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9. ABSTRACT

A collection of 17 papers on institution-building. The papers were originally presented at five international conferences conducted between 1969 and 1971 at Purdue, Washington, D.C., Utah State, Kathmandu, and El Salvador. This reader both supplements and complements the annotated bibliography of IB literature, Institution Building: A Source Book, by Melvin Blase, 1972. The first section of this reader deals with the context in which institution-building emerged and some of the broad considerations to which IB responds. The second section presents an extended discussion of the conceptual aspects of institution-building and the formulation, development, and refinement of the IB model. The discussion presents the model against a background of the needs of developing countries. Section III moves to the lessons of practical experience, including the problems of planning, operating, and evaluating the IB perspective in technical assistance activities. The fourth and final section contains two case studies of institution-building efforts. Included in the appendix are explanations of various IB terms and concepts. Contributors to this book of readings are George H. Axinn, Ira L. Baldwin, Joel Bernstein, Melvin Blase, Sol H. Chafkin, Arthur J. Coutu, Milton Esman, Cesar Garces, W. Warren Haynes, Abraham Hirsch, Erven J. Long, Prachanda P. Pradhan, Jagadis Sharma, Wm. J. Siffin, Mohan Man Sainju, D. Woods Thomas, and Wm. N. Thompson.

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Institution Building:
A Reader

Edited by Amy G. Mann

PROGRAM OF ADVANCED STUDIES IN INSTITUTION BUILDING AND TECHNICAL ASSISTANCE METHODOLOGY

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PREFACE

In November 1962, the Interuniversity Research Program on Institution Building (IRPIB), formed by Indiana University, Michigan State University, Syracuse University, and the University of Pittsburgh, adopted an "institution-building" perspective in studies of certain efforts to induce social change. Between 1964 and 1968, the Committee on Institutional Cooperation (CIC), composed of representatives of the Big Ten Universities and the University of Chicago, conducted a study of technical assistance in agricultural development overseas. The focus of its analysis was the building of institutions to serve agriculture. Other scholars have also been attracted by, and have contributed to, the concept of institution building (hereafter cited as IB).

The CIC research group developed enthusiasm for the IB orientation, which some of its members see as a valuable tool for promoting agricultural development. CIC studies have made important contributions to the literature, including thoughtful, experience-based prescriptive and evaluative statements.

Experience led to the opinion that the IB model could be developed further and made more useful. This opinion, shared by Dr. George Axinn, president of the Midwest Universities Consortium for International Activities (MUCIA), and a number of officials of the U.S. Agency for International Development (AID), led to the establishment of PASITAM, the Program for Advanced Studies in Institution Building and Technical Assistance Methodology, funded by a grant from AID.

In 1972, ten years after the first formal inquiry into institution building was undertaken, Melvin Blase, in cooperation with AID and MUCIA, undertook the preparation of an extensively annotated bibliography of IB literature. Published as *Institution Building: A Source Book*, this volume brought together references to various publications and unpublished research reports on institution building, making this literature easily accessible beyond the relatively small group involved in institution-building research.

The Blase volume is a comprehensive and perceptively informative bibliographic treatment of IB literature. This reader examines the

strengths, limitations, and application of the IB model as noted in some of the literature. It both supplements and complements the Blase work.

The first section of this volume deals with the context in which institution building emerged and some of the broad considerations to which IB responds—considerations arising from an increased awareness of the problems of technical assistance indigenous to developing countries, and from an increased awareness of the impact of past U.S. technical assistance and development efforts on the complex fabric of developing countries.

The second section presents an extended discussion of the conceptual aspects of institution building and the formulation, development, and refinement of the IB model. The discussion presents the model against a background of the needs of developing countries. Section III moves to the lessons of practical experience, including the problems of planning, operating, and evaluating the IB perspective in technical assistance activities. The fourth and final section contains two case studies of institution-building efforts. Included in the appendix are explanations of various IB terms and concepts.

The material is taken from papers delivered at five conferences: a workshop in IB and rural developments, Purdue University, July 1969; a conference on IB and technical assistance, Washington, D.C., December 1970; a regional conference on IB, Utah State University, August 1970; a seminar on IB, Kathmandu, Nepal, July 1971; and a conference, El Salvador, July 1971. The first two conferences were sponsored jointly by AID and CIC; the Utah meeting by AID and the Utah International Education Consortium; the Nepal meeting on the Tribhuvan University campus by the Centre for Economic Development and Administration; and the El Salvador conference by AID and the El Salvador Ministry of Agriculture and Livestock. The following excerpts of the papers present the essence of the contributions from this two-year period. By combining and reordering the relevant material the editor has eliminated some of the inevitable redundancy.

Excerpts of papers are followed by page numbers where the material can be found in appropriate conference reports: *Conference Proceedings: Institution Building and Technical Assistance,* edited by D. Woods Thomas and Judith G. Fender (D.C.); *El Salvador Institutional Development Seminar Report* (El Salvador); *Seminar on Institution Building and Development*, CEDA Study Ser. Paper No. 1 (Nepal); *Proceedings of the Regional Conference on Institution Building,* edited by Lyman F. Smart (Utah). Papers delivered at the Purdue conference have been compiled in

a volume entitled *Institution Building: A Model for Applied Social Change*, edited by D. Woods Thomas, Harry R. Potter, William L. Miller, and Adrian F. Aveni. Excerpts presented here are from the original papers, however, and are followed only by the notation "Purdue."

A.G.M.
November 1975

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Part I

The Context of Institution Building

This section examines the nature of institutions, their role in development, and their relation to technical assistance efforts. In examining technical assistance activities, this section notes certain problems of past approaches and some new directions indicated by the lessons of experience.

Institutions and Political, Social, and Economic Development

Joel Bernstein
National Academy of Sciences

We have generally proceeded on the assumption that change is inevitable in developing countries. We have believed that change will continue to occur at a rapid rate in comparison to any historical standard. The important question, however, is not whether change will occur, but how it will occur, at what rate, and in what direction. The guidance of change—to make it better rather than worse—must be the overriding concern of development assistance. Development assistance may seek to accelerate some aspects of change, such as growth in the gross national product, in the literacy rate, or in the degree of participation by the country's citizens in their nation's modernization. It may also seem wise to retard other kinds of change, such as rapid shifts of population from rural to urban areas or the employment-displacing effect of certain types of technological advancements.

The central concern of development assistance should be how well the resources available to the recipient country are used; that is, how well total resources are allocated and combined in productive activities to fulfill the most acute societal needs. Effective development assistance cannot be achieved by simply injecting sizable inputs of capital and other investment resources into an economy. The real impact of development assistance is determined by how well the recipient country is stimulated to effectively use its own stock of resources and knowledge base. Marginal assistance resources achieve great multiplier effects when these resource increments lead to the improved use of the total resource stock in productive activities. When this results, the value of these marginal applications is much greater than the total quantitative sum of resources added to the system.

Significance of Institutions

How well resources are utilized in the development process depends to a great extent on the environment for human activities in the developing country. This environment is composed of many factors, including custom and ad hoc events, but it is largely determined by government policies and the set of economic, social, and political institutions serving the society.

The term "institution" is used in many ways. In this case, I refer to the organized capability to perform the important economic, social, or political functions in a society. Institutions are particularly important, providing not only the opportunities for development action, but also the necessary incentives to encourage individuals to react to changing conditions in the desired manner. This reflects the interdependence of institutional arrangements and policy determination and implementation. For example, government price policy may provide incentives to produce more of a particular type of commodity, but the individual entrepreneur cannot respond in a meaningful way to this incentive without access to adequate credit, marketing, and other institutional services.

Furthermore, the quality of institutions is an important aspect to be considered. It is not enough that an institution simply exists in a static sense. Rather, the institution must be a viable, dynamic unit generating the proper conditions for orderly change in the society through time. The influence of institutions on the societies they serve can either catalyze or retard economic and social progress.

Building improved institutional capability should therefore be the main goal of technical assistance. For the most part, the significance of various technical assistance efforts is not what the individual professional does in the developing country but rather the expanded knowledge base and the improved functional capabilities which he leaves behind. Perhaps the greatest contribution individuals can make in development assistance programs is to influence the character of a country's institutions and its governmental policies. This is not true in all cases, but by and large what is left behind should be the main criterion for evaluating the effective results of assistance. Usually, to have a lasting effect, new functional capabilities need to be embodied in institutional form.

This conclusion poses a three-part question:

1. What determines the effectiveness of institutions?
2. How can effective institutions be built and maintained?
3. What is the role of foreign assistance in this institution-building process?

(D.C., pp.5-6)

Emergence of Institution-Building Concerns

In the early days of foreign aid, the practitioners were not very aware of this question, although their concern was implicit in much of what they said and did. That institutions were important was more or less taken for granted. Little active thought was given to institution building as a process—a complex and difficult one at that—or to the possibilities and means of consciously influencing this process. Development was conceived primarily as a matter of applying additional resources and

improved techniques. This approach, however, is best suited to tackling an engineering problem, not necessarily a social one. Development is a social process, although it has engineering components. People are the key development resource, and development involves their interactions, attitudes, motivations, and ways of doing things. For this reason, it also involves risk and uncertainty.

Experience has shown that to be effective in reaching specified institutional goals within a context of positive and acceptable socio-political side effects, there is a need for careful and deliberate planning which involves all interested parties, particularly those in the country. There is a need for feedback and the ability for quick adjustment. All of these complex elements are needed for institution building, but they were often absent in our early assistance efforts. As the difficulties and experience multiplied in highly varied patterns, AID and a few academics began to see institution building as a process needing the careful attention of those in the business of development assistance.

(D.C., pp.6-7)

Institution Building as A Guide to Action

Milton Esman
Center for International Studies, Cornell University

Some Parameters of Institution Building

Institution building is a generic model of induced change. It is valid in any country, in any sector of activity, and at any point in time. It does not, however, explain; nor is it useful in directing all forms of change or even all forms of technical assistance. Transfers of knowledge which are purely technical and involve no significant attitudinal or behavior change, either within the organization or in its external environment, do not constitute institution building: a new method of measuring the size of the labor force in a census bureau, for example, or a new technique for mixing animal vaccines in a well-established veterinary service. Similarly, feasibility or pre-investment surveys with no training or organization-building components are outside the purview of institution building, however valuable they may be to the host society. Assistance to certain kinds of action programs where the technical assistance staffs are the principal doers or the focus is on accomplishing a specific task does not constitute institution building. Perhaps many such projects should be reconceptualized as institution-building activities with explicit attention to developing organizational capabilities and inducing change among client individuals and linked organizations. This disclaimer aside, institution building comprises a large number of technical assistance activities—especially those sponsored by American aid and virtually all those in which university contractors are engaged.

The IB model applies both to the creation of new organizations and to reconstituting existing structures. Which course of action to take—when indeed there is a choice—is one of the strategic decisions that institution builders must make as part of their initial planning. A related choice is whether a new activity should be organized under an existing macro-organization or allowed to develop independently (e.g., should a new school of management be included in an existing university; should a family planning agency be included in the ministry of health, or should they be set up independently elsewhere?). In either case, the variables or the factors to be considered are essentially the same. Existing organizations may have important assets that can be mobilized on behalf of

innovative purposes, but they may harbor conservative interests and attitudes which are difficult for innovators to work with. New organizations are not encumbered with vested interests. They may be freer to innovate but may have little in skills, resources, experience, contacts, or public image to draw on, while other organizations in the environment which feel threatened may have their knives out. There are no simple formulas to govern these critical structural decisions. Each must be determined in its own local context by weighing both the feasibility and the costs and gains of the alternatives.

(D.C., pp.11-12)

Institution Building as Induced Change

The basic concepts underlying IB theory are as follows:

1. The development process involves the introduction and acceptance of numerous changes or innovations in modernizing societies. Many of these changes are technological. They concern ways of manipulating the physical environment (water control systems, fertilizers) or of regulating social relationships (merit systems, patterns of university organization) which are new to the host society. Many of these innovations combine elements of both physical and social technologies (family planning, agricultural extension). Many such changes which seem to be purely technical and rational to the foreign change agent and even to domestic leaders and innovators may, however, be perceived by local people as damaging or threatening to their material interests, their occupational or social status, familiar relationships, or well-entrenched habits. Those who resist innovations are not necessarily only the rich and powerful or the poor and illiterate; they may also be found among the most "enlightened" and educated—professors who resist curriculum changes or civil servants who fight organizational improvements. Because innovations often involve important changes in attitudes and behavior and do not readily fit into local practices and institutions, they are inevitably implicated in social change. Innovations should thus be conceived as induced social changes by both domestic and external change agents.

2. In the contemporary context, most such changes do not occur by autonomous diffusion or evolution. They are deliberately induced by individuals or groups who see such changes as beneficial to themselves and to society. But uncertainty exists in the introduction of changes into any social system, many unexpected consequences, and unpredictable responses, even in well-planned experiments in social change. Indeed, they should be looked upon as experiments. These experimental ventures must be guided by individuals or groups who are consciously prepared to

engage in organizational learning from the data of experience and adapt their technological innovations and original plans for introducing them to what proves to be feasible in the environment—without abandoning their innovations as the price of survival. Institution building is thus a guidance and social learning process, not the "installation" of prepackaged foreign technologies.

3. Induced innovations require the vehicle of complex formal organizations. Important changes depend on centers of competence which bring together, combine, and develop the variety of skills required for the technical phases of the job, the commitment to specific innovations, and the political abilities needed to guide change processes in an uncertain and perhaps unfriendly environment. Organization promotes and protects innovations and represents and symbolizes them to their clients and to society.

Institution building is thus a double-barreled activity. Change agents must both (a) build technically viable and socially effective organizations which can be the vehicle for innovations, and (b) manage relationships (linkages) with other organizations and groups on whom they depend for support and whose behavior they are attempting to influence. Building viable organizations and managing their linkages are closely interrelated aspects of a single institution-building process.

4. An institution has been built—and the activity can be adjudged successful—when the organization (or organizations) and the innovations for which it stands have been accepted and become a valued and functioning part of the environment. To be institutionalized, organizations must not only survive, they must be able to acquire operational resources; they must be able to exert influence on their environment so that the innovations they stand for are taken up and incorporated by complementary organizations and groups with which they interact. We speak not of simple technological transfer but of a much more complex process of introducing technological and social innovations which are assimilated into an ongoing society. Thus, the society accommodates to the innovations more than the innovations accommodate to the society. While institution building is a theory of induced and guided change, it is not essentially revolutionary. It contemplates innovations deliberately induced, usually through authoritative structures in the society; thus it is a useful doctrine and guide for cross-national technical assistance.

(D.C., pp.10-11)

Objectives of Institution Building

What are the end states of the institution-building process—the directions toward which ventures should move? These must be specific for each activity, but in general they should meet the following criteria.

1. Technical capacity: the ability to deliver technical services which are innovations to the society at an increasing level of competence, whether they be teaching agricultural sciences, enforcing income taxes, or providing family planning services.

2. Normative commitment: the extent to which the innovative ideas, relationships, and practices for which the organization stands have been internalized by its staff, e.g., the merit system for personnel selection or participative roles for students.

3. Innovative thrust: the ability of the institution to continue to innovate so that the new technologies and behavior patterns which it introduced may not be frozen in their original form, but the institution can continually learn and adapt to new technological and political opportunities.

4. Environmental image: the extent to which the institution is valued or favorably regarded in the society. This can be demonstrated by its ability (a) to acquire resources without paying a high price in its change of objectives, (b) to operate in ways that deviate from traditional patterns, (c) to defend itself against attack and criticism, (d) to influence decisions in its functional area, and (e) to enlarge and expand its sphere of action.

5. Spread effect: whether the innovative technologies, norms, or behavior patterns for which the institution stands have been taken up and integrated into the ongoing activities of other organizations.

Mere survival is not a test of institutionality. An organization may survive; but the price, due to incompetent or uncommitted leadership, to technical inadequacy, or to environmental hostility, may be the abandonment of its innovative objectives. It may thus survive as an additional organization but not an innovating one, becoming of little interest to institution builders. On the other hand, though the organization may go under, its technical and behavioral innovations might be taken on by other structures and survive and prosper in other organizational settings. But in the overwhelming majority of cases, innovations depend on the survival and success of the organization, and the innovations it represents must be fostered. Both must achieve societal acceptance and integration.

(D.C., p.21)

Institution Development and Country Needs and Resources

A.J. Coutu
North Carolina State University

Since 1950, the dominant theme in U.S. technical assistance efforts has been the transfer of knowledge and technology by encouraging indigenous research and educational institutions. We now seem to be shifting our assistance efforts, concentrating our support in international research centers in order to emphasize U.S. involvement in management systems for resolving the slow pace of agricultural development, and seeking different institutional development guidelines for accelerating social changes. In these efforts to hasten institutional development, we have ignored, and seem to be continuing to ignore, what is really required—the long arduous task of developing essential assets, such as an adequate commitment to science in the development process, well-trained and matured human capacity, and essential physical facilities. Realization of these hard core assets is essential to moving into a research and development approach to increased rates of social and economic growth.

Before focusing on the many issues raised, the research and development, or "learn how" approach to institutional development, needs elaboration. As is the case for most things, relatively little knowledge, few systems, or organizational structures are directly transferable from one society or culture to another. Most definitely, the essential knowledge and technology necessary to sustained high rates of agricultural development are not transferable. Some attitudinal and organizational pieces (of the land grant system) might be transferable, but human and physical capacity, as related to physical, biological, and social issues, is not. If the above assertions are accepted, real institutional development must provide a capacity to do research and development on problems and issues peculiar to the indigenous culture and economy.

Coutu asserts that previous U.S. technical efforts have resulted in several "costs" to all concerned: "the delay in commitment to the agricultural sector by the indigenous countries and higher rates of development that have been foregone"; "disillusionment by the U.S. people in support of efforts abroad—they were sold a false hope that agriculture abroad would flourish with the transfer of U.S. technology"; "the limited number of essential indigenous educational and research insti-

tutions just getting a good start." He concludes that had the U.S. devoted more than 10 percent of its agricultural investments since 1945 to development efforts, "substantially more of the critical assets would exist —a greater commitment to science and education, depth in human scientific capacity, and the presence of essential laboratories, libraries, and experiment stations."

On the other extreme, the new guidelines towards technical assistance in institutional development are also disturbing. The first concern is that a position will solidify around the view that a few international research centers are substitutes for strong indigenous research and training institutions. Research centers do not offer adequate training capacity, and it is doubtful that the difficult adaptive research requirements can be met without indigenous capacity.

Another concern is the growing enthusiasm over management systems, and that an active or dominant U.S. role should continue.[1] Implied here is the idea that knowledge transfers are still the most acceptable development method, but they need to be strengthened through the development of management systems.

Another disturbing element is the possible over-commitment to research and action programs relating to normative models of institutional development. Some of the key elements in the analysis of the institutional building process are leadership, doctrine, organization, and the environment.[2] The disturbing implication is that we will further delay an adequate amount of U.S. resources being allocated to building research and educational institutions because we lack a systematically derived and broadly based theory of how the technical assistance process operates. The U.S. failure over the last twenty years to adequately assist in developing successful public programs in research and education cannot be blamed on the lack of adequate guidelines towards institutional development, nor on a lack of desire on the part of most U.S. universities. The fault lies in a false belief that adequate knowledge existed and needed only to be transferred; and a false belief that the U.S. Congress insisted on short-run highly visible products from U.S. foreign aid.

Regardless of past mistakes, and with experiences gained, it is hoped that more adequately funded programs, through some improved instruments, will increase the capacity for doing essential agricultural research training.

NOTES

1– See Joint Statement by NPA Subcommittee on U.S. Foreign Aid and NPA Board of Trustees, "A new conception of U.S. Foreign Aid," National Planning Association, Special report no. 64 (Washington, D.C., March 1969).

NOTES

2– For further discussion, see M.J. Esman and F.C. Bruhus, "Institution Building in National Development: An Approach to Induced Social Change in Transitional Societies," and M.J. Esman and H.C. Blaise, "Institution Building Research: The Guiding Concepts," mimeographed (Pittsburgh, Pa.: University of Pittsburgh, Graduate School of Public and International Affairs, December 1965 and February 1966).

Changing Nature of Technical Assistance Needs and Responses

Erven J. Long
United States Agency for International Development

As the nature of the job to be done through technical assistance changes, so should—and we hope will—the structure of technical assistance programs. In the 1950s and 1960s we have engaged primarily in institution building. In the 1970s, we shall, in part, be engaged in finishing this part of the job. More important, we shall be helping institutionalize the capabilities and patterns of participation which will assure the continued growth and significance of institutions in societies. The basic structure of technical assistance operations required to achieve this is undoubtedly very different from that utilized in the earlier phases.

Policy should reflect that U.S. interest in this follow-through is essentially independent of whether or not the host country's balance of payments or short-term political situation merits U.S. financial assistance.

First and foremost, opportunities for such a follow-through should be created. Policy should also recognize that the rate of return to the U.S. from, as well as the host country's interest in, this last increment of input is greater than what preceded it. In fact, like the last chapter of a detective story, this part gives the payoff to what went before.

Clearly we should think of new patterns of relationships between our country's professional resources and those of LDCs. Probably the government-to-government dimensions of the relationship should be greatly reduced. So-called sisterhood institution-to-institution relationships should no doubt continue to play a part. Formal professional associations, as well as less formal intra-discipline worldwide relationships, probably require expansion. Genuinely international organized research efforts on specific problems must evolve. Substantial reorientation of our own institutions to give international scholarship its due weight is clearly imperative. The proper blueprint is by no means clear. Hopefully, we will build it around a careful analysis of the job to be done and our own interest in it rather than doing minor patchwork on past practice.

Probably the most serious question for this activity in the 1970s and beyond deals with the extent to which an attempt is made purely through country-by-country activities. The development of institutional and human resource capabilities in less-developed countries is, of course, a necessary condition of their development. But it is necessary that we—

and especially they—have a real understanding of the limitations of this approach: there is absolutely no possibility that any less-developed country can even approximate the capability of bringing to its service the powers of modern science and scholarship generally—at least within our lifetimes. Improved communications, journals, conferences, professor and and student exchanges, and the like will contribute greatly. But problems of scale will end the breakthroughs necessary to adequately change the parameters of the possible for these countries.

The effort simply to aid countries to "catch up" with the developed countries is, in itself, a losing game. Ours is—and I hope will be—an accelerating momentum.

The challenge to our ingenuity, then, is not how to enable less-developed countries to parallel our scientific, technological, and economic growth, but how to enable them to participate in it fully. It would be easy, but completely disastrous, to squander resources in unorganized driblets of minute, endlessly replicative bits of research and development on problems, which by their nature require great concentration of not only financial resources, but extremely scarce scientific capabilities. We must seriously reflect on this basic problem of scale in research. We should consider, for example, both the significance and the magnitude of an all-out effort to completely adapt plants to the human will—towards which we have already made substantial beginnings. We should realize that local adaptation is essential, a simple action if there is something relevant to adapt (like the photo-insensitive wheats or the high lysine and tryptophan genes in maize). We also need to seriously reflect on the numerical dominance of this country in scientific capability. We must ask ourselves how to use this as a resource for achieving worldwide development capability, and how to avoid allowing de facto chauvinism and false national pride from preventing development of such a genuine capability.

We can build bridges which scholars and scholarship may cross to help less-developed nations participate in our progress. Specifically, we can work with these countries to enable them to take advantage of the opportunities organized research can create. They can then participate fully with us in the trip to the new moon which is surely on this earth. We can accomplish this if we recognize that it is as much in our interest as theirs. I believe we will.

(Purdue)

Part II

The Institution-Building Perspective

Many social science models and theories are characterized by an open-endedness which points to the need for additional study. But many of those models and theories are more susceptible to evaluation, measurement, and "proof" than is institution building. Siffin calls IB a "perspective," a term which seems more appropriate than either "model" or "theory." Institution building is, at present, more a way of thinking about and analyzing certain kinds of development efforts and their effectiveness than a way of actually "doing" development. The amorphous nature of institution-building work which recommends the term "perspective" over "model" and "theory" also suggests a somewhat less formal mode of presentation.

The following is taken from two papers presented at the Purdue conference. The papers have been excerpted and woven together to form a complete presentation of the various elements of the IB perspective.

Major Properties and Purposes of the IB Perspective

Milton J. Esman
Center for International Studies, Cornell University

William J. Siffin
International Development Research Center, Indiana University

It may be helpful to explain that the term "institution" is somewhat more abstract and elusive than its cousin "organization." Institution, as used in institution-building terminology, refers to "the normative qualities of an organization, as distinguished from technological characteristics," and indicates "that the 'institution' established by institution building is not just an organization, but a set of continuing patterns of action that encompass both the organization and its transactional relations with its environment."

Elements of the IB Perspective

The Interuniversity Research Program in Institution Building (IRPIB) has studied efforts to create organization-centered complexes. Describing what happened in each case, assessing and attempting to explain the outcomes, and looking for general patterns of experience characterize the effort, which has obtained coherence from a set of "guiding concepts" that serve as the focus for collecting and analyzing data.

One set of concepts states which features of any organization are important to the study of institutionalization. According to the IB perspective, there are five relevant features:

1. Leadership: "the group of persons actively engaged in the formulation of the doctrine and program of the institution, and who direct its operations and relationships with the environment."

2. Doctrine: "the specification of values, objectives, and operational methods underlying social action."

3. Program: "those actions which are related to performance of functions, and services constituting the output of the institution."

4. Resources: "the financial, physical, human, technological, and informational inputs of the institution."

5. Internal structure: "the structure and process established for operation of the institution, and for its maintenance."

The IB focus is not restricted to organizations per se. It concerns organization-environment interaction, "the interdependencies which exist between an institution and other relevant parts of the society." The relation between organization and setting is perceived as one of exchange. The exchanges that take place between the organization and entities in its environment are labelled "linkages," and the IB perspective classifies them into four types:

1. Enabling: relations with entities that "control the allocation of authority and resources needed by the institution."
2. Functional: relations with "organizations performing functions and services which are complementary in a production sense, which supply the inputs and use the outputs of the institution."
3. Normative: relations "with organizations which incorporate norms and values relevant to the doctrine and program of the institution."
4. Diffused: relations "with elements in the society which cannot clearly be identified by membership in formal organizations."

This can be taken as a classification of the types of relationships an organization has with elements in its environment, even though the language used in the classification literally refers to relationships with types of organizations, i.e., organizations differentiated in terms of functions. Obviously, a relationship may be more than one type, e.g., both "enabling" and "normative."

This organization-environment exchange perspective amounts to a "system" perspective—not a closed, stable, explicit systems theory, but an implicit assertion that an "institution" is a package of behaviors and relationships that includes a particular organization and its interactions with its environment. Thus, the test of "institutionalization" in the institution-building perspective is the normative impact of the organization on its setting. Successful institutionalization involves an organization that affects standards and characteristics of behavior in its environment.

(Siffin)

The environment of institution building is not a vacuum into which innovations can be poured and absorbed, but an ongoing pattern of relationships in which individuals, groups, and especially organizations, each participating in an area of activity, promote and protect their own interests which are sanctioned by the larger system. Environments, however, are not closed and static systems; nor are they monolithic. They, too, are changing and differ in their change readiness and change resistance, both to generalized change and to specific innovations. The managers of different organizations may perceive their interests differently and thus vary in their readiness or resistance to proposed innovations. The first task of change agents is to assess these environmental realities

in detail. They cannot assume that there is a demand in the environment for their product—which may be a service, organizational, or technological product—however meritorious they conceive it to be. An unfulfilled demand for a new product may exist, but more often than not such a demand is latent. The market is competitive and must be developed. Change agents must expect and identify environmental hostility to innovations. Even when this hostility is minimal, they must expect that other organizations may compete for control of the market which the change agents are seeking to enter and may attempt to preempt proposed innovations by adopting some changes on their own. Briefly, the environment is essentially political and may present a broad spectrum of generalized change readiness and change resistance as well as receptivity and resistance to specific innovations. The environment also presents a complex of intellectual, normative, technical, and resource constraints as well as opportunities and capabilities to provide the inputs or accept the outputs of the organization, regardless of the political factors already indicated.

(Esman)

Basic Premises in the IB Argument

The IB perspective rests on an explicit view of a certain type of situation. This view amounts to an "argument" or set of assertions upon which the relevance of the perspective rests.

1. Formal, purposive organizations are an important means for inducing beneficial change within societies. In his "Interim Appraisal," Esman said:

> The Institution Building approach has a pronounced social engineering bias. Its root proposition is that a very large proportion of the most significant contemporary changes, especially in the developing countries, are deliberately planned and guided, and can be distinguished from those that occur through gradual evolutionary processes, or as the consequences of political or social revolution. It further presupposes that the introduction of changes takes place primarily in and through formal organizations. These organizations symbolize, promote, sustain, and protect innovations, and it is these organizations as well as the new normative relationships and action patterns they foster which must become "institutionalized," meaningful, and valued in the societies in which they function.

2. There is an important difference between institutionalizing organizations for social change purposes and establishing viable organizations within congenial settings. The essence of that difference is the hostility of the environment in the former case which produces a double-barreled problem: achieving intended and desired organizational behavior and getting the organization's claims and output accepted outside. In friendly circumstances, it will be easy to obtain suitable personnel—relatively well-socialized, prepared, and predisposed to behave in conformity with

organizational needs and expectations. Likewise, in a friendly setting, the legitimacy of the organization and the possible utility of its output will be more or less self-evident. But in hostile (or uncongenial) environments, the critical (though not exclusive) problem of organizing for social change is normative, and the effective resolution of that problem can be described as institutionalization. It may be difficult and expensive to create the core of the organization; people will have to be socialized and made skillful and knowledgeable. It is equally hard—perhaps harder—to maintain the organization. And it will probably be hardest of all to cause the organization's product to be accepted and used in the intended way.

To some extent the IB perspective is a response to often-thwarted efforts to transfer particular organizational forms to so-called developing nations, or to promote development through an emphasis upon the application of technologies. The IB perspective is not anti-technological. In fact, it says nothing about technology per se—a point to which we shall return. But its focus is on something other than technology and organization in the narrower sense.

Enhancing the Concept of Organization

One salient feature of the IB perspective is a conceptualization of an organization. This conceptualization has some real limitations. Certain refinements and variations could make the IB perspective more useful.

An organization (i.e., of the relevant sort) is, we are told, an aggregation of significant factors: leadership, doctrine, program, resources, and internal structure. Call these "variables" if you must—or even "clusters of institutional variables." Actually they are only labels, or the analogs of boxes or buckets into which to put information. They are a classification scheme for ordering data about an organization (or a group of organizations, a type of organization, or even a group of types of organization).

If the IB perspective reflected serious pretentions to being (or becoming) "hard" theory, then one of its elements would be the statement: "An organization can be viewed as a set of discrete, interacting variables. The interactions are patterned. The patterns can be perceived (described, assessed, measured). The ways in which the patterned interactions take place will affect the achievement of institutionality, or the probability of that achievement."

Actually, the perspective says: "Here are the things we judge to be the important features of organizations. By collecting information in accordance with this classification scheme, you may be able to find out something about ways in which organizations do or do not achieve the elusive quality of institutionality. We have chosen this particular classification

scheme because we have a hunch that it focuses on the information that is most likely to tell us something (and to de-emphasize extraneous material)."

There are a number of problems in this conceptualization of organization. For example, it covers almost everything but the kitchen sink and does so at such a high level of generality that some interesting and quite possibly relevant questions about organization remain implicit and invisible. This is no fatal flaw. In fact, a narrow and highly selective conceptualization would be quite risky in a first-draft heurism; it might deter the collection of important information. Yet, there are certainly opportunities for improving the IB conceptualization of an organization, even without making any radical change in the scheme itself. For example, there is that elusive factor called "doctrine." Is this really something distinct from leadership, program, resources, and structure? Is this a label for a discernible phenomenon? Are there not other, better ways to get at the object of concern indicated by this term?

There are at least two other opportunities for developing and improving the "organization"facet of the perspective. One is to go beyond the all encompassing view of organization and establish a typology of relevant organizations. There are, after all, different types of organizations just as there are different types of organizational environment. Extending the initial classification scheme to take this into account would considerably sharpen the focusing capability of the IB perspective. Even more important—and more promising—there are a number of different ways to conceptualize an organization. Some of these conceptualizations open the door to a more rigorous analysis of institution-building questions. The IB perspective belongs to what is loosely called "organization theory"—material incorporated in the IB heurism almost entirely by implication and, because of the nature and scope of the classification scheme dealing with organization, without much selectivity. Refinement of the organizational aspect by conceptualizing an organization in a more analytical fashion would enhance the heurism's power.

James D. Thompson's *Organizations in Action,* published a few years after the IB perspective was formulated, is a distinguished example of what I have in mind.[1] Thompson is concerned only with "instrumental organizations which induce or coerce participation," not voluntary associations. He calls his work a "conceptual inventor," but he generates a number of significant propositions. He focuses on contemporary American organizations, but seeks to transcend the boundaries of the particular. A central feature of his approach is the application of Talcott Parsons' axiom that an organization can be disaggregated into three distinct levels of responsibility and control (or, for that matter, into distinctive types of action): technical, managerial, and institutional.

Thompson conceives of an organization as an open system, interactive with its environment, faced with uncertainty but subject to criteria of rationality. He lays a foundation for a typology by which organizations of the general type that concern him can be differentiated on the basis of both technology and environmental characteristics. Finally, he produces a set of relatively limited, manageable propositions about ways in which organizations function under certain specified conditions.

Without attempting to summarize Thompson's work, I propose that it offers the basis for a definite improvement in the conceptualization of an organization set out in the initial IB perspective. Other opportunities for improving the IB heurism should likewise be examined—and in some cases adopted.

Taking Technology Into Account

A significant feature of Thompson's approach is his treatment of technology as a subsystem of any organization. In terms of institution building, Thompson's concept and propositions should lead to certain interesting questions about technology as a factor affecting the construction of institutionalized organizations for social change purposes.

A technology, in the most elemental sense, is "a reliable body of practical knowledge." There are science-based technologies, pragmatic technologies, and (perhaps most commonly) technologies that incorporate a mix of science and pragmatism. Not all technologies are "organization-centered," and organizations themselves vary in the extent to which they are "technology-centered." Technology is probably a vital variable when it comes to institution-building efforts. If so, the IB perspective would be greatly enhanced if it took explicit account of this assumption, perhaps beginning with the primitive assumption that "it is easier to institutionalize an organization concerned primarily with applying a well-developed technology than an organization that is not technology-centered."

Exploring and refining this premise poses problems, e.g., acquiring a good working conceptualization—perhaps even a typology—of technology, and dealing with the premise that all large-scale organizations have their technological aspects including the technologies involved in their administration. It does not take much imagination and experience to perceive that technology is a salient organizational variable. One has only to compare a police department and a fire department, contrast a school with a pharmaceutical factory, a highway department with a welfare organization, a malaria eradication program with a population control program. In gross and somewhat oversimplified terms, it can be argued that effective and powerful intervention in many situations depends on the availability of a suitable technology; and technological transfer is

quite rightly the most alluring object of concern to those who would induce social change. Obviously it is easier to build roads, spray mosquitoes, and generate electricity than to persuade people to voluntarily modify their breeding habits.

Some technologies, if not all, have features that make them particularly germane to efforts at organizations and institution building—they are bounded, specified, and self-contained. Within a certain inevitable range of variance, these technologies are output-specific. It is possible to say in advance that resources with certain specifiable qualities, in certain amounts, and combined in accordance with certain standards and procedures can reliably be expected to produce specifiable outputs over determinate amounts of time.

Grant that the breadth of this statement is vulnerable to attack by anyone who has ever attempted large-scale application of an established technology, e.g., a new steel mill in Indiana. Grant that even more vociferous objections can be raised by anyone involved in trying to apply a technology in a truly alien setting—a diesel engine factory in India. Acknowledge that "doing" a complex technology is not a routine, automatic activity; that art and skill and judgment are involved; and that mankind's fantastic capacity to standardize and transmit "packages" or combinations of skill-and-standard is never entirely free of the effects of that slippery phenomenon known as "the human element." Grant all this, and you must still admit that an established technology offers distinct advantages as the nexus for creating a viable organization—or an institutionalized change within a society.

Viewed as a social system, an organization-centered applied technology is a determinate set of linked rules and actions marked by a high degree of rationality. If such a technology is going to work, the behavior involved in its application must be specified and substantially consistent with explicit and objective technical norms. Within certain boundaries, an applied technology either is or it isn't; it either functions or it doesn't.

The relative immutability of the requisites of such a technology is both a problem and an opportunity. It is a problem because there are many circumstances in which it may not be possible—and certainly not easy—to obtain the requisite behaviors. But at least the behaviors and some of the central requirements for achieving them—skill and knowledge requirements—can be rather clearly specified ahead of time and meet more or less known methods. To a large extent, skill and knowledge requirements are so intimately linked with technical norms that meeting the former is likely to also mean internalizing the latter. And this, of course, is a form of institutionalization.

Furthermore, the relatively closed-system quality of many technologies means that the behaviors they require are particular to their

operation, not to the larger socio-cultural system. Cultural patterns do tend to shape, in some ways, the structure of a technology-in-action, but not the central and salient features of that technology. I do not contend that any technology can be established in any place, but only that (a) there is no one-to-one relationship between technology and its socio-cultural setting; and (b) some technologies are little (and partial) social systems in themselves and can function wherever appropriate resources are available, output is relevant, and there are no inexorable environmental impediments. Furthermore, technologically oriented organizations are relatively easy to plan and construct. To the extent that an organization is technologically-centered, it contains a set of determinate action patterns specified in advance and subject to continuing evaluation on the basis of hard criteria (as distinguished from criteria that are soft, elusive, and often reducible to that final residual test—survival).

Finally, as we all recognize, the application of technologies can have interesting impacts on the environment. The more we know about specific characteristics of such impacts under particular conditions, the more we shall know about potential strategies of social change. For instance, I know of cases in which simple mechanical contrivances (e.g., pumps for wells) were placed in local community settings to improve the conditions of existence, and the arrangements work poorly or not at all. But I also know of dozens of villages in a Southeast Asian country where diesel generators and small-scale electricity distribution schemes seem to work quite well. Not only was the technology introduced, but somehow, in a relatively unplanned fashion, arrangements for maintaining the systems emerged. And they work in the absence of planned, specifically related vocational training programs for diesel mechanics. What factors seem to explain the evidently effective "institutionalization" of the electricity operation and the failures in the case of the water pumps?

(Siffin)

The Element of Time

The original model has little to say about the duration of the institutionalizing process, the synchronization and sequences of activities, or the stages of development, except to recognize time in its many dimensions as a problem. Clearly, the time horizons of the change agents, the availability of all kinds of resources, and the change readiness or resistance of the environment will influence strategies. Since institution building is more than a technical activity, it cannot be equated in time with the building of an organization which is only one element in the process. Duncan and Pooler estimate that the IB process should require at least eight years.[2] The CIC-AID researchers have posited a three-stage

sequence of launching, growth and consolidation, and maturity based on the work of Donald Taylor.[3] They identified detailed indicators of progress, especially for agricultural universities associated with external technical assistance inputs. Some have questioned the conceptual and empirical validity of fixed sequences of stages. Taylor has proposed as one temporal tactic a Maoist two-step-forward-one-step-back sequence in challenging and penetrating the external environment of a business school.

(Esman)

Leadership, Doctrine, and Memory

Some organizations have been called "nothing more than the lengthened shadows of particular men." Some organizations obviously exert powerful influences on the perceptions and value-orientations of the participants. The IB perspective calls as much as possible for organizations of the latter type, in which certain kinds of value-orientations are effectively institutionalized.

Designing and applying organizational memory processes must be a vital element of an institution-building perspective. Institution building must take into account the "normative" aspects of organizational memory and do it in a way that will cause "memory" to mean more than dead files. The "memory" process must also be a "learning" process so that the organization's ideology is more than a static set of images and "truths." Normative adaptability and innovation must be key institution-building concerns. The alternative is an almost certain guarantee of doctrinal obsolescence. This is hardly compatible with the aim of pursuing social change through institutionalized organizations.

Case studies confirm the decisive importance of leadership. The combination of attributes prescribed for successful institutional leadership has probably never been achieved in any human organization. Several leaders have actually been available in some cases already reported. Their less than enthusiastic commitment to innovation or even to the organization itself, their limited competence, and their dysfunctional leadership styles are a sobering expression of the less than optimal conditions under which many IB ventures begin. In some instances, no other leadership choice was feasible, and better strategic planning might not have yielded better choices. Since leadership can be a group phenomenon, several tactics are available to compensate for particular leadership deficiencies: the cooperation of technical assistance personnel into informal leadership roles; attenuating organizational goals to accommodate weak leadership while preparing for more adequate leadership succession; building on strength elsewhere in the organization; or even in linkage groups. None is

a substitute for effective formal leadership, but it may be necessary for change agents to either improvise or abandon their efforts.

An embryonic institution is so dependent on its leadership that this cluster of variables requires more systematic attention than it has yet received. Analytically, one might suggest such sub-variables as: (a) commitment—the energy the leadership invests in the new organization and their intellectual and emotional interest in innovation (bearing in mind that in some reported cases the leaders served part-time, their main attachment was to a more conservative institution, and they were not interested in innovation); (b) competence—the technical, managerial, and political ability of leadership to handle internal and external tasks along IB lines (for this purpose it might be useful if research aimed for more precise statements about the actual tasks of leadership in both its internal organizational and its linkage management roles at different stages in institutional development, and for different kinds of organizations, i.e., action agencies as well as educational bodies; (c) continuity and succession—the period of time the same leadership group is available to influence the organization, and the consequences of stability and discontinuity in leadership, planning for succession, the factors relevant to these choices, and the adjustment of institutions to the shock of leadership succession; (d) leadership styles—including the degree of hierarchy-collegiality and authoritarianism-permissiveness in internal management, aggressiveness-accommodation in external relations, and other attributes relating to style and the distribution of influence within the leadership group; (e) leadership tactics—including relative priorities to internal and external problems, to caution and risk taking longer or shorter time horizons, and the reference groups that claim its priorities. Clearer definition of these or other sub-variables and the enunciation and testing of hypotheses that would indicate that consequences of different behavioral combinations for institutional performance at different stages in the IB process, would be instructive to those who may participate in the choice of institutional leaders, or in influencing their decisions and behavior. Such knowledge might also help orient leadership to specific guidance responsibilities.

Doctrine has been the most elusive but, in my judgment, one of the most important clusters of variables in IB strategy. I am distressed that it has been downgraded by the CIC researchers as "institutional tradition and attitude," a pale shadow of the originally rich concept. The underlying assumption of the doctrine variable is that the expression of values is a powerful orientor, motivator, and guide to behavior. It represents a set of criteria against which specific program decisions can be weighed; it develops group cohesiveness and evokes extra effort; and it projects an image of the organization in the environment. The original institution-

building definition of doctrine as the "specification of values, objectives, and operational methods . . . the stable reference point" has been proved by several researchers to be too static and monolithic. Fred Bruhns has demonstrated that institutional doctrine is a combination of themes which can be and are manipulated by institutional leadership to enhance internal cohesion and to make the institution more acceptable in the external environment.

Management of values is not a trivial leadership function, especially in an organization committed to innovation in an environment where neither the organization nor its innovations have yet been accepted. It appears that doctrine is both a constraint and an instrument for leadership. As important orientors and motivators, values cannot be tampered with casually. Yet, as expressed in doctrine, value themes can be manipulated to rationalize or pave the way for changes in programs or styles of operation. Doctrine should be one of the key elements in strategic planning. Those IB efforts which have been most successful, like the College of Education at the University of Nigeria as reported by Hanson, had a highly visible and compelling doctrine that socialized its membership toward a common outlook, enhanced their productivity, reduced internal conflict, and made the organization and its innovations more acceptable and meaningful in its environment. The Public Administration Institute for Turkey and the Middle East, as reported by Birkhead, had little sense of identity of purpose because it had no consistent or appealing doctrine. There is much to learn about value management at different stages in institution building, about the orienting and motivating effects of different kinds of value statements on different internal and external publics, about the consequences of different styles of articulating and projecting doctrinal themes, and about how various uses of doctrine produce varying outcomes. It is likely, for example, that inconsistent doctrinal statements indicate disagreement within the leadership group; that ambiguous doctrinal statements indicate a need to appeal to broader clientele at the expense of normative purposes; and that pronounced emphasis on doctrinal themes indicates a determination to push normative changes rather than expand clientele or accommodate to the environment. Guided social change, unless it is purely opportunistic, cannot take place in the absence of guiding ideas and symbols relating to goals, means, and styles of organized action. Both for actors and analysts, it is essential that this cluster of variables be prominently represented in their orienting models.

The Question of Linkages

The concept of linkages in the IB scheme parallels the arrangement for conceptualizing organizations. It is a classification scheme based on the

premise that any organization must interact with its environment in certain ways. As such, it is a sterile perspective, devoid of direct explanatory potential. The linkage element of the perspective was, of course, intended to be this way--to serve as a simple means for attempting to order information. The development of the heurism could now be served by moving beyond this simple, sweeping classification. One way would be to adopt conceptualization of an organization as a partially open system (á la Thompson) and try to specify with discrimination the key processes and problems likely to characterize organization-environment relations. To do this, it might be useful to create a typology of environments, for processes and problems probably vary according to environment. (Siffin)

This concept of linkages has proved to be one of the most fruitful in the institution-building scheme because it treats the organization's external environment explicitly and disaggregates that environment into identifiable structures and patterns of relationship that are both analytically and operationally capable of manipulation. It is less certain that the designated classes of linkages--enabling, functional, normative, and diffuse--have been analytically helpful. At one time, the IB consortium hoped that it might be possible to develop linkage-mapping techniques that would graphically represent the universe of an institution builder and help him to plan and monitor the management of his primary and secondary linkages. Into this mapping scheme would be fed the substance and the styles of action that were planned in advance--in the process of strategic and program planning--with each linkage treated as a separate problem of tactics and relationships. The concept is simple, but the technology has not yet been worked out to operationalize it.

(Esman)

Concerning the Use of the Perspective

The IB perspective is based on the axiom that rational strategies of social change are possible. In some cases, at any rate, one might say: "These initial-state conditions can be changed to a more desirable set of end-state conditions by deliberate efforts to create a rational, purposive organization that can be institutionalized." The concern with institution building grew out of a conviction that earlier efforts at development-through-organization-building had failed precisely because they were insufficiently rational. They had concentrated on the transfer of organizational structures to new environments or had aimed at establishing technological competence without concern for the organizational-environment context in which that competence would have to function.

Many of these ill-starred efforts failed to take adequate account of the normative aspects of organizations and of their linkages with their settings. Thus, IB posits the need for, and possibility of, a more potent rationale for efforts to achieve social change through organization. As Professor Esman in his "Interim Appraisal" has said,

> . . . the institution-building scheme is a rationalistic model. If the ideal type institution-building man is in a position of institutional leadership, what are the problems that he would have to deal with, and what are some of the tactics which he would rationally choose to employ in order to achieve his goals at minimum cost?

Rational Decision-Making Under Conditions of High Indeterminacy

Rationality is a fragile and precarious value; it is more often than not achieved only in retrospect. It comes as no surprise that there is a well-argued position against the feasibility of comprehensively rational problem-solving efforts under certain conditions. A potent, compact statement of that position was set forth by A.O. Hirschman and Charles E. Lindblom in an article asserting " . . . that a carefully thought out plan of research may be a hindrance rather than a help in achieving the desired goal, and that sometimes it may be easier to solve a problem if it is not fully understood."[4]

According to Lindblom, synoptic, or comprehensive, problem-solving is not possible (a) to the degree that clarification of objectives flounders on social conflict or is blocked by potential conflict; (b) to the degree that required information is not available or is available only at a prohibitive cost; and/or (c) to the extent that the problem is too complicated for man's intellectual capabilities. Lindblom offers certain strategies (he calls them "disjointed incrementalism") that may, in developmental circumstances marked by a high degree of indeterminacy, be preferable to efforts at straightforward rationality.

1. Limit consideration to possible policies that differ only incrementally from existing policy.

2. As a variant of this strategy, limit consideration to only a relatively small number of means.

3. Choose ends that seem appropriate to available, or nearly available, means (rather than trying to adjust means to ends).

4. Compare alternative ends in light of assumptions about means.

5. Choose both ends and means simultaneously or, in other words, without attempting to link them logically.

6. Let ends be loose and diffuse, and (a) regard analysis and policy-making as serial and successive while action proceeds under such strategies as two and possibly five; (b) recognize that at any one point the

analysis of consequences is quite incomplete; and, if appropriate, (c) perceive that analysis and policymaking are socially fragmented, occurring simultaneously at different points (and involving different mixes of premises).

Lindblom assumes that, as action proceeds, "adjustment" may be achieved through the interaction of different participants in analysis and policymaking, that errors of incompleteness will come to light through feedback, and that deliberately serialized (incremental) policymaking is best suited to deal with these kinds of conditions. Lindblom argues that there is a preferable alternative to synoptic policymaking in a wide range of developmental situations.

His view stems in part from a rather compelling assumption that "a 'system' or economy is never quite finished. Today's system . . . is likely to turn into tomorrow's subsystem . . . because of unforeseeable repercussions, newly emerging difficulties, unanticipated counterstrategies, changing tasks or techniques, or whatever other forces with which the system or economy has to deal."[5] Such repercussions, problems, and changes can never be fully visualized in advance. This developmentalist postulate is an argument against spending too much early time and effort on a neatly balanced, integrated "program."

This argument has important implications for the institution-building perspective:

1. The authors provide an orderly and perceptive general sketch of the intended environment of institution building. The initial IB perspective dealt with the environment only in terms of linkages. Hirschman, et. al. offer strategic premises about characteristics of the setting in which institution-building efforts might be undertaken. These add enormously to the substance of a comprehensive IB perspective.

2. They raise important questions about the feasibility, as well as the character, or broadly rational social change strategies. In their most extreme form, these questions cast doubt on the feasibility of an institution-building strategy. Push the logic of these authors all the way, and you end up saying it is utterly unlikely that somebody can conjure up a reasonably sound strategy for changing a complex set of given—and not-so-given—social conditions through an organizational intervention to produce a specified, desired outcome in the future. In other words, mankind's capacity to intervene successfully in the terms of existence is undoubtedly limited and certainly doubtful. To which the most appropriate response is probably, "Of course!" followed by three "buts":

a. But even if all the arguments and all the evidence pointed toward the impossibility of sensible and constructive intervention into bad conditions through the use of organizations to foster social change, we should still have to try.

b. But Hirschman, et. al. have made a general speculative statement; and the kind of action that concerns us is not general, but specific. Their general statement is inevitably too simple to fit and cover the conceivable range of specific activities that concern us. (Otherwise, instead of heurisms and speculative theories, we could have "hard" theories in the realm of social behavior like those of the natural sciences.) There is in this work a vital caveat for all who would think about things like institution building and act to try to induce social change. That caveat should never be ignored, but neither should it be taken as sound ground for a fatalistic posture. Their perceptive heurism is nonetheless a heurism.

c. But it is possible to stop short of the argument that planned, organized social change is essentially impossible while making constructive use of this view in at least two ways. First, to improve the design of social change strategies by avoiding the synoptic fallacy, for example, and by sharpening our judgments of the feasibility of such things as institution-building strategies in particular circumstances. Second, by incorporating in an IB perspective decision-making strategies that derive from the indeterminacy argument.

Concerning Social Change Strategies

An IRPIB study of the establishment of an Israeli youth movement makes a point that emphasizes the warning against synoptic strategies, as well as the major premises of the IB perspective. The youth movement was originally created for a relatively specific set of programmatic purposes. As conditions in Israel changed, so did the programmatic activities of the organization. The study found that this organization's meaningfulness to its participants did not derive primarily from its specified programmatic goals, but stemmed from a more diffuse purposiveness. The vitality of the structure persisted even though its substantive, programmatic goals changed rather radically.

Youth movements are rather atypical organizations, and one case is no basis for a sure generalization. But it does illustrate the idea of institutionality as an attribute that can be distinguished from an organization's program goals. And it does imply that "diffuse" organizational strategies may, under some circumstances, be compatible with institution-building aims (a "diffuse" strategy being one in which the organization is not tightly and discretely structured in terms of one distinctive set of goals).

(Siffin)

The change-oriented organization not only makes demands on its environment and on specific publics, but it is also the target of their demands in a cooperative and competitive exchange of services and

influences. Happy is the institution builder who enters a vacuum as the monopoly supplier of a desired or non-threatening service or, better still, is in tune with societal demands. Often the demand is latent and must be brought to the surface, or program space is occupied or claimed by existing organizations and their products. In either case, the institution builder must determine what combinations of activities, including provision of useful services, the manipulation of doctrine, or the application of power, can move linkages in the desired directions; what coalitions are possible; which targets should assume priority in time; and what expedient concessions may have to be made and when. Every sophisticated institution builder deploys a battery of survival, service, and change tactics and uses them as appropriate. He does not just start producing and wait for the environment to respond. He plans and calculates and then responds to what he learns—or this is how our model institution builder would behave. Distressingly few do so. Many of them regard their task as primarily technical. They fail to plan for their linkage encounters, or they react to resistance by premature accommodation and the sacrifice—or the deferment—of their innovative goals; or they move doggedly forward, innocent of the environment that is closing in on them, like the inept leaders of the ill-fated National Resources Planning Board in the United States government in the 1940s.

(Esman)

IB and the Concept of an Institution

The IB perspective takes as its problem: "How to build an institution." It must first answer the question: "What is an institution?"

In his "Interim Appraisal" of the IB perspective, Professor Esman says an "institution is defined not as a set of sanctioned norms like marriage or contract, nor as a sector of action like business or religion, but as a change-inducing and change-protecting formal organization." Such formal organizations "symbolize, promote, sustain, and protect innovations; and it is these organizations, as well as the new normative relationships and action patterns they foster, which must become 'institutionalized,' meaningful, and valued in the societies in which they function." "Institutionalization" is "the process by which, through the instrument of organization, new ideas and functions are integrated and fitted into developing societies, are accepted and acquire the capacity to sustain themselves, and in turn influence the larger environment in which they function."[6] In short, an institution, for our purposes, is an organization that successfully produces changes—"new ideas and functions"—within a social system.

Let us stipulate that a formal organization is, for our purposes, a set of partially-specified patterns of action that involve the behavior of more

than one person. In some sense (or senses) the action is purposive: it is performed for some reason other than merely to be performed. By "pattern" we mean action that is regularized. We mean that individual behaviors are related in some more or less orderly way.

We can "name" the mechanisms that regularize and relate the behaviors to produce the pattern, calling them "norms," "standards," "conventions," etc. The nomenclature is not so important as the recognition that patterned behavior reflects and tends to conform to underlying principles. Some of these are formal and specified, perhaps written down. Others are not; but they do exist and can be discovered by watching what goes on. Some of these principles, or norms, etc., are technical–objective specification that must be met if a certain kind of intended pattern is to be fulfilled. Others include rules about status, conventions about the legitimacy and limits of particular inducements, and so forth. In all organizations there is a normative dimension, most immediately manifest in the "rules" that show up in behavior.

A complex organization will include dozens, hundreds, perhaps thousands of such normative premises–some quite stable, some ephemeral, and others somewhere in between. Many norms will govern only little pieces of the overall action; others will have relatively broad application. And to some extent (and in ways that may be complex, incomplete, and elusive) some of these norms will be coherent, though in practice they will never be fully coherent. But unless the organization is rife with conflict and confusion, norms will reflect an underlying "value-orientation." A number of such value-themes may exist within the organization. There will probably be layers of them. To some extent they are almost bound to be potentially conflicting. But individually and collectively they produce–and reflect--tendencies toward coherent patterning within the organization.

Another facet of an institution, or of institutionality, concerns organization-environment relations. In describing the IB perspective earlier in this paper, I used the term "institution" to refer to a pattern of action, or a set of action patterns, not located entirely inside an organization but reaching across some part of the organization and its environment. Any organization will typically be involved in many such patterns, and they will be different in various aspects. Any such trans-organizational activity could be either: (a) governed by a single value-orientation existing both inside and outside the organization, or (b) governed by a set of differing, but not contradictory, value-orientations. (Rural people may respond to and partake in activities promoted by the land-grant-type institution not because the activities are oriented toward benefiting rural people, but because they have confidence in representatives of the organization, are

motivated by self-interest, perceive this as linked with deferred gratifications, with changes in the enterprise system, etc.)

Intuitively, it seems that the most common situation faced by organizations is (b) rather than (a). The problem, in other words, is not often likely to be the construction of an "institution," in the sense of a trans-organizational activity made coherent by a single set of value-orientations. More likely the problem will be one of constructing an organization that can induce attitudes, awareness, and behaviors congruent with elements of its own value-orientation.

To thus induce social change, it may not be necessary for an organization per se to be valued, or to be loved, in a sense. What really matters is that it exists and has the appropriate environmental impact. Grant that in some cases—in some kinds of activities—boundaries between an organization and elements of its setting must be low; that there must be a fulsome normative intimacy, a set of truly shared values, between agency and allocators or clientele. Grant, too, that changes in the normative aspects of behavior are a key part of what is meant by "social change." But also grant that organizations can conceivably have—and do have—many different kinds of normative relations with their environments. Grant these things, and the IB perspective becomes a bit sharper, moves a bit more toward operational relevance, and becomes a question of: "How can we build organizations that will have normative (as well as technological and managerial) qualities that will enable them to promote social change?"

If this is the question, then "institution building" is a special case of "organization building," its distinctiveness deriving from two factors: (1) the particular type of normative problem likely to be involved in creating the organization, and (2) the particular type of effects the organization is intended to have.

Another way of saying this is: "There are special problems in creating change-inducing and change-protecting organizations. One set of those problems concerns the intrinsic organization; the other concerns its extrinsic relations with its setting. The problems may be related, but they are also distinguishable." One can conceive of an organization that solves the intrinsic problem without having much of the intended impact on its environment. It is also possible to conceive of an organization that has no major intrinsic problem to solve, but that has significant social-change effects upon its setting. If we view an organization in James Thompson's terms, we will find circumstances in which a new technology can be "organized," or put into operation in a structure that is otherwise not much different from other existing structures in its setting with significant environmental effects. A critical factor here will be the compatibility of existing social circumstances and the technology. For example, in

Thailand one can establish a road-building organization that is in many ways quite similar to other organizations in the existing administrative culture; in its fashion it will "work"—it will get the roads built, and the roads may be important mechanisms of developmental change.

On the other hand, in Thailand it will be extremely difficult to establish an effective community development program for at least two reasons. First, community development has no closed system technology like that involved in road-building. Second, factors in the administrative culture—thematic value-orientations within the bureaucracy and society—are not highly compatible with value-orientations requisite to community development-type activity. In the second case, it may be appropriate to define the problem in quite different terms, given the aim of pursuing social change through community development.

All of this illustrates an important point. It is possible to talk about such things as social change and institution building "in general," but is also possible to do them only "in particular." In moving from the general to the particular, the more relevant factors we can identify and the more statements we can make about how they seem to be related to other factors, the further we can go from a speculatively theoretical orientation towards applicable guides to action strategies.

(Siffin)

The model assumes formal organizations are capable of socializing those who come within their boundaries to new norms and action patterns, and socialization is an explicit concern if the contact is long enough in duration. Thus, an organization can decisively influence the behavior of staff members and, in the case of schools, of students whom it processes for new roles. Organizations are not merely technical conversion or service-providing structures, though they do both. They do not merely reflect the values of the environmental system in which they participate. They have the capacity to act on their environment, particularly on the specific sub-systems with which they carry on transactions and maintain linkage relationships. Organizations can be dynamic vehicles through which change agents can impress their values both on persons within their boundaries and on external contacts. The type of organization implicitly assumed in the IB model is bureaucratic, with specialization of roles, formal rules, and hierarchical authority structures. Not only is this the most common form of organization in modern societies; it is also the one through which guidance methods of management can most readily function. Within this form of organization, there may be many degrees of centralization and decentralization, or authoritarian or collegial decision-making, of permissiveness and control; but the form is essentially *bureaucratic constitutive.*

IB implies the process of investing in an organization, a concept not yet incorporated into economic theory. This implies the continuity of the organization and the willingness of change agents to sacrifice current outputs for future capacity. One invests not only in physical facilities, but also in the technical and managerial capabilities of staff; in access to informational resources that are processed and stored for future use; in internal communication capabilities so that information may move quickly and thus facilitate more prompt and rational action; and in sources of social support. One invests normatively in the organization so that its component units and individuals may be motivated by similar goals and expectations and bring the same value premises to bear on problems that arise. A high degree of inter-personal trust must be developed so more effort is put forth than salaries alone could evoke; part of their rewards are derived from the psychological satisfactions of serving an organization and a set of purposes they believe in. An organization is much more than an aggregation of individuals and equipment; and the technical performance and the commitments it evokes result from what has been invested in it.

The assumption that an organization must have a minimally effective administrative structure before IB strategies can hope to succeed has been vindicated by one field research report. The Pittsburgh team at the Central University in Ecuador found that the diffuse distribution and the absence of effective central administration in an organization that was already highly institutionalized and in nearly perfect equilibrium, both internally and with its environment, provided none of the leverage that change agents (particularly external change agents) would require to move the institution along the innovative paths to which they were committed. Though the structure of the university was not the sole cause of the failure of this project, it contributed significantly. The institution as an entity could not be directed. The IB model implies a leadership with the capacity to evoke some response from its organization and to act through the organization on its external environment. Where the structures and the norms of the organization exclude this possibility and thus deny the opportunity for guidance, the IB model of social change is not applicable.

(Esman)

Measuring Institutionalization

One useful consequence of the IB stress on "institution" is a derivative emphasis on extrinsic measures of success in institution-building efforts. Effects in the environment are what count, even though the major problem may be to build an organization that can get those effects. The developers of the IB heurism have encouraged the development of "criteria

of institutionality," and authors of institution-building case studies have tried to specify them. The most elaborate of these endeavors has been that of Professor John W. Hanson, whose careful and thorough study of the College of Education, University of Nigeria, covered an effort spanning more than half a decade.

According to Hanson, "An organization or an innovation may be said to be institutionalized to the extent to which it is viewed within the environment as having value, that is, the extent to which it is prized."[7] In his view, "prizing," or institutionalization, could be judged in his own case study in terms of six criteria: (1) use of the services provided; (2) verbal approval; (3) survival and growth; (4) outside support; (5) autonomy, or freedom from external control—particularly discriminatory external control; (6) normative spread, or outside adoption of normative themes of the organization.

Numbers of buildings, faculty, and students in all likelihood are not very adequate indices of "institutionality." Neither, unfortunately, are "prizing" or "meaningfulness." At the broadest level of generality, the ultimate test of "institutionality" is really quite simple: Does what was sought for come about? Does something that was intended happen? Does the job get done? Does the change-process show signs of working?

Once we move beyond the level of generality represented in a simple statement about "getting the job done," or having the desired sort of effect, we move to the level of the particular, or the level of particular types of organization-settings-aims. Here the extrinsic tests of efficacy are likewise particular. We judge the organization in terms of results, acknowledging that under conditions of novelty and uncertainty the results may not be the ones that someone initially had in mind. In some types of effort, the results will be hard (perhaps impossible) to assess in any satisfying manner. In others, it will be possible to find out what happened (or some of what happened) as a result of organized efforts because the organization's aims and effects will be knowable. There is no real contrast here. What effect does "knowableness of the organization's 'aims and effects' " have on assessability? We will be better off if we conceive of institution building as creating organizations with "good" institutional characteristics. Then we can give our attention to decisions about when to try to establish organizations that promise to be suitable in their "institutional" features and relevant to social change goals.

This may be objectionable to those who want to focus not on organizations, but on "institutionalization," that "process by which . . . new ideas and functions are integrated and fitted into developing societies." But once it is agreed that building or changing organizations is going to be an acceptable method for doing these things, it should be possible to concentrate on such questions as: the circumstances under which

organizations of certain kinds are likely to achieve results of some desired kind; the strategies for developing such organizations; and the ways of assessing their substantive impacts, to the extent this is likely to be possible. It will not be necessary to try to construct elegant, elusive, and in some ways, extraneous categories of extrinsic impact measures for the sheet fulfillment of a prescript that calls for institutionality measured in terms of "prizing" or "meaningfulness."

This does not mean that we can ignore "linkages," or that we are not concerned with normative qualities of the organization's environment. It does mean, however, that "institution building" is a particular approach to what might otherwise be called "organization building," that social-change goals are the raison d'etre of this particular concern, and that a prime working hypothesis is that advancing such goals is likely to involve organizations with distinctive normative features. In this view, an "institution" is an organization that can never exist in isolation. "Institution building" is the study of the ways and means by which certain kinds of organizations can be used to promote certain kinds of developmental goals. And "institutionality"means that the blooming organizations are established and are somehow effective.

(Siffin)

Institutionalization means that the organization and its innovations are accepted and supported by the external environment. The environment has accommodated to the organization's innovations more than the organization has accommodated to the original environment. But accommodation in the real world is usually a reciprocal process. The operative question is now much "A" accommodates to "B" and on what issues. This adjustment process involves functional, normative, and power relationships. Institution builders must sometimes sacrifice or defer indefinitely a whole program in order to save another. Accommodation is often less dramatic—a set of incremental concessions that results in much accommodation and little innovation. The organization survives (perhaps to fight tomorrow's battle), but no new institution has been built. The IB model implies a relatively stable, nonrevolutionary environment. Too radical a set of deviations will attract unmanageable and destructive opposition. Thus, the managers of substantive and procedural innovations must make concessions to the local milieu, identify with well-established popular themes, symbols, and slogans so that the venture starts with a maximum of legitimacy, supplementary to the services it can render and the power it can generate and deploy.

The model stipulates a series of tests for institutionalization, the end product of IB. The survival of the organization is a necessary but not sufficient condition of institutionalization. Even the building of a viable

organization is not a sufficient test. The organization may be functioning and even prospering, but if its managers have made so many compromises with its environment that the organization has sacrificed its innovative purposes, it represents only another example of a conventional organization. A new institution has not been built. The achievement of intrinsic value in its environment is the second test. This can be measured by the autonomy it has gained in the development of its program, in its internal management, in its access to resources, and by the influence it is able to exercise on its external environment. The third test is the spread effect of its activities, i.e., whether the relationships and action patterns embodied in the organization have become normative for other entities with which it interacts. A suggested fourth test is whether the institution can maintain its innovative thrust, that is, the ability to continue to innovate. That new norms and action patterns must be established both within the organization and in its relevant environment is clear; and both the organization and the innovations for which it stands should be institutionalized or prized in the environment. But are there circumstances when the new norms and practices become so well accepted by linked organizations and generate such an innovative thrust in the environment that the original organizational vehicle for change loses its reason to survive? What are the implications for the new organization when this happens? Must the institution be valued intrinsically – beyond the task at hand – or is it sufficient for institutionalization that it be valued instrumentally only for the actual services it renders? The IB model, as originally developed, called for an intrinsic test of institutionality to provide symbolic and emotional sources of continuing support for innovations, to strengthen its legitimacy, and thus enhance its capacity to exercise influence on linked organizations. Is this a necessary test of institutionality? And in what circumstances may instrumental, rather than intrinsic, tests be adequate?

(Esman)

Putting the IB Perspective to Work

The IB perspective can be put to work in two related ways: to develop knowledge to move us a little further down that endless road from heurism to hypothesis, law, and systematic explanation; and to develop elements of action strategies that can be useful, even if scientifically impure.

The distinction between systematic knowledge and action strategies is by no means definite, but it is worth making. Many people interested in institution building are concerned with solving problems. They want "useful" knowledge, and not all the knowledge that can be produced by the study of aspects of "institution building" is likely to have precise and particular applications. Statements that help us understand things do not necessarily tell us what to do in specific situations. On the other hand,

practical information sometimes takes the form of hunches, examples, unanswered questions, checklists of things to find out about (classification schemes)—in short, material that is not a systematic explanation, but seems better than past conventional wisdom. A fine example is the statement of Professor Lindblom about possible decisional strategies in situations of great uncertainty. These statements have much practical relevance. They help us. Yet they are not, and are not likely to be, converted into determinate empirical theory. (For one thing, the guides to action do not determinately specify the situations in which they apply, and the selection of a strategic approach remains a matter of judgment.)

In the relativistic realm where action strategies are formed and followed, information is needed for three purposes: problem definition, problem solving, and evaluation. The IB perspective—particularly if it is developed and made more powerful—can serve all of these needs.

Problem Definition

The most significant feature of any problem is its subjective aspect. A problem is not an objective thing: it is neither a factor nor a concrete phenomenon. A problem emerges only when someone attaches a negative connotation to an assumed or an evident set of facts. A problem is a synthetic statement—one that combines observations about some condition with a judgment that the situation should be changed.

In practice, problem definition and the shaping of strategies for attacking problems go hand-in-hand. Sometimes, in fact, the order is reversed, and the problem is defined in terms of the means available for attacking it. Hirschman, et. al. have noted that this is not necessarily an irrational strategy. Sometimes it may make sense to set out to "build an institution," even if the circumstances are so uncertain that we cannot be certain at the outset that they call for building an institution. In such perplexing conditions, the IB perspective may at least help us proceed. An expanded, enlarged, more potent perspective should narrow the zone of indeterminacy and help us decide when and whether a particular social change problem is best defined in institution-building terms. The more we can discover about the circumstances in which "institution building" is the answer, or is not likely to be a sound and sensible way to define a particular problem, the better off we are likely to be when we choose to act as social change agents.

Problem Solving

The IB perspective makes rather obvious contributions to certain kinds of problem solving. In some cases it enables people to avoid defining their problems in unduly narrow terms or too casually embarking upon "problem solving" efforts without having first engaged in an effort,

however unruly, at problem definition. And where there are plausible grounds for trying to solve a problem by building an organization with the appropriate normative features in order to strive for a desired change in society, then IB can offer guidelines, checklists, caveats, rules-of-thumb, and occasionally even more. It can identify some of the possible pitfalls in an action strategy. It can sensitize those who would plan and act to the nature of the situation. The IB perspective, its framework enlarged and reinforced by evidence from experience, can, in a field of activity, reduce somewhat the grossness and vagueness of problem-solving strategies.

Evaluation

The basic problems of evaluation are about the same as those of defining situations and designing strategies. The main difference is the frequent retrospective orientation of evaluation which asks, "What has happened, how, why?" The snare that trips up efforts at evaluation is retrospective rationality—the often irresistible tendency to work backward through a multidimensional maze of only partially perceived actions and events to discover a neat sequence and to impute causation.

Backward looks can elicit the thin, sweet consolations of retrospective pseudo wisdom. If that were all, they might not be worth the trouble. But beyond this, at the ultimate level of reduction, the only difference between evaluation, problem definition, and the design of intended problem solutions is one of tense. The same canons of description and explanation apply, but their application can be easier (as well as more dangerous) in the past tense. More of the returns are in: more is known about the situation. Evaluation is faced with lower levels of indeterminacy than exercises conducted in the present and future tenses. In this lies the distinctive merit and appeal of evaluation. Less uncertainty means better description and analysis, and this can mean an incremental gain in knowledge for the next round of action. These observations are so banal they would not be worth making were they not also basic, and were it not all too often the case that evaluation operates as a closed system, not feeding its findings into present-tense and future-tense activities.

The IB perspective is logically as appropriate for evaluation efforts as for other uses. If it does not nurture the beguiling pseudo explanations that are really rationalizations, IB evaluation can contribute much to knowledge of the use of organizations as prime tools of social change strategies. Without evaluation, the potentials and limitations of the IB perspective can never be adequately known. The potency of such evaluation will not lie in discrete case examinations, but in efforts to synthesize the findings of such studies.

(Siffin)

Strategic Planning and Evaluative Research

The original model does not allot enough attention to strategic planning. The case studies report numerous instances of IB ventures (with and without technical assistance support) where commitment and action preceded planning. Would-be institution builders, wallowing in oceans of ignorance about the environment in which they were operating and the resources available to them, had only the vaguest conception of their goals, and improvised strategy as they coped "pragmatically" with unexpected situations. Often political urgency or the pressures required to "sell" projects create irresistible demands for immediate manifest action, and feasibility studies are preprogrammed to recommend commitment. In how many cases has the American land-grant college extension service family farm-model found its way into project agreements with no real assessment of alternatives? And even when the model chosen was feasible and responsive to local needs and the environment was carefully assessed for supports and resistence, how often was a detailed strategy plotted and time-phased?

Among the strategic issues that might be accounted for in planning an IB venture are the following: (a) What innovations are most suitable to the circumstances? This decision depends on the preferences and commitments of change agents, their knowledge of available alternatives, and their detailed assessment of the elements of change readiness and change resistance and of specific sources of support in the environment. (b) What organization should be the vehicle? An existing one that can be restructured, or a new one? (c) What leadership patterns are suitable? Centralized or pluralistic? What are the desired qualifications of leadership? Who are available as the initial incumbents? (d) What sources of essential resources can be relied on for such inputs as funds, personnel, information, and authority, and at what prices? Who is likely to take the organization's outputs on acceptable terms? (e) What shall the initial operating program and tactics be, and how should activities be phased over time? What shall be the relative priorities between building the organization, providing useful services, and extending innovations? (f) How shall the organization be designed and staff requirements determined so that operating programs may be consistent with the organization's capacities and synchronized with staff development activities? (g) What are the significant linkages, and how can doctrine and program help to influence the behavior of each linkage in the desired direction? What combination of survival, service, and change tactics should be employed at successive points in time? (h) What control mechanisms should be employed to monitor current performance and to evaluate institutional progress?

(i) What shall be the role of technical assistance in this venture? What should be the specific relationship of foreign and domestic personnel in the various internal management activities of the organization?

Even the most carefully laid strategic plans may go awry as they encounter unexpected events or the consequences of failure to assist conditions or predict responses correctly. This is why IB is a guidance activity, not only correcting for minor variances in preprogrammed action, but often requiring major adjustments to feedback, including shifts in goals and time horizons, painful trade-offs between the promotion of particular innovations and the protection of the organization, and numerous unexpected adjustments in program content and organizational structure. The complex and uncertain environment of social change, including both technical and political pitfalls, guarantee problems for any IB venture. But strategic planning can increase the probability of success without exacting unacceptable costs in delay, and it may prevent some projects from being started. More exacting strategic planning and the required analysis would probably have stopped the disastrous and costly Pittsburgh project at the Central University in Ecuador.

Allied with strategic planning, as Jacobson has indicated, is the need for evaluative research, not only to support particular projects, but also to contribute knowledge to the science and the practice of guiding social change. The need for ongoing research to appraise the activities of an institution along many dimensions of performance (including internal development, program performance, environmental acceptance) at different stages in its development was recognized early in the history of the IB consortium. The related need to identify generalized indicators of the major dimensions of performance, along with specified indicators for each project, was also recognized. Nehnavaysa devised a comprehensive scheme for the ongoing evaluation of institutional performance. The purpose of such research would not be merely to appraise and correct variances in an earlier plan, but to point out needs and opportunities to adjust strategy and tactics to new and emerging realities, and to the project of organizational learning. The IB research consortium was never able to build this admittedly costly element into any project: its studies were all retrospective. Any such research effort would have to involve indigenous scholars and research institutions. It would have to begin with the initiation of the project and would represent innovation in societies not accustomed to empirical social science research of ongoing experiences, especially when governments and bureaucrats are involved.

(Esman)

NOTES

1– James P. Thompson, *Organizations in Action* (New York: McGraw Hill, 1967).

2– Richard Duncan and William Pooler, "Technical Assistance and Institution Building," mimeographed (Pittsburgh, Pa.: University of Pittsburgh, Institution Building Headquarters, 1967).

3– Donald A. Taylor, *Institution Building and Business Administration: Brazilian Experience* (East Lansing: Michigan State University Press, 1968).

4– A.O. Hirschman and Charles E. Lindblom, "Economic Development, Research and and Development Policy Making: Some Converging Views," *Behavioral Science* (April 1962):211.

5– Ibid.

6– Milton J. Esman and Hans C. Blaise, "Institution Building Research: The Guiding Concepts," mimeographed (Pittsburgh, Pa.: University of Pittsburgh, Graduate School of Public and International Affairs, 1966).

7– John W. Hanson, *Education, Nsukka: A Study in Institution Building Among the Modern Ibo* (East Lansing: Michigan State University Press, 1968), p. 305.

Part III

Lessons and Applications of the IB Perspective

Originally conceived in the detached atmosphere of academe, the institution-building perspective ultimately faced the realities of technical assistance concerns as they actually occur in the field. The practical application of the perspective has had implications for the perspective itself, as well as for the technical assistance activities it is intended to facilitate. This section deals with some of the findings of both planned and intuitive institution-building applications.

Field Testing the Model

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In one sense, we have been field testing the model before it was first defined and put on paper. Some of this field testing is going on in places such as Djakarta, Bagota, Kaduna, and Lahore where people like us are helping government officials put model accounting methods to work, counseling agriculturalists in building networks of research stations, improving rice varieties, or trying to help a staff insure the survival of a new university.

Previously, the venue may have been Milan or Manila, Brussels or Frankfurt. Institutions were changing and growing; and the field test was in progress. As Merle Curti and Kendall Birr note in their book on American technical missions abroad, the first U.S. Customs Advisor was advising on institution building in the Customs Department of the Korean Government in the late 1880s.[1]

Earlier still, as people traveled from England to Australia and India, from the Netherlands to Java, from China to Thailand, institution building was in process. Few scholars or practitioners tried to make systematic analyses of the process, or even thought about conceptual models. But the field test was in progress, as it had been since the Egyptians crossed the Mediterranean.

The institution-building model is a set of concepts, a collection of categories developed for certain uses. Grounded in the history of human social evolution and the contemporary wisdom of the behavioral sciences, it grew out of the fertile mind of Professor Milton Esman and many of his colleagues and contemporaries. It is an invention of thinking men who wanted to better understand certain phenomena, exchange ideas and accumulate experience, and improve the human condition.

The categories, concepts like leadership, doctrine, and language do not comprise an ultimate system but may be useful aids to thinking. With them, we can build and test hypotheses and develop principles. These principles, in turn, can be useful guides to action.

As is the case in other category systems, the categories are governed more by the knowledge, discipline, and insight of those who invented them than by the nature of the world. Suppose, for example, I had a large box of marbles. I could invent categories to analyze them based on my knowledge of what was in the box. I could have categories like large, medium, and small. Or, if I were not color-blind, I could have

categories like red, green, and blue. If I had a scale, I could have categories like 0 to 3 oz., 3 to 6 oz., and over 6 oz. If I test the categories of marbles with a different box, I may have to add new categories, change some, or discard some. Much will depend on my own purposes—what I want to do with the marbles.

So it is with the categories in the institution-building model. Professor Esman, who probably deserves more credit for their invention than anyone else, has described them in various papers. Others have testified to their value and usefulness, and the categories have been successfully field tested.

Let me illustrate from recent research in which the concepts of this model provide blueprints for scholars. Like a map, the institution-building model outlines the terrain. Like a geographer, each researcher tests the map against the real world as he observes it. He changes the map where it needs change, and improves it when he can. But geographers are not the only ones who use maps, and researchers are not the only ones who have used the institution-building model. Just as a navigator or a motorist may use the geographer's map to plot his course from one city to another, technical assistance personnel have used, and can use in the future, the institution-building model to help them set their courses. In fact, it may be significantly used by people who plan the long-term strategy and the particular techniques of the future of international development assistance.

As I said at the outset, all of us have been field testing the model for a long time. Between 1964 and 1968, however, thirty-eight individual research projects were designed specifically to test this model. They were supported by IRPIB which was, in turn, supported by the Ford Foundation and AID.[2]

Independently at first, and then with increasing collaboration, a series of studies of the U.S. technical assistance efforts to build agricultural institutions around the world was sponsored by AID. Known as the CIC-AID studies, these have been summarized in a volume entitled *Building Institutions to Serve Agriculture.*[3]

Some Experiences with the Model

I will first report what some researchers have said about the model, particularly the value and usefulness of the categories and the relationships between them. Then a series of propositions which emerge from the principles will be suggested. I think these may have real value as we try to help build institutions. But keep in mind that these propositions come from principles which are only partially tested. Like other principles relating to human behavior, they are at best neither true nor false. They

are useful if they tend to be true more often than false and if, in trying to use them, we are aware of their weaknesses.

William Siffin, of Indiana University, was one of the original theory builders as well as one of those who conducted some of the field case study research. He writes, "As a theory, institution building is non-operational. And in practice, institution building is and will remain an art—an art that cannot be avoided so long as there are commitments to change which would improve human conditions." The IB perspective "can help refine some feature of that art, reducing the indeterminacy of its application and effect, and strengthening the hands and judgments of the artists."[4]

Thinking of the model as a perspective, he says, "An institution-building perspective would have produced a different strategy, one that was less marked by goal-displacement and more deliberately tailored to the setting." He referred to the tendency of technical assistance personnel to be more concerned with building organizations or transferring technology than with building institutions, and thus to change their original goals when institution-building problems got in the way. But with regard to the institution-building perspective, he also says, "It generates salient questions. In addition, it helps mobilize the inevitably limited, fragmentary, and tentative knowledge we have about the answers to those questions."

John Hanson, of Michigan State University, after several years as a technical assistance practitioner in Nigeria, conducted one of the AID-sponsored studies utilizing the IB model. He came to this conclusion: "If I were to attempt any amateurish assessment of the usefulness of the conceptual framework of analyzing institution building overall, I would point out that even in its current rough shape, the schema provides a series of lenses with which to examine a phenomenon. Many I found in particularly sharp focus, albeit crudely ground and still unpolished."[5]

Professor Eugene Jacobson, also of Michigan State University, made an intensive review of four of the case studies designed to utilize the model. He came to the conclusion that the

> idiosyncratic characteristics of each of the institution-building projects can be recognized readily even though the basic analytical concepts are the same. Each of the authors was able to use the concepts to enrich his account of the process, without forcing his analysis into a stereotyped form. And each of the reports suggests extensions and elaborations of the original conceptual framework.[6]

Jacobson suggests some generalizations which are useful not only to the research worker, but also to any practitioner:

1. The process of institutionalizing innovation is not a simple, linear function. There are interruptions, retreats, accommodations, regroupings,

diversions and emergence of secondary goals, amended objectives, and altered doctrine.

2. Technical assistance teams have unreliable means of evaluating the success or failure of specific actions they are taking. They have only partial and incomplete access to performance criteria.

3. Performance criteria appropriate for assessing operations in one culture may not be available or appropriate in another.

4. Predicting response to innovation is difficult under any circumstances. In developing countries, prediction must be based on more careful and more intensive data-gathering operations.

5. Innovation creates new situations which, in turn, demand innovative solutions. But original objectives and doctrine, which may become obsolete, will dictate programs until new demands become apparent.

6. As an institution changes and matures, its opportunities for attracting and retaining different kinds of personnel change.

7. In a developing country, a new institution with an explicit program for selecting, training, and placing staff will, in many instances, be a unique resource for providing new cadres of leadership throughout the society.

8. Changing domestic leadership and technical assistance staff make it difficult to achieve continuity in expressed doctrine.

9. Though new technologies and procedures may be introduced at a relatively rapid rate, there may not be corresponding complementary changes in relevant interpersonal relationships.

One useful result of the research has been the refinement of the concept of institutionalization itself. How do you know when it has taken place? How can you use it as a measurable program goal? Siffin has tried to reduce the problem to an elementary level by asking: "How can such organizations be created, maintained, and effectively linked with their environments?"[7] These are the essential questions which are asked in the institution-building model.

Esman and Hans Blaise define institution building as "the planning, structuring, and guidance of new or reconstituted organizations which (a) embody changes in values, functions, physical and/or social technologies; (b) establish, foster, and protect new normative relationships and action patterns; and (c) obtain support and complementarity in the environment."[8]

In examining an organization in Nigeria to see whether or not it was an institution, Professor Hanson concluded:

> By the end of five years the College of Education had sent out its first class of graduates, it had a Nigerian Dean and Nigerian faculty, strong relationships with Nigerian school teachers, and an emerging research function, and [that] it was

> winning acceptance of its service doctrine, not only among the already convinced publics, but also among the original skeptics. This was reflected in changes of program and function in the earlier established higher education institutions in other parts of Nigeria.[9]

Hanson's study is a practical example of having attained a set of criteria by which he could measure the extent to which the organization and its key innovations had, in fact, become institutionalized.

As Jiri Nehnevajsa puts it, institutionalization can be measured by:

1. An organization's ability to survive.

2. The extent to which an innovative organization comes to be viewed by its environment to have intrinsic value, to be measured operationally by such indices as its degree of autonomy and its influence on other institutions.

3. The extent to which an innovative pattern in the new organization becomes normative for other social units in the larger social system.[10]

But what else have the scholars found which is practical and useful? Guthrie Birkhead, of Syracuse University, studied the Public Administration Institute for Turkey and the Middle East launched at the University of Ankara in 1953.[11] He reviewed its activities over a fourteen-year period during which it trained and educated civil servants, supported research, issued publications, and participated in government and university related functions. He reports that five major institutionalization processes were completed. The initial operation leadership was replaced by Turkish leadership largely through apprenticeship in the Institute programs. More than one thousand Turkish government officers, teachers, and other civil servants participated in the training programs of the Institute. The Institute was established as a part of the Turkish Government through formal legislative action, giving it status independent of the political science faculty of the university. The Institute also created a research function that was competent to conduct a major study of the Turkish Government at the request of that government. Graduates of the Institute have played important roles in establishing other agencies for introducing administrative improvements in Turkish Government operations.

Siffin analyzed the institution-building process at the Institute of Public Administration, Thammasat University, Bangkok, which ICA supported through Indiana University beginning in 1955.[12] He observed that doctrine is difficult to establish and maintain. In that study, he examined in detail the doctrinal commitments of the staff of the Institute, and, in part, those of the leadership, illustrating the tensions accompanying the intent of some members of the staff to move from traditional to innovative administrative patterns.

In another study, Hans Blaise, of Pittsburgh University, studied the Central University in Quito, Ecuador.[13] His report examined the interaction between efforts of the technical assistance team to encourage education and the intervening environmental factors: a military takeover in the country, a new law for higher education, and the return of the civilian government. Blaise showed that the technical assistance team did not have access to the important leadership functions and could not effectively introduce doctrinal changes. He concluded that only those innovations coinciding with existing forces of change had been supported during the brief period of the study. The innovative attempts to introduce a basic studies program and to centralize administrative leadership were rejected.

If one looks at other case studies, he will find similar information. Focusing on one of the concepts (e.g., leadership), one can find such guidance as the following:

1. The development of an innovative institution depends on creating a structure of institutional leadership.
2. In a hostile environment, it is less difficult to establish an institutional leadership structure with a supporting cadre than it is to protect and maintain it.
3. It is entirely possible to mobilize environment support for an innovative institution even if there are sharp inconsistencies between the institution's doctrine and the value orientation prevalent in that environment.[14]

If one compares the findings of one of these studies with the other—for example, comparing Siffin's work with that of Professor Donald A. Taylor who studied institution building in business administration in Brazil and that of Dr. Birkhead in Turkey and the Middle East—one might conclude that "resident and stable leadership can more easily command resources for a new program and develop strong enabling linkages with other institutions in any society than absentee and changing leadership."[15]

Esman summarized that all the case studies confirm the decisive importance of *leadership*.[16] The leadership category can then be broken down to more detailed characteristics such as commitment and energy; technical, managerial, and political competence; continuity and succession; style; and tactics.

With respect to doctrine, the following findings have been distilled:

1. The central object of any educational institutional development is to embody a doctrine in the organization including norms as well as skills and/or knowledge content.
2. The ability to interpret and to make innovative applications of

doctrine in developing and operating a program of activities is probably the key indicator that the doctrine has been institutionalized.

On the basis of his field study of the Central African Research and Information Center, Fred Bruhns, of the University of Pittsburgh, showed that institutional doctrine is a combination of themes manipulated by institutional leadership to enhance internal cohesion and to make it more acceptable in the external environment.[17]

To those concerned with carrying out technical assistance, the greatest value comes in the propositions which can help in strategic planning. David Derge and others at Indiana University, working as part of the CIC-AID study, developed a linkage matrix, illustrated below.[18] Across the top are the linkage variables; down the side, the institutional variables:

	enabling	functional	normative	diffuse
Leadership				
Doctrine				
Resources				
Program				
Internal structure				

In this matrix, or category system, there are twenty boxes; and Derge and his colleagues suggested hypotheses which may become principles in each of them. For example, with respect to leadership:

1. Co-membership of the leadership of the host institution in other government agencies strengthens enabling linkages of the host institution.

2. High frequency of interaction between host institution leadership and government leadership can serve to strengthen enabling linkages with the host institution.

3. Host institution leadership will be most effective when it is free from frequent government interference.

4. When host institution leadership is committed to change, acceptance of host institution leadership into social, political, and economic elites of the host country strengthens the enabling linkages of the host institution and facilitates attainment of its broad goals.

5. Host institution leadership which is personally and professionally acceptable to clientele leadership will be more effective as a bargaining agent of the host institution and thus have the potential to strengthen the host institution's functional linkages.

6. The prospects for institution leadership being effective agents of the host institution are greater if this leadership does not transgress the values or deviate from the dominant social consensus of the host country.

7. Host institution leadership which can convert favorable public opinion into intrinsic evaluation of the host institution will increase the prospects for survival.

The concept of *doctrine* has proved to be one of the most useful and practical of the categories in the institution-building model. It has been defined as "the specification of values, objectives, and operational methods underlying social action." Doctrine is viewed as the stable reference point of the institution to which its interaction with the environment and all other variables are related. Derge and his colleagues have suggested the following as some propositions relating to doctrine:

1. Where there are other client groups besides the host government in the environment, the concept of service, without being tied to any institutional form, can be important for promoting enabling relationships.

2. The host institution doctrine should be at such a level of specificity that, while allowing for personal differences in leadership, philosophy, and ability, the main thrust of the institution in a national development context will be clearly defined.

3. The ability of the host institution to obtain resources and approval from the host government is related to the degree of total and active commitment on the part of the host government leadership to the doctrine of the host institution and the host government.

4. The higher the level of specificity of host institution doctrine, the less freedom the host institution leadership has in major policy changes, but the more clearly the host institution is defined to competing and complementing organizations in the environment.

5. As the relevant publics in the environment increase, the doctrine of the host institution will have to be sensitive to the religious, ethical, and cultural norms prevailing within those publics.

6. The interpretation and conveyance of host institution doctrine to the environment by the mass media will facilitate achievement of host institution goals when that environment is composed of potential clientele groups for host institution outputs.

A "program" category which included "those actions which are related to the performance of functions and services constituting the output of the institution" was established in the institution-building model.

Propositions:

1. As long as the host government is the major clientele group in the environment, the program of the host institution must be responsive to host government leadership. If host government leadership is committed to change and development, the host institution program will reflect this commitment. If host government leadership is not committed to change

and development, the host institution program will reflect this lack of commitment.

2. To the extent that the host institution program is developed with clientele group needs in mind in order to attain "high visibility" of the output, the outputs will come to be perceived as valuable by the clientele group.

3. A program should be designed so that it does not come into immediate and obvious conflict with existing and competing programs until the host institution has established secure linkages in the environment.

Resources:

1. For institutional survival, the host government and/or other clientele groups must provide adequate financial resources after the withdrawal of outside assistance.

2. Given the low level of social mobilization in most developing countries and the resultant lack of potential clientele groups for relationships with the host institution, most indigenous organizations are dependent on the host government for providing inputs, for consuming outputs, and ultimately for institutionality.

3. To the extent that publics exist in the environment, efforts expended through the mass media to give the host institution a high visibility will serve to create a favorable climate for increased support in terms of human, physical, and technological resources.

Suggested Principles Related to Internal Structure:

1. The success of a host institution is related to the internal structure which maximizes the institution's ability to negotiate with the host government and enabling institutions through one spokesman with political influence in the host government.

2. The higher degree of social mobilization in a country, the better it is to place the project in an entirely new host institution free from other institutional control and domination. The success of such new institutions is related to how well the internal structure is organized for serving the needs of the host government and other possible clientele groups, and the continuity and stability of the structure.

Conclusion

The model has been and continues to be field tested. The tests are promising. They demonstrate the need for more research, but also indicate that the practitioner cannot afford to ignore the institution-building model.

An AID administrator, program officer, or on-the-spot institution builder can profit by keeping the institution-building model in mind,

and establishing goals and measuring programs in accordance with these categories. Let him consider leadership, doctrine, program, resources, and internal structure and take into account enabling, functional, normative, and diffused linkages. He can then build a strategy of institution building which increases the probability of achieving his goals.

NOTES

1–Merle Curti and Kendall Birr, *Prelude to Point Four: American Technical Missions Overseas, 1838-1938* (Madison: University of Wisconsin Press, 1954), p. 159.

2– *Report to the Ford Foundation* (Pittsburgh, Pa.: University of Pittsburgh, Inter-University Research Program in Institution Building, Research Headquarters, 1968).

3– *Building Institutions to Serve Agriculture: A Summary Report of the CIC-AID Rural Development Research Project* (Lafayette, Ind.: Purdue University, Committee on Institutional Cooperation, October 1968).

4– William J. Siffin, "The Institution-Building Perspective: Properties, Problems and Promise" (Paper presented to the CIC-AID Conference on Institution Building, Purdue University, August, 1969).

5– John W. Hanson, "The College of Education, Nsukka: A Study of Institutionalization," mimeographed (East Lansing: Michigan State University, 1966).

6– Eugene Jacobson, "Research and Institution Building: Lessons from the Field" (Paper presented to the CIC-AID Conference on Institution Building Overseas, French Lick, Ind., August, 1968).

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8– Milton J. Esman and Hans C. Blaise, "Institution-Building Research: The Guiding Concept," mimeographed (Pittsburgh, Pa.: University of Pittsburgh, Inter-University Research Program in Institution Building, 1966).

9– Hanson, "Nsukka."

10– Jiri Nehnevajsa, "Methodological Issues in Institution-Building Research," mimeographed (Pittsburgh, Pa.: University of Pittsburgh, Institution-Building Headquarters, 1964).

11– Guthrie S. Birkhead, "Institutionalization at a Modest Level: Public Administration Institute for Turkey and the Middle East," mimeographed (Syracuse, N.Y.: Syracuse University, 1967).

12– William J. Siffin, "The Thai Institute of Public Administration: A Case Study in Institution Building," mimeographed (Bloomington: Indiana University, 1967).

13– Hans C. Blaise and Luis A. Rodriguez, "Introducing Innovation at Ecuadorean Universities," mimeographed (Pittsburgh, Pa.: University of Pittsburgh, Inter-University Research Program in Institution Building, GSPIA, 1968).

14– Siffin, "The Thai Institute."

15– Donald A. Taylor, *Institution Building and Business Administration: Brazilian Experience* (East Lansing: Michigan State University Press, 1968); Birkhead, "Modest Level."

16– Milton J. Esman, "Institution Building as a Guide to Action" (Paper presented to AID seminar, Washington, D.C., December, 1969).

17– Fred Bruhns, "The Role of Values in Management of Institutional Doctrine: The Institution-Building Experience of an African Regional Organization," mimeographed (PhD diss., University of Pittsburgh, Building Headquarters, 1969).

18– David R. Derge, Donald L. Souder, et al., "Institution Building and Rural Development: A Study of United States Technical Assistance Projects," mimeographed, (Indiana University, Bloomington, Ind., 1968). (Part of Committee on Institutional Cooperation and Agency for International Development Rural Development Research Project.)

Learning Practical Things from Experience

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A study of field experiences does not produce simple formulas or models for institution building, nor does it produce a list of "principles" for the successful management of new institutions. Such a study can, however, indicate the most crucial areas in which we can do a better job of planning new institutions. The planning of leadership styles, for example, and of the quality of organizational relationships can make a major contribution to the smooth development of a new institution. The issue of leadership style is a central one in many developing countries, and to leave this issue to haphazard shifts of opinion is to invite fears and unproductive debates which may weaken the organization or even destroy it.

Planning cross-cultural relationships can also reduce misunderstandings and tensions. Because the influence of foreigners must shift from stage to stage, planned shifts are more productive than unplanned ones. The chief purpose of strategic planning is well-expressed in a leading book on business policy: "From the point of view of implementation, the most important function of strategy is to serve as the focus of organization effort, as the object of commitment, and as the source of constructive motivation and self-control in the organization itself."[1] In educational institutions, it is a great asset to have a common understanding of the mission of the organization and of the general lines of action which are proposed. A clear "image" of the institution's purpose is also likely to make it more visible and acceptable to outside agencies, and thus to contribute to stronger enabling and functional linkages.

This paper is a condensed version of several chapters in a study which Thomas Hill, Howard Baumgartel, and I are completing on institution building in India. The study is concerned primarily with two major management education institutions in which the Sloan School of Management at the Massachusetts Institute of Technology and the Harvard Business School have been involved. The main purpose of the study has been to learn about the design of effective institution-building projects from our experience in India.

The two projects under study were both in management education, the result of identifying a need in the Central Government of India leading to the involvement of the Ford Foundation.

Calcutta, one of the two major centers of commerce and industry in India, was the natural site for one of the institutes. Although Bombay was expected to be the second center, Ahmedabad was selected because of the unusual interest in the project there. The result was the formation of the Indian Institute of Management, Calcutta, in 1961-62, and the Indian Institute of Management, Ahmedabad, in 1962-63. The two institutes soon became leading centers of management education in India.

Strategic Planning

The most important stage in building new institutions is that of initial planning. A major error in the initial assessment of the environment or in the design of a strategy to deal with that environment is not easily corrected in later stages. The most dedicated administrators cannot overcome the handicap of a misconceived plan; a well-designed project reduces the risks of weak implementation and is carried on by its own momentum.

A systematic study of strategic planning in overseas institution-building projects has not yet been made, although a few case studies are available. An unsystematic review of the available materials on post-World War II projects suggests that initial planning is often neglected in the eagerness to get on with the job. In developing countries such impatience is understandable. One of the problems of development is that too much time is often spent on surveys, debates on the nature of the problem, and discussions of the merits of various alternative approaches, and too little on implementation.

Institution building, therefore, requires a trade-off between the benefits of more careful planning and the opportunity costs of delays in implementation. If a systematic study of the planning stage can both increase the benefits of planning and reduce the delays, it is conceivable that the terms of the trade-off can be shifted sharply so that better plans and more timely implementation can be achieved. Planning may delay the initiation of a project but should accelerate the later stages of development.

Conceptual Framework

One definition of strategy is "the pattern of objectives, purposes, or goals, and major policies and plans for achieving these goals, stated in such a way as to define what business the company is in or is to be in, and the kind of company it is to be."[2] This definition will serve our purpose if we substitute the word "institution" for the word "company." Strategy is concerned with the major decisions, usually with long-term implications, which set the general direction of the institution. In this study, therefore, we are not concerned with detailed policies and decisions, but rather with the overall plan within which such details are determined.

Strategic planning of institutions involves a series of major decisions which do not occur in a definite sequence but rather overlap. The planning is not necessarily formal and systematic; in general practice, even in progressive business firms, it consists of both predetermined lines of action and a series of ad hoc decisions. In fact, a major issue in planning is determining the ratio of formal planning to flexibility to meet changing or unknown situations.

The key elements in the strategic planning of institutions are:

1. Identification of a need and an evaluation of its importance in terms of alternative needs.
2. A forecast of the capacity of the proposed institution to fill this need. This requires an analysis of the environment and its receptivity to the institution, as well as of the resources likely to be available for the purpose.
3. The planning of "enabling linkages." These are the linkages with the organizations and groups which will provide the resources required.
4. The planning of "functional linkages." These are linkages with the suppliers and customers of the institution—the agencies which supply inputs or use the outputs. This might be called marketing planning and procurement planning.
5. The planning of relations with similar institutions which provide similar services, including plans for cooperation or competition in doctrine, marketing, or the acquisition of resources.
6. The planning for environmental constraints, especially government regulations or restrictions.
7. The selection of an institutional site and development of a building program closely related to the institutional requirements.
8. The selection of top institutional leaders and planning for succession in leadership.
9. Determination of a leadership style.
10. Determination of the "mission" or objectives of the institution.
11. Determination of the institution's "doctrine," that is, definition of the general way in which it proposes to carry out its objectives.
12. Design of the internal organization of the institution, especially the character of superior-subordinate relationships and of horizontal relationships among the personnel.
13. Determination of the time dimensions within which various purposes will be achieved, and a preparation for the phases of growth and consolidation through which the institution will pass.

Succsssion in Leadership

The planning for the top leadership of these projects was of crucial importance. This is a conclusion of previous studies and is so obvious

that it hardly requires stating. Yet, I think I have some thing to add to the subject.

The initial indigenous directors of both projects were intelligent, aggressive, and respected leaders who were fortunate in their connections with government officials and the business community. They can be given major credit for the initial success of these projects; without their vision and energy, confusion in the faculties and attacks from external forces jealous of the financial support won by the projects from the Government of India and the Ford Foundation might have hampered the institutions' development.

Surprisingly, both leaders suffered from the same two limitations: (1) they had diverse interests outside the institutions they headed; and (2) they failed to plan for succession in leadership. At Ahmedabad, the small amount of time the director had for the project reduced vertical communications to dangerously low levels. Some faculty members had access to the director, others did not; and competition for access became a source of tension. In Calcutta, this development came later, but it was far more serious when it came. It was clear that the director would eventually leave the institute, and an internal battle of succession produced wounds which have not yet healed.

In both cases, development would have been smoother if a successor had been found before the uncertainties and jealousies had accumulated. In neither case was adequate energy devoted to the search for a successor. In Ahmedabad, a strong leader was found after two years of intermittent search, which at times appeared to be aimed at proving that no one was available. Fortunately, the project has progressed successfully since a new director was found in 1965. In Calcutta, the agony of succession was even more prolonged, and the scars remain.

Leadership Styles and Internal Organization

I strongly believe that the style of leadership and the allocation of influence within an institution are among the most crucial determinants of its internal health. Institutions may survive in the face of tensions arising from poorly designed leadership styles or confused allocations of influence, but only at a heavy human cost. Unfortunately, our knowledge of these human factors is still limited, and we continue to suffer from dogmatism and ideology on the subject. My conclusions are necessarily tentative, but my belief in the importance of this factor is firm.

Educated Indians appear to be highly sensitive about organization and leadership. It is possible that no organizational design will satisfy an Indian faculty, or any other group brought together for a common purpose. Traditional Indian faculties are frequently subject to degrees of hierarchical control which Westerners would find intolerable,

especially when that control appears to conserve traditions which require modification and resist innovation. The two institutes under study, however, had deliberately broken with the Indian university traditions, part of the strategic plan on which everyone agreed. The problem was that few seemed satisfied with the organization which resulted.

Some of the American participants in these projects became involved in the issues of organization. In retrospect, it appears doubtful that these Americans, even the behavioral scientists among them, always served a constructive role in the debates on the subject. Some of them saw threats to academic freedom which never existed, but their pronouncements on the subject strengthened the Indian fears that the "hierarchy" was indeed threatening such freedom. Some of the Americans insisted on degrees of participation and degrees of openness which are seldom experienced even in American institutions. Some of the Indian and American teachers, inexperience with faculty traditions, the reaction against these traditions in the Indian universities, and the overly dogmatic criticisms of some American advisers created tensions. They were offset, however, by the high degree of commitment on the part of most of the Indians and Americans involved.

Observers do not even agree on the facts in these two cases. In Ahmedabad, there were many complaints about hierarchical or authoritarian control, but the fact is that the original director had little inclination or time for authoritarianism. More recently, there have been as many criticisms of "permissiveness" as of "authoritarianism" and there is considerable evidence to support this position. Perhaps a more accurate criticism is that the leaders have been "personalistic" in their approach to the faculty. They have provided access to some more than others—not always, it appears, on the basis of merit. The leaders have left themselves open to charges of favoritism or nepotism and have taken too little care to protect themselves from misunderstandings of their reliance on some advisers more than others.

It may be argued that the real problem was over-reliance on bureaucratic organization, including placing limits on discussion of topics defined outside "terms of reference." But it could also be argued that the leadership was not bureaucratic enough, and failed to clarify the criteria for evaluating faculty performance, for salary increases, and for promotion. Perhaps the problem was the uncertain wavering between bureaucracy and its opposite.

It can be argued persuasively that these institutes needed firm leadership to clarify objectives and define major lines of action. Strong leadership is preferable to spontaneous policy formulation by the faculty, especially in India where faculty consensus is extremely difficult to achieve. In Ahmedabad, such firm leadership seems to be evolving to the

benefit of the institute; in Calcutta, past hostilities make it more difficult to win faculty support for this approach.

Another view, also of considerable merit, is that a status gap between an "in group" close to the director and the bulk of the faculty was a serious source of tension. Indians are extremely status conscious, and highly educated Indians are probably unusually sensitive to status differences. My observation is that Indians are frequently jealous of rewards to others when those rewards carry status. In Ahmedabad, the pattern of leadership has been to maintain a day-to-day status gap but to permit pressure from protesters to overturn decisions on major issues.

It is easy to criticize someone else's style of leadership in a period when academic leaders everywhere, particularly in the U.S., have difficulty finding the right mixture of participative involvement and the maintenance of basic policy. The question is whether it is possible to plan an effective leadership style and an organization which will be productive with a minimum of tensions and misunderstandings. I think it is possible, even imperative, to do so. I am reluctant to provide a formula, but I think the answer must lie in the development of a so-called organic organization involving high degrees of participation and openness with willingness to explore differences of opinion and emotional problems in open meetings.

I believe that it is possible to plan leadership styles and organizational patterns for more effective performance. In the Indian projects, such planning might have reduced the risks of failure and increased the rewards of personal involvement. The projects have survived and, by measures which I cannot summarize here, have been successful. But the outcome might have been a failure in at least one of the two projects. If the risks of failure are to be reduced, much more conscious and planned attention must be given to organizational design and leadership style than that found in these two projects.

The Role of the Foreign "Experts"

Similarly, much more planning of the role of foreign experts would contribute to the productivity of projects like these and would reduce the misunderstandings and tensions arising from unclear relationships. The foreigners are expected to have influence or they would not have been invited in the first place; but the type of influence should vary from individual to individual, and from time to time.

I strongly believe that it is a mistake to apply the label "consultant" to all of the foreigners engaged in an educational project such as this. This title conveys the impression that all of the foreigners, junior and senior, are qualified to advise on top policy issues. The result may be that all of them see themselves as chairmen of the board whose views are to

be taken with great seriousness by the director. The Americans at these two projects expected to have more access to the directors than their Indian colleagues, a fact which inevitably was resented on the Indian side. Therefore, in planning these projects it must be made clear which foreigners are to have a special responsibility for policy and which are to assume more precise responsibilities for research and development. This does not mean that the non-policy foreigners must suppress their views; they should be given the same opportunities as the host country nationals to express their views on policy, but not greater opportunities and greater influence.

One of our major conclusions is that the role of the foreigners must change from one phase of the project to another and that it is desirable to plan the change rather than leave it to chance. In the early months, the foreigners may play a central role in formulating the mission of the institution, in recommending appropriate models to carry out that mission, and in suggesting ways to implement these models. The relative influence of the foreigners must diminish over time, and eventually they must take a completely secondary role as they are "phased out." In the two Indian projects under study, this was understood intellectually but not emotionally, and the process of withdrawal was more confused and painful than was necessary. Finally, the Americans saw that the solution was to abandon all claims to "rights" over these projects and to turn all authority over to the Indians. When this was done, the communication between the Indians and the Americans immediately improved, presumably because American influence was no longer a threat.

I would like to add a brief comment on the role of U.S. and Indian behavioral scientists on these projects. They were all fully committed to the projects and showed great energy and zeal in developing courses, in research, and in curriculum planning. My view, however, is that they at times permitted their missionary fervor to carry them into doctrinaire positions which were not always constructive. My view, as one who is not a behavioral scientist, is that action-oriented behavioral scientists sometimes work from ideological positions which are contrary to the scientific spirit. Extremists of this type often withheld support from the leadership unless it conformed to their models of what was right; they became intolerant of alternative models and occasionally joined with some Indian colleagues in undermining alternative approaches. This kind of behavior may be destructive, but further research is needed before a firm generalization can be made.

In fact, the whole subject of the relationship between host country and foreign personnel requires additional thought. The problem is much more complex than the frequently discussed gap between two cultures. The Indians in these projects were not of a single "culture." Some had

been educated abroad and were sympathetic with U.S. educational models. Some were more sensitive to hierarchy and nepotism than others. The Americans also differed in their views. Informal coalitions, therefore, cut across national lines complicating relationships. Some Indians, at Ahmedabad at least, looked upon the Americans as supporters in a battle against undemocratic Indian leadership and as protectors of academic freedom. Those Americans who refused to take a firm stand against the Indian hierarchy were sometimes considered defectors from the movement to reform Indian authority relationships.

If the complexity of these relationships is more fully understood, the foreigners should be able to plan their roles for greater effectiveness. This view has been well expressed by Margaret Mead:

> The objectivity which combines respect for the values of another culture, a determination to bring about change in ways which promote the mental health of the population, and a certain amount of detachment from the clash of old and new values going on within the culture, are invaluable assets which come from long experience in working with members of other cultures. Many of the members of technical assistance teams will not, however, have had that experience, that sum total of memories of felicitous suggestions and disastrous mis-steps, of plans that misfired and plans that succeeded inexplicably, which make up the delicate certainty of the experienced expert. [3]

NOTES

1– E. D. Learned, et. al., *Business Policy: Text and Cases* (Homewood, Ill.: Richard D. Irwin, Inc., 1965).

2– Ibid.

3– Margaret Mead, ed., *Cultural Patterns and Technological Change* (New York: Mentor Books, 1955), p.18.

Project Planning Applications

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The following discussion is organized around certain suggestions which arise primarily from the findings of the Pittsburgh-CIC studies. It is difficult to give specific credit to one or the other of these studies since many of the suggestions arise, in fact, from the findings of both. In general, the Pittsburgh studies were concerned with the institution-building process and the CIC studies with the ways in which technical assistance can best be given to an institution-building project. However, each study was to a degree concerned with these two different aspects of the total problem.

The planning process naturally divides into two broad areas: (1) the overall planning at the national level which leads to the decision to establish an institution-building project; and (2) the more specific planning associated with the initiation and conduct of the institution-building project.

As a basis for planning at each stage, the planners must first assess the present situation as accurately and completely as possible, and second, estimate the changes which will occur over finite periods of time. There is never as much information available as desired. Particularly in the developing nations the quantity of the available data is often meager and the quality questionable. In the first stage, the planners must have enough reliable data to justify action on the decision to initiate an institution-building project. The first decision may well be to secure the needed information. Information sufficient to justify the establishment of an institution-building project is usually adequate for the initial planning. The hazards of making plans on less than adequate background information can be minimized by immediately collecting the vital data and maintaining flexibility in the plans to allow for changes in operations based on new information.

Planning to Determine the Need for an Institution-Building Project

Although the two stages of the planning effort merge with each other in actual practice, at the theoretical level they can be sharply differentiated. The items to be considered in the first stage are fewer in number than those of the second stage, but they are of overriding importance. It is impossible for a project which should not have been started to succeed, with the possible exception that the passing of time may correct mistakes

in the timing of project initiation.

National needs. Institution-building projects should emerge from a thorough assessment of national needs and the development of a list of priorities. The logical approach first establishes an order of priority by broad categories such as agriculture, industry, transportation and communications, education, national defense, etc. The next step involves determining the shifts in resources, men, and money which will be required not only to insure the areas of high priority, but to establish what new or improved public functions and services and what new resources will be needed. Accelerated growth rate will be achieved only if past conditions are in some way changed. Usually this change involves both additional resources and additional or improved public services. The need for new and improved services will almost certainly be greater than the available resources can support. Again, an order of priorities must be established. Additional or improved public services or functions can only be provided through new or rebuilt institutions. Institution-building projects established as a result of such studies have a good chance of success. They will serve an important national need.

Creating or rebuilding institutions. If the desired service or function is a new one, there is probably an existing institution with a related service or function. If the mission is one of improving an existing service, there certainly is an existing institution. Will the new function or the improvement of the old be better served by building a new institution or by rebuilding an old one? There is never an easy answer to this question.

At this stage in the planning process, it often seems easier to rebuild an old institution than to build a new one. Building a new institution may necessitate liquidating the old to avoid undesirable duplication. It is difficult to build a strong, vigorous, and effective institution; but it is also difficult to liquidate an old institution which has outlived its usefulness. At the stage of actual institution building, it is usually far more difficult to rebuild an old institution with the necessary changes in doctrine, program, and structure than it is to build a new institution. Staff members quite naturally view the disruption of established doctrines, programs, organizational patterns, and habits as a threat to their security.

Long-term nature of institution building. Institution building is a long-term process and should not be started without a full realization of this fact and a strong commitment by the host country. A donor country or agency should not offer technical assistance unless it is willing to make a strong and long-term commitment to the project. Under appropriate circumstances, however, one-time capital assistance by a foreign donor to an institution-building project may be useful.

Examination of past institution-building projects which have received U.S. technical assistance indicates that, with few exceptions, ten to fifteen years of operation should be considered the minimum for satisfactory results. A few examples of apparently successful technical assistance efforts in institution building with five or fewer years of operation can be found. The far more common result of short-term technical assistance has been the failure to give the host institution any permanent help; in many cases, positive damage has been done by short-term technical assistance efforts. Both host country and donor country should be deeply committed on a long-term basis before starting an institution-building project.

Donor Country or Agency Role at This Stage of Planning

Both the host country and the donor country or agency are inevitably concerned in the planning of the institution-building project. However, in some cases the host country has reached a decision to establish an institution-building project before the prospective donor country or agency is aware that such action is contemplated. In this case, the prospective donor must conduct its own planning and evaluation studies to determine whether it should join efforts with the host country on the particular project. In other cases, a donor may independently carry out planning studies which lead to the conclusion that the host country needs a particular institution-building project, and then offer to provide the host country with a large measure of support for such a project. Rarely, however, is such a proposal made in an open fashion. Offers of assistance have often encouraged host governments to engage in projects in which they had little genuine interest, usually doomed to failure regardless of their intrinsic worth. Fortunately, in most cases, the host country and the donor country or agency are aware of the other's ideas, at least in a general way, at an early stage in the planning process.

Even where there is joint participation in the decision to proceed with an institution-building project, there is not always joint agreement, either actual or apparent; and apparent agreement often does not represent actual agreement. Joint planning will not always secure complete agreement on all items, but it does provide the continuing forum which is a prerequisite for establishing confidence and actual communication. Of course, joint planning may demonstrate that the differences between the host and donor are so great that abandoning either the institution-building project itself or the donor's technical assistance to the project is desirable. If such differences do exist, the sooner they are discovered the better.

Improving Technical Assistance Efforts

All who have studied the situation agree that efforts should be made to improve the quality of our technical assistance efforts. The U.S. started its technical assistance efforts with little knowledge of the problem and with little relevant experience; predictably, some of the early technical assistance efforts did not succeed. Perhaps we should have been surprised at the many which were at least moderately successful. Over the years, we have learned much about technical assistance efforts. Unfortunately, we do not always use what we have learned. Three areas need attention. First, projects should be designed to attract the most competent people. Second, overseas workers generally need better orientation in technical assistance than they have been receiving. Third, few U.S. institutions which now conduct, and will be asked to conduct, technical assistance projects are adequately prepared for the task.

To counteract the inherent difficulties of any such project, it is necessary to establish certain guidelines, to define who does what, how, when, and where, and to determine how and when needed resources are to be supplied. Thus, strategic planning is crucial to the success of institution building. The men and institutions dedicated to a project must be given the opportunity and the means to overcome the obstacles which can be foreseen.

The Value of the Model

The IB model provides a useful framework around which the institution-building project can be planned by insuring that certain important factors will not be overlooked. However, the model only characterizes the areas in which problems will occur; each case presents its own problems and each must find its own solutions. The ease of the model in planning gives a degree of protection against unforeseen problems. The model is extremely valuable in its present form and should be widely used by those concerned with institution building. Nevertheless, further research can be expected to bring refinements and improvements.

Certain findings of the CIC study have been assumed to have universal validity even though they were derived from a study of a single class of institutions. I hope that those with wide experience in areas other than my own will give their opinions about the universal validity of these findings.

(D.C., 48-58)

Goals and Strategizing

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The IB analytical framework is merely a means to an end and not an end itself. It is only worthwhile if it provides insights into improved methods of project planning and implementation. Therefore, attention should turn to the question of how project plans can be formulated with the assistance of such a conceptual model.

An apparent consequence of using the model is the tendency for host institution personnel to focus initially on flow inputs rather than on system outputs, an orientation which must be changed if institution building is to be meaningful. That is, host institution personnel are receptive to having technical assistance teams primarily because of the availability of the additional resources provided by the donor. But in many cases they do not realize the consequences of changing the output of the system over time and, thus, the very nature of the institution itself. Technical assistance personnel involved in the project planning process will almost invariably find that their counterparts have much more difficulty perceiving the ends desired than the means for bringing them about.

This difficulty brings us to the first essential element of the project plan: the identification of intertemporal goals with respect to the output of the host institution. If institution building is to occur, a clear understanding of the goals of the system must be achieved. The identification of multilaterally acceptable goals is a time consuming process. However, within the first year or eighteen months some understanding of output goals should emerge. If no common agreement can be found at this point, serious questions concerning the continuation of the technical assistance effort should be raised.

Once a set of agreeable goals has been reached, the implications of the changes can be traced throughout the system. One of the objectives of this system is to use conventional principles of economics in determining resource allocation. Those trained in economics will recognize that we have conceptualized a multi-product, multi-phased, multi-lateral production unit. What is suggested is that the technical assistance team disturb the host institution's equilibrium with respect to product mix. Subsequent points can then be identified on the production functions in subsystem B and subsystem A. In layman's terms, this process involves the following steps: (1) changing preferences of decision-makers with respect to the outputs of the system over time; (2) identifying necessary

changes in the production of the services of the functional characteristics in order to reach the newly identified output goals; and (3) identifying the changes required in the flow and stock of resources in order to alter the production of functional characteristic services identified previously. In most instances this process can be done in a number of ways, confirming the need to prepare a strategy for goal accomplishment, i.e., institution building over time.

In reality two strategies are usually needed in a technical assistance, institution-building effort. The primary strategy must be developed jointly by the technical assistance team and key decision-makers in the host institution. The other is a variation of this strategy in terms of its implications for the technical assistance team. For example, personality conflicts among key host institution personnel which represent a primary constraint to developing an institution obviously necessitate action by the technical assistance team. If host institution decision-makers cannot agree in the solution, the team's strategy can hardly be a multilateral one, nor can it be publicized. Nevertheless, some strategy will be required to avoid hamstringing the project at this point.

Before discussing strategy as an aspect of project planning, the term needs to be defined. *Strategy*, as used here, is a set of predetermined actions designed to accomplish a given goal. While strategy is a necessary element of project planning, it cannot serve all situations. Institution building must be done in the presence of many stochastic variables, so a large dose of pragmatism is required as well. This does not negate the need for strategy, but rather emphasizes that it must be frequently re-examined and updated. In all too many cases technical assistance teams have attempted to "fly by the seat of their pants" with disappointing results for all concerned.

In addition to goal definition, another emphasis is the intertemporal nature of institution building. Since institutional change per unit of time is probably the best speedometer to use in gauging progress, explicit attention should be focused on the time element itself. With the use of the Program Evaluation and Review Technique (PERT), the timing of both the strategy as a whole and its various components can be considered. That is, each component of the strategy should be identified with regard to the action to be taken and the estimated time required for its completion. In light of the probabilistic nature of these time requirements, the PERT procedure of weighing activity times by optimistic, pessimistic, and most likely estimates has considerable value. Each of these, in turn, can be fitted into the total system so that expected completion times can be identified. At the same time the components are being fitted into the entire time-phased system, responsibilities of the host institution and technical-assistance teams can be identified. The end

result of this systematization of strategy selected will result in: (1) agreement about project goals; (2) agreement about responsibilities for achieving project goals; and (3) time estimates for completing the components of the total strategy itself.

The type of detailed activity suggested above is not a definitive strategy; rather, it should be continuously reexamined to determine if (1) superior alternatives are available for the accomplishment of plan objectives, and (2) changes in the availability of resources or inputs into the system might alter its optimization. Opportunities should be regularly scheduled for both host institution and technical assistance personnel to reexamine goals and strategies to make the project plan more meaningful.

There are numerous implications of this analytical framework and the resulting project plan. Only one will be used as an illustration. In the past, personnel requirements for technical assistance teams have characteristically been identified by disciplines. The above conceptualization suggests that disciplinary orientation is merely a means to an end. That is, if a technical assistance person is requested in a given area, competence in that area may provide him a legitimate opportunity for both working in his discipline and contributing to the institution-building process. However, if that person merely continues to do the same kinds of teaching, research, or extension activities that he has been accustomed to performing in his home institution, the institution-building process will be left largely to chance and intuition. If, on the other hand, the technical assistance person understands the institution-building process, he will realize that his primary objectives are not the same things that gave him legitimization. In brief, technical assistance teams need to be composed of individuals who are both rich in the substance of their discipline and sophisticated with respect to institution-building techniques.

(Utah, 126-128)

Role of Practitioner

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With respect to the group of concepts constituting the theoretical institution-building models, two things have become quite clear. First, these models have stood up well under the confrontation of experiences and "data" provided during this conference. They provide an analytical mechanism that can be highly useful when sorting the many phenomena involved in institutional development. They also provide a framework for assessing types of individual and aggregate behavior that otherwise have been difficult to handle. However, while the models have proven their utility, they have not met all of our demands.

Secondly, it appears that the practitioners of university development have found the current stage of theoretical development lacking in specificity and operationality—the models are limited in definition, identification, and measurement. Here, I would make three observations. One is that practitioners hold expectations and aspirations far greater than any theory is likely to embrace. Theories designed to explain complex human and institutional behavior seldom, if ever, account for all variabilities. Fortunately, the explanation of such variability is not necessary for the constructs to be useful. A second point is that practitioners should not expect a theory to be capable of handling each specific phenomenon they encounter. Rather, the practitioner must modify, adjust, and expand the general theory to fit the particular phenomenon with which he is concerned. This method may require such things as the disaggregation of broadly defined variables into more careful and precise definitions, or the construction and testing of concepts specifying the functional relationships between such variables and expected changes in universities or other institutions of interest. Finally, it may be necessary to develop means of quantifying variables in order to make the theoretical models operational.

The foregoing analysis emphasizes my first comment on the practice of institutional development. Efforts to bring about change in educational and research institutions would seem to provide a unique laboratory for evolving, testing, and reformulating theory. Because experiences have not been adequately reported, much of the potential contribution of past activities to this purpose has been lost. The same is true of many such efforts currently in progress and could very well be true of future programs. It is my belief that each activity should have a built-in

mechanism to permit the expansion of verified knowledge about the nature of this most fundamental process. Payoffs would be extremely great, not only to this specific area of concern, but to a wide range of problems associated with bringing about desired change in all social institutions.

Another significant fact which has surfaced in different ways is that both the theoretical and empirical knowledge about institutional development are little understood and little used by those engaged in the process of changing the world's educational and research institutions, representing a major limitation in our joint efforts to meaningfully expand the research and educational capacity of the world. That is, we have not provided for systematically acquainting ourselves with what is known, both conceptually and empirically, about the process in which we are engaged. In my view, this has been and continues to be a major failure on our part. It is a situation that we cannot allow to continue. It clearly suggests the need for a major educational effort to provide all those engaged in these activities with adequate knowledge about the phenomena with which they are working. Failure to take aggressive, positive action to ameliorate the situation will constitute negligence of a most serious order.

The entire exercise of university development, both theoretically and practically, is concerned with the process of deliberately bringing about change in the nature of an institution, a process which assumes a set of rational goals for the institution. Consequently, there must be a comprehensive strategy which will stand a chance of effecting the change. It follows that the question of strategic courses of action and reaction is central to the entire process. The CIC-AID study pointed out the dearth of well-conceived strategies for reaching the desired goals of institutional development. This workshop has once again demonstrated (a) the significance of such strategies, and (b) our lack of conceptual and empirical knowledge about this aspect of the development process. It seems reasonably clear that the technical assistance-institutional development complex, as now known and practiced, involves several kinds and levels of strategies. For example, it involves questions of appropriate interpersonal, inter-institutional, and inter-country strategies, and the several permutations of these sets. Yet we have done very little to conceptualize and test the kinds of strategic behavior involved in this process. I would argue that this particular element of the process deserves and demands far greater attention, both theoretically and operationally, if the mutual ends of host countries and assisting nations are to be effectively attained.

The theory of institution building considers the issue of an institution's environment. To succeed, practitioners of institutional development must recognize, and in some way account for, the social, cultural, economic, political, and physical environment of the institution. Effec-

tive institutional development activities presume near perfect knowledge of these environmental factors. Yet many such activities continue in a state of imperfect knowledge about the environment, and make little or no systematic provision for perfecting that state of knowledge. There is only one way to expand knowledge about an institution's environment—through systematic research. The implication here is quite clear: all institutional development ought to allow for an assessment of its impact upon the institution's environment to the point where the value of additional environmental information no longer justifies the additional costs of investigation.

Another subtle but pervasive element important to the practitioners of institution building seems to have permeated many of the papers and discussions. This element consists of (a) the importance of management in the efficient change, growth, and development of educational and research institutions; and (b) the dearth of managerial information and training and, more specifically, personnel capable of providing this most crucial of all inputs. It is imperative that specific attention be given to the decision-making functions associated with the management of educational institutions and technical assistance projects assisting in the process of institutional development. Managerial processes can be researched. Management can be taught. High payoffs resulting from managerial research have been demonstrated in other arenas. There is no reason to question the high rates which will accrue to well-conceived and properly conducted research and education programs in these situations.

Let me make one final comment with respect to the theory and practice of institutional development. Attention has been largely focused on the individual institution, an important and worthwhile concern. However, I was impressed with suggestions that all the needs of the developing world can hardly be met, even if we enjoy perfect success in the micro-elements of institutional development. The problem, of course, is creating an institutional framework whereby requisite scientific and educational capacity might be brought to bear on the problem of the developing nations. The existing international institutional mechanisms are entirely inadequate. The implication is clear. A major job of "institution building" still remains to be done. It seems imperative that "institution builders," both theoretical and applied, focus on the problem and get on with this crucial aspect of the "work of the world."

(Purdue)

Evaluation of Progress in Institution Building

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My pleasant task is to share the experience of using the institution-building model as a framework for evaluation, euphemistically referred to as "assessment of progress."[1]

The so-called "Punjab Agricultural University Evaluation Project" was conducted from November 1969 to March 1970 by a Joint Indo-American Study Team of which I was one of four members. This team was appointed by the Government of India with the concurrence of the Indian Council of Agricultural Research and the United States Agency for International Development (AID). The team was external to the institution being evaluated, but there was full concurrence and support among the top leadership of PAU on the desirability of the project.[2]

The primary objective was to develop a procedure for assessing progress of the several agricultural universities in India being established with the assistance of AID. Since PAU was used as a case study in developing the evaluation method, an important secondary objective was to evaluate the progress of PAU. Reports on each of the two objectives were published by the Indian Council of Agricultural Research in April, 1970: *A Method of Assessing Progress of Agricultural Universities in India* (128 pages), and *The Punjab Agricultural University: An Assessment of Progress to 1970* (153 pages).

PAU—Institutional Antecedents

PAU was founded by a legislative act of the Punjab State government in October 1961. The Pubjab is a small state in northwest India with an area of approximately 50,376 square kilometers and a population of about 14 million, some three-fourths of which is rural. Since 1967, high-yielding varieties of wheat and bajra have been widely adopted in this area. At the time the university was created, the Punjab State included what was later to become Haryana State (1966). The university began with two campuses located on the sites of agricultural colleges that were transferred to the new university: the College of Agriculture, Ludhiana (Punjab), and The College of Veterinary and Animal Science, Hissar (Haryana). A third campus was added at Palumpur, in the territory of Himachal Pradesh.

When our study began, it was known that the Hissar campus of PAU would soon become a separate university, which occurred in early 1970. The Palampur campus was to be associated with a university in Himachal Pradesh. Our evaluation was therefore confined to PAU at Ludhiana, serving the reorganized Punjab State. The importance of this institutional history cannot be overemphasized. For example, all work in veterinary medicine was located at Hissar until November 1969, when a decision was made to establish a new College of Veterinary Medicine at Ludhiana.

Although PAU was created in 1961, its institutional roots have developed over a longer period of time. For example, to the question, "When was your department founded?" the head of the Soils Department responded, "1909 at Lyallpur; 1962 in the PAU." His office was lined with the pictures of those who had served as department heads, beginning in 1909.

Upon partitioning of the Indian subcontinent in 1947 to form India and Pakistan, there was a mass migration of non-Muslims from tha area that is now West Pakistan, including faculty members and students from the old Punjab Agricultural College at Lyallpur and the Punjab Veterinary College at Lahore. A facility for the continuation of the students' education and professional employment of the displaced faculty was established at Khalsa College, Amritsar (India Punjab) in November 1947. In June 1949, the Agricultural College was moved to a rented school building in Ludhiana. In early 1950, 500 acres of land at the edge of Ludhiana was allotted for a permanent home for the college. This area was taken over by the college in 1953, and the building that now houses the College of Agriculture of PAU was started in 1955.

About the time the new building was occupied, the principal of the College of Agriculture was given the additional title of Joint Director of Agriculture, while some of the research officers of the State Department of Agriculture were moved into the laboratories and offices of the building and provided with research land on the college farm. A block of 100 villages in the Ludhiana District was used as a laboratory for training students in extension methods. Extension advisory committees included farm people, and the college sponsored farmers' days on campus as early as 1956.

This College of Agriculture was transferred to PAU upon its creation in 1961. At the same time, all agricultural and veterinary research was transferred from the state government to the university. The act creating PAU also provided for shifting the extension functions primarily of an educational nature. Thus, prior institutions showed the integration of teaching, research, and extension education functions—an idea that is a major element in the doctrine of the Punjab Agricultural University as well as the other agricultural universities in India. Study of the

antecedents of PAU also reveals the spirit of determination of the Sikh agricultural leadership that migrated from the Western Punjab.

PAU—A Brief Sketch

Though colleges offer resident instruction in agriculture, primarily at the undergraduate level, PAU is the one agricultural university in Punjab State with responsibility for undergraduate and graduate instruction in agriculture, veterinary medicine, home science, research, and extension education.

PAU began with a College of Agriculture, with other colleges established as follows: Basic Sciences and Humanities, 1964; Agricultural Engineering, 1965; Home Science, 1966; Veterinary Medicine, 1969. Bachelors degrees are offered in all colleges except Basic Sciences and Humanities. Undergraduate enrollment increased from 779 in 1962-63, to 1,437 in 1969-70 (see table). Graduate students increased from 118 to 383. In 1969-70, MSc degrees were offered in nineteen departments and PhDs in fifteen departments of the Colleges of Agriculture, Basic Sciences and Humanities, and Veterinary Medicine. The MSc degree was also offered in Agricultural Engineering. In 1969-70, sixty-one students came from nine foreign countries, with the largest numbers from Nepal and Malaysia. All undergraduate students have practical field training programs in addition to classroom and laboratory work. The university is on a trimester system with internal examinations.

Faculty members are employed full time. The number in all ranks has steadily increased from 198 in 1963 to 560 in January 1970. Staff housing on campus is provided for 319 faculty members at a rent not exceeding 10 percent of their salary. Additional housing units are under construction.

About 40 percent of PAU's budget is spent on research in some 800 projects. There is heavy concentration in plant breeding, field crops, soils, veterinary medicine, and horticulture. There is a 1,203-acre research farm at Ludhiana and seven regional research stations with 1,195 acres. The research of graduate students is made an integral part of the research program.

The extension education program with about 10 percent of the budget is carried out through the Agricultural Information Department of the College of Agriculture, with responsibility for release of information and recommendations; a training branch of the Department of Extension Education which conducts short courses for agricultural leaders; and an off-campus Farm Advisory Service which promotes the use of new methods and materials. There is a close working relationship with state government personnel who have the major responsibility for disseminating information from the district level to the farmer.

ENROLLMENT OF STUDENTS AT PAU BY COLLEGES AND YEARS, 1962-63 TO 1969-70

	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
BSc Agriculture	779	806	810	819	922	866	925	931
BSc Agric. Engineering	—	—	—	119	214	229	267	237
BSc Home Science	—	—	—	—	25	58	90	136
BV Sc	—	—	—	—	—	—	—	133
Total Undergraduates	(779)	(806)	(810)	(938)	(1,161)	(1,153)	(1,282)	(1,437)
MSc Agriculture*	114	172	318	244	202	305	262	257
MSc Agricultural Engineering	—	—	—	—	—	—	—	9
MV Sc	—	—	—	—	—	—	—	8
Total MSc	(114)	(172)	(318)	(244)	(202)	(305)	(262)	(274)
PhD Agriculture*	4	3	17	35	41	53	69	99
PhD Veterinary Medicine	—	—	—	—	—	—	—	10
Total PhDs	(4)	(3)	(17)	(35)	(41)	(53)	(69)	(109)
Total Graduates	(118)	(175)	(335)	(279)	(243)	(358)	(331)	(393)
Total Students	897	981	1,145	1,217	1,404	1,511	1,613	1,820

*Includes postgraduate students in departments of the College of Basic Sciences and Humanities.

The PAU physical plant has greatly expanded since 1961 when the only major building housed the College of Agriculture with 109,000 square feet. Office, classroom, laboratory, and library space has been increased fourfold; there are dormitory facilities for 1,350 students, staff quarters for 319 faculty members, and conference facilities for 250 persons. When I revisited PAU in March 1971, new construction was underway for the College of Veterinary Medicine and additional research facilities.

The budget of PAU increased from 2,325,269 rupees in 1962-63 to 39,335,556 rupees in 1969-70 (for all three campuses). About 80 percent of the funds are received from the state government, 10 percent from the India Central Government, and the rest from a number of sources including U.S. PL-480 funds, and Ford and Rockefeller Foundations.

The Ohio State University (OSU) has assisted in the development of PAU through AID technical assistance contract. Ohio State began this assistance in 1955 to five cooperating agricultural and veterinary institutions in Punjab, Rajasthan, Himachal Pradesh, and Delhi states. The group leader and several technical specialists were located at the Government Agricultural College at Ludhiana. Assistance included planning for the new agricultural university. The OSU effort in the Punjab was concentrated at PAU in 1961. Since then, eighteen OSU faculty members have served at Ludhiana. Participant training has been received by sixty-five staff members (since 1955), twenty-six of whom are PAU faculty members, while most of the others hold responsible positions in government or in other universities. The Ford Foundation, through the OSU Department of Agricultural Engineering, has assisted in the development of the College of Agricultural Engineering. The Rockefeller Foundation has provided substantial support to PAU for a variety of purposes: development of the main research station; puchase of books, periodicals, and equipment; preparation of architectural and structural plans for the College of Home Science; and travel grants and fellowships for faculty members.

The Evaluation Method and Framework

With this background of the university used as the case study for developing the evaluation method, we can now proceed to discuss the method.

We visualized that the development of a method for evaluating the Indian agricultural universities would require designing a proposed method, testing the method, and then modifying it on the basis of experience gained in the testing process. The limitations of testing the method at only one university were recognized; however, it seemed preferable to make an in-depth evaluation at one university instead of

sacrificing intensity by testing the method at two or more universities. Given the time constraints, this proved a wise decision.

The evaluation method was designed to give depth of understanding of a university's progress, its strengths and weaknesses, and its potential for future service to society. Development of the method, the evaluation of PAU, and the preparation of reports required about twelve man-months of time spread over a period of four and one-half months. Two team members spent four and one-half months at PAU, and one team member spent three months. The other member joined the team at PAU for project planning, interviews of university administrators, and preparation of reports. Future evaluations using the method that has been developed will require less time; however, it must be emphasized that this type of evaluation cannot be done in a few days.

The method was developed to evaluate the progress made by the entire university and its structural components. It does not focus on the effectiveness of the AID contract project or other technical assistance efforts.

The Evaluation Framework. The Esman-Blaise institution-building model was used as the conceptual framework for the evaluation because it was thought to provide the best available set of guidelines for assessing progress in an agricultural university. As the elements of this framework are well known to the participants in this conference, it is not necessary to define and discuss the institution variables, (i.e., resources, structure, program, leadership, and doctrine) and the four types of environmental linkages (enabling, functional, normative, and diffused). Nor should it be necessary to reemphasize the importance of the relationships between the institution and the environment.

Criteria and standards for assessing progress. The IB model provides a framework for evaluation in that it identifies the broad categories of institution variables and types of environmental linkages. However, it does not specify the details of the variables and linkages significant for a particular type of institution. Neither does it specify criteria for testing whether an institution is making an acceptable degree of progress. To illustrate, the "program" variable suggests undergraduate teaching, graduate level teaching, research, and extension education as programs of an agricultural university. But what criteria should be used to judge the priority given to each of the four programs and to assess the progress of each one? What is the desirable internal structure for an agricultural university? And how does one judge whether acceptable progress is being made toward attainment of this structure? Similar questions arise for resources, leadership, doctrine, and environmental linkages.

The criteria and standards problem is a difficult one in evaluation. The solution to the problem for the PAU Evaluation Project is shown in

"A Method of Assessing Progress of Agricultural Universities in India." Chapter 2, entitled "The Agricultural University—Essential Features," outlines goals and objectives and specifies the basic elements of an agricultural university under ten headings: university administration; university development plan; colleges; departments; tenure and promotion policy; resident instruction; research program; extension program; library; and spirit and doctrine.

A careful reading of the report will show that the PAU Evaluation Team drew from several sources in setting forth the goals and basic elements, including Government of India reports that reflect higher education policy with respect to reports of conferences of Indian agricultural educators. Fortunately, India has an identifiable policy with respect to development of the agricultural universities. They borrow heavily from the U.S. land-grant university experience. Government reports provide guidance not only in terms of the general objective of establishing the agricultural universities but also in more specific terms relevant to the IB model. For example, the Model Act drafted by the Indian Council of Agricultural Research gives guidelines to the states on university structure and methods of operation. It also illustrates the functional linkage between center and state government institutions. Several agricultural university doctrinal elements are well established in India, although not unanimously accepted or understood. Examples include the orientation of the university to the rural society; the problem orientation of research; integration of teaching, research, and extension; internal assessment of students; and practical as well as theoretical training.

Careful reading will also disclose that the team drew on a considerable store of conventional and team wisdom in setting up criteria and standards which often remained general and lacked quantification. The most desirable timing of developing various aspects of the institution is left unspecified. Additional work on this type of evaluation will plug some of these gaps, but I strongly suspect that some of these apparent shortcomings are both an inherent and desirable part of institution building.

The evaluation procedure. The institution-building model and the essential features or basic elements provided the broad outline for assessing progress of the agricultural university.[3] This was followed by the development of a plan for gathering necessary information. Data collection was planned concurrently with the study of Indian Government and Agricultural University documents and reports to establish goals, criteria, and standards.

The data collection and analysis procedures are outlined in detail in Chapter 3 of the report, and the eight questionnaires are shown in the appendix; details will not be repeated here. The general procedure calls

for maximum use of information available from reports supplemented by questionnaire data and interviews of department, college, and university level administrators. Data from faculty and students were obtained by questionnaires. Observations of campus activities were made, and off-campus interviews were conducted. Off-campus personnel interviewed included those responsible for research stations and extension programs, state and center government officials, research and education leaders, members of the university governing board, and farmers.

Data collection was followed by analysis and interpretation, decisions on recommendations to be made by the evaluation team, and report preparation. The report illustrates the type that results from this type of evaluation.[4]

Recommendations Resulting from the Evaluation

The report of the PAU Evaluation Project cannot be briefly summarized. It includes an analysis of every major element of the university and the work of each department. A listing of the fifteen recommendations with university-wide significance is perhaps the best way to indicate the types of recommendations that can result from such an evaluation.[5]

1. *Create the Post of Director of Resident Instruction.* It is recommended that a post of Director of Resident instruction be created on par with the post of Director of Research and Director of Extension. It is intended that this post replace the post of Dean of Postgraduate studies. The companion report provides some guidelines for developing a statement of powers and duties of the new post.

The resident instruction function of the Punjab Agricultural University has not kept pace with the research and extension functions, a result of the disparity in emphasis during the early stages of development when the need for research results that could be carried to the field was of first importance. However, the time has come for the quality of both undergraduate and postgraduate programmes and teaching to be greatly strengthened. This, as well as other recommendations, are intended to contribute to this end.

2. *Integrate the Three Functions at College Level.* At PAU integration of teaching, research and extension is excellent at the individual staff member and department level. However, there is a fundamental structural weakness resulting from lack of integration at the level of college deans, where the coordinating and integrating functions should be particularly vigorous. Therefore, it is recommended that the college deans be given equal responsibility for the teaching, research and extension activities; that the heads of departments be responsible to the Dean of the College for the teaching, research and extension activities of the personnel in his Department. The deans are to be responsible to the Director of Resident Instruction on matters relating to the teaching programme, to the Director of Research on research programmes and activities and to the Director of Extension on matters relating to extension education.

3. *Develop Policy Statement on Ranks, Tenure and Promotions.* To provide and understanding and appreciation of the University's interest in encouraging capable and productive faculty members, the University should develop a policy statement on provisions made regarding academic ranks, tenure and promotions. Before such

a statement is finalized, representatives of the faculty at all levels should be invited to offer suggestions. This statement should be distributed to all faculty members and to new faculty when employed.

4. *Make Academic Administrative Posts Fixed Tenure Positions.* It is recommended that the positions of department head, dean and director be made tenure positions, with provision for reappointment or return to nonadministrative academic posts without salary decrease. This will provide for flexibility in moving from administration to academic work and vigorous leadership at all levels.

5. *Assign Each Faculty Member to Parent Discipline Department.* Each teaching, research, and extension person should be appointed to and budgeted in the department representating his discipline. For example, all agronomists should be appointed in the Department of Agronomy. This will encourage professional stimulation of the individual and provide for efficiency in use of valuable professional man-power.

6. *Attach Newly Developing Areas to Related Departments.* It is recommended that disciplines which are expected to eventually grow into full-fledged departments be entrusted to the administration of a related department until sufficiently developed in staff from both the number and quality standpoint to justify a separate department. For example, physics should remain with mathematics until it develops the staff and programme that would justify a separate department. Similarly, the Microbiology staff might be administered by the Department of Botany and Plant Pathology until the discipline is well developed.

7. *Delegate Budgets Clearly to Deans and Heads.* It is recommended that the budgets of all the constituent departments of a college be supervised by the Dean of the College to which the Department belongs. In turn there should be budgetary delegation to department heads.

8. *Organize Regular Teaching Seminars.* It is recommended that teaching seminars be organized and offered at regular intervals to acquaint new staff members with the trimester system, internal evaluation, grading system, use of library reference material, visual aids, methods of teaching, etc.

9. *Developed Depth of Administrative Leadership.* Depth in administrative capability should be developed at all levels by encouraging greater faculty participation and responsibility in department, college and university committees, boards and councils.

10. *Broaden Depth of Research and Extension.* To date, the major research thrust has been in the crop production area. Continued growth in some of the departments which contribute to crop production, particularly soils and agronomy, should be encouraged. However, during the period immediately ahead, greater emphasis should be given to animal production, agricultural engineering and home science. Thus increased development of extension and research programmes in these three areas is a particularly urgent need.

11. *Acquire More Land.* To provide for future expansion, it is recommended that additional land contiguous to the present holdings be acquired.

12. *Improve Communication with Students.* It is recommended that a mechanism be developed for obtaining student opinion regarding matters of direct concern to them, and used to bring about improvements in students' welfare and academic achievements. The constructive role that the students' welfare organization plays needs to be supported by the faculty.

13. *Establish a Placement Service.* It is recommended that a Placement Service be developed to locate suitable positions for the university graduates and to expand

employment opportunities in the agro-industrial sector and in the agencies serving rural people. This Service can also influence the faculty to reorient curricula to meet the needs of employers.

14. *Develop and Foster an Alumni Association.* It is recommended that an Alumni Association of the PAU be organized under the sponsorship of the University to maintain the link with its graduates. While the responsibility for organization and coordination should rest with the Director of Students Welfare, the colleges should play an active role in developing and maintaining the Association.

15. *Improve Record Keeping.* We recommended that with the Tables given in this Report as a starting point, a system of record keeping be devised whereby the progress of the development and growth of PAU can be followed from year to year. The data recorded should be in such form that they can be compared from year to year with little effort. Included should be such items as: number of students and graduates by curricula; number of faculty by ranks, departments and colleges; financial data on budget, resources and expenditures; research and extension data on a comparable basis from year to year; and publications by colleges and departments. The excellent records of the Library should continue to be maintained. Data on the agricultural economy of the area to be served should be summarized annually and distributed to all segments of the University to serve as a guide in the development of programmes.

Reflections on the Evaluation Experience

I have given only a brief review of what was done in the PAU Evaluation Project. The task now is to reflect on that experience in a way that will be useful to those interested in institution development.

Is the evaluation method an effective one? To answer this question requires another evaluation exercise. Having been immersed in the Project for five months, I am in no position to argue that I am free from vested interests and biases. The weakness of testing the method at only one institution has been pointed out. An alternative method was not developed and tested. With these disclaimers and with confidence that the method can be improved upon or displaced by a better one, I shall proceed to defend the method as an effective one. What is the evidence?

First, use of the method at PAU revealed a need for major improvements and resulted in fifteen recommendations of university-wide significance which, if implemented, would lead to substantial additional progress in development of the institution. Each of the elements of the institution-building framework is involved in these recommendations. These recommendations were discussed with the PAU vice-chancellor at the conclusion of the study, who agreed that each was worthy of serious consideration. The report also includes a large number of explicit and implicit suggestions to the leadership of PAU.

That method resulted in recommendations of substantial import at an institution generally recognized as among the best of the agricultural universities in India would seem to speak well for the method. In other words, if it is effective at a relatively strong institution, it is likely to be

fully as effective in identifying needs for improvement at a weaker institution.

Second, the team was satisfied that the method provided insight into the current status of and future needs for improving the institutional development of PAU. From the standpoint of long-run growth of the institution, this may be more important than the specific recommendations that were made.

Third, other Indian agricultural university leaders have expressed interest in using the method at their institutions. The vice-chancellor of on of these universities recently told me that some of the recommendatic applied equally well to his univeristy, and he planned to implement tl n The Indian Council of Agricultural Research and AID are encouraging use of the method at other universities and the current plan outlining cooperative work between the two organizations provides for evaluation of this type. A member of the PAU Team has headed a two-man team using the method in evaluating one of the Indian agricultural institutes.[6]

One of the U.S. university team leaders has stated: "The PAU study provides a measure of achievement of certain goals. It has the advantage of being comprehensive. There have been too many piece-meal evaluations. Several vice-chancellors have asked for an evaluation."[7]

Fourth, the Ohio State University has indicated staisfaction with the report in terms of its accuracy and identification of significant needs for further development of PAU. The report is being used in planning for future U.S. assistance to PAU.

The Ohio State University team leader at PAU has stated: "The evaluation will be of great value—a real measure of the situation. The Vice-Chancellor will have a mine of information to help in decision-making. The study presents a balanced viewpoint, and will help him avoid undue influence by deans and department heads. The evaluation will help in guiding plans for technicians, consultants and participants. The faculty will have qualms about some features, such as the concept of term appointments for administrators."[8]

Essentials for success of this type of evaluation. The degree of success of this type of evaluation depends on a number of things, among which I would emphasize the following.

1. *Administrative support for this type of evaluation.* This must include not only support at the top level of the institution but at all levels in a university—university officers, college deans, and department heads. In turn, administrators must reflect their support of the evaluation to faculty, staff, and students.

2. *Understanding of objectives and procedures.* There must be an understanding of the reasons for and objectives of the evaluation, the

general method and procedures to be followed, and the type of results that are expected. It must be clear that the evaluation is a broad evaluation of the university, not one of individual performance.

3. *Evaluators recognized as qualified.* Obviously, the evaluation team should be competent to do the job, individually and as a team. But in addition, the evaluators should be recognized as competent at all levels in the institution. This means that team members must have wide experience in developing the type of institution under study. Experience in evaluation is highly desirable, if not absolutely essential for some team members.

4. *Adequate time and other resources.* This type of evaluation takes time. As a general guide for an Indian agricultural university we recommended that "four team members should spend about nine man-months . . . spread over a period of two and one-half to three months." The time could be reduced somewhat if some of the basic data were gathered in advance by university personnel. Supporting resources are important for the effective use of time: stenographic and clerical assistance, office space and equipment, and transportation for off-campus observations and interviews.

5. *Evaluators at the institution.* The evaluators should live and work at the institution except for the time needed to study linkages, institution impact, and respect and support for the institution. By living at the institution, evaluators can make many informal observations and conduct discussions that give a "feel" of the institutions' morale and spirit—particularly important in forming judgments on the leadership and doctrinal aspects of the organization.

6. *Positive recommendations.* For the evaluation team to be effective, it must be willing to make positive recommendations for improving the institution. It is not sufficient to merely point out problems and leave it to the institution's leadership to devise and implement improvements. At the same time, the team should not feel required to make strong recommendations on every conceivable aspect of the university. University leaders can be depended on to draw their own inferences from a careful presentation of the situation. To present a large number of recommendations may detract from the smaller number of recommendations dealing with major needs.

7. *Report on the evaluation.* From the beginning of the evaluation, it should be understood that the evaluators are to report on their work, and that the report is to be available to anyone interested within the institution. This understanding will alleviate fears that university personnel may contribute to the evaluation but gain little from it, or that only a few individuals at the top level of administration will be informed of results. It should also encourage the use of the evaluation, which may

expose weaknesses but which will encourage the evaluators to do the best possible job within the constraints that are inevitably a part of this type of exercise. One can be confident that weakness in findings or recommendations will be detected by institution leadership and the necessary corrections made prior to implementation.

Does widespread availability of the report impose serious constraints on its content? It certainly does not make it easy to write! If the results are to be used to improve the institution, the report must not reflect unfavorably on particular persons. Can this be done without omitting major findings that are clearly associated with, for example, one or two key administrators? I think so and would hope that the PAU report would be evidence. It may mean that the full significance of some aspects of the report are not understood by those unfamiliar with the institution under review. It may also mean some divergence of the report outline from the IB model. You will note that the PAU report does not have a chapter entitled "Leadership"!

The report should be available shortly after the evaluation is completed and should be reproduced in the best available form.

The complexity of the method. Some may look at the seventy-five pages of questionnaires in the report and conclude that the method is overly complex. Could it be done with fewer questionnaires completed by fewer people? Why are essentially the same questions asked of different individuals? Could not some of the information be obtained from reports?

The team was conscious of the need to make the method as simple as possible and at the beginning of the project hoped for more simple procedures. It became clear, however, that there is no simple way to obtain depth of understanding of a complex institution. One cannot understand a university by reading reports and interviewing the vice-chancellor and a few key administrators. I suspect that the biggest problems with evaluations of technical assistance IB projects lie in oversimplifying the task; committing too few resources to it, and developing findings that have little positive, perhaps even negative, impact on the future course of the university.

The method is not as complex as it may seem, particularly now that the method and procedures are specified. The method does not require an unreasonable amount of time of any individual. A good share of the data requested from administrators can be supplied by office staff members.

Data compilation can be simplified by having faculty and student questionnaires completed by a sample of each group; however, there are

advantages in using a 100 percent sample. Some feel "left out" if they are not asked to complete a questionnaire along with their colleagues. Also, participation in the evaluation is likely to result in better support of the changes that may be implemented. With clerical staff support, the extra data from a 100 percent sample can be handled without difficulty.

The IB model. I have considerable enthusiasm for the IB model as a general framework for the type of evaluation conducted at PAU. Knowing of no equally good substitute framework, we would have been lost without it. It provides a set of variables for evaluating an institution. But as one uses this framework in evaluating the progress of an institution, he finds that the institution variable and environmental linkage "boxes" are very large. For example, the "programs" of a university include many output-producing activities, some of which strengthen the university directly while others serve clientele groups in the environment. "Resources" include such diverse things as personnel, financial resources, technologies, and legal and political authority. Likewise, "functional linkages" of an agricultural university comprise a complex network. But if it is recognized that the institution variables and environmental linkages are broad categories, there are no particular problems in using the institution-building model as a conceptual framework for evaluation. It does indicate the need for specifying the elements within each of the variables and linkage categories.

Applicability of method beyond Indian agricultural universities. The PAU project focused on a method of evaluating agricultural universities in India. Could it be extended? Using the IB Model as a framework gives a broad application of the general method. Insofar as the "goals, objectives, and essential components" of agricultural universities (as set forth in Chapter 1 of the report) are applicable to other agricultural universities, the method should not be limited to use in India. For other types of institutions, similar guidelines would be needed along with the IB Model and data collection instruments, and techniques would require modification accordingly.

External vs. internal assessment. One might well ask why nine man-months of time plus supporting personnel and other resources should be invested in evaluating one institution by an external assessment team. There are strong arguments for pre-project planning, including planning for review and evaluation and internal evaluation on a continuing basis by institution leadership, with assistance of technical assistance agencies where they are involved.

Perhaps the strongest argument for external evaluation is that internal evaluation just does not get done. There are tremendous demands on

the limited leadership in newly developing institutions. Evaluation expertise is particularly in short supply. We have not yet given higher priority to this type of work, even in educational institutions in the U.S.

The type of evaluation done at PAU should not substitute for internal assessment on a continuing basis, which would make the task of an external or joint external-internal team considerably easier. There are some features of an external assessment, beyond making resources available for the specific task, that may be important. It may be more impartial and objective than an internal group. Thus the results may have more impact, both within the institution and in the environment. The results and recommendations of an external team may have more status, depending on the stature of team members, performance on the specific evaluation, and the wisdom shown as reflected by the evaluation report. There may be a reluctance on the part of an internal evaluation group to come to grips with important questions due to being so close to the institution and its operations. Or there may be sensitive issues that the internal group may be reluctant to deal with. There is the possibility that some may be over-anxious to become involved in some issues, thereby risking internal frictions.

Internal vs. external evaluation probably boils down to the conclusion that it is not an either-or proposition; that internal evaluation is to be encouraged to the maximum extent possible within the limits of resources; that external evaluations have a place where in-depth review of an institution is needed for reasons agreed upon by the responsible leadership.

Maturity. I deleted the word "maturity" from the original title of this paper. The PAU Evaluation Project provided considerable time to think about institution "maturity." a concept that has been defined as a level of achievement essential "to sustain a dynamic, self-generative level of performance."[9] But it must be noted that the term "maturity" was not used in either project report. My feeling, after one intensive evaluation effort, is that "maturity" is a very elusive concept if one attempts to apply it to an entire institution, particularly one in a developing nation. Maturity is a moving target, since the environmental demands on the institution change if it is innovative and successful.

While the concept of maturity is elusive when applied to the entire institution, it becomes more manageable when used with respect to a college or department, to "leadership" or "resources," or to an "undergraduate teaching program." It also becomes meaningful if applied to a particular aspect of the institution's work in terms of some particular question such as, "Has department X reached the point that technical assistance of type A (personnel or participant training or commodities) is

no longer essential to a 'dynamic, self-generative level of performance'?"

The PAU experience emphasized the tremendous range in maturity of different aspects of this university, an institution but eight years old that is glibly referred to by some as well developed. To be sure, some departments are well developed in terms of external assistance needs. On the other hand, every department in two of the five colleges has major needs. Some of these variations are due to the variations in priorities that must be established in the time phasing of a new institution. Others are associated with political changes in the environment, specifically changes in the geographic area to be served by the institution.

The evaluation method and technical assistance. It has previously been emphasized that the PAU Evaluation Project developed a method of evaluating the entire university, not the technical assistance component. Clearly this method was not intended to, and does not, give any firm basis for judging the effectiveness of the technical assistance inputs. One could argue that the basic method might be used to focus on the inputs and returns from AID and other assistance efforts within the total university development effort. But this we did not do, and I am not in a position to argue that attempting to identify results from one portion (relatively small) of the resource inputs is likely to be a fruitful effort.

I will argue that the method and the results of its use at PAU provide an excellent foundation for planning technical assistance needs. The current status of the university is well documented, as are its strengths and weaknesses. Those presently supplying assistance are using this report and other knowledge they have to work with PAU leadership in planning technical assistance for the future.

NOTES

1– For an earlier report on which this paper draws heavily, see "Ideas and Procedures for the Evaluation of Progress and Maturity in Institution Building" in *Proceedings of the Regional Conference on Institution Building* (Logan: Utah State University, 17-21 August 1970), pp. 130-40.

2– Other members of the team were Dr. O. P. Gautam, Deputy Director General, Indian Council of Agricultural Research; Dr. J. S. Patel, former India Commissioner of Agriculture and retired Vice Chancellor, Jawaharlal Nehru, Agricultural University; and Dr. T. Scott Sutton, Associate Dean Emeritus, College of Agriculture, The Ohio State University. These colleagues, the organizations they represent, the Government of India, and the Agency for International Development bear no responsibility for the ideas expressed in this paper.

3– See *A Method of Assessing Progress of Agricultural Universities in India*, Ch. 2 (Indian Council of Agricultural Research, April 1970).

4– *The Punjab Agricultural University: An Assessment of Progress to 1970* (Indian Council of Agricultural Research, April 1970).

5– Ibid., pp. xi-xiv.

6– J.S. Patel, and P. Bhattacharya, *Institute of Ag lture, Anand: An Evaluation* (October, 1970).

7– Statement of Dr. D.M. Thorpe, University of Tennessee, reported in "Proceedings of the Third Annual Conference of the Council of United States Universities for Rural Development in India and Campus Operations Committee" (Columbus, Ohio, 19-21 July 1970), p. 44.

8– Statement of Dr. Cecil A. Lamb, The Ohio State University, ibid., p. 40. Dr. Lamb was at PAU while the evaluation was conducted and has continued service there to the present.

9– J. Thompson, et al., *Building Institutions to Serve Agriculture* (Lafayette, Ind.: Purdue University, Committee on Institutional Cooperation, 1968), p. 117.

Transcultural Transactions

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Technical assistance involves transcultural transactions. I have used the word "transcultural" rather than the more common "intercultural" because the latter term evokes a situation in which two or more cultures are involved equally. In technical assistance, the transactions take place largely in one culture, involving alien advisers from another culture. The match is unequal, for advisers meet their counterparts on the cultural terrain of the host country. They may think that they have created an enclave of their own culture, or at least an environment on which the transactions may occur largely according to the advisers' prescriptions. But many technical assistance projects are doomed to fail because the rules of the game are (quite naturally) those of the cultural matrix of the host country and not those that the alien advisers think they have successfully introduced.

Complicating the subject further is a fact that the alien adviser often glosses over: in the less developed countries there may be, and likely are, considerable differences in the cultural climate from one region to another, differences far greater than those encountered in the more developed countries. To the adviser, all host personnel may be Indians, but Bengali know well that they are neigher Tamil nor Punjabi.

The Character of the Institution

Westerners, and perhaps Americans more than most, tend to ascribe to institutions an identity, character, personality, life, mission, destiny, self-interest, and gamesmanship all of their own, largely disconnected from the people who lead them and function within them. This is a distinctly Western concept. In other parts of the world, an institution is seen as a collection of people who, loyal to a leader, or at least nominally led and organized by him, are essentially extensions of his personal power. (Although Latin American leadership is more personal than in the U.S., it is more institutionalized than in Asia or Africa.) The institution assumes the character of the power and self-interest of the leader. The staff of such an institution are his vassals, his "tribesmen," his "kinsmen," his supporters and devotees—they are his, not the institution's. In this sense, then, institutions as we know them do not exist in most of the less-developed world. If institutions do exist, they do so much more on their terms than on ours.

The alien adivser may have come to help develop the University of ———; his counterpart sees him as working on the personal staff of the vice chancellor, or the dean of the science faculty, or Professor X. The alien adviser perceives Dean Y as the dean of the faculty of education, when in fact Dean Y sees himself as a leader of faculty and perhaps of students in much more personalized terms than the phrase "dean of the faculty of education" would imply.

Similarly, power is personalized in most other countries more than in our own. In the less-developed countries (LDCs), power is still exercised by the man, not by his position. Moreover, in defining who the man in power really is, a major role is played by criteria of family, ethnic group, class or caste, and relationship to other personalized leaders. Thus in the twelve deans assembled around a table in the vice chancellor's office, none of them may be equal in fact, though their institutional titles may all be the same. It is quite plausible that one or more of them might exceed in power the vice chancellor who is nominally in charge. Such discrepancies between real power and formal power exist, of course, in any organization, regardless of cultural orientation. In our institutions, however, these variations are nearly always based on factors deriving from within the organization; in the LDCs, the variations derive largely from factors outside the organization.

Where power is personalized, not institutionalized in our sense, it also tends to be nonfunctional. It is power for its own sake. It is a situation in which every man aspires to be emperor. It is a game in which accretions of power are sought not in terms of function or purpose, but for the sake of more power which presumably will lead to still more power. Thus it is that in many countries every cabinet minister wants his ministry to have its own motor pool, its own printing plant, its own warehouse, its own personnel system, its own supply and purchasing system, etc. These are all accretions of power and leverages for further power, no matter how little related they may be to the basic function to which the institution is nominally dedicated.

Obviously, linkages between institutions are characterized by the character of the institutions they link. Linkages in personalized power settings tend to operate not through transactions of function but transactions of personalized power. Inter-institutional functional cooperation is difficult to achieve. What is possible to obtain is the collaboration of two leading personalities who decide that such collaboration gains something for each, perhaps at the expense of a third or fourth personality.

An alien adviser enters this atmosphere of personalized power. An agent of institution building, institution building in *our* sense, may become bewildered, frustrated, and often less than fully effective. He sees a game being played but does not understand. He associates the playing

field with the rules of the game as he knows it and has difficulty comprehending the behavior patterns of the players he sees.

The counterpart is equally puzzled. The alien adviser speaks of university, department, and director-general as if he does not recognize the person who occupies these offices. The alien adviser assumes that there can be loyalty to an institution, while in the host country this may be perceived as a peculiar aberration, an adoration of a form that has no reality and does not seem to exist.

A further complication results. In the LDCs, there are multiplicities of institutions which, through their personal leaders, influence each other and the rest of the country, but which the alien adviser may have access to, and in many cases, may hardly be aware of: the royal family, the council of tribal leaders, the head of the caste, the religious organization and hierarchy, the court astrologer, the family councils of the leading families, the extended family, the leading social club reserved for the elite of the elite in the capital. It is in these various arenas of discussion, through these institutions and their linkages, that the real decisions may be made. These are the real institutions, and they form a set of linkages far more real, far more effective, and far more established than the new institutions of which the alien adviser speaks and the linkages that he seeks to create. It is in these indigenous institutions that men meet and decide. Some of these same men, or their agents, may use the facade of institutions in our sense—the ministry, the university, the labor union, the teacher-training academy, the community development setup, the hospital—as pieces in their own chess game. But these pieces are not really bishops, knights, or rooks; at most they are pawns.

The Importation/Adoption Variable

The transcultural transfer of skills is not a new phenomenon. It is nearly as old as the history of man's organization into cultural entities. From the very beginning, societies have accepted skills from other societies and made these skills their own. (By skills I mean any technique or technology and the knowledge of how to perform and how to use them.)

However, cultures differ in how they handle this problem. Their manner of handling the intake of skills could be plotted on a line, one end of which can be termed "importing" and the other end of which can be called "adoption." Let me explain these two extremes, noting that the usual practice seems to lie somewhere in between or uses a combination of both.

Importing skills involves obtaining, in one way or another, persons not of the particular society or culture who can perform services for the benefit of the importing society. Means of getting hold of such skill-holders

vary from capturing them and enslaving them, paying them for their willingness to migrate to the host culture and to work there, enticing them to become immigrants who ultimately may at least partially acculturate to their new environment, or—more recently—obtaining their services through intergovernmental or interorganizational agreements.

Adopting skills involves inducing members of one's own culture or society to acquire these skills, either by sending them abroad or by giving them the opportunity and incentive to acquire these skills from those who have been imported.

Most cultures have practiced both techniques at one time or another. However, some cultures seem to have a tendency to import rather than to adopt, while others tend to adopt rather than to import. The Japanese, for instance, especially after the Meiji Restoration, have been great adopters. Until recently, Central Asians—Iranians, Afghans, North Indians—have tended more towards importing.

The implications of the two methods vary. Importing can have immediate impacts if desired. A country wishing, for instance, to have a full-fledged faculty of nuclear physics could hire five or ten nuclear physicists, and immediately such a faculty would exist at the local university. This method is a great time saver. It also enables the importer of skills to acquire not just one individual, but a whole team or organization which can collectively perform in some established manner. On the other hand, importing skill-holders does not result in a transfer of skills. In fact, there may be no transfer at all. All that is really acquired through this process is the immediate availability of whatever product is desired. Presumably, the society that imports skill-holders feels a need for them, but it is not always clear how widely this need is felt or how widely the resulting product will be utilized in the host country. Finally, but significantly, importing skills requires very little accommodation or adjustment to the new technology and to those that wield it.

The adoption of skills is a more drawn-out process. Not only is time involved in training one's own people, but they often require preliminary training before the training process can begin. Adoption also involves the decision—often political and always complicated—of whether the transfer of skills should occur abroad or at home, and where and how one may best acquire the trainers involved in the adoption process. Inevitably adoption also requires adaptation, for no process or technology is exactly the same in different cultural settings. Last, but not least, adoption also involves creating a "system"—an institution and its linkages—designed auspiciously to acculturate the adopted technique or technology into the host society and social structure.[1] A knowledge of the prevailing pattern in recent experience in the particular culture is important information

to be applied in the design of technical assistance and institution-building projects. When a society adopts skills, it must reward those of its own who have acquired the new skills. This is a point that project planners in technical assistance do not always keep in mind when designing projects—with the encouragement and agreement of the host government—which in some ways penalizes the host country nationals who are to be the counterpart personnel. They are penalized (or see themselves as penalized or threatened) by being yanked out of their normal occupational patterns or expected career tracks and joined, sometimes willy-nilly, to the dangerously new project and the institution to which it is to give rise. Motivation of counterpart personnel is a key factor in the success of any project. This is one of the advantages of skill importation. The imported skill-holder may serve for a while in a demonstration project, initially without immediately involving any host country personnel. After a decade or two, perhaps, after the demonstration has been successful, host society individuals may feel encouraged and motivated to start taking over by acquiring the requisite skills. (As we know, donor countries hesitate to commit themselves for such time spans.) In such situations imported skill-holders and their organizations may have to operate in a vacuum for some time.

Where the technique of "importing" is used, an institution may well come about, but it will be isolated from the mainstream of the importing society and will largely operate in a vacuum. Linkages will be very tenuous, if they exist at all. Probably the imported institution will have really only one line—upward to the particular personality (e.g., a cabinet minister) who caused the importation. It may operate in isolation from the local culture, unable to establish linkages, unable to transfer any skills, leading a precarious existence as a peculiar technological encrustation, endangered by any change in the political climate. The institution will rise and fall with its protector. It may appear splendidly successful for as long as he remains in power and continues to be interested in it. It may collapse if he loses power or becomes disinterested in its progress.

Where adoptions take place, the time frame for institution building is much greater. Initially, a period of adaptation is required precisely in order to make the new institution an adopted rather than an imported one. Adaptation itself in many ways creates the linkages required; or conversely, the linkages serve to hammer out the adaptations required.

Attitudes to the Foreign Adviser

Societies and cultures vary in their attitudes to the foreigner. Historical experience structures the manner in which the contemporary society reacts to the alien in its midst, assigns him roles and functions, tolerates

him and his ideas, is receptive to his efforts, and is motivated to accept what he may have to contribute. Few are the cultures in which xenophobia is rampant. In most societies xenophobia is present, but it is selective.

Attitudes towards the foreigner affect the alien adviser in many ways. For instance, on the personal side, societies vary in their tolerance to speakers of foreign languages. In some cultures a foreign language (be it the language of the alien or a third language used for transcultural communication) is more acceptable than in others. Cultures vary in the degree to which they tolerate the alien's speaking the indigenous language, albeit badly and with an accent: in some societies he is welcome, in others he is an object of ridicule, and his effectiveness is impaired when he tries to speak the local language. Cultures differ in their tolerance of aliens of different races or skin color. Recent or current political factors may make aliens from some countries more welcome than others.

To these variations in attitudes toward the individual alien must be added differences in attitudes to an adviser—any adviser, regardless of origin. In many cultures it is demeaning to accept advice, or at least to accept it overtly and manifestly. In such cultures, what we call advisers are acceptable only if their advice is funneled through complicated channels, or presented in complex indirect ways through which the origin of the advice is lost.

Combining the variations in reactions to aliens with the reactions to advisers, we get a feel for how complex the attitudinal variations to the foreign adviser are. Advisers in technical assistance, and would-be institution builders, must accommodate their techniques to the prejudices of the host culture.

Here is an area that has not been explored adequately, and it is a fertile ground for research. Conducting this research is a complicated process. Within any national culture there may be variations in each of the factors mentioned, and the very conduct of such research may be politically and culturally sensitive.

Where there is antagonism either to the alien—limiting his functions and roles within the society—or to the adviser—requiring him to be covert rather than overt—it may be desirable to go through a stage at which some techniques and technologies are first imported rather than adopted. In this manner, a demonstration period is created during which the foreigner is less an adviser than an operator of a demonstration institution, acting under observation. At this stage few linkages will be created, and the institution will be vulnerable. On the other hand, at this stage it may also be demonstrated what can be done, and a demand may be created by the host society. Then the adoption will take place after the necessary adaptations have been made, and real institution building can take place.

As observed in numerous ex-colonial countries (and of particular relevance to technical assistance and institution-building efforts), some host societies are reluctant to switch from techniques and technologies implanted by the former colonial power to newer ones, urged by alien advisers from neither the host society nor from the ex-colonial country. Americans often have observed, for example, that in a former British colony or possession it is difficult to convince anyone to make the transition from a 19th century British technology to a 20th century American or international one. It matters little in this context whether the particular 19th century British technology still survives in England; it may have been discarded long ago. What is significant is that, somehow, the first "modern" foreign technology seems to create a resistance to further modernization. In many current technical assistance efforts, the problem is not to create a "modern institution" in an indigenous matrix, but rather to replace institutions that are no longer modern (though they were never indigenous) with one that is more modern.

This, too, is a cultural barrier. How great is the loyalty to institutions imported or adopted during the colonial period? How receptive is the host society to replacing colonial traditions with non-indigenous, international, or alien ones?

Conclusion

The existence of a great many cultural variables affecting institution building does not weaken the concept of institution building. In the long run, and whatever the intermediary steps, institution building is obviously the most effective manner in which transfer of skills and technology can take place. However, when the theoretical formulations of institution building are applied, cultural variables that affect it in any given location must be considered. In the last analysis, institutions are collectives of people; and the characteristics, motivations, aspirations, and prejudices of these people are part of the environmental setting in which new institutions are built by foreign advisers in the less-developed countries.

(Utah, 71-8)

NOTES

1– See Abraham Hirsch, " 'Importing' and 'Adopting' Skills," *Human Organization* 24(Summer 1965):124-7.

Host Country Uniqueness

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In Nepal, the modern concept of institution building dates from the early 1950s. The introduction of this concept resulted from political change with the advent of democracy after one hundred years of isolation. Some of the new institutions were an independent judiciary—the public service commission and the planning commission.

It would be worthwhile to consider the setting of these new institutions. Although political change had occurred, the setting remained traditional. King Tribhuvan activated political change, and with the help of India set up a bureaucracy modeled on the Indian pattern. But there were few educated people in the country to run the bureaucracy. The educated were taken from the new institutions and placed in the administration of the bureaucracy. With so few people to handle institutional innovations, all institutions, political and otherwise, were soon in difficulty. Also the new innovations were simply borrowed from the west and transplanted without being adapted to Nepal, causing further problems. These unfamiliar institutional forms were hard for the people to manage.

In 1955, King Mahendra ascended the throne. He introduced a stable and more familiar form of government, the Panchayat System. This stability allowed for greater development efforts in other areas—educational, economical, and international. This effort was spurred on in the sixties by the presence (in government and other institutions) of young, trained personnel.

Nepali administration is now at a crossroads. There is dissatisfaction with the operations of the various institutions and an awareness of the need for change. This dissatisfaction is a positive sign, indicating that a number of people have acquired a knowledge of administration and institution-building theory. They can recognize the areas that need improvement and want to begin remedying them.

The roots of our present difficulties lie in the past. The advisers who came to help us did not have the proper perspective on Nepal. They did not consider the institutions that already existed. Modern administrative structures were established without considering whether they would be successful in such a society.

The maladies in our institutions must be remedied in such a way that the institutions become compatible with Nepali society. Simply copying other institutions or prescribing solutions that have been found helpful in other countries does not solve our problems.

(Nepal, 182-3)

Intra-cultural Conflict

Mohan Man Sainju
Center for Economic Development and Administration

As the experience of other developing countries indicates, the development phenomenon is a very complex one. It is not just a question of increased production, but of economic, political, and social change. After World War II, many former colonies became independent nations. These countries expected instant development. The countries had the manpower and were provided with skilled help and capital. But the results were frustrating, and development was slow.

The reason for failure seemed to be that skills and knowledge were imported directly from already developed countries. The techniques needed to be adapted, and they were not. The soft state characteristics and the social realities present in these countries were not considered. Institution building must be done within these environmental facts of life.

During this seminar there have been many provocative and scholarly doctrines presented—many concepts relevant to institution building. But there is doubt that we could really apply these concepts to our institutional development. This does not mean they are useless; only that Nepal has its own particular characteristics. Institution-building concepts must be made to fit Nepal and not vice versa.

To illustrate this problem we can look at the Panchayat Training Institutes. How far can the model be applied? We have to consider that Nepal has a very different environmental situation. One of the basic problems of the Panchayat Training Institutes is the clash of two classes of people in Nepal. One class is orientated to new modern values and the other to traditional ideas. These two orientations evoke constraints which prevent the establishment of the linkages the institutes need. How can we build institutions when we cannot communicate among ourselves?

In any developing country, development is a process of creative destruction. In other words, we have to try to destroy traditional schools of thought and organizations in the process of creating new organizations. In Nepal, we are trying to create new ways without removing existing structures. How we can resolve the basic problem of creative destruction, which is really the problem of development, remains to be seen.

(Nepal, 184-5)

Institution Building and Unbuilding

Sol H. Chafkin
American Technical Assistance Corporation

In one of the preceding papers, reference was made to a public administration institute which seemed to perform very well. Most of its one thousand graduates obtained jobs in the government; host country nationals took over the administration from foreign technical advisers; and the government assumed responsibility for financing the institute, presumably replacing foreign assistance. The question remains: What happened to the quality of public administration in the country. If a positive change in that quality occurred, was it attributable to the institute?

It is easy, in some respects, to satisfy the IB criteria for a successful institution, and yet have an inconsequential one. An inconsequential institution may not need much money. It tends to achieve certain kinds of linkages because it attracts support and provides jobs or otherwise dispenses power and money. Its innovations are non-controversial. Consequently, it might be worthwhile to consider injecting the cost-benefit concept into the institution-building theory. This focuses on the societal consequences and, in effect, defines the importance of the institution.

In my experience overseas and in the U.S., I have become aware of the number of institutions strewn around the landscape, partly as the result of stimulation by AID programs. They all exhibit one of the elemen s of the theory, namely, to preserve and foster the institution. Each institution should have built into it a self-destruct mechanism that goes into effect five to fifteen years after it starts. It is precisely because of the rapidly changing shape of the world and because of the commitment made by leadership, staff, and foreign technical assistance agencies to sustain the life of an institution that we now have fairly unresponsive institutions preserved, fostered, and protected.

Foreign assistance agencies are perhaps particularly guilty of this because of their commitment and investment: the thing *has* to work. I often wonder why it is that we have but one development bank in those countries. One reason may be that the financing agency would prefer not to have competition for the bank. The self-destruct mechanism idea is semi-facetious, but there are variants. The "five-year flush-out" invented for the Peace Corps requires that everyone must leave at the end of five years. It is an interesting pay-off: you destroy memory for

new blood. But the issue of why an institution exists and how long it can avoid being locked into a mold is very important.

For example, suppose there exists in country X an agricultural development corporation, an industrial development corporation, and a small business development corporation. If the projects which demand attention do not fall into any of these categories and no communication exists among these institutions, necessary change will not occur. If no self-destruct mechanism exists by which unresponsive institutions will be eliminated, the system will stagnate and chances of new institutions arising to handle crucial problems will be remote.

We may now be suffering from a glut in institution building that prevents us from most effectively serving the process of change. In order to meet the objective that Dr. Esman has set forth there is a need for some type of institution "unbuilding" to reduce the number of institutions.

(D.C., 26-8)

Part IV

Case Studies

CIDIAT

César Garcés
Inter-American Center for Integrated Land and Water Resource Development

The Inter-American Center for Integrated Land and Water Resource Development (CIDIAT), Project 213 of the Program of Technical Cooperation of the Organization of American States (OAS) is directed and administered by Utah State University. CIDIAT was established with the specific objective of providing training in the field of water and land development and administration, and of creating within a Latin American university the institutional capability of a self-sustained program without the continuous assistance of the original donor.

One is tempted to relate only the successes, but it might be better to relate the whole story and let you conclude what is successful and what is not. Please share your conclusions with us. We at CIDIAT welcome comments and suggestions that can be used for improving our program.

In presenting this case study, reference will be made to the processes undergone to form CIDIAT and later to the activities of CIDIAT in fulfilling its objectives in the area of land and water resource development and administration.

The technical cooperation activities of OAS are the result of twenty years of experience and constant evolution. Today, these activities have many components geared to fulfill diverse specific objectives within philosophy and strategy suited to such a regional international organization.

Institution building is not an end in itself nor is it the only objective of CIDIAT. Nevertheless, CIDIAT's philosophy and doctrine are oriented towards providing part of the training component of the institution-building process within the economic and social development policies of the OAS member-states in the field of land and water resource development and administration.

According to the guidelines of the Program of Technical Cooperation (PTC) of the OAS, technical assistance cannot be provided until the recipient country has identified its needs within the framework of a general development plan, specified the availability of its skills and know-how, and indicated additional requirements to be met by the requested technical assistance. In this sense, the OAS has gradually evolved a philosophy

acceptable to regional international organizations, respectful of the prerogatives of independent member-states, and with the operating procedures for meeting the economic and social development objectives of the region.

The system adopted is oriented not to the immediate optimization of technical assistance, but to the continuous growth of a development potential. As the countries acquire the experience necessary to use a technical assistance program, they will optimize the benefits. Technical assistance cannot be imposed and be successful.

In Latin America, the concern with technical assistance as a tool of development policy resulted from two well-known events: (1) the development of the United Nation's doctrine on development and international cooperation; and (2) the Point Four Program announced by President Truman in his inaugural speech in 1948, and the ensuing Act for International Development of 1950 that incorporated as a principle of U.S. foreign policy a committment "to assist the efforts of the peoples of the areas less economically developed, mobilize their resources, and improve their living conditions." President Truman described the "bold new program" as the task of "making available the benefits of our scientific knowledge and our individual progress for the improvement and development of the areas not sufficiently developed. . . . the material resources that we can make available to assist other peoples is limited, but our immense resources in technical knowledge grow constantly and are inexhaustible."

The U.S. program of technical assistance emphasizes the transfer of abilities, skills, and know-how. The concept of the transfer of technical knowledge replaces the previous theory of economic development based only on the transfer of physical capital as a means to reach an expected growth of the rate of savings/investment. Today there is no doubt that the transfer of skills and knowledge necessary for the self-sustained growth of developing economies is the principal objective of all programs of technical assistance, be it of a bilateral or multilateral source.

Three institutions were directly involved in the creation of CIDIAT: the Program of Technical Cooperation (PTC), Utah State University (USU), and the Universidad de Los Andes (ULA). A fourth institution, the government of Venezuela, representing the host country and directly financing about 40 percent of CIDIAT operating costs, has played a lesser role.

The initiative for Project 213 was clearly taken by PTC. In 1961, it requested authorization from the Inter-American Economic and Social Council (IA-ECOSOC) to launch the project:

> There is a fundamental need to develop the natural resources of water and land by means of an integral (comprehensive) utilization, particularly through the

development of hydroelectric power, provision of water for domestic and industrial consumption, irrigation of agricultural lands and river and other water navigation with the double objective of stimulating agricultural and industrial development of an area through the integrated utilization of the lands and waters of a region.

The project authorization called for establishing a center within a university of one of the member-states to carry out *training* activities at a post-graduate level, to promote exchange of technical information, and to improve existing operating institutions dealing with the development of land and water resources. In addition, the project would have a five-year duration and would be financed by contributions from OAS, the host government, and the host university.

Of the five countries approached to host the center, Venezuela showed the greatest interest and willingness to provide support. Venezuela is well situated from the standpoint of travel from South America and Central America. The recently completed underwater cable provides excellent telephone communication between Caracas and the offices of the OAS in Washington, D.C. Venezuela also has a wide range of climatic conditions. The country has many water projects that encompass a wide potential of educational experiences in planning, implementation, and operation. Field trips to such projects enhance the value of the courses taught at CIDIAT.

Merida was the site chosen for the center. The pattern of the center is similar to that of several centers previously established by PTC. The ULA noticed the availability of the project and appointed a committee of the Deans of the Schools of Engineering and Forestry and three professors to study the possibility of offering Venezuela's facilities and contributions to the OAS. In May 1962, the committee produced a report acknowledging the feasibility and advantages of the project and recommended that it be established in Merida. The report also contained a list of university staff that could collaborate with the center as well as a proposed budget for the first four years of operations.

The University Council declared that "the field of land and water resources study in Merida was an opportunity for the Universidad de Los Andes to expand activities, strengthen the academic staff, expand facilities, increase technical, scientific and cultural prestige, and as a consequence to make an important contribution to the social and economic development in the local region, the country, and in Latin America."

A delegation of ULA staff members participating in the Latin American Congress of Hydraulic Engineering in Chile in 1962 obtained from the Congress the recommendation of Merida as the seat of Project 213. At the same time, the PTC explored the possible interest of USU for the provision of technical support, guidance, and administration for Project

213. On 16 June 1964, the Secretary-General of the OAS and the authorized official of USU signed a contract which required that USU "provide the technical support, guidance, and administration in the organization and development of the center. . . . the purpose of such assistance will be to facilitate the establishment of a permanent educational institution at the University of Los Andes in land and water resources development."

In February 1965, an agreement was signed between the government of Venezuela and the Secretary-General of the OAS for the establishment of Project 213 of the PTC at a university in Venezuela. The Universidad de Los Andes ratified the agreement and assumed the obligations of the host university.

The agreement stated that the major objectives of CIDIAT were:

> To train through regular short and intensive courses, professionals and high level government officials; to develop their administrative capacity in order to increase the effectiveness of their present work in the adequate use of natural resources; to coordinate the operation of existing facilities and improve the maintenance and administration of land and water projects.
>
> To promote the interchange of technical information and ideas between professionals and administrators in this field.
>
> To improve existing institutions concerned with land and water development projects.

The agreement further stipulated that "the training program should be carried out by means of seminars, short courses, regular courses, and research related to training . . . and the Project will have a time limit of six years as of the 1st of January 1964."

To assure continuation of the aims of CIDIAT, the agreement provided that

> a year prior to the termination of the project, the two parties will initiate the arrangements for the definite transfer of the Project, and adds that once the Project has been transferred, the host university will continue the activities of the Center as a regular program of the University without the financial assistance of PTC.

The Government of Venezuela has stated that continuing the inter-American character of the center for several additional years will be beneficial to the country and that other institutions of higher learning in Venezuela should also become involved as recipients of the benefits of the project.

Continuation of the project is thus assured. In December 1969, the ULA created the Centro de Investigaciones para el Desarrollo Integral de Aguas y Tierras, referred to as CIDIAT Nacional. The center started operations in January 1970 with part of the Venezuelan staff of Project 213 and constituted a *regular program* of the Universidad according to the terms of the agreement.

Implementation of Project 213

With contract negotiations completed, USU faced the problem of how to develop a program that would provide the kind of training needed in Latin America. Answers were needed to the following questions: What should be taught at the center? How? And to whom?

When considered in depth, each question raises additional problems. Of prime importance is the identification of needs and their priorities. Could a general curriculum serve all countries when the development problems vary from country to country? Participants would have different backgrounds and training, adding further complexity to the problem. The criteria used in selecting participants would influence subject-matter requirements. Flexibility would have to be maintained in course content so that changes could be made to meet participant needs.

To provide answers to such questions, a series of conferences and seminars was organized at USU by the on-campus project coordinator. The first conferences involved deans and faculty of the university. Later conferences included two groups of consultants and a third group of selected leaders from Latin America. The consultant groups were composed of specialists in agronomy, geography, forestry, engineering, economics, water-resource development, sociology, and private business who had had previous experience in Latin American countries.

It is interesting to note that all consultant groups required time to solve semantic problems. Terms and concepts had to be defined in mutually acceptable language before members of each group could communicate well enough to focus on the specific questions under discussion. The language barrier was quite difficult to overcome for the seminar group from Latin America, despite the competence of simultaneous translators.

The seminar group raised many questions about the center. Why was it located in Venezuela instead of some other country? How could the center, with a limited number of scholarships, hope to train the number of professionals needed by all countries? Where would competent staff be obtained without raiding national organizations? How would students be selected to assure the training or people who would be of use to the country? How would countries individually profit from the center? How would the policies and programs of the center coincide with the real needs of each country? Such questions had to be resolved before the group could deal with specific recommendations.

Venezuela had received favorable attention from the OAS as a possible site for several reasons, some of which have already been discussed in this paper. Large expanses of low-lying *llanos* or plains areas flood during the wet season and dry out during the dry season. In

arid areas, nothing grows without irrigation. In mountainous regions of variable rainfall, *compesinos* eke out a meager living on small farms with and without irrigation. The many water projects being developed in Venezuela offer a wide range of possible educational experiences in planning, implementation, and operation.

Since only twenty-five scholarships were available for each CIDIAT international course, national training courses seemed essential to train large groups. It was recommended that a country request the center to prepare technicians and specialists to cope with its special national interests. Budget and staff limitations would automatically restrict the number of such courses that could be offered each year.

In discussing the selection of students, seminar participants pointed out that many full-time professional students supported themselves by obtaining scholarships to study abroad. They seldom remained in a country long enough to work and contribute to the common welfare. A careful screening of candidates and an endorsement by the organization for whom they work was suggested.

The discussion of staffing the center revealed the reluctance of development organizations to continually lose their better men to international agencies. The participants realized that CIDIAT had to be staffed, but they resented international groups whose adequate budgets make it virtually impossible for national agencies to compete in salary negotiations.

The participants stressed practical applications in the course work. It was suggested that seminar participants should select a committee to meet once each year and review the work of the center; but it was not feasible to immediately act upon this suggestion due to budgetary limitations. Finally, emphasis was given to maintaining close contact with national universities and involving them whenever possible in national training course programs.

Following the discussions, the seminar group proposed specific recommendations to guide CIDIAT. It was recommended that training be conducted at three levels:

(1) One- or two-week high-level seminars for persons in policymaking positions.

(2) Short courses lasting approximately two months for persons at the mid-management level with eight or more years of work experience.

(3) Courses of approximately six months' duration for professionals with two to eight years of experience working with land and water problems.

These three levels of training were considered sufficient to reach the people most important in land- and water-development programs. With discussion of development philosophy in all three groups, a basis for

communication would be established among individuals from each level in a given organization who attended the CIDIAT courses. The group emphasized the need for maintaining contact with the high-level group as a way to keep abreast of current problems and training needs.

It was also recommended that one- to four-week national training courses be given at a country's request. These courses would provide instruction in a subject area suggested by the country. Through this approach, greater numbers of students would receive specialized training oriented to national needs.

Perhaps the most arduous task assigned to the seminar participants was the consideration of the curriculum. Only a few participants came from educational institutions, and after much delibaration they approved most of the curriculum proposed by the USU consultant groups.

All of the courses are organized around a five-point outline general enough to be adapted to particular areas of interest, allowing individual professors to define the specific focus. Major points in the outline include: (1) an introduction to theory of economic growth, including social factors affecting use and development of resources, and concepts in interdisciplinary and systems approaches to resource planning; (2) collection and evaluation of resource data, including physical, economic, legal, institutional, and socio-anthropological data; (3) general principles of resource planning, considering social and political objectives, scope of development, constraints and limitations, preparation of alternative plans, cost allocation and financing, and priorities and scheduling of development; (4) logistics of project development, including finance, personnel, administration, procurement, property, and organization; and (5) project operation and maintenance.

Activities of CIDIAT

The center began operations in May 1965 at the ULA. The first program was held in July 1965. The ULA provided facilities, including office space, classrooms, and access to simultaneous-translation equipment. From its initiation to the end of June 1970, the Center held three High Level Seminars, six International Short Courses, four International Regular Courses, two Regional Courses, and twenty-four National Courses. Through June 1970, 1,044 persons participated in the training programs, representing all countries of the OAS except Barbados, which was only recently admitted to the Organization.

CIDIAT has been following the general outline of courses recommended at the first High Level Seminar. A short description of each course follows:

Two-month short course. The two-month short course is the basic program of CIDIAT, designed to give participants maximum learning

experiences in a minimum time. After a brief orientation, participants are introduced to principles of group dynamics to establish an atmosphere in which mutual trust, acceptance, and teamwork maximize the learning process.

Early in each course, participants are divided into groups and assigned an actual project as a case study. To save time, data are supplied by the staff, but a short field trip of three to five days allows participants to check data, collect additional data, and become familar with the project through contact with professionals in the field. The data are then used for a report or a feasibility evaluation prepared by each group.

The laboratory experiences are complemented by lectures and discussions on (a) philosophy of land and water development; (b) economic considerations at national, regional, and local levels and the mechanics of project formulation; and (c) techniques of data collection and analysis for meteorology and hydrology, soils, water-supply and irrigation-water requirements, crops and cropping patterns, urban and industrial water requirements, human resources and institutional problems, and benefit-cost ratio.

The case studies selected by the staff vary to assure diverse experiences. For example, in one course the case study emphasized a project for which very little data was available, presenting the problem of making decisions based on assumptions and scarce data. Another study involved a river basin that had a well-advanced urban and industrial area and new agricultural lands. Another project centered on the problem of colonization in a region where land and water was plentiful but where no infrastructure existed.

Two courses provided insights into the broad problem of development and helped to alert administrators about the need for considering alternatives. In addition to the technical problems, the human social factors have been emphasized; while the world has the tools, the understanding, and the experience to solve most technical problems, solutions to social problems continue to evade us. Thus, technical people —engineers, scientists, and administrators—need some training and background to assure their support of programs and research in socio-economic areas and to bolster their knowledge and acceptance of the advantages of an interdisciplinary approach to project development and management.

The six-month regular course. The six-month course is designed to increase technical skills rather than administrative competence. The participants tend to be younger and less experienced than those in the two-month course. The emphasis on mastery of academic material is greater, and classroom activity is more intense.

Some elements of the two-month course are utilized. The orientation and group dynamics are essentially the same. A case study is also used to foster a better understanding of all the factors that must be considered in land and water development. Keeping these aspects common to both courses sets the stage for better communication between management and technical personnel.

During the six-month course, the staff presents material on topics such as irrigation, drainage, soils, and crops. The academic work is at the level of a master's program. Participants in the third six-month course (completed in June 1969) who wanted to work towards a master's degree were given credit for the course by the ULA.

National training programs. National training programs vary each time they are offered, since requests for such programs come from different countries. A number of the courses dealt with irrigation and drainage problems. Another course considered the problems of operating and maintaining an irrigation district. Perhaps the most innovative national training program undertaken by CIDIAT involved a course in management and did not include any material of a technical nature.

Regional training courses. Some courses were organized on a regional basis. Nearby countries were invited to participate in what was originally intended as a national course. These courses emphasized host country problems but had more extensive potential applications.

High level seminars. The high level seminars for government and educational leaders from several member-states significantly contributed to the success of CIDIAT. They provided a clearing house for ideas, programs, and curricula. Discussions included concepts of development philosophy, management techniques, the process of project formulation, and individual country needs. Participants exchanged ideas and obtained feedback on their approach to development problems. Undoubtedly a close contact with the leaders of development organizations and educational institutions is necessary to CIDIAT's future.

Experimental courses. Evidence of the success of CIDIAT is the request for special programs from several sources. For example, the director of INCORA (Agrarian Land Reform Institute of Colombia) requested a program since he could send only one or two participants to the regular courses. Using techniques to build teamwork and to develop understanding of administrative purposes, CIDIAT sponsored a one-week course to help INCORA administrators with training in communication processes.

The experimental course was so well received that the director of INCORA requested additional courses for his staff and for other Colombian organizations. Within a year, Colombian agencies arranged for and

financed thirteen additional courses, including a two-month course in operation and maintenance of irrigation districts.

The irrigation district management course was originally planned as a national course but was broadened into a regional program including El Salvador, Honduras, Nicaragua, and Venezuela. The course provided training to project managers and prospective managers in the operation and management of irrigation districts. The Roldanillo Irrigation Project, the site of the course, provided real problems and actual field situations for classroom discussions and laboratory exercises.

The teaching staff included professionals from CIDIAT and INCORA, consultants from other Colombian agencies, and two specialists in operation and maintenance from the U.S. Bureau of Reclamation. Financed by U.S. AID/Colombia, the USBR men provided technical assistance to the project and filled teaching assignments.

One week of sensitivity and management training allowed course participants to look seriously at their own management techniques and operational procedures. The concepts of self-analysis and introspection helped participants achieve a new approach to management problems. The impact of the course was such that the Venezuelans requested a similar program for management and personnel of their irrigation districts; Ecuador also requested a national course in operation and maintenance. CIDIAT complied with both these requests as quickly as possible.

Other benefits from the Roldanillo course included INCORA's realization that the shortage of experienced, trained personnel to cope with the expansion of irrigation in Colombia was critical. Subsequent evaluation of personnel needs indicated that a minimum of 300 persons per year for the next five years must receive training and experience in various aspects of the operation and maintenance of irrigation districts. INCORA requested that CIDIAT establish a subcenter to help train its personnel. This has been done and Colombia now has a subcenter of CIDIAT called PADE (Program for Training, Demonstration and Research). The director of PADE is furnished by CIDIAT, with supporting staff from INCORA and from USU with AID financial support.

Courses and Instruction

Experience with all CIDIAT training shows that the teaching process must be oriented to the needs of professionals who are mature, responsible adults. Class schedules, therefore, provide ample opportunity to discuss and absorb class material. Large groups are subdivided to encourage additional discussion and exchange of ideas and experiences. The structure of each course is kept flexible to allow changes. In interdisciplinary training programs of short duration, it is admittedly difficult to provide students sufficient background in all areas of study related to

land and water development. CIDIAT courses are, therefore, designed to provide at least sufficient material in each discipline so that those not knowledgeable in that area can understand its importance and potential contributions to the development process.

For example, instruction in agronomy emphasizing the relationships between plants, soil, and water is provided to engineers who usually concern themselves with the physical features of the project. Emphasizing the fact that structures and distribution systems serve only to provide water to farmers for use in growing crops encourages engineers to consider the end use of development, not only the engineering aspects of the facilities to divert, store, and transport water. The economic aspects of water resource systems are presented to all participants so that alternative uses of money can be evaluated by decision-makers and appreciated at all levels. In addition, all courses include a case study that provides the participants with a realistic opportunity to test new concepts relative to project formulation.

Introductory courses in sociology provide engineers, agriculturalists, and economists with insights into social problems that must be solved before a project is successful. Often the social problems present the greatest challenge, especially when the people who will live with a project are never consulted about their part in the development process.

Scholarships and Admissions

CIDIAT awards twenty-five scholarships per course for each regular six-month course and for each two-month short course. The scholarship includes a travel allowance, a housing and living allowance at Merida, accident insurance, books, and classroom materials. It is customary for the home institution to continue the full salary for the individual during the course.

Brochures sent to selected agencies outline the next course to be offered and provide sufficient information to assist administrators in selecting applicants. Applications come mainly from government agencies and institutions, although private institutions and agencies receive consideration as well.

A committee of representatives from CIDIAT, the PTC, and USU reviews the applications and awards the scholarships. The committee attempts to match participants to the objective of the course in order to obtain as much group homogeneity as possible, minimizing unproductive conflicts within the group and fostering a better learning atmosphere.

To test the value of course content and the effectiveness of teaching procedures, the CIDIAT staff has adopted a system of student evaluation for national and international programs. Each lecture or contribution by

a staff member is evaluated by the participants. The material is rated with reference to the student's previous knowledge of it and according to its degree of helpfulness to him. The professor is rated on the effectiveness of his presentation. The results of the student course evaluations are used during the staff's planning conferences. Professors' ratings are used to stimulate the development of better methods and techniques in teaching. Participants have continually stressed in these evaluations the need for competent professors who can teach in Spanish, since simultaneous translation is often inadequate.

Conclusions, Evaluations, and Observations

The chain of events that led to the sponsoring of CIDIAT by PTC and the government of Venezuela indicates a logical and sound approach to international cooperation. The OAS is duty bound to promote social and economic development for its member nations; it depends on host countries to provide sites for its programs. Venezuela, by accepting the responsibilities of being host country, including the financial obligations, displayed its willingness to work with and support the OAS-PTC Program. It is possible that a host country could place undue pressures on such a center to give considerable attention to national problems. Thus far, this has not been a problem for CIDIAT. Both the government of Venezuela and the ULA have given CIDIAT every opportunity to develop and carry out its programs.

Undoubtedly, one factor in CIDIAT's success was that the Latin American countries themselves guaranteed the concept of the center. Although the overall need for resource development in relation to population growth presents a gloomy picture, any solution imposed from without would be resented. The plan to expedite the training of personnel in management of land and water resources was further enhanced by the knowledge that money was available to develop sound resource projects.

The early use of South American consultants to advise USU assured invaluable insights into the problems of South America and resulted in recommendations that focused the curriculum on real needs. The follow-up work by selected consultants provided CIDIAT with course material oriented to specific Latin American conditions. The first High Level Seminar deliberately brought together department heads, directors of agrarian land reform agencies, university professors, and others knowledgeable about their countries' problems. By continuing contact with these leaders, CIDIAT gained excellent sources of potential participants as well as some staff members.

The pattern of involving the Latin American leaders in planning the training program and of subsequently training members of their staffs

was designed to promote a vertical integration of thought and action within each country's land and water agencies. High level administrators were exposed to the same philosophy of development in much the same manner as individuals at mid-management and technical levels. This gave a basis for understanding when changes and innovations are suggested.

In a review of the program, it is obvious that the desire of the ULA to expand and become involved in international programs was important to CIDIAT's success. The university administrators saw the cooperative program with the OAS as an opportunity to expand its international activities and to provide additional services to its own country. They were fully aware that their staff would need training and that additional facilities would be needed on campus to support the program.

The project would have faltered and perhaps failed without adequate supporting and technical guidance during its formative stages. These have been the functions of USU.

One of the most significant reasons for the success of CIDIAT has been its dynamic nature. Personnel and programs have not been locked into an inflexible pattern. Participants in the 1967 seminar evaluated the program and recommended the changes summarized below, many of which have been implemented.

1. Combine periodic high level seminars. Orient the two-month course to directors of planning departments, project leaders, or directors. Review and modify or eliminate the regular course in favor of more national courses. Intensify national course training efforts and include sub-professional training. Carry out such courses through local universities.

2. Participate in research in water management, human social factors, economic factors, water pollution and quality control, and water rights and legislation.

3. Provide technical assistance in water resource development on an increasing scale to development organizations and to universities concerned with graduate and undergraduate training programs in water resources.

4. Compile and distribute (and publish if appropriate) data and research results pertinent to land and water development.

5. Continue CIDIAT's program on a permanent basis and assure finances for the center.

The doctrine of PTC seems a logical and sound approach to establishing specialized centers within a Latin American university. The centers can draw additional resources from the overall technical assistance program to help fulfill not only its limited objectives but also the country's development needs.

One danger is the tendency of the centers to expand activities beyond their objectives and staff limitations instead of coordinating their

programs with the additional component programs of the organization or the other multilateral or bilateral technical assistance programs.

The Future Role of CIDIAT

CIDIAT's role, while admittedly small in relation to the burgeoning need for training, has been sufficiently important to justify continuation and expansion. Under terms of the OAS-USU contract and the OAS-Government of Venezuela contract, CIDIAT must develop a permanent educational institution at the ULA. Approximately four to five years were necessary for a smooth transferral of responsibility and financing of Project 213 to the ULA. During this period (1970 through 1975), the international aspects of the present program at Merida necessarily assumed lesser importance, even though some international activity continued, especially in the national training courses.

A continuation and expansion of CIDIAT as a permanent organization has been proposed. The present commitments of CIDIAT would continue to be honored with such a center, and additional activities would be undertaken to further facilitate the development of land and water resources in Latin America.

A full-time coordinator from ULA is working with a committee of professors and CIDIAT personnel to develop plans for the permanent program in land and water resources at the Universidad de Los Andes. As these plans are approved and implemented, ULA will gradually assume full responsibilities for the program. Selected ULA staff members are involved with presenting CIDIAT courses; others are taking advanced training as preparation for the new university undertaking. The permanent program at ULA will consider strengthening undergraduate training, developing continuing educational programs at various levels, giving graduate training, conducting research programs, and providing some technical assistance to national and regional development organizations of Venezuela. Students from other countries will be welcome in the training programs.

The creation of a national training center in Colombia with CIDIAT assistance hopefully portends a trend. Countries actively involved in land and water development and agrarian land reform programs do not have the personnel to cope with many of the details. As a result, much of the work is contracted to private firms and international agencies. Local technical competence must be developed to operate such projects and provide continuity to the overall program. Much of the competence that is lacking can be provided by short course programs and on-the-job training. National centers can satisfy these needs on a continuing basis. Where possible, such centers should work in conjunction with local universities or educational centers. They should not try to usurp the

basic training offered by local universities; instead, they should augment the universities in areas of specific need and provide additional opportunities for professional improvement and growth. Each national center should be flexible enough to develop the courses needed by that country.

It is expected that CIDIAT will furnish technical guidance and support to the national centers during their formative stages. It will make professors available in special areas on a short-term basis. It will provide assistance to national universities interested in developing and improving programs in land and water resources. The ULA program will be considered as a national center and be entitled to receive continuing support from CIDIAT.

It is planned that CIDIAT's program of providing national training courses to countries upon request will continue, since not all countries will or can develop national training centers at the same time. CIDIAT will also continue to supply technical competence and will lead in demonstrating the applicability of technology to local problems of resource development.

The 1967 high level seminar recommended that CIDIAT involve itself in research, since a serious lack of data and information hampers the solution of development problems in Latin America. For instance, very little, if any, reliable information is available regarding the maximization of crop production under irrigation. Although drainage problems exist in every country, very little is known about solving them. Experience in designing effective subsurface drainage systems is practically nil, yet the success or failure of many projects involving irrigation depends on the associated drainage system.

CIDIAT will cooperate with universities and research organizations to identify and initiate research in strategic areas. Many graduates returning to their countries fail to develop research competence when left without some guidance and support. An international center could provide support and technical guidance to such persons. The proposed cooperative programs would train researchers in addition to generating data and information.

The need for technical assistance in land and water resource development will continue and will undoubtedly increase with time. CIDIAT has succeeded in the past with national courses that provided some technical assistance as well as training classes. If professors or consultants assigned to a national training course can be available one to three weeks in advance of the course, they can give technical assistance to the project and use the information obtained to illustrate lectures or laboratory exercises or in problem assignments. Thus, both the project and participants in the course benefit. Another benefit inherent in such a

program is that the staff members involved become acquainted with field problems and enhance their own abilities to provide service.

Another of the 1967 seminar's recommendations was to involve CIDIAT in a program of gathering available information pertinent to land and water development and sending it to each country. The need for such a program is self-evident. The emphasis on research should soon produce a continuing flow of data and information. This information should be collected and made available to interested agencies and people. Researchers and extension specialists should be encouraged to publish their work to increase the flow of data and information on Latin American problems.

In addition, there is a serious lack of up-to-date Spanish textbooks and teaching materials in the land and water field. Hopefully, CIDIAT will develop textbook materials for use by educational institutions and technical personnel. Another desirable development is a library connection with up-to-date sources in the U.S. and other countries. This material should be screened and made available in Spanish for use in Latin America.

A continuing CIDIAT program will require a change in orientation while capitalizing on past experience with, and acquired understanding of, Latin American problems. It should continue to support the program at Merida, Venezuela, but reduce its direct responsibilities as ULA assumes leadership. It should act as a catalyst in other Latin American countries to generate national training centers oriented to national needs. Ideally, the CIDIAT program of national and regional training courses will be continued at an accelerated rate in cooperation with local universities and development agencies. Local universities wishing to strengthen their undergraduate course work or to develop competence in graduate training for work in relevant fields should receive technical assistance, preferably in connection with the sponsoring of a national training course. CIDIAT personnel should instigate and cooperate in research and help identify problems needing study. In these ways CIDIAT can make an increasing and lasting contribution to the economic, the social, and perhaps even the political stability of Latin America.

CEDA

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Institute of Business Administration, Commerce and Public Administration, Tribhuvan University

Established just over two years ago, CEDA has been progressively cultivating strong linkages with the administration and general public. Any organization with innovative goals must face great difficultues before it can be institutionalized, for proposed changes in the existing patterns of administrative and social behavior are not always readily accepted. Within this context, CEDA as an institution will not be able to play its role unless it becomes an important national resource and contributes toward realizing the government's goals of economic and social development. In order to make such a contribution, CEDA must reassure itself that its goals relate to the national goals and that its programs are infused with greater breadth.

In the socio-cultural context of Nepal, CEDA occupies a doubly unique position. First, CEDA is the only institution in Nepal that offers training of a varied nature, especially at the policymaking level, to high-level government employees and officials of private enterprises. A cabinet decision to allot more responsibility for high-level training activities to CEDA is an indication of the government's faith in CEDA. Second, the fair degree of autonomy CEDA has established has helped it bring an impartial and objective policy analysis to various sectors of the government. Before going into the details of CEDA's performance as an institution, let us analyze CEDA as an institution with the help of the IB model.

Leadership is accepted as the single most critical element in institution building. The head of the institution may receive many tempting and lucrative job offers, but a leader dedicated to the program will continue to provide leadership amid the hardships and bitter experiences inside the institution. The leadership at CEDA is deeply committed to innovation. It seems to be both technically and politically competent (the term *politically* here indicates the capability to interact with the policymakers of the government), as the following discussion of linkages achieved and innovative goals fulfilled within two years will indicate. The leadership's success in gaining support from His Majesty's Government, The Ford Foundation, U.S. AID, and The German Development Institute (GDI) West Berlin testifies its competence. This success has resulted from the clear enunciation of CEDA's doctrine. It is an autonomous institution with definite commitments to high-level training for innovation, useful

consultancy, and research. Recognition of the competence of CEDA's leadership can also be judged by the publication of their articles on the critical problem areas of development both in the country and outside; their participation in national and international seminars and conferences both at home and abroad; and the appointment of one of the CEDA staff to a short term in the Investigation Centre at the Royal Palace.

There has always been a lack of manpower trained for planning, programming, and developing in a manner specific to the Nepalese environment. CEDA plans to help overcome this gap by providing such training. We hope to run high-level seminars for those who play a crucial role in the development process. The stated objectives are:

(a) to assist HMG in improving the planning management and administrative techniques;

(b) to assist Tribhuvan University in upgrading its curriculum;

(c) to assist the private sector in increasing its activities; and

(d) to provide consultation and conduct research.

CEDA plans to establish training facilities both in administration and business management. At a time when industry is just beginning to be an important sector in Nepal and management as a trained and scientific activity has not really been introduced, CEDA, by entering into the field of management, thus fulfills a highly felt need.

CEDA's training programs are not limited to the production of trainees. The process of training is viewed as a catalyst which will help pragmatize the university's academic system. While the major target of its three activities is management in government, CEDA believes that it must include private and public enterprise as much as possible in the scope of its efforts. As a result, CEDA views its role as a unique one in Nepal, a triangular bridge between government, university, and business—independent of all three, yet serving all three entities.

As far as resources are concerned, HMG provides the necessary funds for the continuing operation of CEDA. During its first year, the grant from HMG was supplemented by contract funds provided by the National Planning Commission, the Ministry of Commerce and Industry, and the Ministry of Public Works, Transport, and Communication to underwrite the Dhangadhi-Dandeldhura Road Survey, the Birgunj-Hetauda Industrial Survey, and the Transport Project Analysis Seminar-Cum-Workshop respectively. In the second fiscal year the government is underwriting the entire cost of the Centre's administrative and educational programs through a regular budget. Major research and consultancy programs, however, will continue to require outside funding. The government is underwriting one-fourth of the cost of the CEDA's building and one-fifth of the cost of furnishing and equipping it. The Ford Foundation

has supported the Centre by providing advisory services, funds on a fifty-fifty basis for construction of the CEDA building, architectural support, construction supervision, instructional services, study fellowships, equipment, library materials, and support for the case study program. One-fourth of the cost of the CEDA building, as well as half of the cost of furniture and equipment, is being provided by AID. UNDP has also provided architectural and technical advisers. The UN Asian Institute for Economic Development and Planning in Bangkok has similarly provided substantial instructional assistance, training, and advice. The Centre has also received important support in the form of travel grants, fellowships, and library materials from the governments of the USSR, Canada, Israel, GDI West Berlin, the British Council, and the Organization for Economic Co-operation and Development (OECD) in Paris.

CEDA is highly equipped as far as staff resources are concerned. CEDA has been successful in maintaining very strict recruiting standards and accepting only those outstanding in their fields of study.

Having considered objectives, let us briefly review what CEDA has already offered. The following conferences and seminars have already been organized.

1. Conference of Secretaries
2. Agricultural Planning in Underdeveloped Countries
3. Transport Project Analysis
4. Program Budgeting (two courses)
5. Industrial Estate Administration
6. Development Administration
7. Plan Implementation and Project Analysis
8. Law Seminar
9. Training Methodology Seminar
10. Financial Management Cum Workshop

A regular Public Administration Diploma program is also offered by CEDA in collaboration with Tribhuvan University. Realizing the need for Nepal-oriented teaching materials for use in its various courses, the Centre has also instituted a case study program. A Documentation Centre for the acquisition of published and unpublished materials on Nepal is to be established at CEDA. With the aim of having a specialized staff, a long-term staff development program has been drawn up, providing for overseas training with the cooperation of foreign universities and educational foundations.

The internal structure of CEDA is flexible, cohesive, and dynamic. Since there is a continual shortage of staff resulting from absences of members for further training and other various reasons, the internal structure must be mobile. The absence of any staff member is compensated for by giving added responsibility to other staff members and

bringing in compensatory short-term staff members.[1] Research, consultancy, and the Documentation Center are under a Chief Specialist. The training, diploma in public administration, and case study programs are under the deputy director. The executive director delegates overall authority to the various divisions. The policy coordination for CEDA's long- and short-term programs is achieved through committee meetings. To keep the CEDA staff involved in all its activities, regular staff meetings are held. The meetings are also used for assigning jobs and reviewing performance. These meetings help strengthen communication within the organization at all staff levels.

Enabling linkages. In accordance with a tri-partite agreement between HMG, Tribhuvan University, and the Ford Foundation, CEDA was established on 16 July 1969 to deal with the serious constraint on goal and problem definition and on desired program achievements due to lack of trained manpower. Directed by a seven-member board of governors, its primary purpose is to train personnel to support the nation's economic development planning, implementation, and administration.

Chairman (Ex-officio)	Dr. T.N. Upraity, Vice-Chancellor, Tribhuvan University
Vice Chairman (Ex-officio)	Mr. K.B. Malla, Chief Secretary and Head Administrative Management Department, HMG
Government appointees	Dr. B.B. Thapa, Secretary, Ministry of Finance
	Dr. B.P. Shrestha, Member, National Planning Commission
University appointees	Dr. Y.P. Pant, Governor, Nepal Rastra Bank
	Dr. K.P. Sharma, Head, Department of Economics, Tribhuvan University
Secretary (Ex-officio)	Pashupati S.J.B. Rana, Executive Director, CEDA

During the past two years these enabling linkages with the government, the Ford Foundation, and Tribhuvan University have been continuously strengthened. The cabinet decision to extend to CEDA the responsibility of training undersecretaries, and the agreement to shoulder CEDA's entire administrative cost are examples. CEDA's leadership has also been very effective in reaching an agreement with the Ford Foundation for financing the case study and research programs and consultancy, and with U.S. AID for the Documentation Centre. Through a series of interlocking linkages, CEDA has organized a number of seminars in cooperation with

the UN Asian Institute, Bangkok, and U.S. AID. Working relationships were recently established with the German Development Institute, the University of Pittsburg (U.S.), and EROPA, Manila.

Functional linkages. As mentioned above, seminar training has been provided to many high-level government officials and other intellectuals. That the level of officers attending the courses has steadily risen is a reflection of the increasing goodwill achieved by these courses and other CEDA activities. For the program budgeting course, fifty-six applications were filed; twenty-one had to be turned down in order to keep the number of participants at a manageable level. The growing interest among government personnel in participating in CEDA seminars indicates that the utility of services offered by CEDA is appreciated; and further support for this new institution can be anticipated. The acceptance of CEDA programs by the government, industrialists, employees of private enterprises, and lawyers indicates that the output from CEDA is welcomed in the environment. The participation of guest lecturers also indicates the strengthening of CEDA's functional linkages with the government and the public. High ranking government officials, Nepal-based foreigners, and other foreigners have lectured; and their participation has brought these visitors to CEDA and made them aware of its operation, location, and program.

Furthermore, the give and take between guest lecturers from HMG and the participants has provided the beginnings of highest level training. As a result of the intercommunication with government departments, CEDA can count on firm and highly cooperative links with all ministries and important corporations in Nepal.

Concerning the state of training facilities in Nepal at the time CEDA was started, *Narad* commented that

> one can come across with three potential administrative training facilities; long and short term training programs undertaken by the Administrative Management Department, The Centre for Economic Development and Administration and the Public Administration Program of Tribhuvan University. One has to accept the training as an essential requisite to develop administrative skill. However, these three potential training facilities have been in different directions making the man and material resources underutilized. It is high time for us to give a prudent thought to organizing an integrated and comprehensive training program and institution.[2]

Some months later, while inaugurating the third in-service training conducted by the Administrative Management Department, The Honorable Minister Giri Prasad Budathoki was already expressing the view "that Nepal cannot depend on foreign countries all the time for the training of her civil servants. Therefore His Majesty's Government is planning a comprehensive plan to provide training facilities to all levels of civil

servants within the country. On behalf of His Majesty's Government, CEDA is conducting a series of Training-Cum-Seminars for high level government officials."

By 28 October 1970, sixteen months after its initiation, the Cabinet designated CEDA as the training place for all higher level civil servants and allocated the job of training section officers and below to administrative management. Thus, within a short period, CEDA moved from a situation in which three agencies were functioning in the same activity without definition to a situation in which its role was not only clearly defined, but defined in such a way as to give it the most important function. The government's decision came at the same time as the university's decision to allocate the diploma course in public administration to CEDA. This, too, meant greater coordination and clarity of roles.

Normative linkages. Besides the content of the training programs, CEDA's normative linkages with other organizations and the public have been strengthened by a series of critical policy analyses presented by CEDA staff members in articles, speeches, and outside seminars. There is a dearth of well-informed evaluation of government policy. By entering this field, CEDA has won popularity among the general public. The role undertaken by CEDA has, we believe, been of great importance to Nepal. It is vital for all systems to produce alternative ideas to those of the establishment, and to test these ideas in the caldron of public opinion so that the establishment does not close itself to outside influences. We believe that CEDA is providing this for the three groups it has chosen to serve in Nepal. Until now, this type of policy analysis has had tremendous impact in bringing CEDA into the spotlight. For instance, the government's committee on Trade and Transit invited CEDA's director and deputy director to serve as consultants to it. This invitation followed a series of articles and speeches on the trade and transit problem by these members of CEDA's staff, a series which caused a great deal of stir in Nepal and India. Such policy analysis has increased intellectual curiosity in Nepal.

Also, the Morang Hydro-Electricity Co., for whom CEDA acts as a consultant jointly with NIDC, has provided the basis for the Board's determining a policy to set that industry on its feet. It is interesting that this company has started making profits this fiscal year for the first time in many years. An analysis of the Balaju Industrial Estate is also under way at CEDA.

Diffuse linkages. Press coverage of CEDA activities has been both extensive and positive; all the research projects and the training programs undertaken have met with praise from the press. CEDA's occasional Paper No. 1, "Trade and Transit: Nepal's Problem with her Southern Neigh-

bour," was welcomed by the intellectuals. At a time when the press expresses its dissatisfaction with cheap publicity, CEDA is said to "seriously tackle important questions in a spirit of pragmatism and general usefulness."[3] The press coverage also indicates that CEDA has received wide recognition as a real intellectual organization.

One of CEDA's main characteristics has been its autonomy, and the leadership jealously guards this. As a result, it is becoming increasingly clear to the government and the public that the survival of CEDA is linked with its autonomy. This has definitely helped CEDA make its independent standpoint felt, which has in turn increased its normative linkages. Having played a bold and dashing role as an innovative institution, CEDA has revealed its influence in a wider environment. This strengthens CEDA in such a way that the path toward becoming an established institution seems very clear for the years to come.

(Nepal, 79-86)

NOTES

1– A senior staff member in CEDA can, for instance, earn ten times his salary in the U.S. or in some international organization; whatever degree of loyalty or cohesiveness may exist generally cannot outweigh a ten times greater compensation elsewhere. This will be a continuing problem for CEDA.

2– *Narad* 1(3 May 1970).

3– *Rising Nepal* (13 September 1970).

Appendices

Appendix A- Institution-Building Terms and Concepts

CHANGE AGENT: One who deliberately works toward inducing change through creative thinking and innovations.

DIFFUSE LINKAGES: Relationships with individuals and groups who are not aggregated in formal organizations or collectivities but influence the standing of the innovative organization in its environment. An example might be the parents of present or prospective students in an educational institution or the "clients" of a tax collection agency.

Those relationships with generalized interest groups—such as farmers, bankers, students—which are not organized in recognizable, concrete entities. This linkage may be considered as the "public," as in "public relations."

The expression of what the institution stands for, what it hopes to achieve, and the styles of action it intends to use.

That combination of themes which can be and are manipulated by institutional leadership to enhance internal cohesion and unity and to make the institution more acceptable in the external environment. Encompassed in the combination are those values, standards, and philosophies which proclaim the identity and legitimacy of the institution, its goals and the means of attaining them, and its service and progress orientation.

Those organizations through which the society provides the institution with both the authority and the resources that enable it to function. These almost always include a legislature, either state or federal, and probably elements from the executive branch of government. Involved will be charters and regulations as well as appropriations, contracts, and grants.

Relationships with organizations that control the allocation of authority or resources.

DOCTRINE: The values, standards, philosophies, and mentalities that prevail in an organization. Doctrine is reflected in policies, programs, and operations of the organization.

These definitions were prepared for the Utah Conference based on the writings of Milton Esman, J.K. McDermott, R.W. Roskelley, and Bruce Anderson.

ENABLING LINKAGES: Those relationships which the university as an organization must build with other organizations and social groups controlling the power to allocate authority and resources which the organization must have to function.

FUNCTIONAL LINKAGES: Those relationships with other organizations which make use of the target organization's output in serving the society. These include agencies and organizations that hire graduates, that diffuse or use directly the new technology or products, and that send personnel to be trained by or seek counsel from the target organization. These also include other similar organizations with which cooperative programs are developed.

Relationships with organizations that supply needed inputs or which take outputs.

INNOVATIONS: New technologies, new patterns of behavior, or changes in relationships among individuals or groups.

INSTITUTION: A set of integrated and complementary ideas, concepts (intellectual blueprints) covering the broad areas of elemental and essential variables, and linkages which give direction to behavioral patterns designed to achieve the goals defined by society in such areas as education, family, economics, politics, and religion.

A new or remodeled organization which induces and protects innovations.

INSTITUTION BUILDING: The planning, structuring, and guidance of new or reconstituted organizations which (a) embody changes in values, functions, physical, and/or social technologies; (b) establish, foster, and protect new normative relationships and action patterns; and (c) obtain support and complementarity in the environment.

Planning and guiding organizations which induce and protect innovations, gain support, and thus become viable in their society.

INSTITUTIONALITY: The end-state of institution-building efforts characterized by the following conditions: (a) a viable organization has been established which incorporates innovations; (b) the organization and the innovations it represents have been accepted and taken up by relevant groups in the environment.

INTERNAL STRUCTURE: That organization of resources into formal and informal patterns of authority, division of responsibility among the different units of the organization, channels of communication, and means of resolving differences and formulating consensus on priorities, policies, and procedures.

The technical division of labor, distribution of authority, and the lines of communication within the institution through which decisions are taken and action is guided and controlled. (See *Variables.*)

How individuals inside the organization relate to each other, who has freedom to make decisions and take action, how decisions are made, who gets rewarded and by what criteria, and other items of this sort.

LEADERSHIP: Those persons occupying the functional positions of authority and responsibility at the several levels of a complex organization who are concerned with the internal organizational matters and the external environmental relationships expressed through linkages. These persons actively engage in structuring the organization, formulating policies and programs, cultivating resources, translating and manipulating doctrine, delegating authority, clearing channels of communication, managing all linkages of the organization, and implementing all of its activities.

The group who directs the institution's internal operations and manages its relations with the external environment.

The persons who actually participate in or influence the formulation of policy and program of the organization and its operation. This may include some persons not apparently a part of administration. This group becomes the effective management of the institution or organization. (See *Variables.*)

LINKAGES: Patterned relationships between the institution and other organizations and groups in the environment. These relationships comprise the exchange of resources, services, and support, and may involve various degrees of cooperation or competition.

The organization or institution must be tied into the society or environment. It must be an integral part of a larger mechanism which includes other similar parts, i.e., other institutional organizations. In the Pittsburgh concept, linkages refer to other institutions through which the target institution or organization is tied into the total society or economy. (See *Enabling, Functional, Normative, and Diffuse Linkages.*)

NORMATIVE LINKAGES: Those relationships with other organizations in the society which act as guardians of the society's values, norms, and standards. These include churches, political parties, and ideological groups.

Relationships with other organizations which share an overlapping interest in the objectives or the methods of the new institution. These may

be reinforcing or hostile. Thus, a family-planning institution may have a normative link with a church group which may be either supportive or hostile, and a school of public health may have normative linkages with the organized medical profession.

ORGANIZATION: A social unit having a complete stratified structure of positions that is systematically coordinated. It is goal-directed and task-oriented as enunciated by its doctrine. It is characterized by a hierarchy of positions and roles, the performance of which is socially regulated according to the goals and tasks undertaken.

A body of persons organized for a specific purpose.

PROGRAM: Those planned and organized actions that are related to the performance of functions and services, i.e., the production of the outputs of the institution (teaching, research, extension). Programs are designed to fulfill the goals of the organization as set forth in legal mandates or official doctrine, and are needed and demanded by the environment to be served.

The activities performed by the institution in producing and delivering outputs of goods or services.

Constituted by the output of the organization. This usually includes services, such as education or training, but it could be translated into numbers of students graduated, publications issued, new crop varieties developed and seed stock produced, or simply information on new technology. In some cases it would be an actual commodity, such as seed. (See *Variables.)*

RESOURCES: Those inputs of the institution that are converted into products and services and into increases in institutional capability. These include financial resources that can be used for construction of physical plant, equipment, facilities, and employment of personnel services, and also such intangibles as legal and political authority, individual and collective knowledge of staff members, and information about technologies and the external environment.

Includes the inputs into the organization. Just as program is what the organization *provides for* society (or the environment), resources are what the organization *receives from* the society to be used in producing the outputs. (See *Variables.*)

TRANSACTIONS: In the Pittsburgh conceptualization, linkage refers to another institution that has a relevant relationship with the target institution. The linkage concept does not refer to the actual interpersonal contacts and interactions that occur between and among individuals who

represent the groups. These contacts and interactions are included in a sub-category of concepts labeled *transactions.*

Transactions are the actual concepts which representatives of the institution have with representatives of the linkage institutions. In these contracts, goods and services or power and influence are exchanged. Transactions serve at least four functions:

(1) they strengthen or create bases of support for the institution and its program;

(2) they acquire resources for operation;

(3) they seek to bring changes in other organizations which enhance the chances of the institution in achieving its objectives; and

(4) they seek to transfer values and norms of the institution to institutions.

UNIVERSE, INSTITUTION-BUILDING: The institution in its environment has been designated the IB Complex or Universe, or as McDermott described it, the Host Country Complex. Different writers have prescribed minor differences, but the IB Universe is usually rendered schematically as follows:

Host Institution *Institutional Variables*		*Other Institutions* *Linkage Variables*
Leadership		Enabling Linkages
Doctrine		Functional Linkages
Program	Transactions	Normative Linkages
Resources		Diffuse Linkages
Internal Structure		

VARIABLES: The various ingredients or elements that identify each institution in varying degrees are referred to as *institution variables,* which are essentially concerned with the organization itself, and the *linkage variables,* which are mainly concerned with external relations.

The operational relationships of the model have been described as follows: "We see *leadership* as being the intervening variable between institutional variables and their environmental linkages. The function of *leadership* is to translate and manipulate *doctrine* to *normative linkages* which, in turn, activate *enabling linkages* to provide the *resources* with which *internal structure* is built and *programs* are provided for the *functional* and *diffuse linkages* thus building relationships in the environment which provide identity, legitimacy, and support for the institution."

(Utah)

Appendix B - Key Institution-Building Concepts

I. LEADERSHIP

A. *Internal Functional Characteristics*

1. *Competence*

Leadership of an institution should:

Have an understanding of the development of scientific facts bearing on all the phases of agriculture and industry.

Be capable of taking the critical and pivotal steps in organizing the institution; that is, defining the character of the work to be done by the institution.

Have a breadth of vision of the relationship between agriculture and the natural, mechanical, physical and social sciences, and economics and engineering which will enable them to map out programs to demonstrate the beneficial effects of practical knowledge.

2. *Commitment*

Leadership of an institution should:

Be enthusiastically committed to innovation as a means toward achieving recognized goals of the institution.

Have the dedication and foresight to lay a foundation broad enough to provide for the future needs of the institution and the public it serves.

3. *Style*

Leadership of an institution should:

Be capable of resisting pressure toward specificity in favor of flexibility in decision making.

Strive to achieve a balance between authoritarianism, democracy, and permissiveness in internal management which will best serve the purposes of the institution at the time.

4. *Tactics*

Leadership of an institution should:

Provide a free-flowing, two directional information system within the organization of the institutional staff.

Provide an opportunity for young professionals to actively participate in institutional policymaking

Provide an opportunity for young professionals to demonstrate, in productive use, their newly acquired knowledge.

5. *Continuity and Succession*

Leadership of an institution should:

Provide that leadership responsibilities, and thus leadership status and reward, be shared by all members of the leadership group.

Continually recruit for leadership positions in the institution those individuals recognized as the most progressive scientists.

Assume the responsibility and obligation to put into effect an explicit program for the selection, training, and placement of a new cadre of leadership.

B. *External Functional Characteristics*

1. *Linkage Management*

Leadership of an institution should:

Be articulate in voicing the goals of the institution, and the means by which they are to be achieved.

Be able to mobilize the natural, human, and service resources of the environment to the support of the institution.

Provide a free-flowing, two-directional information system with environmental linkages.

2. *Style*

Leadership of an institution should:

Develop a sensitive balance of aggressiveness and accommodation in its external relations in such a way as to achieve maximum cooperation and support from the environmental linkages.

Preserve the peculiar emphasis and point of view of the institution, that is, its unique "character."

3. *Tactics*

Leadership of an institution should:

Increase the prestige of the institution and if it is already extremely high, ensure maintenance of that prestige.

Manage programs so as to keep costs as low as possible through efficient use of time and space, reduction of duplication in courses, experiments, research, etc. to illustrate to environmental linkages the best use of resources.

4. *Doctrine Manipulation*

Leadership of an institution should:

Be capable of the elaboration, expression, and manipulation of doctrine so as to maximize environmental acceptance of the institution and its innovations.

II. DOCTRINE

A. *Internal Themes*

1. *Themes directed toward staff members*

The institution:

Should protect the faculty's right to academic freedom.

Should make sure that on all important issues (not just curriculum) the will of the full-time faculty shall prevail.

Should ensure that faculty and/or staff members have maximum opportunity to pursue their careers in a manner satisfactory by their own criteria.

2. *Themes directed toward students*

The institution:

Should provide a full round of student activities.

Should offer top quality in all programs offered to the student.

Should keep up to date and responsive to professional trends so as to prepare students for available positions upon completion of degree program.

B. *External Themes* (directed to the external environment)

1. *Identity Themes*

The institution:

Should provide a substantial education to men and women—general information and the discipline of the mind and character to make intelligent and useful citizens.

Should maintain an educational policy, in spirit as well as in form, which is consonant with the language of the legislative acts which defined the purposes of the institution.

Should devote itself to the special needs of the state, to discover its natural resources, and to train men to successfully develop those resources.

2. *Purpose Themes* (Goals)

The institution would see its purpose to:

Provide an education aimed at preparing men and women for the real work of the world.

Teach the application of science to the common purposes of life.

Work increasingly in behalf of the advancement of the state.

Educate to his utmost capacity every high school graduate who meets the basic legal requirements for admission.

3. *Program Themes* (Ways and Means)

The institution:

Should engage in research that is problem-oriented.

Should teach courses of study in which subject matter is related to the important problems in the basic sciences.

Should provide that new methods of presentation, stimulation, and examination are used in the classroom and laboratory.

Should provide programs to resolve the problems of the rural and industrial sector of the community and to communicate the solutions of the problems back to the community.

4. *Service Themes*

The institution:

Should provide special training for part-time adult students through extension courses, special short courses, correspondence courses, etc.

Should offer cultural leadership for the community through university-sponsored programs in the arts, public lectures by distinguished scholars, etc.

Should assist citizens directly through extension programs, consultation services, and by providing useful and needed facilities and services other than teaching and research.

5. *Progress Themes* (Change and Growth)

The institution:

Should be continually alert to the challenge to improve existing conditions.

Should work continually to maintain top quality in all programs in which it engages.

Should keep up-to-date and responsive to progress in scientific fields.

III. PROGRAMS

A. *Internal Programs*

1. *Teaching Programs*

The program of the institution should provide that:

The relationship between the teacher and the student be conducive to study, inquiry, and thoughtful scholarship.

Students learn to apply principles of scientific methods under actual farm, community, and industrial conditions.

Discussion group techniques be used within the classroom and time be allowed for groups to function as part of the instructional program.

Teachers schedule regular and frequent office hours when they are available to students who wish to discuss problems of mutual interest.

2. *Research Programs*

The program of the institution should provide that:

Research be problem-oriented with high priority being given to the most urgent problems of the region served.

Research staff shall have had a significant research experience as a major qualification for a position in research.

Experimental research be promptly completed, the data recorded, details and results or findings reduced, reported, published, and distributed to the farmers.

3. *Innovative Programs*

The program of the institution should provide that:

All departments, even those least concerned with agriculture and industry, be encouraged to develop programs of service to the rural and industrial communities.

Individual staff members be encouraged to develop "pay dirt" projects having a direct effect upon increasing productivity, creating wealth, and making contributions to the community in other ways.

4. *Evaluative Programs*

The program of the institution should provide that:

The courses or projects be evaluated from a practical, usable point of view.

The programs be evaluated in terms of the impact resulting from the information-dissemination processes.

5. *Service Programs*

The program of the institution should provide that:

The institution assume the responsibility of providing on-campus housing for students where necessary.

The institution offer medical care for minor health problems of students.

B. *External Programs*

1. *Extension Programs*

The program of the institution should provide that:

Teaching methods used be tailored to specific jobs to be done.

All teaching procedures be continuously evaluated and improvements made in light of the evaluation.

Adequate materials and support be given local leaders to deal with the growing complexity of problems it encounters.

Other agencies be given the opportunity to become fully familiar with extension personnel and programs.

2. *Service Programs*

The program of the institution should provide that:

The staff of the institution stimulate the development of adequate community or area organizations and provide guidance and assistance to such organizations.

Staff of the institution cooperate with local people, other public agencies, and lay organizations in community improvement and resource development.

The staff of the institution assist community groups in obtaining information and other assistance needed from organizations.

IV. RESOURCES

A. *Internal Resources*

The institution:

Should seek staff personnel with the precise skills, knowledge, and program commitments that effective performance requires for an innovative organization.

Must recruit and retain different kinds of personnel as the institution changes and matures.

In order to expect real performance, must provide the necessary resources for the educational task including physical plant, land, apparatus, and a library.

Should seek to acquire the best trained and most knowledgeable scholars and scientists for staff positions.

B. *External Resources*

The institution:

Should guarantee the financial support of federal and state

legislative bodies by fulfilling its legislative mandates with industry and integrity.

Should mobilize the natural, human, and service resources of the state by giving the degree and kind of service that will enhance the community as well as the institution.

Should meet with industry and integrity the conditions under which government grants are made.

Should continually seek new resources and should maintain present financial resources by continually developing the capacity for service of the institution and its staff.

V. INTERNAL STRUCTURE

A. *Design of Organization*

The internal structure of the institution should provide that:

The governing body of the institution organize itself into a working group for the division of responsibility and tasks.

The governing body of the institution establish positions in the organization and define their relationship to one another.

The departments be complete in themselves and autonomous in their operations and programs.

B. *Delegation of Authority*

The internal structure of the institution should provide that:

Department heads, and through them the staff members, be placed in charge of, and made responsible for, all work of their respective departments.

Committees of faculty members be assigned to study and make recommendations concerning questions of importance relating to the educational work and policies of the institution.

C. *Division of Labor*

The internal structure of the institution should provide that:

Patterns for the division of labor be practiced at all levels and among all staff personnel.

Each staff member have a clear and definite understanding of the nature and extent of his task obligations.

D. *Staff Orientation*

The internal structure of the institution should provide that:

The teaching staff all be specialists in their lines—men and women whose interest extends beyond the mere consideration of salary to the important question of professional success.

The ambitions of teachers be to accomplish all that is possible for the individual students under their charge, as well as to succeed in the field of research and of investigation.

The internal administrative attitudes and relationships reflect its dedication to the production of useful people and useful information.

E. *Staff Requirements*

The internal structure of the institution should provide that:

The administration understand and accept its role as that of facilitating productivity of the staff members.

Staff members participate in the development of the policies and programs of the institution and of their respective departments.

Staff members be obligated to participate in the development of the budget for their respective departments.

F. *Staff Development*

The internal structure of the institution should provide that:

Very excellent teachers and/or research workers receive a salary equal to or greater in amount than that of administrators.

Administration provide stimulation for professional improvement on the part of the staff.

Staff members participate in the selection of staff members for their respective departments.

Staff members be encouraged to exercise initiative in securing opportunities to participate in professional improvement activities.

Order and discipline be exercised in order that institution's work may proceed effectively.

Should meet with industry and integrity the conditions under which government grants are made.

Should continually seek new resources and should maintain present financial resources by continually developing the capacity for service of the institution and its staff.

G. *Staff Evaluation*

The internal structure of the institution should provide that:

Teachers be evaluated according to their ability to stimulate intellectual curiosity and the quest for new and more knowledge on the part of the student.

Teachers and other staff not be shown partiality or preference because of race, religion, or political affiliation.

Staff members not feel that exercising their own initiatives will jeopardize their positions.

H. *Performance Rewards*

The internal structure of the institution should provide for:

The institution issuing a firm and explicit policy statement regarding its principles and practices of staff advancement.

Conditions under which staff members qualify for "merit promotions" being well defined.

The possibility for junior staff members to advance in rank within their departments strictly on a merit basis.

Staff members being rewarded directly for excellent performance.

VI. LINKAGE VARIABLES

A. *Enabling Linkages*

The institution should sense its responsibility to develop enabling linkages by:

Identifying with well established themes, symbols, and slogans so that the institution can maintain maximum legitimacy.

Seeking through proper channels the financial support from legislative bodies granted by legislative acts.

Seeking information and support from the national congress and the state legislature when they are in session to represent the interests of the institution.

Sending a representative to the national congress and the state legislature when they are in session to represent the interests of the institution.

Inviting the legislative assembly to visit the university, giving the grand tour and treating them royally.

Making effective use of the mass media—press, radio, television—to advertise the institution, and gain interest and support of public.

B. *Normative Linkages*

The institution should sense its responsibility to develop normative linkages by:

Inviting prominent church and civic leaders, elected officials, and successful businessmen to be platform guests and speakers at the official occasions of the university.

Accepting community standards of morals as a criteria for behavior and upholding these standards in institutional regulations.

Assuming the duty to look after the intellectual and emotional welfare of the students.

C. *Functional Linkages*

The institution should sense its responsibility to develop functional linkages by:

Maintaining genial relations with city and county officials.

Graciously accepting the very real material commitment of property and water offered by local community.

Allowing and encouraging staff members to attend and participate in professional organizations' meetings.

Maintaining an open forum for discussion of problems relating to the community.

Conducting all business legally and using courts and other legal means of settling disputes when necessary.

Bringing acknowledged scholars and scientists to the university as visiting lecturers for students, faculty, and interested townspeople.

Encouraging staff members to visit different parts of the state to speak in the interest of the institution.

Cooperating with businessmen of the community in advertising the community and the institution in a brochure.

Conducting a survey of schools in the state to determine future enrollments.

Contacting individual teachers at high schools, etc. to identify possible college students.

Sending an explanatory pamphlet and a catalogue of courses offered to possible students of institution.

Cooperating with the local Chamber of Commerce in matters that affect the institution.

Soliciting and accepting material and financial gifts from individuals, businesses, or industries.

Cooperating with federal, state, and community agencies in community welfare.

Utilizing the mass media (radio, press, and television) in publicizing the activities of institutional staff.

D. *Diffuse Linkages*

The institution should sense its responsibility to develop diffuse linkages by:

Maintaining a thorough, non-sectarian, non-partisan character in the administration of the institution.

Advertising the institution as a people's university in the newspapers of the state.

Acquainting the public with the activities of the institutional staff by offering speakers for civic, educational, and cultural groups.

Advertising the institution by sending exhibits of the products of its programs to country, state, and world fairs.

(Utah, Appendix B)

NOTES

1– Dr. R.W. Roskelley of Utah State University assisted by Mrs. Lila L. Garr developed a conceptual elaboration of the IB model. In cooperation with several graduate students they examined the historical record of a land grant university in terms of its components. The statements used to flesh out the outline were paraphrased by Roskelley and his co-workers from official records, board minutes, speeches, newspaper accounts, etc., and were chosen to demonstrate the basic concepts that served as guidelines in giving direction to what and how things were done during the formative years of the university. Modern scholars can observe, in retrospect, how the institution builders anticipated IB theory, and how they might have been more effective.

Readings

Blase, Melvin G. *Institution Building: A Source Book.* Washington, D.C.: U.S. Department of State, Agency for International Development, 1973.

The volume is a valuable compendium of publications on the institution-building perspective and includes a section defining key concepts. Available from PASITAM.

Caiden, Naomi, and Wildavsky, Aaron. *Planning and Budgeting in Poor Countries.* New York: John Wiley and Sons, 1974.

A vivid description of how multi-sector development planning *really* works; how it is related to budgeting; and how planning activities and budgetary processes might be strengthened.

Eaton, Joseph W., ed. *Institution Building and Development.* Beverly Hills, Calif.: Sage Publications, 1972.

A significant collection of essays on the institution-building model in development administration. The essays specifically address the concept of institution building and its methodological and empirical concerns.

Hirschman, Albert O. *Development Projects Observed.* Washington, D.C.: The Brookings Institution, 1967.

An excellent analytic and empirical treatment of the uncertainties of the context of development projects, by one of the most astute development economists.

Inayatullah. *Management Training for Development: The Asian Experience.* Kuala Lumpur, Malaysia: The Asian Centre for Development Administration, 1975.

An engrossing set of essays on the development, organization, and relative effectiveness of Asian training and research institutions working in public administration. Includes both Asian and American viewpoints.

Moravcsik, Michael J. *Science Development.* Bloomington, Ind.: PASITAM, 1975 ($6.00)

Perhaps the first book on the subject, though the literature on science development has become quite extensive. A valuable feature is the list of 500 publications on various aspects of science development, many of them summarized in the text. Available from PASITAM.

Pressmen, Jeffrey L., and Wildavsky, Aaron B. *Implementation.* Berkeley: University of California Press, 1973.

A harrowing account of the U.S. Economic Development Administration's efforts to design and implement self-help projects on Oakland, California, the lessons of which apply to any development project. Should be of particular interest to those involved in implementing a project after its planning stages.

Swanson, Burton G. *Organizing Agricultural Technology Transfer: The Effects of Alternative Arrangements.* Bloomington, Indiana: PASITAM, 1975. ($3.00)

An enlightening study of the effects of alternative training arrangements on the job orientation and performance of agricultural officers trained in overseas institutions. Drawing upon interviews with IRRI and CIMMYT participants, Swanson shows how the training experience shapes later conduct in the institutions to which trainees return. Available from PASITAM.

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