It is therefore essential for reporting purposes—and also for controlling execution—for projects to be divided into a series of discrete segments for which specific time schedules and cost estimates can be set for each reporting period. When this is done in accordance with techniques which have come into use in recent years, it is not only possible to prepare meaningful reports which accurately depict the financial and physical progress of projects and programs, but also to control execution in a way which insures maximum returns from resources employed.