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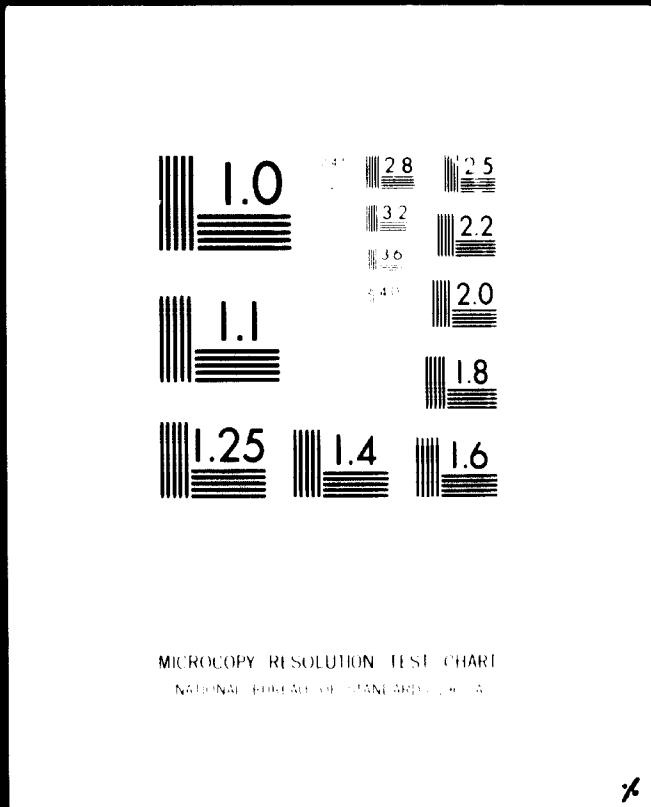
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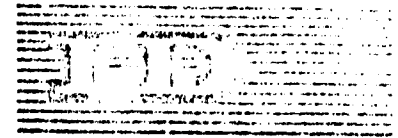
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02124



Distr.
LIMITED

ID/WG.280/12
11 June 1979

ENGLISH

United Nations Industrial Development Organization

Expert Group Meeting on Institutional Infrastructure
for Industrial Development in the Least Developed
African Countries

Arusha, Tanzania, 13 - 18 November 1978



**VIABLE INSTITUTIONAL DELIVERY MECHANISMS FOR INDUSTRIAL DEVELOPMENT:
AN IMPLEMENTATION PERSPECTIVE***

by

M.D. Ing'ra**

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** In co-operation with the staff of Practical Concepts Incorporated (PCI), Washington, D.C.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
SECTION ONE: <u>THE CHARACTERISTICS OF "VIABLE" INSTI- TUTIONS</u>	3
A. Essential Elements of Organization Viability	6
B. The Institutional Viability Model and Esman's Institutional "End-State" Conditions	8
C. The Measurement of Viability in Industrial Institutions	10
SECTION TWO: <u>SERVICE DELIVERY PROCESSES AND INSTI- TUTIONAL VIABILITY</u>	15
A. Institutional Services: The Implementation Cycle	15
B. Service Delivery Impediments and Their Causes: The "Leaky-Pipe" Model	18
SECTION THREE: <u>CONCLUSIONS AND RECOMMENDATIONS</u>	23
REFERENCES	

INTRODUCTION

A resurgence of interest in "industrialization" is underway throughout the development community. The process of industrial development is one of several complementary strategies available whereby basic human needs can be satisfied, development benefits can be more equitably distributed, and greater self-reliance can be promoted. The setting and orientation of industrial development in the 1970's has several new dimensions. Whereas industry was quite limited in the less developed countries in the 1950's, by now a substantial number of private and public enterprises, supported by a broad range of service institutions, exist in most developing areas. This change has been accompanied by a fundamental redirection in national development policies. Disillusioned with "trickle-down" economic development theories primarily based on urban centered industrialization strategies, many countries are taking a multi-sector approach to industrial development--one that emphasizes small-scale non-farm enterprises, rural and urban linkages, and appropriate use of local resources.

In carrying out their new industrial development policies, governments depend upon numerous support services, commonly referred to as the "industrial infrastructure." This infrastructure has three dimensions--physical, socio-economic, and institutional. (Barber, 1977) The institutional infrastructure--encompassing industrial development banks, credit institutions, industrial extension agencies, management training institutes, research centers, central banks, and planning agencies--plays a pivotal role in establishing and maintaining industry. Given its importance, this paper analyzes the process by which industrial institutions succeed and fail in providing appropriate support services to industries. More specifically, it examines the salient characteristics of "viable" or successful industrial institutions and explores the service

delivery related factors which contribute to, or detract from, institutional viability. The discussion is tailored to the specific conditions and needs of least developed African countries.

We expect readers to find the paper useful in several ways:

- In Section I an operational definition of institutional "viability", relevant to industrial service institutions, is introduced. Grounded in "Institution Building" concepts and experience (Esman, 1969; Eaton, 1972; Blase, 1973), measurable indicators of viability are presented. These indicators are applicable to a wide range of industrial and non-industrial institutions.
- In Section II a practical approach is introduced for analyzing service delivery implementation in industrial institutions. This approach is useful in identifying factors which support and detract from the appropriate and timely delivery of industrial services. Fundamental causes of implementation impediments are clarified with this approach.
- In the final section, the paper presents conclusions and recommendations for improving service delivery by industrial institutions. The recommendations are modest--they assume that incremental changes can be made if they are suitable and feasible within the environment of the least-developed countries. The recommendations are applicable to countries or institutions which are firmly committed to broad-based industrial development.

SECTION I: THE CHARACTERISTICS OF "VIALE" INDUSTRIAL INSTITUTIONS

At present most African countries do not have a rational and uniform institutional infrastructure for industry. Industrial institutions include a variety of organizations and bodies--large and small, urban and rural, public and private. The diversity of these institutions poses many analytic difficulties. Thus, we suggest a process-oriented approach which focuses on institutional "viability" and the factors which contribute to it. That is, we favor an approach which is oriented toward the establishment of "viable institutions", e.g., those institutions that demonstrate a continuous ability to support industry in such a way that national development objectives are accomplished.

The concept of viable or successful institutions has as its foundation the extensive literature and experience on "Institution Building". (Blase, 1973) What we refer to as a viable institution is what has been called the "end states of the institution-building process--the directions toward which ventures should be moving." (Esman, 1969) As Esman conceived it, the criteria for these "end-state" viable institutions would be specific for each activity, but in general have the following attributes:

- (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 -- for example 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 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 on-going activities of other organizations.

Esman and his followers have addressed themselves, primarily, to the process of putting in place the conditions required to "create" an institution. Esman's model of the institution building universe defines a series of "conditions precedent" for an institution and, in addition, places the institution in its environmental context:

"In the guiding concepts there are two groups of variables or factors that are considered important to understanding and guiding institution building activity. These are the "institution variables", which are essentially concerned with the organization itself, and the "linkage variables", which are mainly concerned with external relations." (Esman, 1969)

The empirical question of whether "viable" institutions had in fact been created by the building process was given only cursory treatment in the literature. The preliminary ideas advanced by Esman were not refined, or presented in terms which allowed a practical test of their utility.

Several years ago, Practical Concepts Incorporated (PCI) became interested in measuring and evaluating organizational performance in less developed country contexts. Drawing on the Institution Building experience, PCI undertook a research effort to refine Esman's "end-state" institution concepts in the form of an Institutional Viability Model (PCI, 1974). This model, which is explained and adapted to industrial institutions below, focuses on the development of "viability" indicators, and a practical measurement approach.

In the Institutional Viability Model, institution is defined as a significant practice, relationship, organization in a society or culture; an established organization or corporation. And it defines viable as capable of living, capable of growing or developing, capable or working, functioning, or developing adequately, capable of existence or development as an independent unit as when a colony becomes a state. The definition for viability gives meaning for the term established organization in the definition of an institution, i.e., an institution or organization capable of existence and development as an independent unit. In developing this model, PCI's first step was to define the characteristics that made an organization viable and then define ways of measuring organizational viability.

This model of measuring organizational viability differs from traditional measures of organizational performance by focusing not only on the effectiveness and efficiency of the organization, but also its ability to continue to produce in an effective and efficient manner in a new situation, that is, to continue to develop as a functioning unit. In measuring effectiveness (the actual production of power to produce an effect) and efficiency (productivity without waste), we are properly measuring end-states which tell us that organization X is or is not fulfilling its mission. Viability goes beyond an assessment of

effectiveness and efficiency in the near term to deal more directly with the organization's ability to continue to produce without waste in new situations, assessing integrated effectiveness--total effect-- over the life of an organization.

A. Essential Elements of Organization Viability

After extensive analytical effort, the following three properties were determined to be essential to an organization.

- Image: The cognitive dimension of what people think about an organization: knowledge, on the part of those internal as well as external to the organization, as to what the organization is and does, and why it exists;
- Connotation: The affective dimension of attitudes held about an organization: the assessment of where those internal and external to the organization place the organization's image in their structure of personal beliefs and priorities;
- Purchasables: Money and the things that have been or can be bought or purchased.

An immediate value of these definitions as a working hypothesis is that it points up a possible fallacy in much of our thinking about organizations per se. We typically concern ourselves primarily with the tangibles--money and the things that money can buy. However, the proposed definitions suggest that money considers only one--and possibly the least important--of three dimensions of concern.

1. Image (I)

Image is the identification of what the organization is, what it does, and why it does it. It has two distinct components--doctrine and program.

Doctrine is the general statement of organizational mission--its ethos, constraints, etc.--and is basically unchanging over the life of an organization. Doctrine is easily understandable when we speak of the doctrine of a local bank or management training center. In operational terms, doctrine limits what a training center will do in order to survive when it has been demonstrated that none of the programs that are currently anticipated will in fact result in viability.

The second component of image is program--the things that the organization actually does to sustain itself. Program is changeable and can be varied within limits fixed by doctrine. Thus, one bank may service urban industries, while another may be "full service" in both urban and rural areas--where the programs may be similar but the need to relate to the environment makes certain types of adaptation more desirable.

2. Connotation (C)

If image shows perceptions or awareness of the organization's program and doctrines, then connotation shows how the program and doctrine is valued. Internal to the organization, connotation equates quite well with the conventional use of the term morale. However, "connotation" is a more significant concept than morale because (a) of the distinction between the doctrinal and program components of image, and (b) connotation is concerned with views of those external to the organization as well as internal.

3. Purchasables (P)

Purchasables equate to financial and monetary concepts, which need little description here. Note, however, that people's time can be bought with money and can be valued or costed, along with such other tangibles as physical plant, training materials, etc. However,

productivity, or the amount of human energy expended to advance the organization's mission and consistent with the organization's image is a function of connotation and purchasables--with the former being far the more significant factor. There is clearly a convertibility in the three elemental dimensions of the organization viability model. Purchasables can be used to create or change image, connotation can and must be converted to purchasables, etc.

An organization that has image, connotation, and purchasables exists. The state of being that ensures preservation of these essential properties is what we call viability. Thus, to the extent that an industrial institution can guarantee continuation if its image, positive connotation, and replenishment of its purchasables, it will continue to exist, or meet our general definition of viability. The issue then in assessing viability is the extent to which the organization will continue to regenerate I, C, and P given the probable future of its environment.

B. The Institutional Viability Model and Esman's Institutional "End-State" Conditions

To what degree does the Institutional Viability model subsume the current unmeasurable end-state conditions identified by Esman? The interrelationships are explained below:

● Technical Capacity and Institutional Viability

Esman defined technical capacity as organizational ability to deliver services at an increasing level of competence.

This concept of technical capacity contained two dimensions: ability to provide services and increasing competence. With in our model the first of these dimensions is treated in "converted" form. The ability to provide services is determined by the actual response of clients to those goods and services. If technical capacity is such that client needs are met, then that capacity is contextually adequate. If client needs are better met as the organization ages, then competence is increasing. Both of these factors are discoverable as increases in, and trends for, external Connotation and Image.

- Normative Commitment and Institutional Viability

Esman defined normative commitment as the extent to which ideas, relationships and practices for which the organization stands have been internalized by the staff. Normative commitment is, in our model, Internal Connotation.

- Innovative Thrust and Institutional Viability

Innovative thrust was defined by Esman as the ability of the organization to continue to learn and adapt. The ability of an organization to learn and adapt covered in "Innovative Thrust" is not treated directly in our model. However, the ability to effectively serve diverse populations, or provide a diversity of service, is both a result of "innovative thrust" and a natural fall-out from the Image and Connotation measurements. An organization that does only what is "pre-programmed" to do will not be expanding its client base (Image consensus spreads beyond clients), nor be associated with diverse programs (Image includes diverse programs), nor will it be valued by a diversity of target groups (Connotation high for target and non-target populations). Our analysis agrees with Esman's in perceiving the ability to innovate--adapt to environmental change in "unprogramed" ways--as a key factor in viability and probably the best single measure of viability. We suggest further than "innovation quality" is the net increase in I, C, and P.

- Environmental Image and Institutional Viability

Environmental Image was defined as the extent to which the organization is valued or favorably regarded in the society. Environmental Image, as defined by Esman, thus addresses two viability indicators--(External) Image and (External) Connotation. Esman's use of the term "image" corresponds more directly with External Connotation. Esman does not seem to deal with what we call External Image. We feel that our distinction between "image" and connotation provides much greater diagnostic power.

- Spread Effect and Institutional Viability

Spread Effect was defined as whether the technologies, norms and patterns which the organization stands for have been adopted by other organizations. Spread effect is dealt with as the increase in Image over non-target populations, complements, etc. The viability model thus addresses the earliest stage of innovation "spread"--the knowledge of the innovation (image). The model also addresses the intermediate stage of "spread" effect--attitude regarding the innovation (connotation).

C. The Measurement of Viability in Industrial Institutions

A balance sheet approach can be used to measure the viability of industrial institutions. This approach assesses the net value of the organization in terms of the three dimensions of Image (I), Connotation (C), and Purchasables (P). In this section we specify the balance sheet measurement approach. The first step in the specification of that approach is the identification of the model's measurement emphasis.

1. Image

In measuring Image in a viability assessment the emphasis is on image consensus: the extent to which the members of an organization

similarly perceive themselves, and are perceived. The emphasis on image consensus means that organizational image is higher when: more people or industries believe that same things about a support institution; the same people or industries believe more things about a support institution; or the same people or industries believe the same things with more certainty.

If there is a high image consensus, then the organization will tend to "become" or "live up to" its image and we have a positive factor for viability. On the other hand, low image consensus, or an undesirable image, argues against viability. An undesirable image is one that does not include effectiveness or is inconsistent with development goals. Two different industrial examples of undesirable images are: (1) A training center thought of as a place that only the unsuccessful managers attend; and (2) A banking organization that has profit as its only goal.

2. Connotation

In measuring connotation the emphasis is on assessing morale as potential energy. Are those internal to the organization willing to work hard for the organization--do they associate achievement of their personal goals with organizational success? Are those external to the organization willing to expend their energy to avail themselves of the organization's services because they value what the organization is and does? In selecting an emphasis on connotation as potential energy for measurement purposes, we expect the connotation of an organization to increase when: (1) An organization's image changes to match people's needs, desires, and preferences; and (2) people's needs, desires, and preferences change and match an organization's image. Thus changes that reduce connotation, or a lack of change, are signals indicating that connotation is not being replenished in the manner required for viability.

3. Purchasables

In measuring the purchasables dimension of an organization we are concerned, from a viability standpoint, with endurance--the length of time the organization could exist without new money, income, or subsidy from external sources.^{1/}

The second major step in measuring institutional viability is to lay out the key elements of a viability assessment using a "Balance Sheet" approach. This approach includes a Balance Sheet and a Viability Status Report based on the results of the analysis. Both are described below:

- The Viability Balance Sheet (See Table 1)

The basic balance sheet form is a 3 x 3 matrix. The columns in the matrix are the basic characteristics--Purchasables, Connotation and Image. The matrix rows refer to the data collected on each basic characteristic:

- Internal Data: Data from leaders, members
- External Data: Data from industries, sponsors, suppliers, etc.
- Sensitivity Data: Data from sources inside the organization concerning sources outside the organization.

- The Viability Status Report (See Table 2)

This report is based on the balance sheet for an organization.

^{1/} In addition to the specific emphasis identified for each of the above characteristics, there is one general measurement emphasis common to an assessment of all three--Organizational Sensitivity. To be viable an organization must not only have sufficient I, C, and P, it must also accurately sense them. For example, a training center whose image depends on providing extension services, but thinks of these reviews as a sideline, may inadvertently put itself out of business by de-emphasizing them. Sensitivity to Purchasables, Connotation and Image are, of course, especially important during times of change.

TABLE 1: VIABILITY BALANCE SHEET

	PURCHASABLES	CONNOTATION	IMAGE
INTERNAL	<ul style="list-style-type: none"> ● Cash on Hand ● Plant, Consumables, Materials, etc. 	<p>Image value for the industrial institution's members</p>	<p>Amount of consensus among leaders, members, etc. on what the institution is and does, etc.</p>
EXTERNAL	<ul style="list-style-type: none"> ● Receivables ● Firm Backlog ● Monthly Expenses for supplies, rent, other bills 	<p>Value associated with image by those external to the institution</p>	<p>Amount of consensus among clients, among sponsors, etc. on what the institution is and does</p>
ORGANIZATION'S SENSITIVITY TO ITS OWN P.C.I	<ul style="list-style-type: none"> ● Endurance: the length of time the institution could exist without Purchasables from external sources 	<ul style="list-style-type: none"> ● Do leaders and members feel their efforts are appreciated by industry? ● Is their perception accurate? 	<ul style="list-style-type: none"> ● Amount of Internal/External agreement on what the institution is and does, etc. ● Internal accuracy at predicting what industry sponsors, etc. think the institution is and does, etc.

TABLE 2: VIABILITY STATUS REPORT

ACCESS TO PURCHASABLES

1. Capacity for subsistence without money from external sources.
2. Linkage Strength: Prospects for future funding, etc.

ACCESS TO CONNOTATION AND IMAGE

1. Current position in the client environment. (How would the institution be faring if industry were the sponsors?)
2. Over the short-term, is #1 on the up-swing or down-swing?
3. Long-term prospects.

OBSERVATIONS

1. Areas where the institution can be trusted with new responsibilities.
2. Areas of opportunity or problems.

SECTION II: SERVICE DELIVERY PROCESSES AND INSTITUTIONAL VIABILITY

Governments in the least developed countries seek the establishment of "viable" industrial institutions to further their national development objectives. Frequently, however, such institutions--even after long periods of nurturing--appear to have contradictory "Images" low valued "Connotations" and high dependence on government support for their "Purchasables." In short, many key industrial institutions (not to mention the industries they support) rate low on a "viability" balance sheet.

One approach to understanding--and thus being in a position of influencing--how institutions become viable is to explore their service delivery characteristics. Therefore, we turn our attention to a consideration of how the service delivery function contributes to and detracts from institutional viability. By looking at service delivery from an implementation process perspective, it is possible to analyze impediments to a viable institution extension network. In turn, the primary causes of these impediments can be isolated and discussed.

A. INSTITUTIONAL SERVICES: THE IMPLEMENTATION CYCLE

Several stages are involved in the implementation of industrial services. By implementation, we refer to the process of transforming industrial institution service delivery policies and plans into desired results--national industrial development. The major implementation stages can be identified, along with their interrelationships, in terms of the "implementation cycle" model presented in Figure 1. (Ingle: 1978) The rationale underlying the implementation cycle approach is that institutional programs, including service delivery activities, necessarily move through several unique stages from the point of their conception to the point where they are self-sustaining, thus contributing to an institution's viability. (Radosevich: 1974)

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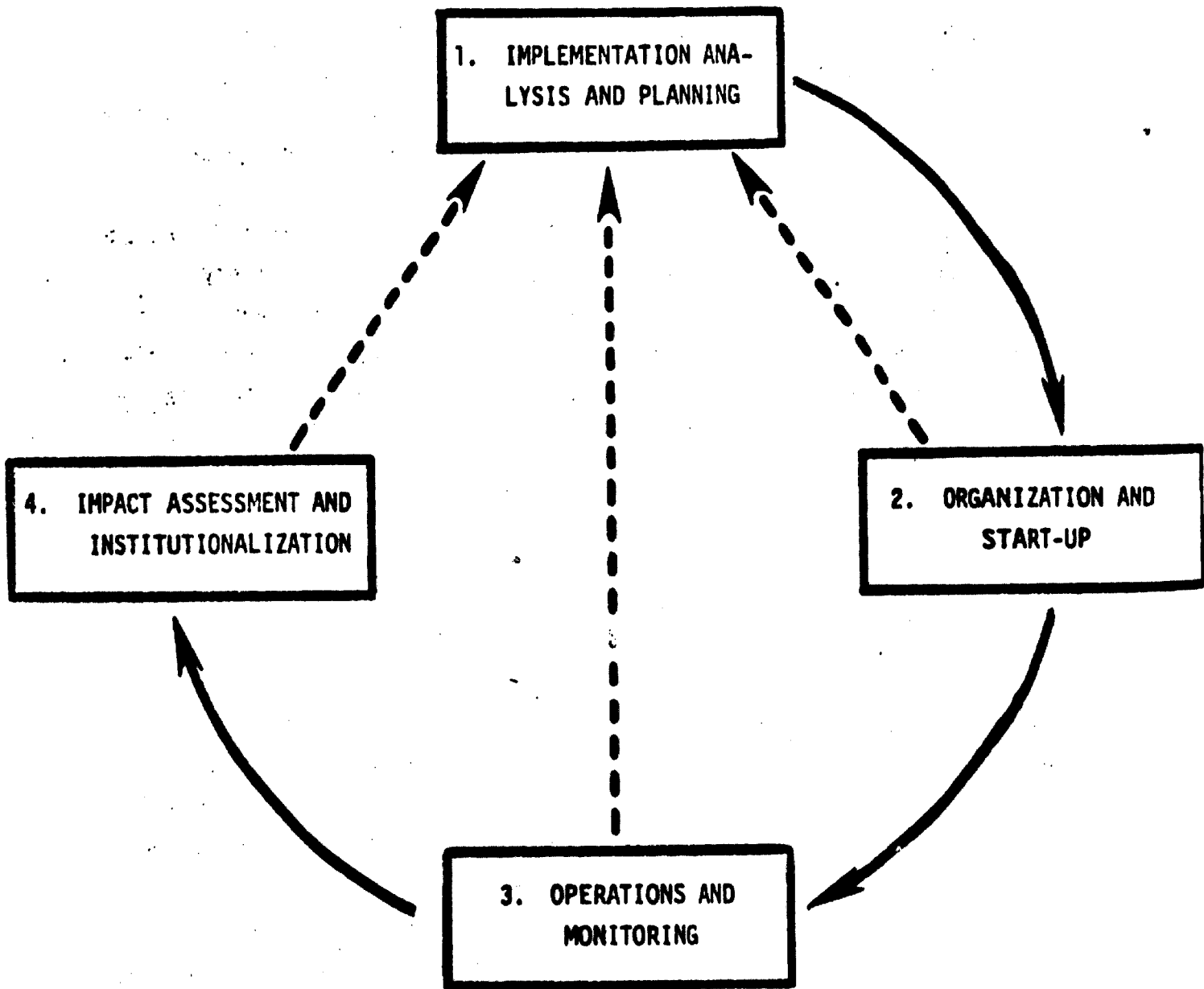


FIGURE 1: INDUSTRIAL INSTITUTION SERVICE DELIVERY IMPLEMENTATION CYCLE

Importantly for the eventual success of the service delivery activity, key managerial processes are required at each implementation stage. The implementation stages, along with a brief description of their accompanying managerial processes, are discussed below:

- **Implementation Analysis and Planning**

Once services are tentatively agreed upon (or a service change is approved), management needs to assure their suitability and feasibility with respect to established national objectives and the industrial task-environment. This is accomplished during the Implementation Analysis and Planning stage. Key processes include implementation analysis or feasibility (Hargrove: 1975; Allison: 1975), detailed scheduling, responsibility assignment, and contingency planning. In response to feedback on unexpected changes in the task-environment, the Implementation Analysis and Planning process may be reinvoked in the form of reanalysis and redesign.

- **Organization and Start-up Activity**

Following a final decision within the institution to deliver a service, the initiation stage begins. This is a period of high and innovative activity. The implementation staff, frequently newly hired, must verify (and alter if required) implementation plans, recruit and train staff, and establish appropriate service procedures.

- **Operations and Monitoring**

At this point, the service delivery activity can be expected to be fully operational and target group members (various industries) should be using the services in the expected manner. This is also the stage where support is developed in the external environment. Such support is often dependent on meeting stipulated service objectives within time and cost constraints.

- **Impact Assessment and Institutionalization**

The final implementation stage is Impact Assessment (or Evaluation) and Institutionalization where the institution reviews the impact of its service delivery experience on industrial development and makes major changes, as required, to assure improved impact in the future. At this stage services become self-sustaining (i.e., institutionalized) or are phased-out.

**B. SERVICE DELIVERY IMPEDIMENTS AND THEIR CAUSES: THE
"LEAKY-PIPE" MODEL**

The implementation process by which the four service delivery phases contribute to, or detract from, institutional viability can be depicted in a flow or "Leaky-Pipe" model. (See Figure 2.) This model shows how the stages are interrelated, and also indicates the several locations where service delivery impediments, or leakages in the flow, are likely to occur.

Using the Leaky-Pipe model as a guide, it is possible to isolate and classify common industrial institution service delivery impediments according to their stage in the implementation cycle. A representative list of service delivery impediments typically found in least developed countries is presented in Table 3.

An analysis of the impediments showing up at each stage suggests that they can be summarized in terms of two concepts: (1) non-valid transactions between industrial institutions and the industries they service; and, (2) inappropriate behavioral reinforcement within the industrial institutions. In simple terms the key impediment is that valid transactions between institutions and industries do not occur as required at various stages of the service delivery process. Usually, the rewards institutions receive for delivering services to industry are not linked to industrial development objectives, but rather to bureaucratic survival and the continued generation of funds. As a result, industrial institutions receive inappropriate behavioral reinforcements (valued incentives). This gradually contributes to contradictory "Images," low "Connotation," and a shortage of "Purchasables."

Institutional examples of these non-valid service transactions, by stage in the implementation cycle, include:

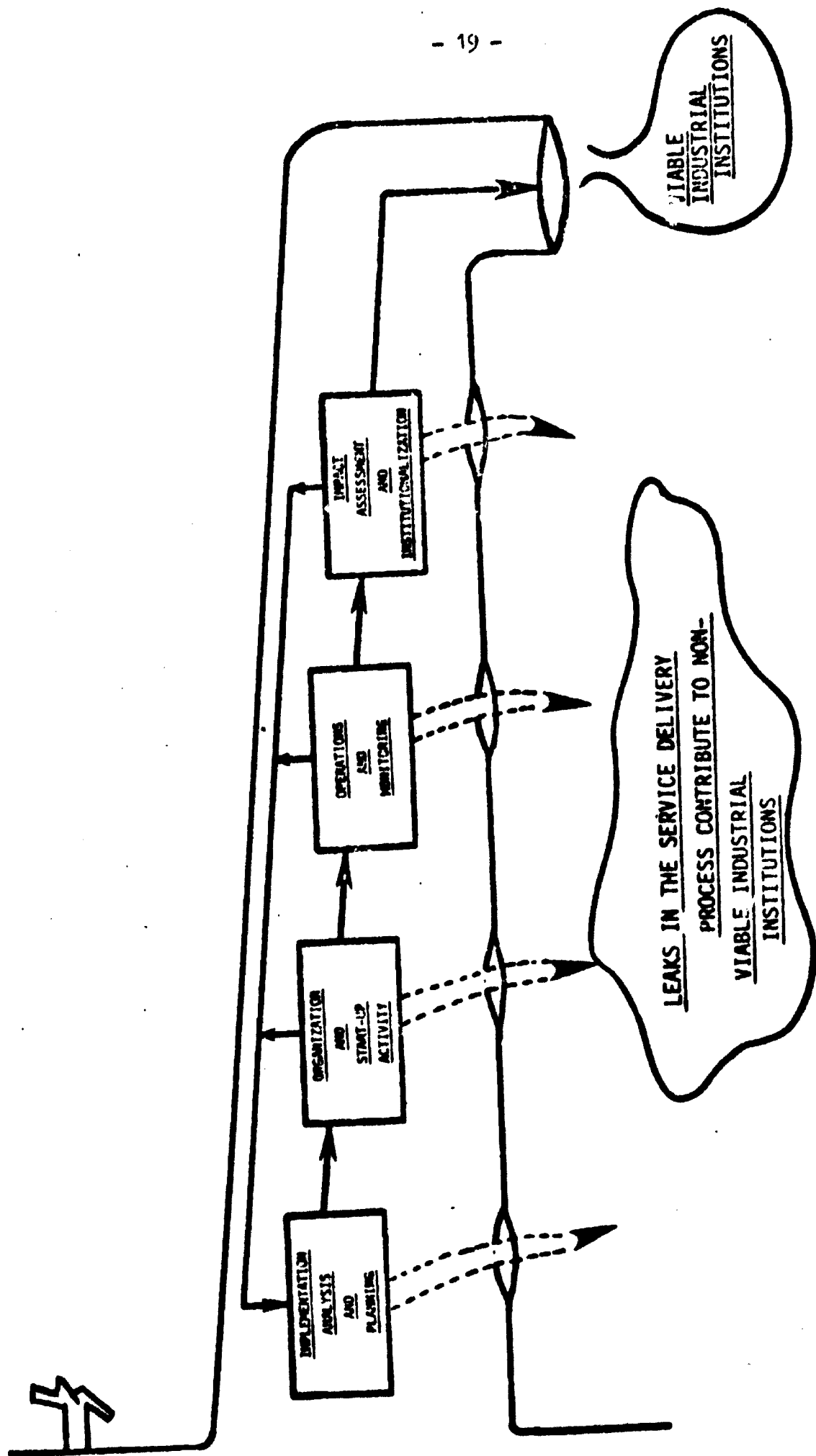


FIGURE 2: "LEAKY-PIPE" MODEL OF THE INDUSTRIAL INSTITUTION SERVICE DELIVERY PROCESS

TABLE 3
SERVICE DELIVERY IMPEDIMENTS IN INDUSTRIAL INSTITUTIONS:
ILLUSTRATIVE IMPLEMENTATION LEAKAGES AND THEIR CAUSES

CATEGORY		STAGE IN THE SERVICE DELIVERY IMPLEMENTATION PROCESS			
		IMPLEMENTATION ANALYSIS & PLANNING	ORGANIZATION AND START-UP	OPERATIONS AND MONITORING	EVALUATION & INSTITUTIONALIZATION
INDUSTRIAL INSTITUTIONS IN THE LEAST DEVELOPED COUNTRIES	REPRESENTATIVE TYPES OF SERVICE DELIVERY "LEAKAGES"	<ol style="list-style-type: none"> 1. Long-range industrial development objectives often overlooked. 2. Implementation feasibility not completely overlooked. 3. Little attention given to scheduling and responsibility assignment. 4. No formal mechanism established for monitoring and responding to change. 	<ol style="list-style-type: none"> 1. Initial delays in initiating service delivery. 2. Qualified staff to operate service program unavailable. 3. Delays in getting essential policies enacted, legislation enacted, and formal operating procedures developed. 	<ol style="list-style-type: none"> 1. Established service delivery targets (in quantity and quality terms) are not met. 2. Services which are delivered are perceived as inappropriate. 3. Lack of flexible response to changes in industrial environment. 	<ol style="list-style-type: none"> 1. Failure to assess long-term impact of industrial services on industrial development and also required changes based on changes in industrial needs. 2. Continuation of non-viable service institutions.
	GENERIC CAUSES OF "LEAKAGES"	<ol style="list-style-type: none"> 1. Concern over bureaucratic survival focuses attention on short-run activities. 2. Promotion of individual "pet service programs" rather than those justified on basis of industry need and existing setting. 3. Planning rigid, tendency to continue same procedure b/c of fixed annual budget. 	<ol style="list-style-type: none"> 1. Monitoring of changes is not effective because procedure is highly structured and not altered for new or evolving services. 2. Unexpected bureaucratic delays in obtaining approvals for staff and adequate salaries. 3. Policy-makers and industry representatives do not perceive the service as a high priority endeavor. 	<ol style="list-style-type: none"> 1. Services unsatisfactory due to: <ol style="list-style-type: none"> a. Extensive political interference in planned activity. b. High staff turnover due to inadequate incentives. c. Difficulties in obtaining required bureaucratic support. 2. Industries are not actively involved in continuing needs assessment. 3. Programming decisions are taken only at fixed time and are not based on relevant information. 	<ol style="list-style-type: none"> 1. Failure to evaluate due to: <ol style="list-style-type: none"> a. Lack of institutional reward structure to allocate resources based on long-range goal impact. b. Lack of clearly specified objectives and information to determine whether, and why, they are accomplished. 2. Government support for industrial institutions based on previous results, not on assessment of institutional viability.

- **Implementation Analysis and Planning**

Under severe time pressure, a national bank establishes a credit program for small-scale rural enterprises without involving knowledgeable representatives of these enterprises in the planning process. Not surprisingly, loan rates during the first few years of operation are low.

- **Organization and Start-Up**

In establishing a new training program for industrial extension agents, the Management Training Center is unable to recruit staff with previous industrial experience. A follow-up participant survey suggests that few of the training programs concepts and techniques are being used.

- **Operations and Monitoring**

A major agri-business is diversifying its product line. No service response is evident. The agri-business begins to view the service infrastructure as a burden and liability.

- **Evaluation and Institutionalization**

The country has decided on a major industrial deconcentration program. No change is evident in the key government-sponsored agribusiness extension program, although its funding remains at a constant level.

Table 3 also presents a list of generic institutional "causes" for service delivery impediments at each stage of the implementation cycle.

Our analysis suggests that a key to understanding the cause of these impediments involves the management of industrial institutions--or more precisely the lack of integrated management processes. To have "valid transactions" and "appropriate reinforcement," institutions require effective procedures: (1) for managing information about their internal and external environment, and (2) for managing resources in response to that information. Our analysis of successful industrial institutions in the least developed countries indicates the presence of an integrated management system which provides accurate information and timely responses across all implementation stages. Conversely, unsuccessful institutions

usually lack an integrated management system which impedes them from providing discipline and control over service delivery, from original inception through successful completion. Specifically, they lack one or both of the following basic elements of an integrated management system:

- The basic tools, techniques and processes for conducting appropriate analyses, developing schedules, and setting up useful monitoring, reporting and assessment procedures.
- The internal procedures by which the individual service delivery processes at each implementation stage are integrated into a single practical system, and by which the service delivery activity is managed and controlled.

SECTION III: CONCLUSIONS AND RECOMMENDATIONS

The preceding analysis allows us to draw some tentative conclusions as to the common service delivery factors contributing to non-viable industrial institutions, and suggest some recommendations for improving the implementation of industrial services. These are presented below:

Conclusion 1: The Current Reinforcement Structure in Industrial Institutions Typically Favors Institutional Aggrandizement Above Appropriate Service Delivery

The major service delivery impediments can be characterized in terms of non-valid transactions between industrial institutions and industrial establishments. The overwhelming deficiency in service delivery mechanisms is that the reinforcement or reward structure is not related to promoting institutional "viability" and industrial development. Indicative of this situation are a series of impediments or leakages at each stage in the service delivery implementation cycle.

Recommendations:

- Establish a service delivery process which assures valid transactions based on appropriate reinforcement between industrial institutions and the industries they support. This can be accomplished by assuring that institutional rewards are based primarily on the actual service related performance of recipient industries.

- To accomplish this, least developed countries and industrial institutions can follow the example of "viable" service institutions--they can establish integrated management processes for managing their resources in response to conditions in their internal and external environments. This can be done by incorporating a set of integrated tools and procedures for

managing and controlling service delivery at every stage of the implementation process. Recommendations for tools appropriate to each stage in the implementation cycle are described more fully below.

Conclusion 2: Detailed Implementation Analysis and Planning For Industrial Services is Insufficient or Inaccurate.

Implementation Analysis and Planning for the development of industry is frequently insufficient or inaccurate. Conventional planning approaches do not emphasize the importance of information on the industrial task-environment. Services are inadvertently selected, not on the basis of industry "need", but on their previous support and ease of implementation. In addition, current approaches are episodic, i.e., they only acknowledge and treat one component of the service delivery process or are aimed at short-term goals.

Recommendations:

- Adopt a comprehensive service delivery analysis and planning process which emphasizes the importance of the industrial context. Practical analysis tools and techniques, adapted to least developed country settings, should be stressed. (For examples of such techniques see PCI: 1975 ; PCI: 1976; PCI: 1977 and Delp: 1977) Major problems and their causes must be determined, and if this first requires a gathering of better vital statistics, then this should be done. (For a Manager's Guide to Data Collection, see PCI: 1978.) Industrial problems should not be artificially constrained. One must examine all kinds of deficiencies in the operation of enterprises, including social values that may affect the operations of industrial organizations in various settings. Cultural mores and reward systems as well as traditional industrial and small scale enterprise practices must be acknowledged. Service delivery must be responsive to these norms. They must serve all the assessed industrial needs. Just as the best doctor treats the whole patient, and listens carefully to the patient's statements of problem and environment, so an effective service delivery system must be

prepared to consider the total social and physical environment of the populace it serves. Emphasis must be on causes, opportunities, and long-term results.

- Since industries are dependent on a variety of services, service delivery coordination is essential. (Barber: 1977) However, we suggest that industrial institutions be given coordination responsibility and training rather than to expect a national board or body to perform this function. Initial analysis conducted by the service institutions can establish whether it is realistic to obtain support from other institutions. Given substantial demand for services, most institutions can locate and choose impact areas where probability of success is high. As a precaution they can arrange to monitor important external conditions which may influence service delivery impact. If unexpected changes occur, these can be quickly sensed and used to make timely service changes.

Conclusion 3: Many Industrial Services are Seriously Impeded During their Initial Organization and Start-up Phase

Some of the most common service delivery "leakages" can be attributed to initial procedural delays and inappropriate staffing. Service implementors frequently have not been involved in the planning process.

Recommendation:

- Service implementors, as soon as they are assigned, should review implementation plans and assure their accuracy. Where qualified staff is not available, or industry need no longer evident, immediate steps should be taken to alter or terminate the service activities.

Conclusion 4: Many Ongoing Service Activities Are Neither Properly Monitored or Evaluated

Many industrial programs suffer from a lack of administrative effectiveness and efficiency. Service records are poorly-kept. Sufficient time is not allocated for activities, staff do not have clear objectives, vehicles are not available at the right place at the right time, etc. Collusion within and between industrial institutions is frequent. This situation is allowed to continue because performance based monitoring and evaluation is not usually carried out, and even less frequently acted upon. Ineffective or even dangerously destructive activities are allowed to continue without modification. Past mistakes are often repeated in current efforts.

Recommendation:

- Service activities should be continuously monitored, and periodically evaluated. Management must be flexible to respond immediately to these evaluations, to change direction, or even terminate service programs where they are ineffective. It is imperative that institutions be supplemented by continuous reinforcement if they are to become self-sustaining, and contribute to institutional viability.

REFERENCES

- Allison, Graham T. "Implementation Analysis: 'The Missing Chapter' in Conventional Analysis. A Teaching Exercise." In Benefit-Cost and Policy Analysis 1974, R. E. Zackhauser, et al. eds. Chicago: Aldine, 1975, 369-391.
- Barber, Laurence L. Institutional Infrastructure For Industrial Development, prepared for UNIDO, (1977) (id., 77-4921; ICIS 36)
- Blase, Melvin. Institution Building: A Source Book, Agency for International Development, 1973*.
- Chapel, Yves, Administrative Management for Development: A Reader Brussels: International Institute of Administrative Sciences and Paris: UNESCO, 1977.
- Delp, Peter; Thesen, Arne; Motiwalla, Juzar; and Seshadri, Neelakantan. Systems Tools for Project Planning. Bloomington, Indiana: International Development Institute, Indiana University, 1977.
- Duncan, Richard L. "Institution Building: Incidents, Ideas, and Applications." Under Contract No. AID/ta-c-1069, March 25, 1975.
- Eaton, Joseph W., ed. Institution Building and Development: From Concepts to Application. Beverly Hills, California: Sage Publications, 1972.
- Esman, Milton, "Development Administration and Constituency Organization", Public Administration Review, 38 (March/April 1978), pp. 166-172.
- Esman, Milton J., "Institution--Building as a Guide to Action", AID-CIC Conference on Institution Building and Technical Assistance, Washington, D.C., December, 1969.
- Hargrove, Erwin C. The Missing Link: The Study of the Implementation of Social Policy. Washington, U.C.: The Urban Institute, July 1975.
- Honadle, George H. and Ingle, Marcus. Project Management for Rural Equality. Syracuse, New York: A Report Prepared for the Agency for International Development, 1976.
- Ingle, Marcus, "Program Implementation in Developing Countries: A review of the Scholarly and Academic Literature," DS/DA USAID, Mimeograph, 1978.
- Morgan, E. Philipp (Ed.) The Administration of Change in Africa, New York, Dunellen, 1974.

Moris, Jon R. "The Transferability of Western Management Concepts and Programs, an East African Perspective." In Education and Training for Public Sector Management in the Developing Countries, The Rockefeller Foundation, March 1977, pp. 73-85

Practical Concepts Incorporated. The Africa Bureau Project Management System: Manual of Operations. Phase II Final Report, Volume II Washington, D.C.: Practical Concepts Incorporated, November 1975.

Practical Concepts Incorporated. "The P/C/I Model: Some Practical Concepts for Assessing Organizational Viability, International Development, December 1974.

Practical Concepts Incorporated, "Project Design and Evaluation Concepts: The Logical Framework Approach", Mimeographed, 1977.

Practical Concepts Incorporated, "Project Performance Assessment and Tracking" Mimeographed, 1976a.

Practical Concepts Incorporated, "Summary of PCI's Project Management System (PMS) Concepts" Mimeographed, 1977b.

Radosevich, H. Raymond. Development Project Management: An Integrated Approach to Project Planning and Implementation. Planning Processes for Project Management, Volume 1. Graduate School of Management, Vanderbilt University, February 1974.

Rondinelli, Dennis and Palia, Aspy, Project Planning and Implementation in Developing Countries, East-West Center, Honolulu, Hawaii, 1976.

Rondinelli, Dennis A. and Radosevich, H. R. "A Study of Development Project Administration: Diagnostics for improved implementation." Memphis, Tennessee: Vanderbilt University, 1975.

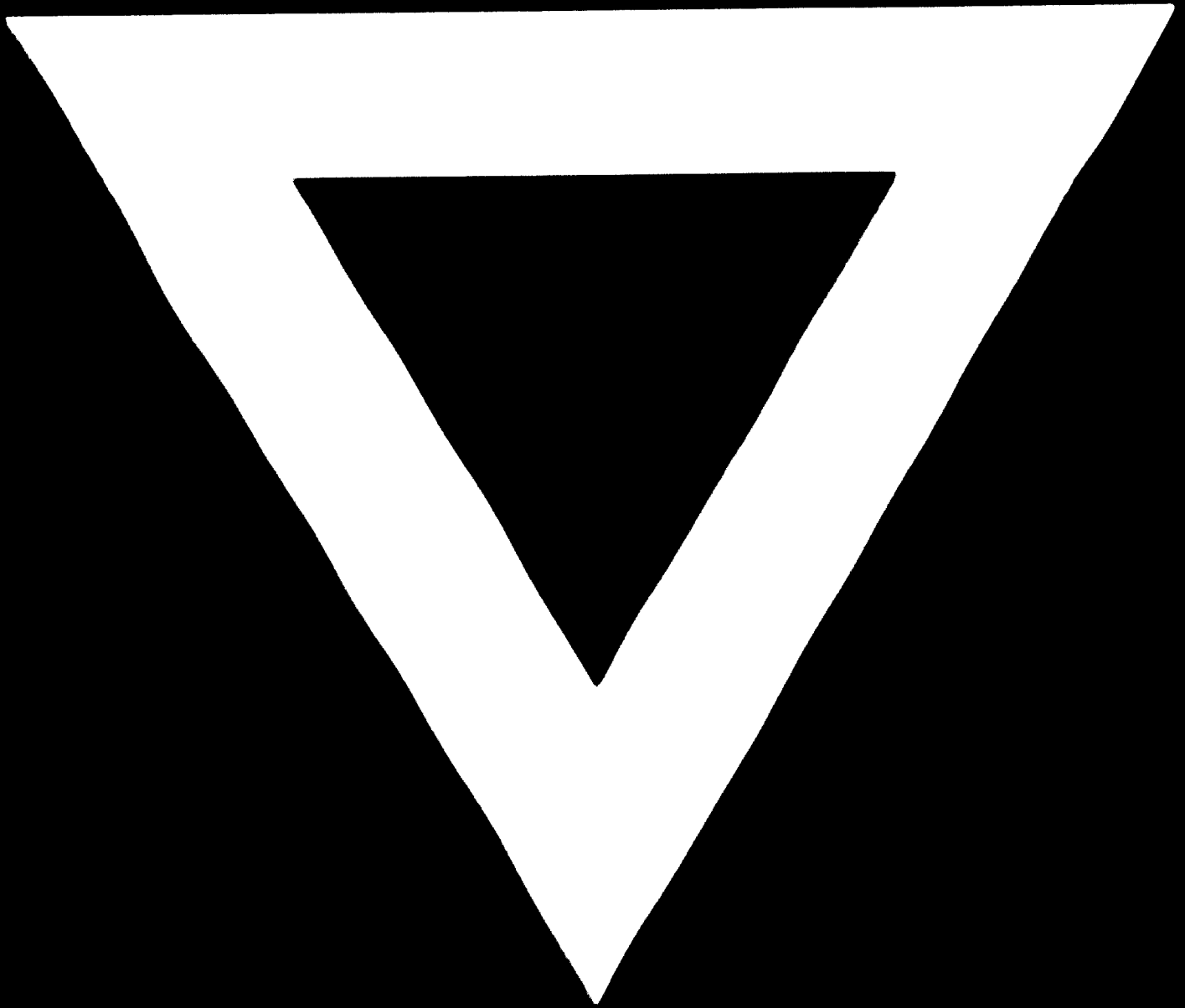
Rosenburg, Leon and Hageboeck, Molly, "Management Technology and The Developing World," Presented by Practical Concepts Incorporated at The IFAC/IFORS Symposium in Algeria, 1973.

UNIDO, Report of the Joint Seminar of UNIDO and CAFRAD on the Organization and Administration of Industrial Services in Africa. Tangier, 1967 (ID/WG.1/R.8).

UNIDO, The Initiation and Implementation of Industrial Project in Developing Countries; a Systematic Approach. (1975) (ID/146; 75.II.B.2).



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82.06.23