

# THE IMPLEMENTATION OF DEVELOPMENT PLANS

by Milton J. Esman\*

National development plans may serve multiple purposes. They may be domestic political manifestos, or bids for foreign assistance, or gestures to domestic intellectuals. We are concerned with "serious" plans which represent a set of aspirations for national improvement over a broad spectrum of sectors in a multi-year time perspective in which some priorities have been chosen, resources have been balanced with requirements, key policies and action programs have been identified, and the package has been endorsed by political leadership.

## UNCERTAINTY, CONTINGENCIES, AND CONFLICTS

A plan so conceived is obviously not self-executing. Paper plans can soon become dead letters. All depends on implementation. Yet no plan can be implemented mechanically. Some are so complex and make such demands for large scale coordination that the managerial resources of the government and the private sectors cannot cope with them. The architectural model is entirely misleading. A national development plan can never be designed or executed with the precision of an architect's or an engineer's design. Government planners and administrators must cope with vast complexity and large areas of uncertainty about the physical and social realities and relationships which they are attempting to manipulate and to change. They face contingencies and unexpected events to which they must continuously adjust. Some contingencies like crop failures or ethnic disturbances may constitute painful setbacks; others like the discovery of oil or a reduced rate of population increase may provide welcome opportunities for accelerated development.

Plans are implemented in a political environment where influential individuals and groups inside and outside government have varying, conflicting and changing objectives and interests. These they try to incorporate in national plans. They continue to pursue them during the process of implementation, regardless of the language of the plan. Unlike the architect who has most of his variables under

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The ideas in this paper are derived from observations, and study experience, over many years. In the literature, two helpful sources are the work of Bertram Gross and his colleagues in the Comparative Administration Group's Committee on National Planning published as *Action Under Planning*, NY, 1967 and Albert Hirschman's recent volume, *Development Projects Observed*, Brookings, 1967.

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control, government administrators attempting to function under the discipline of a development plan must be able to tolerate very great complexity, uncertainty, conflict, and sudden changes.

#### *THE BLENDING OF PLANNING, IMPLEMENTATION AND EVALUATION*

Any attempt to distinguish sharply between planning, implementation and evaluation can be quite misleading. Analytically it is possible to distinguish this sequence of activities, but in the flows of events which characterise the real world of action, these processes are frequently impossible to disentangle. The implementation of an activity included in a plan usually requires more detailed planning. This more detailed planning and the action under it may uncover problems not originally considered and the feedback of this information may require adjustments in the original plan. Operating experience plus unexpected events exogenous to the plan explain why plans must be continuously modified in order to maintain their relevance and why countries are increasingly resorting to "rolling" plans. These make explicit adjustments every year and add an additional year to maintain a constant mid-term time perspective.

Any plan document in which projects and programs of action have not been subjected in advance to tests of technical, economic, political, and administrative feasibility is likely to be worthless and an essential test of feasibility is the prospect of implementation. The real measure of a plan's sophistication is neither in its "comprehensiveness" (for no plan can comprehend in an operationally meaningful way all the activities which impinge directly on national development), nor the analytical elegance of its system of equation, but in the rigor and the relevance of the feasibility tests to which it has been subjected.

#### *THE FALLACY OF CENTRAL OMNISCIENCE*

Because the architect's model of implementation dies so hard, let me return to it to explore the fallacy of central omniscience. The architect can claim to know enough about all the important factors affecting the construction of his building that he can incorporate them into his design. He then "controls" execution through flows of information which permit his project staff to supervise closely the construction process and to modify designs or take corrective action on matters of detail. He is in control. This degree of central omniscience is impossible in national development planning. The idea that a central planning unit has enough knowledge to develop feasible policies, programs, or projects and supervise their implementation without the active participation and support of the main implementers, both governmental and non-governmental, is sheer illusion. For this there are compelling technical and political reasons.

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*Technical Imperatives*

The main technical reason is that no central agency can mobilize enough knowledge to formulate and to supervise in detail the myriads of complex action programs and projects included in any national development plan. Such knowledge cannot be available to a handful of central planners. If plans are to be adequately informed with knowledge,—technical, political, economic, social, and administrative—those responsible for carrying them out must be consulted and the programs of action finally agreed upon must take account of their expertise in order that serious mistakes may be avoided. Central planners cannot be expected to know the special soils conditions on which a land development scheme in province X depends, nor the problems of enforcing a new tax regulation, nor of instituting a new animal disease control program without detailed clearance with the implementers. And even with batteries of computers, the volume of information required to control implementation of all the activities in a national plan are so enormous that any central plan agency would be totally overloaded. The delays involved in analysis and in communicating orders would ensure the breakdown of action. Program and project control must be exercised by the implementers; it must be decentralized.\*

This is one reason that planning capacity must be built into the main ministries, departments, agencies and regional governments and these planning units must belong to the line organization which they serve, not to the central planning agency. Otherwise they will not gain the confidence of the operating personnel on whom they must depend for information and support. The links between the central and sectoral planning groups must be professional; between them communication will be simple, but there will be frictions. By fostering the development of such units, the central agency must be prepared to sacrifice some of its formal

\*Those who claim that a multi-sector development plan can be centrally controlled the way a space satellite is controlled by computerised feedback of information are mis-applying a machine model to societal phenomena. I know of no successful effort to conceptualise a modern society as a closed system, except in large abstract aggregates which cannot describe even a small fraction of the relationships among its components that would interest a development administrator. Even though many current uncertainties will probably be clarified by further research, it is unlikely that closed systems theory will ever be able to comprehend the variety of relationships which are likely to be important in the implementation of a development plan in an essentially plural and only partially deterministic universe.

Social systems theories are useful research and learning devices for breaking down the artificial barriers between economic, political and social approaches to phenomena and events and for fresh conceptualization of relationships. They help to sensitize the practitioner to the networks of inter-dependencies in a modern society so that he will be aware of the systemic implications of his decisions. But reducing the monitoring of a development plan to manageable dimension means that most of the job must be done, activity by activity, by the decentralized implementers. Top levels may follow a group of, hopefully critical, mostly economic indicators and a few large projects and keep their eyes open for unexpected developments. Thus their control, unlike the satellite monitors, is only partial never total and even then they depend on the reliability of information, most of which originates among the de-centralized implementers.

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control over the content of plans in order to insure better informed sectoral and project planning and to enhance the capacity and the will of the multiple decision centers in government and the private sector to supervise their detailed implementation. The fact that they are not omniscient does not suggest that central planning agencies are unimportant,—for their critical importance is too obvious a point even to argue—but rather that the planning process must actively engage all organizations which control significant areas of action.

### *Political Imperatives*

Not only the expertise, but also the interests of the implementers must be taken into account, and therein lies the political imperative for a decentralized strategy of implementation. Any modern society is a diffuse set of interests, and this includes the government bureaucracies. Economic, ethnic, regional, professional and bureaucratic interest groups each have a measure of power. If the organizations that represent them or influential individuals among them are fully informed of the action programs they are expected to implement, if their views have been taken into account, if they are reasonably committed to the success of these programs they will work for their fulfilment or at least not oppose them. If they believe that a program or project adversely affects them, they can find numerous ways to impede and even to block implementation. By assuming intellectual initiative, a central group of planners can attempt to modify their perceptions of interest; they can bargain, compromise, persuade, and apply judicious pressure. They cannot, except rarely and at great risk, impose decisions. Effective national planning must thus be a participative process. Any viable plan must be the product of bargains and compromises to insure the sense of commitment or at least the absence of strong opposition which the decentralized implementers must feel if they are to take the numerous timely actions on their own that no plan can predict but that successful implementation requires.

It is a commonplace that development planners should have the full support of the national political leadership, the top men or the top coalition. This is an invaluable asset in planned development, but it does not dispose of the problem of political support. Political leadership can create a favourable atmosphere for planned development and can intervene strategically on important issues, but political leadership is never monolithic. Depending on the structure of government and on particular circumstances, it may be seriously divided. In any event, it is no more omnipotent than the central planning agency is omniscient. Top political leaders have limited energy and limited political strength to commit to battles on behalf of a plan, especially when the opponents of particular policies or programs may themselves be men of political consequence. The implementation of plans is a profoundly political

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process since it apports scarce resources which distribute satisfactions and dissatisfactions, opportunities and constraints among competing individuals and groups. The broader the consensus, the more likely the plan and activities under it will be faithfully implemented, but this involves consultation and participation among the interested groups and compromises which limit the need for senior political leaders to intervene too often. Much of the continuing political burden must be borne by administrators in the day-to-day management of public affairs. They participate in negotiating and resolving the numerous issues which arise in carrying out and in modifying development programs.

Planning can infuse public affairs with a sense of purpose and a rationality that would otherwise be lacking, but it also creates expectations which impose great burdens on administrators. Plan implementation requires continuing management of high quality in its political as well as its economic and technical dimensions. There are no simple or elegant analytical solutions to the administration of development programs, no mechanical unfolding of a plan, only continuous adjustments, action, pressures, conflict in the uncertain flesh and blood world of human affairs.

There are two basic forms of plan implementation: public investment programs (capital budgets) and those which attempt to influence the behavior of groups outside government. Most development plans contain both types of activities and a single activity may have both components. They call for different strategies of implementation.

#### *PUBLIC INVESTMENT PROGRAMS*

Public investment programs are more readily controlled by government (though not necessarily by a central plan agency), because they involve action primarily by government agencies. The most fundamental set of problems is the provision of resources, none of which are provided automatically by the plan, many of which are not foreseen at the time of planning despite feasibility studies, and most of which represent recurring problems. Among the necessary inputs of resources are a) legal authority, b) an organizational structure; c) competent technical, professional and managerial manpower; d) land, buildings, equipment and supplies; e) finance, including domestic budgeted funds, foreign exchange, and often foreign aid, and f) information on program operations and on the relevant external environment.

Each of these classes of inputs is controlled in part by authorities which are governed neither by the central planning unit nor by the operating agency which needs the resources in order to carry out its activities. The pressures to which control agencies are subjected, their legal charters and the decision criteria they apply are often inconsistent with the operational needs and the time pressure which

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are implicit in a plan and are felt by operating agencies. Each of these inputs imposes problems.

### *Organization*

One such problem is organization. There are always choices and these choices are important. Shall a program or a project be assigned to an existing organization with its established competences, contacts, and powers? Or should it be given over to a new organization with better access to political leadership, greater commitment to the program's purposes, more freedom to experiment and innovate, and less restricted by conventional personnel, procurement, and financial controls, but more likely to sustain the bitter and often persistent opposition of established organizations which have been denied the new program or project? Or should the activity be assigned to a non-governmental organization, perhaps with governmental assistance and regulation? Shall it be organized entirely by the central administration or should it be shared by local authorities or, in federal systems, by state and regional governments? Organizations crave new activities for themselves and often politically significant clients have preferences about which government agency should control an activity or project. Political and technical factors converge in such choices as these and this is a critical class of decision in plan implementation. Administrative structures are semi-permanent. Functions are not readily transferable among such structures and yet the structure may determine the values, the style, and the ultimate effectiveness of the activity.

While the importance of skilled high level manpower is a major latter day discovery of writers on development, there is less recognition of the importance of complex organizations in carrying out development activities. Most programs and projects require the mobilisation, deployment, and patterned interaction of varieties of complex equipment, facilities, information and skilled and committed personnel. This is possible only within and through formal organizations. The need to build and maintain such organizations and continuously to invest in their viability is one of the most neglected imperatives of development administration. At a more sophisticated level is the process of converting organizations into institutions which have the internal capacity to sustain complex and changing programs of activity and the external thrust that enables them to interact with other organizations in their environment in such a way that the innovative values and action patterns which they represent become acceptable to these linked organizations. The building and maintaining of change-inducing and change-protecting organizations and the achievement of institutionality (intrinsic meaningfulness) in their environment is an important priority in the implementation of development plans.

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*Skilled Manpower*

Some of the inputs into development programs and projects are in short supply. Many prospective users are competing for them and they may have to be rationed. This applies to scarce skilled manpower which is usually controlled by a central personnel agency whose decision criteria and procedures may not be instrumental to the needs of a dynamic development program. In order to treat all claimants fairly, it may distribute high level skills so thinly and may transfer key personnel so often as to affect adversely both the quality and the stability of the staffing of individual development programs. On the other hand, if a development agency is allowed to control its own personnel and can set its own recruitment and pay standards, it may build up its own staff at the expense of other important organizations.

*Finance*

The most obvious case is finance. Development plans are usually financed through an annual budgetary review. Many of development program or project safely included in a 5 - Year Plan emerges from the annual budgetary struggle mutilated, emasculated or at best stretched out. Activities which require substantial foreign exchange or which the government hopes to finance through foreign assistance are specially vulnerable to long delays. In the latter case, the availability of resources may be contingent on aid negotiations, the vagaries of the legislative process of foreign governments, or the conservative punctilio of the bureaucracies of international organizations. The budgetary procedure is the ideal opportunity for the opponents of a program, working within the administration or in parliament to block, retard, dilute or distort programs which they oppose, or which they honestly believe do not deserve priority. Even when budgets are approved, the meticulous control requirements which usually govern the release of funds for hiring personnel or buying supplies or equipment may harass and exasperate the program administrator and upset implementation schedules. Because they control the availability of funds, budgetary authorities directly influence the implementation of nearly all development programs and projects,—a fact which is not ignored by astute development administrators or by the opponent of development programs.

*Program and Project Management*

Implementation depends on management and modern management requires, among other things, a pragmatic problem-solving approach to the details of action and a propensity to interpersonal and intergroup team work.\* At the heart of program

\*Evoking, rewarding, and enforcing cooperative behavior among key administrators is an important problem in development administration. Since this propensity is not equally distributed in all cultures, the development of institutions or practices which enhance interpersonal and intergroup trust represents an important problem in induced behavioral change.

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and project management are two related problems of synchronization or coordination which depend on such team work. The first is to ensure that the right inputs are available when needed so that costly delays may be avoided. Otherwise, equipment purchased at heavy cost with precious foreign exchange may rust while disputes rage over the price of land or the location of the facility, or an expensively constructed and equipped hospital may be idle because doctors and nurses are not available.

The second is to see that the various administrative units responsible for successive phases of project implementation work together. This is especially difficult organizations when several under different vertical hierarchies, each responsible for a variety of activities of which the program or project concerned is only one, must contribute to its implementation. The failure of such organizations to synchronize is a classical phenomenon in project management. The planning, scheduling, and monitoring of development programs and projects can be facilitated by management control systems, of which PERT is the most familiar. These control systems require detailed operational planning by all the units concerned and implementation must be coordinated and disciplined by a central project or program headquarters. These control systems are not self-executing. They depend on reliable information reporting and on managers who are able to act decisively on the information they receive through these systems and the modify the scheduling network accordingly.

#### *INFLUENCING AND GUIDING THE PRIVATE SECTORS*

The second class of program are those which attempt to influence and guide the behavior of individuals and groups outside government. It is here that the most sophisticated insights and skills in public administration must come into play. Frequently government is engaged in areas of great uncertainty about how various systems in it society actually work, how groups of people can be motivated, and what the consequences of particular policies or action programs will be. How are the sales proceeds of a particular crop divided among landlords, cultivators, money-lenders, middlemen, processors, -- more basically what is the marketing process? How much subsidy would be required to stimulate increased industrial production for export? How will the voters of a particular ethnic group react to a change in traditional land use policy? To what use will farmers put subsidized fertilizers? How can a public sector enterprise developed to encourage domestic entrepreneurship be kept out of the hands of predatory politicians? Often such problems involve the management of group conflict, attitudinal and social changes, the development of human skills, and the building of new institutions. Some measures like land reforms or exchange devaluation may entail the distribution of deeply felt dissatisfactions and thus require the political will and capability to make these decisions stick.

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*Economic Policy Instruments*

Economists are fond of resorting to "economic policy instruments" to guide and control the economy and influence economic behavior in directions contemplated by a plan. These policy instruments are supposed to provide economic incentives for farmers, businessmen, and consumers to behave in the manner contemplated by the planners or alternatively to provide economic disincentives to undesirable kinds of behavior. These policy instruments may include tax adjustments, public expenditures, interest rates, tariffs, export subsidies, price supports, wage rates, and foreign exchange prices. The success of these instruments is based on the assumptions that men in most significant respects are strongly motivated by economic incentives, that these instruments can effectively allocate resources and influence behavior in less developed countries, and that these indirect controls are superior to direct controls because they rely more on market mechanisms and less on incompetent and corruptible politicians and administrators.

All these propositions are questionable to some degree. Many kinds of desired changes can be influenced only marginally, if at all, by economic measures, and often these measures may yield entirely unexpected consequences because they misconstrue the values (what people really want) or ignore the beliefs (how people perceive the world about them) of target groups. Moreover all policies must be politically sanctioned and must therefore pass through the political grinder before they can be enacted. All of them require administration in order that they can be enforced. Particularly important in this form of plan implementation are information systems which permit the economic policy makers to identify trends in the behavior of the economy so that timely and appropriate measures can be taken to manipulate the macro-economic variables by adjusting policy instruments to changing conditions. These information systems are by no means automatic. They depend on sophisticated and reliable data gathering, transmission, processing, analysis, and presentation and on administrators who are prepared to guide their decisions in some measure by these data. Such data and such administrators are scarce in most developing countries.

*Inducing Social and Behavioral Change*

Many elements in development plans cannot be manipulated or can be influenced only marginally by economic policy instruments. These are activities which involve a) the development of new skills, b) the displacement of vested power groups, and c) changes in values, beliefs, institutions, habits and action patterns. These measures may cover a wide variety of action programs and of client groups. How to induce rural women to practice birth control; or family business firms to accept equity capital from outsiders; or farmers to shift to new species, or to form and

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operate associational groups; or professors to try new teaching methods; or civil servants to shift from preoccupation with regulations and status to the service of their clients. Such activities may involve large elements of attitudinal and behavioral change, including the capacity of individuals to form and operate complex organizations (farmers' associations, business corporations) which permit them to mobilize large scale resources and thus to benefit from modern physical and social technologies. This depends, in turn, on organizational skills and on interpersonal and intergroup trust.

Because they involve such great uncertainty, these activities must be guided by educated hunches and tested by disciplined social research and experimentation. Combinations of tactics must be attempted, ranging from patient demonstration to pressure, to persuasion, to systematic training, to economic incentives, to the use of mass information media and face-to-face communication by extension personnel, politicians, administrators and other local influentials and to direct institution building by government or government sponsored bodies. Exhortations and "campaigns" unsupported by more patient and more fundamental learning experiences will surely fail. Each group must be approached on its own terms, starting often with attention to felt needs before sufficient trust and confidence are developed to permit attacks on more salient unmet needs. Few such changes can be successfully imposed by any authority. Instead they must be the outcomes of a vast and continuous process of individual and social learning. Much of this learning can be induced by planned and directed effort, by building new institutions, developing new skills, activating new groups, and providing new facilities through public or private sector channels. These depend primarily on the quality of public administration and indicate the high priority which administrative reforms and improvement must claim in the strategy of planned development. Some of this learning may be inadvertent and unplanned like the unexpected acceptance by farmers of fertilizers and pesticides distributed and financed by manufacturing firms, or the sudden recognition and exploitation of new export opportunities by domestic firms.

#### *EXPERIMENTATION AND LEARNING*

It is possible to over-state the difference between the implementation of public sector investment programs and activities which involve administrators deeply with clients who are the targets of social change. Though public sector investment programs are directly controlled by government, some of them encounter novel problems in administration which call for experimentation and for organizational learning. Frequently they confront technical problems like unexpected soil or drainage failures which throw the project badly off course in its construction or early operational phases and for which no ready-made solutions are available. Or they meet with

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political problems which have a similar effect. These may blend at certain points into social change problems, as when an irrigation project which has been successfully engineered and constructed encounters difficulty in the inability of local authorities to finance the maintenance of the channels, or the unwillingness of farmers to keep to planting schedules or resistance from traditional middlemen whom the government may be attempting to displace from their credit and marketing functions.

It would be futile to avoid launching development programs and projects until every relevant technical, political and social change element affecting the activity was known and predictable. This would be a prescription for futility. But because the risks involved in development activities are high and resources (including time) are scarce, administrators must be specially prone to experimentation, to timely adjustment, to learning from their experiences, to grasping and capitalizing on unexpected opportunities until they achieve patterns of success. One great danger is that their semi-successes or first phase successes may be frozen prematurely into rigid patterns that resist the learning process because they harbor vested interests developed by the program or the project itself. Experimenters must keep their options open less they standardise too quickly "solutions" that prove less than successful, yet inhibit further innovation and learning. The greatest inhibition to this style of action is the administrator who opts to play safe in an environment which encourages such behavior. There is a dearth of administrators with enough technical ability, personal security and development commitment to think experimentally, to examine performance objectively, to maintain a dialogue with their clients, to modify action on their own initiative, and to report straight-forwardly to their superiors that their pet schemes are not working out and need adjustment.

There can be no such thing as the smooth implementation of a development plan. No national development plan and no activity or major project under such a plan can be so well planned as to preclude major managerial, technical, economic or political problems and often all four in infinite combinations resulting from unexpected and unpredictable circumstances and from conflicts of interest. Plans cannot eliminate complexity or contingencies. They can merely attempt to order thinking, fix parameters, allocate resources, predict consequences of alternative policies and programs, and manipulate action in order to cope with experience and events more rationally. Plan implementation is thus a large scale exercise in management at every level of government. The lesser challenge to management embodied in many well-designed public investment projects with high technological content, like highways and power plants, is to identify, compensate, and correct for inevitable variances in the basic design,—to try to hold to a tight schedule. Other activities involve policy conflicts like the classical battle between planners promoting growth and Treasury officials protecting stability. By far the greatest challenge are activities, including the more

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complex public investment projects, which attempt to influence behavior outside government, particularly those which seek to induce institutional and behavioral change. For such activities usually involve conflict and uncertainty and politicians and administrators must draw on all their resources of knowledge and power to guide the experiments, to win the inevitable battles, and to generate and capture innovations which are essential to success in these ventures in social learning.

#### *THE ROLE OF DEVELOPMENT ADMINISTRATORS*

Plan implementation requires development administrators. Such men are poles removed from Weber's rational-legal ideal-type bureaucrats, or from the office-holders who batten on the rewards of office while fawning over their superiors and maintaining appropriate social distance from their clients, or from the lifeless optimizers who populate the immaculate equations of decision theorists and econometric model builders. Development administrators are activists with a purpose and in the pursuit of their developmental objectives they maintain a continuing pattern of interaction with politicians and members of social groups whose behavior they are attempting to influence. They are well-trained in management science and in the program areas in which they operate, but they also understand the political arts of conflict management and the experimental strategies of induced social and behavioral change. Such men are confident that because of their individual and group efforts, they can shape the future. Thus they regard themselves as change agents. They know how to work with and indeed provide leadership for teams of specialists drawn from various professions such as engineering and agronomy and from such social sciences as social psychology and economics. Because of the fine and often illusory line separating planning from implementation and evaluation, development administrators must be represented on central planning agencies as well as in key operating organizations, both at head-quarters and in the field. One of the most perverse and self-serving current myths is the one which qualifies only economists for roles in development planning and classifies development planning as an exercise in applied economics. On the other hand, administrators who are unschooled in economic analysis—and this has included until recently most graduates in public administration—are ill equipped for major roles in formulating or implementing development plans.

If my description of the process of plan implementation is correct, every developing country could use several hundred administrators with this interdisciplinary training and action orientation. Is this the model of the development administrator which the National Institute of Development Administration is attempting to shape for Thailand?

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