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AGRICULTURAL POLICY ANALYSIS PROJECT, PHASE II

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USAID EFFORTS TO PROMOTE AGRICULTURAL POLICY REFORM AND INSTITUTIONAL DEVELOPMENT IN DEVELOPING COUNTRIES: LESSONS FOR DESIGN AND IMPLEMENTATION

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1.0 INTRODUCTION[1]

During the past decade, the U.S. Agency for International Development (AID) has been heavily involved in the promotion of agricultural policy reform and institutional development in agriculture-related institutions. AID assistance for agricultural policy and planning since 1980 totals approximately $1.9 billion world-wide, divided between approximately seventy-one projects and programs. Fifty percent of this assistance took the form of program aid (i.e., non-project aid), while 50 percent was the more traditional form of project aid. Asia and the Near East missions spent 66 percent of these funds in relatively few larger programs, while Africa accounted for about a quarter (26 percent) and Latin America and the Caribbean only programmed 8 percent of those funds.

In general, these projects and programs have aimed to bring about a wide range of reforms to promote efficiency in agricultural resource allocation and reduction of government spending. Common reforms include: subsidy reduction on agricultural inputs and outputs, trade liberalization, and privatization of agricultural marketing activities. In addition, many projects attempt to enhance host agencies' capacity to perform policy analysis and to stimulate demand for policy analysis among decisionmakers. Often, these initiatives complement structural adjustment agreements between host countries and the World Bank.

This article summarizes a long-term effort by AID's Agricultural Policy Analysis Project (APAP) to assess critically AID's activities in the areas of agricultural policy reform and institutional development. Specifically, this study seeks to identify project and program characteristics which are associated with either the success or failure of these various initiatives. Towards that end, the study employs a two-pronged approach. The

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[1] This article draws from a recent Abt Associates Inc. study, "Synthesis of Agricultural Policy Activities," John Tilney, et. al., Agricultural Policy Analysis Project, Phase II, USAID/Bureau of Science and Technology, March 1991.

Towards that end, the study employs a two-pronged approach. The first method is a qualitative assessment of a set of case study activities. This assessment considers success along two dimensions: achievement of policy reform, and development of institutional capability to perform policy analysis and to implement and monitor reforms. The second approach is a quantitative analysis of the association between project characteristics and effectiveness. In both instances, the types of characteristics examined include: project environment (e.g., conduciveness to project objectives), the quality of project management, budget and length of the initiative, degree of political or economic crisis in host country, and type of initiative (e.g., project or program).

The APAP II study finds that project environment is the critical variable in determining which approach is most appropriate. In particular, policy reform programs are highly unlikely to succeed in environments lacking in well-trained host agency staff, strong support from influential policymakers, an internal demand for policy analysis, and a solid record of A.I.D. support in the country.

While various components of the environment are critical in determining the likelihood of successful policy reform, project management is the critical variable in determining the likelihood of successful institutional development. In addition to the chief of party's performance of his or her responsibilities, the critical components of project management include: clear definition of the COP's responsibilities, close collaboration between the COP and senior officials in the host agency, and the ability of the entire technical assistance team to work productively with host agency counterparts.

These findings suggest that A.I.D. can increase the likelihood of success in policy reform and institutional development initiatives if the design process is sensitive to particular aspects of the host country environment. Certain situations may require a greater emphasis on institutional

development as a prerequisite for sustainable policy reform. In such cases, a project approach may be more appropriate than a program approach.

The APAP study attempts to fill an important gap in the voluminous literature on agricultural policy reform. Much of the literature seeks to diagnose the reasons for the widespread disappointment with the economic and agricultural performance of developing countries during the 1970s. Much of this literature draws attention to the negative role of host country policies themselves, particularly in Africa, where economic performance was weakest. The World Bank's 1981 study, Accelerated Development in Sub-Saharan Africa: An Agenda for Action (a.k.a., the "Berg Report") is the best known and most influential of these analyses.

These diagnoses contributed to a profound reorientation in the approach to agricultural development taken by AID and other donors. The typical approach taken in the 1970s was to concentrate on the development of host agency capacity in such areas as statistical analysis, project evaluation, and policy design. The diagnosis that host country policies which directly and indirectly taxed agriculture played a large role in retarding agricultural development in many countries contributed to a different donor approach to agricultural assistance in the 1980s. The new emphasis was on policy reform, market liberalization, and privatization. In contrast to the more traditional form of project assistance, many of the 1980s efforts took the form of programs in which AID and other donors would provide direct cash transfers in exchange for direct policy reform.

The existing literature deals extensively with the diagnosis of the problem, as well as with the success or failure of various donors' efforts to promote policy reform. For example, the World Bank, through its Managing Agricultural Development in Africa research project, has produced an excellent collection of studies of various donors' experiences. Yet, to date there has been little effort systematically to identify and

to analyze the specific features of the design and implementation of these initiatives as they relate to success or failure. The APAP study is a preliminary step in that direction. By examining in depth AID's experience in the 1980s with policy reform and institutional development activities, this study seeks to develop guidelines for the identification and design of future initiatives of that sort, and sets out an approach to a more vigorous meta-evaluation of projects than is typically done.

2.0 CASE STUDIES: OBJECTIVES AND IMPACTS

This section briefly describes the universe of AID agricultural policy and planning activities and the sample that we have drawn from that universe for more detailed analysis. That discussion is followed by an overview of the impacts of these activities and several hypotheses which we propose as means of explaining the successes and failure encountered in our sample.

2.1 Universe and Sample of AID Initiatives

In the 1970s AID typically addressed the objective of agriculture sector planning by means of projects designed to enhance the institutional capacity of host agencies to collect and to analyze agricultural statistics and to undertake sector analyses. Accordingly, training of host country nationals, both overseas and in-country by teams of expatriate advisors, was the centerpiece of project design.

In the mid-1980s, AID moved increasingly towards a more pragmatic approach (e.g., non-project assistance"), which sought to motivate direct policy reforms. Where the earlier projects concentrated on training and micro-planning activities, the programs concentrated more on sector-wide policy change, In place of project-style inputs, the programs typically provided direct cash transfers to recipient governments in return for the adoption of specific policy reforms.

As noted above, the universe of post-1980 AID agricultural policy initiatives contains approximately 71 projects and programs. In budgetary terms, this represents about $1.6 billion, split roughly 60/40 between programs and projects, respectively.

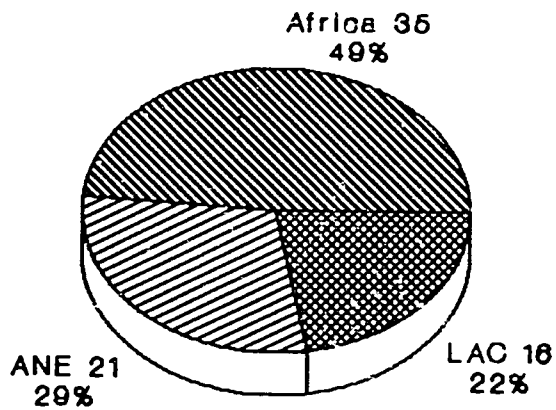
Exhibit 2.1 reflects the regional distribution of these combined initiatives, by number of projects and by funding. Forty-eight percent of these activities have been in Africa, though these activities received only 31 percent of total funding. Asia and the Near East hosted 29 percent of these initiatives, accounting for 60 percent of total spending; the remaining 23 percent of agricultural policy projects and programs were in Latin America and the Caribbean, accounting for 9 percent of total AID spending on these activities.

From this universe, we have selected nineteen projects and programs for more in-depth analysis. Selection of these initiatives was non-random, based largely on the availability of adequate documentation, as well as a desire for regional diversity. The documentation consisted primarily of comprehensive mid-term and/or final evaluations, along with various design documents, and where possible, discussions with AID staff involved in the activities.

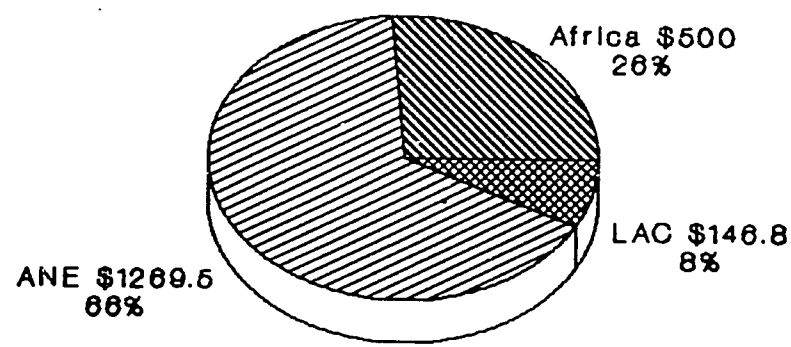
Exhibit 2.2 lists the sample activities and their basic characteristics. As the exhibit indicates, there are three purely analytical capacity and institution-building projects and three direct policy reform projects in the sample. The other thirteen cases are a combination of both capacity building and direct policy reform projects. Funding level varies from $1.2 million for the Agricultural Sector Analysis Project in the Dominican Republic, to $187 million for the PL-480 Title III Program in Bangladesh. Appendix A summarizes the background, inputs and expected outcomes for each of the sample projects and programs.

Figure 2.1
Total Project & Program Funding

Number of Projects & Programs



Funding



Funding in $ millions

EXHIBIT 2.2
Basic Characteristics of the Sample Projects and Programs

	Actual Budget ($ mill)	Project Length (yrs)	Project Type	Funding Source
AFRICA				
1 Economic and Financial Policy Analysis Project -- Gambia	$2.9	6	3	PA
2 African Economic Policy Reform Program -- Guinea	$10.0	3	1	NPA
3 Structural Adjustment Program -- Kenya	$117.0	3	3	NPA
4 Cereals Marketing Restructuring Program -- Mali	$9.0	5	1	NPA
5 Agricultural Sector Developent Grant -- Niger	$40.0	5	3	NPA
6 Cereal Export Liberalization Program -- Togo	$7.9	3	3	NPA
7 Agricultural Planning and Statistics -- Sudan	$14.5	10	3	PA
8 Agricultural Training, Planning, & Institutional Development Project -- Zambia	$9.5	5	3	PA
9 Agricultural Policy and Planning -- Zaire	$10.0	10	3	PA
ASIA & NEAR EAST				
10 Planning, Econ., and Statistics for Ag. -- Morocco	$12.5	10	2	PA
11 PL-480 Title III Program -- Bangladesh	$187.0	4	1	NPA
12 Agricultural Development Systems and Data Collection and Analysis -- Egypt	$17.6	9	2	PA
13 Agricultural Planning Project -- Indonesia	$12.9	5	2	PA
14 Agricultural and Rural Sector Support -- Indonesia	$66.0	3	3	NPA
15 Food Security Management -- Pakistan	$35.0	5	2	PA
16 Natl. Ag., Food, & Nutrition Strategy -- Sri Lanka	$0.5	3	3	NPA
LATIN AMERICA & CARIBBEAN				
17 Agricultural Sector Reorientation Project -- Ecuador	$8.5	5	2	PA
18 Agricultural Policy Analysis -- Dominican Republic	$1.2	3	2	PA
19 Agricultural Planning & Institutional Devt. -- Peru	$24.0	6	3	PA

NOTES:

Project Type -- 1 = Policy Reform Project/Program
2 = Institution Building Project/Program
3 = Combined Policy Reform/Institutional Devt. Project/Program

Funding Source -- PA = Project Assistance
NPA = Non-Project Assistance

2.2 Impacts of the Case Study Projects

The types of impacts described in this chapter fall among two groups: 1) policy impacts, and 2) institutional impacts. Policy impacts refer to the activities' direct impacts in reforming host country policies. In this context, the term "impact" refers to the occurrence and depth of policy reform, as distinct from the economic effects of those reforms. Institutional impacts describe the projects' effectiveness in: 1) enhancing the analytical capacity of the host agency, and 2) increasing local decisionmakers' understanding of the role of policy analysis, their demand for such analysis, and their support for the reform process. Exhibit 2.3 summarizes the level of impacts of the sample projects on policies and institutions.

The most successful projects among the case studies in terms of policy reform were The Gambia EFPA and the Bangladesh pl-480 Title III programs. Although quite different from one another in design and emphasis, both programs resulted in a high level of policy reform.

Reforms in The Gambia were primarily macroeconomic. The EFPA project was part of a broader host government strategy of economic reform. Progress was particularly impressive in reforming the foreign exchange regime. A critical element in the success of this activity was the support of an influential official in the host institution, who believed in the program and worked closely with the expatriate team to promote the reform process.

Reforms under the Bangladesh PL-480 Title III program were more microeconomic in orientation, and concentrated in the agriculture sector. The primary targets of reform were the system of food rations through the Public Food Distribution System, and the BDG's policies regarding the stabilization of producer and consumer prices. Significant progress in this

Exhibit 2.3

Policy Reform and Institutional Development Impacts of Sample Projects and Programs

Project:	Policy Reform success	Inst Developmt success
Indonesia Ag Planning	low	low
Mali Cereals Mktg	high	low
Pakistan FSM	high	high
Togo CELT	low	low
Ecuador Ag Sect Refm	low	low
Gambia EFPA	high	high
Kenya SAP	low	low
Bangladesh Title III	high	low
Niger ASDG	high	low
Sudan Ag Planning	low	low
Zambia ZATPID	low	high
Guinea AEPRP	high	low
Egypt DCA & ADS	low	high
D R Ag Sect Anal	low	low
Sri Lanka NAFNS	high	high
Peru Ag Plan/Inst Dvt	low	high
Zaire APP	low	low
Morocco Ag Pln & Stat	low	high

direction was made on both accounts. This was the third such program implemented by AID in Bangladesh, resulting in a situation of continuous support for the BDG and consistent collaboration with AID in implementing the programs.

The Niger Agricultural Sector Development Grant was also fairly successful in attaining its intended policy reforms. The GON made significant progress in implementing a range of cereals market reforms, including the establishment of a tended and bid system for public grain purchases, and the privatization of certain public sector grain marketing operations. Yet, progress in some other areas, such as agricultural export policy reform was mixed.

At the other end of the spectrum, the Ecuador Agricultural Sector Reorientation Project yielded little, if any, policy impacts. The lack of policy reform in Ecuador was related to the concurrent lack of institutional impacts (i.e., there was no internal demand for policy analysis). The result was the creation of an ineffective policy analysis unit that a project evaluation predicted would be unsustainable when U.S. assistance was terminated. Expatriate consultants undertook policy studies the existence of which were virtual secrets within the Ministry of Agriculture.

The institution-building impacts of our case studies were assessed in terms of their effects on decisionmakers and host agency analytical capacity. With regard to decisionmaker impacts (e.g., increasing decisionmakers' demand for policy analysis), most of the case study projects produced mixed results. The only case that resulted in a high degree of decisionmaker impacts was The Gambia EFPA project. Gambian policymakers were highly receptive to the notion of policy reform, and collaborated closely with expatriate technical assistants in implementing a general economic reform program.

In contrast, Togo showed little gain by decisionmakers in appreciating the need for policy reform as a result of the Cereals Export Liberalization Program. In that case, the problem

lay, in part, in the opposition of senior policymakers to the direction of reform. The reforms in this instance seemed to be imposed on the GOT by donor agencies.

The Ecuador ASRP provides the least degree of decisionmaker impact. That project adopted a "demonstration" strategy in which a series of sophisticated studies performed in a relatively short period of time, exclusively by expatriate technical assistants, was supposed to stimulate local demand for policy analysis. However, an initial lack of interest, lack of trained personnel, and poor communication within the Ministry of Agriculture combined to undermine that objective.

The results were also mixed with regard to the projects' impacts on host agency analytical capacity. In Kenya, for example, a review of the Structural Adjustment Program found that the program could actually have contributed to a decline in host agency analytical capacity. The dynamics in that case were that the program had helped to finance the infusion of a large number of highly qualified technical advisors. Kenyan decisionmakers became heavily dependent upon these expatriates, who tended not to work closely with Kenyan counterparts. The result was increased alienation of Kenyan staff, whose skills possibly dulled from lack of use. This experience suggests the possibility of a perverse outcome when decisionmakers' demand for analysis far outpaces improvements in host agencies' own capacity.

Analytical capacity in Bangladesh was already high by the time of the third PL-480 Title III Agreement. Consequently, improvements in analytical capacity were not a priority in the program. Unlike the other case study projects and programs, there was no expatriate team associated with the program. Indeed, given the already high level of technical sophistication, any marginal changes would likely have been relatively small.

This overview of our qualitative assessment of project and program impacts, as well as a review of the relevant literature, leads to several hypotheses regarding the factors

which contribute to effectiveness in attaining policy reform and institutional development. The factors that seem most closely associated with success include:

- previous investments in human capital,
- internal demand for policy reform,
- host government, AID, and other donor commitment to policy reform,
- continuity of AID programs,
- the degree of political or economic crisis in the host country.

The operative hypothesis regarding previous investments in human capital is that donor-sup[ported policy reform programs are more likely to succeed in countries in which previous investments in human capital have created adequate administrative and analytical reform programs. A finding that previous investments in human capital are a prerequisite for successful policy reform would have important implications for the selection and design of policy reform programs.

A second hypothesis is that policy reforms are more likely to succeed when they come in response to demand for reform from within the host government.Conversely stated, we hypothesize that policy reforms imposed from the outside are less likely to succeed. A related hypothesis is that successful policy reform requires the joint commitment of the host government, AID, and other donors. That is, if donors work at cross purposes with one another regarding reform, then their individual programs are less likely to succeed.

A further hypothesis is that the continuity of AID programming in a given country is positively related to the likelihood of success. This continuity would contribute to both the ability and the willingness of host governments to undertake reforms. A final hypothesis is that policy reform programs are more likely to succeed in the context of economic crises. host country governments may be more willing to undertake reforms when

their need for outside resources is greatest. Indeed, the occurrence of a crisis may underscore the need for reform in the eyes of the host government.

These themes are thread loosely through the preceding discussion of project impacts. The following section formalizes that analysis with a statistical approach.

3.0 STATISTICAL ANALYSIS OF AGRICULTURAL POLICY REFORM AND INSTITUTIONAL DEVELOPMENT INITIATIVES

The previous sections have described the goals and impacts of the projects and programs in our sample. This section presents the results of our statistical analysis of the case study projects. The analysis revolves around two models of project effectiveness, distinguished by two separate "dependent" variables: 1) successful policy reform, and 2) successful institutional development. In both models, we examine these outcomes as functions of a set of "explanatory" variables, that includes: 1) project environment, 2) project management, 3) project size, 4) economic crisis in the host country, and 5) project type.

Among the eighteen observations (projects and programs) in our data set, just under 40 percent of the initiatives succeeded in producing policy reform, and the same percentage succeeded in promoting institutional development. Just over 40 percent of the activities had been implemented in "good" environments, while nearly 65 percent were well managed. The average budget was $29.3 million, and the average duration of the initiatives was 5.6 years. Two-thirds of the sample activities were programs, and the average country was experiencing a moderate degree of political or economic crisis at the time of the initiative. Appendix B provides a detailed definition of these variables, as well as a description of the data and an explanation of the statistical methodology.

3.1 Results of the Statistical Analysis: Policy Reform Models

This section describes the results from a logit analysis of the factors contributing to successful policy reform. Logit analysis yields results which describe the contributions of given explanatory variables to the probability of a successful outcome. As might be expected from any type of regression with a small sample size (n=17), most of these variables yielded highly uncertain estimates. The consequence of this is that for most variables, we cannot claim to have identified a significant effect with a reasonable degree of confidence.

Our analysis suggests that the only variables which significantly influence the probability of successful policy reform are project environment and field performance of project management.[2] While the logit coefficients are not directly readable as probabilities, they lend themselves easily to simulations of various scenarios. Table 3.1 presents the probability of successful policy reform projects under four different combinations of project environment and field management performance.

Table 3.1 Logit Simulations of Policy Reform Success

Scenario:	Probability of Success	Confidence Interval
Good Management & Good Environment	.82	(.64,1.0)
Poor Management & Good Environment	.44	(.21,.68)
Good Management & Poor Environment	.15	(0,.32)
Poor Management & Poor Environment	.03	(0,.11)

[2] The estimated coefficients from the logit model of policy reform are: logit(Prob(policy reform success)) = -3.492 + 1.7535*(Project Management) + 3.2593*(Project Environment), n=17

The simulations in Table 3.1 are calculated from the logit estimates under alternative assumptions regarding the values of the dummy variables for management and environment. The results clearly convey the primacy of a conducive project environment in determining the likelihood of successful policy reform. A policy reform initiative in a good environment, even with no other positive factors, has a 44 percent chance of success. In contrast, a well managed project in a poor environment has only a 15 percent likelihood of succeeding. Absent both of these factors and the chances fall to only 3 percent. Yet, these simulations suggests that there is a synergistic effect resulting from the combination of good management and good environment, under which circumstances we predict a 82 percent success rate for policy reform initiatives.

The principal problem raised by the small sample size is the inability to make precise estimates (e.g., the estimates are inefficient due to large standard errors). This suggests that the confidence intervals around the estimates may be quite large.

Table 3.1 shows that, although the predicted likelihood for project success given good management and environment is 64 percent, we can only be 95 percent certain that the true probability lies between 54 and 100 percent. (The confidence intervals for the zero estimates were insignificantly different from zero.) Similarly, initiatives which suffer from both poor management and a poor environment have an expected success rate of 3 percent; yet, the 95 percent confidence interval around this estimate suggests that the rate could be as high as 11 percent.

In alternative specifications of this model, none of the other explanatory variables appeared to have significant effects. In some cases, this finding is in apparent contradiction to the results of our earlier qualitative analysis. For instance, our previous work suggested that the likelihood of policy reform is positively related to the degree of crisis in the host country. In contrast, our qualitative analysis found that project size (length and budget) was not closely related to the likelihood of

successful policy reform. The logit model presented here could be thought to contradict the finding regarding crisis and confirm the lack of effect of project size. Yet, in both cases, the lack of significant effect may well be an artifact of the small sample size.

3.2 Institutional Development Models

The problem of our small sample size also had severe consequences for the ability of a logit model to discern significant effects from most of the explanatory variables in the institutional development model. Indeed, the field performance of project management was the only variable which contributed significantly to the likelihood of successful institutional development.[3] Table 3.2 shows the simulation of these results under the assumption of both poor and good project management.

Table 3.2 Simulation of Institutional Development Success

Scenario:	Probability of Success	Confidence Interval
Good Management	.64	(.41,.86)
Poor Management	0.00	---

These simulations suggest that with good project management, an institutional development project has a 64 percent chance of success. In the absence of good project management, successful institutional development is extremely unlikely.

The effect of the small sample size in this model is not only that no other explanatory variables are significant, but also that we can only be 95 percent certain that the true likelihood is between 41 and 86 percent chance of success. The combination of these problems suggests that this model has little practical value, beyond the conclusion that project management is

[3] The logit estimate in this case was logit(Prob(Institutional Development Success)) = -10.5047 + 11.059*(Project Management)' n=17

the primary factor determining the likelihood of successful institutional development.

As in the case of the policy reform model, the lack of significant effects for budget, crisis, type of project, etc., may only reflect the fact that the sample size was too small to detect effects with a reasonable degree of certainty. As the following section indicates, however, we accept the lack of effect for project size, yet maintain that degree of crisis and type of project do significantly effect the likelihood of successful institutional development.

4.0 FINDINGS AND RECOMMENDATIONS

Among the sample of projects and programs which we examined, a number have had striking success in changing host country policies and improving the capacity of local government. Nearly 40 percent of our sample activities were successful in achieving either policy reform or institutional development. Yet, despite these considerable successes in the area of policy reform, it is likely that AID, the World Bank, and other organizations will need to continue their efforts to promote agricultural policy reform. This study's principal findings combine the results of the qualitative and quantitative analyses.

4.1 Policy Reform Findings

The conduciveness of the project environment is clearly the most important factor conditioning the likelihood of project success in promoting policy reform. "Project environment" refers to a broad range of factors which determine the conduciveness of a given country setting to donor-funded agricultural policy reform or institutional development activities. An ideal project environment would be one in which influential policymakers supported the project's goals, and in which host agency staff was technically well-trained. Other positive features would include a consistent program of long-term U.S. aid to the country, and concerted donor action in the country.

"Project management" is also a composite of several more specific considerations. Important questions in this regard include various aspects of the chief of party's performance, the definition of his or her role, relationship with host agency officials, administrative support, and the ability of the entire technical assistance team to work productively with host agency counterparts. A combined evaluation of these considerations forms the single explanatory variable in our model describing project management.

Our analysis suggests that, even with good project management, policy reform projects in poor environments are highly unlikely to succeed.

Indeed, our analysis further suggests that various aspects of the host country environment create conditions in which a project approach is more likely to succeed than a program approach. In particular, policy reform programs are highly unlikely to succeed in environments lacking in well-trained host agency staff, strong support from influential policymakers, an internal demand for policy analysis, and a solid record of A.I.D. support. These factors are less critical (though they remain important) in determining the likelihood of success of projects, which tend to concentrate more on institutional development.

Our findings also suggest that there may be a trade-off between sustainable policy reform and institutional development. Programs (e.g., sector grants) are more likely than projects to produce policy reforms <u>in the short run</u>. Yet, there is a serious, and as yet unanswered question, as to whether policy reforms bought through program aid are sustainable. The reason for this concern lies in the fact that programs, which essentially trade cash for policy reform, have tended to under-emphasize institutional development. At the same time, projects have proven more likely to enhance institutional capacity.

These findings suggest that A.I.D. can increase the likelihood of success in policy reform and institutional development initiatives if the design process is sensitive to

particular aspects of the host country environment. Certain situations may require a greater emphasis on institutional development as a prerequisite for sustainable policy reform. In such cases, a project approach may be more appropriate than a program approach.

Another finding pertains to effect of size on the likelihood of successful policy reform. By their nature, policy reform programs are long and expensive. Yet, given the recognition that initiatives must be of a certain size to promote sector-wide change, we find no strict relationship between project length and effectiveness. The effects of program environment and management seem to swamp whatever impact length may have on effectiveness.

4.2 Institutional Development Findings

The quality of project management is by far the most important variable in explaining successful institutional development efforts. Good project management requires a combination of features that extend beyond the obvious necessity for highly qualified and experienced advisors. Good management also requires the creative use of project resources to maximize the involvement of host agency staff in activities at all levels. The COP must establish and maintain close ties with influential host country officials. Yet, it is equally important that all members of an expatriate technical assistance team maintain strong counterpart relationships.

Our qualitative analysis also suggests that project environment affects the likelihood of successful institutional development. In this context, "project environment" takes a slightly different meaning than in the policy reform setting. A conducive environment for institutional development initiatives is one in which the host agency makes it a priority to supply qualified counterparts for expatriate advisors on a consistent basis. It is also necessary that host agency officials work

closely with the COP, and meet their commitments with regard to logistical support and counterpart funding.

We have also found that the effectiveness of institutional development projects is enhanced by drawing both policymakers and technical staff into the process. Too often, AID has concentrated exclusively on host agency technical staff in its institutional development activities. Yet, technical staff are rarely empowered to make policies. Thus, it is useful to design these interventions in such a way as to involve both type of host agency staff. Indeed, improvements in communication between analysts and decisionmakers can be a critical element of institutional development. Moreover, it is essential that host agency technical staff participate fully in project-sponsored technical studies, and that the host agency staff be able to claim authorship of such studies to the greatest extent possible.

4.3 Recommendations for the Design of Future Policy Reform and Institutional Development Activities

Our analyses and findings lead us to a number of recommendations regarding the design of future agricultural policy reform and institutional development initiatives, which are summarized below:

- <u>AID should not proceed with policy reform activities in environments which are not conducive to reform</u>. A "good" environment for policy reform has several defining characteristics, including: decisionmaker interest in policy analysis, a previous history of reform, an influential host government official willing to take the lead in promoting continued reform, and a host agency staff with the analytical sophistication necessary to fuel the reform process. In the absence of these characteristics, our analysis has shown that policy reform projects are highly unlikely to succeed. This suggests that AID should be extremely cautious before proceeding with a large-scale quick-disbursing grant program in an environment lacking in some or most of these characteristics.

- In unfavorable program environments, AID might provide training and institutional support in the hope of improving the climate for reform. To some extent, a country's "readiness" to undertake reforms is a function of the level of previous investments in human capital, as well as of the continuity of AID activity in that country. In those countries where the environment is not conducive to immediate and sustainable policy reform, AID should assess the environment to identify the specific characteristics that are lacking, and concentrate on initiatives designed to foster an environment more hospitable to future policy reform activities.

- AID should place greater emphasis on institutional development within its policy reform programs. Our findings suggest that policy reform programs are more effective than institutional development projects in promoting immediate policy reform. Yet, the programs have not been effective in promoting the institutional development that may well prove essential to the sustainability of the reform process. Thus, AID should incorporate a significant emphasis on institutional development within its policy reform programs. The sustainability of a policy reform program depends critically on the ability of the host agency staff to undertake policy analysis. Continuing analysis is necessary to continue and to maintain the policy reform process after the program itself has expired. Moreover, competent host agency staff are needed to implement reforms, as well as to design them.

- Institutional reorganization and re-staffing may be important aspects of institutional development. In some cases, an over-bureaucratized host agency institutional environment may itself be an impediment to policy reform. In those cases, institutional development may take the form of streamlining the institutions involved. It may also be the case that existing host agency staff may be well-grounded in a microeconomic or project-oriented perspective that is less appropriate for sector-wide and macroeconomic reform programs. In those cases, AID should specifically assist host agency in reorienting their analytical perspective and in re-staffing as necessary.

- <u>AID should give special emphasis to promoting good project management</u>. Management performance is by far the most important characteristic in determining the likelihood of successful institutional development, and is the second most important variable in the case of policy reform success. Steps that AID can build into the design process to promote "good" project management include: emphasizing the management rather than the technical experience of the Chief of Party position, clearly defining the COP's responsibilities and authority, ensuring that the position includes sufficient authority to make and to implement important decisions in the field (without relying on a U.S.-based authorization process), drawing the host agency officials into the design process, and specifying a high degree of interaction between the COP and host agency officials as a central feature of the project design.

- <u>In both policy reform and institutional development initiatives, AID should give high priority to identifying and promoting strong local managers and counterparts to take over the process at the end of AID's direct involvement</u>. Sustainability is the ultimate indicator of the success of policy reform. Experience to date shows that in the absence of solid host government support for the process, reforms are unlikely to succeed and less likely to be sustained. An important aspect of the management of policy reform activities is thus to plan for the future by identifying and nurturing influential host agency officials who support the reform process, to maximize their involvement in the program, and to provide them access to technical assistance after the initial grant program has expired. The more involved are such officials throughout the program, the more likely they will be to continue reform into the future. This approach also heightens the sense of host agency "ownership" of the reform program. Cases in which the reform process is perceived as being imposed from outside have been less successful than those in which influential host agency officials are drawn in as leaders of the process.

- <u>Policy studies and short-term technical assistance should be performed in response to needs perceived by local policymakers</u>. Experience with the management of technical

assistance has shown that policy studies that are not overly technical and that respond to the perceived needs of policymakers are much more likely to affect policy formation.

Over the past decade, a broad consensus has formed that agricultural policy reform must play a central role in promoting agricultural development, and that the donor community must take the lead in building the policy analysis capacity necessary to support policy reform. The present report summarizes the findings of APAP II's detailed analysis of AID's contributions to these efforts.

By examining AID's experience in the 1980s with policy reform and institution-building activities, this study seeks to accomplish several goals. One goal is to develop guidelines for the identification and design of future initiatives of that sort. By carefully examining the factors associated with the success and failure of a diverse set of policy reform and institutional development initiatives, we hope to have provided insights that will heighten the sensitivity of the designers of future policy reform and institutional development initiatives to both pitfalls and opportunities for success.

In addition, we hope that this study can provide a model for future project and program evaluations in its identification and analysis of the characteristics associated with the success and failure of these initiatives. Part of the difficulty in undertaking this study was the fact that previous program and project evaluations tended to be somewhat ad hoc and idiosyncratic. This meant that there was often no consistent set of generalizable criteria by which similar initiatives were evaluated. This study has attempted to specify a set of salient criteria by which to evaluate agricultural policy reform and institutional development initiatives, and to provide a methodological model for undertaking such evaluations in the future.

AID has accomplished a great deal in its efforts to promote agricultural policy reform and institutional development, and in many countries the results are readily apparent. Yet, it is clear that much remains to be done, and that the donor community will continue to be deeply involved in this process. AID now has a wealth of experience that it can bring to bear in shaping and improving its contributions to the central task of reforming agricultural policies and enhancing institutions in developing countries. These efforts will be critical to economic growth in many countries around the world.

APPENDIX A

Characteristics of Case Study Projects and Programs

PROJECT BACKGROUND AND DESIGN CHARACTERISTICS OF SELECTED CASES
(AFRICA REGION)

Background	Project Inputs	Expected Outcomes
mbia: Economic and Finance Policy Analysis Project • Ministry of Finance and Trade is the implementing agency. • Agriculture comprises 58% of GDP • Predominance of one crop--groundnuts comprising 30 to 40% of GDP and 90% of export earning. • Food deficit--70% of country's food requirement • Declining economy starting from late 1970s, and macroeconomic imbalance • The Government initiated a major Economic Recovery Program (ERP) in 1987.	• Technical Assistance • Training • Equipment	• Implementation of Economic Recovery Program • Statistics and special studies unit established. • Policy studies carried out and reviewed by decision makers and incorporated into national policy. • Staff trained and retained in Ministry of Finance and Trade.
iger: Agricultural Sector Development Grant • Ministry of Rural Development is the implementing agency. • Draught reduced agricultural production by 50%. • Large drop in revenue from country's main export--uranium. • Public debt service ratio risen to 33%. • Very large budget deficit. • Ninety percent of the country's employment comes from agriculture. • GNP showed negative growth of 2 percent (annually). • Some government policies led to market distortion and inefficient resource allocation.	• Cash Transfer • Budgetary Support • Technical Assistance • In-service Training	• Seminars and workshops. • Program evaluation and policy analysis. • Establishment of economic policy analysis unit. • Reduction in agricultural input subsidy. • Rationalization of cereal marketing and pricing. • Liberalized cross border trade. • Developed agricultural financing market.
ogo: Cereals Export Liberalization Program • Ministry of Rural Development is the implementing agency. • Unstable economy. • Precipitous fall in international price of phosphate, its main export. • Large public sector. • Very large budget deficit. • Cash flow problem for the government. • Increased taxation to sustain public sector. • Inefficient agricultural institution. • Highly unstable producer prices. • The government initiated two consecutive Structural Adjustment credit programs. • Bumper maize harvest immediately before AEPRP program.	• Technical Assistance • Training • Cash Transfer	• Improved data collection and analytical systems. • Export licensing system implemented. • An intermediate credit facility available to farmers and exporters. • Workshops and information dissemination process. • Rationalized operation of Togograin.

PROJECT BACKGROUND AND DESIGN CHARACTERISTICS OF SELECTED CASES (AFRICA REGION)

Background	Project Inputs	Expected Outcomes
Kenya: • Ministry of Finance and Planning is the implementing agency. • Distinct slowdown in growth in 1970s resulting primarily from external and domestic policy factors. • Agricultural production grew at a slower rate than population. • Overvalued exchange rate discouraged agricultural export. • Government control over price reduced production incentives. • Government intervention in marketing discouraged investment. • Overextended and inefficient public sector and inadequate decision making and management.	• Cash Transfer • Technical Assistance • Equipment	• Balance of payment reforms. • Financial market reforms. • Agricultural policy reforms. • Institutional reforms. • Special studies conducted.
Sudan: • Ministry of Agriculture and National Resources (MANR) • Declining agricultural production and productivity. • Poor and inappropriate economic policies emanating from weak agricultural policy structure and inadequate data base.	• Technical Assistance • Training • Equipment	• Well trained analysts capable of undertaking and managing project development and data collection. • A number of strategic planning and policy analysis studies conducted. • Agricultural data base prepared. • Statistics division strengthened. • A production and marketing unit established within MANR. • A cadre of well trained Zambian officials in appropriate positions. • Improved coordination between ministries dealing with agriculture.
Mali: Cereals Market Restructuring Program • Falling per capita income • Budget deficit amounting to 18% of GNP • Balance of payment problem. • Net overseas development assistance of 32% of GNP. • Government expenditure amounted to 66% of GNP. • Major economic reform initiated just prior to PRMC. • Inefficient state marketing agencies.	• Food Aid • Some technical assistance provided by donors other than USAID.	• Legalized private cereal trade. • Raised official floor prices of cereals. • Reduced scope and operation of state marketing agencies. • Improved efficiency and reduced subsidy to state marketing agencies.
Guinea: Agricultural and Economic Policy Reform Program • Ministry of Agriculture and Animal Resources (MARA) • Highly distorted and unproductive agricultural sector. • Government fixed input, producer and market prices of agricultural goods. • Government controlled procurement and distribution of agricultural commodities. • Overvalued exchange rate.	• Quick disbursing loans and grants.	• Deregulation of consumer and producer prices of agricultural commodities. • Satisfactory credit policy. • Revised investment and commercial codes. • Liquidation of four state enterprises for agricultural activities. • Eased balance of payment situation.

PROJECT BACKGROUND AND DESIGN CHARACTERISTICS OF SELECTED CASES (AFRICA REGION)

Background	Project Inputs	Expected Outcomes
Zambia: Agricultural Training, Planning and Institutional Development Project		
• Ministry of Agriculture and Water Development (MAWD) • Significant downturn in the economy • Large unemployment and underemployment. • Large government expenditure. • Low producer prices in agriculture. • Production shortfall caused by drought. • Lack of government investment and credit in the agricultural sector. • Inadequate staff to deal with economic issues. • Paucity of data on agricultural activities.	• Technical Assistance • Training	• Strengthened planning capacity of National Commission for Development Planning. • A cadre of well trained Zambian officials in appropriate positions. • A number of strategic planning and policy analysis studies conducted. • Improved coordination between ministries dealing with agriculture.
Zaire: Agricultural Policy and Planning Project		
• Office of Studies and Planning (SEP) in the Department of Agriculture is the implementing agency. • Uncertain external financial prospects. • Tight domestic financial prospects. • Weak institutional framework. • Lack adequately skilled human resources. • GDP growth of 1.3% between 1980 and 1985. • High inflation rate (+100%).	• Technical Assistance • Training • Equipment	• Increased analytical capabilities and skills within SEP. • A better understanding of the agricultural sector, its structural characteristics, behavior, performance and potential through special studies. • Improved and expanded data base available. • Areas of policy improvement identified and projects and program designed to implement such improvement. • Better linkages between various ministries and agencies dealing with agriculture and policy formulation established.

PROJECT BACKGROUND AND DESIGN CHARACTERISTICS OF SELECTED CASES (ASIA AND NEAR EAST REGION)

Background	Project Inputs	Expected Outcomes
Bangladesh: PL 480 Title III Program • Large rural population (83%), almost all of whom depend on agriculture for their livelihood. • Severe seasonal unemployment and extremely low standard of living for landless rural poor. • Sixty percent of the population is inadequately nourished. • Large number of marginal consumers imposes severe constraints on government to provide production incentives through increased output prices. • Heavy dependence on foreign food market due to large food deficit. • Partial price stabilization and food rationing system in place.	• Food assistance.	• Increased food consumption and nutrition. • Increased agricultural productivity. • Increased employment generation. • Improved food system management.
Indonesia: Agricultural Planning Project (APP) • Declining oil earning and increased unavailability of foreign exchange for food import. • Budgetary difficulty puts pressure on agricultural services and subsidies. • Declining returns for agricultural labor. • Centralized planning. • Massive increase in debt service obligation. • Balance of payment difficulties.	• Technical Assistance • Training • Equipment/commodity	• Improved capacity within MOA to conduct agricultural policy and planning analysis. • Integrate analysis with the formulation of agricultural policy, programs and projects.
Indonesia: Agricultural and Rural Sector Support Program (ARSSP) • GOI initiated structural adjustment program in 1983--devaluation, deregulation of key sectors of the economy, diversified exports were some policy reforms of SAP. • Government budgetary expenditure declined sharply, especially development budget.	• Dollar grants • Food Assistance	• Rationalized input and output prices of food and export crops to encourage efficiency and expanded production. • Expanded banking services at unsubsidized level, and pension and insurance funds mobilized for capital market. • Improved planning and implementation of agricultural diversification policies and program. • Improved management of policy changes related to domestic resource mobilization.
Pakistan: Food Security Management Project (FSM) • Rapidly growing population • Food security has been high priority policy objective for both USAID and GOP. • Over extended and inadequately staffed planning unit to provide data and analysis on agriculture. • More complex policy issues arising due to change of Pakistani agriculture from food self sufficiency to modest surplus.	• Technical Assistance • Training • Equipment/Commodity	• Improved analytical and policy formulation framework of GOP. • The national food security system is efficiently and effectively managed. • Policy studies undertaken that would influence policy reform in the direction of deregulation and liberalization in the food sub-sector.

Background	Project Inputs	Expected Outcomes
Egypt: Agricultural Development Systems and Data Collection and Analysis Project • Agricultural policies pose as barrier to growth in production and income. • Excessive state control over agricultural production and marketing. • High input subsidies and price control exercised in food grain subsector. • Institutional and political barriers to policy reform are strong. • Inadequate information on the costs and benefits of reform.	• Technical Assistance • Training	• Reprogram the Ministry of Agriculture's (MOA) development activities particularly those with AID funding. • A Joint Policy and Planning Board set up to deal with agricultural policy issues. • A number of critical policy and other studies undertaken. • Improved data collection and management functions within MOA. • Greater access of decisionmakers to policy analysis.
Morocco: Planning, Economics, and Statistics for Agriculture • Directorate of Planning and Economic Affairs (DPAE) within the Ministry of Agriculture and Agrarian Reform (MARA) is the implementing agency. • Lack of trained staff to conduct meaningful policy analysis and planning. • Lack of reliable data on agricultural activities.	• Technical Assistance • Training • Equipment	• Funding for studies. • Development of a computerized agro-economic data base useful to policy makers. • A series of studies addressing key economic issues that would be useful to policy makers. • A cadre of computer literate economist in planning directorate who could make the transition from description research to analytic research.
Sri Lanka: National Agricultural, Food and Nutrition Strategy (NAFNS) • Numerous ministries and semi-government agencies are concerned with the agricultural sector. • Narrowly defined role for the organization concerned with agriculture. • Near self-sufficient in rice production. • A desire of the government to reduce government role and increase private sector role in the agricultural sector.	• Technical Assistance	• A set of consistent policies and programs to promote growth in agricultural sector developed. • Capacity of the government to deal with policy issues that cut across the agricultural sector developed. • Greater linkages between agencies responsible for the agricultural sector. • Greater interaction between decisionmakers and analysts.

Background	Project Inputs	Expected Outcomes
Dominican Republic: Agricultural Policy Analysis Project • Stagnated agricultural sector • Inherent flaws in existing government policies to stimulate growth in the agricultural sector. • Inadequate institutional capacity to analyze and develop effective agricultural policy.	• Technical Assistance • Training • Equipment • Local Professional Support	• Improved institutional capacity to analyze and develop effective agricultural policies. • Special policy studies conducted. • Recommendations derived from policy studies passed on to the highest office through a specially created consultative body.
Ecuador: Agricultural Sector Reorientation Program (ASRP) • Agricultural growth less than population growth. • Excessive government intervention in the agricultural sector. • Imports supplied 40 percent of domestic food consumption. • Large public sector. • Current administration committed to market oriented agricultural policies. • Ministry of Agriculture (MOA) not among the several ministries and agencies responsible for formulating macroeconomic policies. • Insignificant capacity of MOA to contribute to macroeconomic or formulate agricultural policies.	• Technical Assistance • Training • Equipment	• An administrative structure established within MOA for conducting policy analysis and formulating and examining policy alternatives. • A foundation established to promote policy dialogue, fund research, dissemination information and develop human capital. • An agricultural information system to assist analysis of market demand established.
Peru: Agricultural Policy and Institutional Development Project • Extremely limited capacity to analyze policy alternatives. • Transition from public sector oriented to market oriented private sector approach to policies. • Virtual absence of reliable information to guide design decisionmaking. • Shortage of qualified management and technical staff in the agricultural sector. • No effective dialogue between public and private agricultural sector.	• Technical Assistance • Training	• An Agricultural Policy Analysis Group (GAPA) established within the Ministry of Agriculture (MOA). • GAPA would provide economic analysis to current problems and participate in policy dialogue. • A data base developed through a national rural household survey. • The Sectoral Statistics Office (OSE) of the MOA bolstered to provide accurate and timely agricultural statistics. • More well trained analysts available, and existing training institutions better equipped to provide training.

APPENDIX B

Background to the Statistical Analysis

B.1 Dependent Variables

The first dependent variable is successful policy reform. This refers to the extent to which the host government satisfied the conditions precedent of a given program by adopting stipulated reforms. A second model examines successful institutional development as the dependent variable. Successful institutional development is taken to consist of a combination of decisionmaker impacts and analytical capacity impacts.

Decisionmaker impacts refers primarily to whether or not the project succeeded in increasing decisionmakers' demand for policy analysis. The importance of this factor lies in the notion that concrete policy analysis is a prerequisite for rational policy reform, and that such analysis is more likely to influence decisions if policymakers recognize its value. Analytical capacity impacts are the complement to decisionmaker demand. Host agencies have often been found to lack adequate capacity to undertake rigorous policy analysis. Thus, progress in developing that capacity is an important measure of the success institutional development activities. One final element contributing to the measure of successful institutional development is a project's contribution to inter-ministerial cooperation and coordination.

As noted above, our models of successful policy reform and institutional development posit that the dependent variables just described are functions of several explanatory variables, which are described below.

B.2 Explanatory Variables

The explanatory variables in our models include: project environment, project management, size, type of design, and the degree of political or economic crisis in the host country. These variables are necessarily broad' yet, they represent composites of more specific criteria. These categories, however, lend themselves intuitively to considerations in project design. Also, our small sample size required that we minimize the number of explanatory variables in the statistical models.

"Project environment" refers to a broad range of factors which determine the conduciveness of a given country setting to donor-funded agricultural policy reform or institutional development activities. An ideal project environment would be one in which influential policymakers supported the project's goals, and in which host agency staff was technically well-trained. Other positive features would include a consistent program of long-term U.S. aid to the country, and concerted donor action in the country.

"Project management" is also a composite of several more specific considerations. Important questions in this regard include various aspects of the chief of party's performance, the definition of his or her role, relationship with host agency officials, administrative support, and the ability of the entire technical assistance team to work productively with host agency counterparts. A combined evaluation of these considerations forms the single explanatory variable in our model describing project management.

Other variables includes size of project as measured separately by duration and budget (is bigger better?), the degree of economic or political crisis in the country at the program's inception (are governments more willing to reform when their backs are up against the wall?), and project type (are programs or projects more effective in attaining the different objectives?).

B.3 Data

The data set for our statistical analysis was generated from a close reading of available AID documentation of the relevant projects. The informational requirements of our analysis were such that we could include only those projects that had detailed and comprehensive mid-term or final evaluations, including information on project impacts.

One problem common to the statistical analysis of qualitative information is the subjectivity involved in creating numerical scores. In addition to the question of subjectivity,

units of measure are also problematic. For instance, it would be difficult to interpret a conclusion that stated "... a one unit increase in the conduciveness of the project environment leads to a 0.35 increase in policy reform success."

While there was no avoiding the problem of subjectivity in quantifying the projects, we have been able to reduce the arbitrariness of the units of measure by scoring project environment and management performance as dummy variables (e.g., a project environment either was or was not conducive to policy reform, a project was either well-managed or not). We also created success vs. failure ratings for each of the projects in terms of both policy reform and institutional development. The intellectual foundation for our judgements regarding, for example, the conduciveness of a project environment, was our previous qualitative analyses of these issues and projects.

The data itself can described briefly in terms of a few descriptive statistics. We judged 39 percent of the projects to have been successful in promoting policy reform, and 39 percent to have been successful in promoting institutional development. Forty-one percent of the projects were implemented in conducive environments, and 65 percent were well-managed in the field. The mean budget was $29.25 million, and the average project lasted just over five and one-half years. Also, the average country was in moderate political or economic crisis at the onset of the project. Table B.1 presents the actual data set employed in our analysis.

Each instance in which the datum is a zero or one is a dummy variable for which one indicates success (or good management, etc.) and zero indicates failure (e.g., poor management). Budget is measured in millions of U.S. dollars. "Type" is a dummy variable referring to the type of approach taken in that case -- program = one, project = 0. "Crisis" is an ordered categorical variable reflecting the degree of political or economic crisis at the outset of the AID initiative. It is measured by a four point scale along which four is the most severe crisis and one is the least severe (e.g., no crisis).

Table B.1 Project/Program Data

Project:	Dependent Variables: Pol Ref success	Inst Dev success	Independent Variables: Project Envirmt	Project Mngmt	Budget	Years	Type	Crisis
Indonesia Ag Planning	0	0	1	0	12.9	5	0	2
Mali Cereals Mktg	1	0	1	1	9.0	5	1	3
Pakistan FSM	1	1	1	1	35.0	5	0	3
Togo CELT	0	0	0	0	7.8	3	1	2
Ecuador Ag Sect Refm	0	0	0	0	8.5	5	0	3
Gambia EFPA	1	1	1	1	2.9	6	1	4
Kenya SAP	0	0	0	1	117.0	3	1	3
Bangladesh Title III	1	0	1	1	187.0	4	1	4
Niger ASDG	1	0	0	0	40.0	5	1	4
Sudan Ag Planning	0	0	0	1	14.5	10	1	2
Zambia ZATPID	0	1	0	1	9.5	5	1	2
Guinea AEPRP	1	0	1	---	10.0	3	1	3
Egypt DCA & ADS	0	1	0	1	5.0	7	0	2
D R Ag Sect Anal	0	0	0	0	1.2	3	0	3
Sri Lanka NAFNS	1	1	1	1	0.5	2.5	1	2
Peru Ag Plan/Inst Dvt	0	1	0	1	24.0	6	1	4
Zaire APP	0	0	1	0	12.5	10	0	2
Morocco Ag Pln & Stat	0	1	0	1	10.0	10	1	3
Variable Mean	.389	.389	.412	.647	29.3	5.6	.65	2.8

B.4 Methodology

In seeking to identify the specific effects of the explanatory variables discussed above on project effectiveness, the statistical analysis relies on logistic regression, or "logit" analysis. Logit analysis is appropriate in cases where the dependent variable is a binary (zero/one) outcome. In this case, the dependent variable is project success or failure. This approach allows one to isolate the contribution of each explanatory variable to the likelihood of a successful outcome, holding the other variables constant.

The process of model selection (e.g., determining which variables to include) utilized a stepwise approach in which the significance of given variables was determined by comparing the explanatory power of the model with and without a given variable. As we determined that given variables significantly improved the explanatory power of the model, those variables were included and additional variables were tested in the presence of all included variables.[4]

The available data set for this analysis includes only eighteen observations. After extensive consideration and research regarding the relevant "universe" of projects we found that adequate documentation was available for only this small number of projects. This limited sample size imposes a severe constraint on the statistical analysis, and also limits the range of analytical techniques that could be applied.

The chief problem for regression imposed by our small sample size is the limitation it creates in the precision with which we can identify effects. In practical terms, this lack of precision limits the degree of confidence with which we can claim to have identified the contribution of a particular factor to project success. It also increases the margin of error that one must allow in interpreting the model's results. The following

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[4] The more usual method of simply performing a t-test on the estimated coefficients is not valid for logit models in small samples.

section presents the results of separate logit models of policy reform programs and institutional development projects.