The Role of Institutions in Poverty Reduction
A Focus on the Productive Sectors

Sharon L. Holt

Institutional development is critical to growth and sustainable poverty reduction. Institutions that reach the poor and help them to participate in economic growth are typically flexible, involve intended beneficiaries, and employ a variety of government, nongovernment, and local organizations.
This paper was prepared as a background paper for the 1990 World Development Report on poverty. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact the World Development Report office, room S13-060, extension 31393 (71 pages).

Holt contends that institutional development (ID) is critical to growth and sustainable poverty reduction.

Although there is no single model for poverty-oriented institutional development, and ID initiatives vary considerably across sectors and nations, important common lessons have been learned about successful institutional development initiatives. Holt presents these in terms of six components:

- Forming and strengthening local organizations.
- Supporting institutional pluralism.
- Building links between poverty-oriented institutions.
- Adapting the appropriate organizational structure and encouraging strong leadership.
- Adopting the learning process approach.
- Mobilizing local resources and the participation of poor people.

Both successful and unsuccessful programs are used to illustrate the importance of these components. Drawing on evidence from the Managing Agricultural Development in Africa (MADIA) study, Holt shows, for example, that because of a lack of adequate institutional links and information flows between small farmers and researchers, less than 5 percent of farmers in Malawi have adopted hybrid maize despite more than 30 years of maize-breeding work and 20 years of agricultural development projects.

But institutional investments often require unconventional, potentially costly programs and projects. ID initiatives have been criticized in terms of the costs and benefits of different approaches, the scale on which they can operate, their compatibility with conventional project frameworks, the degree and types of decentralization they require, and their political feasibility.

Using case studies from different productive sectors and subsectors such as the National Irrigation Authority in the Philippines and the Grameen Bank in Bangladesh, she illustrates how these objections may be unwarranted or overskepdical — that investments in institutional development can be both economically and politically viable.
Table of Contents

I. Why Institutions .................................................................................................................. 1

II. Lessons for Institutional Development ............................................................................... 4

- Institutional Arrangements ................................................................................................. 5
  - Local Organizations ............................................................................................................. 5
  - Institutional Pluralism .......................................................................................................... 8
- Characteristics of Poverty-Oriented Institutions ............................................................... 10
  - Institutional Linkages ........................................................................................................ 10
  - Organizational Structure and Managerial Leadership ...................................................... 13
  - The Learning Process Approach ....................................................................................... 18
  - Participation and Local Resource Mobilization ................................................................. 20

III. Problems and Prospects ................................................................................................... 25

- Costs and Benefits ................................................................................................................ 25
  - National Irrigation Administration .................................................................................. 26
  - Grameen Bank ................................................................................................................... 30
- Scale .................................................................................................................................... 37
- Compatibility with Traditional Project Frameworks .......................................................... 38
- Decentralization .................................................................................................................... 41
- Political Feasibility ................................................................................................................ 42

VI. Summary and Conclusions ................................................................................................. 45

Annexes

Annex I: Evidence From Impact Evaluations ......................................................................... 47
Annex II: Linkages Between Agricultural Research and Extension ...................................... 50
Annex III: Participation in Irrigation and Credit ...................................................................... 54
Annex IV: Saving and Investment with NGO, private, and public cooperation ....................... 56

Bibliography

General ..................................................................................................................................... 57
Credit ........................................................................................................................................ 64
Agriculture .............................................................................................................................. 69

Tables

Table 1: Farmer Equity Contribution to Construction Costs .................................................... 16
Table 2: Institutions, design and construction costs per hectare of wet season irrigated land ......................................................................................................................................... 27
Table 3: Construction Loan Repayment .................................................................................. 29
Table 4: Mean irrigated land before and after the NIA's construction assistance .................... 30
Table 5: Administrative costs in relation to arrears rates, 1984 .................................................. 32
Table 6: Comparison of Internal Efficiency ............................................................................. 32
Table 7: Profit and loss accounts .............................................................................................. 33
Table 8: Unit cost of operation of bank branches by age of branch, 1984/5 ......................... 35

Prepared as background paper for World Development Report 1990 and CECPS.
Acknowledgements

The paper was prepared as a background paper for the World Development Report 1990 on poverty and the Public Sector Management and Private Sector Development Division of the Country Economic Department. The author wishes to thank the many individuals who supported and made this paper possible. The greatest thanks goes to Helena Ribe of the WDR who provided invaluable guidance and made useful suggestions for the paper throughout its many drafts. Robert Ayres also from the WDR made comments. Also Norman Uphoff of Cornell University provided extensive comments and made editorial suggestions. Lawrence Salmon and Samuel Paul of CECPS supported and made comments. Robert Holt of the University of Minnesota provided useful inputs particularly on the section on organization and management. Finally, Trinidad Angeles of the WDR provided important production support.
I. **WHY INSTITUTIONS**

Neoclassical growth theory holds that the difference between developed and developing countries is that the latter have less human and non-human capital. The diagnosis prescribes the cure: increase the capital resources of developing countries and they will grow, indeed they will grow faster than developed countries per unit of capital input because the marginal return will be higher. Not only will there be growth, but the benefits of growth will be distributed widely if not equitably.

But as development experience suggests, (supported by economic literature)\(^1\) the outcomes anticipated by the neoclassical model have not been realized. While one cannot deny that increases in capital resources are necessary for development, they are not sufficient for sustainable growth and the relief of poverty in developing countries. In addition to capital resources, there must be appropriate institutional structures.

Experience with poverty reduction programs and sustainable projects suggests that "appropriate" institutions are important for development for two main reasons. First, in the absence of "appropriate" institutional arrangements the benefits from major inflows of physical capital tend to accrue to the elite and rarely reach the poor. Second, such institutions not only help to distribute benefits more equitably, but also will do something more important: they will contribute to the sustainability of projects and thus to sustainable growth. This critical link between "appropriate" institutions and sustainable growth is supported broadly by the World Bank's Annual Review of 2000 Evaluations (1988) which found investment

---

\(^1\) See Joseph Stiglitz, "Markets and Market Failures, and Development" in AEA paper and proceeding, May 1989 pp. 197-203, other relevant writing by Stiglitz and others are cited in this paper.
in institutional development to be the single most important determinant of project sustainability.

Michael Cernea (1987) illustrates these general points by examining the impact of two World Bank-assisted projects, one a success and the other a failure (See Annex I for a more detailed review of Cernea's analysis). Seven years after the completion of the Hinvi Agricultural Development Project in Benin an evaluation showed a negative rate of return. There was little evidence of the investments in a significant agricultural technical package made less than a decade earlier. Seventy-four percent of the farmers had dropped out of the inappropriate cooperatives imposed upon them from above and had returned to cultivating crops for subsistence. There was no sustainable growth and the poor remained poor.

The Muda Irrigation Project in Malaysia stands in sharp contrast. An evaluation conducted approximately five years after project completion showed that the income of the farmers was increasing and some of the increase was being invested back into the project to sustain it. In addition to the physical inputs of an irrigation system, this project had provided for local water user organizations that were carefully and patiently created following a thorough analysis of farmer needs, propensity to cooperate, and other factors. The evaluation attributed the success of the project primarily to the user organization and other grassroots institutions.

In each of the projects there was a significant input of physical resources and training. In one, the additional commitment to build appropriate institutions—that is, to invest in institutional development—led to a distribution of some benefit to the poor who, in turn, put resources into the continued maintenance and development of the project. This linkage
between poor people's investment in sustainable activities distinguishes these development projects from simple welfare schemes that may reduce misery, at least in the short term, but do not equip the poor with the institutional mechanisms that allow them to magnify the resources that have been invested.

Once one recognizes the importance of institutions a difficult question then arises: what do appropriate institutions look like? Of most direct relevance to this discussion are institutions that have an organizational structure like farmer cooperatives or government ministries. The kinds and combinations of "appropriate" institutions that facilitate sustainable growth, however, may vary considerably from sector to sector and from place to place. For example, a financial institution that successfully provides credit to credit groups will bear little resemblance to a research station doing farming systems research on local smallholder agriculture. But development experience suggests that there are some general characteristics that many of these "appropriate" institutional structures share.

It is the objective of this paper to describe and evaluate these broad components. The paper is divided into two parts: first, it outlines characteristics of institutions that promote both economic growth and the reduction of poverty; second, it addresses the problems and prospects encountered in developing institutions which actively involve the poor. A wide variety of successful (and relatively less successful) case studies are used from different sectors and sub-sectors in both sections. Cases were chosen to provide insight into the lessons learned from institutional initiatives and to convey the geographical and sectoral variety of successful, poverty-oriented institutional activities.
II. LESSONS FOR INSTITUTIONAL DEVELOPMENT

Drawing on experience, this section presents a more detailed picture of effective, poverty-oriented institutional frameworks. This is not to suggest there is one model for successful institutional development: the kinds and combinations of institutions to be supported may vary considerably from sector to sector and from place to place (Uphoff 1986:19). The aim, therefore, is to map out the general components of institutional development efforts (iD) that reach the poor and work to reverse the causes of poverty.

These components are of two varieties. Two are concerned with countries' broad institutional arrangements. These include:

- forming or strengthening local organizations; and
- allowing institutional pluralism.

The other components describe specific institutional characteristics:

- building institutional linkages;
- adopting the appropriate organizational structure and encouraging strong managerial leadership;
- adopting the learning process approach; and
- fostering poor people's participation and local resource mobilization.

Although presented separately for clarity, these components and themes are integrally linked, it would be difficult to introduce one without considering the others. For example, local organizations act as mechanisms for poor people's participation.

Two major themes underlie all components. First, successful institutional interventions are generally demand driven. This means the poor themselves shape initiatives and capacities to meet their needs. Second, the goal of development intervention should be to help the poor help themselves. This goal requires not only a resource commitment, but a willingness to build administrative and additional skills at the local levels.
Local organizations commonly take the form of membership organizations (for example, user groups in irrigation or credit, or women's groups), local governments, service organizations (for example, nongovernmental organizations), private business or local administrations (Uphoff 1986b:4-6). Development experience suggests local organizations serve two main purposes: (a) they act as a vehicle for involvement, and (b) they enhance poor people's bargaining power and access to resources. Where these structures do not exist it may be necessary to employ special staff (catalyst/community organizer) to help them form or be restructured, design incentives for participation and flexibility into the project, and train poor people in basic organizational skills such as bookkeeping and leadership.

First, local organizations give poor people, including those usually missed in traditional projects, a mechanism for participation. In Northern Pakistan, the successful Aga Khan Rural Support Project model of "organization and cooperative management" is based on the mass participation of villagers through village-level and separate women's organizations. The society's considerable gender stratification makes this division necessary (World Bank 1987, World Bank 1989a). The village organizations allow villagers with relatively homogeneous resources to group-manage irrigation and common grazing land, and cooperate for the purpose of commercial activities, including village-level investment in management of capital works, group access to credit, and organized marketing (World Bank 1987:4).

Second, local organizations improve the poor's access to resources and bargaining power. For example, the National Farmers Association of
Zimbabwe (NFAZ), an institution comprised of local organizations with over 31,000 low-income member households, helps improve farmers' access to information and marketing arrangements. This association and other farmer organizations have helped sponsor an informal process of technology diffusion which by 1985 resulted in 95 percent of peasant farmers using hybrid seed and 61 percent using chemical fertilizers on at least one of their fields (Bratton 1988:9-10).

Further, they have assisted farmers in circumventing unreliable service delivery agencies by organizing their own transport for supply and marketing. As a result, group farmers are significantly more likely than individual farmers to use fertilizer, and to obtain this input directly from urban suppliers at cheaper prices. Farmer organization facilitates improved access to agricultural technologies and services, which leads ultimately to higher agricultural productivity and incomes. In 1982 in NFAZ's Heartland of Gutu District, Masvingo, group households produced more than twice as much maize--and sold more than seven times as much--as individual households (Bratton 1988:10).

Although it is generally easier and better to use existing organizations than it is to establish new ones, there must be some caution in using existing local institutions. Since communities are rarely harmonious, homogeneous entities, it is quite possible that traditional organizations reflect the interests of the elite. Community organizers may help mitigate these differences to some extent, but when conflicts are strong and entrenched it may be necessary to adopt more structural approaches (D. Korten 1983:193). For example, the Bangladesh Rural Advancement Committee tried for several years to develop broad-based community groups. They ultimately concluded that
the interests of the landed and the landless or near-landless were sufficiently irreconcilable that the only solution was to develop separate groups (D. Korten 1980:480-511).

There can be serious disadvantages, however, to establishing separate institutions for the poor. These institutions may become marginalized and receive few central funds because the poor wield little political clout. They can also contribute to further societal stratification. These experiences are clearly evident in the US where social welfare spending programs to the poor (increasingly nonwhite disenfranchised groups) have fallen at the same time social spending for senior citizens (increasingly the white, middle income majority) has risen substantially. This inequality results in large part from the fact that senior citizens have a strong effective political lobby, the American Association for Retired Persons, while poor minorities do not.

It is also important to mention that although the examples provided above involve grassroots programs, in some situations "top-down" or centrally-managed local institutions can be successful. Newly-industrializing country (NIC) experience in Korea and Singapore, for example, suggests that central-level decisionmaking and goal setting merged with mobilization at the local can lead to rapid growth. But there are many social and historical features unique to the NICs experience that would be difficult to replicate in, for example, Latin America or Africa. In contrast regimes such as China or Tanzania, that have built top-down local institutions (usually government cooperatives) focused on extracting resources for national consumption over local control. These top-down institutions have had greater success in social sectors than in productive sectors. In some cases, productivity has actually
declined when local communities have too little authority. Recognizing the limitation of these centralized structures, many governments, such as China, the Soviet Union, and many countries in Eastern Europe, have evolved towards more local ownership.

_Institutional pluralism_

Building local organizations is an important part of a larger strategy that suggests the need for complementary and competitive organizations in the public, private and nongovernmental sectors\(^2\). In other words, the poor benefit from institutional pluralism. As "the poor" are a heterogeneous group, and some are harder to reach than others, organizations have varying capacities to work with people living in different conditions of poverty. In the area of microenterprise, Crindle, Mann, and Shipton (1987:33-50) find that because of their relatively small size and focus, voluntary organizations and certain government agencies that have adopted a multi-service approach\(^3\) (for example, the Ministry of Social Services and Development in India) may be the most appropriate institutions for reaching the poorest entrepreneurs.

These authors argue that cooperatives and certain types of government agencies may be best at reaching poor people at slightly higher income levels. They suggest that the need to maintain cooperative forms of organization and the existence of considerable government regulation and

---


\(^3\) In microenterprise, agencies seeking to reach the poorest microentrepreneurs directly and effectively, may have to provide a number of services including, for example, credit, technical assistance, training, and social promotion interventions since the poorest tend to possess extremely limited access to information and human and financial capital.
oversight of cooperatives tend to limit the adaptability and creativity of these institutions. This limited flexibility, in turn, may restrict their ability to reach the very poorest who demand the most specialized input. Cooperatives that have managed to be more responsive to their local membership because of strong equity-minded leadership (for example, the National Dairy Development Board in India) and/or participatory components (for example, the National Farmers Association and the Saving Development Foundation in Zimbabwe), are exceptions to this general tendency.

Grindle et al. argue that banks and business associations may be most appropriate for reaching the most well-off low-income small and microentrepreneurs. Because bank procedures and regulations must be uniform and must be applied to broad categories of clients if their activities are to be efficient, they may be ill-suited to deal with the poorest, most difficult to reach groups. Banks that are committed to community development and social welfare goals are important exceptions to this general tendency. Examples include Multi-service centers of the Bank of Baroda; the Banco Del Pacifico in Ecuador; the Grameen Bank in Bangladesh; the Badan Kredit Kecamatan (BKK) banks in Indonesia; and the South Shore Bank in the United States.

Comparative advantage among organizations requires that agencies with different skills and resources cooperate in order to reach all low-income groups. This has led to increasing incidence of NGO-government cooperation as governments take advantage of NGO flexibility and grassroots orientation while NGOs benefit from central resources (Paul 1988:65). For example, in the Alwar district of Rajasthan, PRADAN, an Indian NGO has been working with the government Integrated Rural Development Project (IRDP) officials to improve effectiveness of Poverty Alleviation Programs at the
Block level with considerable success in improved targeting and loan repayment. Similarly, the Bangladesh Rural Advancement Committee (BRAC) has also demonstrated that it can provide effective, low-cost services (efforts so far have emphasized immunization) for the Government in rural areas.

CHARACTERISTICS OF POVERTY-ORIENTED INSTITUTIONS

Institutional linkages

Linkages have considerable implications for implementation (Leonard 1982:37). Institutional linkages in an institutional development (ID) strategy should be structured so that communications can flow back and forth between central, intermediate and local levels, and development officials are accountable both to the clients at the bottom and central leaders at the top. This will require emphasizing linkages that encourage representation of interests.

In their book, Institutions of Rural Development for the Poor, which reviews developed and developing country experiences with poverty programs editors, David Leonard and Dale Marshall (1982) identify five types of center-local linkages. These include:

a) representation (for example, various forms of formal and informal participation in planning and implementing programs or political parties);

b) technical and personnel assistance (for example, in-service training, management and program advice);

c) regulations and monitoring (for example, audits, administered market prices, registration of local organizations);

d) services (for example, provision of inputs); and

e) finance (for example, credit, grants, savings) (Leonard 1982:35).
These mechanisms involve various mixes of control and assistance. Control linkages enable one organization to determine some aspect of another's performance, while assistance linkages facilitate program implementation by compensating for gaps in the performance of implementing organizations. The ID strategy should stress assistance linkages (that is, representation and technical assistance) over control linkages (that is, regulation or input delivery) as the former create incentives for increased local commitment and capacity to implement development programs (Marshall 1982:59-66).

The value of institutional linkages and central-local communications flow is exemplified in the area of agricultural research and extension. In their in-depth study of small farmer agriculture in Africa, MADIA researchers found that in some countries, despite massive investments in extension and research, relatively little of this knowledge was adopted by small farmers. The technologies that were developed (for example, high-yielding varieties, HYVs, that require significant inputs of fertilizer and water) did not reflect the realities of small farmer resources. For example, less than five percent of farmers in Malawi have adopted hybrid maize despite thirty plus years of maize-breeding work and twenty years of agricultural development projects (Lele, Kinsey, and Obeya 1989:26). This results partially from the fact that information has flowed only one way: from the researcher to the farmer (Lele, Kinsey, and Obeya 1989:27). The important

---

4 The Managing Agricultural Development in Africa (MADIA) study involved a detailed analysis of six African countries' policies and performance over the last 20-25 years. The countries included: Kenya, Malawi, Tanzania, Cameroon, Nigeria, and Senegal.
link that would allow researchers to do more location-specific research--
farmer-to-researcher communication--was not developed.

Agricultural research and extension have emphasized control
linkages such as input delivery, and put relatively less effort into
developing assistance linkages that focus on trying to heighten the poor's
representation in agricultural research. Whereas control linkages are
sufficient for delivering technologies that are robust and usable in a wide
range of conditions (for example, some handpumps), they are inappropriate for
technologies that require two-way information flow between researchers and
farmers (for example, farming system research requiring location-specific
knowledge about farmers' access to inputs, cropping patterns, and the
heterogeneity of the resources employed).

One agricultural project that has put greater effort into trying
to incorporate farmers input into research is the Rural Women's Agricultural
Development Project in Bihar, India. In this farming system research
experiment, strong linkages between poor tribal women, the Bisra University
agricultural researchers, and female extension workers have led to increased
yields and incomes. Women extension agents have fed information from poor
tribal women in the drought-prone Chotanagpur plateau to scientists at the
University, who, in turn, have developed a simple dug well system to provide
irrigation for vegetable gardening during the dry season. This lucrative
undertaking led to five-fold increases in annual household incomes (Singh and
for more detail on FSR, and agricultural research and extension in India.)
Organization structure and managerial leadership

Both organizational structure and managerial leadership have proven to be important components of effective poverty-oriented institutions. The aspects of these two issues that are relevant for institutions working in poverty reduction are highlighted below.

There is no single ideal form of organization that is most effective and efficient in all situations and circumstances. The best organizational structure is contingent on the decision environment in which the organization is operating. There is a large body of literature that supports these propositions. The research that is most relevant to institutions concerned with poverty reduction has been done by Lawrence and Lorsch. They clearly demonstrated that when the decision environment is marked by great uncertainty, the most effective organizations depart markedly from the Weberian ideal of a rational bureaucracy—clear lines of command, explicit non-overlapping role assignments, etc. Instead, chains of command are somewhat ambiguous as are role assignments.

One of the specific findings is that within an organization where different operating units have different time horizons, it is necessary to have individuals assigned as coordinators between these units. For example, production divisions have time horizons of hours or days, marketing divisions, of weeks or a few months, applied research, a year or two, basic research a number of years. People in these different units have difficulty communicating with one another without going through an intermediary. By contrast, organizations whose environment is relatively certain do best if they are organized along classic Weberian lines.
The Lawrence and Lorsch findings are relevant to institutions designed to reduce poverty. In some situations, there is a great deal of uncertainty in this decision environment. Little may be known about the micro social structure in which agencies are operating, and people's response to opportunities may be relatively unknown. There are clearly different time horizons in different parts of the organizations. Those who work directly with the poor in activities such as group organizing and training will be on a completely different schedule from those who are building the irrigation channel, or those who are researching new irrigation designs. Many institutions designed to reduce poverty, however, are organized along fairly classic Weberian lines. Consequently, it may be necessary to introduce considerable bureaucratic reorientation\(^5\) to make them effective in the decision making environment in which they operate.

The National Irrigation Administration (NIA) in the Philippines is an example of a public bureaucracy that has restructured its mode and culture away from the classic bureaucratic model to reflect a more flexible organizational structure (D. Korten 1988:117-142). For example, it has employed interdisciplinary problem-solving teams to work as intermediaries with the various NIA staff workers who do different tasks which require different time horizons. Further, some of these officials, especially those working at the grassroots level, operate in uncertain environments which means that a considerable amount of social learning must take place before programs

---

can be appropriately implemented. The problem-solving teams work with farmers, community organizers, the design and construction and post construction engineers, and the provincial engineer responsible for the overall coordination of entire provinces' communal irrigation programs. Moreover, these teams have the authority to make decisions and are also held responsible to their client groups. The use of community organizers (mostly college educated females), participatory farmer user organizations, and problem solving teams that are accountable both to farmers and engineers, marks a clear departure from the classic bureaucratic model.

The impact of this new bureaucratic system on farmer satisfaction and commitment, is remarkable. Farmers' resource contribution to the irrigation schemes, a barometer of farmer satisfaction exemplifies this success. The National Irrigation Administration in the Philippines introduced the new system, in part, because of chronic budget problems. For example, in 1964-65, irrigation fee collections totalled only 1.27 million pesos while operation and maintenance expenses were 3.42 million pesos (Bagadion 1988:5). In 1967 the NIA attempted to solve its chronic budget deficit for operation and maintenance by increasing water fees. But farmers were reluctant to pay the higher fee and operation and maintenance costs for NIA rose simultaneously so that the percentage of collectible fees actually paid decreased from 59 percent to 27 percent (Bagadion 1988:7). In contrast, in areas where the new more participatory system has been introduced farmers have been more willing to at least approach, if not meet, the governments financial requirements--10 percent of the system's cost and all of operations and maintenance costs. For example, farmer mean equity contribution for construction per hectare of irrigated land in the 1985 wet season was 357 pesos in the participatory
system verses 54 pesos in the non-participatory system (Reyes and Jopillo 1988:109) (see Table 1).

Table 1 Farmers' equity contribution to construction costs
(in pesos)

<table>
<thead>
<tr>
<th>Basis for measuring contribution</th>
<th>Participatory systems (n=21)</th>
<th>Non-participatory systems (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers' mean equity contribution per hectare of land irrigated in the 1984-85 wet season</td>
<td>357 b/ (t=5.31; p&lt;0.01)</td>
<td>54</td>
</tr>
<tr>
<td>Farmers mean equity contribution per 1984-85 wet season system user</td>
<td>348</td>
<td>44</td>
</tr>
</tbody>
</table>

a. Data on the farmers' contribution to system construction costs were not available for three systems in which construction had not been completed.
b. Contributions are standardized in terms of 1984 pesos: P20=US$1.00.


At the same time, however, there are institutions concerned with poverty reduction, particularly those doing major infrastructure projects-building roads that improve access to markets or central station electric power, that are working in a different environment. These kinds of institutions will not have to undertake the types of social learning activities that are required by community level workers. Their environment is more certain, which suggests that a more classic bureaucratic form may be the most effective and the most efficient for these institutions.

In the area of managerial leadership a number of different factors have proven central. Specifically, leadership, leadership's link to powerful
political figures and institutions, and leadership continuity have proven to be important factors in successful institutional management. Judith Tendler, in an assessment of five successful NGOs involved in the Ford Foundation's Livelihood, Employment, and Income Generation program, finds that all five NGOs are led by strong and driven individuals who, through class or previous work experience, have links to important institutions and political figures. For example, though the Grameen Bank is now an independent financial institution, it found its first institutional home in the Central Bank as an experimental project. When Grameen became its own bank, the link to the Central Bank continued informally, partly through the three Central Bank professionals who went on extended leave to take managerial positions with Grameen (Tendler 1987:26).

In addition, in his study of six successful public sector development programs, Paul (1982) argues for the importance of leadership continuity. Paul illustrates that in all of the cases studied, the person who initiated the project as an experiment was the same to carry out the transition to a nation-wide program: In other words, it was the energy of the single leader that drove the successful expansion of the program, not just the force of a particular organizational model.

---

6 She reviews the Grameen Bank of Bangladesh, the Self-Employed Women's Association of Ahmedabad, the Working Women's Forum of Madras (WWF), the Annapurna Caterers of Bombay, and Environmental quality International (EQI) working in conjunction with the association of Zabaleen garbage collectors in Cairo.

7 Paul's high performers include the National Dairy Development Program of India, the Indonesian Population Program, the Philippine Rice Development Program (Masagcna 99), the Public Health Program of China, the Smallholder Tea Development Program of Kenya, and the Mexican Rural Education Program (CONAFE).
Given this finding, it is not surprising that a common critique of successful management in poverty-oriented projects is that organizational effectiveness results from charismatic leadership which cannot be replicated or maintained. But there are many important examples of strong leadership that has been institutionalized—for example, with laws and regularized procedures, and where the government has chosen the correct "charismatic" person for the leadership position. This experience is illustrated by the Indian National Dairy Development Board which has been built up to a national program from the model of the Anand Milk Producer’s Union of Gujurat State under the direction of one of its original leaders, Verghese Kurien.

Strong leadership, however, is a necessary but not sufficient condition for effective ID. As the NIA study suggests, management and organizational linkages are also necessary components of effective institutional structures. These factors should be incorporated into project design, although in this context design should not be equated with "blueprint" planning. As discussed below, the most successful poverty programs are often "designed" to allow for flexibility and adaptation.

The learning process approach

The 1980s have witnessed an evolution of thinking about planning and implementing development projects, away from the blueprint to the more open-ended "learning process" approach. This approach rejects fixed planning and calls for more experimental and adaptive forms of design and implementation. This type of incremental decisionmaking is decentralized

---

8 This approach is continually evolving. A professional group known as this Development Management Network meets at least once a year to discuss cases and develop the approach as a concept.
and based on information flow and feedback mechanisms that allow projects to evolve to fit local conditions best. Further, it suggests the need to start small and experiment with different pilot projects before trying to expand programs across countries or regions.

Local institutional development requires a learning-by-doing approach for the following reasons:

a) localities' heterogeneity demands that different approaches be developed for disparate areas;

b) little is known about the obstacles poor people confront or the best means to overcome them; and

c) institutional development takes time and outcomes may be different from initial appearances: Successes can sometimes collapse and failures may turn out to be successful (Smith et al, 1982).

The Self Employed Women's Association (SEWA) in Ahmadebad, India, a large grassroots NGO, demonstrates the need for an adaptive approach. Incremental decision-making based on information from the project activities has allowed the local institution to alter its credit program substantially to better reflect the needs of its clientele. Initially SEWA worked through nationalized Indian banks to get credit to its members. This arrangement ran into difficulties as the banks were ill-prepared to deal with illiteracy among their clientele, to provide small enough loans to meet the women's needs, or to act as a saving depository for poor women who had only small deposits to make and did not live near any bank branches. SEWA responded in 1974 by starting its own "mobile" saving unit that went directly to the women's homes and places of employment to collect savings. By 1981 the Bank had 13,639 savings accounts with over Rs. 3,000,000. These savings are now reinvested in the community through loans to SEWA members.
This process was not created overnight. SEWA started small as an intermediary between nationalized banks and poor women in 1972. When the organization's feedback mechanisms indicated that this arrangement was proving unsatisfactory, SEWA evolved into a saving mobilizing unit and then eventually into a lending institution. In her review of SEWA Bank, Jennifer Sebstad attributes the Bank's success, in part, to its ability to respond to and understand its members' needs and its willingness to learn from the established banking community and to experiment with new ideas—the learning process approach (Sebstad, 1982:118).

Larger development institutions concerned with poverty reduction have also adopted this approach. For example, the International Fund for Agricultural Development began with a few basic concepts and a specific target group—smallholder farms, rural women, landless and other marginalized rural populations. It did not begin with a set of tenets in place. Its priorities and modalities evolved out of actual operations as lessons were absorbed, and led to changes and refinements in project design (IFAD 1989:1).

**Participation and local resource mobilization**

In this context, participation is used to mean the poor's influence in decisionmaking in poverty reduction programs.9 Local resource

---

9 This narrow definition is used because it is appropriate for the context—institutions in poverty reduction schemes in the productive sectors. Nevertheless, some argue that a primary goal of poverty reduction should be to enable the poor to demand and control more of the benefits of development (Chambers, 1983:140). The implication of this type of argument is that the poor must be able to influence national allocational decisions if they are to get appropriate access to resource. Although not necessarily inconsistent with the narrower definition used here, this argument is concerned with the powerlessness of the poor, and therefore lies outside the scope of this paper.
mobilization is included with participation because a commitment of local resources—time, labor, or capital—increases poor peoples' involvement/participation in design, operation, and maintenance of an endeavor and thereby provides a mechanism for influencing decisions.

Although the 1980s have witnessed a trend toward participatory approaches among a number of national governments and development organizations, poor people's participation remains a controversial issue for two reasons. First, it has political consequences when it leads to pressure-group formation that challenges existing power structures. Second, public, private, and non-governmental agencies are reluctant to foster participation when they feel the costs involved (political, financial, and administrative) are not worth the benefits. Further, poor people may also demonstrate reservations concerning participation. It is unlikely that they will participate for the sake of participating. Participation is an investment, and poor people will consider making this investment in light of the returns they anticipate receiving. The implication here is that if participation is to occur, there must be incentives to participate (Bryant and White 1984:9).

Given these potentially constraining factors, some may question the need for participation. But experience suggests that participation will be a necessary component of effective and sustainable poverty reduction programs under the following conditions:

a) when the poor possess information not known to outsiders that is necessary for program success;

b) when collective action is required for effective management; and
c) when governments must rely on poor people to expand the public resources that are put into projects.10

Participation has proven to be critical to the following productive sectors and sub-sectors:

a) agriculture, which includes the sub-sectors of forestry, livestock, irrigation, and agricultural extension;
b) rural water supply;
c) urban development and in some instances, urban water supply;
d) environment and resettlement (World Bank 1989); and
e) credit, particularly group lending schemes, and micro-enterprise (Grindle et al., 1987).

It may also be important for road maintenance, (Cook cited in World Bank 1989) and labor union activity. In contrast, participation is not essential in sectors that require large and lumpy capital investment such as electrical power or transportation.

Examples from a few of the more participatory sectors demonstrate the impact representation can have on projects. First, in the area of livestock development, about 50 percent of World Bank first generation projects undertaken in the 1970s, failed primarily because they ignored local social and ecological conditions (World Bank's review of African Livestock

10 Community resources can expand programs considerably when they use traditional methods of resource mobilization (commitment of labor and funds), and train locals as paraprofessionals whenever possible to carry out the tasks of outsiders. See Milton Esman, Paraprofessionals in Rural Development: Issues in field-level staffing for agricultural projects, (Washington D.C: World Bank Staff Working Paper #573,c1983).
projects cited in World Bank 1989). In these cases, the poor possessed information about their micro social structure not known to outsiders that proved essential to effective implementation and sustainability. In contrast, second generation World Bank projects that have given a prominent role to pastoral or herder associations have met with much greater success. For example, the pastoral associations introduced in Zaire have improved pastoralist' access to veterinary drugs and services and have led to the establishment of a federation of associations called the Association des Cooperatives d'Eleveurs de l'Ituri (ACOOPELI). Acoopeli has come to play an integral part in implementation: it has taken over activities, including the management of the abattoir, originally entrusted to the Government's comparatively ineffective livestock parastatal, ONDE.

In rural water supply, development agencies have become convinced of the need for popular participation. In the 1970s, development agencies' main emphasis was the development and installation of durable, easy-to-fix hand pumps. But a high proportion of the systems installed have fallen into disrepair and become useless. In Tanzania, for example, water schemes with a capacity to serve more than 40 percent of the rural population have been constructed, but only ten to fifteen percent actually benefit from these schemes because most schemes ceased to function or are not utilized properly (Therkildsen 1989:1). The successful exceptions have been distinguished by strong community participation. In Kenya's Kwale project, for example, social extension agents work with local women's groups. Pumps are installed only after local groups have decided that they really want a pump and have demonstrated their capacity to operate and maintain it (including the levying fees). In Malawi's Rural Piped Water Supply Program, community participation
in water supply has helped the Government to provide one million people with reliable and accessible water. Communities managing the water facilities are responsible for identifying sites, electing water committees, organizing distribution, electing repair teams, raising funds for replacement parts and enforcing water use rules. (For examples of participation in irrigation and credit see Annex 3).

As illustrated above, participation can have the following benefits. First, increased participation can enhance project effectiveness because poor people's input helps to identify needs and local constraints. Second, participation can increase project targeting by reducing leakages to elites. Third, local resource mobilization can play a very important role in generating local commitment to program goals. Fourth, peoples' involvement can reduce the financial and administrative pressures on overextended governments when it includes local resources mobilization and human resources development (for example, training local communities to operate and maintain rural water supplies) components. Fifth, these factors contribute substantially to program financial and institutional sustainability.

Participation of the poor, however, can be difficult to accomplish because the hurdles confronted can be formidable. Obstacles come from within the community (for example, poor communication facilities, local factionalism and corruption), development agencies (for example, centralized decision-making and bureaucratic orientation), and the policy environment (for example, laws that discourage participation) (F. Korten 1983:181 - 200).
III. PROBLEMS AND PROSPECTS

Investing in poverty-oriented institutional development may require alternative methods of planning, evaluating, funding, and implementing poverty reduction programs. Moreover, the approach does not necessarily produce quick, easy or cheap results. Consequently, many governments and development agencies are skeptical about the feasibility of ID approaches as part of their projects and programs. More specifically, objections to poverty-oriented institutional development efforts emphasize:

- the costs versus the benefits of such approaches;
- the scale on which they can operate;
- their compatibility with conventional project frameworks,
- the degree and types of decentralization they require, and
- their political feasibility.

This section of the paper will address these issues, and with the use of case studies, it will illustrate that these criticisms may be misleading.

COSTS AND BENEFITS

Investing in institutional interventions that seek to organize the poor and develop indigenous management capacity may entail both increased administrative costs and higher up front costs for activities such as community organizing and management training. But increased administration costs may be justified when they lead to returns on investment which are sustainable over a longer period, more equitable distribution of benefits, and improvements in non-pecuniary indicators of poor peoples living standards (for example, reductions in the incidence of dowry). Moreover, there is strong evidence to suggest that the need for financial assistance will fall overtime as a result of declining cost structures, and when early efforts are made to
create capacity for local resource mobilization (USAID 1989). A brief analysis of two successful pro-poor institutions demonstrates ID's potential.

The National Irrigation Administration

In their chapter "The Impact of Participation," Romana de los Reyes and Sylvia Jopillo (1988:90-116) assess the impact of non-participatory versus participatory irrigation systems. They illustrate many of the benefits that have resulted from adopting a more participatory institutional approach, such as relatively higher rice yields and hectares irrigated, and the greater representation of landless and small farmers in water user association leadership positions. This essay, however, will focus only on their findings that pertain to costs and area irrigated.

First, the researchers show that although the cost of the participatory system exceeds that of the non-participatory system, it only does so by a very small amount (merely $2 more per hectare). This results from the fact that the non-participatory system costs more per hectare for the design and construction (see Table 2 for cost break down of the two systems). Second, they demonstrate that despite the higher costs, the benefits associated with the institutional activities made them well worth the investment for three main reasons:

a) the participatory system mobilized local resources far surpassing those of the non-participatory system;

b) loan repayments have been significantly higher under the participatory system; and

c) the area of land irrigated has expanded more under the participatory system than the non-participatory system especially during the dry season.

These factors also contribute to sustainability.
Table 2  Institutions, design and construction costs per hectare of wet season irrigated land (in pesos)

<table>
<thead>
<tr>
<th>Type of cost</th>
<th>Participatory systems (n = 24)</th>
<th>Non-participatory systems (n = 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profile preparations</td>
<td>36 ($ 1.80)</td>
<td>-</td>
</tr>
<tr>
<td>Community organizer salaries and field supplies</td>
<td>293 ($ 14.65)</td>
<td>-</td>
</tr>
<tr>
<td>Community organizer training and supervision</td>
<td>82 ($ 4.10)</td>
<td>-</td>
</tr>
<tr>
<td>Financial and system management training for irrigation associations</td>
<td>87 ($ 4.35)</td>
<td>-</td>
</tr>
<tr>
<td>Total institutional costs</td>
<td>498 ($24.90)</td>
<td>-</td>
</tr>
<tr>
<td>Design &amp; construction costsb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chargeable to farmers</td>
<td>12,666 ($633.30)</td>
<td>12,000 ($600.00)</td>
</tr>
<tr>
<td>Not chargeable to farmers</td>
<td>2,484 ($124.20)</td>
<td>3,599 ($179.95)</td>
</tr>
<tr>
<td>Total design and construction costs</td>
<td>15,150 ($757.50)</td>
<td>15,599 ($780.00)</td>
</tr>
<tr>
<td>Total development costs</td>
<td>15,648 ($782.40)</td>
<td>15,599 ($780.00)</td>
</tr>
</tbody>
</table>

a. Costs have been standardized in terms of 1984 pesos: P20=US$1.00. 
b. Includes costs of materials, labor, equipment rental and technical supervision.


The difference between the resources mobilized under the participatory system versus the non-participatory are startling. Farmers' mean equity contribution to construction costs under the participatory schemes has been 357 pesos compared with only 54 pesos under the non-participatory (see Table 1). Similarly, comparing loan repayment rates, we find that the mean percentage of amortization due that has been paid equals 87 percent for
participatory schemes versus only 50 percent for non-participatory schemes (see Table 3).

Given these statistics, de los Reyes and Jopillo (1988:112) demonstrate that from NIA's perspective, the financial benefits associated with the institutional activities have been substantial. The higher farmer equity contribution to construction--303 pesos (US$15) per hectare greater for the participatory system--has led to an immediate recovery of 61 percent of the cost of the institutional development activities. Moreover, loan repayment rates have averaged 87 pesos per hectare per year more for participatory than for non-participatory schemes. If that differential rate of repayment is maintained for a total of five years, the remaining 39 percent of the cost of the participatory method would be recovered, and any further differential payments would provide a direct positive financial benefit to the NIA. In financial investment terms, if the differential repayment remains constant over ten years, the annual financial rate of return on the investment of using the participatory methods would be 25 percent. Similar results have been found in the Sri Lankan Gal Oya irrigation system that is based on the Philippines model. The measurable benefit/cost ratio for the first two years alone was 1.5 to one (Uphoff 1987:211). In both irrigation schemes, the more participatory approach has contributed substantially to financial sustainability.

The Philippine participatory system also led to relatively higher benefits in terms of the expansion of the area irrigated. An analysis of the mean areas irrigated before and after the NIA's construction assistance under the two schemes shows that on average the NIA assistance produced a positive effect for both the participatory and the non-participatory systems. In the
Table 3 Construction and loan repayment

<table>
<thead>
<tr>
<th>Payment</th>
<th>Participatory systems (n = 17) a/</th>
<th>Nonparticipatory systems (n = 19) b/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean amortization payment due a/</td>
<td>15,088</td>
<td>41,667</td>
</tr>
<tr>
<td>Mean amortization payment remitted to the NIA</td>
<td>12,429</td>
<td>21,065</td>
</tr>
<tr>
<td>Mean % of amortization due actually paid</td>
<td>82%</td>
<td>50%</td>
</tr>
</tbody>
</table>

\[(z = 2.17; p<0.05)\]

a. Of the twenty-four sample participatory systems, four were still under construction during the research fieldwork, one had no loan because the association raised a 30 percent equity, and two were not yet due to begin paying their amortization.

b. Of the twenty-two sample nonparticipatory systems, two associations had not accepted the final turnover of the system, while one association had no loan because it raised a 30 percent equity.

c. Nonparticipatory systems had larger amortization payments due because most had been completed in 1981. A larger proportion of participatory systems were completed in 1982 and 1983.

Source: de los Reyes and Jopillo, 1988:111 in Korten and Siy, Jr.

Wet season, expansion has been similar for the two types of systems—18 percent for participatory and 17 percent for nonparticipatory. In the dry season, however, there has been a substantial difference between the two systems: under the participatory systems the area irrigated expanded by 35 percent in contrast to only 18 percent under the nonparticipatory schemes (see Table 4). Jopillo and de los Reyes (1988:98) speculate that the difference in dry season expansion may reflect better water management practices (for example, more efficient water rotations) in the participatory systems as
indicated by their greater use of water rotation and of specially designated water management personnel.

Table 4  Mean areas irrigated before and after the NIA’s construction assistance  
(in hectares)

<table>
<thead>
<tr>
<th>Time period</th>
<th>Participatory systems (n=24)</th>
<th>Non-participatory systems (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet season</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before the project</td>
<td>88 ha</td>
<td>127 ha</td>
</tr>
<tr>
<td>Crop year 1984-85</td>
<td>104 ha</td>
<td>149 ha</td>
</tr>
<tr>
<td>Expansion</td>
<td>16 ha</td>
<td>22 ha</td>
</tr>
<tr>
<td>Expansion as a percent of area irrigated before the project</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>(z=0.08; p&lt;0.21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry season</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before the project</td>
<td>56 ha</td>
<td>105 ha</td>
</tr>
<tr>
<td>Crop year 1984-85</td>
<td>76 ha</td>
<td>123 ha</td>
</tr>
<tr>
<td>Expansion</td>
<td>20 ha</td>
<td>19 ha</td>
</tr>
<tr>
<td>Expansion as a percent of area irrigated before the project</td>
<td>35%</td>
<td>18%</td>
</tr>
<tr>
<td>(z=1.38; p&lt;0.08)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: de los Reyes and Jopillo in Korten and Siy, Jr (1988:97)

_The Grameen Bank_

The second case used to illustrate ID potential, the Grameen Bank, demonstrates both the financial and the social benefits that can accompany institutional development investment. Investing in institutional arrangements in credit can produce dramatic financial results when they lead to reductions in arrears. In their article, "Credit for the Rural Poor: A Comparison of the Policy Experiments in Nepal and Bangladesh," Mosley and Dahal (1987) analyze
the impact of investing in certain institutional design features on the effectiveness of credit for the poor programs, the Grameen Bank (GB), the Small Farmers Development Program in Nepal (SFDP), and the average of 38 Small Farmer Credit Institutions (SFCI). They have defined effectiveness by repayment rates and the credit institution's ability to reach its target group.

The authors show that GB investment in organizing groups, resource mobilization (for example, compulsory contribution to an Emergency Fund) and intensive supervision of loan repayment (for example, weekly collection of repayment on borrowers premises) raises its administrative cost. Grameen's administrative costs as a percentage of total lent out in 1984 were 12.3 (GB) vs. 7.6 percent (SFDP) and 4.68 percent (SFCIs) (see Table 5). This investment has had two major benefits. First, from a financial perspective, it has led to considerable increases in repayment rates which translates into major reductions in arrears rates (see Table 6 for statistics and definition of arrears rate). In 1983/84 Grameen Bank's arrears rate was 1.6 compared to 11.7(SFDP) and 39 (SFCIs). These high repayment rates have contributed to Grameen Bank's ability to cover costs and sometimes even make a profit (given its access to low cost credit--see Table 7). SFCIs, in contrast, have made few investments in ID. Their average overdue rate of 39 percent—which results from political pressures for loan distribution and lack of specialized

---

11 This profit figure is complicated by the fact that GB has access to low-cost credit (2.0-3.0 percent a year), but, as discussed above, it is currently going through a period of substantial expansion which may justify the subsidy on infant industry if not equity grounds.
Table 2  Administrative costs in relation to arrears rates, 1984

<table>
<thead>
<tr>
<th></th>
<th>Grameen bank</th>
<th>Small farmers' programme</th>
<th>Nepal</th>
<th>Average of 38 third world schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative costs as a % of total lent out</td>
<td>12.3</td>
<td>7.6</td>
<td>4.68</td>
<td></td>
</tr>
<tr>
<td>Arrears rate</td>
<td>1.6</td>
<td>11.7</td>
<td>39.00</td>
<td></td>
</tr>
</tbody>
</table>


Table 6  Comparison of indicators of internal efficiency

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Arrears rate (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFDP, Nepal</td>
<td>4.5</td>
<td>16.2</td>
<td>25.1</td>
<td>26.6</td>
<td>10.8</td>
<td>13.0</td>
<td>13.6</td>
<td>17.8</td>
</tr>
<tr>
<td>Grameen Bank (a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh (b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Profitability (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFDP, Nepal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grameen Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Arrears rate for a give period is
\[
\text{Amount overdue} \times 100
\]
for repayment.

The arrears rate is equal to 100% minus the repayment rate. For the Grameen Bank arrears statistics are published in two forms: (a) the proportion of loan recipients who had not paid back their entire loan after one year (the standard term of a Grameen Bank loan); (b) the standard arrears rate which is described as a "regularity of repayment" index.

Table 7 Profit and loss accounts, 1984-86

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount 1984 (TK million)</th>
<th>Amount 1985 (TK million)</th>
<th>Amount 1986 (TK million)</th>
<th>As share of loans and advances 1984 (percent)</th>
<th>As share of loans and advances 1985 (percent)</th>
<th>As share of loans and advances 1986 (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>35.38</td>
<td>65.69</td>
<td>89.90</td>
<td>19.9</td>
<td>26.7</td>
<td>27.1</td>
</tr>
<tr>
<td>Loan operation</td>
<td>23.39</td>
<td>35.56</td>
<td>43.91</td>
<td>13.2</td>
<td>14.5</td>
<td>13.2</td>
</tr>
<tr>
<td>Other operations</td>
<td>11.99</td>
<td>30.13</td>
<td>45.99</td>
<td>6.8</td>
<td>12.2</td>
<td>13.9</td>
</tr>
<tr>
<td>(investments in fixed- and short-term deposits)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditures</td>
<td>31.13</td>
<td>65.27</td>
<td>90.99</td>
<td>17.5</td>
<td>26.5</td>
<td>27.4</td>
</tr>
<tr>
<td>Cost of funds for loan operation</td>
<td>8.10</td>
<td>14.19</td>
<td>11.94</td>
<td>4.6</td>
<td>5.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Cost of funds for other operations</td>
<td>7.86</td>
<td>15.43</td>
<td>19.09</td>
<td>4.4</td>
<td>6.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Cost of administration of loan operation</td>
<td>15.17</td>
<td>35.65</td>
<td>59.96</td>
<td>8.6</td>
<td>14.5</td>
<td>18.1</td>
</tr>
<tr>
<td>Profits</td>
<td>4.90</td>
<td>0.46</td>
<td>-0.75</td>
<td>2.8</td>
<td>0.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Loan operations</td>
<td>0.12</td>
<td>-14.28</td>
<td>-27.99</td>
<td>0.1</td>
<td>-5.8</td>
<td>-8.4</td>
</tr>
<tr>
<td>Other operations</td>
<td>4.13</td>
<td>14.70</td>
<td>26.90</td>
<td>2.3</td>
<td>6.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Sundry income</td>
<td>0.65</td>
<td>0.05</td>
<td>0.34</td>
<td>0.4</td>
<td>.</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Sources: Grameen Bank, Annual Report, 1984-86; Mahabub Hossain (February 1988).
knowledge about borrowers' working environment-forces them to put heavy financial demands or government to compensate for the bad debt.\textsuperscript{12} Second, investment in institutional development activities has allowed Grameen to be highly successful in targeting low income, disadvantaged groups--particularly women, who are usually missed by traditional credit schemes. For Grameen, this group is defined as persons belonging to households that own less than 0.5 acre of cultivable land. A 1985 field survey of 975 randomly selected borrowers showed that only 4.2 percent of the borrowers belonged to nontarget-group households (Hossain 1988:44).

It is also important to point up that institutional investments can have declining cost structures which may justify Grameen's access to subsidized credit. Start up costs have accounted for over half of Grameen's administrative costs. Banks that have been in operation from six months to a year have had expenses that account for 16.2 percent of outstanding loans. After banks have been in operation for more than three years, this figure drops to 5.7 percent (see Table 8).

There are an additional set of non-financial benefits, or positive externalities, that are associated with institutional interventions that are difficult to quantify. For Grameen, credit has served as a catalyst for

\textsuperscript{12} Mosley and Dahal argue that if the credit institutions he analyses were to charge an interest rate to borrowers that covered the cost of their bad debt: Grameen would have to charge 19% as opposed to the 16% it currently charges, SFDP would have to charge 28%, and farm credit institutions would have to charge 88%. These figures are based on the following formula:

\[
\frac{(1+a+p)}{1-p} = \text{interest rate that will cover costs}
\]

\(p\) = the probability of financial loss
\(a\) = administrative costs
\(i\) = the interest rate charged to banks which is estimated to be 10%
Table 8  Unit costs of operation of bank branches, by age of branch, 1984/5

<table>
<thead>
<tr>
<th>Age of branch</th>
<th>Salary and Allowances</th>
<th>Other expenses</th>
<th>Total expenses</th>
<th>Amount of loans outstanding w/ borrowers</th>
<th>Expenses as share of outstanding loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 6 months</td>
<td>30.8</td>
<td>9.6</td>
<td>40.4</td>
<td>165</td>
<td>24.5</td>
</tr>
<tr>
<td>6 months to 1.0 year</td>
<td>46.0</td>
<td>13.0</td>
<td>59.0</td>
<td>365</td>
<td>16.2</td>
</tr>
<tr>
<td>1.0-1.5 years</td>
<td>72.8</td>
<td>15.8</td>
<td>88.6</td>
<td>1,041</td>
<td>8.5</td>
</tr>
<tr>
<td>1.5-2.0 years</td>
<td>87.8</td>
<td>17.8</td>
<td>105.6</td>
<td>1,576</td>
<td>6.7</td>
</tr>
<tr>
<td>2.0-2.5 years</td>
<td>94.0</td>
<td>19.6</td>
<td>113.6</td>
<td>2,015</td>
<td>5.6</td>
</tr>
<tr>
<td>2.5-3.0 years</td>
<td>100.8</td>
<td>18.8</td>
<td>119.6</td>
<td>2,198</td>
<td>5.4</td>
</tr>
<tr>
<td>More than 3.0 years</td>
<td>107.6</td>
<td>20.8</td>
<td>128.4</td>
<td>2,259</td>
<td>5.7</td>
</tr>
</tbody>
</table>

**Source:** M. Hossain (1988)
broader interventions (Hossain 1988:27). It has introduced "Sixteen Decisions" which are aimed at trying improve poor people's quality of life through such things as investment in the improvement for housing and education of children, use of latrines and safe drinking water for better health, and rejection of dowry in marriages. Many of these interventions are also aimed at trying to improve poor people's perception of themselves in society by, for example, eliminating dowry and increasing their access to information and income generating potential. These considerable social and psychological benefits accompany programs that emphasize socially oriented activities such as participation, groups organizing, and local resource mobilization. Yet these are usually left out of cost benefit analyses since it is difficult to quantify the benefits of, for example, reductions in the incidence of dowry.

These cases should not suggest that investing in ID will always produce higher private rates of return. Indeed, the credit and irrigation sub-sectors may be especially well-suited for ID investment. They have clearly identifiable users and benefits, and therefore, are less prone to problems of collective action (for example, free ridership) (Uphoff 1986b:26). This probably reduces administration costs. In sub-sectors such as forestry or rangeland management, however, where beneficiaries and resources are more difficult to identify and distribute (Uphoff 1986b:23-29), the returns to ID investment may decrease as group organizing and management costs increase. Whether these financial and administrative costs outweigh the benefits will vary sectorally and regionally.
One of the main arguments against institutional development strategies is that they cannot be scaled up to reach large numbers of poor people without sacrificing their effectiveness and participatory elements. There is growing experience, however, that this tradeoff may be more relevant among certain types of organizations than it is in others. Moreover, many of the private, nongovernmental, and public institutional examples cited in this essay are not particularly small and have expanded into nationwide, or regionwide programs.

In her review of Livelihood, Employment, and Income Generation: Nongovernmental Organizations (NGOs), Judith Tendler (1987:38) describes how the low impact and lack of replication of some NGO programs has to do with certain "diseconomies of scale" affecting their expansion. These diseconomies take the following form: a) NGOs that rely on local ethnic, religious, or other social homogeneity for success cannot be expanded easily; b) since NGOs compete for funding they seek to "differentiate their product" from "competitors", which acts as a strong disincentive for exchanging ideas; c) because of conflicting objectives—real or perceived, the potential for government/NGO cooperation and interaction may be limited; and d) NGOs do not face pressures to reach large numbers of persons, in contrast to the public sector that must respond to public opinion.

As a result of these diseconomies, Tendler concludes that the path to replication of successful NGO experiments to nationwide problems of poverty and unemployment can be quite limited. This does not mean, however, that a large number of small and medium scale NGOs could not have a large impact in the aggregate. For example, 44 percent of farmers in Zimbabwe belong to some...
kind of voluntary organization (Bratton 1986:122). Moreover, there is growing
incidence of government, private sector, and NGO coordination and cooperation
which has allowed NGOs to have a more significant impact. For example, the
Zimbabwean Savings and Development Foundation (SDF) works with ministries and
private firms to support increased agricultural production to reach an
estimated 250,000 small-holders, most of whom are women (Brown and Korten
1989:21). (For a more detailed discussion of SDF see Annex 4)

Other kinds of pro-poor institutions have also achieved
significant scales. Large institutions that are effective at reaching the
poor are frequently decentralized, however, particularly when they are doing
more than service delivery activities. This decentralization can be a
critical part of their success. In the public sector Badan Kredit Kecamata
(BKK) credit program in Indonesia, for example, each local BKK bank is an
independent unit, not a bank branch. Regional development banks supervise,
but do not run, the local units. Through this arrangement, the BKK has
succeeded in servicing 35 percent of central Java's 8,500 villages with almost
500 subdistrict BKK units and 3,000 village outposts (WDR 1989:120).

COMPATIBILITY WITH TRADITIONAL PROJECT FRAMEWORKS

Although analysis of institutional aspects of poverty reduction
has received increased attention over the last few years, it is probably fair
to say that institutional development has been less successful in making in-
roads into project implementation and design (Chopra 1989:15). This lag stems
in part from the fact ID requires some alterations in the way projects are
traditionally conceptualized, implemented, evaluated, and funded. But this
does not imply that projects, per se, are incompatible with ID. Indeed, the
USAID ARIES project supports ID by providing resources to intermediate institutions to enhance their capacity to serve small and micro-entrepreneurs, and many examples of additional successful ID projects are cited in this paper. Nevertheless, the four issues highlighted below continue to prevent institutional development interventions from becoming integral components of many poverty projects.

First, institutional development requires a relatively long-term perspective (Chopra 1989:15-16). ID projects may be initiated in traditional four to seven year project time frames, but this is rarely long enough to achieve institutionalization, especially when interventions are intended to change behavior (for example, involving women in agricultural expenditure) or performance incentives (for example, bureaucratic reorientation). Considerable progress can be made in a short period, however. Significant improvements in water distribution and operations and management were made in the Gal Oya irrigation project in the first three years. But, project designers and implementers should not expect a revamped, committed, pro-poor Irrigation Ministry after only seven years. They should expect to see a transforming bureaucracy. As the NIA experience suggests, there may be some advantages to experimenting first in pilot areas (1975 to 1979) and then expanding to a larger scale based on that experience (by mid-1986 NIA's participatory program covered 35,000 hectares in sixty-eight provincial offices up from twenty-four in 1981).

Second, many projects use blueprint design methods. Yet the learning process approach, critical to many institutional investments,  

---

13 ARIES stands for Assistance to Resource Institutions for Enterprise Support.
requires that there be mechanisms for feedback to allow project designs to evolve and change. For example, one of the issues raised by the World Bank's Operations and Evaluation Department in their review of rural development projects (World Bank 1988:51) was the restrictiveness of the traditional project appraisal process. This blueprint procedure tends to be inflexible; implementers adhere to project designs which may not accurately reflect local conditions. The OED suggests that although the need for a definitive appraisal is associated with the banking and "bankability" notion of financing, it may be at odds with some realities of sustainable rural development. In contrast, they present an alternative to the one-time appraisal which allows for continued appraisal and reappraisal. This learning process approach has had considerable success in the World Bank-assisted Aga Khan Rural Support Program in the Northern Pakistan.

Third, donors face considerable pressure to disburse funds. But over-funding can undermine ID initiatives when institutions attempt to expand too quickly beyond their organizational and management capacities. For example, when the Voluntary Agencies Development Assistance (VADA), a Kenyan NGO, received a $12 million dollar grant from a bilateral donor, the organization's staff were diverted from delivery of management services for rural development to devising internal management procedures to satisfy donor demand for financial oversight (Bratton 1988:19).

Fourth, evaluating and designing ID can be a complicated undertaking. Results may be neither immediate nor quantifiable making assessment difficult. Moreover, how does one, for example, document the benefits of, or design a well-trained, committed, effective manager? Yet these qualitative features are critical to project effectiveness (USAID
1989a:72). Primarily for these four reasons—the need for a longer term perspective, the tendency to use blueprint designs, the pressures to disburse money, and the complications ID poses for evaluation and design—mainstream poverty-oriented projects have rarely incorporated ID interventions in a systematic way.

**DECENTRALIZATION**

The centralized/decentralized\(^{14}\) dichotomy frequently posited in development management is misleading. Some pro-poor institutional development activities can be quite centralized (for example, building central power systems) while others may be highly decentralized (for example, local level NGO activity in group organizing). But for most programs, a combination of central and local level input will be required. For example, resources accumulated locally will probably have to accompany training, funding, and technical assistance provided centrally for effective sustainable poverty reduction. The limitations of using strictly local funds is exemplified in the case of North Yemen. When the central government, motivated primarily by budget constraints, transferred development administration to Local Development Association (LDAs), only limited objectives were achieved. The LDA could only handle very simple projects, once projects were expanded they failed because of lack of sufficient training and technical skills that

\(^{14}\) Traditionally, decentralization has referred to a devolution of power from the central government to local authorities or a deconcentration of power from central administrators to local level civil servants or semi-autonomous government agencies. In addition, it sometimes refers to the process of allowing non-governmental and/or private organizations to channel resources to local levels. See Uphoff (1986b:221-227) and Leonard (1982:28-34) for paradigms of decentralization.
potentially could be provided by central authorities (Hage and Finsterbusch 1987:207-213).

The problem, then is to identify what combinations of central and local support are required and how the responsibilities between the two should be allocated (Bryant and White, 1982:155-157). Under this type of scenario what is needed is not power for either central government or local organizations but complementary strength in both (Leonard 1982a:193). Many of the examples used in this paper (for example, the NIA and Gal Oya irrigation schemes, the Grameen and BKK Banks, the Saving Development Foundation of Zimbabwe, and the rural water supply projects in Kenya and Malawi), demonstrate potential for and effectiveness of complementary and coordinated central, intermediate, and local efforts. Decentralization may pose political as well as administrative problems for governments. The political feasibility of ID is discussed below.

POLITICAL FEASIBILITY

ID is not inherently threatening to governments for it does not overtly redistribute wealth like land reform policies do. But the political ramifications of a development strategy that promotes institutional pluralism and local level representation may make it unpalatable for some governments or local elites because it could alter local and national power structures. One need not look far to find cases of government repression of participatory grassroots organizations (for example, the Ruvuma Development Association, a grassroots NGO forced to liquidate by the Rwandan State) or local elite usurpation of benefits supposedly targeted for the poor (the outcome a significant proportion of small farmer credit schemes).
Institutional development initiatives could, however, increase political parties' or governments' constituencies by bringing more people into the political process. This, in turn, can improve parties' and governments' chances for maintaining or gaining access to power. Evidence of parties that seek to broaden their support base by including the poor are plentiful in competitive political systems. Examples include the British Conservative Party's courting of blue collar workers by enfranchising them in the electoral reform of 1867 which contributed to Conservative electoral victories in the latter part of the 19th century; Rajiv Gandhi's recent efforts to strengthen the system of Panchayati Raj which is meant to devolve power to village level councils; and efforts by the Christian Democrats in Guatemala to recruit support from the Rural Labor Unions. In addition, governments can get a lot of political mileage out of policies that appear to help the poor and increase participation (Tendler 1989:139-141). Therefore, ID may actually seem attractive to governments seeking to increase their support base.

Moreover, although poverty-oriented ID requires decentralizing administration, it does not necessary demand devolution of power from the central government (Leonard and Marshall, 1962). For example, the decentralized and influential Kenyan Tea Development Authority has not wrested power away from the central government (Lamb and Muller, 1982) any more than the community development movement in Korea reduced President Park's national control (Yoon 1985). Whether governments fully grasp ID's political potential or are able to decentralize without devolving, however, is an unanswered question.

It is also important to recognize the serious political and economic costs associated with anti-poor development. First, the poor can
exit either physically or economically from society which can have deleterious consequences for political leadership. In Ghana between 1970-1980, for example, destructive pricing and institutional policies led farmers to either leave the country (many found refuge in Nigeria only to be ousted in 1982 when oil prices dropped) or revert back to near-subsistence agriculture. This led first to a dramatic drop in agricultural output and government revenues and then to a successful coup d'etat.

Second, the poor are increasingly finding new means for political expression which are difficult for governments to ignore. In his article, \textit{What is not the Same About the Urban Poor}, Sheldon Annis describes the political movements that have risen from the urban slums and created a real bartering structure through which the poor can engage the state (Annis 1988:143). The most recent example of the poor's political leverage in Mexico City is led by a Robinhood-like character called Superbarrio who, dressed in yellow tights and a red-cape, gains concessions from government with media and poor urban slum dweller support.

Third, there is evidence that capricious terrorism is also becoming a weapon of the poor and giving national or local leaders some cause for concern as evidenced by the NPA in the Philippines, the JVP in Sri Lanka, and the Naxalites in Eastern India. Given the political possibilities that accompany ID strategies and the potentially damaging consequences of ignoring the poor, ID may be politically feasible.
IV. SUMMARY AND CONCLUSIONS

This paper has attempted to demonstrate three main points. First, institutional development is critical to effective, sustainable poverty reduction and growth. This statement is based on development experience which strongly suggests that economic policies alone cannot overcome the economic, political, and cultural hurdles that prevent resources from adequately reaching the poor, and development interventions that ignore institutional considerations are often unsustainable.

Second, although there is no one model for poverty-oriented ID and ID initiatives will vary considerably cross-sectorally and cross-nationally, a number of important lessons have been learned about successful institutional development initiatives which can be delineated as six broad components. They include elements that are concerned with countries' broad institutional structures—forming or strengthening local institutions and supporting institutional pluralism and components that describe specific institutional characteristics—institutional linkages, organizational structure and managerial leadership, the learning process approach, and participation and local resource mobilization. These components emphasize flexibility, adaptability, and the need for poor peoples' involvement in programming.

Third, the paper has argued that although ID initiatives have faced considerable criticisms of cost, scale, compatibility with traditional project frameworks, decentralization, and political feasibility, these objections may be unwarranted or overly skeptical of ID's viability and potential. The paper uses case studies from different productive sectors and sub-sectors to support these propositions, and to illustrate what the various components look like in practice.
Governments that are willing to encourage this kind of competition and coordination among institutions are much more likely to endorse the ID interventions suggested above than those that prefer to maintain exclusive control over poverty programs. Although some of the newly industrializing countries achieved rapid growth by combining central level planning and decision-making with local resources, there are a number of features unique to the NIC experience which would make replication difficult in, for example, Latin America or Africa. In contrast, many countries that have pursued "top down" development have faced heavy economic and political costs as a result, especially in the productive sectors.

Poor people are not merely passive recipients of government policy: they respond strongly to incentives and disincentives which should cause nonpoverty oriented governments some cause for concern. Given these realities, from both a political and an economic perspective, poverty-oriented institutional interventions should figure centrally in development that promotes poverty reduction.
Evidence from impact evaluations (IE)--evaluations done appropriately five years after project completion--demonstrates the costs of not investing in indigenous institution. When IEs were undertaken on twenty-five agriculture and rural development projects, evaluators found that only twelve out of the twenty-five appeared to have successfully achieved long-term sustainability (World Bank 1985). In "Farmer Organizations and Institution Building for Sustainable Development" Michael Cernea (1987) analyzes this data and illustrates the strong association that exists between economic sustainability and institutional development and the need for organizational structures at the farmers level. He finds that in the projects which failed to achieve sustainability, institutional development objectives were notably lacking from the outset in the project design. Conversely, the sustainable projects had in common a clear attempt by design, to enhance the institutional capacity in some form.

This contrast is exemplified by two World Bank assisted projects, the Muda Irrigation Project in Malaysia and the Hinvi Agricultural Development Project in Benin. In the Muda Irrigation project, careful and patient efforts were made to build local water users' organizations. The project took into

---

15 The 25 projects were composed of: irrigation (8), livestock (2), perennial crops (5), area development (4), land settlement (2), forestry (2), and agricultural credit (2).

16 Sustainability was defined economically to mean the maintenance of an acceptable net flow of benefits from the project's investments after its completion i.e. after the project ceased to receive World Bank financial and technical support. The standard for determining economic sustainability has been to assess whether the economic rate of return (ERR) was equal to, or greater than, the opportunity cost of capital.
account farmers' resource needs, their willingness to cooperate, and the physical location of their plots as the criterion for owner association. The evaluation concluded that the project's success in increasing its flow of benefits during the post-completion period was attributed more to grassroots institutional development and to endurance of farmers' users' organizations than to any other single cause.

In contrast, the negative rate of return at the time of the impact evaluation of the Hinvi Agricultural Development Project was basically caused by the disintegration of a cooperative network that had been designed as the institutional support for project-prompted activities. The networks broke down because the cooperatives imposed on farmers by a parastatal and capacity for local management was not established. The technical/agricultural package financed and promoted through the project failed to take account of the socioeconomic practices, the traditional land tenure systems, and the cultural behavior of the area farmers. The farmers opposed the organizational arrangements imposed upon them, and when these collapsed, the technical innovation (cultivation of palm oil) collapsed as well. By 1983, seven years after project completion, more than 74 percent of the membership had opted out of the system, refusing to work in cooperative blocks. The farmers returned to cultivating food crops for subsistence and the project's investments were largely lost.

A similar conclusion was derived from a settlement project in Senegal's Terres Neuves, which created several new settlements. Although the new settlements did achieve temporary increases in settler income levels, the overall results were less than expected. The unsustainable outcome was traced to the fact that the settlers did not establish their own organization in the
new settlement. When the strong and active executing agency withdrew from the area following completion, it left an "organizational vacuum" that the national level institutions could not fill. As a consequence, growing settlement area needs and for services (for example, input distribution, credit, marketing, and maintenance) were not met. Since the settlers had not established local organizations there was no institution to take over these functions. The project had not been concerned with organizational development measures to create the capacity necessary for self-sustained management of the technical packages proposed for the area. As a result, the main technical and economic objects--increasing production through the introduction of intensive farming techniques and by diversifying the traditional cropping pattern--were not achieved on a continuing basis.
ANNEX 2

Farmer/Agricultural Research/Extension Linkages

Recognizing the need for linkages, the World Bank has worked to set up the Training and Visit (T&V) system with the hopes of fulfilling a number of important objectives. They include: a) establishing a clear line of command from the head of the agricultural ministry down to the field extension staff; b) ensuring that village extension workers (VEW) work on extending a set of simple messages developed by the research establishment to guide each field season's crop production—emphasis has been placed on regular visits to "contact farmers" in villages; and c) institutionalizing a strong and direct linkage between agricultural research and extension by matching the research-to-farmer extension process with a farmer-to-researcher feedback loop.17

In India the revised agricultural extension system, now operative in 17 states, has by and large been able to achieve two major objectives, establishing direct lines of command and delivering messages. These objectives are dependent on the efficient functioning of control linkages (for example, delivery of inputs). They require that information from the center (or research station) actually reaches the farmers. These type of linkages are sufficient for delivering technologies that are robust and usable in a wide range of conditions (for example, some handpumps and high yielding crop varieties). But they are inappropriate for other technologies that require two-way information flows between farmers to researchers (that is,

technologies are dependent on location-specific information for their development).

The T&V system in India has been relatively less successful in achieving the hoped for feedback loop where VEWs would relay farmers' problems back to the scientists and thereby influence the research agenda towards solutions to location specific problems. This results, in part, from the fact that the system has as yet been unable to develop strong responsive mechanisms, or assistance linkages (for example, representation), that communicate farmers' problems to researchers. Since most technologies developed by the research establishment and delivered through extension tend to be for irrigated conditions with little attention to production costs or to the role of the particular crop in the overall farming system, poor small and marginal farmers cultivating rainfed land benefit the least from these technologies (Women in Development Division 1989a:60).

The poor may, in some instances, gain more from farming systems research (FSR) which gives greater emphasis to farmers input into the development of appropriate technologies (assistance linkages). Farming systems research is holistic: it takes into consideration the entire farming system which includes, for example, the availability of inputs, cropping patterns, and the heterogeneity of resources employed (for example, land may be differentiated by quality, or labor may be provided by men, women, and children). FSR requires on-farm research and experiment station research. A two-way information flow should exist between on-farm research and experiment station research since information generated by on-farm research is important for guiding experiment-station research (CIMMYT Economic Staff 1984:368). For example, information about farmers' circumstances from on-farm experiments may
indicate the variety that performs well under local conditions and that meets farmers' preferences for varietal maturity, yield, storage quality, and cooking quality. In FSR, therefore, the focus is on linkages between farmers and researchers that allows for the representation of the farmers' interest. It is not on tight control over experimentation. Indeed, FSR trades control for relevance to local conditions to an extent that is unusual in traditional research (Anderson, 1988:41).

One example of farming system research that takes into consideration cropping patterns, heterogeneity of labor force (in this case, women farmers) and local community groups with positive consequences for productivity is the Rural Women's Agricultural Development Project in Bihar, one of India's poorest states. In this project the Bisra Agricultural University has deployed Women Project Development Officers (WPDOs) to work in close coordination with the University's Farming Systems Research Project. Since the aim of the FSR project is to find ways to improve the income of the poor tribal families in the drought-prone Chotanagpur plateau, the WPDOs focus their work on ways to enhance the agricultural productivity of the tribal women. From tribal backgrounds themselves and already trained to the post-graduate level at the Xavier Institute of Social Sciences, the WPDOs receive further training to improve their knowledge of agriculture and have served as a vital sources of feedback to the scientists at Bisra Agricultural University. Extending new technologies suggested by the scientists to Mahila Mandals (women's groups) established in each village, the WPDOs have helped the women take up lucrative vegetable gardening using simple dug wells to provide irrigation during the dry season. A study of farming families covered by the program shows an increase in cropping intensity to almost 50 percent
between 1981 and 1987. Annual household income has increased five-fold—from an average of Rs. 3,000 to Rs. 14,990—in the same period (Singh and Baha, 1988 cited in Women in Development Division 1989a:64).
ANNEX 3

Participation Examples

1. Irrigation

The need for participation in programs requiring collective action is dramatically illustrated in the Gal Oya irrigation system in Sri Lanka. The introduction of participatory irrigation associations in this project helped to transform a conflict-ridden resettlement scheme and a run-down irrigation system that served few downstream farmers, into a more cohesive farming community which cooperated with each other and with engineers for effective water distribution and canal maintenance over a much broader area, almost doubling water use efficiency (Uphoff, 1987:201-219). This effort, funded by USAID, built on experience in introducing participatory irrigation management in the Philippines.

2. Credit

Malawi also offers a striking example of participation in credit, which indicates that the functioning of credit cooperative depends upon the way the system is organized and promoted. In response to the complete breakdown of their multipurpose, top-down, cooperative system, the Malawian government launched a group lending program based on the Grameen Bank model of group lending which has resulted in one of the most successful programs of its kind (Fedor and Huppi 1989:30).

The Working Women's Forum cooperative in Madras India, is totally managed by the members themselves who act as shareholders and directors. Anyone interested in joining the forum must become a member of a neighborhood loan group which are made up of 10-20 women. Forum members and staff continually hold group meeting and discussions to acquaint women with the
program. A usual pattern is for a potential leader to approach a Forum staff member. She is told to bring together a group of 10-20 women and explain to them how the forum works. When a sufficient number have committed themselves, they elect a leader. Once a neighborhood group is organized it is registered with the Forum. Each member then files an individual application form and pays a membership fee (Chen:6-7). Members are required to attend group meetings, repay loans consistently, and act as a mutual guarantor for the loans of all group members. Under this system the WWF has been able to achieve a recovery rate of between 90 and 95%, which can be contrasted with the national average for commercial banks of only 30-40% (Arunachalam:5).
Saving and investment with NGO, private and public cooperation

The Saving and Development Foundation (SDF) of Zimbabwe pioneered a simple method of savings small amounts of money by households organized into neighborhood groups and devised a financial record-keeping system accessible to non-literate people. As a result, groups members—numbering about 250,000 in 1985—now save enough money to place bulk orders for fertilizer and seed. Rural women thereby increase their financial independence and modernize their farming skills.

The partnership involves the Ministry of Community Development and Women’s Affairs, whose field staff are trained by SDF to teach the saving methodology and the Ministry of Agriculture, who extension agents are linked by SDF to groups that require technical services. The partnership has also involved a private fertilizer company to finance the production of training materials. The company’s sales to peasant farmers have increased as a consequence of increased savings. By the mid-Eighties this innovative, low-cost, and participatory approach to raising agricultural production among the rural poor had become firmly institutionalized in Zimbabwe as a trilateral partnership between the public, private, and voluntary sectors.
Bibliography

GENERAL


Pradan. "Pilot Project for Improving the Effectiveness of Rural Development and Poverty Alleviation Programmes at the Block Level".


_____ 1987. "Development Thought, Development Assistance and Assistance Impact", University Graduate Faculty of Economics Lecture Series No. 2, Oregon State University, November.


Therkildsen, Ole. "Participation in Rural Water Supply: Experiences from a Danish Funded Project in Tanzania", Copenhagen, Denmark: Centre for Development Research.


_____ 1986. Improving International Irrigation Management with Farmer


Department, Washington, DC: World Bank.


Case Studies in Rural Water Supply


"Kwale: A Model in Project Sustainability and Replicability".

Lesotho. "Private Sector".


Tanzania. "Village Financing of Local Maintenance: The Case of
Tanzania".


**CREDIT MICROENTERPRISE**


Everett, Jana and Mira Savara. "Institutional Credit for Female Petty


Olivares, Martha. 1985. "An Urban Credit Program - The Case of the
Association for Development of Microenterprise (ADEMI), Dominican Republic".


Von Pischke, J.D. "RoSCAs: State-of-the-Art Financial Intermediation".


Huppi, Monika and Gershon Feder. 1989. "The Role of Groups and


USAID, Dhaka.


_________. 1989b. Sub-Saharan Africa - From Crisis to Sustainable Growth.


AGRICULTURE


in Agricultural Development", in John P. Lewis et al. Strengthening the Poor: What Have We Learned? U.S.-Third World Policy Perspectives, No. 10, Overseas Development Council, Washington, DC.


<table>
<thead>
<tr>
<th>WP Series</th>
<th>Title</th>
<th>Author(s)</th>
<th>Date</th>
<th>Contact for paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPS607</td>
<td>Abolishing Green Rates: The Effects on Cereals, Sugar, and Oilseeds in West Germany</td>
<td>Donald F. Larson, Simon Glance, Brent Borrell, Merinda Inge, Jonathan Coleman</td>
<td>March 1991</td>
<td>D Gustafson 33714</td>
</tr>
<tr>
<td>WPS612</td>
<td>Education and Productivity in Developing Countries: An Aggregate Production Function Approach</td>
<td>Lawrence J. Lau, Dean T. Jamison, Frederic F. Louat</td>
<td>March 1991</td>
<td>WDR Office 31393</td>
</tr>
<tr>
<td>WPS614</td>
<td>Accountability in Public Services: Exit, Voice, and Capture</td>
<td>Samuel Paul</td>
<td>March 1991</td>
<td>F Madrona 37496</td>
</tr>
<tr>
<td>WPS615</td>
<td>Socialist Economic Growth and Political Investment Cycles</td>
<td>Heng-fu Zou</td>
<td>March 1991</td>
<td>A Bhalla 37699</td>
</tr>
<tr>
<td>WPS616</td>
<td>Optimal Nonlinear Income Taxation for the Alleviation of Poverty</td>
<td>Ravi Kanbur, Michael Keen, Matti Tuomala</td>
<td>March 1991</td>
<td>J Sweeney 31021</td>
</tr>
<tr>
<td>WPS617</td>
<td>International Poverty Projections</td>
<td>Sudhir Anand, Ravi Kanbur</td>
<td>March 1991</td>
<td>J Sweeney 31021</td>
</tr>
<tr>
<td>WPS619</td>
<td>Foreign Direct Investment in Sub-Saharan Africa</td>
<td>Laurence Cockcroft, Roger C. Riddell</td>
<td>March 1991</td>
<td>S King-Watson 33730</td>
</tr>
</tbody>
</table>