
Chapter 4

OTA's Findings About **ADF-Funded Projects**

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Chapter 4

OTA's Findings About ADF-Funded Projects

SUMMARY

- The four critical issues addressed here are participation, results, sustainability, and replicability (table 4-1). These issues were chosen because of their importance to ADF's mandate and the interests of the congressional committees that requested this work.
- One-half of the 12 African groups visited by OTA teams were judged to have a high degree of overall participation in the ADF-funded project activity; one-third, however, were rated low on participation. In a majority of projects, participants did not share in evaluation and financial decisionmaking and women rarely participated in project management.
- Most of the projects visited were in early stages of implementation so OTA's teams estimated future results when possible; actual impacts could be observed in only half of the projects. Ten projects were judged likely to have a positive impact on the social and economic development of the poor in the locale. But the level of expected impact ranged from significant to negligible.
- Eleven ADF-funded activities had a high or moderate potential to be sustained over the next 3 to 5 years, although not necessarily in the same form as in the approved proposal. Community support and the self-help nature of the projects were the strongest reasons for sustainability. But the lack of careful economic and environmental planning were common constraints threatening sustainability, especially in the longer term.
- Ten of the projects had a moderate or high degree of replicability in the region or country but two were rated low. Self-help processes were judged more replicable than many of the technologies used. The relatively high cost of the technologies involved was a major constraint to replicability of project activities.

Table 4-1.—Rating the Critical Issues in 12 ADF Projects

Critical issue	No. of projects rated		
	High	Moderate	Low
Overall degree of participation	6	2	4
Overall results	4	6	2
Overall sustainability (for next 3 to 5 years)	6	5	1
Overall replicability in region or country	3	7	2

INTRODUCTION

This chapter examines the results of site visits to 12 ADF-funded projects (table 4-2). It is organized around the four critical issues that Congress asked OTA to investigate: participation, project results, sustainability, and replicability. In each case, ADF's approach to the issue introduces the discussion. Then OTA's operational definitions follow, along with the overall and detailed findings. The final section con-

siders links between these issues and their relationship to ADF's funding program. Detailed descriptions of these projects are in appendix B. Since these projects were selected to be representative, chapter 5 discusses the implications for ADF's program and gives suggestions about how ADF can improve the effectiveness of its funding program.

Table 4.2.—The 12 ADF Projects Visited by OTA Teams

Name of project ¹	Name of recipient organization	Country	Type of recipient organization	Project scope ²	Project grant amount	Proposal submitted	FY grant committed	Grant period (FY to FY) years	First check disbursed	No. of participants (groups)	Type of activity offered by ADF grant	Intended outcomes
1 Farm Rehabilitation for the Agricultural Society of Dagnare Cooperative (DHC) Grant	Dagnare Agricultural Society	Niger	Intermediary (association of coops)	L	7 255	7/9/85	985	1986-89 3 yrs	3/6/87	660 (3 groups)	Fruit, vegetable, and cereal production	Restore and modernize cooperative irrigated fields
2 Dakoro Herders Cooperative (DHC) Grant	Dakoro Herders Cooperative	Niger	Grassroots	L	108 275	1/24/86	987	1987-90 3 yrs	8/86	74	Livestock production, literacy, small enterprise creation	a. Develop project plan b. Reconstitute livestock herd, repair well, and increase self-sufficiency
3 Equipment to Strengthen the Agricultural Activities of the Association	Youth Association of Ross-Belgio	Senegal	Grassroots	L	58 639	2/86	986	1986-91 5 yrs	2/5/86	265	Irrigated agriculture (rice and vegetables)	Increase irrigated rice and vegetable production
4 Union Kaoural	Kaoural Federation of Cooperatives	Tanzania	Intermediary (association of coops)	R	03 832	3/18/86	986	1986-88 2 yrs	8/87	2 076 (25 youth groups)	Fruit, vegetable, cattle, health	Improve group income and health care
5 Integrated Food Development Program	Department of Morogoro	Tanzania	Intermediary (church-based)	L	248 378	2/85	986	1986-89 3 yrs	8/87	106 1986/87 521 1987/88 (27 parishes)	Credit for inputs, tractor hire, maize production	Increase maize production
6 Conservation Education Project	Kikafiri Village Malihai Club	Tanzania	Intermediary (PVO)	L	4 000	3/30/86	986	1986-87 1.5 yrs	4/24/87	900 families	Water supply, forestry	Improve water supply, and reforestation
7 NGK Self-Help Water Project	Gtero Self-Help Water Project Committee	Kenya	Grassroots	L	1 000 000	12/24/84	985	1985-87 2 yrs	5/22/85	250 families (3 communities)	Water supply (domestic and farming use)	Increase water supply, irrigated land and potable water
8 Kenya Small Enterprise and Credit Training Project	Partnership for Productivity/Kenya (PIP)	Kenya	Intermediary (PVO)	L	4 000	10/84	8/85	1985-87 2 yrs	5/85	2 750 (92 women's groups)	Training, (management) credit	Provide women training and credit for small-scale enterprises and agricultural inputs
9 Poultry-Market Garden Project	Boireko Agricultural Management Association	Botswana	Grassroots	L	15 000	8/84	984	1985-87 2 yrs	4/4/85	0	Poultry, vegetable and citrus production	Develop small scale vegetable and egg production enterprises
10 Tutume Tractor Hire Project	Tutume McConnell Community Trust	Zimbabwe	Intermediary (PVO)	L	40 604	5/30/84	1985	1986-89 3 yrs	9/85	62	Tractor hire	Increase productivity of farmers
11 Zimbabwe Coffee and Tea Project	Agricultural Finance Corporation (AFC)	Zimbabwe	Intermediary (parastatal)	L	537	7/3 84	1985	1986-89 3 yrs	12/24/85	144 1985-86 214 1986-87 (4 coops)	Credit for tea and coffee production	Increase number of coffee and tea enterprises
12 Silvera House Development Fund	Silvera House	Zimbabwe	Intermediary (church-based)	R	20 808	7/10/84	985	1985-88 3 yrs	7-3/85	150 (11 projects)	Farm and nonfarm projects	Improve projects through loans

¹Key: Italics indicate short form of project name used

²Key for project scope: L = Local, R = Regional

SOURCES: ADF project files for columns 1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Throughout this work, OTA makes important distinctions between: a) beneficiary and participant, b) project and organization, c) grassroots and intermediary organizations.

Beneficiary and Participant

Project “beneficiary” and project “participant” are often used interchangeably and vaguely. A beneficiary gains from the project activity; the benefit may be direct or indirect, and intended or unintended (10). Participants take part in or contribute to project activities but they do not necessarily benefit. For example, in one credit project more women have taken part by contributing to local savings clubs than have received loans from them. In other cases, people benefit from projects without participating, such as receiving irrigation water from systems which they did not help build. Participation in project activities and directly benefiting from them are included here in measures of “participation,” but the two are considered separately,

Project and Organization

The term “project” refers to the activity or activities supported by the ADF grant (as described in the approved proposal). The group sponsoring the activity and/or receiving the grant funds is the recipient “organization.” This distinction is especially important when considering sustainability and replicability. Sometimes organizations are sustainable but specific activities are not. Organizational processes may

be replicable but certain activities too site-specific for repetition. OTA’S assessment of these two critical issues included project and organizational elements.

Grassroots and Intermediary Organizations

Grassroots organizations (sometimes called primary or base groups) are defined as “small aggregations of individuals or households who regularly engage in some joint development activity as an expression of collective interest” (11). Most are community-level associations, although they may include members from several communities. Intermediary organizations, or grassroots support organizations, provide services to grassroots groups. One type has professionals in leadership positions; another type consists of higher level membership organizations, such as confederations of cooperatives or associations of community organizations (11). In this assessment, intermediary organizations may refer to national, regional, or local private voluntary organizations (PVOS), church-based groups, associations of cooperatives, or parastatal organizations. OTA visited four grassroots organizations and eight intermediary organizations. The intermediary organizations consisted of three regional PVOS, two associations of village cooperatives, two church-related groups, and one parastatal. Grassroots groups and intermediary organizations are distinguished throughout this assessment.

PARTICIPATION

What is Participation and How Can It Be Measured?

The Foundation’s legislation specifically emphasizes participation, directing ADF to give priority to projects in which community groups foster their own development and which have “the maximum feasible participation of the poor in project initiation, design, implementation, and evaluation.” ADF has translated this

direction into operational criteria. Some of these criteria deal primarily with the timing of participation in the project cycle, others with modes of participation. ADF examines the following components of participation in its project approval and monitoring checklist:

- participation of beneficiaries in project design, implementation, management, and evaluation;

- community members contribute to the project and share in benefits; and
- achievement of project objectives enhances continued participation.

However, ADF recently stated it gives priority to self-determination and local control, allowing recipient organizations to select their own modes of participation (8).

The elements of participation ADF uses in its appraisal checklist were considered appropriate but OTA found that some additional elements were needed for its field assessment. A careful review of ADF's project files identified

a lack of specific ADF data on participation, especially gender-disaggregated data; raised issues about participation in intermediary organizations; and highlighted decisionmaking as a probable critical element of participation (box 4-I). The specific data that field teams collected to evaluate project participation are included in appendix D, "Field Team Methods: The Assessment Materials."

Participation in ADF-funded projects was assessed on the basis of multiple factors. The following were most useful in comparing projects in different regions and in reaching overall project ratings:

Box 4-1.—A Look at ADF's Files: Participation

OTA examined ADF's files of projects related to agriculture and renewable resources to gather information on the way ADF is implementing its congressional mandate for participation. Overall, it appears that ADF has pursued the spirit of its mandate. For example, ADF has hired Africans to represent the Foundation in Africa, Africans provide most of its technical assistance, and African contractors perform its evaluations. Unfortunately, however, ADF does not document how it is increasing the participation of people as decisionmakers in the projects it funds. Existing files lack the data necessary to say if projects are as participatory as Congress intended.

OTA'S review of ADF's files identified these major findings:

1. ADF has little specific documentation to support the Foundation's claims of participation by African community members in project decisionmaking. For example, questions regarding key aspects of participation in ADF's grant application form are vague and seldom answered by applicants. ADF staff say they evaluate participation during the project approval process but do not document it. As a result, ADF has little documentation of the amount and type of participation that occurs.
2. ADF does not make an organized attempt to gather gender-disaggregated data. Therefore, ADF does not know whether women participate fully in project activities.
3. Methods of participation in ADF-funded projects differ according to the type of organization receiving the grant. Grassroots groups, which provide benefits directly to their members, tended to have strong participation by their membership or the members' representatives, sometimes with a special place for community elite. Intermediary organizations, which provide benefits to grassroots groups that pass benefits along to members, seemed to have less participation by potential beneficiaries and more by the groups' Boards of Directors, management, and staff. These differences have as-yet unexamined implications for how ADF assesses participation. Since a significant portion of ADF grants goes to intermediary groups, these implications are significant.
4. Effective participation means participation as a decisionmaker, not only as a beneficiary. For example, women were beneficiaries but not decisionmakers in the Kenya Beekeepers Organization; their needs were ignored, and the project was failing as a result. Women's role as decisionmakers can be problematic because OTA'S data suggest that women tend not to be decisionmakers in projects in which both men and women participate. Again, this is something that ADF needs to address in its work.

SOURCE: Virginia DeLancey, "Aspects of Participation in Projects Funded by the African Development Foundation," contractor report prepared for the Office of Technology Assessment, August 1987.

1. Participation in project identification and design: who originated the project, identified the need, proposed the activity, designed the project, and made technology choices? Were participants consulted, and do they agree to the activity and with the project design?
2. How participatory is the organization receiving the grant: What is the structure of local groups? How do members share in decisionmaking? Do they agree with leaders' decisions, and do members' suggestions result in changes? How, and how often, do intermediary organizations relate to local groups? How are group leaders selected?
3. Who has access to the project: Do participants represent the community? Do women take part? Is any group (ethnic, age, etc.) excluded and why? Who are selected to be participants and how? Do the poorest one-third in the locale and country participate?
4. Participation in decisionmaking, paying costs, and sharing in benefits: What do participants contribute and gain? How do par-

ticipants share in decisionmaking and management of the project?

5. Participation in technical assistance: Who makes initial and ongoing technology choices? Who provides technical expertise and how? Is the process based on two-way communication; is the advice imposed?
6. Participation in project evaluations: Who takes part in evaluation? When and how?

Each project was rated using several aspects of the factors listed above (table 4-3). Then, a rating for overall participation was given to each project. The following factors were given greater weight than others: participant input into decisionmaking; their understanding and support for the project activity; and, in the case of intermediary organizations, the quality of the relationship between the intermediary organization and community groups. The ratings took into account the local context, since the 12 projects took place in varying settings with a variety

Table 4.3.—Rating Participation in 12 ADF Projects

Elements of participation	No. of projects rated		
	High	Moderate	Low
Overall degree of participation	6	2	4
1. Participation in project identification and design			
Input into origin of project	6	2	4
participants identified/agreed to need	7	3	2
participants proposed/agreed to activity	6	2	4
Input into design of project	3	4	5
participants agreed with design	3	6	3
participants made/accepted technology choices	5	3	4
Participants understand and agree with project	6	5	1
2. How participatory is organization receiving the grant?			
local organization	6	4	2
intermediary organization	2	2	4
3. Who has access to the project?			
Participants are representative of community	5	6	1
Women have equitable access to project	4	4	4
4. Participation in decisionmaking, costs and benefits			
Participants share in project management	5	3	4
Members have access to fiscal decisions and records	3	2	7
Women share in project management	1	5	6
Members share equitably in costs and benefits ^b	6	4	0
Women bear equitable share of project costs ^c	3	7	1
Women have equitable share of project benefits ^c	4	7	0
5. Participation in provision of technical assistance	6	2	4
6. Participation in project evaluation	0	1	4

NOTES

^aEight grant recipients visited were intermediary organizations

^bThis refers to equitable share within male or female subgroups. It was too soon to evaluate distribution of project benefits

^cIn one case, in another case, insufficient data was available to judge.

^dIt was too soon to judge in one case

^eIn the other seven projects, participants did not share in project evaluation

of modes of participation, all far from the American cultural context,

Assessing Participation in 12 ADF-Funded Projects

Finding: One-half of the ADF-funded projects visited were judged to have a high overall degree of participation, but one-third were rated low overall.

Six of the twelve groups had a high degree of participation in the ADF-funded project activity (table 4-3). The six represented a wide spectrum of modes of participation. For example, projects rating high in overall participation included a herder group with a traditional hierarchical system of decisionmaking (Dakoro in Niger) and an intermediary organization with several thousand members in nearly a hundred local groups (Partnership for Productivity/Kenya, PfP). Another strong example is the poultry and vegetable growing project by the Boiteko Agricultural Management Association in Botswana, notable because of its open management style. The 10 women members share in all project decisionmaking, the financial report is presented on the blackboard at monthly meetings, and leadership rotates. While technical assistance is provided by a man (the project manager of the ADF grant) and one woman is acknowledged to be "the mother" of the group, training has been provided for all members so they are able to share fully in decisionmaking regarding project activities,

The fact that a third of the projects rated low overall on participation is a serious concern given the importance assigned to participation in the legislation establishing ADF. Two of the low-rated projects appeared to have considerable problems related to participation (Kikatiti in Tanzania, and Union Kaoural in Senegal); interviews at the other two low-ranking projects (Dagnare in Niger, and Tutume in Botswana) raised even more fundamental concerns about their appropriateness for ADF funding explained below. The Dagnare project was rejected twice by ADF's Project Review Committee before it was approved,

Another reason for concern is the trend over time. Of the 12 projects visited, 5 were awarded grants in 1986, 6 in 1985, and 1 in 1984. Yet of the most recent grants, those awarded in 1986, only one of the six projects rated high on participation overall and three rated low,

Finding: The ADF projects visited generally rated well on some aspects of participation, such as meeting recognized needs and encouraging contributions of labor, but poorly on other aspects. In a majority of projects, participants did not share in financial decisionmaking or evaluation, and women rarely participated in management.

1. Participation in Project Identification and Design

To assess the elements regarding project identification and design included in table 4-3, OTA began by asking who originated the project. In every case either a local group leader or an indigenous intermediary organization originated the project, in this sense, fulfilling the legislative intent that projects be designed by Africans. Typically a local leader worked with a regional PVO to propose the project; in several cases, the local leader was a member of the larger organization. Sometimes outsiders provided help at early stages. For example, a Peace Corps volunteer linked a tri-community water committee with ADF and with the Kenyan water officials who designed the technical aspects of the project. But the NGK committee originally had the idea to obtain water from the slopes of Mt. Kenya. Additional groups, such as Boiteko, conceptualized their project, but sought technical help from outside to design the project and select specific technologies. ADF funded a grant for technical assistance in Dakoro, Niger, and the provider designed the project. Usually African professionals provided external technical assistance.

Identifying the need for the project is another important element in project origination. Participants took part in this step or agreed that the project addressed a real need to a high degree in seven cases, a low degree in two. If the project addressed a strongly felt need, such as



Photo credit: ADF/Wendy Wilson

Successful participation takes many forms. ADF-funded activities build on traditional systems of community decisionmaking in the Dakoro Herders Cooperative in Niger.

for water or increasing food production, the beneficiaries generally supported it.

In the cases studied, the participants usually agreed with the project activity and design. However, one-third of the projects received a fairly low degree of support for the activities proposed and technologies selected; one-fourth of the projects faced a low acceptance of the project design. For example, the farmers agreed with the concept of a credit program in the Zimbabwe Coffee and Tea project but not with the repayment schedule or pesticides proposed by the Agricultural Finance Corporation (AFC). Sometimes participants supported one activity over others: Kikatiti members were much more interested in obtaining water from a restored borehole than in the reforestation part of the project strongly supported by the intermediary organization. In the Dakoro project, herders were dissatisfied with changes imposed by local government officials. In these two cases, where participants supported only some project objectives, those objectives were judged to be the ones most likely to be achieved.

Lack of participant involvement in project design was a major problem in some cases. For example, two cases where participation was judged unacceptably low, the Tutume and Dag-

nare projects, were designed with minimal involvement of the intended beneficiaries, who had virtually no idea of what was to come. In the Union Kaoural project, the intermediary group designed the project and decided which villages would participate and how.

In other cases, however, the lack of active involvement by the beneficiaries in the early stages of project design was not a problem. Involving everyone in detailed project design generally is infeasible. Participants in these instances agreed with technology choices even if few were involved in actually designing the project. Decisions usually were made either by a small group of leaders with external technical assistance available locally or by the intermediary organization staff. In several cases, ADF personnel decisively shaped the project proposal,

A key consideration was the quality of the relationship between the initiators, designers, and participants. Positive participation ratings in project identification and design were most often related to participants' support of choices made by their leaders or by the African intermediary organizations,

2. How Participatory Is the Organization Receiving the ADF Grant?

Overall participation generally was rated high in organizations judged to have the support of their members, whether the recipient organization was a grassroots organization or an intermediary group. OTA visited four grassroots organizations; two were rated highly participatory organizations and two were rated moderately participatory. Three of these four projects had high ratings on overall participation, suggesting that grassroots groups may have an advantage in achieving participation. The management structure of these highly-rated groups ranged from elected representatives (from three communities to a central management committee in NGK), to traditional leadership (Dakoro), to open meetings of all participants (Boiteko). Leadership style varied from a small group of tightly disciplined elected leaders who made

decisions (Ross Bethio in Senegal) to consensus-building approaches.

Participation in the eight intermediary organizations was more problematic, confirming the findings of the review of ADF's files. All four projects with low ratings for overall participation were intermediary organizations. However, three of the eight intermediary organizations did receive high overall ratings in participation; two were the church-related intermediary organizations (Silveira House in Zimbabwe and Morogoro Diocese in Tanzania), the third (PfP) was begun and led by Kenyans, most of whom are Quakers. The three highly-rated intermediary organizations have a long history of sponsoring development projects and providing training to local groups and have an explicit philosophy to foster participation.

High overall participation was strongly correlated with the quality of the relationship between intermediary organizations and local groups. In the two projects with the poorest overall participation ratings, the intermediary groups were not actually working with local groups. In the Dagnare project in Niger, a group of retired civil servants nominally agreed to share the benefits of the ADF grant with two other communities, thus making themselves technically an intermediary organization and more likely to receive ADF funding. The project primarily will benefit the retired civil servants. In Tutume, Botswana, a private organization sponsored a tractor hire and demonstration plot to serve individuals they selected, but these farmers had no role in project design, nor do they have a role in implementation, decision-making, or evaluation. They are not members of the organization receiving the ADF grant, nor, after several years of receiving the service, have they joined any group. While the project may be considered self-help in the sense that it is run by Botswana, it is not self-help in the sense that beneficiaries have a role in its management or decisionmaking.

Different types and levels of participation are appropriate for intermediary organizations and local groups, as well as for different stages in the development of the intermediary organiza-

tion, the local groups, and the project activity. However, problems in the relationship between the intermediary organization and local groups can arise from many sources:

- the two may have different objectives and perspectives about the project;
- too much financial and technical control may be given to the intermediary organization;
- intermediary organizations may make decisions without the input and acceptance of local groups;
- intermediary organizations may not understand the need for participatory development; or
- intermediary organizations may not have the experience and capability needed to work with local groups.

The assessment teams looked at different aspects of the relationship between the intermediary organizations and local groups and they judged how each functioned. They found that the local groups had little input in the intermediary organization's decisionmaking in seven of eight projects. Only in Morogoro, Tanzania, had the intermediary organization established a working structure for the local group to share decisionmaking regarding the project. There, village-level congregations elect a "contact" committee for development projects; officers of several committees comprise a parish committee, whose officers sit, in turn, on higher-level committees. This interlocking committee structure, developed over a number of years and recently applied to the tractor hire and maize production project funded by ADF, builds on a democratic church structure and allows for two-way information flow.

In determining the level of participation in projects involving intermediary organizations, learning how decisionmaking occurs can be more critical than knowing management structures. Intermediary groups without formal structures for direct local input into project design were able to compensate for these structural deficiencies if they had good relationships with local groups. For example, the PfP project in Kenya received good ratings for being a par-

ticipatory intermediary organization even though it had no formal structure for local input. This organization has a large number of extension agents who are in close contact with the local groups and have generally good relationships with them. This provides an informal mechanism for participants' suggestions to influence decisions made by the intermediary organization. The Silveira House project in Zimbabwe similarly maintains extensive extension and training programs; while Kenya's PfP works with pre-existing groups, Silveira House programs encourage local participation among previously unorganized groups. In the case of the Union Kaoural in Senegal, however, the existence of formal structures for representation was not sufficient to provide for adequate participant input into decisionmaking. These structures tended to be used for one-way, top-down communication.

Some intermediary groups do not seem to know how to relate to local organizations. For example, farmer groups taking part in the AFC project have little influence on AFC policy despite a directive from the Zimbabwe government that AFC work with communal farmers. The AFC is attempting to shift its emphasis from large-scale commercial farmers to those of the communal areas, but it has not yet developed an organizational response to this directive, although it has established a working relationship with local cooperatives. In this case, the local groups themselves are strong and participatory, but the intermediary organization's relationships with the local groups are not,

3. Who Has Access to the ADF-Funded Project?

Access to ADF-funded projects is open in most cases, but women have a low degree of access in one-third of the projects visited. Otherwise, participants generally represent the community in all but one case (Dagnare, Niger).

In some cases, a certain amount of exclusion may be justified, even necessary, for group cohesion and identity. For example, donor efforts to include persons other than the group propos-

ing the activity (which occurred in the Dakoro project) can weaken participation and negatively affect results. But sometimes exclusion is not justified, and often it is implicit or hidden. The most common problems related to access include: lack of access by the poorest third of the population and women, land tenure issues, religious affiliation of participants, and the criteria for selecting participants, especially those used by intermediary groups.

The Poorest One-Third of the Population. One ADF goal is to reach poor people in Africa. In this review, the poorest one-third of the people in the area seemed able to participate in ADF-funded projects, although no reliable socioeconomic data have been collected by funded groups or ADF to prove this. The one clear exception is Dagnare, Niger, where participation in the core project was limited to relatively better-off civil servants and their families.

Trade-offs sometimes exist between access of the poor and other important aspects such as projects' economic viability. For example, the entry fee for a piggery subproject of Silveira House in Zimbabwe restricts participation to the affluent because each entrant is required to purchase a costly pig. Similarly, conditions for receiving AFC loans exclude some poor people, such as Mozambican refugees because they



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lack long-term access to land. Exclusion from the piggery subproject may not have been justified because it could have been designed so that participants contributed labor or other resources, or purchased their pigs over time. However, ADF was justified in supporting the AFC project because the participants are poor and representative of small farmers in the area.

The answer to a related question—do the project participants represent the poorest one-third of the people in the country or region?—is more difficult to determine. In only a third of the cases could the assessment teams respond with a firm “yes,” based on interviews with local officials and others outside the project. The other cases involved better-off participants, either because the project was situated in a part of the country with higher rainfall and/or better infrastructure, or it was sponsored by a relatively affluent group (for example, owners of farm plots in a Kenyan land resettlement area in the NGK project).

Land Tenure and Displacement. Schemes to expand cultivation or provide irrigation also can be ways to secure rights to lands that customarily were under the use of others. Research on development projects in Africa has shown that pastoralists are especially vulnerable to loss of grazing rights and access to land caused by development schemes. Women’s plots can be lost when cultivation is expanded for crops that bring cash to men. Irrigation projects may disrupt downstream crop production or grazing lands. Projects that increase the land’s value (e.g., irrigation) in areas where sales of land occur can increase the chance that more marginal farmers will lose land to the more politically and economically powerful.

Development projects can exacerbate these problems if the funder does not have a detailed understanding of local patterns of landholding and use. In certain cases, ADF does not seem to have sought this information. Rights to use of the land put into crop production by the Youth Association of Ross Bethio in Senegal, for example, were previously held by a minority group of Fulani herders. The youth group legally acquired those rights. The herders, provided with alternate but poorer grazing land,

tried to block installation of the group’s irrigation system. Eventually, local authorities with armed guards dislodged the herders. In the Morogoro project, block farms will be cultivated by tractors on land that is traditional grazing land of the Maasai in Tanzania. In both cases, herders are a different ethnic group from the farmers and most project participants.

Women’s Access to Projects. Women constituted at least 90 percent of the participants in 2 of the 12 projects visited, Boiteko and Pfp. The sample of projects visited is representative of ADF’s portfolio in this respect. Grants to women’s projects or organizations also represent 17 percent of total ADF-funded grants through fiscal year 1987.

Women had a high degree of access to the project relative to local norms in 2 other projects visited, a moderate degree in 4, and a low degree of access in 4 of the 12. Access was judged by whether or not women were or could become eligible to participate in project activities and to receive project benefits at least in the same proportion as their involvement in the activity in the locale.

In some cases, women were able to participate in activities from which they usually were excluded and which often result in their displacement from land. In Ross Bethio, for example, Senegalese women were given access to irrigated land. In AFC, a few women were given credit for coffee and tea production in eastern Zimbabwe. Women are a majority of participants in Ross Bethio, and although they receive far lower benefits than the men, their inclusion in the project was judged an advance in the local context. But in Zimbabwe, where women commonly are eligible for rural credit programs, the small number included in the AFC project was not sufficient to be considered an advance, and women were judged to have a low degree of access to the project.

In the four projects where women’s access was rated low, the fact that the projects address work done by women could negatively affect achievement of project objectives. Women in Kikatiti, Tanzania, for example, are excluded from the committees directing a village project

that focuses on water and fuelwood, areas of their responsibility.

Issues of access for minority ethnic or religious groups can be similar to those involving women,

Lack of Clear Criteria for Project Access. The lack of clear criteria for selecting participants was identified as a problem for ADF-funded intermediary organizations in particular (e.g., Tutume; AFC). When the service provided is one that many individuals or groups want, organizations need clear criteria and a fair process for selecting who will and will not participate. Some groups required participants to register, others included only dues-paying members, and others considered anyone who contributed labor to be project members. OTA'S assessment teams noted that ADF often did not verify whether project participants were representative of the local community, nor identify whether selection criteria and processes were perceived as fair.

The two religious-based intermediary organizations visited by the teams were rated highly participatory and appropriate for ADF funding because participants were representative of the general community. Nevertheless, funding such groups raises additional questions regarding access. In these cases, access to project benefits was open to eligible participants without regard to religious affiliation. While most participants in the tractor hire project in Morogoro are Anglicans (because church committees register members and the demand for services is far greater than the supply), a significant portion of small farmers in the area were Anglican and management and resource constraints justified the focus. With the exception of the piggery sub-project of the revolving fund of Silveira House whose high entry fee restricted access to the affluent, participants of both projects were representative of the community and poor.

4. Contributing to Costs, Sharing in Benefits, and Participating in Decisionmaking

Costs and benefits were equitably shared among participants to a high or moderate de-

gree in every case studied. Distinguishing between project participants and beneficiaries, however, shows that in some projects the two groups are different people. For example, fewer people helped build the water systems in East African projects than will receive water; in PfP, more women contributed to the savings clubs than have been able to receive loans.

Also, OTA specifically examined how women participants shared in project costs and benefits (table 4-3). This was judged to be equitable in most cases, even when women did not receive precisely equal benefits. For example, women participants in Ross Bethio did not consider their lesser share of project benefits unfair. The one low rating was given to the Tutume project in Botswana because female, single heads of households in practice had to contribute more labor to receive the same benefit as male-headed households.

However, equitable sharing in costs and benefits alone, without sharing in project management and decisionmaking, constitutes a low level of participation. OTA judged the former a necessary but not sufficient condition for meeting the ADF participation mandate.

A low degree of sharing in decisionmaking during project implementation existed in one-third of the projects (table 4-3). This rating was highly correlated with the rating for overall participation. A special problem for intermediary organizations and grassroots groups was the lack of participation in financial decisions found in more than half the cases. Often the local group had accurate records of time and funds contributed by its own members, but little access to the financial records of the intermediary organization or the technical assistance provider who controlled funds provided by outside donors.

Women's participation in management and decisionmaking rated low in half the projects, including PfP, which provides credit to 3,000 women. One reason for this is because all members of the PfP board of directors and the majority of the staff are men. Thus, funding a women's project or women's organization does not guarantee that women participate appropriately in management. In only one case, the



Photo credit: ADF/Christine Fowles

Women participate in many ADF-funded projects, such as this successful one in Botswana (Boiteko).

other predominantly women's project of the 12, Boiteko, was women's participation in management rated high. An ADF-sponsored evaluation of five Kenyan projects concluded that the lack of women's participation in management harmed project results, especially those with a majority of women participants (22).

S. Participation in Providing Technical Assistance

All 12 ADF-funded projects received some technical assistance during their design and implementation stages. ADF policy encourages recipients to select their own technical assistance and pay the provider with ADF grant funds. This policy is unique and consistent with

the Foundation's mandate. So is their attempt to have technical assistance provided by Africans where possible. Africans provided technical assistance in 10 of the 12 cases. Often an intermediary group will provide technical assistance to its local groups. But the roles of the technical assistance providers and their relationship with the local group and participants differed among the projects studied.

OTA found that technical assistance was provided in a non-participatory way in one-third of the projects (table 4-3). Project managers or participants had little two-way interaction with technical assistance providers, they were not given an opportunity to provide input to technology choices, or they were dissatisfied with providers' methods. Providers were representatives of intermediary organizations in two of the cases ranked low, a Dutch volunteer in one and local government officials in one. Three of the projects with non-participatory technical assistance also had a low rating on overall participation.

6. Participation in Project Evaluations

One consistent problem noted was the lack of participation in internal project evaluations. Until recently, ADF did not encourage or help funded groups participate in evaluations. Only PfP had even a moderate level of member participation in its evaluation process. Although only half of the projects studied were fully operational, their grants had been committed for at least 12 months. Preliminary evaluations, based on early project activities, would have been appropriate by this point.

Factors Affecting Participation

Finally, OTA teams assessed factors fostering and limiting participation in each project. Sometimes external circumstances helped participation, such as good markets, rainfall, and roads. Others, such as illiteracy, hindered. Commonly cited positive factors include:

- effective and trusted leadership,
- group cohesion,
- building on existing traditions of communal effort,

- project activity matching needs of community,
- using familiar technologies,
- regular meetings, and
- clear project scope.

Factors constraining participation in the 12 projects included:

- unclear membership criteria,

- exclusion of women from project management committees,
- overly complex organizational structure,
- production system requiring centralized decisionmaking,
- inadequate information sharing,
- too prominent a role for outsiders, and
- centralized decisionmaking in intermediary organization.

RESULTS

What Are Results and How Can They Be Measured?

A main purpose of ADF is social and economic development. The Foundation weighs the social and economic impacts of its projects in terms of:

- achieving project objectives,
- attaining community needs,
- effects on the environment and health, and
- benefits to participants and others.

Like most donors, however, ADF directs most of its post-approval efforts toward tracking its own project inputs (e. g., monitoring expenditures of grant funds for purchases of materials and technical assistance) and the project outputs—the goods and services that the ADF grant was expected to produce (a working irrigation system, credit provided to small farmers, or tractor-hire services, etc.). Little systematic attention is given by ADF or its project managers to project outcomes, i.e., what the beneficiaries actually do with the service and how it changes their lives and the life of the community and of the organizations to which they belong. Tracking outcomes is an important way to determine a project's progress, identify gaps where other resources are needed, and involve participants in evaluating project activities. It also is a way to determine whether the project is attaining the broader development goals of the grantee and funder.

Project outputs and outcomes both were included in OTA'S assessment of project results and data on a wide variety of relevant indica-

tors were collected (app. D). The following criteria were used to assess results:

1. Degree to which the project is meeting its objectives: how well is the ADF-funded project doing relative to similar projects supported by other funders; what fosters and what hampers achieving objectives?
2. Actual or likely economic impacts on participants: how many beneficiaries are there; what are the amount and the value of benefits and contributions per person?
3. Actual or likely social impacts on community and organizational impacts on the local groups and intermediary organizations.
4. Actual or likely environmental impacts during the grant period.

OTA attempted to quantify intended and unintended results and their economic, social, organizational, and environmental impacts on participants and the community. Data were disaggregate by gender. If an activity was meeting its objectives and had, on balance, positive economic, social, and organizational effects for poor people and no serious negative environmental impacts, OTA rated its overall results positively in terms of achieving social and economic development.

Assessing Results in 12 ADF-Funded Projects

Finding: OTA judged that 10 projects were likely to have a positive impact on the social and economic development of the poor people in

the locale. However, the level of impact ranged from significant to negligible.

Because of the early stage of implementation of the projects visited, OTA teams were required to estimate likely results. Some actual results could be seen in only one-half of the projects. However, 10 were judged likely to have a moderate to high positive impact on the social and economic development of poor people (table 4-4). Overall ratings were similar for projects with some actual results compared with those starting up; however, grants committed in 1985 were rated somewhat higher (3 high, 2 moderate, 1 low) than those committed in 1986 (1 high, 3 moderate, 1 low). In addition, grassroots groups rated significantly better than intermediary organizations (3 high and 1 moderate vs. 1 high, 5 moderate, and 2 low).

Participants from several projects told OTA teams about dramatically increased production and incomes, e.g., a 30 percent increase in income for women who received PfP's farm input loans. In addition to a significant impact on individuals in this project, a large number of people in other communities in western Kenya were affected positively. Similarly, most family incomes increased considerably following the completion of the water and irrigation

system in the NGK project in Kenya, the one project visited which had completed its ADF grant period. Additional specific information on project results is included in the project descriptions (app. B).

Benefits to poor people in two cases, however, were judged likely to be low. Dagnare and Tutume were judged likely to achieve some of their objectives, but not benefit the poor segment of the population very much. The Tutume project in Botswana provided free tractor plowing. However, no longer-term benefits to the sponsoring organization were evident, agricultural production had not increased, and soil erosion threatened to lower future production. In addition, participants were relatively affluent in both projects.

1. Degree to Which ADF-Funded Projects Are Meeting Their Objectives

Despite the preliminary stage of one-half the projects visited, 11 were judged to be meeting or likely to meet their objectives to a high or moderate degree. However, a project can meet its objectives, in the sense of providing the planned service or outputs, but have little impact on improving peoples' lives or achieving

Table 4-4.—Rating Results of 12 ADF Projects

Elements of results	No. of projects rated		
	High	Moderate	Low
Overall results			
Actual or likely positive impact on social and economic development of the poor in locale	4	6	2
1. Degree to which project is meeting or is likely to meet its objectives.	5	6	1
	No. of projects rated		
	Positive	No Change	Negative
2. Actual or likely economic impacts on participants	10	2	0
3. Actual or likely social and organizational impacts			
Actual or likely social impacts	9	2	1
Actual or likely organizational impacts overall ^a	9	1	1
Impacts on local groups	10	1	1
Impacts on intermediary organizations	4	3	1
4. Actual or likely environmental impacts during grant period	1	8	3

NOTES:

^aIn one case, impacts were rated positive on local groups but negative on the intermediary organization so no overall ranking was given.

^bEight grant recipients visited were intermediary organizations.

other development goals, as seen above (Tutume).

Conversely, a project can be behind schedule in meeting objectives, or only partially meet them, and still have important impact. For example, the one project with a low rating on meeting its objectives (Morogoro, Tanzania) had notable impact on many participants during the first agricultural season. Participants who received the entire range of project services (tractor plowing, improved seeds, fertilizers, pesticides, and extension advice) increased their maize production significantly in a year of lower-than-average rainfall. But projected numbers of participants were overambitious and one tractor arrived rather than three, and that one late. Only 150 acres were plowed, less than one-tenth of what was planned for the first year. Overall, however, the OTA team assessed this project's likely future impact favorably. Thus, the types and values of actual benefits and the number of beneficiaries are more important than rigidly meeting project objectives. To measure impact accurately, baseline data and data on specific effects on beneficiaries must be collected, but in only one case had any attempt been made to collect this information (PfP).

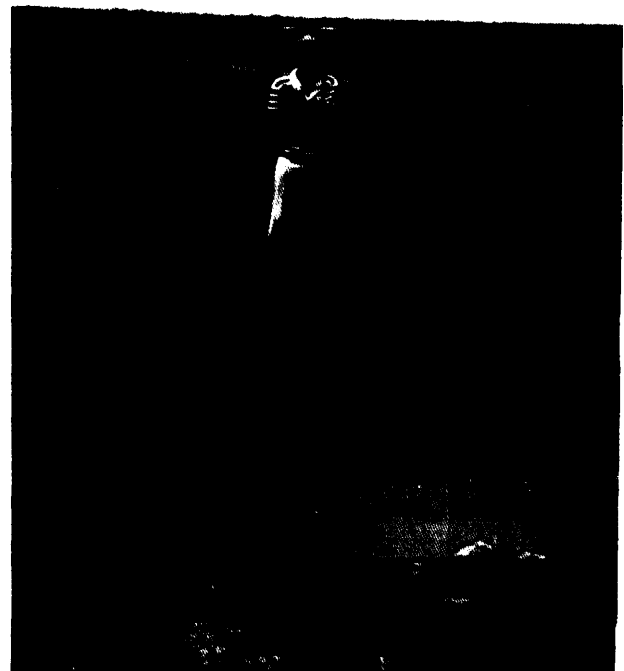
OTA teams assessed what factors helped and hindered projects in achieving their objectives and goals. Common positive factors were good leadership, organizational strength, a ready market for production, simple available technology, and either government support or complementarity with government policies. Commonly cited factors constraining results were lack of markets, poor production plans, and the lack of provision for maintenance and repairs. Feasible strategies to meet recurrent costs and replacement reserves did not exist in most projects. In a number of instances, organizational and management weaknesses were also cited. Finally, delays in project startup and in disbursement of funds affected five of the agricultural projects visited.

Team members also attempted to evaluate whether ADF's projects achieved, or were likely to achieve, their objectives more often than sim-

ilar projects funded by others. Based on interviews with outside researchers, donors, and government officials, this was judged true in two-thirds of the projects, but not in the other one-third. The comparison, generally, was to past bilateral or multilateral governmental programs rather than to programs supported by PVOS or other private funders because few examples of the latter were available. This finding needs to be placed in a broader context, however: many of these types of projects (irrigation, tractor-hire, rural water supply, and rural credit) have a poor track record in Africa.

2. Actual or Likely Economic Benefits

Ten projects had, or were likely to have, positive economic outcomes for the participants



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and no change was probable in two (table 4-4). The specific benefits, the number of people receiving them, and their value are described in the project summaries (app. B). These values were estimated based on interviews with participants because the projects had neither collected baseline data nor data about increased production and income resulting from project activities.

A project's economic effect in most cases was greater beneficiary income due to increased production of crops or livestock. In 7 of the 12 projects, an important component of the increased production was (or will be) provision of water; in 4, provision of credit; in another 4, provision of agricultural inputs with extension advice.

Other economic benefits include increases in the value of land or in saving time collecting firewood, carrying water, or plowing. For example, the value of land in one community in Kenya rose from \$625 per acre to \$1,250 an acre as a result of construction of the NGK water supply. But the distribution of the economic benefits ranged widely.

Beneficiaries totaled fewer than 100 persons in 4 of the projects; in 2, more than 2,000 (table 4-2). The value of the increased yearly production caused by the ADF-funded activities ranged from \$540 per year per person in the Boiteko project to \$14 in the Morogoro project. But the \$14 represented a 10 percent increase in annual income for the participating farmers in Gairo, Tanzania. Usually other members of households benefited indirectly in some way.

Finally, OTA calculated the cost to ADF per participant by dividing the grant amount by number of participants. The cost to ADF per participant averaged \$650—Morogoro's was \$624 in the first year—and ranged from \$50 (Union Kaoural) to \$3,507 (Boiteko). After these projects have completed several years, it will be possible to calculate the ratios of ADF-costs-per-participant to benefits-per-participant to provide a measure of the economic efficiency of ADF's funding. The Foundation as yet has not used simple cost/benefit analysis as an element in making funding decisions.

3. Actual or Likely Social and Organizational Impacts

Three-fourths of the projects that OTA visited were judged to have, or be likely to have, positive social and organizational impacts. The positive social impacts on the community principally flowed from the concrete benefits the project brought or would bring. Less tangible effects identified by project leaders and/or participants and communicated to OTA teams were a sense of pride in themselves and their community, the skills learned while implementing the project, and the sense of power that accompanied the knowledge that the group could successfully carry out development activities. Negative social effects included actual or potential conflicts with those who lost control of assets or were left out such as herders in Ross Bethio and Morogoro and farmers downstream from NGK's water project. But because of other effects in these cases, the net social benefits to the local community were still rated positively.

Likewise, projects had positive effects on funded organizations related to the experience of planning and implementing their projects and from the organization's ability to deliver goods or services to members. The ADF projects were judged to have positive effects on all four grassroots groups, but only one-half of the intermediary organization seemed likely to benefit. In one case, the project activity strengthened participating local groups but contributed to divisiveness between some groups and the intermediary organization (Union Kaoural). In others, benefits principally flowed to the local group with little organizational effect on the intermediary organization.

4. Actual or Likely Environmental Impacts During Grant Period

The findings on environmental impacts were less positive than on economic and organizational effects (table 4-4). Only one project (AFC) was judged to have a positive environmental impact because planting tea on mountain slopes in Zimbabwe can help prevent erosion. Simultaneously, however, coffee planting is increasing due to declining tea prices and the erosion

potential of coffee can be high. Negative environmental impacts could already be seen in three projects. In installing its 100 hectare irrigation system near the Senegal River, the Ross-Bethio Association bulldozed a considerable number of trees and shrubs and destroyed some grassland. This degradation was poorly balanced with only modest reforestation efforts. Removing tree stumps and plowing during low rainfall years has led to soil erosion in Tutume, Botswana. Compaction is beginning to affect soil structure in the Boiteko project in Botswana. Eight projects were judged likely to have no significant negative environmental impact during the rest of the grant period. However, negative impacts may appear in the mid- to long-term.

What Do ADF and the Community Put Into ADF-Funded Projects?

Since project results should be considered in relation to their costs, or inputs, OTA also sought to identify the resources contributed by ADF, the community, and other donors.

The Foundation's grant funds were allocated to the 12 projects for the following uses:

- 46 percent for equipment: construction, infrastructure costs for wells and/or irrigation systems in 7 projects, tractors in 2;
- 5 percent for vehicles/transportation: trucks or motorcycles were purchased in 5 projects, rented in 1;
- 18 percent for revolving credit funds, a component of 4 projects;
- 10 percent for agricultural inputs: seeds, fertilizer, implements for individual farmers in 4 projects;
- 9 percent for salaries and office expenses: while 9 projects had staff, ADF funds paid staff salaries in only 5 cases;
- 4 percent for training and technical assistance obtained outside the project; and
- 9 percent for other expenses: ADF audits and evaluations, contingency funds, and an ADF documentary film.¹

¹Total greater than 100 percent because of rounding.

Typically, ADF provides money for materials and the community provides labor. Often the community also provides funds, through individual fees, community fundraising efforts and materials. The community contributions to the ADF projects are measures of their support of the project. Contributions include:

- labor: in nine projects most participants contributed labor; in two others, one-half did. For example, in the NGK water project participants contributed an average of 115 days' labor digging trenches in a year and one-half. At Boiteko, the women continue to contribute substantial labor in vegetable production and raising chickens. But in Dagnare, members hired laborers to work for them.
- money: in one-half the projects most participants contributed some money in support of project activities. Usually this was a small amount in relation to total project Cost.
- material: in one-half the Projects more than half of the participant; contributed material.

The Role of Other Donors in ADF-Funded Projects

All 12 organizations visited had external funding sources in addition to ADF, and 4 used those funds for the ADF-funded project. In 9 of the 12, more than one outside donor supported the organization and/or ADF-funded project. The outside donors included U.S. AID (PfP; Ross Bethio), the World Bank and African Development Bank (AFC), other bilateral donors (Dakoro; Union Kaoural; PfP), European religious donors (Morogoro; Silveira House), European PVOS (Ross Bethio; Union Kaoural), U.S. PVOS (PfP; Malihai), private foundations (Dakoro; PfP), and the U.S. Ambassador's Self-Help Fund (NGK; Ross Bethio),

OTA teams found that in four cases some alternative funding was available for the project had ADF funds not been provided. Alternative funding was less certain in six cases; in two cases, no viable alternative funding was available for the project.

Therefore, the Foundation is not the only funder of its grantee groups nor, in many cases, of their projects. Often its money is being used with that of other donors to provide larger amounts of funding than would be available from a single source or to provide for continuity of projects from one grant to another. In a

few cases, ADF-funded activities also obtained some African government funding (Tutume) or government-supplied technical assistance. For example, district water officials in Kenya designed the NGK water system and supervised technical aspects of its construction.

SUSTAINABILITY

What is Sustainability and How Can It Be Measured?

Sustainability is generally understood to mean that the project activity and/or its positive results will continue after the grant period ends. It can be judged on several levels: sustainability of the resource, of certain activities, of the project, of the local group and/or the intermediary organization. Also, sustainability has economic, environmental, technical, and social elements, and policy factors can intervene. Therefore, sustainability depends on many dimensions of an activity and failure in one area can jeopardize sustainability overall.

The Foundation includes most of these elements in its project appraisal checklist:

- financial sustainability;
- project self-sufficiency, generating enough income to cover costs;
- probability that the funded organization will pursue other projects after the funded one; and
- effects on the environment.

These criteria were expanded for this assessment. For example, expecting that environmental sustainability might be a problem for ADF as it has been for other donors, OTA based its considerations of environmental sustainability, in part, on questions that emerged from the reviews of ADF's project files regarding renewable resource technologies (box 4-2). Teams sought a range of specific data during site visits and other interviews in Africa (app, D).

Key elements of sustainability for rating the 12 projects were:

- economic aspects, including market for the product, provision for recurrent costs, preparation of business plans, and financial management capabilities;
- organizational/social aspects, including quality of leadership, track record of the organization, participation of members in decisionmaking, access of the organization to financial resources, and whether or not current activities would continue and other activities were planned, how the funded activities contributed to growth of the group;
- environmental aspects over the next 3 to 5 years and longer, including positive and negative impacts on renewable resources and identification of any measures to mitigate negative impacts;
- technological aspects, including site specificity (whether or not the technology was sustainable in the locale), access to training and technical assistance, and conformity to national development plans and policies regarding the technology.

Ultimately, sustainability can be judged only after a grant is completed. Just 1 of the 12 projects visited (NGK) had completed the ADF grant period, and that only recently. But planning and decisionmaking for sustainability should occur throughout the project cycle. Therefore, the presence or absence of these elements often are indicators of what will happen in the future. These rankings define the near future as 3 to 5 years.

Box 4-2.—A Look at ADF's Files: ADF's Use of Renewable Resource Technologies

OTA examined ADF's files of projects relating to agriculture and renewable resources, identifying the types of technologies used and attempting to determine how ADF accounts for environmental sustainability.

ADF's grassroots mandate appears to have high potential. ADF is well placed to become the primary assistance agency that blends ecological concerns with the urgency for Africans to raise adequate food and to provide adequate water. The Foundation is positioned to help Africans "break the infernal cycle of people being forced to misuse their natural resource base," as one African forester describes it. Even without such an ambitious goal, however, ADF could make improvements in its work to avoid environmental problems.

This review's most important finding is that ADF project documents contain little information on field-tested and accepted technologies that could:

- mitigate additional stress on existing resources, and
- help increase farm yields and incomes on a sustainable basis via proven methods such as water conservation, windbreaks, terracing, native trees, sand stabilization, and agroforestry plantations.

Files tend to yield incomplete and insufficient information to determine what resource-related activities are underway and to identify the environmental impacts of agricultural projects. Evidence is strong, however, that ADF-funded organizations could use resource-related technologies much more often as primary and adjunct project activities.

Yet the Foundation is not ignoring the need for environmental protection and the use of resource-related methods. For example, ADF has funded several activities that integrate resource concerns into predominantly agricultural projects. Of 56 projects examined, 3 dealt significantly with resource-related activities and 9 projects had resource activities as accompanying measures. The Foundation could do more, however, to account for such concerns on a more sophisticated level, more thoroughly, and more systematically. Agricultural projects that involve mechanical soil preparation, land clearing, or water development efforts where yields are large should raise flags in the minds of ADF staff.

The Foundation's position is difficult because it responds to local initiatives and many Africans, like many other agriculturalists and donors, presently do not give environmental protection high priority. Yet, according to the OTA desk reviewer:

"Any organization dispensing development funds, regardless whether local people, at present, place any emphasis on the ecological sustainability of their resource base or not, needs some sort of 'ecologic malpractice protection'. . . . If this is not done, those who authorized funding. . . may be responsible (after .5, 10, or 20 years) for having contributed to making matters worse instead of better; good intentions and focusing on other, important criteria notwithstanding."

The key is providing new information so that local people are more completely informed about alternatives that might better serve them. The Foundation's expanding outreach and training activities could help fill this need,

SOURCE: Fred R. Weber, "Desk and Office Review of ADF Activities: Renewable Resource Technologies," contractor report prepared for the Office of Technology Assessment, August 1987.

Assessing Sustainability in 12 ADF-Funded Projects

Finding: One-half the ADF-funded projects were judged to have a high potential to be sustained over the next 3 to 5 years; another 5 were judged to have a moderate chance to be sustained over the same period, although not necessarily in the same form as proposed. Longer-term sustainability was not ascertain.

Finding: Strong community support for the activity and the local organization was identified as an important factor fostering sustainability of the projects visited, while the lack of careful economic and environmental planning were common constraints to sustainability.

Six ADF-funded projects were judged to have a high potential for sustainability over the next 3 to 5 years (table 4-5). Sustainability means the project activity was judged likely to continue for this period. Overall, projects sponsored by grassroots organizations were rated more sustainable than those of intermediary organizations, and projects awarded grants in 1985 rated slightly better than those funded in 1986.

These six projects are more likely to reach a greater number of people and/or have an expanded impact on those involved. An excellent example is the recently completed water and irrigation system in Kenya (NGK). Vegetable and milk production has significantly increased as a result of the water supply to each farm. The management committee is discussing plans

for vegetable marketing and milk processing. They have hopes of purchasing a truck and building a storage cooler for produce. Only one project was judged to have a low chance of being sustained: the team identified economic, organizational, technical, and environmental factors that jeopardized sustainability of the Tutume tractor-hire scheme in Botswana. The other five projects may be continued but with their effects decreasing over time.

In some cases, a particular activity within the project is more likely to be sustained than another, however, suggesting that projects often will change with time. For example, OTA teams felt that the activities most strongly supported by participants would have a better chance to continue: herd reconstitution rather than literacy in Dakoro, Niger; water supply rather than reforestation in Kikatiti, Tanzania. Flexibility in adapting to new circumstances was assumed to be an important component of sustainability.

1. Economic Sustainability of ADF-Funded Activities

Three-quarters of the ADF-funded projects were judged to have a moderate to high chance of being sustained economically, but one-quarter faced a low chance (table 4-5). For example, OTA found a good to very good market for the products of four projects, an adequate market in four, and a poor market in two. But when OTA teams asked whether or not formal or informal, simple market analyses and business plans had been prepared for the activities,

Table 4-5.—Rating Sustainability of 12 ADF Projects

Elements of sustainability	No. of projects rated		
	High	Moderate	Low
Overall sustainability for next 3 to 5 years	6	5	1
1. Economic sustainability of activity.	5	4	3
2. Organizational/social sustainability			
Local group/s	6	4	2
Intermediary organization	5	2	1
3. Environmental sustainability			
For next 3 to 5 years	8	3	1
After 5 years	2	9	1
4. Technological sustainability.	7	4	1

NOTES:

^aEight grant recipients visited were intermediary organizations.

they found that only three had market analyses and only one a business plan (AFC).

A greater problem was lack of provision for recurrent costs of the activity after ADF funding ended: five projects rated low, three average, and four high. While six projects had formal or informal strategies to cover costs, too often it was not based on careful or accurate economic analysis. Recurrent costs of the activity were expected to be covered by income produced by the project activity, income from a related activity (e.g., rental of the truck in two projects was not only paying for itself, but would provide income for the project), outside donors (PfP), African government subsidies (Tutume), or community fundraising efforts.

While criticizing the lack of financial planning to cover future costs of maintaining project activities, OTA teams still judged several projects to have a moderate chance of being sustained because of the level of support of the community and their past record in raising funds internally and externally (e.g., the Kikatiti water system). Traditional community fundraising efforts can best meet sporadic needs, such as the breakdown of a pump, but not regular expenses such as paying the monthly electric bill and the system's guard. But the local groups' affiliation with an intermediary organization, in this example the National Malihai Club, could assist them obtain additional outside resources.

Financial management was rated high in four projects (all southern Africa projects), moderate in six, and low in two. In both the low cases, problems centered around accountability between the intermediary organization and local groups regarding use and control of ADF funds. For example, intermediary organizations did not communicate openly and share decision-making with local groups regarding ADF funds. Eight groups had received some financial technical assistance or training, and three had plans to receive financial training.

2. Organizational and Social Sustainability

Sustainability of the project activity often is closely linked to the future of the group funded.

OTA'S assessment teams considered a number of factors related to the organizational sustainability of grassroots groups, intermediary organizations and their local sub-groups. The organizational sustainability of local groups was similar to that of the intermediary organizations (table 4-5). But the two had different strengths. For example, seven of eight intermediary organizations were rated high on leadership; six were low on members' decisionmaking; seven had high or moderate access to financial resources. Local groups, on the other hand, rated better on members' decisionmaking (10 of 12 projects were high or moderate) but lower on leadership (one-half were high) and access to financial resources (4 were low and 6 moderate). Intermediary groups have certain advantages for sustainability, such as access to out-



Photo credit: ADF/Christine Fowles

Sustainability is implicit in ADF's mandate: future generations should benefit from current development projects.

side resources; however, they also have special problems. PfP, for example, maybe unable to continue successful work because external funds are shrinking.

Artificial organizations established with little rationale other than obtaining an ADF grant (e.g., Dagnare) had a poor chance of being sustainable. Other groups' continuation may be more certain than that of their project activities, especially if such activities are new to them (Malihai, AFC). Long-established groups (Silveira House) were judged to have a better chance of survival than a project sub-group primarily organized to carry out one activity with resources from the intermediary organization.

Management training can help promote organizational sustainability and innovation. Eight projects had received such assistance and another three had plans to obtain it. For example, one of NGK's project leaders received community development training from a Kenyan training institute and his skill was an important reason for the success of the water project.

3. Environmental Sustainability of ADF-Funded Activities

Environmental sustainability was assessed in the short- and medium-term and a number of concerns were identified. Two-thirds of ADF-funded projects were judged to have a high potential for short-term environmental sustainability (table 4-5). Far greater uncertainty exists about their long-term environmental sustainability.

The kinds of agricultural projects that ADF funds are known to have a variety of negative environmental impacts. Government officials, outside experts, and project managers varied in their awareness of this. The Foundation and project managers often made no clear assessment of potential problems. A few organizations, however, had carried out some activities which increased awareness or helped improve conditions. For example, one project helped participants practice intercropping (PfP) and two conducted some conservation education (Kikatiti, PfP). Several ADF-funded organizations mentioned plans to plant trees or shelter-

belts (Kikatiti, Morogoro, Ross Bethio) or use integrated pest management methods (Boiteko) to minimize negative environmental effects in the future. But implementation of these plans was disappointing.

A number of specific concerns warrant greater consideration by ADF and project managers:

- for tractor hire projects: the danger of increased soil erosion and weeds and concomitant risk to farmers' future production; destruction of grasslands and trees;
- for irrigation projects: the danger of waterlogging, salinization, soil erosion and compaction; destruction of trees, grasslands; and potential health problems;
- dangers to health and soil fertility with increased pesticide use;
- dangers of monocropping to soil fertility, pest resistance and diversified diets and income; and
- the potential of increased water supplies to cause overstocking and overgrazing by livestock.

The differing judgments between short- and longer-term environmental sustainability were closely related to an assessment of the appropriateness of the technologies chosen by projects.

4. Technological Sustainability of ADF-Funded Activities

The Foundation's funded activities were technologically sustainable for 11 of 12 cases (table 4-5). Teams judged that 5 of the 12 projects entailed relatively high-technology approaches, another 5 used relatively high-cost technologies, and 9 included relatively high-risk technologies. The latter, especially, seemed to call long-term sustainability into question. But based on interviews with local researchers, other experts, and government officials, the teams considered that technology choices were probably appropriate in every case but one, and that they were not too high-risk to the participants involved given the context.

Team members in one case were convinced by local experts that a technology known to

have detrimental effects elsewhere was sustainable in their locale. Researchers at Sokoine University in Tanzania felt that tractor-hire schemes could be an appropriate way to increase sustainable agriculture in parts of the Morogoro region because of rainfall, population density, compensating practices to conserve the land, government policy, and other factors. But questions about long-term environmental impacts remain, and a need exists to 1) document effects on soil and grasslands of the tractor plowing schemes being implemented now by the government and others, 2) design and carry out mitigating measures, and 3) do comparative studies with ox-plow use to determine in which areas, and with which farmers, animal traction is more advantageous. While this tractor-hire program was judged appropriate, the other one visited in Botswana was not. Tutume was the one project where the technology did not seem sustainable for environmental and economic reasons, even though it was government-subsidized.

In judging sustainability of the technologies, OTA teams also considered whether the specific activity was in conformity with national development plans because a favorable policy environment and supportive public services can complement an activity. For example, Tanzanians interviewed argued the tractor schemes of the 1980s would be more successful than the failed ones of the 1960s and 1970s in part because spare parts and petroleum were available from government programs favoring mechanization. Technologies were in conformity with

government priorities in all cases but one (PfP). In that case the activity had the strong support of local Kenyan officials interviewed precisely because it was meeting a recognized gap in public programs by providing rural credit for women.

Factors Fostering and Constraining Sustainability

OTA teams identified the following factors that contribute to the sustainability of a number of ADF-funded projects:

- availability of technical assistance and training,
- strong intermediary organization with good track record,
- good local leadership,
- environmentally sound activities,
- adequate financial management and planning,
- good markets,
- low-risk technologies for participants, and
- complementary government policy.

The following were identified as constraints to sustainability:

- lack of or poor financial or environmental planning,
- intermediary organization deficiencies in target group identification and monitoring, and
- women not involved in management of projects relating to their work.

REPLICABILITY

What Is Replicability and How Can It Be Measured?

Replicability is often desired by donors because it can increase the impact of their project funding. Groups such as ADF that fund small-scale projects intend not only that the projects will benefit local people, but also that they will have larger impacts on social and economic development. The assumption is that the activity is beneficial and should be replicated.

Replicability usually refers to extending the impact of the funded activity, or its benefits, beyond the group originally included in the proposal. Some experts consider replicability as the “multiplier effect.” Often, replicability refers to adoption of an activity or technology by non-participants or by those in other geographic areas without additional funding from the donor.

Replicability rarely means an exact duplication of projects using a “cookie cutter” model

or “blueprint” approach. Such attempts have failed in the past because of ecological, social, cultural, economic, and other differences between regions and groups.

ADF is concerned that its projects be replicable; its criteria for replicability include:

- results are likely to be disseminated, and
- the project is likely to be repeated.

OTA expanded ADF’s criteria and collected information on several elements of replicability for the 12 projects visited (app. D). Replicability of project activities, technologies, and organizational processes were each considered separately because the same or other groups might replicate the problem-solving or planning process used for a project, but not the project activity itself. And the process of taking best advantage of a situation and recognizing the unusual conditions necessary for an activity to succeed can be replicable even though unique social, cultural, physical and other aspects of each particular situation might make project activities non-repeatable. The following measures were incorporated into the final assessment of replicability:

- technological replicability: the degree to which other groups have financial and physical resources (including infrastructure) to use the technology; whether technologies can be readily learned;
- organizational replicability: which management structures, processes, and styles could be used by others;
- level of dissemination: efforts by funded organizations to spread what they learned;

adoption of technologies by non-participants.

Evidence of project impacts on national policies and institutions was also sought.

Assessing Replicability in 12 ADF-Funded Projects

Finding: Ten of the ADF-funded projects were rated to have a moderate or high degree of replicability, and two a low chance of being replicated. Self-help processes were judged more replicable than the technologies supported. The relatively high cost of the technologies and high equipment expenses were major constraints to replicability of project activities.

Replicability of technologies and of organizational processes was weighed in overall ratings for each project (table 4-6). These overall ratings were similar for grassroots groups and intermediary organizations. Projects awarded grants in 1984 and 1985 rated higher in replicability than those committed in 1986. For example, PfP’s project was judged highly replicable. Since 1980, PfP in Kenya had tested methods to work with and train local women’s groups, to help them establish savings clubs and loan committees, and to administer revolving loan funds. Many staff had worked with PfP for at least a decade. PfP recently had applied this methodology to credit for agricultural inputs and its methodology was applicable to other groups.

Table 4-6.—Rating Replicability of 12 ADF Projects

Elements of replicability	No. of projects rated		
	High	Moderate	Low
Overall replicability in region/country.	3	7	2
1. Technological replicability	5	5	2
other groups have access to financial resources.	2	3	7
other groups have needed physical resource base	3	7	2
technologies readily learnable.	8	3	1
2. Organizational replicability.	7		3
3. Level of dissemination	2	2	2

NOTES:

^aDue to the preliminary stage of two projects, it was impossible to judge dissemination of Project results.

Replicability is not the only measure of project impact, however. One successful project (NGK) was rated low on replicability. Another project, the Tutume project in Botswana, was being replicated by the sponsoring intermediary organization using government subsidies. But the OTA team found that the flaws of the project were serious enough to question whether replication was desirable.

1. Technological Replicability

Almost all of the technologies used by ADF-funded projects can be replicated (table 4-6). The greatest constraint, however, is that many could not be repeated without a large grant from ADF or another external funder. There was a low chance in seven cases that other groups could implement the activity since they did not

have access to funds. Thus, for those who consider repetition of the technology or the specific sector activity by another group as the core of replicability, more than half of ADF projects were not replicable.

The lack of other suitable physical settings or infrastructures generally was not a serious constraint to technology transfer, nor were the technologies too difficult for other local people to learn. In one case, lack of capability to control access to the benefits of the activity was identified as a constraint to replicability. While NGK successfully completed its water and irrigation system, OTA'S assessment team gave it a low rating on overall replicability because self-help construction of gravity-fed water systems is possible in only a few regions in Kenya. More important, none of these regions are in



Photo credit: OTA/Scott McCormick

Not all projects should be replicated. Unacceptable levels of soil erosion may result because the tractor-hire project in Tutume, Botswana, plowed this land.

newly resettled areas where local groups can control access to the water. Also, the water system was expensive and few funders, including the Kenyan government, provide such large amounts of funding to small communities. Thus, the circumstances critical for success limited the project's ability to be replicated elsewhere.

2. Organizational Replicability

Aspects of the sponsoring group's management structure, function, or style could be beneficial to other groups in three-quarters of the projects (table 4-6). Examples of promising organizational elements included the open management style of Boiteko, the interlocking church committee structure of Morogoro, the tri-village management committee of NGK, and national union membership to share information illustrated in Ross Bethio. Generally, OTA found that the processes, like project activities, cannot be rigidly repeated. For example, one weakness of the Union Kaoural project in Senegal was that the intermediary organization's leaders imposed an inflexible project model on all participating villages.

Few, if any, project activities or technologies funded by ADF were innovative in themselves. Using the technologies was often an innovative experience for the project participants or an innovative activity for the locale, however. The uniqueness of each group and its setting means that each group must develop its own activity, assess its own resources and needs, and make decisions about the best way to reach its goals. These activities are at the core of the development process. Enabling other groups to engage in these activities may be the most replicable work ADF funds.

3. Level of Dissemination

A majority of the funded groups made some effort to spread what they learned (table 4-6). Most intermediary organizations, for example, intend to implement the ADF-funded activity in a number of locations, then to expand further. PfP, for example, expected to train 30 women's groups in managing small revolving

loan funds during the 2-year grant period. Instead, it provided training and loans to 92 groups and cannot meet further demand. Grassroots organizations can disseminate results through active membership in larger organizations. For example, Ross Bethio is sharing what it learned about the organization of irrigated rice production through its membership in FONGS, a national association of village groups in Senegal.

However, in only three cases (PfP, Morogoro, and Ross-Bethio), was there evidence that non-participants had adopted the technologies introduced by ADF-funded projects. Demonstrated yield increases in these examples led outsiders to begin to copy some of their neighbors' successful activities.

Finding: Three of the projects had some positive impact on national-level institutions.

Three projects had an impact on national institutions; all were successful projects run by small grassroots organizations. Ross Bethio in Senegal was among the first village associations to obtain credit from a new National Agricultural Credit Bank; its success has led to the expectation that others can follow. In Botswana, Boiteko's success with its vegetable garden and poultryegg production has influenced thinking in the Ministry of Agriculture where it is seen as a successful pilot project. Leaders have provided technical assistance to a similar horticultural project funded by ADF in Botswana. Water and agriculture officials from other districts in Kenya are looking at NGK with interest. Government water/irrigation projects often are not completed and are more costly than NGK's project.

Factors Fostering and Constraining Replicability

In addition to the constraints listed previously, another problem is that organizations rarely documented concrete results that project activities brought to the participants, limiting their ability to publicize results to other communities and outsiders, including government officials and outside donors. ADF promoted

shared learning in several cases by funding travel costs for exchange visits between projects and for managers to attend meetings. Good communication of project leaders with local officials enables the officials to bring the project to the attention of others.

Replicability often depends on conditions outside of a group's control, such as market prices. For example, late government payments for maize were limiting PFP's ability to assist new groups in Kenya.

RELATIONSHIPS AMONG PARTICIPATION, RESULTS, SUSTAINABILITY, AND REPLICABILITY

An analysis of the interconnections between participation, results, sustainability, and replicability has implications about what ADF funding can accomplish. It also can improve ADF's ability to select and monitor projects. Although this sample is too small to provide a rigorous test of correlation, some interesting patterns emerge from this review of 12 projects. Complementarities, or positive correlations among the four critical issues, suggest that more than one desirable outcome can be achieved simultaneously and that proposal analysis and project monitoring must be done holistically. Trade-offs, or negative correlations, identify dilemmas for the Foundation and other development organizations because they may suggest that achieving certain results can have undesirable costs in other areas.

Complementarities

ADF's legislation is based on the assumption that increased participation improves results. Generally, this report confirms that assumption. For example, projects that rated high on participation also rated high or moderate in results, while projects that rated low on participation also rated low or moderate in results. NGK's successful completion of the water system was due, in large part, to the labor and other contributions of the residents. High levels of participation allowed local groups to overcome deficiencies in other areas in all cases, but especially in Dakoro and NGK. In these cases, a sense of "ownership" by the local group increased the potential for the continuation of activities. Since the activities meet real needs, people work to maintain them, even if the initial external investment was beyond their

means. Nevertheless, participation alone is not always enough to ensure the success of an activity.

Success in bringing benefits to participants helped sponsoring organizations gain support and widen participation in the activity and group. Examples include the large numbers of local women's groups who want to join PFP's credit program and farmers who want to register for Morogoro's tractor-hire/input program and AFC'S credit program. The positive effect of results on participation is consistent with development literature and the experience of schools that provide training and technical assistance to community organizations in the United States (e.g., the Industrial Areas Foundation in New York City, New York). According to this view, organizations develop by identifying realistic actions that bring participants concrete benefits due to their collective effort. Thus, OTA'S team members were concerned that some ADF staff believe that ADF-funded groups grow as much through failure as success and attributed some problems in ADF's grant monitoring to this attitude.

Success in bringing concrete improvements to participants was found to be a condition of replicability. For example, the financial success of the Boiteko group is the reason other groups want to start similar projects in Botswana. But not every successful project is considered highly replicable.

Trade-offs

Trade-offs also exist, however, between participation and results. If board members or other decisionmakers are chosen from elite

groups, such as more highly-educated persons and government officials, they often can help local groups gain access to financial and technical resources, but they also tend to dominate groups. This was seen in the Kikatiti, Tutume, and Union Kaoural projects. The same tendency is true for technical assistance providers, although OTA also saw exceptions to both, for example, in the Boiteko project.

Placing too great an emphasis on achieving ambitious project results in too short a time period can restrict participation, just as too much emphasis on participation can lessen results, at least in the short-term. Slowing down the pace of change and gradually increasing participation can help bring about longer-lasting results. Since cultural norms, such as women's low participation in decisionmaking, do not change quickly, ADF should be expected to fund groups in which women's participation may not be equal but which are at least moving in the direction of becoming more participatory within the local context. The perceived conflict between participation and results may be, in fact, only a problem in the short-term.

Another apparent conflict, between replicability and participation, was seen in attempts to impose external models, which hampered achieving results in one project, Union Kaoural, precisely because the desires of the local groups were not taken into account. This inflexible approach to replicability was a problem for some intermediary organizations as they attempted to expand their programs to new sub-groups, and for some persons selected to provide technical assistance to grassroots groups. Flexibility in adapting to new circumstances, by project managers and funders, was identified as important in achieving results, sustainability, and replicability.

Funding intermediary versus grassroots groups also involves trade-offs. Projects of intermediary organizations may have the potential for broader results, greater sustainability,

and better replicability than those of grassroots groups but these advantages are not automatic and often occur at the cost of less participation of beneficiaries in project design and implementation. But possible advantages of grassroots groups in participation may correspond with lesser results. In certain instances, their impact, while affecting fewer people directly, may be deeper. Given the proper context and careful effort, successful grassroots projects can be models for others and even affect national policy. Alternatively, changing the ways intermediary organizations do business may have a profound impact on the national setting and alter the structures that constrain or enhance local efforts. Understanding these potential differences is important for tapping the actual strengths of each.

Also trade-offs exist between participation and sustainability, particularly environmental sustainability. Often the environmental problems presented by new technologies are dimly perceived and take a back seat to the immediate, pressing need for increased water or agricultural production. For example, the people in Tutume, Botswana, wanted tractor plowing but the OTA team concluded that the long-term results of plowing are likely to be disadvantageous. While this is a problem for all donors, it poses an especially difficult challenge for ADF because of its mandate to support self-help efforts.

A related trade-off is evidenced in the likelihood that the success of some project activities can cause environmental problems, e.g., Ross Bethio's irrigation of 100 acres and the acreage plowed by the Tutume and Morogoro projects. Typically project beneficiaries will not experience the negative economic impact of environmental damage for some time, even though in Tutume the harm is sufficient to threaten short-term economic benefits. The donor's role is to help project managers see the potential dangers and plan ways to minimize them.

PROJECT FINDINGS, PROGRAM CHOICES, AND ADF'S MANDATE

OTA'S assessment of 12 ADF-funded projects identified many areas where the projects' performance is good. But in several key areas, ADF is falling short of its mandate. This is especially true for important aspects of participation, sustainability, and replicability. One-third of the visited projects had low overall levels of participation, even considering the local context; ADF's decision to fund two of them was questionable. Although ADF-funded projects visited were judged likely to attain short-term objectives and benefit some people, a number raised questions regarding the overall impact and aspects of longer-term sustainability. Of special concern to OTA was the portion of agricultural projects using relatively high-risk technologies and the lack of consideration of environmental impacts. Only two projects rated low in overall replicability, using a generous measure that includes replicability of management processes. By a more conventional definition, over half of the projects would be difficult to replicate.

Participation, sustainability, and replicability are fundamental to ADF's mandate, making weaknesses in these areas a particular concern. The need for participatory development permeated congressional testimony and debate during the long process of the Foundation's inception and is a recurring theme throughout the authorizing legislation. Sustainability and replicability were implicit in the discussions preceding ADF's establishment. Appreciable positive impacts over time and across locations were expected to be a major outcome of supporting grassroots development. Congress codified these expectations by specifying that ADF's funded efforts contribute to "social and economic development."

The findings regarding the 12 ADF-funded projects discussed here appear to be applicable to the Foundation's larger portfolio. First,

OTA'S review of ADF's files in Washington, which looked at 58 projects, pointed to a similar lack of attention to participation and concerns regarding financial or economic viability, technical soundness, and environmental sustainability. Second, interviews with U.S. ambassadors, AID mission staff, representatives from other public and private development agencies, and ADF's in-country staff led to the conclusion that the projects visited were typical of the country programs in at least five of the six countries visited. In the sixth country, Kenya, the 2 projects visited seemed to be performing better than all but 1 of the 13 other ADF-funded projects, based on information including ADF's own evaluations of its projects in Kenya. Third, OTA'S findings parallel and confirm many conclusions reached by the authors of ADF's 1987 evaluations of 10 projects,

The Foundation has had just 4 years to turn its legislative mandate into an operational program. ADF faced difficult choices along the way, given the complexity of its mandate and the challenges of African grassroots development. It has had to balance the distinct and, at times, apparently contradictory aspects of the mandate in allocating resources (time, money, and staff) and setting priorities. The Foundation's choices sometimes were influenced by external factors such as congressional pressure to quickly obligate funds following its own false start, staff and budget limitations, and the varied circumstances it faced in each African country. These combined choices are reflected in the project results discussed here. The next chapter presents OTA'S findings on how ADF's choices have produced both positive and negative results for its funding program. Also, chapter 5 suggests how different choices may improve ADF's performance in relation to its mandate.