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June 8, 1972

To the Graduate Council:

I am submitting herewith a thesis written by Robert Venable Thurston entitled "Informational Feedback in Agricultural Development Programs." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

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INFORMATIONAL FEEDBACK IN AGRICULTURAL DEVELOPMENT PROGRAMS

A Thesis

Presented to

the Graduate Council of

The University of Tennessee

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

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by

Robert Venable Thurston

August 1972

ACKNOWLEDGMENT

The author wishes to express his sincere gratitude to Dr. David Brown whose encouragement, guidance, and enthusiasm have been extremely instrumental in the development of this study. Similarly, the author appreciates the ideas and constructive criticisms offered by Dr. Nelson Robinson and Dr. Charles Cleland who took the time to review this manuscript. The author also wishes to thank his wife, Juanita, for her forebearance and assistance in the typing and editing of the thesis. The financial support for this research came from the Section 211(d) grant program of the U. S. Agency for International Development.

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ABSTRACT

A flow of rapid, accurate, and relevant informational feedback from village level agricultural projects to regional or area level program administrators needs to be maintained if such programs are to be as effective as possible. Program administrators require timely and reliable information in order to (1) expedite and coordinate the execution of projects, (2) adapt projects to local conditions and changing circumstances, and (3) evaluate project performance.

On the basis of the author's observations of regional agricultural programs in Venezuela and readings in the literature of agricultural development that deal with similar situations in several other developing countries, it appears as though feedback frequently fails to meet program administrators' informational needs. Further review of the literature in agricultural and development administration revealed that very little work has been done on analyzing feedback problems at the regional program level. In addition, most of the literature related to feedback focuses upon "Western" settings and does not adequately reflect the institutional, communicative, and motivational problems often encountered in less developed countries.

The primary objective of this study, then, was to develop a conceptual framework for analyzing the major issues and dimensions inherent in the feedback process. Such a framework can serve as a point of departure for more in-depth analysis by program administrators

or analysts who are concerned with improving feedback in specific program contexts. Ideas and constructs from several theoretical and applied fields such as development administration, communications, organizational theory, and economics were utilized and adapted to provide focal points for examining the important variables and factors involved in the feedback process. It was concluded that the concerned administrator or analyst could begin to organize his own thinking about how to diagnose feedback problems by applying an analytical framework developed around the following three basic dimensions:

1. A structural/procedural dimension involving such factors as feedback channels, media, and timing and institutional and hierarchical rigidities.
2. A behavioral/cultural dimension encompassing such factors as bureaucratic and target group communication and behavioral patterns.
3. An allocative/decision-making dimension involving resource constraints and the determination of feasible alternatives.

While the analytical framework was usefully applied to feedback problems observed by the author in Venezuela, it still represents a preliminary effort to dissect feedback problems within the context of regional agricultural programs in less developed countries. Much more needs to be learned about the nature of the administrative environment and decision-making processes of specific non-Western settings before a more detailed problem-specific approach can be suggested.

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CHAPTER I

INTRODUCING THE PROBLEM

While working within a regional agricultural development program in Venezuela, the author observed that the administrators of the agricultural agencies operating in the area found it difficult to obtain and maintain a flow of accurate, relevant, and timely informational feedback from village level projects. These regional, or district level administrators[1] rarely had time for direct daily contact with the program participants at the village level due to the latters' wide geographical dispersal and due to primitive communication and transportation systems.[2] The administrators relied largely upon routine written reports from the village level workers (VLWs) for information concerning the progress, problems, and obstacles of programs. This information was complemented by regular staff meetings, by infrequent field trips to the implementation sites, and by occasional interviews with farmer spokesmen and local politicians.

Nevertheless, these sources of feedback often failed to provide the decision-maker with enough accurate and relevant information with

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[1] Hierarchically the administrator referred to here might be called a "second level" administrator responsible for one or more programs within an area or region. Interposed between the program administrator and the target group are intermediary communicators such as the field workers and their supervisors.

[2] References to the "program participants at the village level" encompass both the village level workers and the farmers.

which to evaluate project performance, monitor on-going projects, and to adapt programs to local needs and conditions. For instance, the long and time-consuming reports filed regularly by VLWs tended to emphasize the quantitative rather than the qualitative aspects of their performance; the number of farmers visited was reported but information concerning the nature or results of these contacts was frequently excluded. A reported farm visit may have consisted of no more than an exchange of pleasantries at the farmer's gate. Whether any useful information was transmitted, whether it was accepted or rejected and why was not reflected in the report. To complicate matters, the agency personnel who received, compiled, and edited these reports tended to play up success stories and to downplay program problems. Occasionally a group of farmers would seek a private interview with an administrator. Often the VLW accompanied them and, because of his higher status and education, acted as their spokesman. More often than not the original query of the villagers was sidelined as the VLW used the presence of the group to legitimize his own requests, which somehow failed to receive due consideration when transmitted through formal written channels. Even on inspection tours an administrator was apt to be met by the agency personnel assigned to the village and by a handpicked group of farmers who were not likely to bring up embarrassing topics. The farmers who did speak out were often those who were more powerful and better off. The problems that they brought up were not always

representative of those facing the greater number of less influential farmers.[3]

As a consequence of weaknesses such as these in the feedback process, projects often became stalled or occasionally failed to achieve their goals. For example, in one Venezuelan agricultural settlement the chief agency engineer began a field clearing project. Large machines pushed the forest debris into low-lying areas. The farmers, who were year-round residents, complained to the VLW and to the engineer directly that this work would block the natural drainages during the rainy season. The engineer refused to heed the farmers' advice, considering them ignorant and impertinent for questioning his technical judgment. The rains did in fact bring widespread flooding. The settlement, originally planned as a corn producing area, had to plant rice on most of its acreage. Unfortunately, the price had to be subsidized year after year since input and marketing costs were higher in that area than in more centrally located rice growing areas.

The consequences of inadequate feedback, as the example above illustrates, can be extremely costly. The administrator obviously needs to invest agency time and resources toward improving field to agency communications.

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[3]The examples cited stem from personal observations in Venezuela where the author worked for two years under the auspices of the National Agrarian Institute and the Peace Corps in a village level extension program. During that period he worked daily with VLWs and farmers and dealt frequently with program administrators from the National Agrarian Institute and the Ministry of Agriculture.

Although feedback and feedback related problems appeared to concern the Venezuelan program administrators, this aspect of agency communications was largely neglected. The administrators were usually extremely preoccupied with daily routine matters and had very limited time to spend analyzing communication problems of this nature. In addition to time constraints the administrator faced an institutional constraint on his freedom to alter existing feedback mechanisms and procedures. Major overhauls of the feedback system were not feasible, although the administrator did have the authority to change the system in many small ways. Whatever formal training the Venezuelan agency administrator had received appeared to have inadequately prepared him to deal in an effective and comprehensive way with problems pertaining to feedback communications. It therefore occurred to the author that program administrators in Venezuela, those in comparable settings elsewhere, and perhaps development program analysts, might benefit from a systematic and cohesive examination of the major issues and alternatives pertinent to the feedback process. It is to these actors in the development process that this study is directed.

The examples discussed above illustrate some of the kinds of problems encountered by the Venezuelan program administrators in obtaining a realistic picture of the felt needs of the target group, the sometimes urgent needs of the field staff, and the problems and bottlenecks affecting or likely to affect program performance. On the basis of a broad but by no means comprehensive review of the literature on agricultural program administration and implementation, and discussions about feedback with individuals familiar with

programs in other countries, it would appear that problems of getting accurate, relevant, and timely feedback from village level programs are encountered in at least a few comparable situations elsewhere.[4]

I. GENERAL LIMITATIONS OF THE LITERATURE

In attempting to find specific suggestions in the literature as to how an administrator in the Venezuelan case, or one similar to it, might begin to improve the feedback system some major problems arose. First, no empirical work was encountered which dealt directly with the feedback system and processes peculiar to the Venezuelan situation itself. The relevant variables and interactions to receive attention had to be based on the author's own observations and impressions. Second, in the feedback related literature reviewed, there was a scarcity of theoretical or empirical work on feedback at the level of regional program administration within less developed countries (LDCs) in general. Very few theoretical or practical guidelines were found which could help the author to understand better the important forces at play within the feedback milieu at the level of regional programs. Third, the body

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[4]Among the sources in which the need for improved feedback in agricultural development projects is discussed are the following: Max F. Millikan and David Hapgood, No Easy Harvest: The Dilemma of Agriculture in Underdeveloped Countries (Boston: Little Brown and Company, 1967), pp. 86-88; Ranaan Weitz, ed., Rural Planning in Developing Countries: Report on the Second Rehovoth Conference, Israel, August, 1963 (Cleveland: The Press of Western Reserve University, 1966), pp. 55-59; John M. Fenley, "Emphasizing Certain Administrative Processes in Extension," Thoughts on Administration in Extension in Rural Development, John M. Fenley, ed., Comparative Extension Education Publications Mimeo, Release No. 8, April, 1961, Cornell University, Ithaca, New York, pp. 9-20.

of literature that does address itself to feedback processes and problems[5] is confined mostly to the Western experience and may not be generalizable to, or applicable in, non-Western cultural contexts. In addition to focusing upon feedback problems within Western institutions and settings, much of the literature reviewed tended to have a prescriptive, as opposed to analytical, emphasis. That is, rather than focusing upon ways to increase the ability of a program administrator to recognize and analyze the major issues and dimensions involved in the feedback process, considerable emphasis seems to be placed on proposing remedies to specific feedback problems. Also, many studies tended to have a narrow purpose (e.g., improvement of reporting procedures or report content) rather than focusing on the interrelationships among the structural, procedural, and human behavioral components of the feedback process.

It would be particularly helpful, then, if the analyst or administrator concerned with feedback problems had some specific guidelines that could help him to conceptualize and evaluate in a systematic way the constraints, important elements, dimensions, and alternatives inherent in establishing and maintaining a flow of relevant information from grass-roots level programs. This study is a preliminary attempt

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[5]References to feedback, as an element in organizational communications, can be readily found in the literature of public administration, the sociology of organizations, and managerial communications. More specific references to selected aspects of feedback within rural development programs can be found in the literature of agricultural program planning and implementation and in agricultural extension.

to dissect conceptually some of these major dimensions and alternatives so as to facilitate the analyst's or administrator's job as they attempt to come to grips with the problem of getting useful and timely feedback.

II. OBJECTIVES

Specifically, then, the objective of this study is to suggest some conceptual dimensions around which the program administrator or analyst can organize his own thinking about how to:

1. Diagnose the problems and obstacles involved in obtaining and maintaining an improved flow of feedback from the program participants at the village level; and,
2. Formulate, evaluate, and select feedback alternatives consistent with his particular informational needs, resource constraints, and other major limitations likely to be encountered in the task environment.

In other words, this study seeks to provide a conceptual point of departure for examining, explaining, and solving informational feedback problems in agricultural development programs like the Venezuelan situation with which the author is acquainted. Its aspired contribution is to identify theoretical ideas from several areas of social science that appear to be especially relevant, to bring these concepts more sharply to bear on agricultural program feedback per se, and to blend them into a cohesive framework as a starting point for diagnosing specific problems. Especially in mind is the program administrator or researcher who has to begin with a limited amount of concrete facts.

The major purpose is not to draw definitive conclusions about manifestations and causes of feedback difficulties in Venezuelan local-action programs. Lack of comprehensive information beyond personal observation and recall prevents this. Instead, selected aspects of these particular programs are used to illustrate how analysis of feedback problems might be approached systematically, key questions identified, and additional factual needs illuminated.

III. METHOD

In developing a conceptual approach which can be useful in analyzing feedback processes at the regional level the following general steps are helpful:

1. Define clearly just what the feedback problem is, i.e., determine the nature and magnitude of the discrepancy between what information from village level programs is needed and what is received.
2. Determine what are the relevant issues, dimensions, and alternatives involved in improving the feedback process.

In order to diagnose conceptually the variety of human, structural, and procedural dimensions and issues inherent in the feedback process, literature from several formal areas of inquiry shall be drawn upon. A number of constructs and ideas from such areas as communications, development administration, organizational theory, and economics can be usefully applied or adapted to meet the theoretical and practical needs of the program administrator as he begins to organize his own thinking

about how to grapple with feedback problems. For example, Fred W. Riggs in describing the milieu within which administration in LDCs takes place, points out several behavioral tendencies found within bureaucracies, such as formalism, bureaucratic political activity, and status consciousness, which can have considerable impact on the transmission of feedback to the administrator.[6] In similar fashion, Saul M. Katz, in outlining the functions that an organization needs to perform in order to be effective, provides some useful clues to the kinds of feedback an agency might require.[7] The opportunity-cost principle and other tools from economics for allocating scarce resources are also relevant to feedback decisions. Constructs and ideas such as these which can contribute to the administrator's ability to conceptualize the major issues and alternatives pertaining to feedback will be examined in detail in the following chapters.

IV. ORGANIZATION

In Chapter II a start is made toward the development of a framework for viewing the feedback process. Key concepts and ideas from various disciplines that can be applied to the feedback problems of the regional agricultural program administrator are pointed out and discussed.

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[6]Fred W. Riggs, Administration in Developing Countries: The Theory of Prismatic Society (Boston: Houghton Mifflin Company, 1964).

[7]Saul M. Katz, "Administrative Capability and Agricultural Development," American Journal of Agricultural Economics, Vol. 52, No. 5 (December, 1970), pp. 794-802.

Chapter III focuses upon the major structural and procedural dimensions and decisions inherent in the feedback process. How the administrator can begin to identify and evaluate various feedback alternatives is a major concern in this chapter.

Chapter IV outlines and discusses some commonly encountered human obstacles to feedback. Behavioral tendencies in both the change agency bureaucracy and the target group which can give rise to feedback problems are examined.

Chapter V illustrates how an administrator in a situation like that observed in Venezuela might utilize the suggested analytical approach in examining his specific feedback problems.

Chapter VI briefly suggests some areas within which future feedback related research could be carried out.

CHAPTER II

TOWARD A DIAGNOSTIC FRAMEWORK

The program administrator faces the special problem of relating agency programs and capabilities to the needs and requirements of a variety of local situations which are largely outside of his control. He must keep attuned to the task environment and to the pulse of village level programs. Unfortunately a systematic framework for viewing the issues and alternatives involved in obtaining feedback from village level projects appears to be lacking. How an administrator or analyst might begin to bring into focus the relevant elements of the feedback process within a regional setting similar to that observed in Venezuela is suggested in broad terms in this chapter.

I. DELINEATING THE PROBLEMATIC SITUATION

As a first step in examining the specific feedback process under consideration here, the concerned individual (analyst or administrator) will want to delimit the problematic situation as clearly as possible. That is, he needs to specify:

1. Exactly what he means by feedback;
2. The feedback performance that is desired; and,
3. The extent to which actual feedback meets these desires.

Feedback Defined

Feedback has been defined in various ways and at different levels

of generality depending upon the area of concern and perspectives of the source,[8] For the purposes of this study, feedback will be conceived in terms of the program and communications context of the regional agricultural development agency.

What is to be meant here by feedback, then, is the following: Feedback refers to the flow of information to the effective agency decision-maker(s) concerning the important factors and forces at the village level which need to be taken into account for program adaptation, implementation, maintenance, and evaluation purposes. That is, feedback as defined here is the communications process by which the agency decision-maker at the regional or area level receives information concerning (1) the status of projects at the village level (i.e., how well they are performing and the nature of the activities that are being undertaken); (2) the input requirements of village level projects; (3) the changes, obstacles, and bottlenecks affecting or likely to affect projects; and, (4) the program related grievances and felt-needs of the target group (e.g., how they feel about the substance and/or the execution of existing projects). On the basis of this information the administrator can make allocative decisions and determine the changes brought about by the agency's own actions or performance.

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[8] A very general definition of feedback is given by Snyder, Bruck, and Sapin: "Feedback refers to the messages about the actions or states of the system which are returned to the system . . . makes it possible for the decision-makers to have a more or less current picture of the success or failure of their actions and the relative adequacy of the system." From Richard C. Snyder, H. W. Bruck, and Burton M. Sapin, Decision-Making as an Approach to the Study of International Politics (Princeton: Organizational Behavior Section, Foreign Policy Analysis Project, Foreign Policy Analysis Series, No. 3, 1954), p. 88.

Feedback Needs

The agricultural program administrator requires a flow of accurate, timely, and relevant feedback about programs at the village level in order to carry them out successfully.

The accuracy of the information he receives is critical, for his decisions can only be as good as the information upon which they are based.

The timeliness of feedback is essential for information needs to be received with sufficient lead time to allow for analysis, decision, and action.

Of all the variables that could be reported to the decision-maker from the implementation level those that are immediately relevant in important ways to program success deserve priority.

In addition to pointing out specific desirable attributes of feedback, it might be convenient at this point to make explicit in practical terms some of the major reasons why feedback from village level programs is useful.

1. The administrator's knowledge of the major forces and constraints affecting program implementation at the village level is instrumental in adapting vague national plans and policy directives to local settings. For instance, in order to stem the flow of foreign exchange spent on food imports the Venezuelan national planners decided to promote rice production. It was then up to the regional administrator to decide which were the best rice producing localities in his region in terms of soil types, irrigable acreage, farmer receptivity,

proximity to product and factor markets, and numerous other criteria. How well an administrator was able to translate these nationally formulated plans into viable operational programs in a variety of local situations depended on his familiarity with the region and his ability to keep on top of developments in the field as projects were implemented.

2. The administrator is likely to have very limited resources to allocate among competing projects and programs. Consequently, he may need a flow of information concerning the impacts that various programs are having in order to judge for their relative cost-effectiveness. Similarly he may need information concerning the deployment and utilization of scarce agency resources so as to maximize their impact and to keep them efficiently and productively employed.

3. A flow of information during program implementation may help the administrator to recognize and to avoid, or at least act upon, critical bottlenecks before major problems and waste develop.

4. Through a process of consultation between the decision-maker and program participants at the village level (i.e., change agents and farmers) a greater understanding of mutual problems and capabilities can possibly develop. More realistic expectations of the ability of all parties to respond to change and problems may evolve.

5. By eliciting feedback from program participants at the village level a greater sense of involvement may be generated on their part. As a result, the project design may be more in tune with their felt-needs and motivations; their attitudes toward, and response to a program may be more favorable; and they may make greater personal contributions to the project.

Actual Feedback Performance

The magnitude and nature of the feedback problem takes on some concreteness when feedback needs and requirements are compared with actual feedback performance.

The examples in Chapter I illustrate the ways in which feedback in the Venezuelan situation frequently failed to provide the program administrator with the information he needed to make adequate program-related decisions. Accuracy often suffered because of deliberate or unintentional distortions and/or omissions in staff reports. Frequently problems at the village level were not perceived or reported until a crisis situation already existed. Formal feedback channels themselves were slow and cumbersome, thus delaying the transmission of even urgent information. Reporting devices were time-consuming, routinized, and not adequately designed to provide certain types of information needed by the administrator. Information requested in reports often was no longer relevant to changing local needs and project phases.

The human relationships and rapport between agency clientele and staff and among agency personnel themselves were not always conducive to constructive and candid feedback communications. For example, some farmers considered agency officials ineffectual, slow moving, and self-concerned. Agency officials, on the other hand, frequently looked down on farmers as uneducated and ignorant.

II. BASIC CONCEPTUAL DIMENSION OF THE FEEDBACK PROCESS

After defining the gap between actual feedback needs and actual

feedback performance in general terms, attention can be shifted to a conceptual analysis of the feedback process.

In deriving the major dimensions around which a diagnosis of the feedback process of concern here might be organized, a line of deductive inquiry can prove to be profitable. Three major areas of concern stand out as focal points around which a conceptual analysis can be structured. They consist of (1) a structural/procedural dimension, (2) a human behavioral dimension, and (3) a decision-making dimension. The so-called structural/procedural dimension encompasses a host of issues and alternatives pertaining to such things as feedback media, channels, and timing. The human behavioral dimension pertains to the way that the feedback process is affected by the motives and perceptions of the feedback communicators within both the agency and the target group. The decision-making dimension, while less tangible than the other two, is equally important to the program analyst or administrator. It refers to the art of assessing and choosing among the various alternatives involved in the feedback process--whether structural/procedural or human within the bounds of relevant constraints.

III. USEFUL CONTRIBUTIONS FROM EXISTING BODIES OF KNOWLEDGE

A key working hypothesis in this study is that certain constructs and existing lines of thought from several disciplines offer useful points of departure for delving into the three basic conceptual dimensions mentioned above. Specifically, some ideas and modes of analysis

from communications, organizational theory, development administration, and economics can be adapted or built upon to help the analyst or administrator to gain insights into the structural/procedural, human, and decision-making dimensions of the feedback process.

Communications

Few, if any, formal communications models dealing expressly with information feedback are readily available in the literature. However, there are some general models which can be applied to either the dissemination of information from the agency or to the return flow of information to the agency (i.e., feedback). For example, the elements in the Berlo or Shannon-Weaver communications model illustrated below in Figure 1 can be useful in analyzing feedback.[9] While models such as

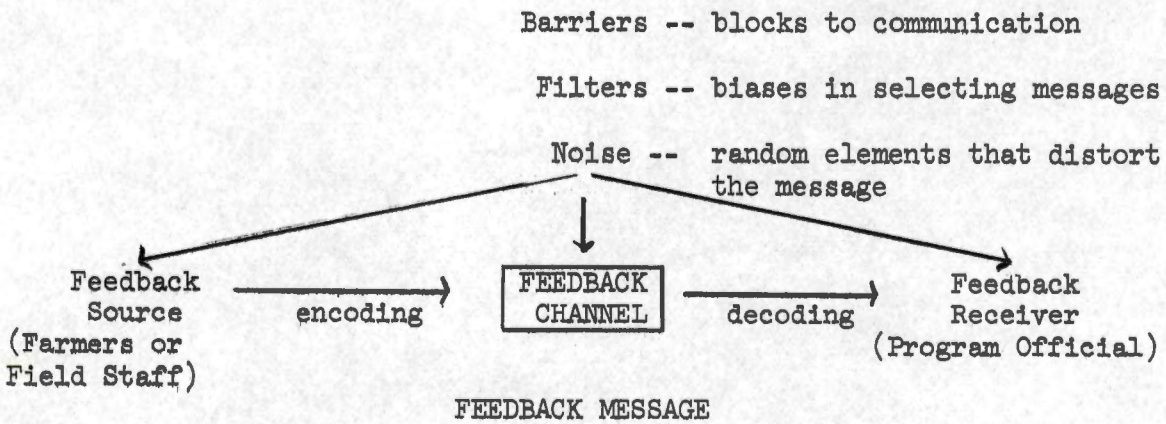


Figure 1. The Berlo or Shannon-Weaver communications model applied to informational feedback.

[9]Adapted from the Berlo, or Shannon-Weaver, communications model as discussed in a mimeographed handout prepared by James E. Snell,

this are not designed with the specific feedback needs of the agricultural program administrator in mind, they can provide a point of departure for more detailed problem-specific analysis.

In the first place, the administrator might try to identify and evaluate the effects of various barriers, filters, and noise upon the feedback flow. Barriers, for example, could be physical, such as the absence of communications facilities, or human, as in the case of recalcitrant feedback reporters. The subordinate staff which reports to the administrator may intentionally or unintentionally filter the information that they receive. It is not at all certain that the information which the staff chooses to report or perceives as relevant will coincide with the decision-maker's informational needs. The administrator will need to be able to recognize and see through such noise as padded and glossy reports which distort or conceal the nature and magnitude of program problems at the village level.

The administrator might also look into the encoding system to see if it is appropriate for the type of information desired. Fulfillment of a target can be noted in terms of quantitative indicators for instance, but getting at just how it was fulfilled may not adequately be encoded by use of numbers. Decoding of information can similarly lead to misinterpretations if the symbols or units used are imprecise

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Associate Professor, Department of Agricultural Economics and Rural Sociology, University of Tennessee, Knoxville, Tennessee, Winter Quarter, 1972. Also see: David Kenneth Berlo, The Process of Communications: An Introduction to Theory and Practice (New York: Holt, Rinehart and Winston, 1960).

or ambiguous. Different types of information may require different reporting channels. For example, information regarding an urgent need for the administrator to rectify credit shortages before farmers become irate may reach him through a different channel than that used to handle monthly progress reports.

Organizational Theory

Some concepts from the literature of organizational theory can also be helpful in examining the feedback process. In particular, the four basic functions of an organization discussed by Saul M. Katz (i.e., maintenance, transformation, adaptation, and guidance functions) provide a point of departure for categorizing the kinds of feedback information required by the agency.[10]

Briefly, Katz's "maintenance" function refers to the need of an organization to establish and maintain orderly internal structures and procedures. Logistics, budgetary preparation and control, personnel recruitment, training, and supervision might fall within this function.

The "transformation" function of an organization is that of converting agency inputs of funds, materiel, and personnel into the desired responses by the target group. The transformation function is the process underlying project implementation and execution.

The "adaptation" function helps to keep the agency in touch with important developments in the external environment, stimulating adjustment of program content, methods, and goals to these changes. As

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[10]Saul M. Katz, loc. cit.

examples, the need for agency adaptation could come from new legislation, political events, clientele wants, or public reactions to agency programs.

Katz's "guidance" function serves to coordinate and direct the above three functions in such a way so as to minimize conflict among them and to make the most of their potential complementarities.

In looking at the feedback requirements of an agency responsible for carrying out village level programs Katz's categories can easily be adapted to represent the kinds of information that the agency needs. That is, the agency needs certain informational inputs from village level programs to ensure and facilitate program maintenance, transformation, and adaptation and guidance.

Another useful category can be referred to as program "evaluative" feedback. That is, in addition to generating feedback related to how a program is performing vis-a-vis each of the four functions discussed above, there is a need for feedback about how all of these are adding up collectively in terms of overall program goal achievement.

Perhaps the feedback interrelationships and requirements being discussed can best be summed up in diagramatic fashion as in Figure 2.

The above categories will be taken up and applied directly to the feedback decisions discussed in Chapter III. Suffice it to say here that the organizational functions defined by Katz can be usefully

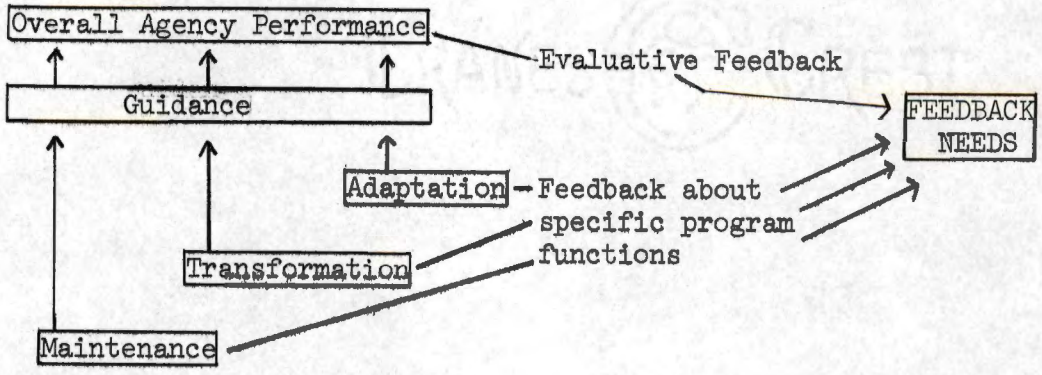


Figure 2. Interrelationships among agency feedback requirements.

adapted to help clarify the micro-requirements of the change agency/village program feedback process.[11]

A more in-depth application of Katz's ideas and of those from communications which are related to the structural/procedural and decision-making dimensions of the feedback process shall be taken up in the following chapter. But what about the behavioral elements that influence feedback patterns and content? Some ideas and illustrations

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[11]Additional feedback important to the agency's continuing effectiveness may originate and stem from sources outside of the agency-village level program context. Information about how the agency's actions and activities affect or are affected by a wide range of groups, organizations and individuals is needed in the long-run if the agency is going to be successful. However it is unlikely that the feedback system for gathering and transmitting these informational inputs will be as formally elaborate and developed as the system for relaying the feedback from village level programs. For a detailed discussion of the need for organizational linkages with outside groups see: George H. Axinn, "Principles of Institution Building," paper prepared for the Asian Agricultural College and University Seminar, Bangkok, September 21, 1970; H. L. Bumgardner, Walter Ellis, Rolf P. Lynton, Christian W. Jung, J. A. Rigney, contributors, A Guide to Institution Building for Team Leaders of Technical Assistance Projects, prepared by North Carolina State University under contract No. AID/CSD2807, December 1971, pp. IV-11 to IV-31.

from the literature of development administration can be helpful in identifying the behavioral attributes found within bureaucracies which can have an impact upon feedback communications.

Development Administration

Fred W. Riggs has developed a model that attempts to explain bureaucratic behavior within LDCs.[12] In considerable detail he describes the characteristics and forces at play within what he calls "prismatic society." He then proceeds to depict the consequences and resulting behavior patterns within LDC administration in general. Riggs' model is useful here inasmuch as it begins to identify behavioral tendencies that were perceived to affect feedback within the Venezuelan context. How feedback from the village level program participants to the agency decision-maker is affected by manifestations of bureaucratic self-interest, formalism, status consciousness, and politicization is of concern here.

Riggs would argue that these behavioral tendencies are mutually reinforcing and when left unchecked, will consume inordinate amounts of the agency official's time and energy to the detriment of his formal responsibilities. It could be argued, however, that countervailing extra-bureaucratic forces can act to encourage and enforce a certain amount of accountability and program direction within the bureaucracy. Influential interest-groups such as the Federacion Campesina and the Liga Campesina in Venezuela exert pressure upon the bureaucracy at

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[12]See Fred W. Riggs, loc. cit.

local levels. At the same time professional norms and attitudes that enhanced job performance were not totally lacking among agency personnel. In commenting on the influence of professional norms upon bureaucratic behavior, Sharkansky has noted that " . . . these norms affect both the professional's view of the problems that he sees in the environment and the goals he adopts in order to confront these problems."[13]

Resource Allocation Concepts

Economics provides some key concepts and decision-making tools pertaining to resource allocation that can be used as guidelines in helping the agency administrator realistically to assess his ability to act on the feedback problems he faces.

The decision-maker is confronted with matters of choice regarding how far to go in committing scarce agency resources to get information, what information to seek, and how best to allocate his information gathering resources among feedback alternatives. The opportunity-cost principle can be applied to help choose from among feedback alternatives. The notion of performance trade-offs among alternatives is applicable also.

In determining whether to invest agency resources in feedback as opposed to another agency activity, some way to estimate the value of feedback information is essential. While the decision-maker may not have access to quantitative data on the costs and benefits of

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[13]Ira Sharkansky, Public Administration: Policy-Making in Government Agencies (Chicago: Markham Publishing Company, 1970), p. 46.

feedback information, he still may be able to make reasonably sound judgments by making all the "costs," and "benefits" explicit even if they are non-monetary in nature.

In attempting to select the most appropriate feedback alternative or mix of alternatives, it is important to assess each in terms of its likely effects on program performance. Evaluating these effects is apt to entail judgments not only about agency time and expense, but also about the responses of people in and outside the agency to the proposed feedback alternatives. For example, a plan to get extension personnel from cooperating agencies who worked in identical projects within the same Venezuelan villages to file joint reports failed because agents did not like to have their co-workers see how they padded and distorted their reports. This type of outcome was not considered by the administrators nor were any provisions made to contend with the problem, even though it was common knowledge that petty rivalries flourished among the agents.

Various Applied Fields

Some strategies and approaches for improving the pivotal dimensions of the feedback process (i.e., structural/procedural, human communications, and decision-making) within agricultural programs can be drawn from the applied literature of rural sociology, program planning and implementation, and extension. On the basis of the kinds of problems and human responses discerned in the Venezuelan situation, it would appear that some of these remedial possibilities for improving feedback hand-ups might prove useful. In particular, general

suggestions for improving certain structural/procedural aspects of the feedback system (e.g., report content, format, timing) would seem to be applicable within the program context observed in Venezuela. Ideas from rural sociology about legitimizing agency programs with the target group could conceivably be used to improve grass-roots participation in the feedback process. Some ideas from extension and personnel management, while reflecting a Western cultural bias, could conceivably be employed by the Venezuelan administrator in his contacts with feedback communicators. In sum, a number of suggestions encountered in the literature for improving particular feedback problems might be effectively adapted and utilized by an administrator in a situation similar to that observed in Venezuela.[14]

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[14]Listed below are a few selections from the applied literature which offered relevant suggestions for analyzing feedback problems and which seemed adaptable to the cultural and institutional milieu of the Venezuelan program administrator.

Earl M. Kulp makes some useful suggestions about how feedback reporting formats and data elements can be organized: Earl M. Kulp, Rural Development Planning: Systems Analysis and Working Method (New York: Praeger Publishers, 1970), pp. 325-346. For a discussion on some ways to improve human communications in feedback see: W. Keith Warner, "Feedback in Administration," Journal of Cooperative Extension, Vol. V, No. 1 (Spring, 1967), pp. 44-45. Some general but useful sources offering suggestions on how to bring about behavioral changes within change agency bureaucracies are: Allen R. Cohen, "The Human Dimension of Administrative Reform," Development and Change, Vol. II, No. 2 (1970-71), pp. 65-82; Detchard Vongkomlshet, "Innovation: The Task of the Civil Servants," Report on Regional Seminar on Development, Malaysian Centre for Development Studies, Prime Minister's Department, Kuala Lumpur, Malaysia, 1968, pp. 27-31. For constructive ideas on leadership and motivation within rural development agencies see: David W. Brown, "The Human Element in Getting Programs Going--Legitimization, Motivation, and Leadership," Unit L in a series of mimeographed class notes prepared for a class on Agricultural and Rural Program Planning by David W. Brown, International Professor, Department of Agricultural Economics and Rural Sociology, University of Tennessee, Knoxville,

IV. SOME CONCLUDING REMARKS

Some ideas and concepts from communications, development administration, organizational theory, and economics that appear to provide a basis from which an analysis of feedback can be undertaken have been discussed. The very complexity of the subject seems to necessitate an eclectic approach. Perhaps this study can make a contribution by attempting in preliminary fashion to conceptualize and present in a systematic way the issues, alternatives, and forces at play within the feedback process at the level of regional programs.

Tennessee, Summer, 1971. While the literature that was reviewed in the area of management communications and personnel management was directed at the practitioner, many of the recommendations were presented as indisputable maxims. Unlike the other sources mentioned above, these often lacked an analytical thrust which would have facilitated their application outside of a Western cultural context.

CHAPTER III

STRUCTURAL/PROCEDURAL DIMENSIONS AND ALTERNATIVES IN FEEDBACK DESIGN

The objective of this chapter is to examine the major structural/procedural dimensions involved in the feedback process. These are framed within a decision-making context, which emphasizes the need to consider and evaluate alternative courses of action.

I. FEEDBACK AS A PROBLEM OF ECONOMIC CHOICE

It is imperative that the program administrator take into consideration both the disposition of resources for feedback purposes and the nature of the agency's feedback needs as a prelude to acting on feedback problems.

Initially two allocative decisions face the administrator concerned with making feedback improvements: the first has to do with the allocation of agency resources between (a) information gathering and analysis and (b) project execution; and the second has to do with the allocation of feedback resources between the search for new information and sustaining on-going feedback processes (i.e., those involved in monitoring existing projects and expediting actions to alleviate bottlenecks in these projects).

Feedback Versus Action

The administrator may improve feedback by (a) channeling more

resources into feedback activities, and/or by (b) improving the effectiveness of those information resources presently at his disposal (e.g., encouraging more effective information gathering, transmission, and analysis). In the short-run the total amount of resources available for project execution (action) and feedback is apt to be fixed. Consequently the administrator can only increase the amount of agency resources (e.g., personnel, time) available for feedback gathering and analysis by shifting them away from agency implementation activities. The administrator can visualize action and feedback/analysis as partial substitutes for one another in generating maximum program performance as shown in Figure 3.

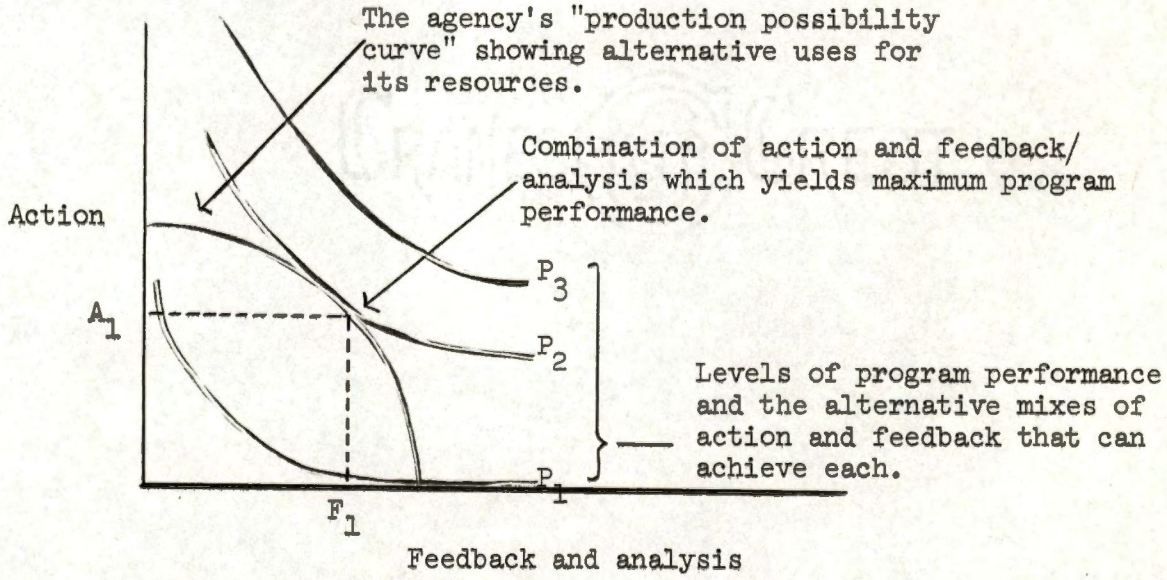


Figure 3. The allocation of agency resources between action and feedback/analysis components.

In such cases the question is where to "draw the line" in allocating resources (and/or the administrator's attention) between (1) feedback and analysis, and (2) action implementation so as to maximize total agency performance. Some considerations which may tip the balance of agency resources one way or another are illustrated below in Figure 4.

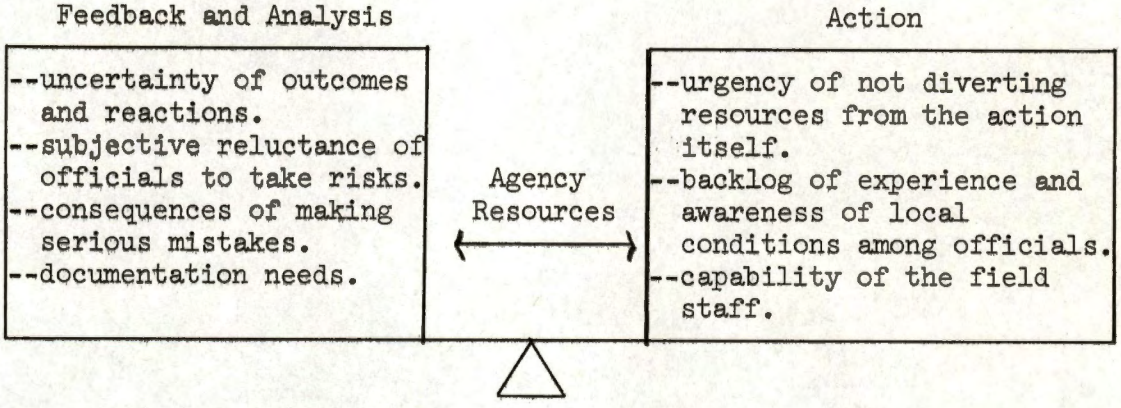


Figure 4. Factors to be considered in allocating agency resources to the action or the feedback/analysis components of agency programs.

Clearly the best allocation of resources between action and feedback/analysis will vary from case to case.

In many situations, however, the allocation of resources between feedback and action may be predetermined by precedent and the established ways of doing things within the agency. The administrator may have little leeway to shift resources from one use to another. In such instances feedback improvements can be more easily realized by increasing the effectiveness of the existing feedback resources and system. Most of this chapter will be concerned with this latter approach.

Competing Feedback Alternatives

The administrator may also face decisions relating to how far he should go in committing feedback resources to obtain new or additional information upon which to make program decisions. In doing so it is helpful to bear in mind the following points:

1. Information gathering and interpretation is a continuous and rarely completed task.
2. Most decisions are made on the basis of the best available information at any point in time.
3. Rarely do decision-makers possess all of the information related to any particular issue. Rather, they seek sufficient information upon which to make reasonably sound decisions.[15]

The limits to new information gathering include: (1) the costs involved, (2) the capacity of the feedback system to handle and interpret increasing amounts of information efficiently, and (3) the competing needs for feedback resources. With reference to this last limitation, it will be recalled from Chapter II that different kinds of feedback are required by the agency. These alternative feedback needs compete for existing resources. For instance, feedback resources needed to help arrive at new program decisions may already be tied-up in the monitoring of on-going projects. To detract from the latter use may have serious implications for the performance of these projects.

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[15] Ira Sharkansky discusses some information constraints which commonly face agency decision-makers. Sharkansky, op. cit., pp. 40-42.

On the other hand, the value of additional information may be high in terms of its pay-off in total program performance. For example, a diversion of resources toward finding out why farmers in a particular area frequently default in credit repayments may more than justify any discontinuities or problems created in other feedback activities pertaining to that program.

The Value of Feedback Information

To be sure, before the administrator can determine whether an investment or agency resources for feedback purposes is worthwhile, some feeling for the value of feedback is needed.

The costs of obtaining feedback are relatively easy to determine. In addition to the costs though, the administrator needs some notion of the net value of information so as to be able to judge how much to "spend" on information gathering (i.e., feedback) as a whole and how to allocate resources among different feedback needs. Although absolute values may not be easily attached to the information reaching the decision-maker through feedback channels, a statement concerning the stream of benefits derived from the information can be made. Some readily recognizable pay-offs of information are listed below.

--Value added by information as decisions are made that otherwise would not be made;

--Value added by information as decisions by analysis prove better than decisions by insight;

--Value added by information as the scarce commodity of insights if freed from lower-level decisions and can be applied to higher-level problems;

--Value added by information as decisions are made sooner because of the increased confidence of the manager.[16]

These benefits as well as numerous others, while not amenable to quantification in every case, can be made explicit and contrasted with the costs of acquiring information thus providing the decision-maker with a rough estimate of their worth to him. Even though the ambiguity and uncertainty surrounding the feedback process can be reduced by pinpointing and suggesting methods for weighing the relevant issues and alternatives, it is important to bear in mind that:

> There is no once-and-for-all decision that reflects a completely rational assessment of problems, goals, policies, and the benefits and costs associated with each possible option. As changes occur in the . . . environment, it is necessary for participants to learn about the implications of these changes for the current set of goals or policies and perhaps renegotiate.[17]

II. SUBSTANTIVE COMPONENTS OF FEEDBACK

The initial step in tackling the feedback problem is that of defining precisely what the informational needs of the agricultural program administrator are. The more clearly the administrator is able to determine the kinds of information that he needs to make timely and realistic program decisions, the more efficiently can he marshal his scarce information-gathering resources. Ascertaining his informational

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[16] Adrian M. McDonough, Information Economics and Management Systems, (New York: McGraw-Hill Book Company, Inc., 1963), p. 11; it also contains an interesting chapter on micro-level information economics, see Chapter 6, pp. 92-118.

[17] Sharkansky, op. cit., p. 43.

needs is not a simple task. He may be responsible for the implementation of several village level programs (e.g., credit, extension, infrastructure) which involve different goals, input requirements, personnel, target groups, levels of supervision, and even different reporting systems. Considering all of the other demands upon his time it is little wonder that the administrator can easily get out of touch with what is really happening within programs at the village level.

Even as the administrator focuses in on a specific program, however, a number of questions and decisions pertaining to informational feedback immediately arise. What purpose does the existing reporting system really serve? Is this purpose consistent with general organizational requirements? Is it consistent with the informational requirements of the program decision-maker? The type of information required by the agency decision-maker and that required by the organization as a whole may differ. For example, the internal housekeeping function of the organization (Katz's "maintenance" function)[18] may require that detailed reports be filed concerning the movements of personnel, funds, and materiel within village level programs. An immediate concern of the administrator, on the other hand, may be determining whether the agency inputs into the program are producing the desired responses by the target group (Katz's "transformation" function). Also, the administrator may want to detect and to analyze the causes and likely

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[18] Recall that Saul M. Katz classified the basic functions of an organization into four parts: maintenance, transformation, adaptation, and guidance.

effects of changing conditions or attitudes at the village level ("adaptation" function), or to evaluate how well program components are being coordinated and used in a complementary fashion ("guidance" function).

It is important to note that while program maintenance, monitoring (transformation), adaptive, and guidance feedback deal with specific functional components of the feedback process, program evaluative feedback is one step higher on the means-end continuum, i.e., it encompasses the others.[19] Similarly, let it be noted here that while the breakdown of feedback according to basic purposes is useful for conceptualizing agency feedback needs, few feedback systems will actually be designed along these lines explicitly.

Functional Components

Before going any further a clarification of what is meant, for the purposes of this study, by each of the feedback types is in order.

Program maintenance, or control oriented feedback. Much of the reporting within government agencies is done in order to ensure personnel, materiel, and budgetary accountability. The smooth and orderly internal functioning of an organization requires that a certain amount of control be exerted through the feedback mechanism. Procurements, travel requests, vehicle usage, and work schedules, for example, are all subject to abuse and/or misuse, thus necessitating some means of

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[19] See Figure 2, page 21.

control and accountability. Furthermore, budgetary preparation requires that detailed information on the level of activity within the agency be thoroughly documented. A good share of the feedback needed by the agency has to do with these largely internal matters.

Program monitoring, or transformation facilitating feedback. The role of program monitoring feedback is to facilitate the smooth and orderly day-to-day execution of projects at the village level. This type of feedback relates to the agency decision-maker, or to the key administrative sub-units responsible for program implementation, what the short-run input requirements are for a specific project and when and where they are needed. Transformation facilitating feedback helps to keep the programs in the field operating and to make adjustments to short-run changes and bottlenecks. Program monitoring feedback also serves the purpose of documenting on a regular short-run basis the project input/output relationships.

Program adaptive feedback. The administrator also has a need for information that will help him to develop program strategies consistent with local conditions and constraints. He needs to keep aware of changing opportunities and situations at the local level and to stimulate program adaptation in response to those changes. For example, he may need to assess how farmers feel about using a new production input (e.g., hybrid corn) in order to determine how much emphasis should be given to the farmer education aspect of a production program. He needs to keep in touch with the farmers' general reaction

to the program once it is underway and to make adjustments to newly emerging problems.

Program guidance feedback. The administrator may also need to know how well agency efforts are being coordinated to achieve program goals. For example, he may want to be advised if program components are out of phase with each other, or if personnel are pursuing conflicting ends, or if the whole program is deviating from its planned course. Such information can help to minimize conflict and to ensure needed coordination and cooperation among the various program elements.

Program Evaluative Feedback

Upon the completion of a project or a major phase of a project the administrator may want to evaluate the results in terms of attainment of project goals and in terms of how closely actual results and expected results correspond. He may rely on an analysis of reports and records from the previous implementation stages to see what actually occurred and why. In addition he may require new or additional information for program evaluation and review purposes.

Trade-offs and Opportunity Costs

Obtaining and assessing the information that is required to maintain, execute, adapt, coordinate, and evaluate agency programs poses certain allocative problems. Given the diverse (but complementary) feedback requirements of the agency, the decision-maker must determine how much emphasis to give each aspect of this informational requirement "mix." Some trade-offs between one kind of information

and another will probably be involved. Therefore the decision-maker may try to determine what the likely effects and consequences will be of emphasizing some types of feedback over others in terms of project and/or agency goals. For instance, in the face of scarce informational resources, the administrator may decide to emphasize internal control, or maintenance related feedback. In arriving at this decision it is important to determine whether the sacrifices made in terms of transformation, adaptation, guidance, and evaluation are outweighed by the advantages gained from improving the agency's internal control or auditing system. (I.e., the opportunity cost principle applies here.)

Indeed, John Dorsey points out that where the information and resource surpluses are low, such as in LDCs, there is a strong tendency for the control and maintenance subsystem to absorb the greater share.[20] The scarcity of information inputs in the form of accurate, systematic, and comprehensive reports on the operational environment may lead to a dependence upon previously stored information in carrying out the adaptation process. Rather than spontaneity and flexibility in performing the adaptation function the tendency is apt to be for a " . . . reliance upon precedence, rules, and accepted ways of doing things."[21] The ability of the organization to perceive and to adapt to changes in the environment is likely to be seriously impaired as a result. This illustrates some of the likely consequences resulting from a

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[20]John T. Dorsey, Jr., "A Communications Model for Administration," Administrative Science Quarterly, Vol. 2, No. 3 (December, 1957), p. 53.

[21]Ibid., p. 51.

trade-off between program adaptive feedback and program maintenance feedback. A trade-off between transformation facilitating feedback and program maintenance feedback may result in improved methods for keeping track of how the VLW uses his time but at the expense of providing him with an effective channel through which he can request the support necessary to keep him productively occupied. Conversely, if the program monitoring (transformation facilitating) feedback is improved to the detriment of internal controls (maintenance feedback) the inputs that the VLW requests may be rusting away in a neighboring village or agency warehouse unbeknown to the supporting staff.

Again the important point is that the administrator, in choosing to divert more information gathering resources toward one type of feedback or another, needs to give some thought to the opportunity costs involved. A systematic and objective analysis of the opportunity costs of alternative feedback emphases can be a complicated and time consuming task in itself. However, the administrator can at least make note of some of the likely consequences, in terms of program gains and losses, associated with emphasizing each type of feedback (see Figure 1).

Determinants of Feedback Emphasis

To be sure, the successful adaptation and execution of a project will depend on some combination, or "mix," of the five types of feedback. In fact, the nature of the project itself may indicate which types of feedback need to be stressed. For example, where tasks are simple and constant (e.g., recording readings from a local weather

station) program maintenance and occasionally program evaluative feedback may be adequate. For rapidly changing and more complex projects (e.g., introducing a new crop requiring a package of new inputs) program adaptive and program monitoring feedback may be more critical.

Not only might the type of project determine the dominant feedback requirements but so might the phase or stage that a project is in. Adaptive feedback, for example, might receive priority during the early stages of a project. As the project picks up momentum during the implementation stage, the need for program maintenance and program monitoring feedback may become increasingly important. More resources might be shifted toward providing program guidance feedback as the project or phasing becomes more complex. Near the end of a particular phase or project, program evaluative feedback may require more attention.

Again, no program can be successfully sustained in the long-run without all five types of feedback. This is not to say that the most appropriate channels, media, and timing employed in the feedback process will necessarily be identical for all types of feedback from all types of programs. The administrator needs to look at these and other considerations inherent in obtaining, transmitting, and handling feedback if he is to make sound decisions concerning his own feedback priorities and arrangements. Table I illustrates one example of a way in which the pros and cons of emphasizing certain types of feedback can be laid out for evaluation by the agency decision-maker.

TABLE I

GAINS AND LOSSES FROM EMPHASIZING CERTAIN TYPES OF FEEDBACK

	Program Gains	Program Losses
Emphasis on Maintenance or Control Oriented Feedback	--Orderly internal control and accountability of personnel, funds, and materiel. --Clear and distinct procedures for materiel procurement by field staff. --Budget allocations more easily determined for field operations. --Good records of input requirements and mobilization for future programs.	--Staff time lost in filing detailed reports. --Program delays due to red tape. --Practical problems of implementation disregarded. --Concern of VLW with his short-run output rather than with his impact on the performance of the target group. --Disregard for how effectively VLW is spending his time. --Lack of flexibility. --Procedures become routinized and are not responsive to innovative ways for meeting changes in the working environment.
Emphasis on Program Monitoring, or Transformation Oriented Feedback	--Rapid response to specific short-run needs of programs at the village level. --Improved coordination in allocating project inputs. --Implementation bottlenecks reported as they arise.	--Little emphasis on anticipating bottlenecks before they arise. --Little emphasis on foreseeing and taking advantage of changing opportunities at local level in long-run. --Slippages in program maintenance may create problems by not having reliable and standardized procurement procedures and other internal controls over agency resources.

TABLE I (continued)

GAINS AND LOSSES FROM EMPHASIZING CERTAIN TYPES OF FEEDBACK

	Program Gains	Program Losses
Emphasis on Adaptation Oriented Feedback	--Adaptation of programs to local conditions. --Improved acceptance by farmers of program methods and goals. --Program goals adjusted to long-run program potential and changes in environment. --Agency rapport with farmers enhanced. --Farmers may bear more of program responsibilities and thus lower agency requirements.	--Short-run or transformation needs may be neglected and the program may lose steam and credibility. --Adaptation may outpace internal supportive maintenance and transformation capacity to adjust, creating program lags and inconsistencies.
Emphasis on Guidance Feedback	--Improved coordination and phasing of program components. --Internal conflicts or inconsistencies detected. --Interdependencies among separate program components can be taken into account.	--Time may be spent coordinating projects on paper rather than following through to project implementation. --Highly structured guidance feedback may increase the paperwork burden and volume within the agency.

TABLE I (continued)

GAINS AND LOSSES FROM EMPHASIZING CERTAIN TYPES OF FEEDBACK

	Program Gains	Program Losses
Emphasis on Evaluative Feedback	--Can pinpoint problem areas to avoid in future programs. --Can begin to measure how well program is meeting goals. May decide to adjust goals and/or program strategies. --Can get a cost-benefit analysis to see whether program or program strategies adequate.	--After-the-fact information may come too late to be of use. --Still need continuous records and reports for evaluative purposes. --May create suspicion and low morale among field staff.

III. MAJOR STRUCTURAL AND PROCEDURAL DECISIONS

Initially, then, a number of basic decisions need to be made with reference to the structural/procedural dimensions of the feedback process. They might include the following:

A. Deciding what specific kinds of information are to be collected.

B. Deciding from whom the information might be collected.

C. Deciding who to use to collect information.

D. Deciding how to collect the information.

E. Deciding to whom the information is to be transmitted.

F. Deciding in what form information is to be reported.

G. Deciding on the mechanisms for channeling information to the decision-maker.

H. Deciding on the timing (frequency and speed) of information reporting.

For each of the major decisions above there may be several alternatives. How the decision-maker might begin to examine the major choices with the help of a decision profile is illustrated in Table II. The alternatives pertaining to each major decision may vary from one case to another. However, the practice of making key decisions and alternatives explicit and arranging them in an organized format will facilitate a systematic appraisal of the options available.

In the remainder of this chapter some of the key feedback decisions and alternatives outlined in Table II will be examined. Specifically, the mechanisms for channeling information to the

TABLE II

DECISION PROFILE ILLUSTRATING KEY FEEDBACK DECISIONS AND ALTERNATIVES

Feedback Decision	Alternatives
A. Kinds of Feedback to be Obtained	Program maintenance feedback Program monitoring feedback Program adaptive feedback Program guidance feedback Program evaluative feedback
B. From Whom to Collect Feedback	VLWs Farmers Personnel from other agencies Local government officials Local politicians
C. Who to Use in Collecting Feedback	VLWs Outside evaluators Peasant representatives Ombudsmen Spies
D. How to Collect Information	Staff reports Staff meetings Village assemblies Inspection tours Periodic surveys Inter-agency meetings Office interviews
E. To Whom Information Is Transmitted	Top administrator Program supervisors Special assistant to administrator (gatekeeper) Full planning body Local leaders General public
F. What Form to Use in Collecting and Presenting Feedback	Verbal-written Structured-unstructured Quantitative-qualitative Objective, conditional-normative, or prescriptive

TABLE II (continued)

DECISION PROFILE ILLUSTRATING KEY FEEDBACK DECISIONS AND ALTERNATIVES

Feedback Decision	Alternatives
G. Mechanisms for Channeling Information to the Decision-maker	Direct-indirect Formal-informal Elicited-unelicited
H. Timing of Feedback	Continuous Periodic Spontaneous

decision-maker, the form to use in collecting and presenting feedback, and the timing of feedback will be discussed. An effort will be made to determine which kinds of feedback might be facilitated or hindered given various structural/procedural alternative feedback arrangements.

Mechanisms or Channels for Acquiring Feedback

For the administrator who is willing to use them, a variety of possible feedback channels are at his disposal. By judiciously combining these information flows a fairly well-rounded picture of program needs and performance can be obtained. Or conversely, where the administrator fails to utilize the potential sources of information available to him, program decisions may suffer.

Direct and indirect channels. The feedback problem would be greatly simplified if the administrator had responsibility for a very small project which allowed him the time and the setting conducive to

direct contact on a continuous basis with the field staff and with the farmers. Unfortunately this was not the case in Venezuela nor would it be a likely situation for most regional program administrators. The administrator is apt to rely on a few direct contacts with the village level program participants (i.e., staff meetings, inspection tours, office visits by farmer delegations, and occasional informal contacts) supplemented by more frequent and voluminous indirect information flows (e.g., staff reports) which reach him via one or more intermediaries. That is, the decision-maker must generally depend on others to select and relate to him the information that he needs to make program decisions.

The person most familiar with agency programs at the village level is the VLW, but he cannot be so overburdened with reporting duties that his performance as an agent of change within the community is impaired. Other channels exist for getting information about village level programs to the administrator. Diagramatically, some of the more obvious direct and indirect feedback channels can be illustrated as follows in Figure 5:

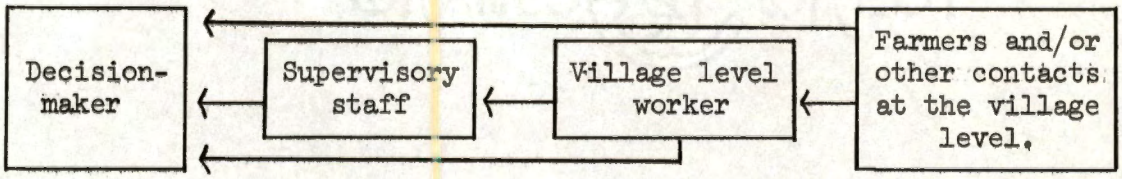


Figure 5. Direct and indirect feedback channels for getting information about village level programs to the administrator.

The arrows indicate feedback channels that link the origin of the information with intermediary communicators or directly with the program administrator. These are by no means the only possible sources and channels of feedback. The administrator may also use specialized reporters such as official ombudsmen, outside evaluators, or even "spies" to get information for him. Other individuals or groups outside of the agency could also serve as feedback sources, e.g., politicians, voluntary special interest groups, and personnel from other agencies.

Given a variety of potential feedback sources the administrator will want to select those which most closely meet his feedback needs and constraints. One way to compare alternatives in a preliminary fashion is by constructing a plus/minus chart. By using this simple device the important alternatives, listed vertically, can be evaluated in terms of the criteria deemed relevant by the administrator which are arranged along the upper horizontal axis of the matrix. Then each alternative can be assigned a plus if it meets the criterion in a positive manner or a minus if it constitutes a negative factor. Conceivably a numerical score, ranging for example from a plus 3 to minus 3, could be assigned, thus establishing some feeling for the relative magnitudes involved. Table III illustrates a hypothetical case where various alternative sources of feedback are rated in terms of specified criteria and compared. In this example the operational criteria which are used are the costs of the feedback in terms of time and money, the comprehensiveness of the information supplied, the accuracy of the information, its timeliness, and the extra-agency participation in providing feedback. In

TABLE III

OPERATIONAL CRITERIA*

Alternative Feedback Sources	Costs to Agency		Comprehen-siveness	Accuracy	Timeli-ness	Extra-Agency Participation
	Time	Money				
1. Extension Personnel	-3	-3	+2	+1	+3	+1
2. Farmers	+1	+2	+1	+2	-1	+3
3. Official Ombudsman	-1	-3	+2	+2	+3	+1
4. Outside Evaluations	+1	-3	+3	+2	+1	+2
5. Politicians	+1	+3	-1	+1	-2	+3
6. Personnel from Other Agencies	+1	+2	-1	+1	-1	+3

*Certain criteria may be weighted more than others in making the final decision on feedback sources. E.g., cost to the agency may be of greater concern to the agency than, say, the timeliness of the information.

applying this type of analysis some alternatives may be easily discarded, others may entail some trade-offs, and some alternatives may be clearly superior in most or all aspects. In any event, the most appropriate set of alternatives for serious consideration can more easily and systematically be determined.

Since acquiring feedback directly from the various sources at the village level requires more of the administrator's available time than does indirect feedback, it might be worth considering which kinds of messages warrant his immediate attention and time, and which might be suitably channeled through intermediaries. Certainly most of the program maintenance related feedback can be received and compiled by intermediaries. Likewise a good share of the program monitoring feedback can be received and dispatched by subordinate program officials. The administrator may help expedite certain transformation related problems however, and advise subordinates on particular day-to-day implementation problems. Direct channels for these types of problems need to be provided. Program adaptive feedback may require major changes in program emphasis and direction which only the decision-maker, in consultation with the various project heads and technical staff, is able to authorize. Direct feedback channels from the village level sources may be required in order to gain additional information and to corroborate the information received via indirect channels. Program evaluative feedback may also call for a mixture of direct and indirect feedback sources, particularly since much of the unfavorable information may be subject to distortion if it is routed through indirect channels. Special

implementation problems, those requiring major decisions, and sensitive program evaluative feedback will most likely require direct channels to the agency administrator. Other types of feedback may be satisfactorily channeled through intermediaries.

An interesting attempt to improve the effectiveness of indirect channels is illustrated by the Malaysian operations room approach. In implementing infrastructure projects the Malaysian Ministry of Rural Development maintained in each regional office a special reporting center. Each center was equipped with a large book, called the Red Book, which contained a series of overlaying maps and project progress charts for the region. The maps pinpointed the physical characteristics of the area, indicating existing facilities (roads, bridges, land clearings), projects under progress, and those being considered. For each project there was a detailed progress chart which laid out the various project stages along with appropriate completion dates. The chart was up-dated every reporting period and the progress of a particular project was noted in red if behind schedule, in green if ahead of schedule, and in black if on schedule. The administrators needed only to scan these charts to spot where project delays and bottlenecks were occurring. Written reports explained delays and the remedial actions being taken. Regular staff meetings were held in the operations room and decisions were made as to what needed to be done and who was to be responsible.

Although the Malaysian evaluation technique proved more difficult to apply to projects with non-quantitative goals and units of measurement (e.g., changes in attitudes with the target group), a

program administrator might consider the use of a special control-room in which to hold feedback briefings. Where appropriate the scheduling, magnitude, and progress of projects could be presented graphically. At a minimum some visual indicators or program phasing requirements, resource needs and allocations, and project targets might be helpful. Such devices could help to clarify the program objectives and methods for the staff as well as lend an aura of importance, professionalism, and team effort to project reporting.[22]

Formal and informal channels. Another dimension of feedback that bears special examination is whether formal or informal channels should be used. Formal channels include such official feedback mechanisms as written reports, staff meetings, inspection tours, and local assemblies. Informal mechanisms skirt or are outside of officially designated channels, e.g., information elicited or volunteered in casual conversations or informal settings.

There are advantages associated with the use of both formal and informal feedback mechanisms. The administrator, in drawing upon formal and informal channels for feedback, might seek to combine them so as to maximize (1) the potential complementarities in the kind of information provided, and (2) the relative advantages peculiar to one or the other

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[22]A description of the Malaysian scheme is found in: Clair Wilcox, "Malaysia's Experience in Plan Preparation and Implementation," Development Digest, Agency for International Development, Vol. III, No. 2 (July, 1965), pp. 2-10.

channel. Some of these possible complementarities and relative advantages can be discerned from Table IV.

TABLE IV

SOME POTENTIAL COMPLEMENTARITIES BETWEEN AND RELATIVE ADVANTAGES OF FORMAL AND INFORMAL FEEDBACK MECHANISMS

Formal Channels	Informal Channels
--A formal structure may already exist through which feedback can be channeled.	--Opportunities for informal information seeking arise frequently and can be taken advantage of.
--Formal channels are best suited for relaying descriptive facts that can be easily quantified and verified.	--Informal channels are useful for in-depth probing into the reasons for unanticipated bottlenecks or unexpected progress.
--Routine events and program needs can be transmitted in a regular and organized fashion.	--New insights and perspectives can be brought to bear on program activities and performance.

In many instances, then, informal channels can provide valuable insights and complementary information to that gained through formal channels. In addition to helping the administrator better understand what is really going on at the implementation level, informal channels may help him to recognize the weak points or aspects of the formal reporting apparatus itself.

Elicited and unelicited feedback. Another useful distinction that can be made by the administrator as he takes stock of his information-gathering possibilities is to divide feedback into that

which is elicited (resource comsuming) and that which is unelicited (resource saving). Most of the feedback for program maintenance and monitoring purposes is not likely to come in with sufficient regularity and detail if not actively elicited by the agency. For this reason VLWs periodically file reports, staff meetings are regularly scheduled, and field trips occasionally planned.

However, the agency can encourage and initially help develop valuable sources of unelicited feedback that can become self-sustaining and which can provide spontaneous informational inputs. This can be brought about by encouraging and providing feedback channels for special interest groups that exist or that can be formed within the farm community so that they can actively participate in the feedback process by voicing their program related needs, complaints, and suggestions. Agricultural cooperatives, community development committees, or village councils are examples of potential sources of unelicited feedback. In India, for instance, village councils (Panchayats) are linked very closely with the decision-making process within the agricultural development agencies. A formal, structured, and legal relationship has been established. In other instances, an agency may maintain contact with local groups in a less structured and binding fashion (e.g., in the United States the extension service has utilized county advisory committees). In some situations an agency may have no formal channels for unelicited feedback at all.

To encourage such groups to become involved on a continuing basis in the feedback process the agency would have to take two major

steps. First, a structure through which local groups can gain access to the agency feedback process would need to be provided. Second, the agency would have to respond to at least some of the requests from the target group in order to maintain credibility. By the same token, if local groups are given a structured and effective mechanism through which they can channel needed information on a continuing basis, some agency resources can possibly be freed to perform other program activities.

Forms of Recording Feedback

In addition to looking at feedback channels and mechanisms the administrator may want to examine the media used to convey messages within these channels. Certain informational needs may be most efficiently and/or effectively met by written reports while still others by verbal messages. It is up to the administrator to determine how feedback accuracy, clarity, ease of interpretation, and speed of delivery are affected by particular feedback media, what advantages certain media have over others, and how he might best utilize the media types at his disposal.

Structured written reports are those which adhere quite closely to predetermined categories of information and formats, e.g., tabular-graphic reporting forms and standardized information items. Some of the advantages of structured written reports are:

1. Information can be grouped into distinct categories for concise and easy reference (e.g., according to project or for special use such as publicity).

2. Within each category, key indicators of project status and progress can be set apart and highlighted for rapid review.
3. Data categories and units of measurement can be used which correspond with those required at higher levels of the organization. This may reduce the time and resources required for such things as agency budgetary requests and annual reports.

Unstructured modes of presentation, in contrast to structured reports, are more open in format and content and allow for greater flexibility in gathering and interpreting information. Unstructured written reports are particularly valuable where descriptive or diagnostic narratives are called for.[23]

In looking at the feedback requirements of an agency it would appear that highly structured written reports are closely associated with program maintenance feedback. Without this type of communication, internal control and housekeeping efforts would be futile. Program monitoring feedback is also associated with structured reporting although the degree of flexibility required is greater than that for program maintenance feedback. Reports related to the transformation process need to be able to reflect any novel occurrences and changes

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[23]For additional ideas concerning report formats and content the following sources may be helpful: Earl M. Kulp, op. cit., pp. 330-334; Kenneth F. Smith, "Management and Agricultural Development," War on Hunger, a report from the Agency for International Development, August, 1971, pp. 12-15; Administration of Development Programmes and Projects: Some Major Issues (New York: United Nations Department of Economic and Social Affairs, 1971), pp. 85-86.

that affect the implementation effort. For example, a short-run change in project input needs or an unexpected need to substitute production inputs may require explanations involving some unique and unanticipated circumstances.

Less structured reporting is a necessary ingredient for program adaptive feedback. Here considerable flexibility both in format and content is valuable since unexpected qualitative changes may point to program related problems that cannot be clearly discerned from structured or quantitative reports. The same comments apply to program guidance and evaluative feedback. In cases of substantive program criticism much of what needs to be reported may stem from completely new perspectives and ways of looking at program goals and activities. Some of the advantages and disadvantages of written and verbal feedback are shown in Table V.

Again it would appear that, where the information required is easily identifiable, measurable, and needed on a regular routine basis, structured written reports would be most effective. Verbal feedback might best be utilized to get at some of the more qualitative aspects of program performance and as a check on written feedback.

Forms of Presenting Feedback

When transmitting verbal and written feedback reports it is necessary to decide how the contents or recommendations can best be presented. Three approaches to presenting information are discussed here--the factual approach, the conditional-normative approach, and the prescriptive approach.

TABLE V

SOME ADVANTAGES AND DISADVANTAGES OF WRITTEN AND VERBAL FEEDBACK

	Written	Verbal
Advantages	--Easily stored and permanently recorded. --Easily duplicated and transmitted to various receivers simultaneously. --Can be limited to specific or precise items of infortion only.	--Opportunity to clarify or comprehend precise meanings in face-to-face exchanges. --Most acceptable form of feedback from sources outside the bureaucracy. --Communications may be more open and candid when verbal.
Disadvantages	--Easily distorted. --Difficult to immediately check or verify. --May inhibit the free flow of constructive criticisms since sender may not want to "go on the record." --May become excessively burdensome.	--Involves considerable time on the part of the sender and the receiver. --Fear of reprisals or unpleasant consequences may lead to reticence. --Precision may be lacking. --Less apt to be directly to the point.

The factual approach consists of merely recording and passing the desired facts on to higher levels. The burden of interpretation and analysis falls on persons who are specially trained or positioned to perform this job. In the case of maintenance feedback, they might be accountants or supply officers. In the case of program monitoring feedback they might be agricultural specialists or project supervisors. In the case of program adaptive, guidance, and evaluative feedback the program administrator will also become directly involved.

The conditional-normative approach requires that the information not only be collected and analyzed but that concrete recommendations

be forwarded on the basis of the analysis. The report is presented in an "if . . . , then . . ." context. This type of reporting presents specific alternatives to the decision-maker that have been formulated with program goals and constraints in mind. His role is restricted to that of choosing among the various alternatives. He is not apt to be directly involved with the data analyses from which the alternatives are derived. For feedback of a highly technical nature requiring professionally trained analysts such as a disease-control campaign, the conditional-normative approach may be suitable. For other types of feedback the decision-maker may want to spend more time looking at the facts behind the recommendations which are made to him by his staff.

The prescriptive approach to presenting feedback recommends to the administrator what he "should" do, with the bulk of the factual evaluation and alternative selection done by others. In this case the choices are by and large made for the administrator with only limited involvement on his part. For most types of feedback such an approach would probably prove inadequate since the decision-maker is likely to have expertise and insights that need to be brought into the decision process at early stages. In particular the administrator can (a) contribute his knowledge and insights pertaining to viable program improvement possibilities and their likely outcomes, and (2) decide which criteria (or value judgments) are to be used in arriving at the most appropriate choices.

The likelihood and magnitude of program miscalculations due to data distortion and/or biases would appear to increase as the forms of

reporting go from factual to conditional-normative to prescriptive. On the other hand, the investment of time and effort on the administrator's part increases as reporting becomes more prescriptive and less objective. Here again the administrator is faced with a matter of choice. He cannot spend all of his time analyzing raw data to be sure. Nor can the administrator rely entirely on his subordinates to come up with solutions to program problems. Some combination of objective and conditional-normative reporting will probably be relied upon. In any event efforts can be made by the administrator to improve the content and readability of objective reports as well as to check on the quality of decision-making within the supportive staff.

Timing of Feedback

Another dimension of feedback that has not been touched on but which deserves the administrator's attention has to do with the timing--both speed and frequency--with which feedback is reported.

Frequency and speed of reporting. Ideally the feedback process would provide a rapid and continuous flow of information related to all five agency informational feedback needs. This is generally not feasible nor could the individual decision-maker act if he spent all of his time assessing and reassessing the implications of each new item of incoming information. The administrator is faced with the problem of adjusting his informational needs to the time he and his staff can allot to collecting and assessing this information. The frequency and speed of reporting may be determined in part by the purpose for which the agency

needs the information (i.e., maintenance, transformation, adaptation, guidance, evaluation), and in part by the nature of the project itself or by the phase that a particular project is in.

Program maintenance and program monitoring feedback are essential to keeping a project in motion and may consequently require continuous (e.g., daily or weekly) and speedy reporting. Given that much of the information needed for these purposes can be coded and transmitted in a relatively simple and routinized manner (i.e., structured quantitative written reports) continuous maintenance and monitoring oriented feedback is feasible if bottlenecks and delays in the feedback delivery system can be ironed out.

On the other hand, distinct and clearly identifiable cues in the task environment calling for program adaptation may not always be obvious in the short-run. Considerable agency time and effort may be required to detect and analyze these more subtle indicators. Important changes in the task environment can, however, arise rapidly, necessitating a concerted and immediate agency response. Ad hoc or spontaneous feedback structures are needed to keep abreast of significant program related occurrences, especially since these may arise at any time.

Programs involving easily measured goals and units of progress may be more amenable to continuous reporting than those programs where goals and agency progress are less tangible (e.g., projects dealing with infrastructure versus projects aimed at changing attitudes). In the latter case precise reporting is more elusive and time consuming.

It might be noted also that quick, tangible feedback becomes more difficult to obtain as the measurement of the final program responses and outcomes is undertaken. For example program inputs and direct "outputs" (e.g., so many man-days for demonstrations, the number of farmers attending) are relatively easy to monitor. But the number of farmers actually adopting a new practice or the real effect of demonstrations on crop yields is more difficult to determine. More reliance will need to be placed on qualitative judgments and proxy indicators. Skilled and experienced observers may be required. Consequently this type of information may take considerable time to compile and cannot reasonably be expected on a continuous basis.

Reporting "hyperfrequency" is another problem to be avoided. In the first place short reporting intervals may result in the field reporters doing little other than information gathering. In the second place, the administrator may not have enough time to thoroughly digest and act on lengthy reports coming to him in rapid succession. Some serious thought might be given to the most practical reporting interval. In some cases a few key indicators might be reported on a continuous, or interim, basis while the other required information is reported on a more manageable periodic basis. Agency reporting intervals may also be made to correspond with reporting periods of the organization as a whole so as to minimize duplication of effort.

Project stages and feedback timing. In addition to the nature of the project, the phases or stage which a project is in may determine the frequency of reporting. In the early stages of a project the

frequency of program adaptive feedback may become less frequent and more on a spontaneous basis. Program maintenance and monitoring feedback might need to be brought up to and sustained at its maximum level from the early stages of a project on. Program evaluative and guidance feedback, however, might be elicited less frequently in the early stages and with increasing frequency near the completion of important program aspects.

In agricultural projects particularly, critical seasons may dictate a need for stepped-up frequency of reporting, e.g., daily reports on the input needs during planting season. Similarly, feedback on particular "problem" aspects of a project might be intensified until they are brought under control. Increased use of radio or telephone communications and/or increased field visits could be used in some cases to speed up information flows. To be sure, the concentration of feedback resources upon a specific problem may decrease feedback activities in other projects or program aspects. Consequently an intensified feedback effort cannot realistically be sustained indefinitely.

Feedback "scale effects." Another time dimension in addition to reporting frequency and speed has implications for feedback. As a program grows in size and complexity, the capacity of the organization to handle and store an increasing quantity and variety of information will need to be developed. Karl Deutsch refers to the effects on the informational feedback system caused by increased program size as the "scale effect."

> The agency . . . must resist the trend towards self-preoccupation and isolation from the environment; . . . must reorganize and transform itself enough to overcome the problems of internal communication overload and jamming of the message traffic.[24]

Not only will the quantity of information increase but so will the scope of specialized problem-specific informational inputs. As projects move from one stage to another new factors and problems will become evident. For example, as a development program shifts its emphasis from production to marketing, new areas of vital information arise. The agency thus needs to maintain enough flexibility to adapt its reporting devices and information sources to new problem areas.

Since the field worker is apt to bear the burden of increased feedback requirements stemming from new or expanded projects, some thought might go into finding ways to lessen this time consuming responsibility. Every item on reports might be examined closely in terms of (1) the purpose(s) which it presently serves, and (2) whether it can be easily obtained from other sources. Redundant or obsolete items may be deleted or combined into more useful forms, and some items of information can be acquired through alternative means.

Other strategic simplifications in the feedback system might also be necessary. For instance, when the volume of program maintenance and some of the more routine items pertaining to program monitoring feedback reach certain proportions it might well pay in terms of efficiency

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[24]Karl W. Deutsch, "Communication Models and Decision Systems," Contemporary Political Analysis, James C. Charlesworth, ed., (New York: The Free Press, 1967), p. 295.

and speed to introduce computerized data processing, if available, to help eliminate data log jams. More attention can be paid to the feedback process itself (feedback guidance) in order to detect structural rigidities or human constraints that might be obstructing or distorting the inflow of necessary information.

IV. A DECISION-MAKING FRAMEWORK FOR FEEDBACK

This chapter has undertaken in some detail a conceptual examination of the major structural and procedural issues inherent in the feedback process. By outlining the types of feedback required by the agency (i.e., program maintenance, monitoring, adaptive, guidance, and evaluative feedback) the administrator or analyst can begin to decide in which areas particular feedback problems lie. By taking opportunity costs into consideration, limited feedback resources can be marshalled more effectively. Allocative decisions can be made with a more precise understanding of the likely impact that they might have upon the feedback process. By making the major decisions related to the feedback process explicit and by considering the feasible alternatives for each, a more systematic and objective treatment of feedback problems is possible. The relative merits and disadvantages of using particular feedback channels, media, and timing can similarly be made explicit and their effects on the various types of feedback required by the agency can be determined. Ultimately, however, how an agency administrator selects the ingredients for his own feedback "mix" will depend not only upon the factors discussed above, but upon the likely human responses

and reactions to agency feedback overtures as well. It is to this human dimension of the feedback process that the following chapter is directed.

CHAPTER IV

HUMAN DIMENSIONS OF THE FEEDBACK PROCESS

> Administrative reforms often fail because methods and approaches are . . . inclined toward excessive concentration on changes in structure, administrative methods and techniques, neglecting the behavioral aspects of organizations and administration. The results have tended to be formal with little effect on actual operations.[25]

In the communications process that linked the village level program participants with the agency administrators observed by the author, the motives and responses of the communicators appeared to influence to a large extent the information transmitted. Any effort to improve feedback in that setting would have had to take into account the human as well as the structural/procedural obstacles involved. To illustrate some of the human problems the following example may be helpful.

Farmers in a credit program needed pre-harvest allotments for family consumption purposes. Although this need was pointed out to the VLW and the credit program supervisor no action was taken to ameliorate the situation. In part this was because of institutional rigidities in the credit program itself, as well as the agency officials' feeling that the farmers would misuse the funds. Lacking other resources, the farmers turned to re-selling some of their production inputs (e.g.,

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[25]Arne F. Leemans, "Administrative Reform: An Overview," Development and Change, Vol. II, No. 2 (1970-71), Institute of Social Studies, The Hague, p. 4.

fertilizer, insecticide) to make ends meet. Consequently, crop yields fell below those which the VLW had somewhat optimistically projected for the community. The VLW, fearing criticisms and reprimands from his superiors, exaggerated in reporting village production totals. His immediate supervisor, who was concerned with getting a transfer, juggled production data from the various villages under his responsibility so as to hide any deficiencies. The figures reaching the administrator told him little about the problems of the program nor did they disclose the network of distrust, personal apprehension, and status seeking affecting the feedback process.

I. INTERNAL AND EXTERNAL FEEDBACK LINKAGES

For analytical purposes the feedback behavior among agency personnel can be distinguished from that typically encountered between agency personnel and the target group. How agency personnel act and respond when communicating among themselves can affect the quality and content of feedback considerably. How the farmers perceive and react to agency feedback overtures can also influence the content and volume of the feedback flow.

The administrator or analyst may find it helpful in conceptually analyzing the human motives and obstacles affecting feedback to look into three basic questions. First, what is the nature of the problem? What types of behavior are likely to block, distort, or otherwise interfere with the flow of feedback? Second, how and in what specific ways are these forms of behavior likely to influence feedback? Third, what

are some ways to cope with, or at least to recognize and avoid, some of the more serious feedback distortions resulting from human communications problems?

Bureaucratic Behavior

To provide some analytical cohesiveness to this discussion on bureaucratic behavior several of the principal behavioral tendencies discussed by Fred W. Riggs in his work on administration in LDCs are emphasized.[26] The repercussions that such behavioral tendencies as lack of value-neutrality, formalism, status and rank consciousness, and politicization--in sum, bureaupathetic behavior--can have upon the feedback process is of interest here. These patterns of behavior, according to Riggs, are likely to be encountered to one degree or another in most bureaucracies, whatever the cultural context. To be sure, evidence of "bureaupathetic" tendencies were observed by the author in Venezuela. Some reading in the literature of agricultural programs in India indicates that "bureaupathetic" behavior affects feedback in that culture also.[27] In some cases it would appear that the extent to which "bureaupathetic" behavior manifests itself and affects feedback in Indian programs is greater than that observed in Venezuela.

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[26]Riggs, loc. cit.

[27]Some specific references from the literature on Indian agricultural bureaucracies are: Stanley J. Heginbotham, "The Bureaucratic Environment in India," from Chapter II-IV, Part II of an unpublished Ph.D. dissertation entitled Patterns and Sources of Indian Bureaucratic Behavior: Organizational Pressures and the Ethic of Dubyina Tamil in the Nadu Development Program, Massachusetts Institute of Technology, February, 1970; V. R. Gaikwad, Panchayati Raj and Bureaucracy: A Study

To put these observations in clearer perspective a continuum of bureaucratic behavior can be conceived, ranging from a Riggsean "bureaupathetic" situation at one extreme to a bureaucratic "ideal type" similar to that described by Max Weber at the other.[28] Diagramatically on such a continuum the Venezuelan example (V) would appear to fall somewhat toward the "bureaupathetic" extreme but perhaps not as far as the Indian case (I).

Riggsean "bureaupathetic" bureaucracy ——— I V ——— Weberian "ideal type" bureaucracy

In similar fashion a continuum could be constructed for each contributing behavioral pattern as illustrated in Figure 6. Again, these are but rough approximations used here for illustrative purposes. By no means does the placement of Venezuela and India relative to the two polar bureaucratic types or relative to each other reflect an attempt to empirically determine these relationships. Rather, their placement on the continuum reflects some subjective judgments made on the basis of field experience in the Venezuelan case and a cursory review of several relevant studies in the Indian case.

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of the Relationship Patterns (Hyderabad: National Institute of Community Development, 1969); A. P. Barnabas and Donald C. Pelz, Administering Agricultural Development (New Delhi: The Indian Institute of Public Administration, 1970).

[28]See Max Weber, The Theory of Social and Economic Organization, trans. and ed. by A. M. Henderson and Talcott Parsons (New York: Oxford Press, 1947), pp. 329-334.

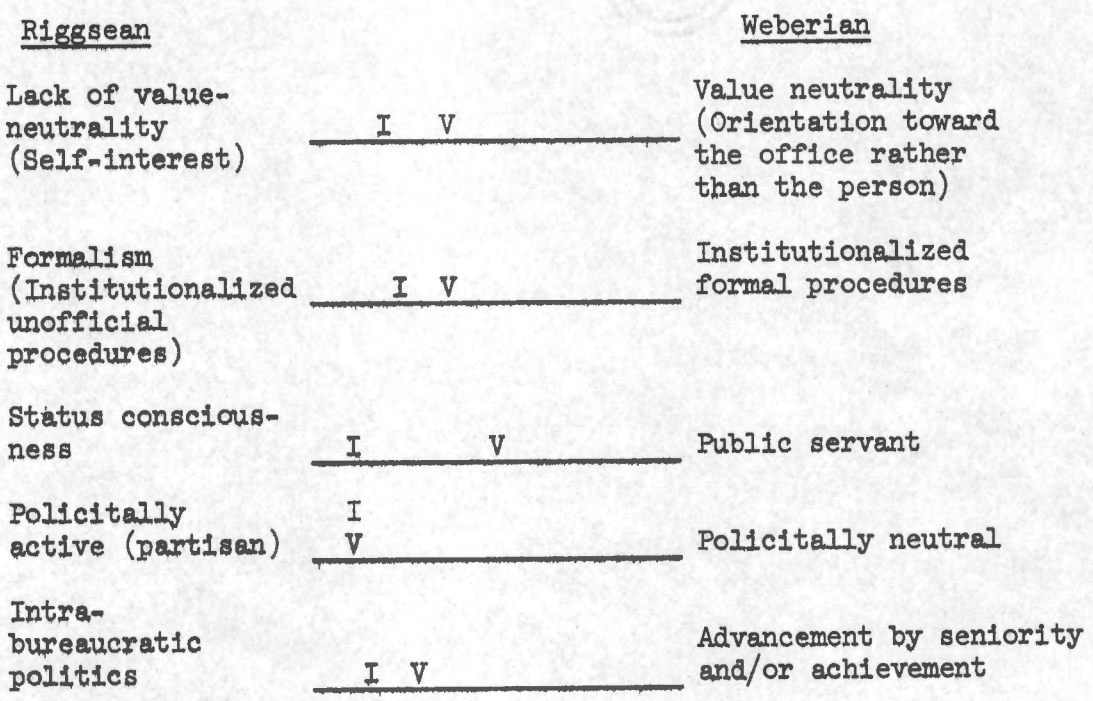


Figure 6. An illustration of how bureaucratic behavior in Venezuela and India might be compared.

It would appear, however, that as the motives and interactions of personnel within an agency approach the "bureaupathetic" extreme more than the "ideal type" extreme, the behavioral dimension of feedback will have an increasingly larger impact on communication flows. The amount of agency resources and the strategies required to improve the feedback process could vary considerably depending upon where along the continuum a particular situation lies. In the discussion of the Riggsean behavior types to follow, the extent to which any of these are manifested and affect feedback in the Venezuelan situation is conditioned by a unique set of cultural and institutional factors. Therefore,

the mix of strategies and resources required to improve feedback in the Venezuelan (or any other) instance may be fairly unique.

Lack of value-neutrality. To assert that bureaucrats, in performing their job, transcend personal desires for wealth, security, power, status or prestige and concern themselves only with public service and the efficient execution of POSDCORB[29] would probably make even Max Weber wince. Fred Riggs postulates that individuals within LDC bureaucracies are apt to be inordinately concerned with enhancing their self-interests. He argues that in the absence of strong countervailing forces outside of the bureaucracy little can be done to effectively ensure that public policies and programs will be effectively carried out.[30]

In the Venezuelan case it was observed that local groups (village councils, cooperatives), and particularly those with some political clout (Federacion Campesina, Liga Campesina), could bring pressure to bear on individuals in the agency who were flagrantly remiss in the performance of their official duties or who seriously abused the power of their position. Feedback on the more chronic cases of neglect or abuse of official capacities for personal gain brought about some

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[29]POSDCORB is an acronym for Planning, Organization, Staffing, Directing, Coordinating, Reporting, and Budgeting. See Luther Gulich, "Notes on the Theory of Organization," Luther Gulich and L. Urwick, eds., Papers on the Science of Administration (New York: Institute of Public Administration, 1937), pp. 1-45. Cited in Riggs, op. cit., p. 260.

[30]Riggs, op. cit., pp. 348-349.

changes in this type of behavior, although oftentimes the improvements were short-lived. Some officials even gave the impression that they regarded efforts by the target group to force agency personnel to improve their performance as undue "interference" with the "prerogatives" of their office.[31]

The implications for feedback communications of a tendency to view one's position as a means for personal advancement rather than as a part of the program effort are far reaching. Where the self-interest of the Venezuelan credit program supervisor seeking a transfer dictated that he should maintain the goodwill and favors of his superior he refrained from reporting any disconcerting or unpleasant news. It was observed that VLWs occasionally showed a considerable amount of bias and selectivity in the type of information that they reported. Considerable time was spent arranging, adjusting, and even fabricating the information that went into reports. "Second-guessing" the kind of answers and information that would please the agency administrator was a common preoccupation among agency personnel.

The reactions of the target group to manifestations of self-interest on the part of agency officials also worked to the detriment of feedback. In the first place, the motives of the officials were usually suspect since they came from outside of the community. Subsequent self-serving behavior, especially when perceived by the farmers

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[31]Apparently this type of reaction on the part of officials was more prevalent in the Indian case studied by V. R. Gaikwad. V. R. Gaikwad, op. cit., pp. 28-34.

as being carried out at their expense, acted to undermine whatever basis of trust and working rapport that might possibly have been established. This is consistent with others' postulates that trust and mutual confidence are important ingredients in a constructive communications relationship.[32] Where the farmers lost confidence in the motives of even a few agency personnel they appeared to become more suspicious of agency staff in general. It was not uncommon to find farmers who had become indifferent to, disillusioned with, or even hostile to agency personnel and programs. In such cases the agency staff was hardly perceived as an effective channel through which program related problems could be transmitted.

In the final analysis, then, the likely upshots of a tendency on the part of even a few agency officials to seek their self-interest over and apart from the agency's goals are (1) a considerable amount of distortion and manipulation of information included within reports, and (2) the disaffection of a valuable and important source of information, i.e., the farmers. As a result administrators may be misinformed or be forced to spend additional time and resources finding out through other channels what is really going on at the village level.

Formalism. Since the officially designated feedback channels may fail to provide the administrator with much of the information

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[32]Ronald G. Havelock, Planning for Innovation through Dissemination and Utilization of Knowledge, Center for Research on Utilization of Scientific Knowledge, Institute of Social Research, University of Michigan, July, 1969, p. 5-17.

that he needs, or the farmer with an effective vehicle for communicating with the agency, unofficial feedback mechanisms may be created to meet these needs. This is one manifestation of formalism--i.e., the inability of the formal structures of the organization to perform adequately--that gives rise to one or more unofficial but accepted ways of getting things done. In Venezuela it was frequently observed that farmers, and even VLWs, were reluctant to relay unusually important or urgent program needs through the formal reporting apparatus. Instead they preferred to go directly to the program administrator with their requests and information. In part this was because subordinate officials often lacked the power to resolve major problems. However, this practice reflected a reluctance to rely on the slow and distortion-prone formal feedback channels as well. To gain access to the administrator the assistance of an influential from inside or outside the bureaucracy was frequently sought. Such an individual (usually a person with good political connections) acted as a facilitator in circumventing agency subordinates and directly reaching the administrator. Persons lacking the proper contacts usually had their messages intercepted at lower levels of the formal feedback system. They then had to wait as the information passed from one staff member to the next, sometimes suffering alterations or even disappearing in the process.

A variation of formalism that was not observed in Venezuela is reported by Barnabas and Pelz in their study of communications within several Indian block (regional) agricultural programs. In that study several formal patterns of communication were evaluated by

agency personnel to determine (1) which patterns were preferred by the officials, and (2) which patterns they considered most effective. Surprisingly, the most formal pattern (formal written reports) was preferred even though a less formal pattern (formal meetings supplemented by personal contacts) was rated as the most effective form of communications.[33]

Another possibility as to the impact of formalism on feedback in more "bureaupathetic" situations than that encountered in Venezuela might be envisioned. As an example, it is conceivable that an excessive emphasis on formal modes of communication and communicative behavior might tend to confine discussions among agency personnel to things that the agency is "supposed" to be doing and to how projects are "supposed" to be carried out, i.e., formal goals and formal methods. An atmosphere conducive to candid and realistic discussions of substantive program problems and alternatives may not be permitted to develop. While this type of situation was not observed in Venezuela this does not exclude the possibility that it could occur elsewhere.

The discussion above should not be construed to imply that formal channels and modes of feedback are not or cannot be useful to the agency and the administrator. The agency requires a steady flow of information if it is to maintain orderly intra-agency accountability and control and if it is to continue supporting the day-to-day implementation effort. (I.e., it requires maintenance and transformation

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[33]Barnabas and Pelz, op. cit., pp. 75-103.

related feedback.) Much of this detail can be and is transmitted through regular formal channels in a fairly routinized manner. However, formal channels may prove to be too unresponsive or slow moving for urgent or novel types of information. If major changes in the formal feedback system are not possible, the administrator might well look to ways to manipulate and improve the content and delivery of more informal channels. At least, some ways to tapping these information flows where they exist might be considered.

Status and rank consciousness. In general, an excessive concern for maintaining strict status and rank barriers was not perceived as being a major factor governing relationships among agency personnel or between agency officials and the farmers in the Venezuelan case.[34]

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[34] V. R. Gaikwad observed that status barriers between Indian officials and farmers created considerable tension and conflict:

> "The officials resented these individuals (village spokesmen) and expressed considerable ill-feeling and even hostility toward them. Among the reasons explaining this attitude of contempt and resentment are the following:
>
> 1) Feeling of superiority due to higher education, urban background, higher social status and better economic conditions;
>
> 2) Feeling of superiority due to the position of status, power, and authority, along with special privileges enjoyed as a government servant in the society;
>
> 3) General contempt for the illiterate and semi-illiterate villagers from which class most of the non-officials are elected;
>
> 4) Feeling of resentment toward the emerging local leadership because of its effort for more powers and better status; and
>
> 5) Fear of loss of power, prestige, and privileges enjoyed so far." V. R. Gaikwad, op. cit., p. 64.

To be sure a certain amount of deference was observed in interactions between field and lower echelon staff with their superiors. Feedback was not as candid and to the point as might have been desired. Between farmers and agency officials, status differences acted to a greater extent to curtail free and open discussions of problems. Farmers often seemed ill at ease, somewhat embarrassed, and reluctant to present their case before the agency administrator. They did, however, "speak their mind" to lower agency personnel who in some cases resented what they regarded as a "lack of respect." By the same token, agency personnel who treated the farmers in a condescending or arrogant manner encountered considerable resistance and open antagonism from the farmers. In situations such as these a constructive and positive feedback relationship rarely developed.

Rank consciousness acted in additional ways to hinder feedback. Some officials were very sensitive to what they considered to be encroachments upon their formally designated areas of responsibility. Consequently most incoming information was forced to flow through well

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Heginbotham notes that in staff meetings status differences among Indian officials were frequently emphasized to the detriment of feedback. The VLWs were subjected to harsh criticisms and reprimands by their superiors. Even the seating arrangements emphasized status differences by placing lesser staff toward the back of the room. Heginbotham, op. cit., p. 16. Also Fred Riggs comments that in Thailand status and rank barriers interfere with intra-bureaucratic communications. "Yet the principle of deference to superiors makes it unlikely that a subordinate Thai official could bring himself to offer 'advice' which would appear to those above him as critical." See Fred W. Riggs, Thailand: The Modernization of a Bureaucratic Polity (Honolulu: East-West Center Press, 1966), p. 365.

defined rank levels, even though this process was slow and susceptible to distortions. In such a case efforts on the part of the administrator to speed up or redirect feedback channels would probably have encountered some resistance from those with vested interests.

Politicization. The political motives of the individuals involved in the feedback process can have an effect on its content. It was apparent in Venezuela that partisan politics played a major role in numerous aspects of program administration, feedback included. For example, the reports filed by field workers from two Venezuelan agencies which happened to be linked ideologically to two opposing political parties often placed the blame for program failures upon the activities of the other agency or upon those members of the target group who belonged to the other party. Too frequently the perceived nature and causes of program related problems were dependent upon the political affiliation of the reporter.

The extent and nature of intra-agency politics and its impact upon feedback was difficult for the casual outside observer to determine. That factions existed within the bureaucracy was discernible. Presumably the intra-agency political aspirations and motives of officials could lead them to use feedback reports to cast certain individuals or groups in a favorable or unfavorable light.

Apart from the effects of political motivations on feedback, the existence of political activity at the village level may mean that the administrator will require feedback about the village level political situation. Foreseeing and determining the effects of politics on agency

programs can be a valuable input into the agency decision-making process. For example, political interests consisting of the larger, more powerful farmers may push for cooperatives which, once under their domination, will give them access to the lion's share of the low cost credit. Where the agency is concerned with helping the smaller disadvantaged farmers, then stipulations and safeguards can be built into the credit program to make the distribution of potential benefits more equitable. But without some foreknowledge of the intentions of groups at the village level, such planning is unlikely to be undertaken.

Bureaupathetic behavior. The combination of attitudes and motivations mentioned above can be described as bureaupathetic behavior. In its extreme form bureaupathetic behavior can be characterized by:

> . . . excessive efforts to maintain aloofness from subordinates; ritualistic attachments to formal procedures; petty insistence on the rights of one's status; insensitivity to the needs of subordinates or clients; . . . .[35]

The elements taken together can be likened to a syndrome which could afflict certain individuals or even groups of individuals within the change agency bureaucracy. The ultimate effects of the bureaupathetic syndrome upon the feedback process could be disastrous. What the Venezuelan administrator is likely to be up against, however, is a tendency of officials to drift toward practices and patterns reminiscent of bureaupathetic behavior. He might therefore keep alert for signs of such behavior and bear in mind how it can effect the content and flow of feedback that he needs for decision-making purposes.

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[35]Sharkansky, op. cit., p. 45.

Feedback Related Behavior within the Target Group

Some of the effects of various bureaupathetic tendencies within the change agency on feedback from the target group have already been discussed. In terms of improving feedback, however, it is unlikely that strict adherence by agency personnel to formal feedback roles, rules, and regulations would have helped in Venezuela. The illiterate farmer appeared to have little understanding of, or appreciation for, the impersonal, efficiency-promoting, and rule-laden approach to bureaucratic communications.

Indeed, one of the challenges facing program administrators appeared to be that of educating the farmers to the "rules of the game" peculiar to the relatively new institution represented by the change agency. The agency, unlike institutions associated with a more traditional order, provided only a narrow range of services.[36] To carry out these problem-specific services effectively the agency needed an input from the target group of constructive feedback regarding the performance and adequacy of agency programs and personnel. Most of the farmers appeared to be unfamiliar with just what the agency could and could not do for them, or with how they could act to provide the feedback required by the agency. Manifestations of bureaupathetic behavior among agency personnel acted to discourage some farmers from communicating with the agency altogether.

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[36] For an interesting discussion on the differences between the role and modus operandi of "traditional" and "modern" institutions see Fred W. Riggs, Administration in Developing Countries: The Theory of Prismatic Society (Boston: Houghton Mifflin Company, 1964).

To involve and instruct the target group in agency operations was no easy task in the Venezuelan situation. In some cases a village level "ombudsman" was hired and trained to serve as an intermediary between the farmers and the agency. These individuals were useful in that they helped direct people and feedback from the village to the relevant program officials. They also performed a political function in the village which often occupied much of their time and lessened their credibility among certain village groups. Village councils could have possibly served as effective vehicles for providing the farmer access to the agency and the agency with feedback about village programs. From limited personal observations it appeared that, where such groups did exist, they were usually unfamiliar with agency capabilities and procedures. This was the case even where the councils were encouraged by the agencies. They were conceived of more as vehicles for promoting and helping to execute agency projects than as vehicles for feedback. The councils, which were created in response to agency prodding, were often composed of individuals who lacked the opinion leadership qualities necessary to give the council an aura of legitimacy in the villagers' eyes.[37]

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[37]For ideas concerning the identification and use of opinion leaders as communication links between change agencies and farmers see: Everett M. Rogers and Floyd Shoemaker, Communication of Innovation: A Cross Cultural Approach (2nd ed.; New York: The Free Press, 1971), pp. 198-225; also Reginald W. Seiders and Robert V. Thurston, "Opinion Leaders," a research paper prepared for Frank O. Leuthold, Associate Professor of Rural Sociology, Department of Agricultural Economics and Rural Sociology, University of Tennessee, Knoxville, Tennessee, Spring, 1971.

How the administrator could best (a) encourage and educate farmers to make effective use of the agency, (b) adapt and make agency practices and procedures more intelligible to and compatible with the needs of the illiterate farmer, and (c) reduce the bureaupathetic behavior of agency personnel who deal with the farmers is difficult to answer on the basis of limited observations only. Clearly, the cultural, resource (funds, personnel time and qualifications), and institutional constraints would have considerable bearing on the tactics and approaches which could be considered in any given case. Even where the administrator's ability to act is greatly constrained, however, he could try to determine the problems involved in obtaining and transmitting feedback from the target group and try to anticipate the likely effects that these problems will have on his information requirements.

II. PINPOINTING HUMAN SLIPPAGES

How then do the various behavioral propensities discussed here come into the picture when an attempt to judge or improve feedback is being made? The administrator, upon receiving a particular item of feedback information, might ask questions such as the following:

1. What or who is the source of this information?
2. Has this source proved reliable in the past?
3. Are there any special reasons (e.g., self-interest, status seeking, politics) why this information might be distorted?
4. Are intermediary communicators involved and, if so, in what ways and for what reasons might they have edited or changed the information?

From Whom/To Whom Interfaces

One way of systematically evaluating the potential human impact on the content of feedback messages is to examine each interface between sender and receiver along the feedback system. The from whom/to whom interfaces involved in transmitting certain kinds of feedback from the village level to the administrator could conceivably be many. For instance, a typical feedback process may involve exchanges of information at interfaces between the following communicators: farmer/VLW; VLW/supervisor; supervisor/administrator; farmer/administrator; and VLW/administrator. Other program related feedback interfaces could include those between agency officials and personnel from other agencies and between farmer organizations and agency officials.

Some of the most frequently encountered human communications problems likely to occur at several of these interfaces have already been explained. It will be recalled, for example, that the farmers were likely to be suspicious of the motives of the VLW and that communications could all but stop if they felt that he was attempting to take advantage of them. Again, where an agency official was more concerned with asserting what he considered his "superior status" than with fostering good working relationships with his subordinates, communications were apt to suffer. In the case where farmers had unrealistic expectations of the VLW's role and capabilities, his inability to respond to their non-program related demands diminished their confidence in him as an effective communicator.

Another problem in the Venezuelan case which appeared to hinder communications was that the administrators (or supervisors)--often urban reared and educated--and the illiterate farmers were unlikely to perceive problems within the same frame of reference. Within the context of a face-to-face encounter, the career civil servant often appeared not to comprehend how the subsistence farmer, whose livelihood and well-being were tied to a small yearly crop of corn, felt about adopting, say, a new hybrid seed. Nor did the farmer appear to have much empathy for the problems of the administrator. The demands made by the farmer and the responses or alternatives offered by the administrator were apt to be unacceptable or irrelevant from the other's point of view. While these types of built-in cultural differences affected communications, they did not appear to be irreconcilable. However, until efforts are made to overcome them, a certain amount of misunderstanding and confusion was likely to persist between the sender and the receiver of feedback at this interface.

A particularly critical interface in terms of its effects on feedback was observed in Venezuela. In one instance an administrator employed an administrative assistant, or "gatekeeper," to receive, aggregate, and to convey feedback messages (whether written or verbal) to him. Such an agent, while often saving the administrator time and effort, sometimes had an undesirable effect on the flow of feedback. Supervisors and other officials of higher rank than the "gatekeeper" resented his interference with and influence over what messages the administrator received. Reporters did not appear to be confident that

the "gatekeeper" would always relate information on to the administrator. The buffer role of the "gatekeeper" created hostilities and consequently had an adverse effect on the content and volume of information going to the administrator. The "gatekeeper" in fact showed some favoritism and was prone to let his biases and value judgments interfere with how and what he communicated to the administrator. This is not to say that a gatekeeper should not have been employed. An effective "gatekeeper" could usefully sort and gather related information for more systematic review. He could also save the administrator time by referring certain problems and messages directly to the appropriate officials. The administrator, however, had a need to maintain additional and supplementary feedback channels open.

Sender/Receiver Matrix

One way to summarize some of the most likely human obstacles to the communication of feedback is by constructing a matrix with appropriate feedback senders along the vertical axis and receivers of feedback along the horizontal axis as in Table VI. The interfaces and the kinds of interactions depicted in this table are for illustrative purposes. An administrator could use such a layout to highlight the prevalent human obstacles to feedback encountered within his specific setting. Given a fix on some of the likely human communication problems the administrator could then proceed to seek appropriate solutions.

In summary, this chapter has examined the human attitudes, motives, and behavior that appeared to impede or distort the flow of

TABLE VI

SOME FREQUENTLY ENCOUNTERED HUMAN OBSTACLES TO FEEDBACK AT VARIOUS SENDER/RECEIVER INTERFACES AS OBSERVED IN VENEZUELA

Feedback Senders	Feedback Receivers		
	VLW	Supervisor	Administrator
Farmer	--VLW's motives may be suspect. --Farmer may misunderstand VLW's role and function. --Farmer may not perceive VLW as effective communicator.	--Status differences may interfere with communications. --Cultural differences may interfere. --Supervisor might not be perceived as being able to get things done. --Farmers may be unfamiliar with supervisor's role function.	--Status differences. --Cultural differences. --Spokesmen for farmers may represent special interests. --Administrator may not be accessible.
VLW		--Status and rank barriers. --VLW may fear reprimands and only report favorable results. --VLW may not perceive supervisor as effective communicator of his needs.	--Status and rank barriers. --VLW may fear reprimands and criticisms. --VLW may be concerned with looking good. --VLW may represent own interests only.
Supervisor			--Supervisor may only report favorable results. --Supervisor may have political motivations. --Administrator may feel that supervisor is unaware of realities.

TABLE VI (continued)

SOME FREQUENTLY ENCOUNTERED HUMAN OBSTACLES TO FEEDBACK AT VARIOUS SENDER/RECEIVER INTERFACES AS OBSERVED IN VENEZUELA

Feedback Senders	Feedback Receivers		
	VLW	Supervisor	Administrator
Village Ombudsman	--Status and rank conflicts. --Petty rivalry and competition. --Ombudsman and VLW may favor different persons or groups. --Ombudsman may be perceived by VLW as a threat and a spy.	--Status and rank conflicts. --Ombudsman may represent special interests. --Ombudsman may not see supervisor as an effective problem solver.	--Ombudsman may represent special interests. --Ombudsman may not have ready access to administrator. --Ombudsman may be perceived as unqualified to offer solutions.
Evaluators		--Status and rank conflicts. --Supervisor may feel that evaluator is spying and prying into his activities. --Supervisor may be seen as a naive outsider.	--Evaluators may not be aware of all the facts (e.g., politics). --Evaluators may be biased towards particular programs and activities. --Administrator may fear reprisals from his superiors due to evaluator's report.

feedback that the Venezuelan administrator needed to make sound program decisions. In such a case the administrator might want to determine where and to what degree manifestations of bureaupathetic behavior, such as self-seeking interests, formalism, status and rank consciousness, and political ambitions exist and affect feedback. A realistic awareness of the human obstacles and impediments to the flow of feedback which can be expected at the various interfaces between communicators in the feedback process can make the administrator's attempts to rectify and adjust for these problems more effective.

CHAPTER V

APPLICATION OF THE ANALYTICAL FRAMEWORK

In the preceding chapters a conceptual dissection of the feedback process and problems likely to be encountered at the level of regional agricultural programs was undertaken. Particular emphasis was placed on the structural/procedural, human/cultural, and allocative/decision-making dimensions of feedback and feedback related problems.

The purposes of this chapter are (1) to suggest an operational framework that the "second level" agency administrator or the program analyst can use as a point of departure in examining possibilities for improving feedback, and (2) to illustrate how such a framework might be applied to a specific problem within a cultural and institutional setting like that observed by the author in Venezuela.

I. THE OPERATIONAL FRAMEWORK IN CAPSULE FORM

For analytical purposes the administrator or analyst may find it helpful to organize an examination of feedback problems and possible solutions around the following problem-solving steps:

1. definition of the problematic situation,
2. diagnosis of why feedback performance falls short,
3. delineation of remedial possibilities,
4. decision on a specific course of action.

Building around these four steps, an operational framework for appraising feedback problems and possibilities can be illustrated diagramatically as in Figure 7.

To be sure, Figure 7 presents a broad overview of the major characteristics of the analytical process that has been dealt with in more detail in preceding chapters. Recall, for example, that in examining desired feedback performance the feedback required was broken down into five categories--program maintenance, monitoring, adaptive, guidance, and evaluative feedback. Also, in diagnosing possible structural/procedural elements which might cause feedback performance to fall short of that which is desired three basis types of mechanisms or channels were discussed--direct/indirect, formal/informal, and elicited/unelicited.

While it may be convenient for analytical purposes to examine the feedback process by dissecting it into separate categories, the interrelationships among them need to be emphasized. Structural/procedural adjustments in the feedback process may be determined in part by behavioral/cultural factors and vice versa. Take, for example, a case where farmers are prevented from contributing valuable insights into project and personnel performance because of antagonisms which exist between the farmers and the agency feedback reporters at the village level. In this situation new channels linking village groups directly with the program decision-maker might become imperative.

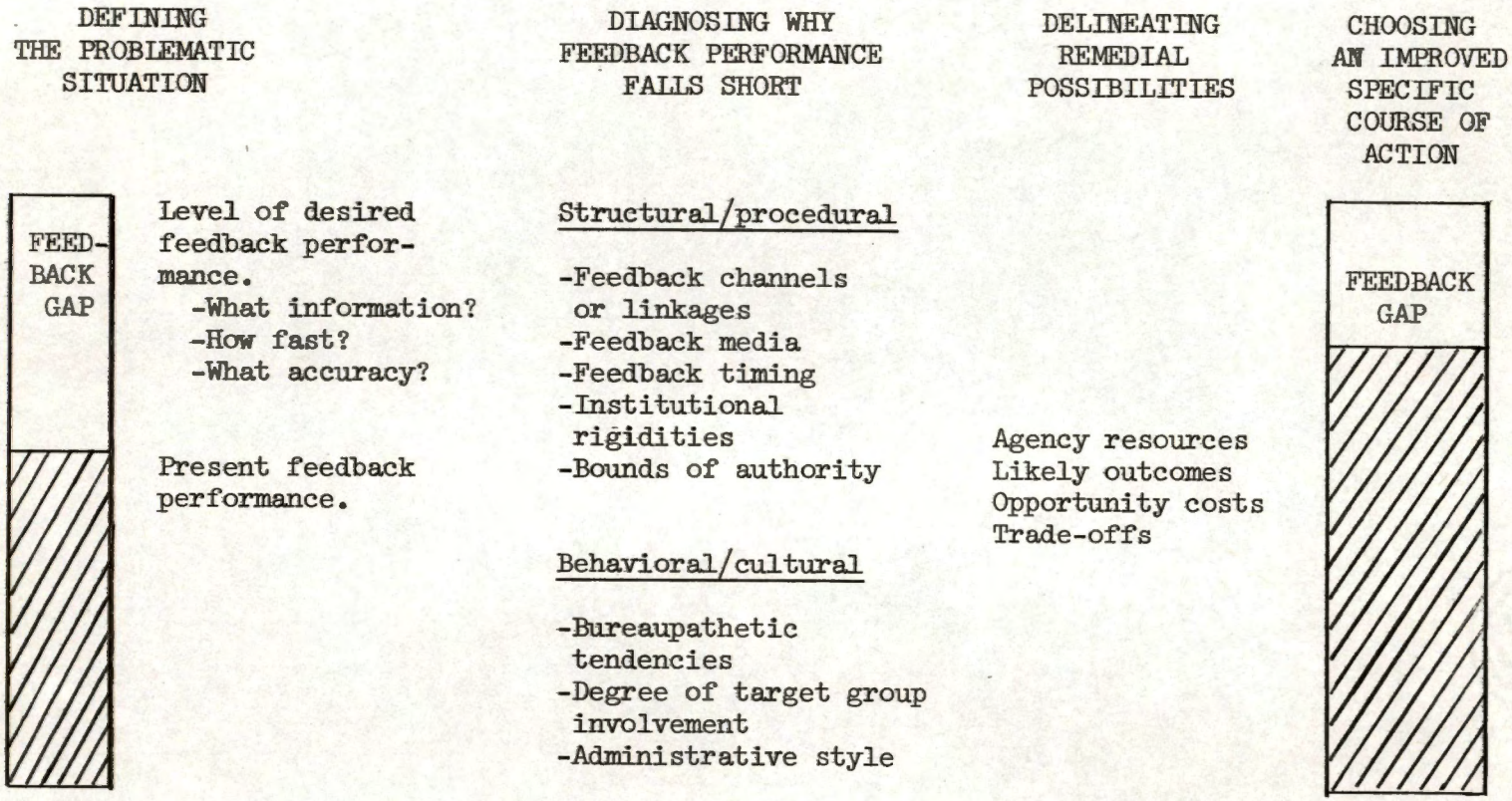


Figure 7. Operational framework for analyzing feedback.

In any case it might be helpful to illustrate how the operational framework can be applied to feedback problems in a specific program context.

II. APPLICATION OF THE FRAMEWORK TO A PROBLEM IN VENEZUELA

Rather than examining the feedback system observed in Venezuela as a whole, a particular problem aspect of it is focused on here. This is necessitated in part by the lack of comprehensive information about the broader Venezuelan situation which was beyond the author's personal experience. Nevertheless, the same analytical framework provides a conceptual basis for examining a wide range of feedback situations--from the very simple to the very complex. While an attempt is made to adhere to the major steps and categories outlined in Figure 7, in practice a certain amount of overlapping may occur. For instance, in the process of looking at reasons why feedback or a particular aspect of feedback falls short of that which is desired, some alternatives may become immediately apparent. These may be given some consideration at that point in the analytical process before diagnoses of additional aspects of the feedback process are undertaken. This is to say that the steps and categories within the analytical framework should not be regarded as rigid guidelines but rather as pivotal points around which an evaluation of the problem can be facilitated. Preliminary comments aside, an examination of the Venezuelan case in point is now in order.

The Problematic Situation

Referring back to the discussion in Chapter I on the feedback problems faced by the Venezuelan administrators, it will be recalled that the author observed a number of what appeared to be formidable obstacles to quick, accurate, and relevant feedback in that program setting. It was observed, for example, that while the agency administrator needed honest and frank reporting by the VLWs on project implementation problems and bottlenecks, this information was not always provided in a prompt and straightforward manner. In practice, it appeared as though the VLWs were often reluctant to report project obstacles or failures.

Diagnosing Why Feedback Performance Fell Short

Among the behavioral/cultural factors which appeared to affect the honesty and candor with which reports were filled out was the fear that project problems or failures would reflect badly upon the personal performance of the VLW. This notion was occasionally reinforced by a project supervisor or a higher ranking agency official who would hold a VLW responsible for project failures--whether this was justifiable or not. While this was not always the case, it only had to happen once in a while to keep the village level reporters on guard. Another observation as to what might have perpetrated this reporting problem was that the VLWs appeared to be reluctant to point out to their superiors how they felt about the use of reports as a control device. They seemed to feel that their suggestions for changes in the system would be misconstrued by their superiors as attempts to get out of

doing their work and as behavior bordering on the impertinent or presumptuous for persons of low rank. To complicate matters more, the VLWs appeared to be reluctant to solicit advice or assistance on projects even if the nature of the project was beyond the realm of their expertise. Partly this was due to a fear of criticisms or rebuffs as mentioned above.

Structural/procedural factors also contributed to a reliance upon VLW reports for personnel control and accountability purposes. Some of the items within the reports were used as checks on VLW performance. Again, more emphasis was placed on the quantitative aspects of personnel output (e.g., number of hours worked, number of farm visits, number of demonstrations given, number of persons attending demonstrations) than on the substantive results of their efforts (e.g., number of farmers adopting a new practice, rate of discontinuance of new practices and reasons for this). Certain rigidities in the agency reporting system also contributed to the problem. Report content was standardized to provide comparability and consistency throughout the country. It was common practice to use VLW reports for control purposes within every regional agency. Because the reports were used in a variety of settings and situations, certain general and easily measured aspects of personnel output were required while more location and project specific measures of performance were neglected. Unfortunately the regional agencies appeared rarely to expand on or adapt the reports to reflect local conditions nor did they appear to seek alternative means for evaluating personnel performance. The regional

program administrators, while obligated to compile and pass on much of the information from the standardized reports, could choose how to use that information in their own decision-making process, could authorize the reporting of supplementary information, and could employ certain other means to check on personnel performance.

Delineating Possible Remedial Alternatives

In this Venezuelan context it appeared that a program administrator concerned with de-emphasizing agency reliance upon VLW reports for personnel control purposes would not have had the resources (time and influence) to effect an organization-wide change relative to this practice. Since such an undertaking would necessitate a fairly thorough review of the purpose and intent of the reporting system, individuals high in the agency hierarchy would have had to be persuaded to sponsor and actively support this endeavor. It is doubtful in the Venezuelan case whether a regional administrator could stir up enough concern among high level officials to bring about the necessary revisions.

Within the regional program itself, however, the administrator had the power to influence and alter in many incremental ways the reporting process. Several possibilities for reducing the control aspect of VLW project reports are listed below.

1. The administrator could delete, or at least de-emphasize in practice, the control items within project reports. He could clarify for his staff the agency's need for and use of all items in reports.

2. The administrator could use other means to check on personnel performance.
   a. Special reporters could be used to periodically check on project and personnel performance in each village.
   b. Separate reporting devices could be employed for project feedback and personnel evaluation.
   c. Periodic encounters with members of the target group could be used to inquire about personnel performance.
3. The administrator could commend reporters who bring project problems to light or who offer constructive suggestions for program improvements.

None of the remedial possibilities above would appear to be a panacea for the reporting problem at hand. Still, by combining several of these practices an improvement in reporting quality and accuracy could be forthcoming.

Prior to deciding on a specific course of action the remedial possibilities listed above might be evaluated in terms of (1) the costs to the agency (i.e., funds, personnel time, administrator's time), and (2) the likely outcomes, both positive and negative, that might result. To make a preliminary comparison of the relative costs a plus/minus chart as illustrated in Table VII might be helpful. A minus sign is used to indicate a relatively high cost, and a plus sign to denote a relatively low cost.

TABLE VII

EVALUATION OF REMEDIAL FEEDBACK POSSIBILITIES IN TERMS OF COSTS TO THE CHANGE-AGENCY

Alternatives	Costs		
	Funds	Personnel Time	Administrator's Time
1. De facto de-emphasis of control aspect of reports; educating staff on use of reports; encouraging honest reporting.	+	+	-
2. Special agency reporters to do personnel evaluations.	-	-	+
3. Separate reporting devices for personnel and project evaluations.	-	-	+
4. Information on personnel performance solicited from target group.	+	+	-

The relative costs alone may not constitute sufficient grounds upon which to select or reject an alternative. Each strategy may have certain other advantages and disadvantages in terms of its effect on feedback and program performance that need also to be weighed. The kinds of "performance" responses that the Venezuelan administrator might anticipate for each of the four alternatives are indicated in Figure 8.

Deciding on a Specific Course of Action

Upon examining the likely outcomes of alternatives one through four as shown in Figure 8, it would appear that no single strategy, or

ALTERNATIVE 1

Likely Positive Outcomes

--Over time the VLWs' fear of being held personally responsible for project problems and failures may decline.

--Some improvement in honesty and speed of reporting project obstacles.

--Some increase in new types of information and insights being reported.

Likely Negative Outcomes

--Tendency on part of some VLWs to work less.

--Tendency on part of some VLWs to see their role as reporters only and not problem solvers.

ALTERNATIVE 2

Likely Positive Outcomes

--More reliable and thorough evaluation of personnel performance.

--Blame for project problems not always placed on VLW.

Likely Negative Outcomes

--VLWs apt to be suspicious and fearful of evaluator.

--Checks on personnel performance may be infrequent.

--VLWs may patronize evaluator in order to obtain favorable reports.

ALTERNATIVE 3

Likely Positive Outcomes

--Project feedback separated from personnel evaluation.

--VLW less apprehensive about project problems being associated with his personal performance.

Likely Negative Outcomes

--Extra paperwork created.

--Some VLWs are still apt to feel that project feedback will be used to evaluate them directly.

ALTERNATIVE 4

Likely Positive Outcomes

--More qualitative aspects of VLWs' performance reported.

--Outside perspectives on project and personnel performance obtained.

Likely Negative Outcomes

--VLWs may become overly concerned with public relations aspect of their job.

--Farmers may blame all program ills on VLW.

Figure 8. Likely positive and negative outcomes related to feedback alternatives.

group of strategies would completely eradicate the fears and anxieties of the VLWs and thus induce completely open and honest reporting. Among the more costly approaches (Alternatives Two and Three), the use of special agency reporters (Alternative Two) would appear to have some distinct advantages which are not provided by other means. Where the administrator is willing and able to invest his time, Alternative One would also appear to yield fairly high net returns in terms of obtaining more honest and accurate reporting. By the same token, Alternative Four could, with very little additional effort, be used whenever appropriate opportunities arose.

Further questions that might be asked before putting the above suggestions into practice are the following:

1. How can the suggestions for de-emphasizing the personnel evaluative component of project reports be implemented? What steps need to be taken? What changes in current practices need to be made? Who is to be involved?
2. How far can the administrator go in committing agency resources and his own time toward improving this aspect of feedback?
3. Will the pay-offs in terms of program performance resulting from this particular use of scarce agency resources outweigh those pay-offs which might have accrued to alternative uses of these same resources?
4. How can improvements in the quality and honesty of reporting resulting from these changes in personnel evaluation practices be assessed?

5. How can the receptivity and reactions of agency personnel to these changes be evaluated?

Only one aspect of the feedback process observed in Venezuela was analyzed in the preceding discussion. The analytical approach used to dissect the problem of obtaining more honest and frank reporting could be applied to other feedback obstacles as well. For example, examination of the problems and obstacles involved in getting relevant and regular feedback from the target group could be undertaken. Or, an analysis of ways to speed up the reporting of important developments at the implementation level could be carried out.

The general utility of the analytical framework is only suggested here. Until the framework has been tested by administrators or analysts in the field, its value as an operational tool cannot really be determined. The analytical framework did provide the author with a systematic way of examining feedback problems in the Venezuelan program context. It would appear that the framework could serve at least as a point of departure for practitioners concerned with analyzing informational feedback in similar settings.

CHAPTER VI

FURTHER RESEARCH NEEDS ON FEEDBACK

The main purpose of this study has been to suggest to agricultural program administrators and analysts several conceptual and decision-making tools which can be helpful in diagnosing feedback problems from village level programs. The sources of feedback problems and the specific strategies needed to correct them may differ from one cultural and institutional setting to another. However the analytical approach suggested in this study could conceivably be utilized to dissect feedback problems in a wide variety of situations. It has been shown that an administrator, like the researcher, can begin to tackle his problem (1) by carefully defining the problematic situation; (2) by examining the relevant variables, dimensions, and relationships involved; and (3) by specifying and evaluating viable alternatives. Key elements around which an examination of specific feedback problems can be developed include a structural/procedural dimension and a behavioral/cultural dimension, both of which are tempered by agency resource and hierarchical constraints.

In searching through the literature on development program administration, little theoretical or empirical work was discovered which dealt with feedback per se. In attempting to build up an operational framework with which to analyze feedback problems relevant constructs and ideas from communications, development administration,

organizational theory, and economics were drawn upon. In short, a preliminary effort was made to bridge the gap between selected theoretical bodies of knowledge and the real world exigencies facing practitioners concerned with feedback.

Two broad areas for future research are immediately suggested by this study. The first has to do with gaining more insight into and understanding of the problems and processes of regional program administration in LDCs. The second involves research aimed at equipping development program administrators with the conceptual and decision-making tools that they need in order to tackle problems like the feedback problems.

Regional Program Administration

There is a need to delve more deeply into the various facets (procedural, institutional, political, cultural) of regional program administration within LDCs. More empirical knowledge is needed about the various factors contributing to program successes and failures. Too often recommendations for improving program problems, like the feedback problem considered here, concentrate upon conventional structural/procedural changes alone. An equal amount of attention needs to be given to such factors as administrative behavior and cultural proclivities.

Further investigation into the decision-making process within development projects also needs to be undertaken. Very little appears to be known about the decision-making and thought patterns of middle-level program administrators in LDCs. How do regional administrators

in fact perceive and evaluate problems and alternatives? What kinds of information do they perceive as relevant for decision-making purposes? How do they go about getting the information that they want? How do they use the information that they receive? These are but a few of the kinds of questions that a researcher concerned with decision-making within regional programs might begin to ask.

Adapting Decision-Making Tools

In a similar vein more work needs to be done in adapting Western decision-making concepts to the specific needs, constraints, and capabilities of LDC program administrators. At least in the Venezuelan case observed by the author, the program administrators were faced with making program decisions within a situation characterized by (1) inadequate and often inaccurate information, (2) projects involving qualitative goals and measures of progress, (3) institutional rigidities, and (4) a high degree of human and political uncertainty. To complicate matters the administrators were often recruited from the ranks of technical specialists who generally had little training administration or management.

Considerably more effort needs to be made, then, to devise problem-solving techniques and approaches that are geared to the problems and skill levels of project managers. In every case, the complexities of the decision-making environment cannot be ignored if administrators are going to be given the kind of preparation that will help them to deal effectively with the problems of choice and strategy inherent in development programs.

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VITA

Robert Venable Thurston was born in Seattle, Washington on January 14, 1944. He attended grade school in Vale, Oregon. In 1956 he moved with his family to Guadalajara, Mexico. There he completed his primary and secondary education, graduating from the Instituto de Ciencias in 1961. He completed his senior year of high school at Union-Endicott High in Endicott, New York in 1962. In the fall of 1962 he began work toward a Bachelor of Arts degree in Political Science at the University of Oregon, graduating in 1966. After two quarters in the Institute of International Studies and Overseas Administration at the University of Oregon, he and his wife, the former Juanita Ching of Roseburg, Oregon, served for two years as Peace Corps volunteers in an agrarian reform project in Venezuela.

Upon returning from the Peace Corps in 1970, he accepted an Agency for International Development fellowship to study international agricultural development in the Department of Agricultural Economics and Rural Sociology at the University of Tennessee. In August of 1972 he received his Master of Science degree.

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