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REORGANIZING AID TO PROMOTE DEVELOPMENT

A Report Submitted to
The Reorganization Study Group
Agency for International Development

by

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REORGANIZING AID TO PROMOTE DEVELOPMENT

INTRODUCTION

The Agency for International Development (AID) is a large bureaucracy which has been assigned heroic goals by Congress. It operates, however, without the benefit of an agreed-upon collective knowledge of how to carry out its responsibilities and without benefit of staff with the opportunity and capacity to experiment and find out. Each of these elements -- bureaucracy, goals, Congress, knowledge base and staff -- are critical in any consideration of the reorganization of AID. The purpose of this paper is to identify the areas in which redefinition and reorganization could make a difference in promoting development, and to specify a set of recommendations -- often choices along a continuum -- which are open to a new administration and Administrator.

DEVELOPMENT GOALS AND PROCESSES

Development Alternatives, Inc. (DAI) defines "development" to mean a process through which is generated self-sustaining change -- change which is viewed as positive both by (a) the local population to be benefited, and by (b) specialists in the

development community.¹ At the heart of a dynamic development process is an increased local capacity to understand, learn, and solve problems which impede future growth. The process carries with it a notion of increasing productivity through a more efficient application of the factors of production as well as one changing the understanding and behavior of the target population. This latter dimension can often -- though not always -- be enhanced by local organizations which bring together individuals to be assisted and provide a coalescing focus for their own "new directions."

The development process will often fulfill basic human needs, but such needs are not the goal of development. Rather, the central goal of development revolves around increasing the capacity of human beings to deal effectively with their own problems.² Basic needs can be satisfied with humanitarian assistance, e.g., PL 480 or capital transfers aimed at improving nutrition, housing, sanitation or education. But unless such aid has the effect of increasing the capacity of a local population to provide for itself what was initially funded from the outside, it can not be considered development assistance.

¹ One or the other of these two groups has frequently opted for processes which are counterproductive to development. It is when both groups agree on a set of objectives that chances for beneficial change are greatest.

² The "basic needs" concept can serve several useful purposes. First, it can identify potential targets of development assistance -- those, for example, who fall below a certain level on the basic needs scale. Second, it can be used to measure progress, tracking changes and improvements in levels of living.

It is well documented that too much outside aid can overwhelm local capacity to invest and commit resources, thus diminishing what might otherwise be strong incentives to assist in one's own development. Small is not always beautiful and good projects are not always small, but external funds need to be fixed in some reasonable proportion to the resources which the local population can commit to the project. This local participation -- broadly defined to mean commitment of local energy, leadership, land, labor, materials and capital -- is the most widely accepted and best documented means of achieving self-sustaining growth.

This is not to argue that all good development projects are small and deliberate such as is often found with projects run by missionary groups. It is rather an indication that there is a dynamic which calls for a phased application of development assistance. In the early years the local population must become involved, the knowledge base about the local area expanded, leaders trained, nascent organizations strengthened, project managers given increased education, an infrastructure program initiated. Then, as the project catches fire, much larger sums can be usefully committed. This suggests a 5-10 year project with minor funding expended in the first two, and the bulk of the support offered after there has been a foundation established which can use the external assistance. Generally, the lower the level of local population education and of technology, and the less well developed are markets or government supporting mechanisms, the longer must be this initial stage. Demanding

results in three or five years defeats the inherent logic of the process by requiring a forced march which is often counterproductive.

In the past, it has not proven difficult to temporarily raise living levels by channeling AID resources into a given locality. It has also been shown that unintended recipients benefit from indiscriminate expenditure of development funds. But it is a highly demanding task to raise the living levels of the rural poor in such a way that initial momentum and progress will continue after AID funds are expended.

This self-sustaining momentum towards increasingly higher levels of living, fulfillment of basic needs, and improved quality of life -- a momentum which results from locally generated determination and increased capacity and knowledge -- is at the heart of DAI's development approach. For the purposes of this paper, we will assume that, in the main, AID holds a similar view.¹

¹ Our concern here is for the development process, AID may have other equally valid goals: humanitarian assistance, politically-motivated assistance, etc. There may also be other approaches and definitions of development which are equally valid though we have yet to see them demonstrated.

THE DESIGN AND IMPLEMENTATION OF PROJECTS
WHICH GENERATE SELF-SUSTAINING DEVELOPMENT

The Approach

A major study of development projects, commissioned by AID in 1973 and completed in 1975, provided documentation for an approach to development which was rapidly gaining acceptance within the development community -- an approach emphasizing broad-based local participation in the development process.¹ The research made two significant contributions to development efforts:

- It identified certain factors and conditions which are most likely to insure project success, including the involvement of the local population in project decisionmaking and commitment of resources; and
- It delineated a process approach to design and implementation which can maximize the chances that conditions necessary for success are met, including distribution goals and self-sustaining momentum.

The process approach includes:

- Determining local level data requirements for project design and the collection of such data;
- Flexibility in the structuring of projects so that changes are assumed as part of the development process;

¹ Elliott R. Morris, John K. Hatch, Donald R. Mickelwait, Charles F. Sweet, *Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects* (two volumes) Westview Special Studies in Social, Political and Economic Development, Westview Press, Inc., Boulder, Colorado, 1976. An Executive Summary of some 50 pages is available.

- A well-considered information system which will report project successes and failures and provide suggestions for remedial action;¹ and
- A two-way communication system which puts project participants in regular and direct contact with project management.

Critical to the process approach is the recognition that the bulk of the data needed in both the design and implementation phases must be generated locally -- from the population to be benefited. Only with an understanding of the reasons for current economic/production practices and the constraints facing the target group in changing their behavior can projects be designed that are realistic and potentially successful.

There is nothing startling in the recommendations of the study; indeed, they constitute a generally accepted, common sense approach to dealing with unique elements in each situation in the Third World, and specifying development assistance which is directly applicable to those circumstances.

Scale and Aggregation

Small development projects are often able to accomplish objectives which cannot be accomplished by either larger projects or the aggregation of small projects into regional groupings. A small project with a target population of, say, 15,000 people can often be effectively managed by a Private Voluntary Organi-

¹ Appendix A, extracted from a recently completed AID-funded study, contains details on the information requirements of rural development projects.

zation (PVO) completely within an existing set of government priorities, distribution of resources and assignment and training of personnel. Such a project might well maximize benefits to a small geographic area, but such benefits might also be generated at the expense of another area even in the same region.

Once an attempt is made to deliver benefits to larger numbers of people, it becomes more difficult for a host country government or a funding agency to ignore the larger questions of priorities, resources and personnel. Pricing policies will often need to be re-examined, infrastructure investments made, and human resource capacity improved. Large development projects must take into account not only the direct project beneficiaries and the managers of the development resources, but also government officials who are charged with formulating and executing government policy. If AID Missions are prepared to work with host country governments on the larger questions of priorities, pricing and infrastructure, small PVO-managed projects will be far more effective and useful. This suggests that AID as an official arm of the U.S. government has a role which extends beyond mere generation of and support to small-scale development projects, and must be funded, staffed and chartered accordingly.

Context and Flexibility: Tailoring Development Assistance to Meet Development Needs

It is axiomatic that different countries and different regions of the world have different levels and types of develop-

ment problems. In preparing a project design and implementation team for Chile a different set of needs must be considered than would be the case in designing a project on selecting a team for Zaire or for Haiti. Country-specific circumstances require a different assignment of responsibility to outside (foreign) experts. In many African countries, the expatriate is still a feature of nearly all externally funded development programs. In Latin America, on the other hand, the human resource base is such that, in many countries, one generalist (an evaluation officer), or none, is sufficient to provide the required outside technical assistance. Problems of local culture and interaction as they often occur in Africa, require a great deal of field work involving bottom of the structure investigations. The rigidity of many bureaucracies in, say, Latin America, requires a painstaking investigation of power structures and political ties in order to find an implementation scheme which will work. Where there exists large pools of educated elite, e.g., in the Philippines, the primary problem is usually project implementation rather than generating the necessary planning documents or allocating resources at the national level.

All of this makes the argument that there are identifiable regions and, within regions, countries which must be treated differently. All will need highly trained professional talent to design and implement development projects which reach and

benefit the rural and urban poor, but the problems and the solutions will differ. Accordingly, the organization of AID should reflect these differences, and allow for flexibility in order to take account of the changes in staffing and funding commitments which will necessarily follow.

Development and Integration

Development is recognized as an integrated process which affects the individual. Often quality of life or basic needs requirements are divided into functional areas for definition and measurement purposes, but to the individual they impact together. Health, nutrition and family planning programs are directly related to the movement of small farmers into more productive cash crops, better storage facilities for grains, control of pests and rodents, and better education and training. The problem is that host country governments are often not organized to provide integrated planning or development assistance.

This question of integration of government services within the host country is critical, and one which has even fewer answers than most glaring unknowns in the development field. The line ministries have their clients and constituents, staff and prerogatives. How to obtain cooperation, or even coordination, when most of the "integrated" activities are not in any one ministry's bureaucratic self-interest is a challenging and as yet unsolved problem. In Appendix B we have assembled case

studies from three countries which document various ways this problem has been approached, and the results insofar as they can be determined at this time.

AID itself is not organized to support an integrated approach to development. AID has been organized and funded (and Congress must take a good deal of the blame) in such a way that certain types of projects fall under specific funding categories. Thus a rural electrification project is arbitrarily placed under food and nutrition. Population has not only functioned as a separate organization, but its mechanistic approach to the problems of population control in the Third World has made it impossible to design integrated and mutually supportive development programs including increased agricultural production. Nutrition is in a separate category, an office within TAB, as is urban development, education, etc. In the field, this means that each field mission office (agriculture, human resources, capital development, etc.) submits its own funding requests (PIDs, PPs) since they are seen as drawing from separate funding pools. The DAI-designed rural development project in Zaire, for example, has no health component, since that falls under a separate funding category and was not to be included in a project which was basically agricultural. Within the context of promoting development, this is organizational madness.

As scale and aggregation increase, that is, as the numbers to be affected become significant, organizational arrangements for a development project become dominating concerns. In our experience inappropriate organizational structure and relationships are a far greater threat to the implementation of development programs than a lack of technical expertise or insufficient money. As a first step, AID must itself be organized in such a way as to promote an integrated approach to development.

REORGANIZING AID TO PROMOTE DEVELOPMENT

Assumptions and Constraints

There are three major factors which constrain any attempt to reorganize and improve the Agency's efficiency: the first is the nature of the problem -- self-sustaining economic development is neither easy to promote nor simple to measure; secondly, the limited availability of qualified personnel inhibits probable performance levels no matter what the structure may be (and the constraints on replacing present personnel are very difficult to overcome); and third, the relationship between AID and external organizations, both public and private, greatly influences the actual functioning of any internal structure. Thus task, people and the structure of external linkages must all be considered when contemplating the effects of alternative

AID organizations. Each is introduced below.

The Task

There is an overriding real world difficulty in promoting self-sustaining development: no easy answers exist. Tinkering with internal AID organizational structure may increase efficiency, but the idea of promoting three-year projects, projects which will have a guaranteed and positive impact on the lives of large numbers of traditional, very poor and uneducated people and which can be measured using objective quantifiable indicators, is simply not a tenable notion. Slow but real progress can be expected from a redirected AID program. It should be incumbent upon AID to provide professionally sound explanations of the constraints to change, including the difficulties and the evidence of success such as there is, and to modify the unrealistic aspirations of Congress. The inability of domestic development programs to make rapid changes in the lives of those on the bottom of the U.S. socioeconomic pyramid should be taken as documentation of the difficulty of the task.

The People

It is obviously not possible to eliminate all AID employees and start anew. Further, even if this could be done, the new recruits would not consist of a majority of the best and the brightest. Changing the overall incentive structure, however, can affect in some positive way the performance of the professional staff, and this has been addressed in following sections.

The qualifications, and the potential for retreading, of the professional AID staff is a critical issue in increasing AID's efficiency in promoting development. It should be clear that personnel problems are not limited to AID -- neither the outside consulting world nor the university world contain deep and experienced pools of knowledgeable and flexible "developers." Organizationally, a solution must be arranged such that the average employee can fill the majority of staff positions, with only a few slots perhaps 25 percent of the operational positions designated for the highly capable, imaginative and knowledgeable. It will not be possible (and this is one of our assumptions) to make major changes in inherent capability. It will be possible to make more effective use of superior talent within AID or who can be made available to AID through external channels.

The External Linkages

Relationships between AID and such organizations as Treasury, OMB, World Bank, OECD, pressure groups, etc., as well as Congress and the State Department, can greatly influence operations no matter what form organization may take. The balance of innovative control-oriented organizational behavior, the timing of activities, etc., all depend in large part upon the nature and timing of budgetary processes and roles. Such linkages function independently of people and they tend both to ignore the nature of the development task and to dominate much of the behavior supposedly devoted to it. These organizations and their

dynamics must be considered, and the thrust toward development progress protected from unnecessary encroachment.

Functions and Responsibilities: Lessons from Recent Experience

Since completing the cross-project analysis for AID (*Strategies for Small Farmer Development*), DAI has assisted in the design of 11 development projects with a total proposed funding of more than 100 million dollars. DAI has also begun to participate in the implementation of projects.

Design

The latest design effort which took place in Tanzania, is, to our minds, an example of a successful design effort. A team was assembled by an excellent AID staff employee who was designated as the design officer. Funding was available for local hire, as well as for outside consultants. The project, is an area development program aimed at developing a process for improving the production capabilities of villagers in the Arusha Region of northern Tanzania. It was conceived through dialogue between Tanzanian Government and USAID officials. The initial concepts were developed in a PID by the mission design officer.

Several logical steps were followed in the design process. The mission design officer first developed a preliminary list of data requirements for the design effort. Utilizing this list, he surveyed secondary data sources to determine which

data existed and were readily accessible. On the basis of this examination a determination was made as to the appropriate composition of the design team. The data requirements dictated that an intensive field data collection effort be carried out. Certain data had also to be collected at the regional and national levels.

To accomplish this work the mission drew on several sources. Two social scientists resident in Tanzania and who had considerable research experience in the country were hired to carry out preliminary field studies of each of the districts which were proposed for inclusion in the project -- a process which took two months. Utilizing these studies as a point of departure, DAI was contracted to provide three development specialists, who, working with the two researchers responsible for the initial field work, filled in data gaps and prepared the project design. Throughout the design process the mission design officer participated in the field work and played a key role in coordinating the design activity with the mission and Tanzanian Government officials involved with the project.

A critical element in this design exercise was the autonomy of the mission to decide and draw on sources of assistance most useful for carrying out the design work. This circumstance, coupled with the presence on the mission staff of an officer responsible for project design, resulted in a design process which met the needs dictated by local circumstances and produced a well-designed area development project.

Implementation

Of the projects which DAI has been involved in designing, it has provided the implementation team for one -- the North Shaba Rural Development Project (Zaire) -- and expects to be involved in the implementation of others. Although the specifications of the team composition for the North Shaba Project were written by DAI, we were unable to meet the specifications from our own staff, particularly with regard to language and area knowledge. The concept of a team as an integrated operating unit, designed to assist the Zairois project unit, required skills and abilities which did not fit easily into standard academic categories. The project requires flexibility: more research after initiation and less rigid scheduling of a blueprint to be followed. Thus, it is not only the technical specialties which are important, but also the ability to experiment, to seek out solutions from among the many unknowns in a remote and neglected corner of Shaba Province.

In retrospect, there were a great many problems of implementation which were not foreseen in the original design of this project, problems which could cause an otherwise excellent project to fail. The lesson to be drawn from this is that design teams should be given at least occasional implementation responsibility in order to insure that the lessons learned from doing the job are recycled into the specifications concerning how the next job should be done.

RECOMMENDATIONS

With these thoughts and with this experience base in mind, the following organizational structure is recommended. The components of the organization are addressed separately, and integrated at the conclusion of this section.

The Field Missions

Field missions should be provided policy guidance from AID/Washington and funding allocations from a combination of AID/Washington and ~~a regional office~~. They should be given the task of identifying, designing and implementing development projects unique to their own country's circumstances. Within the policy guidance and funding limitations established, project approval decisions should lie with the missions. Their internal functions would then be to:

- Identify and arrange for teams to design development projects which fall within policy and funding guidelines;
- Provide or arrange for the provision of technical assistance to projects under implementation; and
- Conduct the liaison/coordination/negotiation with the host country agencies involved in making policy decisions which support AID's development thrusts.

We would propose that personnel in the field missions be dispersed throughout the country, leaving in the capital city only those involved with overall decisionmaking responsibility,

national level liaison and program support (contracting authority¹ for example). Project officers should live on project sites. There is, in addition, an excellent opportunity to cooperate with Peace Corps personnel, even if the two organizations are not formally united. As the field missions become more concerned with implementation and performance of development projects (and less with the paper shuffle to justify the initiation or continuation of projects on the level of the subsequent year's budget,¹ they will need a great deal more information about the lowest level of the country's socioeconomic structure. Peace Corps personnel can be an important source for this information, but they rarely have the opportunity to influence policy or funding priorities. The combination of the two interests -- AID and the Peace Corps -- is natural, and in isolated cases in the past has worked well. There is no reason why it could not be designed, as distinct from a happy accident, in the future.

¹ This may appear to some to overstate the case. But from the point of view of the field missions, the Project Paper (and the preceding project design documents) are justifications for spending money for projects which they (the authors and originators) have already decided should be funded. The result is a proliferation of claims, multiplication of results, and enlargement of benefits and beneficiaries, all in the interest of obtaining approval from "Washington." DAI has seen cables from Washington calling for justification of projects through the presentation of such data as the size of the target population and net income benefits per year by income category -- all data which are not available except as fabrications. This creates bureaucratic wastage: Congress calls for a certain set of unobtainable goals which are passed to the regional offices and on to the missions, only to be answered by fictionalized projections. This is not a rational system for the selection and approval projects. It is rather a great waste of manpower and development talent.

The Mission Director should be guided by Washington policy and should operate within funding limits set some years forward (if Congress will accept this modification). He should be responsible for the generation of development progress in a way that it can be judged by experienced evaluators.

An approach which concentrates AID support on one specific area of a country might be the easiest to implement. This would allow the question of integration to be dealt with at least geographically, perhaps under some regional umbrella. Since the funding (optimally) would not be tied to functional areas, projects could be designed which encompass all aspects of the quality of life, acting on the total basic needs of the target population.

Some of the mission positions should be designated as key slots, to be filled by the Mission Director. We recommend that the Mission Director have flexibility over the assignments of some number of total field positions to insure that he can select those he believes can do the job.

The Regional Office

The regional offices should combine the functions presently shared by the regional bureaus in AID/Washington and the regional support offices (REDSO/East and West, ROCAP, etc.). We envisage two main responsibilities for this office:

- allocating funding among the countries of the region; and

- Providing support services to the missions in project design and implementation.

If the best of the field mission personnel could be rotated into the regional offices, with appropriate language and area experience, they could form a cadre of designers and implementation trouble-shooters who could be very helpful to the missions. In the past the regional support offices have generated animosity within individual missions, but this should not be the case if the actual project funding decisions are made in the field. We are uneasy with the role of the regional office in allocating regional funding to individual countries. This, however, must be done somewhere, and it seems close to home and more useful to have this done at the regional office (with inputs from Mission Directors) rather than from AID/Washington.¹

We see no reason for the regional offices to be in Washington, D.C. It is too close to the center, where paper is demanded, and too far from where serious professional attention can be devoted to project design and implementation.

AID/Washington

With the elimination of specific project approval requirements in AID/Washington, the offices can revert to their principal

¹ There will obviously be special cases in which AID will be asked to undertake large development expenditures (e.g., Egypt) for special purposes. The system must be able to adapt to these anomalies and at the same time concentrate on promoting development as its main goal.

functions: policy, research and evaluation, and other.¹

The Administrator must, of course, have a staff. One part of this staff should be charged with overseeing the implementation of AID policy -- the translation of that policy and complementing funds into development. The reason for the need for this special office is presented in a following section.

At the heart of the AID/Washington complex, there should be two divisions, one with responsibilities for policy, the other for evaluation and research. Policy should have both functional policy divisions (health policy, population policy, etc.) and regional policy divisions. The chiefs of the regional policy offices would be the point of contact with the overseas regional offices. Evaluation and research should be the centralized office which evaluates each field mission's portfolio on a regular basis. The evaluation would be made against a consistent set of objective criteria established to measure the adequacy of the Mission's overall development program. The evaluation division should also provide the technical assistance needed to generate ongoing monitoring and evaluation systems within each mission so that the necessary data could be obtained upon which to base reasoned judgements on development progress. All results should be standardized by the amount of money spent

¹ The "other" includes all those offices which are necessary for internal and external liaison but not for the generation and execution of the development process.

by each mission in order to obtain a "development per external dollar allocated" index. This procedure would provide a disincentive for large but unproductive expenditures of AID resources. Necessary cross-regional research aimed at improving the understanding of the development process and AID's role therein, should also be conducted, or managed, by this office.

Incentives and Checks and Balances

Incentives for mission performance must be a measure of development success set against the expenditure of funds. This can only be accomplished if there is a workable evaluation system, by project, which develops a method of delivering regular data which can be reviewed and analyzed. This is possible on several different levels of sophistication. It should be clear, however, that there is nothing presently existing in AID or other donor agencies even remotely approximating what is needed. The establishment of such a system would call for highly talented and imaginative personnel, as well as several years' design and testing of the system.

These problems have been discussed in two previous reports prepared for AID. See *Information for Decisionmaking in Rural Development* (Draft); a report prepared by Development Alternatives in cooperation with Poyner International, Inc., under Contract No. AID/otr-C-1383, Work Order No. 20, April 27, 1977. See also: "An Evaluation Module for AID," a portion of *An Evaluation Seminar (PDE) of the Agency for International Development*, Development Alternatives, Inc., September 1975.

If there existed a comprehensive evaluation system for the success of development projects which took account of the multiple factors which cause or impede project success, the missions could be made responsible for doing their jobs correctly and with vigor. Rankings of the missions' performance on project design and implementation could be part of the agency's review of personnel appointments. The professional development staff would revolve within the evaluation staff, the regional offices, and the field missions. Washington review of projects, DAPs (which we recommend become a thing of the past, since the World Bank and the IMF are much more fully staffed to carry out such analyses), annual budget submissions, endless paperflows based upon PERT, CPM, Networking, and other monitoring activities, would end, releasing the most qualified of the AID/Washington talent to other endeavors or to concentrate on policy guidance.

Staffing the AID Positions

AID should be able to draw from the largest possible universe of personnel to fill those positions marked "critical" -- the design and implementation officers in field missions, regional officers and some of the positions in the policy and evaluation offices in AID/Washington. This means a very different personnel orientation and contracting potential. AID should be able to identify and hire individuals within 30 days or to arrange contracts with organizations, universities or consulting firms within that same period of time. With a small AID professional staff and increased flexibility in funding.

for selected special positions, AID would be able to hire from a larger talent pool and increase the appropriateness of the backgrounds as well as the language and academic qualifications of the people assigned to do the work. We would argue in favor of a reduced permanent staff, and increased ability to hire or contract from a wide range of experienced talent, including third country and host country nationals, academics, consultants and others who have the potential to move development projects forward.

Further, a more flexible personnel assignment policy for the professional staff should be established, giving Mission Directors, heads of the regional offices, and Division Chiefs latitude to fill some percentage of the total positions under control with individuals they select. It is not clear that any bureaucracy can identify and assign outstanding professional employees to critical positions. This can be done, however, by personal selection. If the top appointees are good (and they should be moveable or removeable by the Administrator), they will be able to detect the performers from among the rest. With a flexible personnel appointment policy for some positions and normal bureaucratic placement for others, the system will nominate the average bureaucrats for less responsible positions, while the services of the outstanding professionals will be the object of competition for more critical positions in Washington and overseas.

The Complementing Support Organization

The sociology of bureaucracy suggests and our actual experience documents that much of AID is designed to impede the forward movement of development projects. The upward mobility and recognition received in the legal, auditing, accounting, and contracting offices is rarely based upon the success of the development projects to be supported. Rather, it is most often predicated upon not making a mistake in the interpretation of government regulations. Risk-free actions rarely are available in the development business. This is an understandable attitude for support agencies who do not directly gain recognition from promoting "development."

We would recommend a group within the Administrator's Office in AID/Washington whose sole responsibility would be to examine the efficiency with which projects get designed, funded and implemented, contracts signed, legal problems overcome, audits performed, etc., from the point of view of professional developers. DAI has been the recipient of half-a-dozen progress-impeding decisions (in terms of pushing forward AID's primary goals) from the support portion of AID. Our guess is that this is multiplied by the desk officers and the DR officers, who finally give up the fight and accept the interpretation of the small-print readers. To balance this known and documented tendency, the "operators" need an office with people having detailed technical knowledge -- particularly legal -- devoted to a "can do" philosophy. This Implementation Office

should carry forward the cause of efficiency and effectiveness and generate a counter-balance to the known tendencies of the support units in the field, regional offices and AID/Washington.

Further, we would recommend that support staff be attached to the overseas regional offices in order to help insure that the professionals engage in support of, rather than in opposition to, the needs of the field missions. This is particularly needed with regard to legal staff, contracting officers, and auditing and comptroller staff. The best of intentions in the reorganization of AID will fail unless there is a new incentive -- based upon organizational positioning -- for the support offices to define their principal role as helping the operating arms of the Agency to get on with the job.

CONCLUSIONS

We opened this discussion with the thought that five components -- bureaucracy, goals, Congress, knowledge base and staff -- are intertwined and require simultaneous solutions by the new Administrator. The bureaucracy is the first target, and a reorganization of AID with decentralized decisionmaking related to project design and implementation, supported by regional offices and given policy guidance from AID/Washington is a good way to start. As an active participant in the project

preparation and approval process, DAI can document in some detail the inefficiency of a system which requires detailed decisions on projects in Washington, but leaves development policy to the imagination of the field. Reversing the arrangements so that policy is nearest to the Administrator and appropriate projects are selected and supported by country missions would seem to be the first logical step in improving the efficiency of AID.

A second step must be common agreement on the goals of the organization, including an understanding of the difficulty of generating self-perpetuating development progress. Good projects can consume a great deal of development assistance -- certainly double what is presently provided -- over the course of the next five years. It is the dynamics with which the projects are assisted which is critical. Longer disbursement times and less push for immediate results would likely generate more development, with less money, than the present high impact philosophy which Congress apparently has pushed upon AID.

And it is to Congress that the new Administrator must turn, with carefully prepared documentation, to show what can and has been accomplished and what cannot and has not. There is little merit in spending a great amount of time attempting to show Congress that all of its objectives have been met. They have not and will not be in the immediate future. A far stronger position would be to show progress in those instances where progress can be documented, and to indicate a lack of knowledge,

capability, or solutions to those problems which are, at the moment, insurmountable.

It is the knowledge base which must expand rapidly if a reorganized AID is to generate the development progress which is its potential. AID, the World Bank, the regional banks, and other bilateral donors do not have enough answers about what works and why, and what does not work and why. This is because there has been and is today no systematic and substantive system of tracking the approach and inputs of development projects, examining the results, and making reasoned judgments on causes, except as after-the-fact case studies. Funds and talented people should be committed to the question of how AID is doing, not for Congress, but for AID. The knowledge base is woefully weak, allowing any experienced developer to argue, often successfully, that what worked in one country will work in the next. Professionals in the field of development, with cross-project empirical knowledge of results, are few. Great strides could be made in this area if it is a priority of the new Administrator. If it is not, there are no incentives, based upon development performance, which can be called into play to improve the operations of the agency overseas.

Finally, the AID staff should be regrouped and reorganized so that talented people push less paper and are more concerned with development policy, processes and progress. There needs to be more frequent use of outsiders: academics, consultants,

Third World specialists, as well as more and better training for the professional staff. Language training and country specialists assigned for four years or more would help improve staff capabilities. Deliberate selection of ex-Peace Corps personnel who work at the bottom of the structure within AID projects would be useful. A movement (already initiated) toward using more social scientists (e.g., anthropologists) is a step toward recognition that it is rarely the technical problems which defeat most development undertakings.

Together, an improved and more efficient bureaucracy, a commitment to carefully defined development goals, an approach to Congress which is not defensive, a greatly expanded knowledge base generated from a review of the results of ongoing and completed projects, and the careful selection and use of key staff for critical positions will multiply the benefits of development to the rural and urban poor of the world.

APPENDIX A

INFORMATION FOR DECISIONMAKING IN RURAL DEVELOPMENT

The following pages are extracted from the draft report entitled *Information for Decisionmaking in Rural Development* submitted to the Agency for International Development, April 27, 1977. The study was performed by Development Alternatives, Inc., in cooperation with Poynor International, Inc., under Contract No. AID/otr-C-1383, Work Order No. 20.

CHAPTER TWO: DEFINING THE INFORMATION REQUIREMENTS

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PROJECT-LEVEL INFORMATION REQUIREMENTS

Introduction

The need for a rural development program often creates an urgency which makes it difficult to satisfy information requirements in an orderly fashion. Yet, there is a logical sequence to most rural development programs or projects. Projects are first planned then implemented, addressing the information requirements, respectively, of resource allocators and those of operating managers. In this section, information requirements are identified during three stages of a project's life: design, implementation and post-project activities. This will serve to introduce the discussion in Chapter Four which examines the issues involved in systematic satisfaction of information requirements at the project level.

Information Requirements for Project Design

Project-level planners may be given a well specified set of objectives, funding levels, expected physical and human resource outputs and constraints on potential solutions -- all imposed by sector-level planners. Alternatively, project designers may be given a loosely drawn circle on a map in some remote area, and a general mandate to do something which will bring about development in that area. Between the two extremes lie the majority of design requirements in AID projects: some identification of the approach and the target group but little

detail which would point to a single well-specified project. The processes which project planners undertake leading to a definition of specific information requirements may be categorized as follows.

Integrating the Project into the Regional/National Environment

If sector-level planners have completed their work, project planners will have available the macro-level data needed to insure that a project will complement the government's priorities, pricing policies, development resource allocations, administrative and political choices for delegation of authority and responsibility for decisions in a project area. If such information is not readily available from higher tiers of the planning structure, it must be generated by the project planners to insure that the design fits into the overall regional/national environment and assigned development priorities.

Understanding the Project Environment

To be successful, rural development projects must be compatible with, and integrated into the existing local environment. Details of local development history, dynamics of the agricultural, other economic, social, political and administrative systems must be understood. This information provides a partial basis for determining what changes are desirable and what forms of intervention would most likely bring about these changes.

Specifying the Project Intervention

Details of the project, including the timing of resources, the point of entry into the local environment, the appropriate mix of inputs which will transform resources into physical outputs and the outputs into human well-being must be specified. Two information items are of particular concern:

(1) the appropriateness of the technology in the local environment (e.g., answering the technical questions of improved maize production); and (2) the capacity of the host government institutions to deliver, support and sustain the development assistance determined to be necessary. Information required to plan the intervention centers on an understanding of the local environment, development experience elsewhere, technical alternatives, resources available to the project and the government's institutional capacity to provide the human and material resources when and as necessary.

Specifying the Changes Required by the Project

Behavior changes in the local population are a necessary outcome of most development efforts. These changes may be impeded by a lack of incentives, by a perception (on the part of project participants) of high risk, by cultural or social constraints, by a set of inflexible economic interrelationships, by a lack of technical understanding, or by a self-serving approach toward the target population by powerful local leadership. Planners may be able to identify some of these constraints and design the project accordingly. But the impact

of unknown reactions from unanticipated multiple constraints make the prediction of change in rural development very uncertain. Estimated changes -- those necessary to achieve the project objectives -- must be specified during design so that they can be closely monitored and the project revised as needed during implementation.

Information Requirements for Project Implementation

Implementation of a project begins when development assistance funds are committed for a specific purpose. For large international donor agencies this means an approved project design, a negotiated agreement with the host country government, and an implementation schedule. In an optimum system, information requirements during this period span both the project and the sector level. The process followed by planners and the complementary information needs may be categorized as follows.

Testing of Alternatives in Technology and Project Strategy

In projects with highly unpredictable technical results or where there are many alternative approaches and little experience to choose among them, testing of technology or other project alternatives should be undertaken. This calls for defining a range of possibilities and selective investigation of those possibilities during the early stages of implementation. As approaches, components, and techniques are found to be unsuccessful in comparison to other alternatives tested,

they should be dropped from the project's package.¹

Monitoring of Project Activities

Project management must exercise control over essential activities, timetables, resource use and personnel. Systems of control extend from accounting procedures to regular reporting requirements on progress checked against projected completions, e.g., Pert, CPM, Networking systems. Careful monitoring of inputs (financial, technical and material) and physical outputs of the project is intended to increase operational efficiency while insuring that the project holds to the path of the original plan.

Determining Change in the Environment

In the design phase, estimations of expected change among the target population were accepted as high risk, uncertain projections. During project implementation, actual changes must be measured. This requires a careful specification of those elements in the pre-project environment which are expected to change or to be responsible for inducing change. A baseline measurement of sufficient precision is required so that

¹ An optimum solution is to conduct social experimentation on possible approaches to development as well as on the components of project design prior to implementation. There are a number of reasons, not the least being the bureaucratic procedures by which funds are allocated by development assistance agencies, which make this approach generally not feasible. The alternative is to begin the project modestly and with a quasi-experimental approach to the selection of the components of the project for large-scale replication. Since in most funding agencies field testing can only be supported after the project has been "implemented," the testing and modification phase in this paper is discussed under project implementation.

re-measurement during phases of the project will allow a determination of change.

Understanding Why Changes Have Occurred in the Environment

A measurement of change becomes far more valuable to project management when it is possible to understand why certain project events or outcomes have occurred. Determining reasons for a variation in project performance compared with an initial target should suggest how the project can be modified to improve performance. Understanding the reasons for change calls for:

- Measurements of change (baseline measurement of critical elements in the environment "subtracted" from measurements after the project is in operation);
- Specification of the "treatment" which has been applied to the project, i.e., the development approach and the project inputs (this data which should be available from the monitoring system); and
- Specification of the unique environmental factors (education, weather, soil, culture, etc.) which might influence the level of project success.

The above data combined with an evaluation methodology which permits confidence that the observed changes can be attributed to the "treatment" will identify those causal elements which have affected project performance.¹

¹ The "treatment" will be that combination of activities and inputs which make the project area or the project population different from some real or hypothetical control group.

Prescribing Recommendations for Project Modifications

This analysis will be of the sort that measured changes in project success indicators can be attributed to the intervention of the project in the local environment (the treatment) combined with those unique factors in the environment which might make the project successful in one area while failing to achieve significant results in another. The variables which make up the treatment can be modified -- treatment thus is not one lumped set of activities, it is the specification of the project's intervention in sufficient detail that managers can make modifications in the way the project carries out its work. These recommendations may be submitted by the evaluation staff or they may be determined by project managers themselves upon examining the information which has been collected. This is the final step in the process of implementation, when information feeds back into new specifications for the intervention of the project in the local environment.

The Relationship Between Monitoring and Ongoing Evaluation

Monitoring is a control function which includes matching project performance against intended output targets. Evaluation is an examination of the impact of the project and the fulfillment of ultimate objectives and an identification of the reasons for unusually high or low performance. In practice, the two often mesh into one long information continuum, beginning with data on technical processes within the project, ending with judgments on the impact of the project on the target population.

Ongoing Design and Staff Improvements

Implicit in the process of generating information for ongoing evaluation is the notion of learning, adjusting and improving while doing. Adjustments and improvements can be made both in project design and among the staff of the project -- from manager to field worker. Staff at all levels can adjust, improve, gain greater capability to help move the local population toward originally stated, or revised, development objectives.

Ongoing Evaluation and Sector Level Information Requirements

Measurements of project impact, set against resources, intervention approach and peculiarities in the environment, are also important to sector-level planners. To intelligently select development projects from among alternatives or to specify development strategies for various local circumstances, sector-level planners must understand what can be expected from a given level of development funding. Insofar as such knowledge can be gleaned from ongoing evaluation of project activities, it should be passed to the sector level for use in planning and resource allocation.

REDUCING INFORMATION REQUIREMENTS FOR PROJECT DESIGN
TO A MANAGEABLE SET

Chapter Two suggested that information requirements were derived from certain processes which should be followed during the design phase:

- Integration of the project into the regional/national environment;
- Understanding the project environment;
- Specifying the project intervention; and
- Specifying the changes required by the projects.

Unless the issues and corresponding information which are critical to the project designer are restricted, collecting data to provide information which satisfies the above requirements can be a never-ending task. Considerations can be used to set the limits on data collection and analysis in the design phase.

For the purposes of this study, project design is defined as that process which culminates in the approval of funding for a project. This definition is chosen because it coincides with the standard distinction made by AID and other donor agencies between the design phase and the implementation phase of development projects. In a typical development project, the end of the design phase is determined not by the conclusion of a search for the "best" method of using development-funds in a local environment, but by the project approval mechanisms of major international assistance agencies.

Experience has shown, on the other hand, that "design" should not -- indeed, in most cases, cannot -- cease when "implementation" begins. Insofar as there are always important "unknowns" which affect project activities -- "unknowns" which can only be resolved during the implementation phase -- "design" must continue well after the project has received its funding.

AID and the World Bank are coming closer to the view that projects must be flexible, that they cannot be completely designed before the project begins. As development assistance has moved from large infrastructure projects, in which engineering blueprints are completed prior to project initiation, to projects involving the rural poor, it has been increasingly recognized that there must be continuing research, monitoring and evaluation within a project to improve the original design. AID has recently approved certain two-stage projects in Africa, an initial stage to test alternative approaches to an agreed development need, a second stage to replicate the findings over a larger area. This shift in emphasis away from brick and mortar into providing incentives for human development has major significance for the kinds and amounts of information which must be collected and analyzed prior to the initiation of the first phase of project implementation.

The need for a flexible design process is particularly acute in those projects in which the optimum technology for an area has not been proven prior to implementation. Whether the technology is the best way to produce maize or the most appropriate

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way of delivering rural health services, alternatives should be carefully considered, outlined, and specified for testing during implementation. To ensure that the range of alternatives slated for testing is appropriate and inclusive, the emphasis on purely technical information should be reduced and greater emphasis should be placed on the need for an understanding of the environment which will receive the development assistance.

In a flexible design process, a requirement for statistical validity on farm system inputs and outputs is replaced by a focus on farming systems within easily distinguishable farmer categories. Information is generated from detailed examinations of a few farms, rather than from averages taken across many. The critical question then becomes, "What do we need to know to get started?" This is a question which experience has shown can best be answered in the field by capable design teams.

Utilizing the Process Approach to Designing Development Projects

Different approaches to project development have utilized or have dictated different levels of the need for knowledge of a project environment prior to the completion of project design. At one extreme is the missionary or private voluntary agency approach, which involves months or years of living in a area, understanding the local situation in great detail, working directly with local leadership to identify and plan for ways to overcome constraints to change. From this experience, it has become possible to identify ways in which external assistance can be of value to the community -- using indepth knowledge of the local environment to design development projects.

At the other extreme are large infrastructure projects -- a diversionary canal to eliminate swamp conditions for example -- in which the need for local knowledge is perceived as primarily technical, with little emphasis placed on understanding the socioeconomic conditions of the area's population.

In response to the Congressional mandate for an emphasis on programs reaching the rural poor, a major research study concluded that a process of design which directly involved the local population in some aspects of data collection and analysis was important in benefiting AID's target group.¹ The process suggested a middle ground in the need for local environmental information and posited the following process for the design of rural development projects;

- Begin at the regional/national level and satisfy the first set of data requirements -- those of integrating the project into the national/regional perspective;
- Move to the project area and establish consensus on the major variables -- farming systems, economic activity, local cohesion and leadership, forces for change or impediments to change in the local area, priorities and interests of the local population. Identify and seek out those leaders who could have a powerful effect on the response to development assistance. From them learn how such assistance might best be introduced.²

¹ Elliott R. Morss, John K. Hatch, Donald R. Mickelwait and Charles F. Sweet, *Strategies for Small Farmer Development* (two volumes), Westview Special Studies in Social, Political and Economic Development, Westview Press, Inc., Boulder, Colo., 1976.

² In areas where the leadership is devoted to furthering its own well-being at the expense of the majority of the local population, the introduction of new institutions and creation of new leadership opportunities should be one element of the project design.

- Identify and investigate (if they exist) alternatives for the introduction of new technology which could serve as instruments for modernizing change; and
- Specify the level of external resources, the potential for mobilization of local resources, the development approach and point of intervention for the project.
- Predict the changes necessary both in the behavior of the local population and the behavior of government institutions to allow the project to be successful.

The process approach seeks out the dynamics of the rural area and attempts to integrate outside development resources into that environment in a constructive way. Information requirements are further narrowed and specified, presenting well defined sets of data and data analysis needed by a design team.

Obtaining the Active Cooperation of Host Country Participants

Projects must not only be designed, they must be implemented. These activities call for a commitment by different levels of the host country to the concepts and approaches being developed. The time to begin collaboration is when the idea for the project is originated. When the design team undertakes field data collection, national, provincial, district and local officials and leaders should be included in the collection process, either as data sources (to whom the project is explained) or data gathers (who help shape the project). Not only will this provide necessary information, since many of the dynamics important to project implementation will be known by local officials, extension workers, teachers, etc., but it will

help to insure that their particular information requirements (how the project will affect their position, responsibilities, prestige, etc.) can be met.

Host country officials are likely to view rural development projects which involve assistance to a local population very differently from a project which builds a dam or electrifies a provincial capital. They will probably be more likely to accept and rely on the technical advice of foreign engineers than passively to accept recommendations concerning attitudes and practices of local people from foreigners with only a short stay in a local area. For this reason appropriate officials should participate in all phases of the data collection and analysis effort. This, of course, further restricts the alternatives for obtaining information for project design.

Selecting an Information Approach for Project Design

In the preceding analysis, critical issues have revolved around the dynamics within a rural area, its relation to the region, the potential for successfully introducing development assistance which will bring desired forms of modernizing change, and an estimation of those behavior changes on the part both of local populations and of government institutions which are necessary for the project to accomplish its objectives. The universe of various approaches to the collection and analysis of data for project design has been limited by:

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- The knowledge that project implementation will begin with a number of unknowns still to be resolved during early stages of the project;
- A process approach to development and to project design which requires interaction with the local population and local leadership; and
- A need for collaboration during design which instills commitment at all necessary levels within the host country government.

Information collection for projects cannot become the responsibility of census takers. Nor can needed information ordinarily be extracted from data entered into a computer. The only proven collection method is observation, perhaps aided by small surveys to establish ranges and magnitudes, in which the designers themselves become involved in primary data collection and analysis. This technique is called reconnaissance or rapid survey. Examples and an analysis of such design efforts, with a description of a team's composition, research undertakings and output, are contained in Chapter Six.

A further issue in project design is that approval processes may call for information which is not of particular value to designers -- information which is used to allow AID/Washington or officials of the World Bank to allocate resources to one development undertaking rather than to another. In the past, this has taken several forms:

- Requirements for mean income figures on a target population, established by some statistically valid sampling process. (Chapter Six discusses the problems encountered in trying to measure income among rural people) and/or
- An internal rate of return or benefit/cost ratio of some given proportion. From investigations into the design of development projects for AID and the World Bank, such endeavors appear to be little more than exercises in the imagination of the economist assigned to the design team. Given the uncertain nature of rural development projects and the secondary, tertiary and/or external effects which the project might conceivably generate, meeting the assigned target is almost always possible. Whether the assumptions on which the numbers are based are plausible requires analysis which goes well beyond the arithmetical techniques required in some approval processes.

AID has carried this process to a logical conclusion *in extremis* by establishing a small farmer computer program which operates on the difference between existing productivity (with priced inputs and outputs) and potential productivity with the gains available from the project. The computer runs are then attached to the Project Paper as evidence of the economic viability of the project.

REDUCING INFORMATION REQUIREMENTS FOR PROJECT IMPLEMENTATION
TO A MANAGEABLE SET

Chapter Two listed the following processes and complementary information requirements for the implementation phase:¹

- Testing of alternatives in technology and project strategy;
- Monitoring of project activities;
- Determining change in the environment; and
- Understanding why changes occurred in the environment.

Within these processes and in support of project decisionmaking, a good deal of overlapping and/or mutually supporting data collection and analysis may take place. The processes are not sequential. In initial project phases, at the same time that testing is going on, a monitoring system should be in place, measurements should be taken of critical variables in the original pre-project situation, and methodological preparation to allow future attribution should be started, all as the project gets underway. Since all possible alternatives cannot be tested, all activities monitored, all change measured and attributed, selective criteria must be used to limit the variables and insure that the critical issues are addressed.

¹ The cost process, that of prescribing recommendations for project modification is an analytical step the information requirements of which should have been satisfied during the previous processes.

Selective criteria are discussed briefly in this section. The information requirements related to specific data collection and analysis techniques are examined in some detail in Chapter Six.

Testing of Alternatives in Rural Development Projects

The testing of agriculture responses to new technology -- seeds, fertilizer, planting, weeding, harvesting, etc. -- has long been accepted, particularly to adapt technology generated at the research station to local climate and soil conditions. Testing is traditionally carried out by agronomists, with a view toward maximizing yields, occasionally in concert with economists who attempt to stress maximization of income from new technology. The most extensive testing of this kind has occurred in the Puebla Project (CIMMYT in Mexico) where more than 16 different technological packages corresponding to different local circumstances have been developed for new corn technology, packages which have significantly lowered the cost of modern inputs to near-subsistence farmers.¹

While the concept of field trials is accepted in agriculture, the concept of testing other portions of a project's technological package has gained few converts. Small farmers often care little about maximization procedures, preferring to

¹ Heliodoro Diaz-Cisneros, "An Institutional Analysis of a Rural Development Project: The Case of the Puebla Project in Mexico," Ph.D. dissertation, University of Wisconsin, 1974, p. 434.

minimize risk, and make the best use of their scarce resources. This behavior leads the farmers to plant many varieties (some will survive), to interplant corn and beans (where land is scarce) and, unless it is risk-free, to refuse to use credit for the production of crops which can be grown without modern inputs, regardless of the potential income increase.¹ Such behavior is well documented in the literature and in those projects which have strong, externally funded research personnel. It is rarely, however, transmitted into development designs, or introduced into projects. The need to test a number of different alternatives for introducing new technology to subsistence farmers, or to other members of the rural poor, has been established but has not as yet been made a part of the process of project implementation.

Contrasting Quasi-experimental Approaches to Traditional Approaches

Several rural development projects have been designed for AID utilizing quasi-experimental methodologies.² The use of quasi-experimental methodologies breaks with the tradition that a development project should settle on one method in the design phase and should continue with that method until it succeeds or fails.

¹ Development Alternatives, Inc., "Small Farmer Risk-Taking," June 1976. A report submitted to the Agency for International Development.

² Colombia Small Farmer Development Project; Local Integrated Rural Development Project, Afghanistan; North Shaba Maize Production Project, Zaire; Oncho Areas Village Development Fund, Upper Volta. The Caqueza Project in Colombia (ICA and IDRC supported) and the Tetu project in Kenya (Government of Kenya and IDS supported) were quasi-experimental research projects which provided insights into many constraints in reaching the small or less progressive farmer.

However, none of the projects which contain quasi-experimental methodologies have yet been implemented as designed. The difficulties in moving from design to implementation show that problems are often raised with an approach which admits to a lack of optimization knowledge and deliberately seeks answers which are appropriate to the project's local environment.

In the Small Farmer Development Project in Colombia, four components were designed to be subject to quasi-experimental test -- the generation of new technology, the extension of the technology to small farmers, the method of promoting local organization of small farmers including marketing arrangements in the public or private sector, and the information system which would be used to test the other three components.¹ The purpose was not merely to maximize farmer's income in one small area of Colombia, but to specify a process by which small farmer income (and other well-being measures) could be increased throughout rural Colombia. Such projects would be more complex to administer than more traditionally designed projects, requiring higher levels of education and management talent than needed for projects in which project staff follow a pre-determined blueprint. Since none of the quasi-experimental projects have yet been implemented, an explanation of how an experimental approach might work in practice is all that can be provided for potential project implementation at this time.

¹ Colombia, Small Farmer Development Project Paper, AID-DLC/P-2140, December 19, 1975.

Assume that in a rural area a development project is focusing, at an initial stage, on the introduction of improved farm technology to increase overall farm income as well as income from individual crop lines. In most remote areas in the Third World, the best way to accomplish this task will not be known. Tests should, therefore, be conducted on small farmers' land, utilizing a risk-sharing concept to insure that innovators do not lose if the technology does not perform as advertised. After a few crop cycles, it will be possible to determine which new cultural practices improve returns to the farmers. There remains then the question of how to deliver this knowledge and what complementary assistance may be needed (credit, marketing associations, input delivery services, technical assistance, etc.) to make the new technology pay.

Several methods of delivering knowledge and complementary assistance which have worked in various parts of the world come to mind. In Africa, good results have been obtained using short training courses for farmers from a particular area. In Latin America, paratechnicians -- local residents with only a little more education than the farmers -- have been selected to deliver simple, straightforward technical assistance on one crop. In many areas of the world, farmers' associations have proven useful in extending knowledge, in promoting innovation, and in providing the insurance and assistance needed to cover the risk of change. Testing is possible not only among different methods of delivering new technology, but within

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the methods as well. Paratechnicians, for example, can be male or female, young or old, educated or illiterate, well paid or poor,

The overall difference in approaches needs to be highlighted. One approach calls for the staff and management of a project to make the project "work" using a pre-selected technique. In the other approach, there is a testing of alternative techniques to solve the problem the project has been designed to address. In the latter approach, staff and management are not committed to a particular technique until the results are in and the best method has been found.

Making a Quasi-experimental Approach Work

Information requirements for experimentation have been specified and there is voluminous literature on random selection of participants. In most rural development projects, unfortunately, there is little opportunity for complete randomness. There are, however, opportunities for matching areas, participants and non-participants, across a number of dimensions which allow relatively powerful attribution of differences in response to the technique being tested (the treatment). To implement a project which tests components and alternatives, project management must:

- Have a detailed understanding of the local environment of the project and with a particular eye for its homogeneous and heterogeneous characteristics;

- Divide the environment into matched or like areas. This can sometimes be accomplished by dividing the project into pie-shaped sub-units in such a way that each sub-unit is a microcosm of the major variations found in the environment;
- Specify the various alternatives and interventions to be tested with clearly demarcated areas for each of the various treatments. If feasible, one sub-unit can serve as an overall control, with no intervention or development assistance in the initial phase;
- Determine the indicators of success for the various treatments -- e.g., take-up rates, adherence to technological recommendations, participation in organizations, vocal support (or denouncements) at group meetings, etc.; and
- Use field staff, paratechnicians, or whoever can provide interface with the local population and the project to collect the data specified above and to determine which alternative provides the most development impact per dollar of development assistance.

There is no need to carry the testing procedure further than the first solid understanding of the least efficacious treatments. As a treatment is found wanting, it can be dropped from the list and resources can be freed to concentrate on other alternatives. In this way experimentation in a development project differs from tests in which each alternative is carried through to a final comparison. Over the initial stages of implementation, a great deal should be learned which will improve the ability of the project to expand those techniques which have been found "best" to a larger population.

Monitoring Project Activities

Monitoring is a mechanism used to control essential project activities. It assumes as given the targets and objectives of the project and measures the inner workings of the project against criteria of timeliness, efficiency and cost effectiveness. The literature on monitoring is filled with Pert, Critical Path and Networking methodologies and approaches as well as more comprehensive data banks which often fall under the heading of management information systems. These systems basically fulfill accounting and reporting functions (watching the flow of material resources, scheduling the work load of personnel) and are necessary for project efficiency. However, the association between efficiency and development impact has not been established. Examples of some of these systems and their inherent problems of data overload are contained in Chapter Six.

If designed correctly, however, the monitoring function can complement ongoing evaluation. As field staff send information back to management about the progress of the project, interesting possibilities for data collection and analysis emerge. Evaluation is process of making judgments about causality but evaluative data can be used for other processes such as monitoring. Insofar as data collection and preliminary analysis is concerned, field staffs can provide the basic raw material for both monitoring and evaluation.

Information requirements for monitoring include:

- Observation of the behavior changes expected by the participants in the project -- behavior which can be detected well before the project can be said to bring benefits;
- Observation of the physical outputs of the project -- trained personnel, establishment of contacts with the local population, delivery of materials, establishment of local organizations -- any action which is postulated to be an important intermediate step in the delivery of benefits to the local population; and
- Specification of the approach (intervention) of the project -- time, money, resources, point of contact, etc. -- which will be needed in the analysis of the effectiveness of the intervention during the evaluation phases.

Determining Change in the Environment

Development assistance is predicted upon achieving positive changes -- beneficial impact on a target population. Attempts to measure change can be informal (based on observation) to formal (using statistical surveys). They can be performed at one point in time or can be performed at a series of points in time (referred to as longitudinal or time-series data). Attempts can vary by the number of variables being measured and by whether variables are examined in isolation or as they interact. Critical variables can also be limited to first order success measures -- direct benefits to participating households -- or can be expanded to secondary impacts -- changes contributing to critical mass take-off into development growth.

The methodology generally used by AID is to contrast an actual state of affairs (using a number of variables) against project plans or targets. This is inherently a weak approach. First, there is no pre-project state (baseline) which has actually been measured. Second, there is a potential for project planners to overestimate project targets, especially in those cases in which projections are not divorced from the decision to fund the project. In many cases, the failure of a project to reach target levels established during the design phase is more a reflection on the credibility of the targets than it is on the adequacy of project performance.

A more powerful methodology is to measure differences between a known pre-project state of affairs and key indicators of success observed at various times during project implementation. Success measures can include increases in income (a most difficult variable to capture in a near subsistence society), productivity, nutrition, self-sufficiency, and other indicators of human capacity in the target population. Such indicators should also be designed to capture changes in the distribution of benefits in the target population. If time-series studies of this sort are well designed, they can yield generally reliable and useful data. However, these studies are time-consuming, expensive and replete with potential for methodological errors in data collection and analysis.

Special attention should be paid to recent attempts to initiate and perfect what has come to be known as the impact

assessment technique.¹ In this methodology evidence of development impact is specified in advance and then measured through observation or through the use of key informants, either individuals or groups. The unit of analysis is a village or community and the most readily observable changes are usually taken from households. The operating theory behind this methodology is that real change will be readily apparent through observation of key variables in individuals or in communities. A frequent example of an indicator of increased income in this approach is the change over time in the number of roofs which have been upgraded from straw to tin.

Conceptually, the measurement of change is uncomplicated. However, recent emphasis from Congress, host countries and other donors on proof of development impact has caused a burgeoning of information requirements and has also made it necessary to think in terms of alternative systems of change measurement. Simple observational data are readily available, but conclusions about change derived from them are often unreliable. Time-series data, either cross-sectional or longitudinal are recommended for use on key variables but, as mentioned, are often expensive and methodologically complicated. Hard data,

¹ It should be clear that the term "impact assessment" is used here in a quite specific way. It refers to a particular technique (with some variation within it) which has been used by the American Institutes for Research in Thailand and by Development Alternatives, Inc., in Bolivia and in Peru to measure change based upon indicators or proxies of the critical variables in development. The methodology assumes but does not attempt to prove that the change was caused by development assistance.

as would come from well-maintained farm records, has been almost non-existent in any but an expensive research context. Little work has been funded by the major development agencies to compare and contrast various ways to measure change and to improve what must be accepted at this time as a primitive state of the art.

All of the techniques discussed above are examined in detail in Chapter Six.

Understanding Why Changes Occurred in the Environment

If, after some years, development assistance generates no change from an original pre-project state, it would not be possible to determine if this is a positive or negative response to the project without examining what has occurred in similar non-project areas. In some areas of Africa, for example, climatic conditions have been such that one measure of the success of development assistance has been that project participants have sustained, not an income increase, but rather a smaller income loss than the loss sustained by those outside the project area. The exercise is one in attributing change to project intervention. This attribution must be based upon comparison of the impact in a project area with changes in areas not within the purview of development funding.

Information requirements for attributing changes in the environment to the intervention of the project are:

- Measurements of change in key success variables (impact), information which should be available from the previously described function of the project;
- Specification of the treatment, information which should be available from the monitoring function of the project;
- Determination of unique environmental factors which might affect project impact including those which could significantly affect the distribution of benefits to project participants; and
- Measurements of change in key success variables in an area with similar environmental characteristics but which has not received project assistance. This is the often neglected control group so important to making a convincing case that significant change resulted from the project intervention.

Control groups should closely match the characteristics of project participants. The less well matched are the control group and the project group, the more difficult it will be to conclude that development assistance was responsible for the observed changes. If there is no identifiable control group at all, the attribution of changes in key success variables to the application of development resources will be more an act of faith than of reason.

Control groups, however, are sometimes not scientifically selected. In an area in which only subsistence corn is grown, and where the project is promoting new cultural practices, all farmers who do not adopt the new practices are candidates for being included in the control group. Project managers

need to determine the reasons for non-adoption (lowest income farmers?, labor shortage?, risk aversion?) so as to take corrective measures insofar as possible.

Without further data collection or analysis, a project can claim behavior changes, can point to increases in production and can argue that continuation of the new practices over several cycles suggests that the rational farmer is achieving income gains. But the project cannot present a convincing case that the changes are due to the project (in an area nearby the switch to new corn technology might occur without project assistance). Nor can it provide a statistically valid determination of income increases. Depending upon the data collection and analysis technique employed, a longitudinal study of income changes over time could provide ranges, means and averages of income changes of varying certainty. The alternatives are examined in a following chapter.

Selecting an Information Approach for Project Implementation

The four processes a project might undertake, as discussed in the preceding pages, have overlapping information requirements. Table 1 on the following page presents these in summary form.

Alternatives testing requires, in a microcosm, all the elements of the determination of causality. Monitoring and ongoing evaluation, which are grouped together in large develop-

TABLE 1
 INFORMATION REQUIREMENTS FOR PROJECT IMPLEMENTATION

<u>Information Requirements</u>	<u>Alternatives Testing</u>	<u>Monitoring</u>	<u>Impact Assessment (Measuring Change)</u>	<u>Causality Determination (Diagnosing Change)</u>
Detailed knowledge of the environment (determination of critical environmental factors)	X			X
Observation and aggregation of input data and approach (treatment)	X	X		X
Observation of concrete outputs	X	X		X
Measurements of change in key success variables	X		X	X
Observation of behavior change (a subset of measurement)	X	X	X	X
Measurement of change in key success variables in control group	X			X

ment projects, have complementary information requirements and complementary collection possibilities from project staff working in the field. Before and after measurements at the household level lend themselves to household surveys, and detailed and convincing changes in farm production and income can be captured by a farm records system. All the systematic collection and analysis approaches can be designed to work on the basis of land utilization (area frame sampling) or on the basis of population.

There is always the possibility of mixing and matching different data collection and analysis techniques. After a discussion of sampling and of individual techniques of reconnaissance, farm records, statistical surveys and project information systems in Chapters Five and Six, Chapter Seven will return to the question of optimum combinations for the least-cost satisfaction of a project's information requirements.

EVALUATING POST PROJECT ACTIVITIES

The only purpose of entering a local environment after external funding has been exhausted and the technical advisors have been withdrawn is to gain an understanding of the full impact of the project in bringing benefits to the target population. This requires a measurement of change as well as a determination of the reasons for the change -- specifically, to what extent the intervention of development assistance was responsible for causing differences in target population benefits. If the project had a solid monitoring and evaluation system which recorded baseline information on critical variables, maintained clear records on the input of resources, and on timing and approach used, and obtained prior measures of change in the success indicators for the project, all that will be needed in the post-project phase is a re-measurement and re-attribution of the reasons for changes to the intervention of the project. Since few projects which were started five or ten years ago had such information systems, there are few post-project evaluations which are able to give convincing evidence of the magnitude of the self-sustaining impact of a particular kind of development assistance.

The concepts and information requirements in the post-project phase are the same as during ongoing implementation where the project is seeking measures of impact which can be directly correlated with the resources provided by the project.

APPENDIX B

ORGANIZING FOR INTEGRATED RURAL DEVELOPMENT

THE CASE OF KENYA

During the past several years the Government of Kenya has been engaged in a process of decentralizing developing planning and program implementation in order to further its stated development goal of integrated development of its rural areas. The concepts upon which decentralized planning developed in Kenya are familiar: because rural development must take place in numerous different environments, the process is one which requires a detailed knowledge of each diverse situation and of the potential of each area. Because of this diversity it is necessary to create, at the local level, structures capable of both identifying problems and needs and specifying processes for their solution. Equally as important, it was recognized that the demands of project integration at the local level were being hindered by the functional organization of the operating ministries. So long as local level officers of each of these ministries, e.g., health, agriculture, social services, were solely responsible to their superiors within their individual ministries, there would exist no bureaucratic self-interest to integrate development activities and such efforts would continue to be frustrated.

To address these problems the government initiated a district development program at the center of which was the recruitment and placement in each district of a District Development Officer (DDO). This officer, who was recruited by the Ministry

of Finance and Planning and seconded to the Office of the President, is to act in a planning and project coordinating role at the district level. At the same time, grants (District Development Funds) were made available from the national government to districts; these monies are to be under the control of District Development Committees (DDC's) for use in development activities identified and implemented at the district level. The DDC's, in turn, are comprised of district level officers of the operating ministries (as well as selected local leaders), and were conceived to be the primary district level planning and project coordinating body. The intent was that, through this structure consisting of DDO's, DDC's and district grants, more realistic development activities would be designed and at the same time the problems of coordinating integrated activities would be overcome.

To date this effort has shown some, but limited, success. Through the use of District Development Funds some district level activities have been initiated and, because these monies are controlled by the DDC's and not by a single line ministry, a degree of activity integration has resulted. These efforts, however, have been on a very small scale, both relative to total development activities being undertaken in rural Kenya and in the sense that the activities themselves are not ambitious, i.e., in no instance have District Development Funds been used to finance a large, integrated development program that would require a high level of coordination between line

ministries. Further, a degree of local level project coordination has been achieved to the extent that DDO's are effective "managers" -- to the extent that they have been able to work effectively with line ministry staff to encourage local level project coordination. As would be expected, however, since the DDO's have no control over line ministry project funds and because other district level staff are not responsible to them, efforts to integrate district programs have met with exceedingly little success.

While the Kenyan Government recognizes the basic problems it faces in implementing truly integrated programs -- problems to a substantial extent resulting from the structure through which they must be implemented -- its efforts to date have been inadequate to deal with them. Over the past several years donor assisted integrated programs have, in nearly every instance, faltered because of these difficulties -- from the IBRD Integrated Agricultural Development Program to the USAID Agricultural Sector Loans. Such programs will continue to face difficulties until the organizational structure through which they are carried out is restructured to reflect a basic goal of the programs -- rural development through effective project integration.

THE TANZANIAN EXPERIENCE

The experience to date in Tanzania in implementing integrated development activities holds significant lessons, i.e., the organizational forms which have been developed are unique in the African experience. In the late 1960's Tanzania embarked on its "villagization" efforts to bring rural residents together into clustered villages. The philosophy, encompassed largely in the concept of "ujamaa," was that through the process of clustering a higher level of social services could be provided to rural residents -- water, health care, education -- and at the same time production activities could be organized on a communal basis. While the process of "villagization" and "ujamaaization" has confronted a variety of problems and the thrust and focus of the process changed several times in an effort to deal with them, the issue of how to effectively organize government ministries to carry out integrated activities was met head on.

At independence the government organization structure paralleled that commonly found elsewhere in Africa -- the Office of the President was responsible to carry out administrative functions throughout the country, a Ministry of Planning existed which was to deal with overall development planning, and a variety of functionally organized operating ministries were charged with implementing projects related to their particular sectors.

With the process of villagization this structure was radically changed. The Office of the Prime Minister was created and given the responsibility for development planning and program implementation. While line ministries were retained and remained responsible to carry out a variety of functional programs, at every level throughout the structure the primary authority was vested in the officer representing the Prime Minister's Office, with line ministry staff responsible to him. At the regional level, for example, the Regional Development Director (the representative at that level of the Prime Minister's Office) is in charge of all regional development activity. Though regional line ministry staff receive support from their ministries at the national level, it is to the Regional Development Director that they are primarily responsible and who has substantial authority (in conjunction with the Party and through an elaborate government committee system) to decide types of programs which will be initiated and the form of their implementation. This basic structure is repeated at the district, with some modification at the ward and village levels.

In addition to and paralleling this governmental structure is the Party organization. Party officials -- represented by, among others, party secretaries and chairmen in the villages, secretaries in the wards, and Area Commissioners and Regional Commissioners at the district and regional levels, respectively -- have equal (and in some instances greater) authority in development related matters to their government counterparts.

Under this structure proposals for development activities are, ideally, initiated at the village level through village councils (comprised of elected village representatives who comprise, in turn, a number of village committees charged with promoting agriculture, education, health, etc.) and are taken from there through various planning and development committees at the ward, district, regional, and national levels for approval. In fact, to a large extent development activities are identified and planned at levels above the village, largely because village structures are at present too weak to effectively perform these functions.

While the performance of this structure in planning and implementing development activities has been mixed, it has succeeded in overcoming some of the problems frequently found elsewhere. Because authority for development planning and implementation is vested largely in one ministry (the Office of the Prime Minister), a considerably greater degree of project integration can be achieved than would otherwise be the case. The government has, in essence, moved from a functionally organized structure to one which accommodates program integration. The structure has allowed the formulation of a number of donor assisted integrated projects -- among them the recently designed USAID Village Development Project in Arusha Region -- which have not been burdened with problems of program integration; in each instance the programs have been able to rationally

define and fund complementary activities which cut across functional lines. This organizational structure can serve as a model for change elsewhere.

THE PHILIPPINES: THE CASE OF THE LIBMANAN/CABUSAD
INTEGRATED AREA DEVELOPMENT PROJECT

The design and selection of implementing organizations are proving to be significant factors affecting project performance in the Bicol area of the Philippines. Linkages between project organizations and external organizations and divisions influence the direction of "mutation." That is, once operations begin, a project becomes diverted away from its designer's intentions and toward the objectives held by significant actors in the project environment. Organization guides the rate and direction of the mutation and thus influences project impact. This influence occurs in straightforward ways and is neither esoteric nor unpredictable. We shall describe the organization of the Libmanan/Cabusad Integrated Area Development Project (L/CIADP) and note the mutation which is occurring.¹

Lead Line Agency

The organization of L/CIADP is typical of area development projects in the Bicol River Basin. A project management unit (PMU) is located within a "lead line agency" and personnel from other agencies are also detailed to the project to provide an integrated focus within the project boundary. The lead

¹ Our discussion is based on: George Honadle, "Project-Level Organizational Linkages and Integrated Area Development: The Case of Libmanan/Cabusad IADP, Institutional/Agricultural Activities," Draft (NAGA: USAID/BRBDP, May 1977). This paper was written as part of a continuing DAI involvement in project implementation in the Philippines.

line agency in this case is the National Irrigation Administration (NIA) and the other organizations providing personnel are: The Bureau of Plant Industries (BPI), Department of Agrarian Reform (DAR), Bureau of Agricultural Extension (BAE), and Department of Local Government and Community Development (DLGCO).

The PMU is charged with two primary responsibilities: to build an irrigation system for rice production and to develop local institutions to manage the infrastructure. NIA was chosen as the lead line agency due to the emphasis on irrigation. Personnel detailed from the other agencies were added to provide the institutional focus and thus create an integrated approach. AID funding is almost entirely for infrastructure, whereas institutional development activities are supported by GOP funds.

Two memoranda of agreement were signed in early 1976 by the cooperating GOP agencies. The provisions included in the agreements involved the use of NIA funds to train and support non-NIA personnel and NIA evaluation of those technicians detailed from other agencies. Two assistant project managers were to head the irrigation and institutional divisions of the project. The institutional division was organized into four geographic areas, each with an area supervisor from a different cooperating agency and an area team with personnel detailed from a mix of agencies. The purpose of the memorandum

and organization was to assist the integration of project activities.

Additional organizational linkages involve project-related committees composed of local department heads, local leaders and the project manager. The Bicol River Basin Development Program Office also acts as an evaluator for the entire constellation of projects in the River Basin.

In summary, numerous mechanisms for coordination have been created or used, an infrastructure-oriented organization was given the lead role in implementation, and AID funds were provided for infrastructure while the critical institutional development function was left to an organization with other interests.

Mutation

For a design to be implemented as intended, organizational behavior must be reliable. That is, incentives for people to act as intended must be stronger than pressures which support other behavior patterns. Otherwise, project activities may not lead toward project objectives.

Organizational behavior within L/CIADP did not reflect the organization design. Rather, it mutated to conform to existing organizational dynamics. The area teams did not operate as integrated units but as hollow shells. Actual reporting

and activities followed an agency-specific pattern and institutional output reflected agency priorities rather than project priorities. This occurred for two reasons: first, the memoranda of agreement were reinterpreted by lower level agency personnel in such a way that they did not totally lose their subordinates to the project; second, NIA did not provide incentives for their own personnel to support an integrated approach -- instead, NIA efforts down played institutional development and protected an infrastructure bias.

The ascendance of functional agency priorities over integrated project priorities occurred in numerous ways. They include the following:

- A budget cut within NIA chopped funds away from institutional development;
- A central office within NIA restricted project autonomy (the office handles 16 special projects and L/CIADP has the lowest funding level);
- An attempt was made to legitimately use project training funds to help subsidize a NIA training facility;
- Personnel records remained with the functional agencies instead of the project;
- Only one assistant project manager was appointed and the role of the institutional component was downgraded; and
- Limited detail to the project of functional agency personnel kept them under the control of their agency supervisors and reinforced agency priorities in the area.

Thus, actual behavior protected the organizational domain of line agencies at the expense of an integrated approach to building farmer-level institutions in the Libmanan/Cabusad project area.

Lessons

Projects tend to assume the "personality" characteristics of their host organizations. An infrastructure-oriented agency, such as NIA, could not be expected to seriously focus on the integration of institutional and infrastructure development.

Since AID funding supported the NIA bias, there was no incentive for integration -- in fact, the other agencies were even expected to contribute personnel without their organizations being rewarded for the contribution. Thus incentives to integrate cannot be assumed. Rather, they should be built in through the distribution of AID funds.

Implications

The location, procedures, and organization of country missions should facilitate linkages which allow accurate assessments of local organizational dynamics and predictions of the effect of alternative project organizations on mutation. Agency structure and policy, therefore, should support and reward mission activity which establishes and reinforces such locally-appropriate linkages.

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