

Report No. 15157-PAK

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1/14/96

Pakistan

The Aga Khan Rural Support Program

A Third Evaluation

December 11, 1995

Operations Evaluation Department



Document of the World Bank

Currency Equivalent

Year	Rs per USD
1983	13.1
1985	15.9
1987	17.4
1989	20.5
1991	23.8
1993	28.1
1994	30.6

Acronyms

ADB	Asian Development Bank	MF	Master Farmer
AFL	Agriculture, Forestry and Livestock	MT	Master Trainer
AKES	Aga Khan Educational Service	PPI	Physical Infrastructure Project
AKF	Aga Khan Foundation	NARC	National Agricultural Research Center
AKHS	Aga Khan Health Service	NCFI	Net Cash Farm Income
AKRSP	Aga Khan Rural Support Program	NGO	Nongovernment Organization
APDP	Accelerated Professional Development Program	NORAD	Norwegian Agency for International Development
BAMA	Baltistan Apricot Marketing Association	NRDB	Northern Areas Development Bank
BRSP	Balochistan Rural Support Program	NRM	Natural Resource Management
CADP	Chitral Area Development Project	NRSP	National Rural Support Program
CVP	Commercial Vegetable Package	NWFP	Northwest Frontier Province
EDD	Enterprise Development Division	PARC	Pakistan Agricultural Research Council
ESC	Enterprise Support Company	PLS	Profit and Loss Sharing
FAO	Food and Agriculture Organization	PPI	Productive Physical Infrastructure
FECT	Fuel-efficient Cooking Technology	PP&P	Plant Production and Protection
FMU	Field Management Unit	RIMI	Revised Institutional Maturity Index
FPAP	Family Planning Association of Pakistan	RWSS	Rural Water Supply and Sanitation
GAMA	Gilgit Apricot Marketing Association	SAP	Social Action Program
GFI	Gross Farm Income	SDC	Strategy Development Committee
GHI	Gross Household Income	SFDP	Sustainable Forestry Development Program
GOP	Government of Pakistan	SFP	Social Forestry Program
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit	SIAP	Swabi Irrigated Agricultural Project
HBP I & II	Homebased Poultry Package I and II	SO	Social Organizer
HRD	Human Resource Development Institution	SOU	Social Organizer Unit
IFAD	International Fund for Agricultural Development	SRSC	Sarhad Rural Support Corporation
IMI	Institutional Maturity Index	UNDP	United Nations Development Program
IRDP	Integrated Rural Development Program	UNICEF	United Nations Children's Fund
IUCN	Institutional Union for the Conservation of Nature and Natural Resources	VA	Village Accountant
JMM	Joint Monitoring Mission	VOCP	VO Credit Program
KIDP	Kalam Irrigation Development Project	VFS	Village Forestry Specialist
LBRDD	Local Bodies and Rural Development Department	VIP	Vegetable Introduction Package
MECP	Microenterprise Credit Program	VO	Village Organization
MER	Monitoring, Evaluation and Research	VP&P	Vegetable Production and Protection
		WID	Women-in-Development
		WO	Women's Organization
		WOCP	Women's Organization Credit Program

December 8, 1995


MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: *PAKISTAN: The Aga Khan Rural Support Program, A Third Evaluation*

The attached report, distributed for information, was prepared by OED at the request of the Aga Khan Foundation (AKF). It evaluates the impact of the Aga Khan Rural Support Program (AKRSP) in the Northern Areas and Chitral in Pakistan.

This innovative, successful rural development program has been underway for thirteen years. The approach to community-based development it has pioneered is being replicated in other parts of Pakistan and, with UNDP assistance, in India, Bangladesh, Sri Lanka, Nepal and the Maldives.

Earlier evaluations of AKRSP were carried out by OED in 1986 and 1989. The full cost of these evaluations has been covered by AKF and AKRSP cofinanciers. The findings and recommendations of the evaluation have been presented to AKF, donors and representatives of the Government of Pakistan, and are being used in the finalization of AKRSP's future strategy.

A handwritten signature in black ink, consisting of a stylized, cursive script that is difficult to decipher but appears to be a personal name or initials.

Attachment

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Map Number 27242

Preface

The Aga Khan Rural Support Program (AKRSP) was conceived as a new approach to fostering the development of rural people. It was established by the Aga Khan Foundation (AKF)¹ with the support of numerous donor agencies (Table A1.14). The primary purpose of the Program is to involve rural people in their own development. It also aims to provide a model of rural development applicable in other settings.

Benchmark surveys and evaluations have been undertaken by the Monitoring, Evaluation and Research section of AKRSP in the early 1990s. These have complemented a wide array of individual studies and an attempt to quantify the maturity of each village organization as a key element in the development process. In addition, since 1991 the Program's donors have mounted joint monitoring missions towards the end of each calendar year, which have provided useful insights.

In view of the importance and visibility of the Program in this sensitive area of Pakistan, and the intention to capitalize on existing achievements in a new phase,² AKF invited the Operations Evaluation Department (OED) of the World Bank to undertake a third evaluation of progress. Earlier evaluations were in 1986 and 1989.

In April/May 1995 the OED evaluation team visited regional and central headquarters and villages in each of the four Program areas—Gilgit, Chitral, Baltistan and Astore. The team also exchanged views with representatives of AKRSP's Board and donors at the beginning and end of the field visit. The draft report was discussed at a meeting held in Brussels with representatives of the Government of Pakistan, donor agencies and AKF on September 15, 1995. Individuals from the team also discussed the report with the Donor Liaison Group in Islamabad, and with representatives of AKF (Canada) in Ottawa.

Chapter 1 introduces the framework of the Program, the challenges it now faces, the current initiatives being taken to respond to the emerging development environment, and the approach taken in this evaluation. Chapter 2 examines the impact of the Program on the target population. Chapter 3 analyzes the major instruments used to attain impact. Chapter 4 comments on issues specifically affecting women. Chapter 5 covers organization and governance aspects. Replicability of the approach is treated in Chapter 6. Conclusions and future outlook are presented in Chapter 7. More detailed annexes are included on savings and credit, and on technology development proposals.

The evaluation team consisted of Dennis Purcell (Team Leader), Graham Donaldson, Julian Blackwood, J.D. von Pischke, and Pamela Hunte (World Bank), and consultants Mike Collinson, and Tariq Siddiqui. Charina Go provided administrative support in report preparation.

1. The Aga Khan Foundation is a private, non-denominational, philanthropic network established by His Highness the Aga Khan. It seeks to promote social development, primarily in low-income countries of Asia and Africa, by funding programs in health, education and rural development. The Foundation is registered in Switzerland (1967) and has its Head office in Geneva. It maintains branch offices in Pakistan (1969), the United Kingdom (1973), Kenya (1974), India (1978), Bangladesh (1980) and Portugal (1983), and has independent affiliates in Canada (1980) and the United States (1981). Grantees and beneficiaries in the Aga Khan Rural Support Program are selected without regard to race, religion or political persuasion.

2. A Strategy Development Committee appointed by the Board of AKRSP made substantial proposals in 1994 for the future direction of the Program.

Summary

1. This summary highlights the main findings of the OED evaluation of AKRSP. The implications of these findings for the future direction of the Program are elaborated in more detail in Chapter 7 of the report, "Future Direction and Outlook."
2. AKRSP, in its 13th year of operation, continues to be an effective instrument to improve the productivity of communities in the Northern Areas and Chitral, and the welfare of families in these communities. This has resulted from its interventions in productive investments, production-support investments such as access roads, training, and financial and technical services. A key element has been institutional development at the village level—village organizations (VOs) and women's organizations (WOs)—which has provided the framework to organize the energies of community members to avail themselves of outside assistance, as well as to direct their own resources into more productive endeavors.
3. Not all of the positive changes which have accrued in the Northern Region are due to AKRSP. Many non-Program^a investments and activities have contributed to development. The Karakoram highway is a prime example, and other government and nongovernment investments and services have played a role in social and economic change. Nevertheless, AKRSP has demonstrated that an external agent can facilitate the organization of communities to develop their own self-help capability, provided that agent has the appropriate strategy and the facilities and staff to implement it effectively.
4. AKRSP has reached a stage where it needs to take a hard look at where it stands vis-à-vis the current stage of development in the North, and what its future role should be in attaining its objectives of sustainable and equitable development. The coverage of the rural population through VOs is already very high in the district of Gilgit (where nearly three-quarters of households are members) and is about two-thirds in Chitral and Baltistan. In the remaining parts of these regions and in the district of Astore, which was only recently included in the Program, there is still opportunity to continue and expand the traditional AKRSP activities. However, in the districts in which AKRSP has been active for longer periods, a different set of issues needs to be addressed: how to ensure that the savings and credit mechanisms are sustained after AKRSP? how to strengthen VOs/WOs so that they can function as semi-permanent entities for the good of all community households? how to organize and fund further major productive and social infrastructure which is still sorely needed? how to manage natural resources to realize their potential in contributing to sustainable development? and how to stimulate local entrepreneurial capacity to enhance the area economy?
5. These issues gave rise to the appointment of a Strategy Development Committee (SDC) in 1992 to assist the owners and Board of AKRSP in defining the appropriate future direction and scope of the Program. The OED evaluation mission examined these same issues and the proposals of the SDC which were being finalized at the time of the mission. The evaluation also reviewed the impact of the Program to date, and the efficiency and effectiveness of its various development instruments.

^a "Program" with a capital "P" is synonymous with AKRSP.

Program Impact

6. As comprehensive household income surveys were only first undertaken in 1992, these do not provide a basis for an overall quantitative assessment of the impact on the targeted population. However, AKRSP has intensively monitored the implementation of its development instruments and done numerous studies to evaluate their effectiveness. This and secondary data provide a reasonable basis for Program evaluation.

7. Average household income appears to have almost doubled in real terms during the Program implementation period (para. 2.7). The basic production system of most households which is a mixture of agricultural/livestock production and off-farm, often nonagricultural, use of the family labor has not changed. However, agriculture is still usually the major source of household income, and improvements in agriculture have made a major contribution to income improvement (para. 2.13). AKRSP has been a partner in this agricultural development.

8. The area under crops has substantially increased due to productive physical infrastructure projects (PPIs) which have enhanced the supply of irrigation water; this has been important for the expansion of cash crops such as fruit trees and vegetables, but also for forestry which has a longer term benefit, and for alfalfa as a fodder crop for livestock production (para. 2.11). The enhanced ability to procure inputs and dispose of outputs through Program services and by improved village access has complemented the improvement in resource base to enhance productivity and reduce the unit costs of production.

9. Credit has been made easily accessible so that households have been able to purchase more production inputs and hold their produce to gain higher prices. The women members of households have benefited from special programs through WOs, including vegetable and small-scale poultry production, and have realized a degree of independence by having their own personal savings accounts (paras. 2.19 - 2.28).

10. However, not all of the activities of the Program have been equally successful, and major adjustments need to be made to improve the effectiveness of some development instruments. Also, the persistence of the typical household economy model, in which nearly half of the income is non-farm related, emphasizes the need to examine longer-term prospects and opportunities in designing support strategies.

Equity Issues

11. The Gilgit region has more complete coverage than other areas, which is largely related to its longer period of participation in the Program. It also has more economic development, but this can be linked to its location which provides more opportunities than the other regions. However, overall, AKRSP appears to be substantially meeting its objective of equitable distribution of development opportunities among regions, communities and households (paras. 2.34 - 2.36). This does not mean that benefits have been distributed equally, but differences can be largely explained by variations in the level of resources available to, and in the initiative of the leadership within, a community or household.

12. AKRSP aims at: (a) improving the welfare and income of the majority of households, (b) ensuring that its grant and any subsidized support are, indeed, equitably distributed, and (c)

undertaking specific programs which are targeted to improve the conditions of those who appear unable to benefit from available opportunities without special assistance. Performance is satisfactory in all three functions, and the whole women's program is an example of the latter function. However, continued vigilance is required in monitoring this aspect of AKRSP support within communities.

13. The PPIs in communities are often land-based (e.g., irrigation channels and new crop land) and are distributed equally to all landholders, with favorable effects on resource distribution. However, although the Northern Region is unique in Pakistan in having virtually all rural households who rely on income from agriculture actually owning land, situations could arise in which poorer households do not own land and do not share in land-based PPI benefits; this would require special interventions to realize AKRSP's equity objective (para. 2.40). Similarly, the uptake of services also warrants careful monitoring to ensure that those with more resources do not capture an inappropriate share (para. 2.43).

14. Within households, despite the creation of WOs and significant advances in a targeted program to assist members, it has been more difficult to effectively provide equal opportunities to all women. Illiteracy and religious and cultural factors inhibit change in the traditional role of women, more so in some locations than others, and the Program has to be realistic in estimating the pace at which change can be achieved. Nevertheless, programs should be carefully designed and monitored to be responsive to these constraints wherever this is feasible (para. 2.46). More targeted programs may be warranted to reach the less fortunate women in communities.

Village Organizations

15. There is a growing realization of the value of the VO concept. GOP has agreed to use the VOs as the instrument to channel its national Social Action Program in the Northern Areas; the Chief Secretary of the Northern Areas has instructed line departments to maximize use of VOs in implementing government programs; and GOP recently used the VOs and AKRSP to distribute rehabilitation funds following the disastrous rains of 1992. As many VOs have been in existence since 1982 and 1983, it could be expected that these would have matured into stable self-sustaining entities if the objective of their acting as continuing self-help institutions is realistic. In practice, there are many which now exhibit these characteristics, especially in some areas of Gilgit region, but also successful VOs are found in the other two regions. However, the majority still need assistance if they are to realize their potential.

16. Improving the skills of individuals and the leadership in VOs will help, but the most important factor determining their future will be a perception in the community that the VO will continue to provide significant benefits which are not likely to be obtained by other means. The initial benefits have been very obvious, but the task is now to verify and demonstrate that the longer-term benefits from continuing with the institution are worthwhile. Advantages could be in the form of (a) more effective interaction with outside agencies to acquire benefits and services for the majority, (b) greater access to capital resources for productive or consumptive use through sustainable savings and lending arrangements, (c) organization of the use and maintenance of common and shared property, and (d) providing a mechanism for resolving internal or inter-community disputes.

17. An important development has been the linkages which AKRSP has encouraged between VOs and outside agencies to allow VOs to capture more development and social services (paras.

3.21 - 3.33). To fully realize this potential, however, AKRSP will have to be perceived as having no biases and providing no preferential treatment to any particular area, sect, or type of community. Despite the potential advantages of these linkages, it should not be assumed that a government agency can simply substitute for an NGO like AKRSP in implementing effective dialogues and action programs with communities through the VO. It is likely that AKRSP will have to provide training to relevant government agencies if this mechanism is to be used effectively (paras. 3.25, 3.33 and 5.16).

18. Formalization of the status of VOs has legitimately been avoided to date to maximize the perception by communities that VOs are their own institutions. However, in view of the emerging role of VOs as partners in GOP investment programs, and as entities involved with the proposed NRDB, it appears necessary that consideration now be given to the adoption of some legal or quasi-legal structure (para. 7.17).

PPI Program

19. The PPI program has had a substantial economic development impact, and has been very effective in providing the basic incentive for communities to form VOs and enter into development partnerships with AKRSP. However, the program has slowed down in recent years, especially in areas which have had longer exposure to AKRSP activities (para. 3.45). Although many VOs have been able to avail themselves of additional investment support from AKRSP by being involved in multi-community "cluster" projects, and by participating in such programs as forestry development contracts, the policy has been to limit the PPI grant to a single investment. This is consistent with the objective of fostering a self-help attitude and avoiding the dependency syndrome. However there is obviously a big potential to accelerate development by more infrastructural investment. This is especially so for irrigation development, as this not only expands the productive resource base, but also allows the use of higher value crops, both of which have demonstrated their contribution to Program benefits.

20. This suggests that AKRSP should become more proactive in identifying additional infrastructure investments which (a) provide substantial common good, (b) are beyond the capacity of the community to initiate and fund by itself, (c) are of a type where the VO labor resource could make a significant contribution, and (d) would be amenable to VO operation and maintenance responsibility subsequent to construction. This is consistent with the wider area planning function envisaged for AKRSP's engineering section (PIES). The latest SDC paper proposes an expanded program and assumes that funding would be largely provided by government, bilateral and other NGO programs complementing community contributions in cash, in kind, or as borrowed money. However, there are likely to be many situations in which a grant from AKRSP would make a funding package viable, and would give the Program greater leverage to ensure efficient implementation and the opportunity to influence any equity considerations which might be warranted. Such participation should not exacerbate dependency, as the communities would be active contributors and be responsible for eventual operation and maintenance (paras. 3.53 - 3.55)

21. Success in involving VOs with government agencies in this type of productive or social infrastructure would do much towards introducing a system which allows communities to become directly involved in the local and regional planning process.

Natural Resource Management (NRM)

22. Important new technologies have been introduced in fruit, vegetables, potatoes and forestry, and significant advances have been made in animal health and poultry production (paras. 3.76, 3.77, 3.89 and 3.103). However, much less impact has been obtained in cereals and animal nutrition, which are the major users of resources available to rural households (paras. 3.67, 3.73 and 3.74). The evaluation considers that significant improvements can be made in the NRM program, and greater emphasis should be placed on it in the next phase. This is also in accordance with the recommendations of the SDC and with the thinking of senior staff and management in the organization. Improvements can be made in the techniques used to identify needs of different types of farming households, and to generate relevant technologies to meet these needs.

23. A greater understanding of the constraints and potentials of households in the major categories of production systems should not only influence technology development, but also the whole dialogue process through which AKRSP plans its interventions with communities. The relatively standard solutions to problems identified in dialogues suggest that the responsiveness of the process is less than it should be, especially when some of the "solutions" have achieved only low levels of adoption (paras. 3.67, 3.72 and 3.94).

24. Recent initiatives have attempted to make the Program more responsive to local needs by decentralizing it to the regions and ultimately to Field Management Units (FMUs) (paras. 5.6 and 5.7). While this appears logical, the difficulty of attracting and retaining skilled and well trained staff has to be taken into account in locating personnel, and in formalizing the linkages between different levels in the NRM organization. Nor does the evaluation team believe that, on its own, this will be enough to instill the required farming system perspective in NRM staff, and meet the requirements for more appropriate technology development.

25. Suggestions are made for an approach which involves key farmers in the design and evaluation of results of experimentation (paras. 3.124 - 3.132). This, however, would require more staff and funding than is currently envisaged. Nevertheless it is sufficiently important to warrant its consideration as a specially funded project. It is also possible that international entities which specialize in this field may be interested in collaboration. A relatively high profile project with international collaboration may be able to overcome the problem of retention of quality staff in NRM. Linkages with the national research system would also be essential to ensure the long-term sustainability of the adaptive research investment, and the possibility of contracting out parts of the adaptive research program to entities with comparative advantage should be considered.

Human Resource Development

26. AKRSP has made a major contribution in human resource development through its training programs. The concept of training villagers in specific fields so that these individuals will continue to provide services within their communities has been a key element in the AKRSP strategy.

27. However, results have not been uniformly good, particularly in the technical fields (paras. 3.63 and 3.135 - 3.137). Where the specialist provides a service which is generally

appreciated as a specialized skill, such as budding/grafting of fruit trees, or involves a skill and incurs a cash cost, such as the administration of vaccines or drugs, there is a greater willingness for other members of the community to pay the individual for services rendered. There is less willingness to pay for general agricultural advice. It has also been difficult for AKRSP staff to adequately support the specialists. AKRSP has responded to this situation by recently focusing a lot of attention on the development of "master trainers" (paras. 3.138 - 3.142). This involves more intensive training of selected specialists to increase their skill level, but also assistance to carry on a business associated with the specialized skill area, such as the supply of inputs as vaccines or pesticides. This program promises to add a permanence to the technical service system, as these master trainers should consider it in their interests to continue to enhance their skills, and to provide appropriate advice along with their provision of inputs. They are also likely to solicit the cooperation of the more numerous specialists who would be represented in most communities. However, after AKRSP terminates its intervention, it will still be necessary to have a technical support system for such experts. This emphasizes the need to increasingly promote linkages not only with private sector providers but also with government departments which can provide some relevant support in the future.

28. Realization of the intended role of VOs as full partners in development will be enhanced if there is a greater depth of management training in VOs. In addition, the future program is likely to imply cooperation by a number of VOs in larger projects in many instances, and a cadre of managers with special skills will be needed to assume leadership roles in a multi-community setting. The proposed new developments in village banking will require substantially expanded training of selected individuals in accounting and management (paras. 3.143, 3.190 and 3.204). This program will also need more intensive follow-up support in the field if it is to realize its full potential.

29. Another important aspect of human resource development relates to the training of AKRSP staff. It has always been the policy of the institution to recruit local staff to the maximum extent possible. However, in the case of senior staff positions it has been necessary to recruit non-northerners in many instances due to the scarcity of suitably trained local candidates. This approach was legitimate, but AKRSP has probably not placed sufficient emphasis in the past on ensuring that local staff are given preferential advanced training opportunities so that they can assume senior posts in their local area. Had this been done in a concerted program, some of the recent staffing difficulties referred to below might have been avoided. This matter, however, has recently received management's attention, and appropriate scholarship arrangements are in place (para. 5.5).

Marketing

30. The marketing program has evolved considerably. The earlier emphasis on cooperative marketing has decreased, and the focus is now more appropriately on improving the skills of producers in handling, processing and presenting their produce, and providing linkages with established markets and/or traders (para. 3.153). The two cooperative marketing ventures which have been established have been beneficial in achieving higher prices for their members, as both involved products which were particularly suited to this type of intervention. However, both (BAMA and GAMA) still need nurturing to ensure that business acumen is adequately instilled in management (para. 3.151). The Marketing section has also expanded its horizons into promoting the establishment of nonagricultural business enterprises, such as village guest houses

to capitalize on the potential tourist market, and changed its title to Enterprise Development Division (EDD) in 1992.

31. The proposed creation of an Enterprise Support Company (ESC) will necessitate a clear definition of responsibilities for this and the EDD.

Savings and Credit

32. The savings and credit program has contributed to the establishment of VOs as useful community institutions, and facilitated economic development by making credit accessible to the majority of the population in the Program area. It has been a flexible and responsive instrument which has evolved as it learned from experience. The VO/WO credit program introduced in the 1990s has been particularly effective in involving communities and households in the credit process. However, there is a trend of deteriorating repayment performance in AKRSP's credit portfolio which must be monitored closely (para. 3.174).

33. The proposal to formalize the savings and credit program in a bank specifically for the Northern Region (NRDB) is appropriate. It provides the opportunity to build on the relatively good performance which this instrument has enjoyed to date, and to create a permanence which is needed to provide continued financial support for local development. Successful establishment of this institution, however, will require increased professionalism in financial intermediation (paras. 7.35 and 7.36). This will include a shift in strategic focus from meeting credit needs to creating debt capacity, building financial information systems, and introducing other measures to control and manage risk, improving operations support and training at the VO/WO level, and increasing controls and other internal prudential oversight.

34. NRDB's unique financial structure in having grant equity which does not have to yield dividends for shareholders provides it with several options to increase its outreach to clients. First, it could undertake more lending by offering longer-term loans. This would increase the risk in its portfolio, as risk is created by longer-term commitments. It would require a high level of market and client information. Second, it could take advantage of the low cost of NRDB's funding by subsidizing lending for particular types of investment. Subsidized lending was suggested by the Program's consultants for social infrastructure projects with a large "common good" element. This, however, can create expectations which are hard to contain, and create incentives to deal with losses in a non-transparent way. The inclusion of a transparent grant element in an investment package to make a loan on regular terms more viable may be more appropriate. Finally, NRDB could choose to subsidize savings through attractive interest rates and staff costs required for an aggressive savings program. Since all VO/WO members save, and because others in the area also save, a subsidy for savings would benefit the greatest number of people (paras. 7.47 - 7.51).

35. The Enterprise Support Company (ESC) is intended to finance investments which potentially have high social and catalytic benefits, but which carry excessive risk for a regular lender. Its business projections show that it is unlikely to be profitable. Some of NRDB's annual profits will be transferred to ESC's equity. It also has a number of features which allow it to interact effectively with local markets and entrepreneurs. This is a challenging role which will require very skillful management. If failure to repay, for any reason, is widely witnessed and not effectively dealt with, some of those who are in a position to repay may decide to attempt to

evade repayment. One way to avoid formation of this culture is to try to ensure that borrowers stand to lose more than lenders when loans are not repaid.

36. Because of the importance of containing any expectation of debt forgiveness, it may be more appropriate to include in ESC the social infrastructure lending currently proposed for NRDB, as this appears to be the most problematic activity proposed for the bank (para. 7.54).

Gender Issues

37. The WO has proved to be an accepted and viable forum for village women's participation in the development process in the Northern Region, and it should be strengthened in the next phase of AKRSP's work (paras. 3.9 - 3.20). While requests from new communities should be met, the program should now focus upon quality of interaction with the existing WOs, along with encouraging more household coverage in each community.

38. Improvement in staff monitoring and follow-up of the WOs is called for, and more flexible implementation of various packages is also necessary. AKRSP's activities in the area of appropriate technology should be carefully reviewed. The introduction of viable labor-saving technology which is accepted by the local populace is crucial—especially for women—but has not been very successful to date (paras. 4.23 - 4.25).

39. In introducing Program activities of a more sophisticated financial nature, it will be important that women are not left out of the process (para. 4.41). This calls for intensive training of selected women from WOs in entrepreneurial skills. At the other end of the continuum of WO membership are the vulnerable women of poor households. These women, who are most in need of assistance, are often left out of WO activities, and this problem needs special attention.

40. The linkages which AKRSP has been encouraging between VO/WOs and government, and NGO agencies in health, water supply and education are especially beneficial to women (paras. 4.51 and 4.52). AKRSP, through the WO vegetable and poultry packages, has directly enhanced household nutrition and provided a source of cash income for many women (paras. 4.26 - 4.32).

41. Integration of gender-related staff and activities into the mainstream Program should be continued, but not without careful planning and constant evaluation of this complex process. The role of the WID Monitors in each region will be especially important in monitoring the effects of the integration process. Additional gender-related workshops should be organized to encourage open discussion of difficulties which will inevitably occur (paras. 4.47 - 4.50).

Management, Organization and Governance

42. The new management of AKRSP has already demonstrated a capacity to address management, personnel and operational issues effectively. However, a number of significant morale problems are affecting productivity. These will have to be quickly addressed if AKRSP is to return to its former levels of efficiency. In the process of implementing AKRSP's emerging strategy, open communication between all levels of staff and management will be essential.

43. An expanded role for AKRSP as a facilitator or catalyst is appropriate, and should enable increased and more effective development investment in the Northern Region. To maximize the

potential benefits of this role, however, AKRSP will have to maintain a reputation as an unbiased, nonsectarian, development support institution. A completely transparent structure and relationship between its owners, its Board and its management will support its position. The emergence of the two new institutions, NRDB and ESC, make this transparency even more essential, as these will involve control over considerable financial resources in the region.

44. MER has accumulated extensive evaluation data especially over the last five years, which has the potential to allow management to make more informed decisions on Program strategy and content. However, this wealth of information is not being properly utilized. Of particular importance is the household income and VO/WO performance data. This can make a very useful contribution to developing greater understanding of the circumstances of different types of households in the various parts of the Program area, which is necessary to develop a total household perspective when considering project interventions. Categorization and description of the population should feed into most types of training and into the formulation of AKRSP's longer-term and annual programs.

Replicability

45. Debate continues on the extent to which the AKRSP model is replicable. However, while it is unlikely that the experience can be, or even should be, transferable in every component, there is little doubt that its principles are widely applicable. This is proven by the fact that they are being actively used in other programs in, and beyond, Pakistan.

46. AKRSP must be considered a successful program. It has made a substantial development impact in a very difficult environment. It has not attempted to maintain an enclave development approach, but has progressively integrated into the overall development process, with government and other investors. This, and the principle of insisting on developing a self-help capability with cooperating communities, augur well for sustainability of its impact.

47. The Program has imperfections. However, these can be addressed through adjustments in policy and in resources allocations. It is hoped that this evaluation will make a contribution to these adjustments. The next phase of the Program will give birth to a new series of problems and challenges. However, with a clear strategy and the appropriate relationships between staff, management, the Board of AKRSP's institutions and their owners, and the donor community, the successes of the Program should continue.

48. The recommendations and suggestions of the evaluation team for the future direction of the Program are further elaborated in Chapter 7.

1. Introduction

1.1 The basic objectives of the Aga Khan Rural Support Program (AKRSP) in the Northern Areas and Chitral in Pakistan have not changed appreciably since its inception in 1982. This has been to increase the capacity of the local people to become involved in their own development, so that they can improve their income and welfare in a sustainable and equitable manner. Key elements in the approach to meet these objectives are (a) the establishment of village-level institutions (Village Organizations-VO, and Women's Organizations-WO) to manage the development process; (b) the use of a productive physical infrastructure project (PPI) with a grant element from AKRSP to support economic development and provide the initial incentive for community organization; (c) the introduction of an obligatory individual saving scheme to mobilize capital, and use of credit through VO borrowing to assist small farmers; and (d) the training of local people in a range of organizational and technical skills to support them in their self-help activities.

1.2 The focus of the Program has been income generating investments and activities, which were considered a prerequisite to attain the intended increases in living standards. Apart from the direct benefits emanating from productive and production-support investments such as access roads, these interventions would enable the local communities to internalize the potential benefits arising from externalities such as the construction of the Karakoram highway through the Northern Areas. The intention was that the Program should demonstrate its replicability, and that AKRSP as a development organization would have limited life; i.e., the village institutions would eventually be sustainable without an external sponsoring entity.

1.3 The accomplishments of the program have undoubtedly been substantial (Table A1.1).¹ By end-1994, over 1800 VOs covering two-thirds of rural households in the Program areas had been established; over 1500 PPIs had been initiated; 745 WOs were active; close to 1000 regular or refresher training courses had been given to villagers; 200 ha of forestry and over 2,000 VO/WO forest nurseries had been established; nearly 2.5 million fruit trees had been planted; and in 1994 alone, over Rs. 90 million was disbursed as loans which largely used community savings as collateral. The current use of AKRSP and VOs by government and other non-government agencies to facilitate the implementation of particular programs in the North is testimony to the Program's accomplishments. Nevertheless, the fact that AKRSP is now in its 13th year and has, indeed, already made a substantial contribution to Northern development, suggests that a review be made to define AKRSP's future direction and strategy.

1.4 As could be expected, after a number of years of AKRSP activity in a district, the demonstration of development benefits has been accompanied by a decline in the rate at which new VOs are created and PPIs are initiated; also, on average, the VOs have become more mature as institutions. This is obvious in Gilgit as the initial area of concentration, while Astore as a relatively new district is still in a less mature, expansionary phase. Does this mean that AKRSP activities should cease in Gilgit and in the other districts as they reach an equivalent stage of maturity, or is continued support warranted, and if so in what way? Withdrawal would satisfy the objective of AKRSP's intervention being self-limiting.

¹ Tables designated "A1. ..." refer to Tables in Annex 1.

1.5 The need to address these questions became obvious in the early 1990s, and eventually led to AKRSP's Board appointing a Strategy Development Committee (SDC) in 1992. The SDC is currently in its third and final phase of deliberation. To date, it has reaffirmed the goals of AKRSP in promoting village organizations to participate in their own development, and of raising incomes and welfare through diversified economic activities, while maintaining a fair distribution of opportunities. It also, however, has analyzed the current environment in the Northern Areas and Chitral, and recommended where AKRSP activities should be concentrated in future for the long-term benefit of local communities.

1.6 Despite considerable maturity in many individual VOs, the SDC did not consider that it would be appropriate for AKRSP to withdraw from any area at this time. Rather, it recommended that AKRSP should concentrate on further developing the capacity of VO/WOs through training and encouragement of group and individual economic activities; on assisting VO/WOs to establish linkages with government and nongovernment agencies and programs with special emphasis on the provision of social services; on improving the capability of VOs to plan infrastructure investment in both the productive and social sectors without AKRSP incurring the major capital costs; and on enhancing the natural resource management aspects of village and individual farm development. It also proposed that the AKRSP-managed savings and loan arrangements be converted into a permanent banking system which could respond to the requirements of communities and of individual entrepreneurs. In essence, the SDC indicated that AKRSP should continue to operate throughout the North, but also intimated that it had reached a stage where significant changes were warranted to ensure that the development framework was sustainable.

1.7 This OED evaluation has analyzed most of the issues addressed by the SDC and comments at length on particular proposals such as the savings and credit arrangements. It accepts the centrality of the village institutions, and believes that most communities that have experienced a PPI have passed the stage where they needed to be convinced that acting together would allow them to articulate needs and receive benefits through cooperation in investments and services. Now the priority is to increase the awareness in communities (and amongst outside agencies) that VOs are able to be equal partners in development, and to facilitate this role. The evaluation pays special attention to the process by which improvement programs in natural resource management (NRM—agriculture, livestock and forestry) have been determined and supported, and makes recommendations to enhance their effectiveness. This has implications for staffing plans, for annual and longer-term program planning and for the traditional dialogues undertaken with village communities. Emphasis is also given to the potential for further high-return infrastructure development in the area. Due to the successes of AKRSP in promoting rural development in this difficult environment, the replicability of its principles in other situations, both inside and outside Pakistan, is discussed in the report.

1.8 Improvement in the role of women as household members is the subject of a specific chapter in which suggestions are made to more fully realize this important equity goal, but in which the cultural constraints affecting AKRSP's activities are appreciated. The report accepts the legitimacy of the objective of providing equitable opportunity for improved income and welfare. However, it also points out that this need not lead to a narrowing of the income gap within the area. Individuals (and even groups) with different levels of resources (land, labor, capital, education) and different characteristics (cultural/sectarian values, risk aversion) can be expected to respond to opportunities differently, with a considerable range in the individual benefits obtained. This must be accepted. An institution like AKRSP has the opportunity,

however, to ensure that any investment grant or subsidized program is equitably distributed, and can monitor overall development activities on the different intended beneficiary groups. This, then, can allow the Program management to appropriately intervene to provide targeted interventions for those who have not been able to respond to generally available opportunities.

1.9 The evaluation was not intended to collect substantial primary source data to undertake its analysis. It has largely relied on the statistics and reports presented by AKRSP management, its consultants and the Monitoring, Evaluation and Research (MER) section. These data, however, along with field visits in each of the AKRSP districts and extensive interviews with AKRSP staff, government officials and interested parties, permitted an appreciation of what the Program has done, and an analysis which, hopefully, leads to sound conclusions and useful recommendations for the next phase of the Program. Interaction with staff and the new management of AKRSP was especially important for the evaluation team, as these individuals are having to face the same issues being considered by SDC and external reviewers; they provided fertile ground for discussion on how the Program should be developed to meet the emerging demands of the Northern Areas and Chitral.

2. Program Impact

2.1 Using the 1981 Census as a base and assuming a 3.2 percent per annum rate of growth, AKRSP estimates that by end-1994 the total population of the Northern Areas and Chitral would have approached 1.1 million, with eighty-five percent living in approximately 1,150 rural villages (Table A1.2). Based on experience that large villages have more than one VO, AKRSP estimates that the area has a potential for close to 2,200 VOs, with about 50 households in each.

2.2 These numbers hide a great diversity across villages due to differences in climate, endowments of irrigation water and land, culture, and physical access to markets, and within villages due to differences in wealth and capabilities among households. The resulting variation in potential requires a development strategy responsive to such diversity.

2.3 By end-1994 the coverage of the Program had increased from about 55,000 households in 1,158 VOs in 1989 (the year of the previous OED evaluation) to over 75,000 households in 1,834 VOs. Most of this increase in coverage (85 percent) occurred in the Chitral and Baltistan regions, more particularly in the earlier years of this period (Table A1.3). The Astore district entered the Program in 1993 to provide the remaining expansion. Only minor changes occurred in Gilgit. The influence on women through WOs has continued strongly in all districts, but with some decline in 1994, except in Astore as a new program area.

2.4 The expanding coverage has not only involved productive investments, but has also been accompanied by a widening and changing portfolio of activities supported by evolving credit mechanisms and technical assistance. Several of the early activities such as lending for land development, appropriate technology and farm machinery were wound down after 1989. New ventures, particularly in vegetables, vegetable seeds, and fruit and forest trees, have expanded. The scope of the training program has widened in accordance with demand.

2.5 A significant impact should be anticipated from a program which has such a substantial coverage of the rural population (about two-thirds) in the Northern Areas and Chitral. The ultimate measure of impact would be the effect AKRSP has had on the income and welfare of households in the targeted area. This would necessitate measurement of changes in these phenomena in different socioeconomic sets of the population, and an assessment of the extent to which AKRSP has contributed to these changes.

2.6 Unfortunately, benchmark household income surveys were not undertaken until 1992. These will provide a sound basis to measure change in the future by follow-up surveys , but do not provide a basis for an overall quantitative assessment at this stage. Even with reliable data on income/welfare changes, the extent of attribution to the Program will still have to be estimated. Many government and nongovernment investments and activities exogenous to AKRSP have contributed to development. The Karakoram highway is a prime example.

2.7 In the 1992 benchmark surveys, an attempt was made to relate survey results to earlier secondary data to provide an assessment of income changes. From 1982 to 1991, per capita income in the Program area was estimated to have almost doubled in real terms. In its "Future Vision" paper submitted to the SDC in 1995, AKRSP refers to this improvement which increased

incomes in the local area from 40 percent to 60 percent of the national average, and asserts that its activities have made a substantial contribution to it.²

2.8 AKRSP has the data to support this assertion. Although overall quantitative impact information is scarce, AKRSP has intensively monitored implementation of the instruments it has used to meet its objectives. It has also done numerous studies to evaluate the effectiveness of various activities in attaining their intended outcomes. The MER section has been particularly active in this area subsequent to the previous OED review, and has frequently involved the respective technical service sections.

2.9 In the absence of a suitable basis for an overall quantitative evaluation of impact, the current mission has reviewed the available data to identify measures which might allow a reasonable assessment to be made. These include asset creation, production improvements, changes in household economy and welfare, and equity issues.

Asset Creation

2.10 AKRSP's own statement of achievements highlights the creation of assets at the VO level. Major categories of assets include PPIs, land development associated with irrigation-focused PPIs, and fruit and forest tree establishment. Table 2.1 records the progress in PPIs since 1989.

Table 2.1: Asset Creation through PPIs 1989-94 (number)

<i>Year</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>
PPIs initiated (cumulative)	901	1067	1204	1315	1425	1501
PPIs initiated in the year	144	166	137	111	110	76
PPIs completed	630	763	882	995	1123	1204
PPIs completed in the year	118	133	119	113	128	81

The PPI's initiated by end-1994 represent an investment of Rs. 250 million by AKRSP. These grant funds are highly leveraged through the use of self-help labor from the villagers.

2.11 Irrigation PPIs made up 56 percent of the initiated projects by end-1994, but detailed estimates of additional land brought into cultivation as a result of these investments are not available. AKRSP (1995) estimates that 21,000 ha of land has been brought under command through the PPIs; this would represent 28 percent of the estimated total of 74,000 ha now under irrigation in the Program area. However, it appears that the rate at which the new command area has been brought into full production has been relatively slow. An estimated 5,500 ha of land development was financed under medium-term credit, but this credit line was virtually suspended after 1989. The AKRSP forestry program has provided some acceleration in command area development in the last few years, but the rate at which individuals can develop

2.

	<i>Pakistan</i>		<i>Gilgit</i>		<i>Chitral</i>	
	<i>1982-83</i>	<i>1990-91</i>	<i>1982-83</i>	<i>1990-91</i>	<i>1982-83</i>	<i>1990-91</i>
Per capita income (Rs)	4,131	9,170	1,905	5,628	1,772	5,900
Proportion of Pakistan pci	-	-	46	62	36	64
Real increase (%)	-	26	-	94	-	89

Source: Bhati et al 1994:1

their land using their own resources is limited by conflicting labor demand, and by inclement weather conditions in the winter months.

2.12 Changes in selected productive assets were presented in the summary of the regional benchmark surveys (Bhatti et al 1994:1). The Agricultural Census of 1981 provides a baseline to assess increases in tree holdings and vegetable cultivation (Table 2.2).

Table 2.2: Percentage Increases in Selected Assets Subject to AKRSP Activities (1981-1991)

	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>
Increase in area of vegetables	100	300	76
Increase in fruit trees per farm	65	210	96
Increase in forest trees per farm	313	-	-

Through end-1994, AKRSP fruit tree planting totaled 2.43 million plants, and forest tree plantings supported by AKRSP totaled over 5 million. In addition, the VOs themselves planted a further 14 million forest tree seedlings (AKRSP Annual Review 1994).

Production and Income

2.13 The benchmark surveys record the continuing importance of agriculture as a means of livelihood in the Northern Areas and Chitral, where it remains the most important source of family income. Table 2.3 records the main sources of agricultural income, and its contribution to household income. Comparable data for an earlier date are unavailable. However, assuming the validity of the analysis quoted earlier (Bhatti et al 1994:1) which used secondary data to imply a doubling of income in the 1980s, the household data indicates that agriculture should have been an important contributor to this improvement. Consequently, as AKRSP has had major activities in the agricultural sector, it can reasonably be linked to the improved income, although there are no means to identify the extent of this contribution.

Table 2.3: Household Income by Program Region

<i>Region</i>	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>	<i>Astore</i>
Family Size	9.5	8.7	7.9	9.1
Irrigated Area (Karnals*)	30.6	26.0	30.1	36.1
Crops (percent of area)	37.0	47.0	43.0	42.0
Irrigated pasture (percent of area)	63.0	53.0	57.0	58.0
Gross Value Produced (Rs)				
Crops	16235	9884	9402	8137
Livestock	8264	4970	4996	10056
Fruits	2962	3406	3089	346
Vegetables	2413	2317	1862	528
Forestry	3218	5584	2362	272
Poultry	914	1480	386	269
Other	2596	279	613	8516**
Gross Farm Income (GFI)	36602	27921	22710	28124
Farm Cash Costs	6845	3829	4483	9246
Net Farm Income	29757	24092	18227	18878
Other Household Income	23712	27241	10351	20916
Gross Household Income (GHI)	60314	54532	33061	49040
GFI as percent of GHI	61	51	69	57
GHI per capita	5628	5900	3617	5405

* One karnal is approximately 0.05 ha.

** Includes Rs 5739 for "grass" sales, which is 20 percent of farm income.

2.14 The benchmark survey done in the Baltistan region included a comparative analysis of program and non-program households. Two samples were surveyed, one of 160 households in the program (VOs), and a second of 40 households (NVOs) from outside the Program. Table 2.4 makes some comparisons.

Table 2.4: Selected Comparisons; Baltistan 1991

<i>Survey</i>	<i>1981 Ag census</i>	<i>1991 average</i>	<i>VOs 1991</i>	<i>NVOs 1991</i>
Farm Size (karnals)	23.6	37.0	41.0	25.1
Irrigated Area		30.1	33.3	20.4
Cropped area		12.8	12.7	13.1
Cropping Intensity	124.0	123.1	112.6	153.7
Fruit Trees (no)	25.0	48.7	52.1	35.7
Forest trees		222.1	275.0	67.2
Wheat kgs/karnal		124.0	136.0	88.0
Barley kgs/karnal		116.0	132.0	92.0
Vegetables Rs/karnal		2098.0	2586.0	972.0
Using fertilizer (percent)	42.1	71.9	82.5	40.0
Net Cash Farm Income Rs)		18227.0	18777.0	16559.0
NCFI per capita		4185.0	4533.0	3285.0

2.15 The data indicate that the VO households have a substantially larger farm size and irrigated area, much higher population of fruit and forest trees, significantly greater use of fertilizer on crops, and higher cereal yields and vegetable production levels. However, the cropped area (assumedly in annual crops) is not significantly different, and the cropping intensity

(apparently also on the annual crop area) is lower than for NVO households. Cash farm income is higher for VO households, but not as high as might be expected considering their better asset situation.

2.16 A higher farm size and irrigated area could be anticipated for the VO group; investment in irrigation makes up 63 percent of the PPIs in Baltistan, and as common land is brought under irrigation command it is allocated to specific households. However, based on the estimated average incremental irrigation command per household receiving irrigation in the Program (about 12 karnals), the figures can hardly be explained by this factor alone, as only about two-thirds could be expected to have benefited from an irrigation PPI. Consequently, it appears that the Program has attracted communities with a higher irrigated land asset base; this confounds the comparison somewhat.

2.17 The lack of positive response by the VO group in cropping intensity could be linked to labor resources being used in gradual development of the new command area in fruit and forestry, and to higher crop yields providing less urgency for more intensive cropping. The restricted income benefit exhibited in 1991 by the VO households is probably associated with delayed benefits typically obtained from forestry and fruit investments, and from slow development of the new command area.

2.18 Overall, the Baltistan comparative study confirms that the AKRSP activities have had a major impact on agriculture in participating VO's.

The Economy within Households

2.19 It is clear that since the early 1980s there have been positive changes in the incomes of households in the Program area. This is associated with expanded employment options for men in local urban centers and in down-country Pakistan and the Middle East, as well as increased production and returns from on-farm activities. AKRSP can possibly claim to have had some impact on the former by improving village access, but, as intimated earlier, its major contribution will have been in agriculture. The higher cash income has obviously benefited rural families, but the changes have affected the functioning of the household unit, with specific effects on women.

2.20 AKRSP has significantly enhanced women's economic activities and increased their status within households (Kalleder 1994; Malik and Kallender 1995). The opportunity to save money, to access credit and to undertake training in how to make better use of their resources have been important measures, as has the introduction of production packages specifically designed for women. The latter have included vegetable, poultry and nursery interventions which have the potential to generate cash income.

2.21 An evaluation study of the Vegetable Introduction Package (VIP) was conducted in all three regions among a total of 210 women from 42 WOs (Hussain 1993). It was found that vegetable production increased on average by 111 percent, with the marketing of the vegetables increasing the women's income by 144 percent. In addition to household consumption, fresh vegetables were marketed locally or taken to nearby towns, while portions of the crop may have been dried and later sold. More than 50 percent of the sample in all three regions marketed produce.

2.22 Income obtained from vegetable sales was utilized primarily for the following:

- education of children (school fees, books, etc.)
- purchase of household items for daily use such as sugar, tea, soap, cooking oil, and electricity/phone bills (where relevant)
- agricultural expenditures (fertilizers, farming tools, and seeds)
- savings at WO meetings.

2.23 Poultry production by WO members has generally led to an increase in consumption of both eggs and chickens (the latter usually only on special occasions), but has not always led to cash sales. In a study of five WOs participating in the poultry package in Baltistan, eggs functioned as currency in the mixed cash/barter economy, and were also exchanged as gifts. However, eggs were usually not sold in the local markets. Nevertheless, mothers with school-going children were more likely to earn cash from their egg-producing activities; the education costs provided the incentive for cash income (Durrani and Naz 1993). Another Baltistan evaluation had similar observations, but noted that those communities which were more commercialized often reduced consumption in favor of sales (Durrani 1991).

2.24 The benefits obtained by women, however, have not been without some costs. Women and children have traditionally assumed a heavy work load in the household production system (Table 2.5). The changes which have occurred in off-farm and migration labor, in farming enterprise patterns, and in women's additional activities encouraged by the Program, have added to women's work loads.

Table 2.5: Household Labor Distribution by Gender for Household Activities and Crop Production in Gilgit District, 1989 (hours)

<i>Labor Activity</i>	<i>Women</i>	<i>Men</i>	<i>Children</i>
Household Activities*	2,034	342	419
Livestock	885	349	431
Crop Production	538	523	83
Collection of Water	283	50	132
Collection of Firewood	100	176	47
Orchards	38	37	20
Total	3878	1477	1132
Crop Production Breakdown			
Land Preparation	51	163	21
Irrigation	67	202	36
Weeding	241	64	45
Fertilizing	31	17	12
Harvesting	137	131	41
Threshing	34	34	15
Subtotal	538	523	83

* The author points out that for women, the category "household activities" often includes a large agricultural component.
Source: Khan 1989.

2.25 For off-farm activities, wherever possible one male member from a household is sent out, while others remain on the farm. In many cases of nuclear family units, however, a male may engage in off-farm employment and, if not local, temporary female-headed households are

created. Where female-headed households exist, male relatives and neighbors often provide assistance or a hired hand may be engaged for such tasks as plowing and planting trees—tasks which women do not traditionally undertake. However, the net effect is that women assume more of men's agricultural tasks, working longer hours and engaging in new areas of decision-making.

2.26 The emergence of vegetables as a cash crop has meant additional work loads for women. With men undertaking off-farm wage labor and more children (both boys and girls) attending school, a general lack of individuals to graze animals has resulted in more stall feeding of animals by women regardless of season. This correspondingly demands more fodder collection and preparation than before when animals were grazed in mountain pastures in spring and summer.

2.27 Despite the increased work load, the benefits that families have obtained by an increase in cash income are clearly evident to women. Although they may complain, they most frequently state that the pros outweigh the cons. For example, in the VIP impact study cited above (Hussain 1993), some 92 percent of the respondents reported spending considerably more time in their vegetable plots for land preparation, fertilizer incorporation, and proper sowing. But, appreciating the potential cash returns from this activity, most women also decided to increase the area of their vegetable cultivation area and, correspondingly, their work load. Thus, women appear to adjust their daily schedules to accommodate the many economic changes occurring, and many continue to seek additional means by which they themselves can bring additional money into their household units.

2.28 In general, with the increase in women's ability to save, access credit, and bring cash into the household or, at least, to assist their male relatives more effectively in this process, an increase in their self-confidence has occurred. Through their scheduled activities in the WOs, they also engage more in long-term group and individual planning for the future.

Changes in Household Welfare

2.29 Apart from changes in the economy within households, there have been improvements in the general household welfare—health, nutrition and education. AKRSP has not been directly involved in social service programs to address these issues. Most social service interventions pertain to GOP programs with local or external funding and to NGOs, especially the Aga Khan Health Service (AKHS) and Aga Khan Education Service (AHES). AKRSP has played an important role, however, in its creation of village institutions which can facilitate social welfare activities, and in recent years through its promotion of linkages between VO/WOs and support agencies.

2.30 Due to poor sanitation, unclean water supply and lack of access to health services, the Northern Areas and Chitral have traditionally been affected by numerous health problems. Women and children especially have been affected. WOs have been actively involved with AKHS in their training of community health workers and birth attendants, largely in Gilgit and Chitral, and in linkages with GOP programs for immunizations and control of iodine deficiency. Significant results are being obtained (Rasmussen et al 1992). In the provision of clean drinking water, AKRSP has recently started to cooperate with the GOP in its Social Action Program (SAP) which will link with VOs to provide water distribution schemes. AKRSP has also recently included this type of investment as PPIs. No impact on health has occurred from these drinking water investments as yet, but a significant impact can be anticipated.

2.31 AKRSP has had a more direct impact in improving nutrition which affects both health and productivity. Members of WOs are quick to point out nutritional changes which have occurred in recent years. This particularly applies to increased consumption of vegetables, which have been the subject of AKRSP's VIP. Not only are more of the traditional vegetables produced through improved seeds and better cultural techniques, but new types of vegetables have been introduced. Improved poultry production, which has been taken up by 80 percent of WOs, has increased animal protein intake.

2.32 The literacy rate is especially low in the Northern Areas and Chitral.³ As will be seen later in this report, literacy of community leaders can have an important influence on the development of village institutions and, hence, on the improvement in community productivity and welfare. Education is also essential for the younger generation if they are to benefit from the expanded opportunities created by economic development in the area. AKRSP has recently coordinated with the GOP's SAP in primary education, where VOs actively participate in the establishment and maintenance of community schools. It also cooperates with the AKES program. However, these programs are long-term in nature, and little impact has yet been attained, apart from the realization by villagers of the benefits of education and a willingness to use cash to support it.

2.33 The development of small village hydroelectric (hydel) schemes as PPIs by AKRSP in Chitral is having a positive effect on family living conditions. By end-1994 there were 30 hydels constructed as PPIs. In addition to furnishing light by which children can study and household members can participate in productive or recreational activities in the evenings, there is also growing use of electricity for labor-saving devices (butter churns, heating coils, irons and, in a few cases, even washing machines).

Equity in Impact

2.34 As pointed out in the first chapter of this report, AKRSP has a legitimate objective in aiming to provide equitable opportunities for improved income and welfare. It must be acknowledged that no program can provide equitable development for every household. Existing resource base, education level, entrepreneurial skill, drive and management ability will influence the rate of advancement of individuals and households. However, AKRSP's objective also implies that it should avoid the capture of disproportionate Program benefits by those among village residents who are already more fortunate than the majority. This especially applies to any activities which have a grant or subsidy element.

2.35 Although the Program was initiated in the dominantly Ismaili areas of Gilgit, as it developed there has been no evidence of discrimination by the Program *between regions or between communities*. Indeed, the expansion into both Baltistan and Astore, where there are very

3. Literacy rates by region (10 years of age and older)

	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>	<i>Diamer</i>
% literate	18.1	14.6	13.8	10.8
- males	28.6	23.9	23.8	17.1
- females	5.5	3.2	2.1	2.0

Source: 1981 Census

few members of the Ismaili sect, and into the southern part of Chitral which is largely Sunni, is witness to the wide nonsectarian Program mandate. However, at this stage the Gilgit region still has more complete coverage than other areas and tends to have more economic development. This can be linked to the longer time it has been in the Program, and to the inherent benefits it has by virtue of its location which provides more economic opportunities.

2.36 The absence of bias has not meant that each participating community receives equal benefits. Table 2.6 shows significant differences in the value of PPI grants to VOs, and also reveals variation in AKRSP staff ratios between regions.

Table 2.6: Equity and Program Resource Allocations

<i>Region</i>	<i>Gilgit*</i>	<i>Chitral</i>	<i>Baltistan</i>
VO Households	28018.0	22601.0	24596.0
VOs	623.0	581.0	630.0
WOs	432.0	194.0	142.0
Professional Staff	60.0	51.0	46.0
VOs per Professional	10.4	11.4	13.7
Households per Professional	467.0	443.0	535.0
PPI	403.0	560.0	539.0
PPI/VO	0.65	0.96	0.86
PPI Grants (Rs' 000)	80779.0	126880.0	77540.0
Grants/PPI	200.0	227.0	44.0
Grants/VO	130.0	218.0	123.0
Grants/household	2.9	5.6	3.2

* Gilgit includes data for Astore.

2.37 Chitral has the highest grant expenditure per PPI, per VO and per household. This is associated with the opportunities available for PPI investment. In Chitral, link roads make up a bigger percentage of total PPIs, and unit costs are substantially higher (Rs 70,000/km) than in the other regions (Rs 59,000 in Gilgit and Rs 47,000/km in Baltistan) because of local circumstances. Although there has been a budgeted average figure per PPI, the main considerations have been priority and feasibility, which is a legitimate rationale. In practice, an upper limit on grant per household is imposed by the common heavy reliance on community labor in the investments. A smaller community would usually not be able to mobilize the labor required for a very high-cost, labor-demanding investment.

2.38 Regarding staff resource allocation, Baltistan has a lower level of professional attention than the other regions. This has not been a conscious policy, but likely reflects the difficulty in recruiting qualified staff in this region, and the general problem of retaining suitable staff who do not originate in the area. However, this issue needs to be carefully monitored, as Table 2.3 indicated that Baltistan also had a lower off-farm and on-farm income compared to other regions, suggesting a need for special attention.

2.39 With respect to equity *within communities*, the baseline surveys show the range of resource endowments across the Program area. Table 2.7 uses farm size as a proxy for resource endowment, and shows a strongly skewed land distribution with 19 percent of the households holding 57 percent of the land, and 23 percent of the households holding only 5.4 percent of the land. There is obviously a significant wealth differential within communities which needs to be taken into account by the Program.

Table 2.7: Farm Size and Resource Endowment

<i>Farm Size (Karnals)</i>	<i>Farms (%)</i>	<i>Farm Area (%)</i>	<i>Fruit trees (%)</i>	<i>Forest trees (%)</i>
Under 8	23.4	5.4	14.3	2.9
8 to 20	32.8	16.7	26.8	15.3
20 to 40	24.6	21.6	27.0	30.9
above 40	19.1	56.7	31.8	50.9

2.40 One of the most significant activities of the Program is the PPI. There is much anecdotal evidence that land brought under irrigation command is divided equally across all VO members. This situation was verified in all villagers visited by the evaluation mission. The impact of extra land area on families owning very small holdings is more significant than the same area for larger landowners. This is a positive equity contribution concerning a key resource. However, AKRSP needs to be vigilant in this area as, should poorer households not own land in some instances, they would not benefit directly from a land-related development investment.

2.41 With respect to the supply and use of inputs and services, in most situations VO members appear to be offered equal opportunity to participate in AKRSP interventions. However, this does not ensure that poorer households will equally benefit from this access. In Table 2.7 the uptake of fruit trees appears to have a reasonably equitable distribution, with 23 percent of farms holding 5 percent of farm area and accommodating 14 percent of the intervention. Forestry uptake is skewed very much towards the larger land holders in the same table. However, there is logic in this; forest trees need a long period before any return is obtained and smaller farmers have other priorities for their limited land areas. However, to the extent that this is a subsidized investment, a degree of inequity could arise.

2.42 The above suggests that priorities differ according to household resource levels. Clearly, an intervention such as access to exotic livestock is irrelevant to farmers with no animals or with scarce labor or fodder resources. For these small farmers who may have more than two-thirds of the cultivated land under wheat, land shortage, often combined with a greater urgency for food from annual crops or cash income from off-farm employment, will inhibit participation in slower yielding interventions which have a significant labor investment. Husain (1992) highlights the choice faced by poor farmers in Gilgit between earning immediate cash from off-farm work and planting their staple wheat on time. In this context, the introduction of shorter maturing wheats created the flexibility to plant wheat later and still ensure a crop, and was therefore a very relevant intervention for poorer farmers.

2.43 Consequently, although the record is generally satisfactory for the distribution of inputs and services between households, it will be important for AKRSP to monitor this equity aspect of activities. The resource base of individual households should be taken into account in the design of interventions, realizing that richer households can take more risks, be more flexible, and access complementary inputs needed to implement a package. Poorer families will continue to need packages which fit their household resources if the Program is to maximize its impact on them.

2.44 *Within households*, it is obvious that both men and women have been beneficiaries of the Program. Nevertheless, simply on the basis of coverage of VOs as compared to WOs, it is evident that more men than women are actively participating (Table 2.6). This is in part due to

the conservative social context of the area and staffing limitations concerning females, and AKRSP must be considered an NGO leader in its attempts to involve women in its activities.

2.45 It is clear that both within society and within the household itself, females in the Northern Areas and Chitral face a number of situations of inequity (for example, in the areas of mobility, decision-making, access to education and daily workload as compared to their male counterparts). Change is occurring, however, as indicated above in the elaboration on the economy within the household, and AKRSP has been a key actor in this process, especially through its WO program.

2.46 Within the WOs themselves, equal opportunities may be presented to all members. However, it is frequently the women of the most well-to-do households who are the most active, assume leadership positions, become specialists, and generally take advantage of the options presented to the group. Poor women, who are often the most in need of economic input for their households, may be excluded by other more powerful group members. There may also be a tendency for some WO social organizers (SOs) to give preference to more capable members so that a particular activity has a greater chance of success. Women of female-headed households are inclined to be in this potentially disadvantaged category, often do not join the WO. This is a difficult problem to address, but suggests that vulnerable households in a community should be identified by the SO and special sub-projects developed to target this group on equity grounds.

Changing Attitudes and Socioeconomic Conditions

2.47 The intangible impact of AKRSP has been well expressed in documentation by external reviewers—the Program's most significant contribution is not so much in the number of trees planted or additional area irrigated, but an attitudinal change; people begin to believe they can influence and achieve their development agenda; and the effect of giving women knowledge and self-esteem may outweigh all the detailed problems of package adoption. These indirect benefits are important. A principle of AKRSP philosophy is that social change is brought about through economic development. In the early days the PPI grants mobilized communities and gave the Program momentum. That stage is nearing an end. In many VOs empowerment is advanced and its sustainability is demonstrated in many ways—the power to survive disputes, the evident social cohesion, and the turn around by skeptical communities which are now demanding to be part of the Program.

2.48 Evolving economic conditions are creating a new context for AKRSP and demand even further development of its partnership with VOs. Resource endowment, population growth and migration, economic and policy trends, and market and technological opportunities need to be taken into account in determining the most appropriate long-term development of communities. Dialogue remains crucial to partnership, but AKRSP, by its insights into changing conditions, can provide guidance for the benefit of the majority of households.

3. Program Instruments

3.A Village Institutions

Progress in Village Organizations (VOs)

3.1 The Village Organization (VO) has been the basic building block in AKRSP's participatory rural development model. Without the impressive coverage of the rural population in formation of VOs that has occurred since the inception of the program in 1983, the reported achievements would not have been possible. At end-1994, there were 1,834 VOs in the program area, with a household membership of 75,215. This represents a coverage of over two-thirds of total rural households.³ Gilgit (started 1983) has the highest coverage at 73 percent, but is closely followed by Baltistan at 68 percent (pilot 1985, full program 1986), and Chitral at 66 percent (pilot 1983, full program 1986). In Astore, where the Program only started in 1993, a lesser coverage of 36 percent has so far been obtained (Tables A1.1 - 3).

3.2 As, on average, not all households in a village are members of the VOs,⁴ the membership figures indicate that the Program covers a higher proportion of villages than it does of households. The average size of VOs has decreased over time, with membership declining from an average of 87 to 41 per group (Table A1.4) This has been caused by division of many of the earlier whole-village VOs (especially in Gilgit) into smaller units, and by the establishment of smaller VOs since 1986. The scale of many of the PPIs, however, has meant that often more than one VO has to cooperate in the venture, whether this be within a large village, or with a different village. Nevertheless, the smaller VO has proven to be more appropriate for social organization and continued commitment, and for VO management.

3.3 The number of VOs has continued to increase each year in all of the districts (Table A1.4) However, the division of VOs exaggerates this figure. The increase in total household membership is more indicative of the rate of progress. This shows a leveling in total membership since 1986 in Gilgit after a very active initial three years. In Chitral and Baltistan, additions in annual membership have continued, but the rates have declined significantly since 1991 (Table A1.3). A decline in growth rate must be expected as district coverage expands. However, in the case of Chitral and Baltistan, the lesser coverage of the total rural population suggests that there is still a potential to initiate more VOs and expand the development program coverage in these districts. Astore, of course, has a big potential for additional coverage and impact, as would any future expansion into Diamer.

3.4 AKRSP records indicate that the incidence of VOs actually withdrawing from the program is very rare. It appears that six VOs have disbanded in Baltistan and nine in Gilgit, and although the annual reports do not indicate any disbanding of VOs in Chitral, the evaluation learned that there were two or three which were not properly established and disbanded. What is

³ The 1994 rural household numbers are estimated by AKRSP from 1981 census data, so can only be considered approximate.

⁴ The minimum participation of 70 percent of village households is required by AKRSP in entering into a partnership with a village.

more of concern, however, is the degree to which VOs are active. Without significant activities, their sustainability is unlikely.

3.5 If the VOs are not sustainable as community institutions, then when AKRSP ceases its intervention it will have undoubtedly contributed substantially to local area development and improvement in human resources, but a lack of persistence of VOs must detract from its potential long-term impact. In 1991, AKRSP initiated a survey of over 90 percent of VOs (and WOs) in the three operating districts to rate them according to an Institutional Maturity Index—IMI (Tetlay et al 1992). This was a quantitative measure of the extent to which individual VOs were developing the capabilities which should ensure their continuation. The indicators included how participatory group processes were carried out; the extent of dependency on AKRSP; the management capacity in the VO for planning, finance and conflict resolution; the linkages formed with non-AKRSP agencies; and how well new technology was being mastered with the help of trained village specialists.

3.6 The IMI exercise provided useful data on changes which had occurred in the region, and some of these have been used in this evaluation (Box 1). An important observation was that there was a large range in IMI scores among VOs, and even among groups of VOs in different social organizer units. This implies that there is still much room for improvement. However, with 23 major indicator areas, the IMI task was too complex and costly to undertake on a regular basis, especially by VO management which was the original intention. A revised IMI (RIMI) was designed but not implemented, largely due to a number of staffing problems discussed later in this report. Current proposals are for a very much simplified form of assessment which VO managers should be able to complete with minimum assistance. It would be designed to provide quick feedback so as to have a useful monitoring function for use by VO and AKRSP managements. This appears to be a practical proposition. However, in view of the primary objective of developing VOs so that they are sustainable and able to operate as partners in local development, it would appear essential to include a measure which indicates not only development investments and activities in which AKRSP has participated, but also those which are undertaken on a self-help basis and with other external assistance.

3.7 The MER has done a number of studies to identify the social processes which support the VOs/WOs with high IMI scores. Two of the findings coincide with the almost universal results of studies on cooperative behavior:

- individual resources will be used for collective action when the action is able to provide significant and important benefits, and would not be feasible with individual endeavors; and
- capable management which is able to provide leadership and to involve the membership in decision-making is a key element in cooperative activity.

These findings have implications for the future AKRSP program in which ensuring the sustainability of the VOs must be a primary consideration.

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VILLAGE ORGANIZATIONS (VOs)

Some Findings of the IMI studies on VOs in 1991

1. The average size of the VOs in each social organizer unit (SOU) was about 40 households in each of the districts.
2. Gilgit had fewer illiterate VO managers, fewer farmers as managers and more managers who were teachers or ex-government employees.

	G	B	C
Illiterate (%)	7	19	16
Farmers (%)	39	52	51
Teachers and ex-gov (%)	49	30	27
3. Household coverage was high in all SOUs, but some in Gilgit had the lowest coverage, possibly associated with the more diverse (often nonagricultural) activities in village households in SOUs with greater access to the major center of Gilgit.

Coverage per SOU (%)	61-91	82-95	73-100
With > 70 % coverage (%)	74	91	87
4. Attendance at meetings was higher in more recently established (younger) VOs.
5. Meeting frequency was positively correlated with meeting attendance, record keeping within the VO, and performance in VO savings. However, variation amongst and within SOUs indicated much room for improvement.
6. Maintenance of the PPI developed under the program was generally satisfactory, indicating the effectiveness of the project identification process.
7. There was considerable variation in the extent of development of management procedures in the VOs, in both SOUs and in districts.

VOs having written rules for governance (%)	45	69	25
Dispute resolution between VOs (%)	35	13	28
within the VO (%)	17	51	18
8. By 1991 the VOs were adapting to the concept of service charges on loans which had been introduced from 1988.

loans bearing service charges (%)	45	46	34
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9. The use of the credit within the borrowing VOs by members was high.

VO members taking subloans (%)	82	95	74
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10. Gilgit was quickest to enter into the VO credit program (VOCP) after its introduction in 1989.

VOs with VOCP loans (%)	25	6	8
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11. Many of the VOs were engaged in procuring their production inputs for cash without the intervention of AKRSP, and this was more prevalent in the older VOs.

VOs making cash purchases of inputs (%)	36	44	42
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12. There was a big variation amongst VOs in the amount of linkages they had formed with external entities other than AKRSP, and there were some differences among districts.

marketing linkages - potatoes (%)	19	14	1
- fruits (%)	11	20	10
- fertilizer (%)	39	16	71*
health services (%)	61	36	57
education services (%)	45	27	50
water supply (%)	36	21	36
electricity investment (commenced) (%)	33	28	6
access roads (%)	36	15	13
operations with local councilors (%)	36	26	19

* this was associated with NWFP having an Agricultural Development Agency responsible for fertilizer distribution
13. When managers were illiterate, there was a higher dependence of the VO on AKRSP and linkages were less well developed.
14. In all districts the % with working specialists was highest in the livestock field

livestock (%)	73	61	71
plant production and protection (%)	38	54	45
forestry (%)	55	20	45
marketing (%)	32	23	21
15. There was considerable evidence to support the impact of specialists on the adoption of recommended technologies in the VOs; but the low adoption of some technical packages indicated difficulties in defining technologies with widespread relevance in particular production areas; these are elaborated in the section which discusses the NRM program.

3.8 AKRSP has the opportunity to provide an incentive for VO persistence in the near term by maintaining its direct involvement (albeit on a reduced funding scale) as a partner in infrastructure development; this proposal is discussed later in the report. However, for the longer term sustainability of these institutions, VOs will have to develop linkages and partnerships with other agencies working in the productive and social sectors. This especially applies to government agencies, as government is the only entity which is likely to be able to allocate funding resources on the scale that is needed for the continued development of the Northern Areas and Chitral for "common good" investments. Equally important will be the continued improvement in human resources and the enhancement of governance within the VOs, so that they are capable of entering into sound partnership for the good of the majority of their members. Emphasis on improved competence in financial management within VOs will also be critical if members are to be able to maximize the benefits from credit access through the proposed new financial institutions. In itself, continued access to development credit could be a powerful incentive for participation in the VO as an institution and contribute to its sustainability.

Progress in Women's Organizations (WOs)

3.9 Village-based WO are also a key component of the AKRSP strategy. They provide a much-needed forum for village women in the Northern Areas and Chitral to actively participate in the development process.

3.10 At end-1994 there was a total of 768 WO, with a membership of 26,089 women (Annual Review 1994). Similar to their counterpart VOs, the majority of WO are in Gilgit (372), with fewer in Chitral (194), Baltistan (142), and Astore (60) (Table A1.5). The WO program began in Gilgit in 1983, in Chitral in 1987, in Baltistan in 1989, and in Astore in 1993. This sequencing was partly due to entry of overall Program activities into districts, but also to differing orientations towards women's mobility and potential to organize in groups. In this respect Gilgit is more liberal, with many parts of Baltistan and Chitral being more conservative. Indeed, there are areas of Chitral and Baltistan where, although VOs exist, there are no WO due to local cultural rules of female seclusion based upon religious doctrine.

3.11 Assuming one woman member per household, the degree of regional coverage by WO at end-1994 was only 25 percent (43 percent in Gilgit, 18 percent in Chitral, 12 percent in Baltistan and 14 percent in Astore). This is significantly lower than the coverage obtained by VOs at 73, 66, 68 and 36 percent respectively in each of these areas.

3.12 A number of issues are involved in this gender-based differential, including limitations on the availability of female staff and cultural constraints mentioned above. These issues are discussed in Chapter 4.

3.13 In earlier years AKRSP's social organizers (SOs) actively approached communities and facilitated the formation of new WO following the successful establishment of local VOs, and the corresponding familiarization of the local populace with the Program's objectives. Since 1993, however, the policy has been mainly to establish WO in communities where formal requests are received from the villagers themselves. Focus is now upon quality rather than quantity. However, WO are still fostered in areas where few WO exist. The number of WO continues to grow, with a dramatic increase from 292 WO in 1989 to 768 WO in 1994. This reflects more than a doubling in membership from 11,000 to over 26,000. As for VOs, from 1986

the WOs had smaller memberships than the earlier ones formed in Gilgit. There is an average membership of 34 women per WO.

3.14 Each WO chooses a president and a manager from among the women members but, due to the low female literacy rate of 4 percent (para. 2.32), in many cases a literate male villager (who is usually a member of the local VO) must serve as manager for the group in order to record financial transactions and meeting minutes. This has implications for the general degree of autonomy a WO can achieve from either the VO or AKRSP. Unless the WO is displeased with the officers, they do not change over time. Women usually take their officer roles very seriously, although those men functioning as WO managers often have little incentive to perform their work with enthusiasm.

3.15 The most successful WOs are those whose members live in close proximity; this allows for more frequent contact without limits on female mobility. WO members are largely made up of older, nonliterate women over the age of 35. At this stage in life they have more free time for meetings, have achieved some status within their households, and have daughters-in-law/daughters to help them with their many household chores.

3.16 A new generation of younger literate women is also joining the WOs, however. Although small in number, these individuals have the potential to create groups in the future which are less dependent upon the VOs and/or male community members and AKRSP. Indeed, in the Gilgit region some WOs have split along generational lines due to differences of orientation of the older members with status and the younger members with literacy skills.

Institutional Maturity of WOs

3.17 The IMI exercise dealing with VOs was also administered to the WOs in 1991. Some of the major findings of this WO study are presented in Box 2. This information provides a valuable database, and allows for some general comparisons between WOs in different regions. Limitations in the complexity of the undertaking and in its continued use prevail for WOs, as for VOs.

3.18 In general, IMI survey results indicate that WOs lag behind VOs in degree of institutional maturity, but AKRSP itself has acknowledged that comparisons between VOs and WOs using the same indicators and scales is inaccurate "due to the very different circumstances that shape their lives" (Tetlay and Khan 1991). Examples include gender-based differences in access to markets, literacy rates, experience in extra-household decision-making, etc.

3.19 Thus MER and WID staff subsequently developed a RIMI for WOs which has a smaller set of indicators and was particularly suited to WO activities and cultural constraints. This has not been administered to date due to staffing problems, but it (or a further refined model) needs to be introduced to provide accurate measurement of WO progress towards maturity. A series of qualitative case studies of selected WOs was undertaken in order to ascertain important indicators to be included in the RIMI, and these reports have furnished some valuable in-depth data about the social dynamics of some WOs in Gilgit and, to a lesser extent, Chitral and Baltistan.

WOMEN'S ORGANIZATIONS (WOs)*Some Findings from the IMI Studies of WO in 1991*

1. The average size of the WO was approximately 35 members in all districts.
2. With the low female literacy rate of 4%, many of the WO managers are male, which holds implications for WO autonomy.

	<u>G</u>	<u>B</u>	<u>C</u>
Male managers (%)	61	81	28

(Note: Many female managers in Chitral are "token.")
3. The average household coverage in communities with WOs was highest in Baltistan, and significantly lower in Gilgit and Chitral.

Household Coverage (%)	38	75	23
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4. Regular meetings were not held by all of the WOs, although the following percentage did meet on more than 50% of the annually planned occasions:

	80	28	60
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(Some 10 percent of the WO in Chitral and Baltistan do not meet at all; this is due to disputes among members or weak outreach.)
5. Major activities undertaken in the three districts as a percentage of active WO, were as follows:

Received AKRSP project	25	62	23
Members deriving benefits	89	88	19
Self-financed project	13	7	4
Loan taken from AKRSP	14	5	6
WO has trained specialists	87	79	55
Specialists are working	61	64	42

Generally lower figures in Chitral reflect difficulties in AKRSP outreach there, along with a more conservative environment for females. In all regions there was a reticence to take loans, which is partly due to a fear of being unable to repay; of the loans taken out, most were utilized for household activities or were given to the husband. Trained specialists in vegetables and poultry were widespread, but not all were actively working.
6. WO may have planned actions to solve their specific problems, but, due to mobility limitations and lack of experience in decision-making, they often faced the constraint of having to rely on their menfolk to operationalize their plans. Any activity "beyond the village" such as marketing, health care, etc., had to involve men.
7. Management characteristics showed that many WO were active in dispute resolution, although very few had any written rules:

VOs having written rules/regulations (%)	10	14	8
Dispute resolution (%)			
inter-household	51	81	4
between members	70	86	4
8. Communications between WO and VO members were usually in the form of informal interaction on the individual household level between husbands and wives. Only in Gilgit were there WO which are part of VO (12 percent).
9. Linkages between the WO and agencies other than AKRSP in both the productive sector (e.g., UNICEF, FAO and government) and social sector (e.g., AKHS and AKES) varied between districts, with most being formed in Gilgit where more options exist.

Vegetable development (%)	13	2	4
Livestock development (%)	10	0	2
Fruit development (%)	4	2	0
Financial management (%)	22	29	6
Health (%)	92	17	15
Education (%)	37	29	9
Potable water (%)	20	14	11
Cooking/heating stoves (%)	3	7	2

3.20 Given the relatively high degree of dependency of existing WOs upon male community members, VOs, and AKRSP itself, much additional work needs to be done with already established female groups in order to increase their capacity for self-reliance and sustainability. This is the responsibility of female SOs who each cover an average of 50-60 WOs, the female staff in the technical sections, and also all senior and middle level management personnel. The multidisciplinary, cross-gender teams in the Program's decentralization plan will also have an important role in promoting this increased capability. Especially important in this context is the encouragement of linkages between WOs and other agencies. In this area AKRSP has an on-going and crucial role to play as facilitator. The linkage process is well underway in all regions, but still has a long way to go until the majority of WOs themselves take the initiative. The training of individual members in basic literacy, accounting skills, and management techniques will be of utmost importance for the development and sustainability of WOs.

Linkages with Other Entities

3.21 The importance of linkages between VOs (and, as appropriate, WOs) and external agencies involved in investment and services has already been emphasized. The initial focus by AKRSP on developing a partnership between it and the village community has gradually been expanded to include the promotion and facilitation of these linkages. Significant progress has been made since 1992 in establishing agreements with both government and nongovernment organizations.

3.22 The current Chief Secretary of the Northern Areas has encouraged government line agencies to involve VOs and WOs as local participatory partners in development. This commitment at the most senior level has had a positive influence on the development of linkages, and the rate of progress to date would not have been possible without this support. However, the implementation of the joint programs has not always been without difficulties.

3.23 The GOP has a *Social Action Program (SAP)* as part of its Five-Year Plan (1993-98). This has four components—primary education, water supply and sanitation, basic health, and nutrition. In the Northern Areas, the first two components of the SAP are being implemented through AKRSP-sponsored VOs. As these two activities are of particular concern to women, WOs are usually actively involved in the discussions at village level, but in the terms of the partnership contract for planning, implementation, and continued maintenance and operation, the VOs represent the total community. Chitral, as part of NWFP, has not involved AKRSP in the SAP to date. In parts of the district, it has a GOP rural development program which has its own VOs, but there appears to be no reason why AKRSP VOs should not be utilized in the SAP.

3.24 The primary education component involves the Department of Education (DOE) which interacts with VOs with assistance from AKRSP. It stresses the education of girls. The communities are to provide a building, choose local female teachers, and establish a local education committee. The GOP provides a grant of Rs 100,000 for each participating VO as an endowment to provide continued support for the program. One thousand schools are to be established in the Northern Areas during the first five years of SAP, and to date 600 education committees has been formed in Gilgit and Baltistan. However, many delays in planning and decision-making have affected the implementation schedule.

3.25 Difficulties have occurred in coordination between DOE and AKRSP at the operational level. The DOE has sometimes selected VOs different to those recommended by AKRSP SOs on

the basis of their knowledge of communities, and on occasions the DOE has appointed nonlocal teachers rather than those nominated by the VO. This illustrates the problem of having government departments, who have traditionally worked in a supply-driven, top-down arrangement, adopt a participatory approach to development in which the community as a whole is a contributing partner. However, steering committees involving the DOE, AKRSP and the Aga Khan Education Service (AKES) have been formed to improve program implementation.

3.26 In the rural water supply and sanitation (RWSS) component of SAP, AKRSP acts as a catalyst in establishing links between VOs and the Local Bodies and Rural Development Department (LBRDD) of GOP. The communities are to provide land and labor for construction, while UNICEF assists with construction material. Each VO is to establish a committee comprised of an accountant, a plumber trained by LBRDD, and a WO member trained in public health. The program is to construct or rehabilitate 345 primary water distribution schemes over a period of eight years in the Northern Areas. However, the program is making slow progress and only 10 schemes have been planned for 1995.

3.27 LBRDD is limited by a lack of resources and skilled personnel, which constrains the rate of implementation. AKRSP is attempting to address this problem by organizing workshops and training courses for LBRDD staff through a UNDP/World Bank RWSS group, and monthly review meetings are held to facilitate progress. The Aga Khan Health Service (AKHS) which is active in Chitral and Gilgit and, to a lesser extent, in Baltistan has also conducted research on water supply/sanitation and health at the village level; this provides valuable information for planning and implementation.

3.28 ADB and IFAD have been funding the *Chitral Area Development Project (CADP)* in the NWFP since 1988. CADP is largely modeled on the AKRSP in its infrastructure development and services to village organizations. It has used AKRSP for training and as a member of its steering committee. A significant difference is that it is implemented by a government line agency, which has meant that it has been obliged to adhere to national and provincial policies in implementing its components. This has caused some problems for AKRSP in Chitral in its cost recovery policies for services and inputs, which are geared to minimize the dependency of the VOs and households on grant funding. However, apart from this, coordination between the government, AKRSP, donors and CADP appears to be satisfactory. To a large extent, CADP has concentrated in the southern part of Chitral while AKRSP has been more active in the North and West. However, some VO communities are served by both entities, especially where there is a multi-village PPI sponsored by either organization. As AKRSP further expands its activities in the southern, dominantly Sunni areas of Chitral, coordination will be even more essential to rationalize external assistance to the villages and avoid excessive dependency.

3.29 AKRSP is also cooperating with the Chitral Public Health and Engineering Department in assisting KfW of Germany to work with VOs in the vicinity of Chitral City. This scheme provides potable water to these villages and the city itself.

3.30 AKRSP is cooperating with AKHS which provides a primary *health care* referral system. Working with the VOs and WOs, villagers are chosen (both male and female) for training to provide services within their communities. The nutrition component of the SAP is just beginning, and will give priority attention to mother and child nutrition; this involves participation by the Department of Health, AKRSP, AKHS and the VOs/WOs. AKRSP also coordinates with the Family Planning Association of Pakistan (FPAP) in directing responses to

family planning requests. FPAP works directly with WOs in Gilgit, Baltistan and Chitral. AKRSP social organizers have recently received training from FPAP to enhance their ability to interact with WOs in this aspect of welfare.

3.31 Linkages between VOs/WOs and private sector have been facilitated for agricultural marketing and input supply, and these are elaborated later in the report.

3.32 AKRSP in Baltistan has also sent a selected woman from 15 WOs to a training school run by a foundation attached to the Pakistan army; this is for training in cutting and sewing in response to requests for enhancement of income-generating skills.

3.33 It is evident that AKRSP has made significant progress in fostering linkages between VOs/WOs and NGO, private and public sector development and service agencies. Most activity has been in health, education and water supply, for which AKRSP has not had direct responsibility with the exception of water supply which has been the subject of some recent PPI interventions. Overall, cooperation between AKRSP and other parties has been satisfactory, but experience under SAP indicates that AKRSP will need to give priority attention to building effective cooperation arrangements between VOs/WOs and public sector agencies. This issue is developed further in the chapter on Future Directions.

3.B Productive Physical Infrastructure

The Role of PPIs

3.34 The grant-assisted productive physical infrastructure project (PPI) is the catalyst and incentive for the initial organization of the VO and for the accumulation of savings. It is at the heart of AKRSP's social organization strategy. On an historical note, PPIs are comparable to what was called the "entering wedge" in the community development movement of the 1950s and early '60s, but since that movement had to rely mostly on sister line agencies to provide resources for the "wedge," but which too rarely appeared, the movement soon fizzled out. AKRSP has successfully avoided that fate with its PPI grants.

3.35 Criteria for approving PPI proposals are that the project must be productive; that at least 70 percent of the VO households would benefit; that villages can execute the project without outside contractors and heavy equipment; that projects take no more than two years to complete; that mostly local materials are required; that it can (and will) be maintained by the VO; and that the project is free of disputes within the village or with other villages. The selection, within these conditions, and design of the PPI is done with the full participation of the VO members, not by offering them a set of options but through their free choice. As will be seen below, however, the pattern of PPI soon got into a familiar track dominated by irrigation schemes and link roads, which reflects the widespread need for more agricultural income in a "mountain desert," and the desire to spread the benefits of government's substantial main road construction in recent years to the village level. Although the main pattern is one PPI grant per VO, in the early enthusiasm for VO formation, some were large and lacked social cohesion. Such groups of villagers eventually split off to form smaller, more homogenous VOs, which then in turn qualified for their own PPI grant.

3.36 AKRSP's strategy allows for only one PPI grant per VO. VO members are warned that once complete, maintenance of their PPI infrastructure is their responsibility. Although one of the prime features of the AKRSP approach is flexibility and adaptability to changing circumstances, this policy has held firm to date. For example, a request for a supplementary grant to repair storm damage to a completed PPI (an irrigation channel) was turned down.

Progress

3.37 As of end-1994, 1,501 PPIs had been initiated and 1,204 completed (Tables A1.6 and A1.9). The most popular type of project is gravity irrigation channels, which are fed by springs, streams from glacial melt and river offtakes. Some 700 gravity irrigation channels have been initiated, or 46 percent of total PPIs. Almost half of these are new schemes with the rest being for widening and extension of existing channels. There are also 72 pipeline or lift irrigation schemes, which brings irrigation schemes of all types to 52 percent of total PPIs. The next most popular group of schemes is link roads, vehicle and foot bridges, and pony tracks to improve communications (359, or 24 percent of total). A high proportion of link road PPIs have been in Chitral, 59 percent of the program total, reflecting that area's relatively undeveloped road system. Other large categories are protective works (162), mainly gabions for flood protection, boundary walls (73), and storage reservoirs (71). Other PPIs include sedimentation tanks, plant nurseries, flour mills and river channelization.

3.38 By district, the number of PPIs initiated has been Chitral - 560, Baltistan - 539, Gilgit - 374, and Astore - 42. On average the number of households per PPI has been notably higher in Gilgit at 66, compared with only 46 per PPI in Baltistan and 40 in Chitral. The earlier larger PPI investments were more common in Gilgit and may partly explain these figures.

3.39 Despite the different times the Program started in Gilgit, Baltistan and Chitral, progress on PPIs is about the same at around 80 percent completion in these three districts. However, in AKRSP's list of slow moving PPIs Gilgit has only 10, whereas there are 35 in Baltistan and 27 in Chitral. A high proportion (71 percent) of the slow schemes are irrigation channels, reflecting perhaps the special problems of schemes which are sometimes quite difficult feats of engineering, in harsh and unpredictable situations. It is too early to comment on PPI progress in Astore except to note that out of 42 PPIs initiated, three had been completed at end-1994. A high proportion (64 percent) of Astore's early schemes are for irrigation.

3.40 The mix of PPIs has not varied much over the years, except that some 36 micro-hydels have been initiated since 1992. Thirty-one of these are in Chitral, where this type of scheme has provided the main focus of the Program's increased activities in the southern non-Ismaili areas.

3.41 Grants totaling Rs. 285 million (US\$9.5 million) have been made for PPIs (see below for comments on the total costs of PPIs). The Chitral program has received 44.5 percent of the total amount of grants, Gilgit 28 percent and Baltistan 27 percent. The AKRSP average grant for PPIs is Rs. 190,000, or about US\$6,300. As a proportion of total program costs, the PPI grants have gradually declined from about half to a third during the 1980s, down to 11 percent in 1994. There is a notable difference between regions in the average AKRSP grants for PPIs, with Gilgit at Rs. 200,000 (US\$6,600), Chitral approaching Rs 230,000 (US\$7,400), but in Baltistan only Rs.144,000 (US\$4,800). As pointed out in para. 2.37, the prevalence of link roads and their higher unit cost in Chitral explains the high average grant per PPI in that region.

3.42 On visiting a range of PPIs, the overriding impression is one of admiration for what can be achieved by the villagers with some material and technical assistance from AKRSP. Many of the irrigation channels, seen from both the ground and from a helicopter, are remarkable constructions in difficult terrain. Traveling on some of the more spectacular roads leads to wonder that such roads could be constructed without sophisticated materials, and at low cost, in such challenging conditions. The secret may lie in that the populations of these areas have survived for centuries in these harsh surroundings, without much connection to the outside world and its technologies, and much of the construction in PPIs is the same local skills employed on a larger scale. Some construction is dependent on modern inputs such as compressors for rock drilling and dynamite, and the resulting irrigation tunnels and spectacular alignments of roads and channels are an understandable source of pride to the VOs and AKRSP staff.

3.43 In addition to the grant-assisted PPIs, various AKRSP papers refer to a large number of PPIs which were self-financed by the VOs. Some of these may have received technical help from AKRSP, but information is relatively less on these PPIs, compared with the great deal available on the grant-assisted ones. Self-financed PPIs are of great interest in that they indicate VO resourcefulness rather than dependence on outside agencies and funds. The 1994 Annual Review records that 22 self-financed PPIs were initiated in the year, but does not reveal cumulative total numbers, the mix of projects or discuss this important initiative by many VOs. The average cost of Rs.111,000, if this is total cost, seems to show that these PPIs are much smaller on average than grant-aided PPIs.

3.44 The IMI study in 1991 used self-financed PPIs as one of its many measures of institutional maturity. The study identified the number of VOs with self-financed PPIs as follows: 128 in Gilgit, 120 in Chitral, and 211 in Baltistan, making 459 in total. In the context of institutional maturity monitoring and justification of future Program support for PPIs, there is a need to study and keep track of self-financed PPIs. A more comprehensive understanding would seem to be especially relevant to the debate on another round of Program PPIs.

PPI Historical Trends

3.45 Table A1.9 shows trends for grant-assisted PPIs since the Program started in 1983. There has been a generally lower number of PPIs initiated in the 1990s compared to the late 1980s as greater regional coverage was obtained and the number of new VOs per year leveled off (Table A1.4). However, in 1994 there was an exceptional drop to about half the peak of the late 1980s, when between 160 and 180 PPIs were approved each year. Part of this fall may be attributable to the diversion of AKRSP's resources into the emergency rehabilitation of irrigation channels damaged by the heavy rains of 1992.

3.46 Since about half the PPIs are irrigation schemes, the decline in numbers also implies a decline in the amount of incremental land development based on new water supplies. Overall, therefore, there has been a substantial decline in the core physical activities of AKRSP.

Land Development

3.47 Past reviews by OED have commented on the fact that land development is not included in irrigation PPIs and generally follows some years behind the water supply. Hence irrigation PPIs do not in fact become "productive," or fully productive, until some years after engineering costs have been incurred. While a gradual buildup to full production is normal and to be expected in most irrigation schemes, the AKRSP schemes have a long built-in delay in that land development is not included in the initial funding or implementation plan.

3.48 AKRSP management has in the past said that land development in areas commanded by irrigation channel PPIs is the prerogative of the VO. This applies especially to the rate at which land is developed to the point where irrigation supplies are fully used and maximum benefits to the infrastructure investment can be achieved. The 1991 IMI studies confirmed that most VOs were undertaking land development to some degree (74, 43 and 50 percent of VOs in Gilgit, Chitral and Baltistan, respectively). Unfortunately, for a variety of reasons the rate at which land is developed has often been relatively slow compared with the rush of energy and commitment that lead to the generally quite rapid construction of the channel or pipeline. An earlier attempt to speed land development by making medium-term loans available came to an end in 1989. The main reason appears to have been that following civil unrest in 1989, AKRSP was forced to forgive the land development loans of some devastated villages. Faced with the prospect of increasing defaults on loans, as news of this debt forgiveness spread, AKRSP ceased making medium-term loans, within which land development was the dominant item. At that time there were 222 loans totaling Rs.32.1 million (US\$1.1 million), to develop about 5,600 hectares at a cost of Rs.5,700 (US\$190) per ha. This implies that only about one-third of the irrigation PPIs initiated to end-1994 had a land development loan to accelerate development. Land development seen by the OED missions has varied from quite straight forward minor irrigation layouts and (mainly) tree planting, to difficult and labor intensive clearance of rocks and boulders, and intricate terracing. The reinstatement of a credit program for land development activities would be desirable, provided it can be managed as a viable credit line.

Maintenance of PPIs

3.49 During the most recent visit of the OED team, as well as on earlier visits, no serious cases of inadequate maintenance of PPI schemes have been seen. AKRSP shows appropriate concern for maintenance standards as a measure of sustainability, and the effectiveness of the dialogues with VOs in identifying high priority infrastructure projects. Thus, since irrigation channels and link roads are producing a constant flow of benefits to villagers, maintenance is good. There are various established, traditional systems for maintaining common assets which have worked well

on the PPIs. They depend mainly on well understood obligations of all beneficiaries to provide labor, or an agreed payment in lieu, whenever maintenance is required. The 1992 IMI report recorded that in Gilgit and Chitral over 90 percent of the VOs were maintaining their PPIs adequately. However, in Baltistan the figure was 80 percent, which might be a level at which there should be concern as to the selection of PPIs and the arrangements for their maintenance. Lack of funds for maintenance of irrigation channels was reported as a problem in some cases following visits to seven villages in Gilgit (Akhtar A. Hai, March 1995).

Costs and Valuing the PPI Portfolio

3.50 Table A1.9 shows the total "cost" of PPIs to date to be Rs.285 million (about US\$9.3 million). However, this figure includes only the cost of the AKRSP grant, and therefore substantially under-counts the value of the Program's infrastructure investments. This has the effect of underselling the case for a continued PPI program.

3.51 The past two OED reviews of AKRSP have been content with anecdotal evidence that if the PPIs were to be constructed by a private contractor, the cost would be in the region of three times the grant cost. Some estimates of the multiplier effect are even higher (Akhtar A. Hai, 1989). Although there may be debatable points in such estimates, the calculation of the true value of the PPI portfolio is desirable from several perspectives. It would better recognize the contribution made by the VOs to their own projects; it would record and demonstrate the high level of infrastructure investment being achieved by the Program with relatively low external funding; and it would provide a large measure of the justification for continued funding of such infrastructure investments. AKRSP should use the real cost of PPIs in all its documentation, especially that intended for fund raising purposes and the general public. The construction and upgrading of roads and bridges, a public good, throughout the Program area, at no cost to government and with relatively low external funding, which are then maintained by VOs, is a major achievement and a great benefit to the Northern Region of Pakistan. AKRSP's submission to SDC II says that the Program has created new assets "worth billions of rupees at a fraction of the cost," but more substantiated figures would have strengthened this assertion.

3.52 AKRSP staff have commented in this connection that they have been accused in the past of over-claiming for AKRSP's results and impact. But so long as the data is well-founded and the methodology is explained, there should be no danger of this problem in connection with monitoring and publicizing the total costs of PPIs. The response that AKRSP's approach gets in terms of mobilizing other resources is an important aspect of Program impact. As resources allow, investigation of a sample of PPI cases would provide more substantive data to demonstrate the leverage effects of the PPI program.

The Future of the PPI Program

3.53 As the rate of VO formation has fallen off with higher coverage of Gilgit, Baltistan and Chitral districts, so the single grant PPI program has begun to wind down. Astore's entry to the project has slowed what otherwise would have been a greater rate of decline in this work. Even so, the workload of AKRSP's engineering services (PIES) has begun to fall and other activities have received more attention (para. 3.57). The original philosophy of AKRSP of only one grant for each VO was to not create dependency in the VO on external funding, and to allow self-reliance to grow. Various measures in the IMI surveys indicate that there has been considerable success in this respect, which is a credit to both the strategy and to the resourcefulness and energy of the villagers.

3.54 In recent years there has been a growing debate as to whether to revive the PPI program with another round. There is certainly great demand and interest from villagers, but funding has been an issue. This has led to the one grant principle coming under increasing pressure in the face of obvious demands for more infrastructure, the success of the PPIs to date, and AKRSP's capability to assist more infrastructure development than in the current shrinking program. Given the successful central role that PPIs have played in the early organization of VOs, and the potential they have to generate favorable economic and social benefits as well as enhanced member commitment to VOs as institutions, AKRSP now has the opportunity through a second round of PPIs to build on earlier achievements.

3.55 The earlier draft of the SDC paper was adamant that grants should not be repeated (costs would be totally recovered), but AKRSP's submission of August 1994 to the SDC proposes a further five-year program of PPIs funded by a combination of credit, AKRSP grants and villagers' own resources. That paper identifies a large portfolio of new projects with a cost over five years of Rs.727 million (about US\$24 million). Some of these PPIs are larger than most PPIs to date and involve several villages, particularly multi-village irrigation schemes and roads projects. The difficulties in large projects of this type should not be underestimated (paras. 3.2 and 7.16), but the proposal deserves serious consideration.

Planning by PIES

3.56 AKRSP's experience in physical planning has largely revolved around village land use planning, usually in association with a particular PPI. Recent proposals were to expand the capacity of PIES to take a broader view of planning at both the settlement level and over wider functional areas such as a whole valley.

3.57 At the *settlement* level, this was to include both natural resource management and the built environment. In 1994/95 PIES prepared long-range village development plans for Passu as a pilot activity. Such an undertaking would have to be highly participatory in involvement of beneficiaries if it were to be useful. However, in June 1995, it was decided that the Aga Khan Housing Board (rather than AKRSP) would be responsible for activities concerning the built environment.

3.58 *Functional area planning* by PIES will be necessary to properly organize development involving a number of villages. This could include productive or social sector investment in which integration of resource use or of services created by an investment is necessary. If the proposed increase in infrastructural development is realized in the Program, this type of planning and the definition of management procedures for large projects will be important functions for PIES.

3.C Natural Resource Management

3.59 Table 2.3 (para. 2.13) evidences the current importance of agriculture as a source of income in the Northern Areas and Chitral. Alternative employment opportunities are of growing importance to the area, but the limited base from which these must grow dictates that agriculture will continue to be of primary importance for local livelihoods in the foreseeable future. Consequently, in accordance with AKRSP's philosophy that communal effort is best nurtured around economic advancement, improved agricultural productivity must play a central role in future program strategy. This section evaluates the instruments AKRSP has used to promote natural resource management.

3.60 The approach used by AKRSP to introduce new technologies has been to develop packages and to promote them through specific sectoral programs which include demonstrations, input supply and technical assistance. Staff of technical sections work with community members who are trained as specialists in a particular area of expertise, and who periodically receive refresher courses.

3.61 AKRSP has traditionally had separate Agriculture and Livestock sections. Following a collaborative pilot forestry program between IUCN and AKRSP's Agriculture section, a section specifically for forestry was added in 1991. The three sections were subsequently amalgamated into a Natural Resource Management (NRM) division in 1994 to improve integration of the services offered to farmers.

Agriculture

3.62 Table 3.1 provides an overview of the uptake of technical packages promoted by the Agriculture section. There are no strong trends in the data. Most instruments have doubled their uptake over the last five years, but the actual levels are modest compared to levels of agricultural activity across the Program area. Vegetable seed is one instrument showing a dramatic increase in use, and potatoes and fruit are also expanding enterprises. Others are relatively static. Of these, maize and fodder seeds are characterized by strong surges then a loss of momentum. The use of AKRSP short-term credit for fertilizer purchase has declined, but this should not be linked to a reduced use of fertilizer. The Program has encouraged direct transactions between the private sector and the VOs, and the multi-purpose VOCP credit line has become more popular than commodity-specific short-term lending. In Gilgit, where this devolution and VOCP are most advanced, and where fertilizer use has been well established since the 1960s, no short-term fertilizer loans were made in 1994. Pesticide distribution has similarly moved towards private supply.

Table 3.1: Uptake of Agricultural Supplies 1989-94 through AKRSP

<i>Agriculture</i>	<i>1989</i> <i>cum</i>	<i>90</i> +	<i>91</i> +	<i>92</i> +	<i>93</i> +	<i>94</i> +	<i>1994</i> <i>cum</i>
Improved Seeds:							
Wheat	95.0	29.6	16.1	25.0	18.5	18.9	203.0
Maize	12.8	0.8	24.3	4.6	1.0	0	43.5
Fodder	1094	1341	6237	2010	238	199	11116
Potatoes (tons)	40.9	2.0	4.2	5.8	2.6	2.2	57.8
Vegetables (kgs)	1056	670	225	3602	6182	1554*	13289
Fruit trees ('000)							
AKRSP -supplied							
New Orchards	250	56	33	53	40	62	494
Rehabilitation	-	-	15	24	23	25	87
VO planted	1499	201	172	18	9	30	1929
VO/WO nurseries & orchards (no)	66	38	4	5	16	109	238
Fertilizer Credit							
Rs million	46.1	9.4	7.9	8.9	8.4	4.3	85.0
Pesticide distributed							
Rs 000	478	134	141	117	263	183	1316

* In Gilgit vegetable seed production (4342 kgs of the 1993 total) has been almost wholly privatized. 1994 figures apparently omit these.

3.63 There are three categories of village agricultural specialists: Plant Production & Protection (PP&P), Vegetable Production & Protection (VP&P) who are women, and Nursery Managers. By the end of 1994, 2,499 specialists, most of them PP&Ps, had been trained and had completed an average of 1.5 refresher courses. The IMI surveys showed that while the 1800 agricultural specialists trained by 1991 were more than enough for all the VOs then established, only 40 percent of VOs had working specialists (AKRSP, 1992). This represented a very high rate of attrition.

3.64 Since 1992 selected specialists have received advanced instruction as master trainers. Their roles are to stimulate the village specialists, develop their own farms as models for local communities, provide services to their own communities and to others, form a link with the private sector and act as resource persons in AKRSP training. One hope expressed for the scheme is the reactivation of inactive specialists.

3.65 *Wheat, Maize and Fodder:* *Wheat* is the traditional food staple and wheat straw is the main winter livestock feed across the Program area. In view of the local availability of subsidized down-country wheat, it is the importance of the straw which has probably maintained wheat as the crop occupying the largest hectareage. It occupies between 35 percent (Gilgit and Baltistan) and 55 percent (Chitral) of the cultivated irrigated area. For small farmers it occupies as much as 70 percent of their cultivated lands. Both these facts make it an important focus for development. High productivity in the crop absorbing most land, labor and cash, even when its production is for subsistence, releases resources for cash earning opportunities.

3.66 Byerlee and Husain (1992) document the introduction of new wheat varieties and chemical fertilizers to the area in the 1960-65 period. They record that farmers in Gilgit were using new varieties in the late 1960's and grew Mexi-pak, an early semi-dwarf wheat, in the mid-1970's. AKRSP introduced Pak-81 seed in 1985 and Byerlee and Husain (1992) credit the Program with a strong impact on its introduction and diffusion. By 1989 it was grown by 24

percent of farmers in Gilgit. Suneen, another early maturing semi-dwarf is also being promoted by AKRSP. The IMI scores for 1991 show new varieties of wheat adopted by 22 percent of farmers in Gilgit, 20 percent in Chitral and 46 percent in Baltistan.

3.67 Table 3.1 shows that in 1994 AKRSP supplied 18,902 kg of improved wheat seed to VO's, the approximate level for the last five years. At local planting rates of 200 kg per hectare, this is equivalent to the seed required for under one-fifth of one percent of the estimated wheat hectareage in the Program area, and represents the annual introduction of new, improved seed into the area. However, seed dissemination is largely based on multiplication and dissemination by farmers themselves; hence the coverage by new varieties of 20 to 46 percent of the wheat areas mentioned above. Nevertheless, this adoption rate is low considering the importance of wheat in the farming system.

3.68 Wider adoption of new wheat varieties has been inhibited by the higher levels of fertilizer required, and by seed adulteration as reported in the 1989 OED review. The potential gains to high levels of fertilizer are probably obscured by the adulteration problem. AKRSP has addressed the adulteration problem by designating seed villages where master trainers are instructed on seed production to maintain purity. In 1993, 27 VO/WOs were selected as wheat seed villages. It is too early for these measures to show impact but it is an important initiative. Use of outside expertise in artisanal seed production would be helpful.

3.69 AKRSP adoption studies (AKRSP 1990) calculated Rs. 1,500 - 2,000 per hectare as the extra net income from new wheat varieties grown under optimal conditions when compared to traditional varieties. These calculations included the indirect benefits of shorter maturing wheats in increasing farmers' flexibility to manage their farming system. This is an example of the kind of assessment needed if AKRSP is to respond to the diversity of farming situations across the Program area. Early maturing wheat varieties meant that farmers could plant maize earlier and be more certain of grain from the maize or, at higher altitudes, of a greater yield of fodder for winter feed; or early maturity also let farmers plant wheat later with a variety of benefits depending on the individual household situation:

- Accumulation of more manure through the winter to use on the crop,
- allowing cattle to graze maize longer into winter, which conserved wheat straw for feeding later in the winter, or
- freeing up family labor for other work in the autumn, which is important to poor households in areas where autumn labor offers a cash earning opportunity.

3.70 Such understanding needs to be drawn into the design and evaluation of all experimentation. This requires a thorough knowledge of the local farming systems. In its cooperation with the Pakistan Agricultural Research Council (PARC) and its affiliate the National Agricultural Research Center (NARC), AKRSP should continue to ensure that in testing new wheat material, straw quantity and quality, and the maturity period of the variety will be important evaluation criteria. Ongoing research to identify improved wheats for the single cropping zone needs to be similarly informed.

3.71 *Maize* is the second most important crop to farmers in both Gilgit, where 1991 surveys showed it occupying 24.5 percent of the cultivated area, and Chitral where it occupied 20.5

percent. In Baltistan with 2.1 percent of the cultivated area, it is much less important than barley with 26.1 percent (Bhatti et al, 1994.) It is grown for both grain and fodder in the double cropping areas, and for fodder at higher altitudes. In all systems it is sowed at high densities. Green thinnings of maize are an important seasonal livestock fodder and maize stover is an important winter feed.

3.72 Improved seeds have been supplied through AKRSP over the last 10 years, but have not been in heavy demand; coverage is negligible. Farmers' priorities make improvement of the maize crop difficult to characterize. As with wheat, the conventional experimental criterion for improvement, grain yield per unit of land, does not tell the appropriate story. The longer maturity of the improved maize varieties available have obviously not been appropriate for the circumstances of most farmers. Again, research objectives need to be informed by a careful analysis of farmers' priorities for the crop.

3.73 Heisey et al (1992) have examined the improvement of maize used in a similar way in the Swat mountains and suggested research thrusts. The 1989 OED report also suggested lines for experimentation. Clearly the wheat/maize interaction, in terms of time in the ground and the speed of turnaround between crops, is an important research focus. Shorter maturing varieties, and the management of maize to maximize grain or fodder depending on family and seasonal circumstances, look like useful initiatives. The Program has not yet sought resources to experiment with the maize crop in any detail. However, with up to 25 percent of the land area, and with major implications for the livestock enterprise, it deserves more attention.

3.74 As wheat straw and maize stover are the main sources of winter feed for livestock, the Agriculture section should be ultimately involved in *fodder* production. As pointed out above, feed value must be an essential criterion in cereal assessments. The Agriculture section has been involved in the supply of alfalfa, rape and vetch seed as fodder catch crops. However, seed supply had fallen to very small levels by 1994, although alfalfa continues to be distributed for undersowing forest plantings by the Forestry section. As will be pointed out later (paras. 3.92-94), the Livestock section is involved in fodder utilization.

3.75 Despite the participation of the three NRM sections in fodder supply, there is not an integrated strategy which responds to the needs of the various types of production systems. This is evidenced not only in the variable results being obtained with the alfalfa program, but also in an apparent lack of effort to identify reasons for this variation, and to define and adopt measures to address the problem. Improved integration should be a priority for the future NRM program, which should also include a component to develop a greater understanding of above-the-channel feed resources (summer pasture) in the various systems.

3.76 *Potatoes, Vegetables and Fruit:* Potatoes, vegetables and fruit, both for domestic use and for marketing locally and down-country, are at the cutting edge of development in the Program area. The suitable disease-free climate, the opening of markets, and the early efforts of an FAO project and private companies have encouraged the production of a seed potato crop. Both FAO and the companies have used the VO forum to negotiate the development and sale of the crop. AKRSP became more directly active in supplying seed through 1992 when the crop spread beyond the well established potato growing areas of upper Gilgit to both Baltistan and Chitral. AKRSP has enabled the establishment of a seed certification laboratory in Gilgit, and during 1993 Gilgit Apricot Marketing Association (GAMA), originally, set up to market apricots,

expanded into seed potatoes in three selected villages. It sold 25 tons in 1993 and 100 tons of seed potatoes down-country in 1994.

3.77 Vegetables are a labor intensive crop and occupy under 10 percent of the cultivated area per household in the Program area. As Table 2.2 showed, there has been a significant increase in area since 1981, ranging from 76 percent in Baltistan, to 300 percent in Chitral. The 1991 IMI survey identified the proportion of households having adopted improved vegetable growing practices through AKRSP as 27 percent in Gilgit, 9 percent in Chitral and 11 percent in Baltistan. AKRSP is thus responsible for only a proportion of the shift into vegetable growing, yet it clearly offers a dynamic focus for Program efforts.

3.78 Vegetables are conventionally a women's crop and the Program's vegetable and vegetable seed development were initiated through the WOs. Table 3.2 shows the spread of demonstration plots in WOs and, in 1992, the introduction of a Commercial Vegetable Package (CVP) now being expanded to selected VOs and WOs. Men's interest in growing vegetables for cash has increased. The introduction of plastic tunnels is extending the vegetable season by two months; users can start growing a month earlier after winter, and continue a month longer in autumn.

Table 3.2: WOs and Vegetable Development 1989-94

<i>Women in Development</i>	<i>1989 cum</i>	<i>90 +</i>	<i>91 +</i>	<i>92 +</i>	<i>93 +</i>	<i>94 +</i>	<i>1994 cum</i>
Vegetable (WOs)							
Demonstration	183	71	60	58	11	15	398
Commercial (WOs)							
Vegetable Package	-	-	-	10	12	14	36

3.79 Three evaluations included case studies of the vegetable initiatives (Tajammal, 1993. Ahmad et al, 1993), and the use of plastic tunnels (Ghani and Raza, 1994). Each confirmed the profitability of the instrument to most of the beneficiaries involved, and the high potential of the packages if yields improved. The evaluations called attention to the need for strong marketing support to encourage participants and to ensure the sustainability of the initiatives. They also called for stronger technical support from AKRSP, particularly in vegetable seed production where the report emphasized its sophistication. The RPO Gilgit in its 1995 operational plan concerning dissemination of the introductory and commercial vegetable packages reinforces the findings of the 1993 evaluations on weak Program support. The following conclusion from the CVP evaluation added a further dimension to these critiques:

“The dialogue for CVP ought not to be a ‘top-down’ what-to-do speech by AKRSP staff [which happens unwittingly] but in fact a more interactive process where the beneficiaries' suggestions and opinions are taken seriously and individual variations made there and then. ...there is a need to avoid accepting the ‘blue print’ approach in the initiation and implementation of packages which are undertaken by people in different economic and cultural contexts” (Ahmad et al, op. cit)

3.80 Like vegetables, fruit tree plantings have also expanded strongly since 1981 (Table 2.2), increasing by 65 percent in Gilgit and as much as 210 percent in Chitral. As with vegetables, AKRSP has successfully identified and reinforced a dynamic trend in local agriculture. The 1991

IMI survey (Tetlay, 1993) records adoption of AKRSP improved fruit planting material by 27 percent of households in Gilgit, 6 percent in Chitral and 11 percent in Baltistan. Table 3.1 shows that by 1994, AKRSP sources dominated the supply of fruit trees for planting in the villages covered by AKRSP. This is a major change from 1990 and 1991 when VO plantings exceeded AKRSP supplies by 4-5:1. However, the figures show total fruit tree planting significantly reduced over the same period.

3.81 The Program is seeking to sustain its influence by assisting households to establish fruit orchards when there is a commitment by at least 50 percent of VO members to dedicate one karnal of land each to the enterprise. At their request, the package was extended to WOs in 1994 and as Table 3.1 shows, the orchard initiative expanded dramatically in 1994.

3.82 Overall AKRSP has successfully improved the quality of new fruit tree plantings. AKRSP fruit orchards in Gilgit and Baltistan were evaluated in 1994 (Hafeez, 1994). This study concluded that progress with orchard development and with renovation of older orchards, was well appreciated by beneficiaries. However, the report was critical of AKRSP technical staff, mainly for their lack of contact with the VO/WOs. It also records farmers as critical of their PP&P specialists; an ineffective PP&P would, of course, exacerbate the need for direct AKRSP support.

Livestock

3.83 Livestock generate about 20 percent of gross farm income across the Program area. This ranges from 18 percent in Chitral to an exceptional 36 percent in Astore, and even 55 percent there if the sale of grass is credited to the livestock enterprise (Table 2.3). Livestock absorb a disproportionate 37 percent of farm cash costs, making them the most cash-intensive enterprise in local farming (Bhatti et al, 1994). Comparisons of livestock numbers between 1981 and 1991 show small increases in cattle and in sheep and goats, but a doubling of poultry populations in all regions. No analysis is available from AKRSP, but other sources (Byerlee & Husain 1992, Adams 1994) suggest livestock are an important source of incomes for the poorer families, through ownership and herding, particularly when common land is available for pasture.

3.84 AKRSP has pursued a three-pronged strategy for the improvement of livestock: reduction in animal losses, and improvement in animal nutrition, and in the genetic base of local livestock. The strategy is implemented by developing packages, organizing delivery of production inputs and training village specialists, as for the crop improvement program.

3.85 Delivery of packages has been achieved by training selected farmers as livestock specialists to provide advice and health interventions in their own villages. Some 1300 village livestock specialists had been trained by the end of 1994, and had averaged three refresher courses after their basic training. This represents potential coverage of 71 percent of the established VOs. The IMI surveys in 1991 reported some 70 percent of trained livestock specialists continuing as active. This is the highest "survival rate" for all disciplinary specialists and provides 50 percent of VOs with some technical support in livestock.

3.86 Selected livestock specialists have received advanced instruction as master trainers to provide services beyond their own village community, and to link with the private sector for the supply of vaccines and medicines. The general livestock has been complemented by training in poultry health and production, largely for women. Some 1500 WO poultry specialists had been

trained by December 1994, which represents about two specialists per WO established by that date. A further 150 WO members were trained as livestock specialists, mainly in goat management and disease control.

3.87 The concept of having beneficiaries pay for services (as the cost of the product plus a small application fee) has not been uniformly successful. It appears, however, that the more capable livestock specialists and all master trainers have been able to institute payment for services. A complication in each of the regions is the provision of vaccination service free of charge (or for a nominal fee) by the government animal health departments and, in the case of Chitral, by the Chitral Area Development Project (CADP - ADB/IFAD) which is executed through government line departments (para. 3.28). These alternative services are limited by budgetary support and mobility. However, when and where they do have significant activity, they do cause complications.

3.88 In Gilgit and Baltistan livestock master trainers have grouped together for the procurement and delivery of inputs and to supply services for payment. Ten master trainers in Baltistan have already established a formal partnership. Although still in its early days, the concept of linking with the private sector and devolving activities from AKRSP seems to be working well. It provides the incentives for trained individuals to give the right advice, and to deliver relevant and viable inputs in order to profit from their businesses. It is envisaged that these groups of master trainers will replace village specialists, or use them as village agents for a small fee. However, the Baltistan group still need AKRSP support in procurement of viral vaccines and in the management of heat-sensitive vaccines. The same pattern is being followed with poultry specialists. Selected individuals are encouraged as master trainers and supported in setting up chick brooding centers as a business which itself should benefit from their providing advice to farmers.

3.89 *Reducing losses:* Table 3.3 shows the use of vaccines and medicines through AKRSP. Use has increased tenfold since the 1989 OED evaluation, and in 1994 the vaccines and medicines supplied were used to treat 106,000 cattle, 163,000 sheep and goats, and 403,000 poultry. Poultry treatment through the WOs in Chitral (c.115,000) and Baltistan (c.270,000) dominated the 1994 figures.

Table 3.3: Value of Vaccines/Medicines Distributed through AKRSP (Rs '000)

	1989 <i>cum.</i>	90 +	91 +	92 +	93 +	94 +	1994 <i>cum</i>
Vaccines	74	78	86	103	141	178	660
Medicines	108	132	128	298	314	207	1187

3.90 As was noted in the 1989 OED report, there have been difficulties with the poor handling of vaccines, especially those which are not heat-stable. The Baltistan benchmark survey (Bhatti et al 1993) made an attempt to evaluate the impact of these veterinary interventions. It compared animal mortality in villages with (VO) and without (NVO) access to AKRSP treatments. The study found a mortality rate of about 5 percent in cattle, slightly higher in sheep and goats, with a nominally worse rate in VO villages. However, it is especially difficult to obtain reliable data on mortality using this type of survey when dealing with very small numbers of animals owned per household, so that the robustness of this comparison is questionable.

3.91 More favorable results are indicated by indirect evidence: 70 percent of livestock specialists, the highest percentage of any section, continue to be active, and there is a greater

adoption of vaccination programs (by a factor of 3) in Gilgit and Baltistan villages which have a specialist. These observations and the rapid expansion of treatment recorded in Table 3.3 above indicate a high demand for these services.

3.92 *Improving nutrition:* In addition to the program for improving fodder production, AKRSP has had three activities in its livestock section to improve feed preservation and utilization—the improvement of mangers to reduce waste, the ensiling of maize, and the treatment of wheat straw with urea (UST). Data proved difficult to consolidate, but Table 3.4 attempts this. The silage and UST activities were launched in 1990 with the training of specialists in these techniques and through demonstrations.

3.93 Mangers have been used by 8 percent of households, while maize silage has been demonstrated in 1.5 percent and UST in 1 percent of households. Case studies have shown that households with silage feed about 12 kg. of maize silage per milk cow per day, and those with UST about 4 kg per cow per day, which results in an extra liter of milk per day (Tetlay et al 1991). The level of uptake of mangers is confirmed by the IMI results (Tetlay, 1993).

Table 3.2.3 (2): Technological Innovations to Improve Winter Feed Utilization

	1989	90	91	92	93	94	1994
	<i>cum</i>	+	+	+	+	+	<i>cum</i>
Maize silage demonstrations	-	-	(150)*	692	387	524	1753
UST demonstrations	-	-	(150)*	(150)*	679	424	1403
Mangers built	-	4086	2090	425	355	0	7956

*estimated

3.94 Adoption of the maize silage and straw treatment technologies are especially low. Silage tends to be used only for high value animals (usually for milk production) and is mostly located in the transitional zone where a second vegetative crop can be grown as maize. The UST is used to an even lesser extent. Even though it does not require a specific crop for its production, its benefits are not so obvious to those unaccustomed to the theory of nutrition; hence, the resource costs (mainly labor) are likely considered too high for the apparent benefits. Unfortunately, these two measures tend to be the major interventions promoted by the Program to overcome the universal winter nutrition problems with ruminants. This is a symptom of a deficiency in the problem diagnosis-discussion-resolution process in interaction with village communities.

3.95 *Improving Animal Quality:* An early initiative by AKRSP was the introduction of improved livestock to the VOs. Breed improvement in ruminants has so far made little contribution; while in poultry, when combined with the vaccination program, good progress has been made. The initial attempts at collectively operated VO enterprises in both improved cattle and poultry were a failure, as was an early attempt at artificial insemination in cattle. These thrusts have now lapsed, and the cattle have been sold to individuals. Once animal health is improved, there is a potential for significant benefits from enhanced genetic potential as long as animal feed and management conditions are improved at the same time to capitalize on this potential. A demand for crossbred heifers is developing from individuals who have adequate fodder resources and access to a local market for fresh milk. A survey at the end of 1994 showed crossbred animals owned by only 200 households in 16 VOs. Although limited in the number of households affected, this represents a response to improved animal health, feeding and market conditions, and should continue to be encouraged. For the majority, however, feed supply and access to a high value milk market are likely to be more limiting factors for adoption of cattle

crossbreeding, and it should not, therefore, absorb an inordinate amount of Program resources. If feed supply, especially for winter months, can be significantly improved, there will be greater incentives for small holders to select animals for production in those aspects which they value. Summer management of cows in common grazing is likely to limit selective breeding in most herds, but thorough understanding of the livestock management–feeding–cropping systems could identify opportunities for relevant interventions.

3.96 Despite earlier setbacks, a further experiment in breed improvement was begun with sheep in late 1993 (Ali et al, 1995). The Kail breed of sheep from Kashmir were introduced to a selected village in Gilgit. The first year's experience has again highlighted problems created by overoptimism about performance and by poor planning, lack of fodder, scarce marketing opportunities, unforeseen losses, particularly from predation, and a failure by villagers to fully honor the agreement with AKRSP. These lessons led evaluators to the conclusions that:

3.97 Farmers can play a significant role in technology development and must be allowed to play that role.

3.98 Innovations should not be considered for their technical merit only. It is necessary to adopt an integrated approach which adapts technology to local circumstances, and which includes all relevant AKRSP sections in both planning and implementation.

3.99 Although the original collective poultry schemes were unsuccessful, the home-based package (HBP1), providing 10-15 improved chickens and advice on management, disease control and supplementary feeding, has yielded good results. As Table 3.5 shows, it had been adopted in 80 percent of WOs by end-1994. It has improved household nutrition and brought women small cash sums from the sale of eggs. This program continues as more WOs are activated.

3.100 AKRSP has its own hatcheries and brooding capacity, but in the 1990s emphasis has been given to developing a capability in the private sector to sustain a viable local industry. The involvement of poultry master trainers in brooding enterprises to supply local demand has already been mentioned. Others in Gilgit supply fertile eggs to AKRSP hatcheries. After testing semi-commercial egg production in 1992, by end-1994 AKRSP had introduced 36 HBP2 packages, each usually with 60-200 hens, managed by master trainers and good poultry specialists. Here again, the intention is to develop the expertise of these individuals as a permanent local source of technical know-how.

Table 3.5: Poultry Improvement through WOs

<i>Women in Development</i>	<i>1989 cum</i>	<i>90 +</i>	<i>91 +</i>	<i>92 +</i>	<i>93 +</i>	<i>94 +</i>	<i>1994 cum</i>
Home-based Poultry (WOs)	110	230	100	79	36	48	603
Semi-Commercial Poultry				-	-	15	15

3.101 A review of the semi-commercial schemes in 1994 showed most of them profitable. Experience in Baltistan (Iqbal et al 1995), however, was not uniformly successful in the semi-commercial package. The expansion of this program will require care, especially in the assessment of market potential as a key criterion in locating projects. Adequate technical assistance from start-up to commercial operation over the first 18 months will also be critical.

AKRSP has constructed a feed plant in Gilgit and is considering one for Chitral. These should supply feeds at lower unit cost if management of the plants is good enough to achieve the quality standards required.

Forestry

3.102 Forestry is an important farm activity. Table 2.3 (para. 2.13) shows that forestry contributes about 10 percent to gross farm income in Gilgit and Baltistan, and 20 percent in Chitral.

3.103 According to Table 2.2 (para. 2.12) farm forest trees in Gilgit expanded over 300 percent between the agricultural census of 1980 and the AKRSP benchmark surveys in 1992. With forest trees, as with fruit and vegetables, AKRSP has identified a growth enterprise and reinforced it with Program activities. This is confirmed by the data in Table 3.6 showing that during the 1990-94 period, the planting of AKRSP-supplied materials has overtaken the planting of local materials. The overall level of planting has been maintained and by 1994, 70 percent of plantings were with improved materials supplied through AKRSP.

Table 3.6: AKRSP Forestry Activities 1989-94

	1989 <i>cum</i>	90 +	91 +	92 +	93 +	94 +	1994 <i>cum</i>
AKRSP-supplied Forest trees ('000)	182	217	444	338	1233	1870	4284
VO-planted Forest trees ('000)	6696	1549	2126	1458	950	820	13599
VO/WO nurseries (no)	-	-	-	41	28	138	205
AKRSP Forestry Refined Package (ha)	-	121	353	364	568	898	2394

3.104 The newly independent Forestry Section began to train Village Forestry Specialists (VFS) in 1991, and courses in 1992 included one for the first 10 women VFS. However, it soon became evident that many were not functioning as intended. Although by end-1994, 626 VFSs had been trained and 328 of these had undertaken refresher courses, a significant proportion were already inactive.

3.105 After 1992 the Section also adopted the master trainer concept, and 24 women VFS have been upgraded to master trainer status by the end of 1994. The overall upgrading program was delayed, however, and only in 1995 was this training of selected VFSs as "village foresters," the forestry equivalent of master trainer, intensified. Candidates for the first course in February 1995 were selected from VFSs who had performed well in different valleys. Their roles as village foresters are to assist VOs define their forestry needs, help prepare village forestry plans, provide guidance to the VFSs in their area, and monitor the work being carried out.

3.106 *The Packages:* A five-year sustainable forestry development program (SFDP) was instituted throughout the Program area in 1991 by the Forestry section with NORAD support. From 1993, AKRSP has also implemented a government-funded social forestry program (SFP) in cooperation with the Forestry Department in Gilgit and Baltistan. Linkages between AKRSP and the Forestry Department have been successfully developed, with the latter cooperating not

only through SFP but also in the supply of planting material and in staff training and in research. The SFDP has six components:

- Afforestation through a "soft package" of promotion and extension with VOs using their own traditional planting material
- Afforestation through a "refined package" of forestry activities with VOs and WOs using improved planting material and planting techniques as well as intercropping; this is the major thrust of the Forestry section
- Nursery development to provide improved planting material
- Training in the same pattern as for other AKRSP VFSs; 10-day courses for men and women selected by the VOs and WOs
- Women's activities; forestry packages for WOs for nurseries, woodlots and beekeeping introduced in 1993
- Environmental education in schools.

The SFP components also include nursery establishment and the refined package for afforestation.

3.107 Incentives include up to 70 percent of the planting material free from AKRSP, and small payments to the VFS for procuring supplies and supervising the work. A significant element of subsidy was justified in this program in view of its common-good environmental benefits which complemented longer-term individual household benefits. However, considerable planting targets have been exceeded, suggesting that the level of subsidy may be excessive. This should be of some concern considering that those with more irrigated land resources are taking greater advantage of this subsidized program than those households with less resources (para.2.41). Some evaluators have also commented negatively on the payment system to VFS from AKRSP, as it breaks the principle of the VO/WOs paying for specialist services. However, as payment to VFS by villagers for this type of advice and assistance would be highly unlikely, some payment can be justified.

3.108 Initially AKRSP took direct responsibility for package delivery, including the provision of planting material. More recently the Program has begun to reduce its own nursery areas from a high of 60.2 ha in 1993 (AKRSP 1993) to 45.2 ha (AKRSP 1994) and has encouraged the development of VO/WO nurseries. The number of VO/WO nurseries increased rapidly to 138 by end-1994. With the minimum individual nursery size of one karnal, the total area of 12.0 ha planted remains small. Demand for forest tree seedlings is said to be very high, and in 1994 for the first time the output of plants from the Forestry Department nurseries was fully taken up.

3.109 IMI's 1991 results show 12 percent of households in Gilgit, and 5 percent in Chitral planting improved material, with a much higher proportion planting local material. The Benchmark surveys in 1992 and 1993 (Bhatti et al 1994) record the proportion of households receiving AKRSP assistance with forest trees as Gilgit 28.5 percent, Chitral 36.4 percent and Baltistan 15 percent. Acceleration of the AKRSP forest development effort with NORAD and GOP funds post dates both the IMI and the Benchmark surveys. The refined package program will have substantially expanded the proportion of households planting new material, with 929

ha, 764 ha and 701 ha being planted under this program in Gilgit, Baltistan and Chitral, respectively. In addition, the 1994 initiative to introduce woodlots to WOs under the NORAD program prompted a massive response. Local women in WOs established 691 woodlots with a total of 577,000 plants delivered through AKRSP.

3.110 The environmental education program undertaken with the cooperation of AKES and International Union for the Conservation of Nature and Natural Resources (IUCN), although modest, has been worthwhile and should be continued. Its focus on students and school teachers is appropriate. Perhaps the most immediate environmental concern in the region would be the effects of deforestation to produce wood for consumption or sale. The forestry program is addressing this directly through its planting programs. Although this is largely below-channel planting, its contribution will reduce the need for above-channel harvesting. An awareness of, and concern for, the wider environment including preservation of biodiversity and local flora and fauna are probably best cultivated in the younger generation; the current older generation is likely to be more concerned with ensuring a livelihood. With respect to management of high altitude summer pasture, there is little that can be offered without a thorough understanding of the pasture associations and the social and economic factors involved in their current use. Acquiring this knowledge is a major undertaking and should probably only be done on a case study basis with expert assistance. Nor can it be guaranteed that such research will result in practical means to improve pasture productivity or sustainability. However, NRM staff need to be aware of the role played by summer pasture in the seasonal fodder supply of the various farming systems (paras. 3.75 and 3.95).

3.111 The forestry program promises to yield significant environmental and economic benefits (Nyborg, et al, 1995). However; it has not been without problems, which appear to mostly relate to its rate of expansion. Staff have had to carry heavy work loads which has sometimes affected the quality of the dialogues with villagers in arriving at development agreements, and also the quality of supervision. Some communities consider that there was insufficient flexibility by the program in adapting to their particular circumstances, and poor survival rates in seedlings have been reported in some cases (although the overall rate at about 70 percent is acceptable) (Azfar and Ali, 1993 and RPO Gilgit, 1995). The intercropping component has been less ambitious, with only 17 percent of the SFDP area being intercropped.

3.112 In the next phase of the forestry program, it will be necessary to ensure the it does not assume a supply-driven character which aspires to meeting targets at the expense of quality and cost-effectiveness. The program should expand only at a rate commensurate with the capacity of trained staff to appropriately respond to community circumstances. As it is a major activity, it will also be essential that coordination with other AKRSP programs is at a high level, and that SOs are closely involved in the dialogues with VOs. Equity issues should also be taken into account in both the location of the program (e.g., attention to more remote areas) and in the subsidy level (para. 108).

Issues in Technology Development and Delivery

3.113 AKRSP's broadbased approach has brought considerable development to agriculture in the Program area. The irrigation related PPIs have expanded the land under command. New enterprises have proved attractive, particularly vegetables and poultry for women, but also potatoes for men. Livestock treatments and improvements in fruit and forestry have been widely taken up.

3.114 AKRSP has been less successful in raising productivity in the major farm enterprises—wheat, maize, and pasture. Between them these enterprises, with barley substituting for maize in Baltistan, occupy over 80 percent of the irrigated land in the Program area. They absorb high levels of labor and available family cash, and make major contributions both to farm income and to household security. In communities where irrigated land is scarce, raising productivity in these dominant crops, either to improve incomes directly, or to release land and labor to pursue new farm enterprises is the only agricultural development option. It will become increasingly important as population increase puts greater pressure on land and water resources.

3.115 *Technology Relevance and Delivery Issues:* Farmers' priorities have not been well reflected in the selection of program content in these dominant crops. The process for identifying and designing packages to raise productivity in the basic crops needs improvement.

3.116 Many locally recruited AKRSP staff and all the VOs have a detailed knowledge of the local farming systems, especially those staff working in their home areas. Yet there appears to have been little effort to fully capitalize this knowledge. Similarly there is good understanding of the geographical diversity across the area among Program staff, but again this has not been effectively used in the planning process. This phenomenon was likely reinforced by having NRM organized in three disciplinary based sections—agriculture, livestock and forestry (ALF).

3.117 The lack of sufficient attention to real needs in NRM has led to the use of standard packages; this, in turn, has limited the effectiveness of dialogue on technical matters. The standard package has become a reaction from the technical sections to the articulation of a general problem. Little attempt is made to shape the solution to the circumstances of the communities and different groups of households in those communities. Even the recent exercise in Astore in improving the effectiveness of the dialogues with communities did not result in anything other than the standard packages. This degrading of the dialogue has been taken a step further by sections setting annual targets for next season's interventions, then seeking to motivate VOs to achieve these targets.

3.118 Beyond this, the autonomous development efforts of the ALF sections in some cases may have exacerbated the problem. A good example is fodder improvement, with all three ALF sections having a hand in its implementation with little positive impact. System interactions in irrigated wheat and maize for grain and fodder and in summer pasture utilization are largely ignored in planning interventions. The ongoing integration of the ALF sections into NRM will improve coherence only if the diversity of local circumstances across the area, and the way this influences farmers activities and their capacity for change, are well understood and used as a basis for planning.

3.119 The Program cannot afford investment in the development and testing of technologies, and in the training of staff, master trainers and village specialists, only to have the package rejected by farmers. The probability of successful intervention needs to be improved. Technology identification and development must ensure benefits for the village and Program resources employed, and credibility for Program staff and the village specialist cadres. It is even possible that a significant portion of the high attrition in specialists might be linked to inappropriate packages.

3.120 Improving the process will need careful consideration of the staffing position and staffing policy. In December 1994, there were 44 NRM professionals, including 31 below the regional management level, each overseeing an average 59 VOs or 2429 households. As the 1989 OED evaluation noted, these professional staffing ratios are modest compared to other World Bank projects with similar rural development objectives.

3.121 Staffing needs will also have to be balanced against what is realistically possible with the level of personnel that can be attracted and retained in the Program. A persistent impediment to improving NRM services has been difficulties in retaining good technical staff. Already the devolution of responsibilities to the FMU level has raised questions concerning the ability to maintain the required level of competency in NRM at this level, and at the regional level where high quality support will be essential. Attracting the required skills has been particularly difficult in Chitral.

3.122 The AKRSP technology transfer concept of educating local village specialists in key areas of technological change has merit. However, it is only likely to be effective if the training/education process builds on local experience to ensure that any recommended technologies are, indeed, appropriate to local circumstances and needs. It appears that much training of specialists has concerned how to implement a technology rather than in participatory analysis of the implications and pros and cons of introducing a technology. The more a specialist acts as a deliverer of the Program's message rather than as an active player in the development of the message, the less likely is he/she to be well received by the farming community, and the more intensive will be the need for continuous service by Program staff. It appears that the frequent criticism of poor technical support may be linked to complementary deficiencies of inadequate training/education of specialists, and a low service ratio of Program staff to inadequately prepared specialists.

3.123 AKRSP is aware of these problems, and the progression to master trainers at the level of village clusters is undoubtedly in response to it. However, even here, the emphasis on establishing a commercial enterprise base to encourage sustainability of the position will have to be complemented by a participatory two-way flow of knowledge in defining appropriate technology if the prospects for success are to be maximized.

3.124 *Improving The Process*: Several past consultants—Conway (1985) and Rhoades (1992)—and the 1989 OED evaluation report have also identified the need to improve the technology development process. However, little headway has been made in responding to this problem.

3.125 There is a great diversity in the circumstances of individual households in the Program area. Is it feasible for AKRSP to establish an NRM framework which will permit relevant responses to this diversity? No program can hope to develop answers for every situation, and individual farmers must be expected to make their own choices and adjustments. However, AKRSP can aim to develop sets of technology which will have wide application in the major types of production systems in the service area.

3.126 In essence, this involves categorization of households and developing technology which should respond to the circumstances of the households in these categories. AKRSP has traditionally used the broad climatic categories of single, transitional and double cropping zones in dealing with technological innovations. However, other important variables at the village level are likely to be accessibility and endowment in irrigated land. These impact on employment,

marketing and commercial opportunities, and the longer-term potential contribution of farming to the economy of the community.

3.127 Within communities, there is always diversity in resources and aptitude amongst households which have to be taken into account. In Chapter 2 (para. 2.42) the issue of how some packages are more suited to resource-rich than to poorer households was discussed. Limited access to resources also affects an individual's attitude to risk taking and, consequently, the type of solution that is appropriate to overcome constraints. Within households, there is the gender issue. This aspect of categorization has already been taken into account in AKRSP's strategy and programming.

3.128 This form of categorization would not be used to determine what will be done in a community or what will be offered to a household. Rather it would provide a basis for a more informed dialogue with communities and households, and provide a framework to define technology requirements and undertake technology development. Any categorization would be flexible and iterative as more knowledge is accumulated.

3.129 AKRSP already has a wealth of information, albeit underutilized, to enable it to construct the suggested framework—the intimate knowledge that some individual local staff have; the comprehensive 1992 household/baseline surveys; the IMI data; and information generated by numerous ad hoc studies, including the more in-depth participatory dialogue exercises initiated in Astore in 1994 and being undertaken in each district in 1995. The information has to be organized in a framework which accepts the diversity among communities and households, and its impact on how opportunities will be perceived and realized.

3.130 Apart from its contribution to a more rational NRM program, categorization alone would generally assist the Program in its operations, and would provide an informed basis for developing strategy which has particular development priorities or equity considerations. However, in the context of NRM it provides the framework for more efficient and effective technology development. It permits the institutionalization of a farming (household) system perspective which is necessary to enhance the technology development process. This perspective accepts that labor productivity and food security are the primary objectives of small farmers.

3.131 *Enhancement of the technology development* would have a number of key elements, but the form in which the elements are implemented will make different demands on personnel and funding resources. The most essential elements are: understanding the characteristics of the farming systems (resources, constraints and potentials); determining aspects which have the potential for improvement to meet priority needs of households; involving farmers not only in the definition of system characteristics and priorities, but also in the process of developing technological improvements to address priority needs; and drawing on all reliable sources of technological innovation to develop or acquire relevant technology. Annex 2 provides details of how an improved technology development program might be incorporated in AKRSP. Chapter 7 (paras. 7.22 - 7.28) stresses the importance of attaining improvement in this aspect of the Program, and suggests that technology development may justify a specifically funded project or, at least, special technical assistance.

3.D Human Resource Development

3.132 One of the three principles underpinning the AKRSP philosophy is upgrading skills at the village level. Acquiring skills is also a need strongly articulated by village communities during the dialogue process. Within AKRSP, training is the responsibility of the Human Resource Development Division, reconceived as the Human Resource Development Institute (HRDI) in 1990. Its primary focus has been on training village representatives to manage VO/WO affairs, and to act as disciplinary specialists in natural resource management. Apart from training of VO members, HRDI undertakes training for AKRSP staff, both down-country in Pakistan and overseas, hiring of interns who work with the Program for varying periods, and training to staff of other agencies seeking to replicate aspects of the AKRSP rural development strategy.

3.133 The distinguishing feature of AKRSP's HRD strategy is that training is integrally linked with implementation. The training function of AKRSP staff is at least as important as their roles in implementation of sectional programs. HRDI itself has direct responsibility for training needs assessment, curriculum development and the production of training material. Regular training activities for VO/WO specialists are carried out by RPOs at local training centers and in the field, with support from HRDI. An important feature of HRD has been its flexibility to evolve with changing program needs. New courses such as business enterprise development have been incorporated as demand for this expertise increased.

3.134 *Technical Specialists:* Village technical specialists receive practical training in specific instruments in seven-day regular courses, and are brought back for three to four-day refresher courses to update skills as instruments evolve. By end-1994, over 4,000 specialists had been trained in 491 regular courses and upgraded in 495 refresher courses. Of these, 81 percent were NRM technical specialists and directly NRM related, including women specialists from the WOs. Five percent were marketing specialists, and 14 percent were village accountants. These numbers are truly impressive and speak well of the organizing abilities and consistent application of the AKRSP staff.

3.135 In 1991 village specialist activities were monitored by both the IMI and the Benchmark surveys. Questions were raised about the value of village specialists and the effectiveness of their training. Table 3.7, extracted from the IMI survey, shows an average 45 percent of trained NRM specialists being active, with the livestock specialists having by far the best performance. This attrition rate of 55 percent is very high. As an indicator of perceived value, the IMI survey queried the willingness of VO members to share the cost of specialist training. Very few (4 to 7 percent across the regions) reacted positively. The evidence on the value of specialists from the Benchmark surveys was more favorable. Table 3.8 shows the level of farmer contacts across the regions. In addition, a high proportion of respondents who had not received services or advice expressed a need for these. Of those who had received services or advice, except in marketing, a large majority were satisfied with the help received. Less than 3 percent of respondents saw no need for specialists (Bhatti et al, 1994).

Table 3.7: NRM Specialists Active (%)

Region	Livestock	PP&P	Marketing	Forestry
Gilgit	73	38	32	55
Chitral	71	45	21	45
Baltistan	61	54	23	20

Table 3.8: Farmer Contacts (%) by Village Specialists (VS)

<i>Region</i>	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>
Membership in contact with VS			
• for advice	22	39	53
• for services	29	37	65
VOs in which VS provides knowledge in VO meetings	52	51	82

3.136 The review of village forestry specialists by Azfar and Ali (1993) refers to their dilemma when the community reacts against the package design. Inappropriate messages invariably reduce the credibility and standing of the messenger, and in AKRSP, with the specialist working within his or her own community, this is pertinent. This critique is amplified in a case study evaluation of VPP specialists in Baltistan (Ahmad et al 1993) which appeals for recognition of the value of existing methods of vegetable preservation and storage rather than imposing new methods which upset traditional routines.

3.137 Overall the evaluation evidence on village technical specialists is mixed. For the future of the NRM program and HRD's role in training villagers to be active participants in the technology development and transfer process, it would be valuable to identify the reasons for the high attrition. It has been partly attributed to a poor selection process. There have been recommendations for the upgrading of AKRSP staff in training methods (Ali 1992). It may also be related to the relevance of the messages specialists are asked to promote. The fact that the livestock specialists had treatments to offer, very transparently seeking to reduce costly animal losses, is likely to have been a factor in their popularity. Conversely the nervousness of some WID staff about new technologies perhaps arises from unhappy experience with "Appropriate Technology" packages and the resulting threat to WID credibility in the communities concerned.

3.138 Initiation of the master trainer (MT) scheme in 1992 was led by the Agricultural section. This program was in part a response to the apparent problems being incurred with the village specialists, and in part to a perceived need for a second level of local activists to establish a viable technology transfer framework. It followed the introduction of the idea of "clusters"—a number of VOs with circumstances in common—which could be grouped for certain purposes. It was felt that the single VO was probably too small a market to provide a livelihood for specialist services and that in working over a wider area, MTs could more effectively link to the private sector and be more readily serviced by technical agencies, including the Program's NRM sections.

3.139 MTs are selected from the pool of village specialists by their performance and the support they get from their communities. Training is done at the Regional offices. Although there is great hope for their role in the Program, it is poorly documented. HRD do not yet feature master trainers as a line item in their reports on training, and they get only sporadic mention in reporting from other sections. The written commentaries available offer mixed impressions.

3.140 The initiative in the Livestock section to organize MTs as retailers of veterinary supplies and livestock inputs seems an excellent way to create services, to link with the private sector, widen local job opportunities and gradually devolve responsibility from AKRSP. The records of livestock MT incomes in recent annual reviews, summarized in Table 3.9, show careful monitoring of the group and a good understanding of the power of the instrument for AKRSP. Out of the 1994 group shown in the table, 10 MTs from Baltistan averaged Rs 40,959 income for the year. Poultry inputs were a major source of their income, averaging Rs 20,977 per trainer.

This group of Baltistan livestock master trainers have recently set up a formal partnership to handle their supply business (para. 3.88).

3.141 The same principles have been applied in forestry. MTs are debited for the value of seedlings supplied by the Program (which may or may not include a markup), and sell at a price

Table 3.9: Average Earnings (Rs) of Livestock Master Trainers

Year	Number of MTs	Services	Medicine Shop	Silage Urea	Other	Total
1993	16	2462	2362	381	456	5700
1994	24	4355	7123	475	9585	21539

dictated by farmer demand. If he or she correctly estimates the local demand before entering into a contract with AKRSP, a significant profit can be made on the cash outlay needed to buy the input. The strategy is extended when the MT takes over the nursery and makes a greater margin if he/she is a good nurseryman. This devolves a further function from AKRSP.

3.142 At the other extreme, an early evaluation by Khan and Muneer (1993) makes painful reading. They interviewed the original nine agricultural MTs 20 months after their training late in 1991. They found only six out of nine working as MTs and concluded that three out of this six had good potential. The authors were critical of the selection, training and support of these original members of this new cadre. They were particularly critical of the lack of preparation of the AKRSP staff, the VOs and community at large, to understand and accommodate the MT function. Some of these criticisms were echoed by the Joint Monitoring Mission in their 1994 report (JMM 1994). The mission also noted some confusion over MTs in the course of their field visits, suggesting that information flows between management and field staff need to be improved. Management should initiate such staff dialogues, but HRDI can be an active agent through its training program.

3.143 *Village Administration Training:* The training of villagers in bookkeeping and account management has assumed increasing importance since the late 1980s (Table A1.10 and A1.11). This has made a significant impact in the quality of record keeping in VO/WOs, and without it the village credit programs could not have been as successful as they have been. However, as will be pointed out in section F of this chapter, about one-third of VO/WOs do not have access to the services of a village accountant. There is an immediate need to expand this training program.

3.144 A training program for master managers has recently been introduced. This was on the understanding that some individual VO managers should assume wider responsibilities, and take a leadership role in activities which necessarily involve a number of villages, and also could contribute to the practical training of other managers. Frequent meetings of local VO managers are already organized at the district level to enhance on-the-job interaction and learning. With the increasing role that VO/WOs are expected to take in partnership with outside development and service agencies, it will be necessary to increase the depth of administration/management training within village communities. This will not only enhance organization efficiency, but also reduce the possibility of any individual capturing undue privileges because of his/her management position.

3.145 *Professional Training:* The problem of retaining qualified and experienced staff in the Program area persists. The policy of paying well, recruiting locally, and upgrading staff through

in-service training has created a core of committed local professionals, but the Program is in a perpetual "catch up" phase given its expansion in area and activities.

3.146 The policy of further external training started in 1985 and intensified from 1988. There are currently 22 professionals training in universities and colleges in Pakistan; 11 are AKRSP staff and the other 11 are trainees who will join AKRSP. There are also seven professional AKRSP staff training outside Pakistan. The external training program provides some of the higher skills needed in professional staff, and offers an incentive for staff to remain in the Program. Interns organized by HRDI also make a contribution to AKRSP. From six interns at its initiation, this program will absorb 35 trainees in 1995. It is more difficult to use this number productively, however, and there is the danger of their becoming a burden on staff.

3.147 *Training for Other Agencies:* Formal training of staff from other rural development agencies has been effectively carried out by HRDI, where exposure to the local program permits more effective education. This has been a worthwhile contribution to development and poverty alleviation in many other areas, and should be continued to the extent that resources allow. Most effort, however, should be given to the development of human resources in the communities and in AKRSP staff. An emerging priority is the need for HRDI to cooperate with MER and other Program units in educating local government personnel in effective communication with local communities as part of the evolving development partnership concept.

3.148 It is important to note that many of the roles of Program staff are changing. Although there will be some further expansion in coverage of communities in Chitral, Baltistan and Astore, the focus on village institution creation will be substantially less than in earlier phases of the Program. Greater emphasis will now be placed on economic growth and on developing maturity, and a capacity for good governance within these community institutions. Both the balance in staffing resources and the balance of training in HRDI need to reflect this watershed in Program history. Similarly the "numbers game" of specialists trained at the village level has clearly been won, yet attrition rates suggest that quality and relevance of training need improvement. This goes beyond HRDI, as the training content for village specialists depends on the packages being promoted by the technical sections. The recommendations made in Chapters 3.C and 7, and in Annex 2 offer new directions for the development and diffusion of technology, and also imply new needs in human resource development.

3.E Marketing and Enterprise Development

3.149 The marketing program has evolved significantly over the last 10 years. The original concept was to assist VOs in cooperative marketing. It soon became obvious that bulk marketing without consideration of uniformity and quality was of dubious value, and that cooperative marketing required sound management skills. This led to emphasis on a restricted number of the more marketable products (especially higher value fruit), and on training of farmers in their production, grading, processing and marketing. Cooperative marketing was still encouraged, but private entrepreneurs were also provided incentives to invest in marketing through assistance in training and finance (e.g., the Central Purchasing and Processing Unit in Gilgit in 1987).

3.150 Advantage was also taken of work done under a UNDP/FAO project which demonstrated the potential for dried apricot and seed potato marketing. These activities were promoted in Gilgit and Baltistan, and led to the creation of the Gilgit Agricultural Marketing Association (GAMA) and the Baltistan Apricot Marketing Association (BAMA) in 1992 with AKRSP technical and financial support. While the former deals with potatoes and dried apricots, BAMA has not been involved in the seed potato business. However, the marketing unit has assisted Baltistan growers by facilitating contacts with private seed potato buyers from the Punjab. This facilitation role has received increasing emphasis and especially helped in the marketing of fresh vegetables in both Gilgit and Baltistan by establishing contacts with commercial wholesalers. In Baltistan the marketing unit arranged exhibitions in which farmers were able to demonstrate their vegetable produce to wholesalers and retailers; this has led to 10 regular open markets in Skardu.

3.151 BAMA and GAMA have not been without problems. Low margins, excessive reliance on a single purchaser, and competition from other players as the area opens up to more commerce have affected operations. This illustrates the need for careful consideration of not only market potential, but also of the pitfalls and difficulties which can occur with medium-scale cooperative enterprises. Participants are usually not well informed about business practices, the role of financial reserves, and the requirements for, and costs of, good management. In general, it would appear that in the circumstances of the Northern Areas, it would be wise to promote the creation of cooperative medium-scale marketing organizations only for those products where there is a very wide and unjustified margin being enjoyed by private buyers. These circumstances would be very rare. The recent emphasis on doing studies to identify markets and assisting individuals to capitalize on these markets for their own benefit and the benefit of local communities has been an appropriate use of the EDD's resources.

3.152 In the 1990s, the Marketing section has also progressively broadened its interest to cover nonagricultural activities, including studies and technical assistance for tourist facilities in the form of village guest houses. Correspondingly, in 1992 the section changed its name to the Enterprise Development Division (EDD). Its role in enterprise development was further enhanced in 1993 when AKRSP initiated a special credit line for microenterprises (MECP) to assist individual entrepreneurs with working capital. Prior to that credit, support had been available only through short-term marketing loans to VOs.

3.153 More than 400 marketing specialists have been trained (Table A1.10). This training has also evolved in response to the changing emphasis of EDD. Surpluses which commonly enter the cash economy include livestock products (including poultry), dried fruits and sometimes fresh fruits, potatoes and seed potatoes, maize, pulses, and firewood and dried fodder. Wool processed

into pati cloth is also commonly sold. Apart from coordination of marketing to medium-sized enterprises such as BAMA and GAMA, the specialists have often worked with VO managers in representing the villagers in marketing produce, in which they are paid for their costs and services. This has mostly occurred in marketing dried fruit in the open market, but has also sometimes involved potato and vegetable sales, often in association with an AKRSP marketing loan to the VO. However, with the change in emphasis away from cooperative marketing, the general training program for village marketing specialists has become less important. It has now been dropped in favor of ad hoc support for individuals and groups, as required by emerging enterprises of marketing initiatives. This has included study tours down-country to expose specialists to the wholesale and retail parts of the marketing chain, and Baltistan has introduced enterprise development courses which focus on general business management rather than on specific sectoral interests.

3.154 The statistics on "cooperative marketing by VOs" are a relic of the earlier emphasis on cooperative marketing, and do not really represent the volume and value which is cooperatively marketed. The figures include not only the latter but also products which are marketed individually by VO members. However, if these figures are examined to reveal the value of actual sales from the VOs surveyed in each year, then the trend is generally upwards, which confirms increasing community participation in the market economy.

3.155 EDD has been without a section head since late 1993. However, the section has demonstrated a number of initiatives which indicate that it has some dedicated and capable staff. In the next phase of the program, the role of EDD vis-à-vis the proposed Enterprise Support Company (ESC) will have to be clearly defined (para 3.195). The proposed bank for the Northern Areas (NRDB) would obviously take responsibility for the financing of marketing enterprises. It is intended that the ESC would have a division for assisting entrepreneurs to develop markets as well as a division to assist enterprises with management and training (with 50 percent cost recovery). Decisions will have to be made on the extent to which EDD functions are absorbed by ESC.

3.156 It could be argued that ESC should deal with the study, promotion, financing and facilitating of specific enterprises, while EDD would be concerned with general studies defining comparative advantage, identifying new market potential, and investigating regional market developments such as the recent market town review for the Ghizer district. However, the sort of expertise required for this type of work is usually very marketable in the private sector, so that qualified individuals are likely to be scarce commodities in the North; this suggests that the limited expertise should be concentrated in one institution, which is likely to be ESC. In this event, it would be necessary to ensure that effective linkages are maintained with the relevant sections of AKRSP (especially NRM, HRD, the WID coordinator, and what might remain of EDD) so that maximum use is made of available expertise and information in contributing to local development. In addition, it will be important to ensure that a capacity to identify and promote the adoption of simple appropriate technology devices for women is maintained in AKRSP. The record has not been especially favorable in this area in the past, but EDD has contributed recently in identifying possible technologies (such as treatment of hides and skins).

3.F Savings and Credit

3.157 Due to the special interest in the savings and credit operations of AKRSP, a comprehensive report has been prepared on this aspect of the evaluation and appears as Annex 3. In this section a briefer description and analysis of the existing situations and the proposals for new banking institutions are made.

Development of Savings and Credit Operations

3.158 *VO/WO Credit and Savings Functions:* Credit and savings constitute a central part of AKRSP's activities, and these services are operated by each VO. Part of the contract between a community and the Program is the formation of a VO or WO and the undertaking by members to make a deposit at every meeting, which is usually semi-monthly. The savings effort has produced impressive results, as indicated in Table 3.10.

Table 3.10: Savings by Members of Village Organizations (VOs) and Women's Organizations (WOs), by District, 1983-1994 (in millions of Rs)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Village Organizations												
Gilgit	0.67	5.15	8.11	10.59	20.57	28.81	36.31	42.28	49.29	55.99	77.00	100.51
Chitral	0.17	0.85	2.21	4.45	7.90	13.15	17.49	22.00	25.14	33.45	38.63	44.56
Baltistan			0.23	0.86	2.52	4.55	6.98	10.96	14.93	20.04	25.43	29.81
Astore											0.63	1.76
Subtotal	0.84	6.00	10.55	15.90	30.99	46.51	60.78	75.24	89.36	109.48	141.69	176.64
Women's Organizations												
Organizations	0.30	0.56	1.32	1.97	3.35	4.84	7.65	10.36	13.60	17.69	23.06	34.16
Total	1.14	6.56	11.87	17.87	34.34	51.35	68.43	85.60	102.96	127.17	164.75	210.80

3.159 Savings tend to be highly concentrated. Approximately 70 percent of total savings balances have been accumulated by 25 percent of VO/WOs. Savings vary greatly by program area. Average savings balances per group member were Rs.3650 in Gilgit, Rs.1971 in Chitral and Rs.1212 in Baltistan at end-1994. Average balances for WO members in the three districts were Rs. 1708, Rs. 880 and Rs. 204, respectively. These averages are influenced to some degree by the length of time the program has been active in each area, but appear primarily to be related to the economic opportunities in each district, and to the strength of AKRSP VO/WO activity in each area.

3.160 The AKRSP credit and savings management system at the level of VO/WOs uses nine types of manual records. The VO manager may maintain these records, or may share this task with a credit committee including a village accountant (VA) trained by AKRSP. Due to widespread illiteracy amongst women, men from the VO usually have to assist WO management in the savings/credit function. VAs usually cover more than a single village and are paid by AKRSP accordingly. The manager is often remunerated for his services through a commission charged on loans, depending upon the VO/WO. Procedures are adopted to provide transparency and to focus on members' performance in meeting their obligations. Cash collected at VO/WO meetings is usually deposited in a profit and loss sharing (PLS) account (essentially a savings account) at a commercial bank, or in a post office, by the VO/WO manager or other designated person. Statements of account are to be prepared every six months, and books are audited at least once a year by an AKRSP field accountant.

3.161 Emphasis on savings reflects a central concern of AKRSP, which is to mobilize funds locally and to deploy them locally. Initially this concern reflected the objective of making the

project area self-sufficient. This concept has been modified in response to the opportunities provided by linking the area with the national economy through the Karakoram Highway, and as a result of migration of able-bodied males. Savings are now seen as a means of encouraging employment locally, especially self-employment by members of VO/WOs.

3.162 *Specific Purpose Short- and Medium-Term Loans:* The economic impact of the PPI often offers scope for provision of credit by AKRSP through the VO. For example, an irrigation channel that increases arable land or a road that facilitates access to a market creates a demand for modern inputs such as fertilizer, for which AKRSP provides short-term, seasonal credit. Short-term credit has also supported marketing of farm produce, purchase of inputs and other seasonal activities. Likewise, medium-term land development loans have been issued to help capitalize on the opportunities created by irrigation. Credit for these and other purposes helps VO members to realize the benefits from the PPI and from social organization through their VO.

3.163 Short-term credit from the Program to the VO for distribution to members was initially interest-free, in accordance with Government policy. This policy was abandoned by the Government in 1988, at which time AKRSP instituted an 8 percent service charge. Data concerning short-term loans are given in Table 3.11, and indicate the dominance of fertilizer loans, followed by crop marketing loans to hold over production to gain higher prices.

Table 3.11: Short-term Credit Disbursed by Loan Purpose and Group Membership, 1983-1994 (in millions of Rs)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Village Organizations												
Fertilizer	0.98	2.47	3.78	5.79	7.67	14.01	11.00	8.82	7.70	8.06	8.28	7.45
Marketing	0.17	0.20	0.80	2.11	3.86	6.24	3.18	0.52	0.72	1.70	2.20	1.98
Other: livestock plants, seeds, chemicals, etc.	0.02	0.01	0.06	0.10	0.38	0.72	2.06	0.27	0.20	0.23	0.04	0.04
Women's Organizations	0.30	0.56	1.32	1.97	3.35	4.84	7.65	10.36	13.60	17.69	23.06	34.16
Total	1.14	6.56	11.87	17.87	34.34	51.35	68.43	85.60	102.96	127.17	164.75	210.80

Medium-term loans have been issued since 1985. Loan use is summarized in Table 3.12 and indicates that land development was dominant. VOs were the borrowers.

Table 3.12 Medium-term Credit Disbursed, 1984-94 (in million of Rs)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Land development	0.47	2.50	2.37	9.74	7.73	8.22	0.43	0.07	0.08		
Agricultural machinery		1.24	1.88	3.25	3.35	3.47	1.02	1.06	1.61	1.12	
Sulphur tents				0.44	0.77	1.10	0.01				
Other: marketing, drills, sawmills, breeding, etc.			0.24	0.14	1.08	2.40	0.16	1.37	1.12	0.01	0.54
TOTAL	0.47	3.74	4.49	13.57	12.93	15.19	1.62	2.50	2.81	1.13	0.54

However, medium-term loans have been virtually discontinued because of poor performance. Some of the tasks to which they were dedicated were too complex for VOs to handle effectively. Others funded applications of technology that were inappropriate or that could not be managed well collectively, such as tractors. Other losses arose from the communal disturbances in 1988 that disrupted economic activity.

3.164 *Village Organization and Women's Organization Credit Program (VO/WOCP):* An innovation in savings and credit operations began in 1989 with the introduction of the VO Credit

Program and the WO Credit Program, collectively referred to as VO/WOCP. VO/WOCP has virtually replaced the short-term loans initially taken by VO/WO members, which is reflected in the decline of short-term credit disbursements in Table 3.11. These loans from AKRSP can be rolled over for up to three years.

3.165 Objectives of VO/WOCP are many. Principal goals are to decentralize and simplify credit operations, and to make savings more accessible and hence more attractive. Decentralization is accomplished by placing on VO/WOs the responsibility for approval and issue of loans to their members. Savings were made more attractive by enabling members to borrow against their balances. Prior to the introduction of VO/WOCP, individuals did not have access to their savings. Under VO/WOCP savings remain generally nonwithdrawable, but the VO/WO can borrow from AKRSP up to a limit equal to members' savings. Individual members can borrow up to a limit equal to their savings, or larger amounts with the approval of two guarantors who have not borrowed up to their limits. Loans are, therefore, fully secured.

3.166 Saving was also made more attractive by increasing the returns to savers. AKRSP funds VO/WOCP loans; VO/WO savings are not directly tapped. AKRSP has charged 7 percent on its funds, but in December 1994 raised the annual fee to 10 percent for VO/WOs using an initial rollover that would extend the original maturity by two years. Banks clearly would be unwilling to lend at this rate, which has little to do with AKRSP's costs of running the credit program or the risk of such lending. At this subsidized rate, the VO/WO is able to add 5 percent to cover its own administrative costs and a further 12 percent as a reward to savers, typically charging 24 percent to member borrowers. In addition to the 12 percent return paid by borrowers to savers, the latter also benefit from investment of their funds by the VO/WO. It has often been possible for VO/WOs to obtain 12 percent on three-year deposits. Hence, the return on savings can approximate 24 percent.

3.167 As shown in Table 3.13, VO/WOCP lending volume has generally increased steadily in each district. Progress is most impressive in Gilgit. AKRSP research has documented that economic opportunities are greatest in Gilgit, and that VO/WO performance tends to be more dynamic here as a result.

Table 3.13: VO/WOCP Loan Disbursement to Members, 1989-1994 (in millions of RS)

	1989	1990	1991	1992	1993	1994
District						
Gilgit	2.86	12.41	9.30	15.86	27.31	57.13
Chitral	0.29	0.94	3.64	3.86	5.56	9.36
Baltistan	0.05	0.48	1.25	2.67	3.40	2.76
Astore						0.06
Total	3.20	13.83	14.19	22.39	36.27	69.31

3.168 *Microenterprise Credit Program (MECP)*: MECP was introduced in 1992 to build a small business base centered on local people, through investment that creates jobs for VO/WO members. Loans are made by AKRSP to individuals who are members of VO/WOs. Although the loan must have the consent of the member's VO/WO, lending is otherwise uncollateralized. AKRSP provides support services and charges 18 percent per year, which it considers a market rate for this type of facility. Loan sizes range from Rs. 5000 up to a Rs. 40,000 project ceiling. MECP activity has been characterized by rapid increases in amounts disbursed, as summarized in Table 3.14.

Table 3.14: Microenterprise Credit Program (MECP) Disbursements, 1992-1994 (in millions of Rs)

	1992	1993	1994
District			
Gilgit	0.56	1.16	3.60
Chitral	0.10	0.50	2.82
Baltistan		0.22	4.43
Astore			0.55
Total	0.66	1.88	11.40

3.169 The strategy adopted for MECP departs considerably from the basis on which AKRSP has historically allocated credit. Part of the cost of identifying good entrepreneurs is assumed to consist of bad debt losses, which are expected to occur primarily on the Rs. 5000 starter loans. Nevertheless, MECP may involve substantial risks. AKRSP receives funds for this credit line on a grant basis from the Netherlands under the Microenterprise Project (Loan 3318-PAK) sponsored by the World Bank and the Government of the Netherlands.

3.170 *Corporate or Commercial Credit:* At the beginning of 1995 AKRSP established a new credit program designed to support enterprises linked directly with VO/WO commercial interests. This program had not yet become operational by the time of the evaluation mission's visit to AKRSP in April 1995, but several enterprises that had already received AKRSP credit will be moved into it. These include GAMA and BAMA, the agricultural marketing associations for Gilgit and Baltistan, respectively (para. 3.150), and Tanzeem Corporation which is a supply cooperative in Ghizar, dealing in basic commodities such as soap, cement, cooking oil, tea, and flour. Ramoshay Tanzeem, a retailer of livestock inputs, is also a borrower. This is a partnership consisting of 10 AKRSP animal health master trainers who each took loans of Rs. 10,000 which they supplemented by an equal amount of their own funds. This form of enterprise is a means of commercializing AKRSP functions, and enabling people to become entrepreneurs based on their functions under the project.

3.171 *Operating Expenses:* AKRSP's Credit and Savings Section estimate that their expenses equal about 6 percent of credit outstanding at year-end. When the resources spent on savings and credit by other AKRSP units is taken into account (SOs, MER, WID and General Administration), total allocable overheads could reach about 20 percent of the loans outstanding at year-end. These levels are not excessive for an NGO or a rural development project (Christen et al 1993).

Trends in Portfolio Performance and Possible Causes

3.172 *Savings Patterns and Performance:* Savings activity tends to be most intense in the early stages of a VO/WO, when the PPI is underway and initial enthusiasm is high. Over time, a decline in additional amounts deposited appears to set in, both in regularity of deposits and as a reduction in the amounts deposited by individual members. This is not surprising. Deposits have been generally nonwithdrawable, which could be expected to make the mobilization of additional savings more difficult. The purpose of saving was not really linked with loans until the introduction of VO/WOCP, which established credit limits equal to savings balances.

3.173 The boost in deposit balances that occurred following the introduction of VO/WOCP in Gilgit is an indication of the attractiveness of greater flexibility in savings and credit, although it

is not possible to isolate that portion of total increases attributable directly to VO/WOCP. Other contributors include the formation of more VO/WOs and economic conditions in the area.

3.174 *Slower Loan Repayments and Rising Bad Debts:* Repayment performance has tended to deteriorate over time. This is illustrated for short-term loans in Table A3.9 in Annex 3, Savings and Credit. As years pass, it takes progressively longer to reach 100 percent recovery of principal. The trend is most noticeable in the Gilgit portfolio.

3.175 The causes of generally declining performance cannot be ascertained with certainty for AKRSP. It is not due to AKRSP having low expectations of repayment by borrowers, as evidenced by its policies and procedures. However, plausible reasons why the repayment performance of borrowers who are VO/WO members has declined may be summarized as follows: a) decreasing intensity of AKRSP activities in a village over time; b) rational selection of lowest risk activities at the outset and gravitation toward larger, more risky ventures over time; c) borrowers' probing the effects of delays in repayment; coupled with d) a reluctance by AKRSP to move forcefully but rather to try to reach a solution through dialogue, which is possibly the only course when loans are unsecured; and e) lack of a plan devised to deal with loans affected by catastrophic situations such as communal strife. The single maturity for MECP loans, discussed below, may lead to repayment problems because repayment terms are not consistent with the cash flow of the activities being financed.

3.176 MECP responds to VO/WO members who have businesses of their own or who would like to start or expand their activities. Accordingly, this program presents much more risk than AKRSP's traditional credit lines. MECP loans are likely to become more risky after the initial round of activity that consists of lending to people who are already established. Borrowers in new ventures in commerce or manufacturing may not fully understand the requirements of commercial success, and it may be difficult to judge the market for the new product or service. Loans may also finance a high proportion of the cash costs of the microenterprise, which leads to a high debt service burden, increasing the probability of default. The microentrepreneur may have few additional sources of funds and may also feel, because the loan is relatively so large, that AKRSP is a sort of partner that should share in any loss.

3.177 Bad debt losses take time to become apparent: all credit programs begin with none. By end-1994, arrears accounted for 27 percent of amounts outstanding. Loans overdue for more than six months accounted for only 3 percent of amounts outstanding, but this proportion will probably rise. Detailed portfolio data indicate 41 percent of borrowers whose loans had fallen due were in arrears, and almost all were in arrears for the total amount of their loan. A contributing factor is that MECP loans have single maturities. Installments may be more responsive to the cash flow cycle of microentrepreneurs.

Strengths and Weaknesses

3.178 *Flexibility and Equity:* AKRSP has been an experimental project. This demands flexibility, which has been a major strength in AKRSP's management of its savings and credit operations. VO/WOs develop at their own pace. Those in areas closer to major roads and markets have an opportunity to develop commercially more rapidly than those that are remote, as their transaction costs and information costs are lower and their opportunities are less limited. This is reflected in Gilgit, which, as previously noted, has much greater average member savings

balances and greater lending activity than found in Chitral and Baltistan. Within Gilgit savings and loans are also concentrated in the better VO/WOs.

3.179 A concern of AKRSP management and of some observers is that different levels of activity inherently reflect inequity. In other words, disparate results may reflect an underlying tendency to favor some groups at the expense of others. No direct evidence of such a tendency was discovered during the evaluation of savings and credit operations. Disparate results appear to be based on differing levels of vitality and intensity of different VO/WOs. These in turn appear to reflect the skills and dedication of the activist who is often the manager, the openness of the village to change, economic opportunities related to access to markets and infrastructure, and problems of trust across communal lines. It is possible that those VO/WOs that are doing well get more attention than those that are doing poorly, although no direct evidence of this was discovered. If this be the case, it could represent efforts by AKRSP management to economize. It could also be consistent with the AKRSP approach of helping villagers to help themselves: too much initiative by AKRSP that is not matched by local efforts is unlikely to produce lasting results.

3.180 A related concern is that savings and credit may reinforce or lead to inequity because different people will save and borrow different amounts. AKRSP's position on savings is that each VO/WO member should save according to his or her capacity. Some VO/WOs, however, prescribe that each member save an equal amount at each meeting. This may be a symbol of solidarity and equity, or it may be used to exclude those who are relatively poor. Some VO/WOs also want everyone to borrow, which increases service charge income and hence the return for distribution to savings. Some members, however, may not want to borrow for religious reasons or because they can fund their expenditures from other sources. This is consistent with the use by AKRSP of instruments to create equitable opportunities: credit is available to all, but the complementary resources needed to utilize credit productively will be accessible to varying degrees by different households. Consequently, different amounts of borrowing are to be expected. They may exaggerate income disparities, while also providing the possibility for those in lower income categories to improve their situations by making use of the credit that they can use productively and repay as scheduled without embarrassment.

3.181 *Flexibility and Responsiveness:* Flexibility has permitted responsiveness in AKRSP outreach and design, as seen in the discontinuation of medium-term credit following bad experience with collective projects, and in the introduction of VO/WOCP. Introduction of MECF enabled AKRSP to move rapidly in an area which has always been central to its mission, which is to encourage local businesses and to create local employment, although this program will have to be carefully monitored to ensure that it is sustainable. AKRSP also responded quickly to communal strife in May 1988 which resulted in damages to several villages. Loans were forgiven the following month for those most seriously affected, and new loans were issued to those less seriously hit. However, the less seriously affected VOs argue that they should also have received a repayment waiver. This dispute still festers, impeding the activity of these VOs, and souring relations between AKRSP and the community concerned.

3.182 A striking example of flexibility and responsiveness is the tolerance of initiatives in VO/WOCP which are at variance with the standard guidelines. These are numerous. Examples include:

- introduction of freely withdrawable deposits;

- borrowing and lending between VOs, and between VOs and WOs for purposes of liquidity management;
- VO/WO lending to nonmembers at interest rates higher than those charged to members; and
- emerging use of VO/WOCP facilities as lines of credit for business purposes, with frequent withdrawals and deposits.

Most of these initiatives are innovative. They lower members' costs or increase their returns; they increase the amounts that can be borrowed or that are likely to be deposited; they facilitate VO/WOCP management; or they contribute to the welfare of the community. They indicate the types of financial services that will be most valuable in the future, i.e., those that are flexible and that permit the client to use funds freely. However, controls and finely tuned, adequately staffed management information systems are required to decrease the possibility of abuse, and to provide early warning when expectations do not work out.

3.183 *Strategic Focus:* AKRSP's savings and credit operations have been dependent on the formation and functioning of VOs and WOs. The energy and health of the VO/WO appear to be major determinants of savings levels and credit use, and of the quality of the credit portfolio. At the same time, successful savings and credit operations reinforce the strength and sustainability of the village institutions—a sound strategy.

3.184 A strategic element of AKRSP is the objective of keeping money in the area for investment in local employment- and income-generating activities. The separation of savings from credit was an excellent policy, because it safeguarded villagers' savings. In practice, the returns to VO/WO members' savings have been not only secure, but also quite high as a result of the pooling of funds into high-yielding time deposits in banks and the return from lending AKRSP funds, that are subsidized. However, use of AKRSP resources to fund loans has resulted in the movement of savings balances down-country by the banks or other institutions that receive time deposits from VO/WOs. This has given rise to the proposal for a local financial institution which can retain a higher proportion of its assets in the Program area than alternative institutions already in place. It should be realized, however, that if the new institution were to install an aggressive savings mobilization strategy through attractive savings services and freely withdrawable deposits, savings balances would probably increase markedly to levels much higher than could be prudently loaned in the project area. The intermediary would have to move a substantial portion of its funds out of the area to earn a satisfactory return.

3.185 Another focus of AKRSP credit operations is to meet the "credit needs" of VO/WO members. In general, attention to credit needs has not provided sufficient vision to make donor-supported credit projects successful in developing countries. The usual result is declining performance, subsidy dependence and lack of sustainability. Basically, "needs" are infinite and expand as programs age or become politicized, while credit is successful only when repayment capacity is coupled with incentives for good loan contracts. AKRSP has not yet experienced these problems to a significant degree. However, it may become more vulnerable over time if financial institutions are established which are less closely linked with AKRSP management and are sufficiently prominent and independent to attract political attention.

3.186 A superior focus for AKRSP would be on creation of debt capacity, defined as the amount that an individual or entity can borrow on a sustainable basis. This requires attention to risks facing borrower and lender. Attention to the ingredients of durable loan contracts leads to more responsive financial services, more responsible financial behavior and to efforts to manage real (i.e., nonfinancial) risks facing borrowers, such as livestock mortality or dissension within a VO/WO. A revision in AKRSP's focus could provide a more elevated view of clients, and a clearer vision of the ingredients of sustainability of financial intermediation. In this regard, the existing credit programs (and especially the VO/WOCP) have produced much information in the form of savers and borrowers' financial flows, which has not been adequately utilized by AKRSP. More focus of strategic attention on savings and credit patterns could be useful in defining the role of the new bank that is likely to take over AKRSP's savings and credit operations.

3.187 *Subsidy Dependence:* Rural development projects invariably include subsidized services. AKRSP's approach to credit is that subsidies can initiate certain activities that will eventually be self-sustaining. However, it has consistently moved toward increasing cost recovery, toward higher rates of interest on credit, and toward institutional evolution that is expected to culminate in the establishment of a bank and enterprise support operation. An initial lending rate on short-term loans of zero percent, was raised to 8 percent when government service charge policies were relaxed, and to 10 percent on VO/WOCP rollovers and 18 percent on MECP lending. Further increases would be required if subsidies were reduced.

3.188 AKRSP does not yet recover the costs of its credit operations. This can be demonstrated by calculation of the Subsidy Dependence Index (SDI), which is elaborated in annex 3. To achieve a return equal to the opportunity cost of capital would require an estimated increase in AKRSP's service charge to 31 percent. If VO costs were added and allowances made for bad debts at the VO level, the rate would probably approach 40 percent. Although this rate appears very high to those from developed countries used to thinking in terms of annual rates, equivalent monthly rates do not to those from developing countries. Successful schemes are operating in various countries with microentrepreneurs paying up to 60 percent (or 4 percent per month) for short-term credit in a low-inflation economy. Very poor women members of Grameen Bank in Bangladesh pay effective rates of more than 25 percent per annum on loans repayable in 52 weekly installments.

3.189 AKRSP could have a credit operation without subsidy, but this would require significant changes in pricing that would greatly influence the behavior of savers and borrowers, and result in major changes in credit lines and volume. However, AKRSP has the advantage of grant equity that enables the proposed bank to cover some of its costs from investment income, cross-subsidizing service charges on loans to its clients.

3.190 *Support, Training and Oversight:* AKRSP provides support, training and oversight of the savings and credit activities conducted by or through VOs and WOs. Overall guidance and central records and systems are the responsibility of AKRSP core staff. The Credit and Savings section is further represented at the regional level and by field accountants. In the communities, village accountants (VAs), who are usually local young people with 10 years of schooling, are trained by AKRSP and given a small incentive payment to assist VO/WO managers with record keeping. The VAs typically cover more than their own village, but it appears that about one-third of VO/WOs still lack VA assistance. Credit utilization is monitored by SOs, and MER has been active in credit impact studies.

3.191 The initiation of the FMU included FMU accountants and has the objective of making AKRSP's total services more responsive to local needs. One advantage of this has been to improve mobility of the accounting staff, which will enable them to work more closely with VO/WOs and VAs. However, accounting staff are still too few to implement accounting controls effectively.

The Proposed Bank and Enterprise Support Operation

3.192 The present formal financial infrastructure in AKRSP's service area has not exhibited the level of dynamism needed to respond to development opportunities and encourage local entrepreneurship. One of the functions of banks is to move funds toward financial centers where large-scale business opportunities exist; but in the Northern Areas this is reflected in extremely low loan-to-deposit ratios in the branches of commercial banks, usually below 10 percent. Hence, while commercial banks clearly provide a highly useful service to depositors, they invest few of these funds locally.

3.193 In the early 1990s AKRSP began to explore the scope for establishing a commercial bank or development finance institution that would be responsive to local market opportunities in the Northern Areas. With the help of consultants, a number of options have been explored in several comprehensive reviews and analyses. By early 1995 AKRSP was close to a consensus for establishment of a retail commercial bank, and an enterprise support company that would promote and fund small businesses and social infrastructure projects and bear relatively high risks. The most perplexing problem delaying realization of this objective has appeared to be requirements imposed by banking and cooperative laws and regulations. However, it seemed in early 1995 that suitable arrangements could be made with national banking authorities to exempt these special institutions from laws and regulations that are not appropriate to their operation.

3.194 *The Functions of the Northern Region Development Bank:* Commercial banking functions of accepting deposits, issuing and administering loans, and making payments would be carried out by a new institution: the Northern Region Development Bank (NRDB). NRDB operations would be limited to the Northern Area and Chitral, and it would establish branches initially in Gilgit, Chitral and Skardu. It would be a for-profit institution that would completely take over the credit operations of AKRSP. NRDB would be funded by the transfer of donor funds committed to AKRSP (Rs. 230m), service charges earned by AKRSP (Rs. 20m), and Rs. 50 million in new money to be raised externally. The mandate of NRDB would be to provide credit through the VO/WO system, to promote development of enterprises at the village level, to improve credit appraisal procedures, to eliminate subsidies in order to achieve sustainability and to reduce financial market distortions, and to be a stable and permanent source of funding. In addition to funding commercial enterprises, social and physical infrastructure activities would be eligible for support.

3.195 NRDB would have two divisions—one dealing with VO/WOs and another dealing with urban clients. Sub-branches would be established in each of the 14 subdivisions in AKRSP's service area, each headed by a "social organizer." AKRSP field accountants would likewise be part of the staff of NRDB, and their number would be 28 so that they could visit each VO/WO at least once every three months.

3.196 *The Role of the Enterprise Support Division or Company:* An Enterprise Support Company (ESC) would promote new businesses through provision of capital and critical

business information through training and guidance (para. 3.155). ESC would have three divisions: one working with groups of entrepreneurs, providing services broadly to develop markets; another offering management and marketing advice and training to individuals; and a financing division to provide funding through loans, partnerships, leasing and other vehicles that will help fledgling businesses facing risks greater than those customarily suitable for commercial bank funding.

3.197 *Spin-Off Issues for NRDB*: Issues highlighted by the consultants include selection of management with sufficient vision to manage these new organizations, rapidly moving AKRSP savings and credit operations and appropriately-qualified staff to NRDB, and a strategy that would enable the new organizations to have appropriate legal form and capacity to operate effectively. These issues are indeed important and at the time of the evaluation mission's visit were receiving the considerable attention they require. Related concerns at that time focused on the governance structure that would link NRDB and ESC. Several other strategic concerns need to be considered, as noted below.

3.198 NRDB's proposed financial structure is unique, initially consisting entirely of grant funds. This provides a tremendous source of subsidy, as no interest or dividends need be paid, and a tremendous capacity to bear risk. To ensure sustainability, lending rates are gradually increased, so that the 19 percent initial rate for short-term commercial loans, for example, rises after seven years to about 30.5 percent. The consultants' projections suggest that NRDB would occupy a position of extraordinary strength, with very high levels of earnings, capital and liquidity.

3.199 One way to take advantage of these favorable ratios would be to engage in more lending and in more risky lending. More lending could soak up liquidity and earn a better interest return than investment in government bonds or on funds placed with other banks. More risky lending could also produce better interest yields if NRDB were willing to charge differential rates that reflect different levels of risk. However, this option would require careful management as it would be successful only as long as increased operating expenses and bad debt losses do not consume the incremental revenue from lending.

3.200 It should be noted that the bad debt losses assumed by the consultants in the projects seem far too low; they approximate commercial banking norms in highly developed countries where legal recourse is a feasible option for creditors, which it is not in small-scale lending in most developing countries. The projections deal with bad debt losses as a proportion of loan amounts falling due each year. A superior treatment would be to create a reserve, equal to the bad debt loss expectation, at the time a loan is made.

3.201 A second possibility for NRDB would be to subsidize services massively, reducing profits and hence the bank's capital base. The consultants advocated concessional rates of interest for investments that seem worthwhile socially, and assumed Rs. 50 million of grant funds would support this. However, concessional rates should be treated with skepticism, especially in poor countries where the sources of subsidy are few and uncertain in the long run. Outright grants for part of the development costs of such investments, rather than concessional interest rates, could assist transparency and not impede the development of rational financial markets.

3.202 A third means of taking advantage of NRDB's unique financial structure would be to mobilize deposits aggressively, which would increase costs and narrow margins. However, NRDB is so substantially funded that for many years it will not have to be very dependent on savings, and will not have a financial or commercial incentive to mobilize savings aggressively. Indeed, the projections assume that VO/WOs would continue to hold much of their funds in commercial banks and similar institutions where they now have balances. There are a number of reasons, however, why deposit mobilization is a positive factor in developing banking institutions. Deposits give the community a stake in a bank. Institutions that are "lenders only" may be regarded as alien and hence not highly valued; local values may regard it as acceptable to default on a lender that appears to have lots of money and that offers a narrow range of services. Deposit flows or patterns are also a valuable source of information about the local economy in general and individual depositors in particular. Consequently, NRDB might usefully cross-subsidize deposit services as a means of serving a wider clientele and encouraging thrift.

3.203 NRDB's relationships with VO/WOs are not fully explored in the consultants' reports or strategy documents. This is an extremely important issue for several reasons. One is the amount of effort that AKRSP has devoted to building VO/WOs, which are really the centerpiece of the project. Another is the opportunities that are presented by the strength of VO/WOCP. Upgrading VO/WOCP into intermediaries in their own right raises certain legal issues because VO/WOs have no legal form, and are unlikely to obtain any soon because of political considerations and restrictions on the range of corporate forms permitted in Pakistan. However, they might be included in the organizational and governance structure of an NRDB with decentralized village units. This could include village credit committees, investment committees and audit committees, as well as sub-branch or agency management including accounting functions.

3.204 Linking local deposits to local lending could be an excellent tool for maintaining credit discipline, and village banks could be cheaper to run than a more centralized system. Local lending need not be limited to the local deposit base, but the link would be useful because it could ensure that the community shares part of the risk of loss. However, the great variation which currently exists in VO/WO management capacity would mean that any implementation of this concept would have to be done selectively and gradually. More field accountants would be required in any event.

3.205 Certain types of lending, such as for urban activities where there is no VO/WO, or for relatively large industrial purposes and for social infrastructure, might best be handled on a more centralized and professional basis beyond the VO/WOs. Where losses are expected to be great and the social benefits overwhelming, it could be unfair to expose VO/WOs to these risks.

3.206 *Spin-off Issues for ESC:* The major issue arising from the ESC projections is its losses, which are expected to equal between 5 percent and 15 percent of funds at risk, depending on the type of borrower. These losses arise from risks created by innovative lending against borrowers' expected future cash flow and the general absence of meaningful collateral. Great analytical detail is required for cash flow lending because of the greater impact of risk on repayment capacity. Also, relationships with clients have to be deep and broad to generate the flow of information that creates confidence on the part of the lender. ESC would have three sources of income: from large but infrequent enterprise infrastructure loans, from "sub-bank loans" to clients, and from investment of its cash balances. ESC would earn an operating loss in each of the 15 years covered by the consultants' projections. ESC would be supported by grants from NRDB profits.

3.207 A 10 percent debt loss is built into the projections of enterprise infrastructure loans, and 15 percent on other lending. The primary difficulty with high loss expectations in development lending is containment. As indicated earlier, recoveries tend to deteriorate, which can easily nurture a default culture. Lending by ESC will require a robust strategy and intense management. One fundamental in packaging loans would be to ensure that its borrowers stand to lose more than ESC expects to lose in the case of default. This would deter some opportunistic applicants. It cannot be claimed that AKRSP has found a solution to this problem with its own lending. The SDC reported in September 1994 that delinquencies amounted to 11 percent of its active portfolio and that their level was rising.

3.208 From the perspective of containment, AKRSP should consider vesting in ESC the social infrastructure loans that NRDB is expected to make. These are also large loans that are expected to create losses of 10 percent of principal and interest. This redefinition of functions would help to erect something of a wall between clients' expectations regarding NRDB, which would operate on an entirely commercial basis, and ESC which would suffer more setbacks in activities that have a larger venture capital element. However, ESC would be dealing with larger clients, and the poor clients of NRDB might begin to wonder why they are supposed to repay in full and on time when larger borrowers, or borrowers for larger projects, in the end do not.

3.209 Issues to be addressed to improve the environment for successful development of the new financial institutions are summarized in Chapter 7 (paras. 7.35 to 7.54).

4. Women's Participation in AKRSP

The Social Context

4.1 Women's participation in AKRSP-fostered activities in many ways parallels that of their male counterparts—establishing village-based organizations, engaging in improvements in agriculture and livestock raising, saving regularly, taking credit and developing entrepreneurial skills. However, the social context of the Program area has limited women's mobility and exposure to the world outside their village, along with their access to markets, education, and many development activities. Consequently, women's participation in the Program merits separate review. Different implementation strategies are often applied by AKRSP staff to reach secluded women, and productive packages are tailor-made to meet women's needs and abilities. These aspects are the focus of this chapter.

4.2 AKRSP is clearly an NGO leader in Pakistan stressing the active involvement of rural Muslim women, and fostering positive changes in their role and status in both household and community. In this conservative social environment, however, this is a difficult task.

4.3 Social rules and norms concerning female mobility and other behavior vary from region to region, largely based on religious sect. In general, the degree of seclusion (*parda* or "curtain") is greater among Sunni and Shia populations than in the Ismaili community, and thus women of Gilgit/Hunza are less restricted by behavioral norms than those in Baltistan and in many parts of Chitral.

4.4 In recent years there has been a growth in sectarian rivalry in many communities and a corresponding growth in religious conservatism. This has had direct repercussions on women's behavior, which is often perceived as an indication of a household's or community's religiosity, and seclusion rules have been more strongly enforced in many areas. Generalizations are difficult, however; for example, the recent response of Sunni communities in Astore towards women's participation in the Program has been very positive. AKRSP has had to be constantly sensitive to variations in the local orientations towards women in its activities. Implementation of its strategy has proceeded vigorously, but with care.

Women's Role in the Rural Household

4.5 The role of women in the household and the impact of the Program on their status and welfare have been described in Chapter 2 (paras. 2.19-2.28). This reveals that:

- Women have traditionally had a heavy work load, with farming, cooking and child care being the dominant activities. In farming, women are engaged in the more constant or frequent activities, such as weeding and care of livestock, while men have responsibility for more intensive, short-term inputs such as plowing, shearing sheep and harvesting.

- With increased opportunities for off-farm employment by males locally and outside the area, women have often had to assume greater responsibilities and work load within the household.
- The expanding interest in vegetables as a cash crop has particularly affected the work load of women, as vegetable culture is traditionally the domain of women.
- While the greater participation of children in schooling is viewed as a major benefit, this has meant that their labor contribution, which has traditionally been especially important in livestock herding has decreased. This has resulted in more animals being stall-fed, which increases the responsibilities of women in fodder collection for feeding animals.

4.6 This scenario does not mean that women are passive, disadvantaged members of the household and have no say in decision-making; indeed, they are active in many decisions affecting the household. This role varies greatly from household to household, largely dependent on husband-wife relations, age of the woman and duration of the marriage. Table 4.1 contains some quantitative information on women's participation in household decision-making. This indicates major influence by women in education and marriage decisions for children and in economic management (Bhatti and Tetlay 1994). Especially interesting is the high degree of women's influence on how the family budget is managed. In many cases, mature women are the "family bankers" who hold the keys to storage boxes in which the household cash is kept; husbands and children go through them to obtain money. The participation of women in the WO savings and credit activities also illustrates a degree of independence in economic affairs, although this participation is not universally accepted.

Table 4.1: Subjects in which women participated in Household Decision-Making
(percentage of male respondents answering positively)

	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>
Education of girls	68	98.2	52.5
Education of boys	80	98.2	51.9
Marriage of daughters	61	97.7	41.9
Marriage of sons	62	98.6	43.1
Management of family budget	93	99.5	48.8
Freedom to utilize income earned from vegetables	73	53.6	67.5

Source: Bhatti and Tetlay 1994

4.7 The widespread wish of women to expand their vegetable growing ventures, despite the additional work load involved, is also indicative of their recognition of their own important role in the household economy. Women do have considerable freedom in managing the cash earned from activities such as vegetable sales, but the money is seldom used for the direct benefit of women themselves (Malik and Kalleder 1995). Rather, they usually choose to invest in means to assist their children or the household unit as a whole.

4.8 These generally positive readings, however, should not be allowed to mask the fact that there is considerable variation in the status of women across the various communities.

Women's Organization

4.9 The key role that WOs play in AKRSP's strategy for community development has been elaborated in Chapter 3 (paras. 3.9-3.20). Progress has been substantial. At end-1985 there were 108 WOs; at end-1989, 292 WOs had been formed; and at end-1994 there were 768 WOs with a membership of 26,089 women. This reflects more than a doubling of membership since 1989.

4.10 WO formation has not been evenly distributed throughout the regions however. The program has been more intensive in Gilgit which has had a longer period of exposure, but this is also a reflection of the differing attitudes in communities towards Muslim women's mobility and participation in group activities. As already mentioned, on the whole, Gilgit is more liberal than the other regions. However, lessons learned by AKRSP from experience have enabled good progress recently in the Sunni communities in Astore.

4.11 The coverage of adult women through WOs is much lower than coverage of their male counterparts through VOs. By end-1994 there were almost three times as many male beneficiary members as female members in WOs. Considering the social context of the area, this is not surprising. However, the 1991 IMI studies indicated that within communities which had WOs, there was often relatively low participation in the WO—Gilgit 38 percent, Chitral 23 percent and Baltistan 75 percent. The evaluation mission ascertained that it is often very poor households, which frequently include female-headed units, which may be excluded. This could be linked to an inability to meet savings requirements or to village politics. Whatever the cause, this phenomenon needs to be investigated further so as to enable AKRSP to take initiatives to improve participation rates within the communities which have WOs.

4.12 Even within the membership of WOs, in Chapter 2 (paras. 2.44-2.46) the occurrence of some apparent inequities in the receipt of particular benefits was noted. A limited number of individuals often assume leadership roles, undertake training and capitalize on anything offered through the Program. These "prime movers" are crucial for the success and sustainability of the groups, but care must be taken to ensure that their active role is not at the expense of participation by the majority.

4.13 A recent development (since 1993) has been the convening of WO conferences at the regional level. Two meetings have been held to date in each region, and this larger forum has much potential for information exchange, discussion of common problems, and enhancing the identity of women and their WOs.

4.14 No PPIs have been included in the AKRSP formation process of WOs to date. However, recent funding from GTZ is to be utilized to include PPIs for WOs in Astore. A study is now underway on the feasibility of PPIs in potable water systems, micro-hydels, vocational centers for women, and self-help school buildings. In these cases physical construction would be undertaken by the VO members, but the WO would assume ownership and be responsible for assuring maintenance and operation. Improved methods of participatory planning have also been recently utilized by AKRSP field staff and village women [in Astore, with a similar exercise in each district planned for 1995], which provide new insights into needs identification and indigenous planning processes.

4.15 Of particular concern is the low literacy rate of adult women (approximately 4 percent—para. 2.32). This has implications for the degree of autonomy that a WO can achieve, as group

management and administration need literacy skills. Some 61 percent of WOs in Gilgit, 81 percent in Baltistan and 28 percent in Chitral (where many women managers are said to be "token" only) have male managers. However, this situation cannot be improved until more younger women who have had schooling are available. Younger literate women need not necessarily assume group leadership positions, but their participation and administrative assistance will at least enable greater autonomy within the women's groups.

4.16 The tendency for WOs to have between 30 and 35 members seems appropriate. In the case of women, close geographic proximity is even more important than it is for men in VOs. Not only does this allow for closer social bonding and more frequent interaction than would be possible with larger groups, but it also overcomes the restrictions on women's movement which exist in many communities.

Production Packages

4.17 In introducing technology to WOs, AKRSP has used a generally applicable package of relatively simple technologies, and a graduated (semi-commercial) package which also involved management and marketing skill development.

4.18 Through the years, AKRSP has learned from its experiences, listened to WO members' opinions, and has altered many of its approaches accordingly. In 1988-89 emphasis shifted from the promotion of labor-saving devices (many of which were technologically unsound) to means by which women could increase their productivity. In addition, rather than collective packages which in earlier years had entailed the participation of many WO members (e.g., collective orchards/vegetable plots) and exhibited the usual "free rider" problem, the approach shifted to a focus on activities for individual members. These trends are evident in Table A1.5 which details progressive achievements within WOs. Table A1.12 presents cumulative data to 1994 on the adoption of AKRSP production packages for women.

4.19 *Appropriate Technology:* From the beginning of the involvement of women in AKRSP there have been efforts made to introduce labor-saving technology into their busy lifestyles. These included nut-cracking machines, butter churns, improved stoves and spinning wheels.

4.20 Nut-cracking machines proved too cumbersome for effective use in the rural household, as did the spinning wheels, which also produced a poor quality product of thin yarn. Some re-design has been undertaken by the AKRSP appropriate technology engineers in PIES, but even these new versions have not met with much acceptance. The packages also suffered in earlier years when their use was on a collective basis rather than by interested individuals. In general, it appears that training in operation of the new equipment was often insufficient, repairs demanded outside assistance, and monitoring/follow-up was lacking.

4.21 Some hand-brush carders AKRSP obtained from England have been appreciated by a number of WO members, but they are in short supply. Wool carding machines which were introduced were cumbersome for the women, and in some cases a village male has taken over the machine and set up a business to which women bring their wool for carding for a small fee. Similar takeovers by male villagers have also occurred with sulfur tents for drying apricots.

4.22 Some work has also been done with fuel-efficient stoves, especially in Chitral, with the purpose in mind to not only instruct women in fuel conservation but also alleviate the extremely

smoke-filled atmosphere of the village home. Links were made with FECT/GTZ¹ which specialize in this innovation and is based in Peshawar. However, again training was insufficient and there was little follow-up conducted.

4.23 Despite this relatively unsuccessful record, WO members have themselves voiced their continuing interest in appropriate technology which fits with their current lifestyles, saves time, and lessens their heavy work loads. Specific types of machines most frequently mentioned as needed include: carding machines or hand carders, spinning wheels, oil expellers, and juicers. AKRSP EDD staff have identified skin/hide preservation technology and the development of simple agricultural tools for women—technologies which would not only facilitate women's work load but also increase their productivity.

4.24 The potential to improve the situation of women through improved techniques, tools and machines obviously remains. A review of how the earlier, less-successful interventions were selected and promoted would be useful, and would likely confirm that insufficient attention was given to local knowledge and the constraints faced by women. Future programs should entail identification of needs as expressed by women in their various types of household environments; the acquisition or development of technologies which should meet these needs; the testing of the technologies in different household environments; promotion of technologies only in circumstances in which they are particularly appropriate; and demonstration, training, follow-up and monitoring to avoid failures related to limited knowledge on the part of users.

4.25 The reliance of the PIES section to develop this type of technology in the past may have contributed to earlier problems. In the future it will be essential to have all relevant sections of AKRSP involved in the identification, development, testing and promotion process—WO/SOs, EDD and NRM staff in the FMUs and PIES technicians.

4.26 *Vegetable Production Packages:* The successful introduction of vegetable growing and marketing by women has already been highlighted in Chapter 2. The vegetable introduction package (VIP) has been widely appreciated by women, and the commercial vegetable packages (CVPs) have been introduced to 36 WOs. A vegetable seed production package was also introduced to selected WOs in Gilgit and Baltistan; it has proved profitable and has potential for expansion if markets are adequately developed (Tajammal 1993).

4.27 On the negative side, marketing of produce is presenting problems for women in many areas (Khan 1991). Also, implementation by AKRSP staff has frequently been rather mechanical in nature, and timely follow-up by AKRSP staff has not always been present. The issue of marketing needs to be a major consideration before WOs contemplate CVPs.

4.28 Training of women has been an important adjunct to the vegetable packages. By end-1994 a total of 1,436 female village specialists in vegetables (VPS) had been trained by AKRSP staff in sowing, plant spacing, use of fertilizer, and disease identification/control throughout the regions of Gilgit (570), Chitral (488), and Baltistan (378) (Table A1.12). This has been very well received by WOs. Collective vegetable demonstration plots did not prove very successful, however, because many women had no time to devote to this group activity, and by 1994 they had decreased substantially in number (Table A1.5).

¹ FECT = Fuel-efficient cooking technologies project.

4.29 VPSs instruct other members of their WO. Beneficiaries' impressions of the training by VPS in the VIP were mixed, although the majority of women found the instruction to be of value. In a VIP impact study carried out in 42 WOs throughout the Program area, 70 percent of the women found it useful, while 30 percent did not (Hussain 1993). Those who did not find training useful thought that the VPS was incompetent or they themselves lacked interest in learning new techniques. In 1993 a course for master trainers in the vegetable package was introduced with 11 participants, and selected women traveled down-country to observe commercial vegetable farms.

4.30 Apart from vegetable production, home-based fruit orchards/nurseries have also been promoted in WOs. Training has been given to selected individuals, and courses in fruit processing have also been administered. These undertakings have not been as successful as the vegetable package, however. In the case of fruit processing, quality control was lacking along with the presence of suitable markets for the resulting jams and squashes. Women relate that they do prepare these for home consumption, however.

4.31 *Poultry Packages:* While earlier collective packages proved unsuccessful, the Home-based Poultry Package 1 (HBP1) has been well received, with nearly 80 percent of all WOs adopting it by 1994, as reported in Chapter 3 (para. 3.99). One or two female poultry specialists have been trained in each participating WO, and by 1994 a total of 1446 poultry specialists existed (Gilgit 752, Chitral 430, and Baltistan 264—Table 4.3). In 1993 nine poultry specialists participated in a master trainer course in Gilgit, while 13 took a similar course in Baltistan. Other training activities included a livestock management course for couples (husbands and wives) in Gilgit. Selected women specialists and master trainers are also active in establishing chicken brooding centers to meet local demand; others in Gilgit are involved in breeding to supply eggs to the AKRSP hatcheries.

4.32 By end-1994 36 interested and capable women poultry specialists were participating in the semi-commercial poultry package. However, as indicated earlier, results have not been uniformly successful. Technical support needs to be improved, and much depends on the availability of a market. Market potential will limit the extent to which this package can be legitimately encouraged among interested women. Training in entrepreneurship (e.g., book-keeping, management and marketing) is also necessary.

4.33 *Forestry Packages:* In 1993 forestry packages for nurseries were introduced to WOs, following the addition of the first woman forester to the staff in 1992. Traditionally, women have not been extensively involved in this area, but as more men participate in off-farm labor, women's roles in forestry are expanding. Concerning firewood collection, however, women's input has been and continues to be considerable (Khan 1986; Clark 1995).

4.34 Women have been heavily involved in the NORAD-funded Women and Greenery Program for the development of private fruit and forestry nurseries, and some 46 forestry specialists have been trained, including 24 master trainers (Table 4.2). Although nurseries have been established in all regions, problems in the marketing of seedlings by women have occurred; also coordination between male and female staff in AKRSP's forestry section has often been inadequate. Due to the dispersed nature of the nurseries, monitoring and follow-up have also proved difficult (Clark 1995; Nyborg and Hamidullah 1995).

4.35 As part of the forestry program, bookkeeping and sericulture have also been initiated with WOs, but to date these have not been more than pilot activities.

Table 4.2: Women's Progress in Forestry Development (1994)

	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>
Nurseries	45	22	43
Woodlots	400	198	93
Master Trainers	6	8	10

Source: AKRSP Annual Review 1994

Savings and Credit

4.36 In general, WO financial activities are on a smaller scale than those of VOs. The average savings per VO group member is Rs.2,386 compared to an average of Rs.1,264 per WO group member. In addition, big differences exist in the amount of savings per WO between regions, with the relative amounts being in the order of 9:4:1 for Gilgit, Chitral and Baltistan respectively (Table A1.4). These differences not only reflect the length of time the WOs have been involved in savings, but also differing levels of involvement in the cash economy and opportunities for income generation, with Gilgit providing the most opportunities by far.

4.37 Table A1.4 also shows similar differences by region in the number of households availing of the WOCP, with the vast majority of women taking credit residing in Gilgit. The same regional differentiation applies to short-term and medium-term credit.

4.38 Regardless of amount, it is clear that women members of the WOs take their AKRSP-related savings/credit undertakings seriously; there are very few other options available to them for such financial services. Many women usually know approximately the amount they have saved, borrowed, and repaid to date, regardless of literacy skills. Amounts saved vary greatly within WOs, however. Women sell surplus vegetables, eggs, fruits, nuts, etc., to other villagers or to shopkeepers and save the cash obtained, which often is seen as an important source of security for the woman and her household.

4.39 Credit is taken by the WO members for a variety of reasons, with the loan often being utilized not by the woman herself but by husbands/sons or for household-related activities. Indeed, it is often "the men" who decide how to use the loan, although this varies from household to household, and it is sometimes a joint decision. There is also a belief among some villagers—especially in Baltistan and Chitral—that to borrow money is "bad," and this inhibits many females from seeking loans; there is also fear of the "high service charge." These beliefs are changing, however, and some common uses of WO loans as indicated by field interviews have been:

- house construction/repair, boundary wall construction
- fertilizer, seeds and livestock purchase
- home-based shop, sewing machine, wool purchase, and poultry purchase
- children's education (local or in Karachi), marriages of children, religious journey of woman to shrines in Iran, and jewelry (investment)

Repayment of loans occurs yearly, and is often accomplished by a woman selling *patti* (woven woolen cloth) to a nearby shopkeeper for the necessary cash.

4.40 The general problem of illiteracy amongst women affects savings and credit as for overall WO administration. The number of literate women is growing year by year, however, and by 1994 there were even five female village accountants functioning in Gilgit and three in Chitral. This is indeed an achievement, but falls far short of requirements (Table A1.13).

4.41 Women entrepreneurs who avail themselves of significant credit are few and far between. Most are located in Gilgit (where more markets and a tourist trade exist), with fewer female entrepreneurs found in Baltistan and even less in Chitral. This holds special implications for women's participation in future directions of AKRSP, and demands attention to the development of female entrepreneurial skills among promising individuals.

4.42 Many WO members are eager for additional opportunities to make money, however, and even in distant villages of Baltistan enterprising women find ways to sell their produce to local city shopkeepers who sell to others down-country. Unfortunately, too many women sell "by chance" and have no definite market for their produce, whether it be vegetables, eggs, hats, or stockings. The EDD is presently stressing the formation of "family enterprises" which involve the participation of husband, wife, and children. New undertakings now being considered are apricot oil extraction, wool improvement/home-based knitting industries, family enterprise nurseries, sheep/cow improved breeding/raising at the household level, butter production/packaging, and cherry production/marketing. These enterprises are likely to increase women's involvement in earning cash income for the household and in credit activities.

AKRSP Female Staff and Integration

4.43 Table 4.3 contains a summary of the number and type of female staff employed with AKRSP. Numbers have been increasing yearly at the lower levels, and in 1994 females comprised approximately 10 percent of the organization's total staff strength of 441. Senior professionals include agriculturists, veterinarians, foresters, and WID monitors, while junior professionals are SOs and support staff are field coordinators. Experienced women staff members have also been promoted to positions of authority in recent years, with one female FMU Manager now active, along with the Director of the Gilgit EDD.

Table 4.3: AKRSP Female Staff (1989-1994)

Level	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
Management	1	2	2	1	1	1
Senior Professional	1	4	6	5	6	6
Junior Professional	2	11	10	11	13	17
Support Staff	12	12	16	15	21	20
TOTAL	16	29	34	32	41	44

Source: AKRSP Office Data 1995

4.44 Women professionals have benefited from AKRSP's Accelerated Professional Development Program (APDP) which sends promising local female staff and trainees down-country and abroad for advanced study. Presently there are 12 women studying such subjects as agriculture, forestry, and business administration, some of whom are about to complete their courses of study. In 1995 eight additional women from Baltistan and Chitral are scheduled to

obtain scholarships. This program is helping to alleviate the great need for female professionals in the Northern Areas and Chitral and holds great potential for the future.

4.45 Since its inception, AKRSP has been intent upon encouraging more participation by females—in both AKRSP itself and in village communities. Over the years it has experimented with different ways to achieve this sometimes difficult goal.

4.46 As the number of WOs grew over the years, a special WID section was established in 1985, which included all female staff regardless of their profession or level. As Program needs grew, female technical specialists were hired, many from other regions of Pakistan. However, it was felt that this led to the development of a parallel program which marginalized women's undertakings in both office and field. A slow process of integration has thus occurred, beginning with the technical staff at end-1992. The WID Section was abolished in 1994, with all female staff being placed in their respective professional sections. A WID Program Manager is based in the core office, with a WID Monitor appointed in each region as part of the MER staff. With the merging of staff, it was anticipated that the responsibility for successfully integrating women into the program would then lie with all sections of AKRSP and all staff members, both male and female.

4.47 In general, the integration process is a healthy one, and the evaluation team supports it. However, it is not without problems, and AKRSP must proceed carefully. The integration of WID activities and staff within the organization has occurred in conjunction with other structural changes in the process of AKRSP decentralization. This has complicated matters and sometimes has led to confusion among staff members about their roles and lines of authority within sections. Budgets for the professional staff who were previously in the WID Section were not integrated into their respective professional sections until recently, which created confusion about the funding of WO-related activities. Decentralization has meant more efficiency in vehicle use, but in conservative rural areas, sometimes it is difficult for men and women staff members to travel together in the field. In addition, staff morale has been low due to uncertainties about their future positions and, in this insecure context of change, gender-related problems among staff have often been intensified.

4.48 In conjunction with the integration process, in recent years AKRSP has initiated gender awareness workshops for its staff in all three regions (Malik and Ahmad 1994). Meetings were arranged by the WID/MER sections of the core office. Although senior management strongly support women's participation within the organization and in the field, some other staff members are often more reluctant to actively foster the process. Regional variations are even reflected within the organization, with a more liberal attitude in Gilgit contrasting with the more conservative Chitral and Baltistan. Discussions in these meetings were frank, and generally they were positively received by the participants. These gender awareness workshops should be continued. It is recommended that outside consultants assist in future meetings, which should mix different sections, along with both men and women, as participants.

4.49 There are also many general constraints in this integration process which originate from the society itself. The social context of the Program area is one of gender segregation in the public sphere. Hence it is necessary for AKRSP to foster and support separate VOs and WOs as integration at the public level in the village is usually impossible. This complex situation demands sensitive coordination between AKRSP male and female staff in their programming efforts, with the realization that segregated implementation is necessary. To complicate things

further, at the village household level, an integrated system is at work, with husband and wife coordinating their efforts to survive.

4.50 In conclusion, the gender-related integration efforts of AKRSP must be commended, and they should be continued in the future. As the organization assumes a new structure, many of the problems associated with the process will probably lessen. The overriding social context must be kept in mind, however, and in its "affirmative action" stance AKRSP must not attempt to go too far too soon. Management must also be clearly aware of staff sentiments, and attempts must be made to deal with any misunderstandings and solve problems promptly.

WO Linkages with other Agencies

4.51 Linkages of VOs and WOs with agencies other than AKRSP have been described in Chapter 3. Most of these linkages to date have been in the social service sectors of health, family planning, education and nutrition. This has meant that WOs and women in VO communities without WOs have been able to actively participate in not only expressing needs but also in actual execution of the programs sponsored by these agencies.

4.52 It is important that the linkages have not only been with the NGO sector and international groups—UNICEF, FAO, Family Planning Association of Pakistan, AKRSP and AKES—but also with government line agencies through SAP. In general, these cooperative undertakings have yielded positive results, but there is still much room for improvement in coordination of planning and implementation, especially with the government agencies.

Social Change and the Empowerment of Women

4.53 Through AKRSP's continuing efforts, the status of women in the Northern Areas and Chitral is undergoing change, both within AKRSP itself and within the village WO membership. Traditional gender boundaries are being altered, although the process is slow and progress is considerably uneven.

4.54 In recent years WO members have had the opportunity to participate in production packages, receive training, save, and access credit. These options have had direct impact upon their household economies and have increased their status within their households and communities (Kalleder 1994; Malik and Kalleder 1995). There has been a definite increase in their self-confidence, with a clear link between commercial activities and empowerment.

4.55 Women in Gilgit, Chitral, and Baltistan continue to adjust their daily activities to accommodate the many social and economic changes affecting themselves and their family members, and many seek additional means by which they themselves can improve their own lifestyles, along with those of their households and communities. AKRSP must continue to foster this change process and provide additional options for women of the Northern Areas and Chitral.

5. AKRSP as an Organization

Staffing Issues

5.1 Educated and qualified people from down-country do not generally consider the Northern Areas and Chitral as favorable areas to work. A major achievement of the Program has been its ability to attract and retain sufficient qualified and dedicated staff to maintain the momentum of development over a period of 12 years, albeit not at a completely even pace. This has been largely due to strong leadership, a clear purpose with which staff can identify, maximizing local recruitment, tangible results in area development, effective communication within the organization, and attractive salaries, especially for those who performed well in the organization. However, over the last few years a number of disturbing influences have negatively affected morale. This, in turn, must have affected, and must be affecting, staff performance and output.

5.2 One of the main factors contributing to the decline in morale has been uncertainty in the minds of staff regarding the future strategy and direction of the Program, and its likely impact on staffing. In the early 1990s some observers, including AKF (Geneva), considered that the Program needed to be reviewed to identify an appropriate future direction which built on the significant accomplishments already achieved. Initial attempts to involve AKRSP management in developing a future strategy were not very successful. Many considered that, in view of the acclaimed success of the Program to date, the existing approach to development was appropriate and should be continued. This led to the appointment by the Board in May 1992 of a Strategic Development Committee (SDC) "to make recommendations on how AKRSP should be structured to establish permanent and self-sustaining successor institutions for the long-term development of the NA and C." Although AKRSP participated in the SDC exercise, commitment and contribution were less than complete, so that the first phase of the SDC exercise was commonly perceived by staff as an external imposition. This position was held even by those who considered that the Program was in need of some revision. Various other factors interfered with staff contentment, but it is likely that most of these assumed elevated importance due to the unstable working environment.

5.3 In July 1994, the Board reappointed the SDC "to recommend implementable actions" within the same basic framework. In this second phase AKRSP management and staff were more completely involved in the process. This improved the situation and many staff now appear to identify with the emerging strategy. However, the strategy will involve staff reductions or, at least, replacements. This prospect and the realism of a voluntary separation package in early 1995 have inhibited the restoration of the desirable, stable working environment which had traditionally characterized AKRSP.

5.4 In the current, final phase of the SDC process, management and staff of AKRSP have been even more intimately involved. This should further enhance the identification of staff with the strategy. Recent introduction of reforms in personnel management policies and procedures which provide complete transparency in the area of recruitment, job classification and grading, and promotion are also positive developments. However, to capitalize on the inherent potential of staff working in the Program, the process of introducing the changes which must eventuate as

the future strategy emerges and is implemented will have to be handled very skillfully. A critical element will be effectiveness of the communication in the immediate period of reorganization and consolidation. Effective two-way communication and interaction between management and all levels of staff will be essential.

5.5 The AKRSP policy of maximizing the recruitment of local people to fill the staff complement in each district has obviously been beneficial. The scarcity of candidates with required skills, however, has created difficulties in implementing the policy, especially in filling management positions and in recruiting women for both management and operational posts. This has meant that many of the management positions in each region have had to be filled by persons from other areas in the North or from down-country, and that nearly all of the limited number of women in management positions are from down-country. However, while accepting the necessity to follow this course, there could have been more emphasis given to developing locally recruited staff for management positions through further training. This is particularly noticeable for Baltistan, where attention to this matter in the late 1980s would likely have avoided some of the recent morale and staff-management problems in that region. Currently, AKRSP is addressing this issue through its sponsored training program. It also has an affirmative action program for the recruitment of women, but it has to be expected that recruitment of nonlocal women professionals will have to continue for some time.

Integration and Decentralization

5.6 At the end of 1992, the technical staff of the WID program were incorporated into the mainstream technical sections of agriculture, livestock and forestry to avoid marginalization of the technical program in WOs. Subsequently, the mainstream technical sections of AKRSP were amalgamated into a Natural Resource Management (NRM) section to give greater emphasis to the technical aspects of sustainable agricultural development. In 1994, the WO social organizers joined the VO/SO division to complete the integration of the WID program. Each of these organizational changes had merit. However, as pointed out in earlier sections of this report, integration on its own will not be sufficient to address some of the deficiencies in the NRM program. Similarly, the impact on WOs and women in households of moving WID staff into the mainstream sections will have to be carefully monitored to ensure that it has the intended outcome.

5.7 An organizational innovation in the transition leading up to the next phase of AKRSP has been decentralization of the program. The intention is to minimize the core staff at Gilgit by transferring staff to the three regional offices (Gilgit, Chitral and Baltistan) and building up the self-sufficiency of these regional offices. Further, within each region the concept is to allocate most staff to Field Management Units (FMUs) in which all the VO/WO service divisions would be represented. The scheme has been initiated in Gilgit in January 1995 and in Baltistan in March 1995; the regional office in Chitral is progressing more slowly and is still at the planning stage. Again, these changes have organizational merit, but will require that:

- cognizance is taken of the difficulties in retaining highly skilled technical staff in more difficult living conditions (especially in the case of Chitral which suffers from a greater degree of isolation than the other regional offices); and
- in the case of the FMUs, communication lines are clearly defined and designed to ensure that each staff member feels he/she is not only part of the local FMU, but

also integrated into the AKRSP program which concerns his/her special area of interest. While coordination and programming of activities would be a local responsibility, the formulation of policies, recommendations and packages in the technical areas should be a function of the respective program heads; the latter should, of course, be heavily influenced by comprehensive feedback from FMU staff.

These considerations could necessitate some modifications to the decentralization initiative. This will require open dialogue among staff and with management, and a responsive attitude on the part of management to local circumstances and practical constraints.

Monitoring, Evaluation and Research (MER)

5.8 AKRSP continues to be a well documented program, and the MER has been able to respond to most of the numerous requests for data on the Program made by owners, donors, its Board and external interested parties. In 1989 the OED review team, while lauding MER's monitoring and reporting activities, was concerned that insufficient attention was given to evaluating the performance of the various AKRSP programs and their overall impact on household and village welfare. Emphasis had been given to measuring the input side of programs rather than the output. Similarly, any cost-benefit analysis was very narrow and did not provide a basis for sound decision-making which would require an understanding of the impact of an intervention on the total enterprise, household or village economy. Since 1989 a number of significant measures have been taken to address these issues.

5.9 Extensive baseline studies and household income and expenditure surveys were implemented in 1992 by MER. A number of household case studies have also provided useful information on household resource use and interactions. The IMI surveys provided a quantitative indicator of relative progress in the development of village institutions, and led to further investigations by MER on the reasons for some important variations. A large number of qualitative evaluation of programs or aspects of programs have been undertaken by the core and the regional MER units, often with the assistance of interns. However, the initial quantitative work now needs to be followed with evaluation studies and robust analysis to progressively evaluate impact. While many of the qualitative studies are thorough and useful, others do not add much to an understanding of how programs affect the target group.

5.10 The household income and expenditure survey work is to be recommenced in 1995 using a simplification of the earlier format. To ensure that budgetary or staffing constraints do not inhibit the implementation of this plan, it seems appropriate that one region be done each year, so that a coverage of each region will be obtained at three or four-year intervals. Due to the scarcity of reliable basic information, the surveys will apparently concentrate on expenses and income associated with agricultural activities. While this may be inevitable for the comprehensive survey, it will not capture many of the potential changes in the household system which likely impact on resource use in agriculture. Although agriculture remains the most important in most cases, and it is the sector in which AKRSP has provided considerable assistance in infrastructure and services, the off-farm income of households and the dynamics of significant change in nonagricultural commercial activities in parts of the area are very important influences. This suggests that more detailed and comprehensive household studies should be undertaken on a much smaller scale, and be structured to complement the wider survey work and contribute to the interpretation of the latter.

5.11 Neither restricted nor complete household income and expenditure data would provide the basis for quantifying the economic return to the AKRSP investment. In this type of development where there are a number of agencies involved and where public infrastructure and a series of other exogenous factors influence outcome, it is extremely difficult to link specific cause with a particular effect; the "with program" outcome is not easily compared to the "without program" outcome. Nevertheless, the quantitative data should indicate to AKRSP the degree of achievement of its ultimate objective of improved welfare of rural families, show how equitably development benefits are being distributed, and provide information which could lead to program adjustments for the benefit of the majority. This is consistent with AKRSP's increasing role as a facilitator and catalyst in development, building on the VO/WO institutions it has fostered under its assistance program.

5.12 The current policy of moving the responsibility for monitoring specific programs to the units which implement them (ultimately the FMUs and the program managers) is appropriate. However, MER should participate in training these field staff and their managers not only in the mechanics of effective monitoring, but also in how the collated information has to feed into program decision-making. This will be necessary to ensure that those responsible will see the benefits in efficient monitoring and, therefore, allocate the required resources to it. MER will also have an important role in bringing together and analyzing monitoring data so that it can ensure that important issues such as equity receive adequate attention in the monitoring process, and provide an overall analysis for use by AKRSP core and regional management teams. It can play a more significant role in the "lesson learning" aspects of evaluation (para. 6.14).

5.13 MER will, of course, maintain its responsibility for the quarterly and annual reports. However, in view of AKRSP's increasing support as a facilitator rather than an implementer, it would be desirable to expand this system to include in annual reporting any significant investments and activities from non-AKRSP sources.

5.14 MER already has linkages with HRD for staff training, and with the technical sections through its joint evaluation of particular activities. In both these functions, however, it can play an even greater role in improving the standard of evaluation. As previously indicated, many of the evaluations have been rather weak and not very useful. To enhance their usefulness, a number of criteria should be met before they are approved: (a) clearly defined objectives; (b) justification for the exercise, and its priority vis-à-vis competing use of resource; (c) detailed design, including resource costs and how data will be analyzed; and (d) how results will be disseminated to potential end-users of the information. These requirements should apply equally to studies/evaluations initiated by MER, to collaborative studies and to studies done by other AKRSP sections.

5.15 Annual planning of the evaluation program based on legitimate, objective criteria should also help avoid, or at least reduce, two untoward phenomena which have become commonplace. The first is MER's undertaking studies in response to ad hoc requests by outside entities on topics which would not otherwise have any priority. Obviously, circumstances can change and an annual program must have the flexibility to respond to such changes, but a firm and justified program would provide a basis for refusal to respond to requests which would not represent a legitimate use of resources. The study plan would also provide a basis for the selection and use of summer interns. Interns would fit the program, rather than vice versa, and their adequate supervision and guidance could be properly organized, with better results for AKRSP and for interns.

5.16 MER has had an important role in developing linkages with other agencies. This role is likely to expand. This report has already emphasized the inherent difficulties in working with government departments which are not accustomed to the participatory approach promoted in AKRSP's dealing with VOs. MER can assist by participating in training of AKRSP staff at core, regional and FMU levels in the principles and practice of effective cooperation with outside entities. It should also be usefully involved in courses for external agency staff to educate them in how to interact effectively with village institutions; this has already begun.

5.17 Cost/benefit analysis still is not a strong aspect of AKRSP's programming or evaluation activities. Partial budgets for practices have too often been undertaken, but there has been little attempt to examine the full implications of recommended and assisted interventions on resource use, final benefits and distribution of benefits in the household system. The result of ad hoc household case studies and the comprehensive 1992 household income surveys, which can contribute to an improved understanding of household economics, appear to have had very little dissemination and use. MER can provide a valuable service in introducing an awareness in other sections of AKRSP of the need to consider their household clients as dynamic enterprises in which any one intervention is likely to have implications for other components in the system. Should future investment in some infrastructure projects entail the VOs accepting development loans, it will be essential to have accurate cost/benefit and cash flow analysis to clearly indicate the obligations of the VOs and their members; this will be required to confirm the financial feasibility of the project. This type of analysis has not been done in the past under the PPI grant arrangements.

5.18 The problem of matching decentralization objectives with the ability to retain suitably qualified staff is likely to be more acute in MER than in some other parts of the Program. Staff turnover has been high in the MER with most staff coming from down-country because of the scarcity of locals with the required qualifications, especially in Baltistan and Chitral. While initiatives to support locals in the required training should have long-term benefits, this will do little to address the immediate problem. It would not appear feasible to have highly qualified MER staff located at the FMU level. While a regional capacity in MER should be possible, it will be essential to ensure that linkages with the core MER are properly developed so that there is no chance of intellectual isolation. Similarly, linkages and networking with other evaluation institutes down-country or outside Pakistan should be established by MER to provide the intellectual stimulation and challenge required to keep up to date with this profession.

Management, the Board and Donors

5.19 The new management in AKRSP has already demonstrated a capacity to address management, personnel and operational issues and to interact effectively with the Board. To ensure efficient use of the Program's resources to the benefit of communities in the North, it is therefore logical that that management be given the responsibility to exercise its role within the policies agreed by the Board, and be held accountable for implementation of these policies; that is, management should be allowed to manage.

5.20 The Board of AKRSP, which is appointed by the owners of the company (largely members of the AKF network), has the normal functions of a company board in deciding policies and responding to issues raised by Management for consideration and resolution. The AKF (Pakistan), representing the AKF network as owners, makes legitimate, prescribed reporting demands on AKRSP management. For the organization to function for the maximum benefit of

the communities in the Program area, the functions of each part should be completely transparent and be according to the accepted norms of governance.

5.21 Bilateral donors, who now provide most of the funds for AKRSP investments and operations (Table A1.14), obviously have the right to negotiate with the Board (and, through it, with Management) as to how their funds are to be used. They also have the right to be satisfied that their funds are being used as agreed. To enable the latter function, the donors in earlier years had mounted separate "monitoring" missions which were costly in total manpower, not only for the donor community as a group, but also for AKRSP because of the demands placed on staff in servicing visiting missions. Since 1991 the donors have mounted joint monitoring missions (JMM) towards the end of each calendar year. It appears that some staff have given these JMMs more authority with respect to program operations than should be legitimately given to such a monitoring exercise. The most recent JMM has emphasized that it does not have an authoritative or management role, and insisted that its function is to report on progress and to interact with management in an assistance role. This is an appropriate function for the JMM. After the new direction of AKRSP is translated into operations, it may be desirable for the JMM to undertake missions at two-year intervals, provided AKRSP maintains a comprehensive and adequate reporting system. The Board should strongly encourage donors to minimize separate reporting requirements, as requests of this nature require AKRSP resources which could otherwise be used for directly productive monitoring and evaluation work. The Board and Management should also take care in dealing with specific donor-funded programs to ensure that there is not only a rational balance in the development initiatives in an area, but also that the resources and facilities given to staff associated with a particular program are not markedly different to those allocated to other programs; the distribution of vehicles under the NORAD forestry project caused some concerns in the latter aspect.

5.22 Transparency becomes even more important in view of two current developments. The first is the use of linkages with government and other nongovernment agencies to leverage the value of VOs as institutions, and of AKRSP as a support organization, to capture and efficiently utilize additional development resources in the North. The second is the creation of new banking and investment institutions in the form of the proposed NRDB and ESC, which would have the power to control and direct considerable financial resources in the Program area. To maximize the potential benefits from linkage arrangements, it will be essential to ensure that AKRSP continues to be scrupulously nonsectarian and unbiased towards any particular group in its coverage and resource allocation. In the case of the new institutions concerned with the mobilization and use of funds, it will be even more necessary to not only have policies and procedures which dispel any suspicion of bias, but also to ensure that they are perceived as such; the unqualified support of government, donors and the public will demand this. Transparency in the composition of the respective Boards and in their policies, and the intended heavy representation of competent persons from the Northern Areas, should go a long way towards creating the appropriate environment for support.

Expenditure and Funding

5.23 The annual expenditures by AKRSP are presented in Table A1.15. The substantial nature of the Program is indicated by the total expenditure of over one billion Rupees since start-up, which is equivalent to US\$47.4 million.

5.24 The categorization of expenditure is not completely transparent. Consultants are included under Salaries; Research, Survey and Demonstration includes the major forestry investments; and Credit treats loans disbursements as an expenditure. The massive increase in Salaries in 1994 is reportedly largely due to regularization of Program personnel (especially at junior professional level and below) who had been on the Administration budget, and to additional staff recruitment. This led to a 25 percent "increase" in staff numbers in 1994 (Table A1.16). The pay scales of middle-level professionals were also raised to be comparable with the equivalent in other NGOs in Pakistan. As reported earlier, staff reductions are currently being imposed, and further adjustments are likely as the new Program strategy evolves (para. 5.3).

5.25 Operating costs currently make up about half of expenditure. These have increased from 27 percent of total expenditure in the 1984-1987 period, to 53 percent in 1991-94. A major factor in this change has been the relative decline in expenditure on infrastructure projects from 36 percent of expenditure in the earlier period to 17 percent in the latter period. This has been associated with the decline in the number of new villages entering the Program as it attains a higher coverage in each district.

5.26 The most outstanding factor in the source of income table (Table A1.14) is the decline in the proportion which has had to be provided by the AKF network. This has declined from 65 percent in the initial year to 30 percent in the early 1984-1987 period, and to 7 percent in 1991-1994. The listed donors have provided the funds to enable Program expansion, while AKF has maintained a contribution which has fluctuated between Rs7.0 million and Rs15.0 million in current terms. The ability of AKRSP to attract external support in this manner is a commendation of the Program.

5.27 The evaluation mission has not looked at future funding requirements or prospects. This is already a major area of consideration by AKRSP, AKF and donors and is linked to how the future strategy evolves in the coming months. As already noted, however, the evaluation believes there is still a place for some grant funding through AKRSP for additional infrastructural development, to complement VO and public sector investment (paras. 3.54 and 3.55).

NGOs

5.28 AKRSP is an NGO. Consequently, it could be affected by the general attitude towards NGOs of the major actors in its working environment. This includes the GOP, which must carry the greatest portion of the costs of "common good" development investment in the North.

5.29 It is estimated there are about 13,000 NGOs in Pakistan, 40 percent of which have been founded in the last five years. However, most of them are small with limited resources, welfare-oriented, and concentrated in urban areas. Those involved directly in economic development activities are rare; they usually are concerned with poverty alleviation, and almost universally use some form of participatory interaction with the target group. AKRSP falls into the latter category.

5.30 In the last decade, the NGO movement in Pakistan has received increasing recognition as a potential partner in development with GOP. This improved recognition, however, is not universal, and some distrust persists, as well as concern about reduced control of development funds by GOP agencies. GOP support for the National Rural Support Program (NRSP) at end-1992 held great promise. This NGO, which had expanded from a small beginning in 1991,

received a commitment of Rs.1.0 billion per year to meet its objective of establishing a country-wide network of village-based organizations; the latter would enable local communities to participate in their own development. However, due to changing attitudes at senior levels in GOP, NRSP has only received a single allocation of Rs.500 million, and in early 1995 there was some doubt as to whether NRSP would be able to retain these funds which are used as an endowment to support operational costs. This issue has apparently now been resolved and NRSP continues to operate.

5.31 Currently, GOP is considering uniform legislation and regulations for NGOs, which are at present subject to a number of different provincial and state requirements. Most of the proposals should have little effect on NGOs of the scale of AKRSP. Probable requirements relating to annual reports and audits are already met through the company structure. Nevertheless, there is the possibility that GOP could insist on the right to intervene in appointment of board members; this would be of concern to all NGOs. Should this intrusion become more commonplace, GOP intervention in board appointments to AKRSP's institutions would appear unlikely, due to (a) the widely established credibility of AKF and of AKRSP, and (b) the demonstrated development impact AKRSP has already had in the Northern Areas and Chitral. Despite this, the possibility provides an additional incentive for AKRSP to be completely transparent in selection of board members and in formulation and execution of the policies of each institution. This should demonstrate its sole interest in providing equitable opportunities for development and enhanced welfare of the rural population in the Program area.

6. Replicability—Transfer of Experience

6.1 One of the initial objectives of AKRSP is to develop a replicable approach to rural development, through experimentation with selected means and methods. In previous evaluations this issue has been examined, pointing out the scope for, and the limitations on, replication of the AKRSP model. This evaluation, however, attempts to go further and to attempt to establish whether and where AKRSP experience is being applied.

6.2 Even now the scope for replication is debated. For some observers AKRSP is a model program designed to meet the needs and constraints of a unique region. Little scope is seen for replication because the Program is so situation specific and because its success has been dependent on special circumstances—the opening of the Karakoram Highway; the "institutional vacuum" created by the abolition of the feudal lords in 1972; the responsiveness of the Ismaili villages to the guidance of their spiritual leader, the Aga Khan; the role of his Highness the Aga Khan in ensuring government support without interference; the charismatic leadership of the first General Manager of AKRSP, Shoaib Sultan Khan; the use of helicopters by Program staff; and, even the advent of favorable market prices for farm produce.

6.3 To others, AKRSP is a beacon heralding a rural development model which, when properly implemented, can be used to ameliorate rural poverty anywhere. Evidence for this is seen in the fact that the Program has been so successful in overcoming the special problems and constraints encountered in the target area. These include the isolation of villages, at the ends of long and tortuous mountain tracks often impassable for half the year; extreme poverty, characterized by a paucity of all forms of capital (natural, physical, financial, human and institutional); the multiplicity of dialects; the fraught geopolitical situation; recurring sectarian strife and destruction of property; the fragile natural resources base, with its thin soils, high erosion and low rainfall; and the low technical standard of agriculture.

6.4 For others still, AKRSP has been a laboratory for experimentation and the development of techniques. Trying and evaluating different approaches and methods has generated working principles and professional skills that can be transferred and applied in similar programs. Several programs now exist in Pakistan and, increasingly, in other parts of South Asia where principles and methods tested by AKRSP are being adapted to suit local circumstances.

6.5 In Pakistan there are now seven programs (including AKRSP) which are part of a Rural Support Program Network, the staff of which share experiences and findings. These programs have several traits in common, including the formation of village or community organizations, the use of infrastructure schemes or other projects to offset perceived constraints, the evolution from savings into credit, and training programs for VO managers and specialists (see Table A1.17). In addition, they are all organized by NGOs even though there is often some government funding.

6.6 Two of these programs were started in the early 1980s and were contemporaneous with AKRSP. These are the Balochistan Rural Support Program (BRSP) formerly known as the Pak-German Self Help Project, and the Pak-German Integrated Rural Development Project-Merdan (IRD). These programs were not based on the AKRSP model nor in any way depend on it. In

both cases, however, there has been considerable transfer of ideas and approaches between them and AKRSP, especially when the Balochistan program (BRSP) was being redesigned.

6.7 Another two of the programs are more recent, the Kalam Integrated Development Project (KIDP) in NWFP and the Swabi Irrigated Agriculture Project (SIAP), and are both supported by the Swiss Development Corporation, but with some government funds. Both of these have made use of AKRSP principles and processes from the outset, albeit with considerable modification to meet local conditions.

6.8 The Sarhad Rural Support Corporation (SRSC) initiated in 1990, however, was by contrast based directly on the AKRSP model. There were also transfer of staff and extensive management support from AKRSP. It is notable in the context of this discussion because in its early development it tended to replicate the AKRSP program agenda and working method with little modification. This proved to be less than satisfactory. Early difficulties led to substantial modification of the program which is now making better progress. The lesson from this experience is that the AKRSP methods of adaptation to local conditions and trial and error experimentation are perhaps the most essential principles to be transferred. It is somewhat ironic that in their efforts to replicate AKRSP, professionals in SRSC neglected AKRSP's dicta and turned from its flexible program approach to a blueprint approach.

6.9 The National Rural Support Program (NRSP) started in 1992 was the most ambitious effort toward extension of AKRSP principles. By far the largest of the seven Pakistani rural support schemes, it was a national program with operations in each of the provinces. Here again there has been a major effort to transfer and adapt AKRSP experience assisted by substantial staff exchanges and transfers. However, the NRSP specifically eschewed the notion of adopting an AKRSP model, noting that only principles and some working methods can be transferred. A notable characteristic of NRSP is that it does not have sufficient resources to use the PPI grant concept to provide the incentive for community organization, although it does access available government or nongovernment investment programs for this purpose wherever possible. Its progress in promoting sustainable village organizations without this in-house facility should be carefully monitored so that lessons can be learned.

6.10 Several other Pakistan Government projects, funded by the World Bank, Asian Development Bank and IFAD, have borrowed principles or working methods of AKRSP, notably the organization of VOs or their equivalent as the primary means of achieving participation of the target population. In many of these cases, services are largely provided by government departments with less reliance on self-help. Nevertheless, even these partial approaches represent improvements in the organization of villagers and are manifestly a contribution of the AKRSP approach. However, experience has shown that it should not be taken for granted that line agency staff experienced in supply-driven, top-down development will readily adapt to a participatory mode of operation. Assisting communities to organize and then attempting to respond to their articulated needs are very different from the traditional mode of operation. The more recent of these projects have accepted the advantages of having NGOs or specialized consultants to facilitate village organization.

6.11 Beyond Pakistan, the Aga Khan Foundation supports programs similar in purpose to AKRSP in India (Gujarat) and Bangladesh (BRAC). These programs provide additional places for experimentation and, since they are in close association with AKRSP, for dissemination of AKRSP experience, as well as their own.

6.12 But, in addition to these there are major rural development initiatives in all countries in South Asia. Some of the best established are in Sri Lanka where over a dozen rural development programs have endeavored to deliver development benefits with varying degrees of participation. There is also a long tradition of savings and credit organizations. Similarly, Bangladesh has a large number of development organizations—government and NGO, local and international—working on poverty alleviation programs. India has had many such programs over the past 50 years, and these are now getting a measure of government support to help NGOs provide services at the village level. New government initiatives have recently been taken to promote development at village level throughout the islands of the Maldives. And in Nepal, where over the years there have been many localized initiatives, there is now a government move to promote decentralization and social mobilization.

6.13 In each of these countries the UNDP has begun a pilot project under a program of "Institutional Development at the Grassroots for Poverty Alleviation." The pilot projects vary from one country to another but they are all built around the principles of community organization, savings, and skill upgrading, albeit in varying balance. The pilot program in Nepal most resembles the AKRSP program in its overall strategy and *modus operandi*. The UNDP program is being promoted by Mr. Shoaib Sultan Khan, formerly of AKRSP, with the assistance of other former AKRSP staff. In this way the transfer of AKRSP principles and working methods to other programs in other countries is being actively pursued.

6.14 In summary, the replicability of AKRSP experience is proven by the fact that it is being actively used in other programs in, and beyond, Pakistan. The initiatives through which this is being achieved, and the efforts of AKRSP staff, past and present, to assist in this learning process can only be welcomed and applauded. However, inquiry of the Monitoring and Evaluation section of AKRSP's MER reveals that most studies undertaken in the past five years have been instigated by the donors, individually or collectively. Responding to such results-oriented clients has led to a considerable body of performance and outcome information which has facilitated the preparation of this report. This responsiveness has, unfortunately, contributed to little reporting of a more general "lesson learning" nature within AKRSP which could influence the overall Program and be useful for other development schemes. In the interests of the broader impact of AKRSP this should be corrected.

7. Future Direction and Outlook

7.1 Since the previous OED evaluation of AKRSP in 1989, the core activities have been continued while the Program area has expanded. Some positive changes have occurred in the Program which address many of the issues raised in 1989, and a favorable development has been a greater awareness within government of the validity and usefulness of VOs as participants in development. However, in other areas, such as improvement in the effectiveness of the NRM program, advances have been smaller, and it was only in recent years that the suggested attention to developing a longer-term strategy for AKRSP and the VO instrument was fully heeded.

7.2 In the years immediately subsequent to the 1989 evaluation there appears to have been some reticence by AKRSP to undertake the critical self-analysis required to redefine its role in the evolving local economic and social environment. However, since 1992 a prolonged process of review and analysis has taken place so that a strategy and program for the next phase of AKRSP are emerging. This process has not been without costs, especially in the form of uncertainty amongst staff concerning their future in AKRSP (para. 5.2), but has led to proposals which appear to respond to most of the concerns expressed in the many significant reviews in recent years by staff, consultants and donor representatives. As pointed out earlier in this report and below, however, there are some aspects of the Program which should respond favorably to further adjustment.

The Strategy

7.3 The primary objective of enhancing the capacity of the people in the Northern Areas and Chitral to improve their quality of life has not changed. Nor has the focus shifted from improving the size and productivity of the agricultural resource base working through VOs. However, the population is increasingly demanding social services and investment in health and education, and the strategy responds to this by facilitating linkages between VOs and other providers. It also responds to the changing socioeconomic environment. With some individual exceptions, the benefits accrued through increase in the agricultural resource base and diversification of land use have not been sufficient to change the trend to increasing emphasis on off-farm income; this is associated with rapid population growth and the limited size of usable landholding. The off-farm contribution and the progressive opening of the communication infrastructure with neighboring areas have led to an expansion of AKRSP's activities into promoting nonagricultural investments to allow the local population to more fully participate in economic development; this trend is consolidated in the new strategy. The need for further economic infrastructural development is also catered for, and an attempt to enhance the planning capacity for this development is included.

7.4 The strategy would result in some activities being delegated to successor institutions in the form of NRDB and the ESC, which would maintain close linkages with AKRSP. AKRSP itself would be consolidated into a support function to provide services which are required to develop local capabilities, and an implementation function in areas where AKRSP can offer significant comparative advantage. In both its support and implementation functions, AKRSP would use its established capacity to link communities organized in VO/WOs with other providers of services, investments and funds.

7.5 The evaluation supports this overall approach, which is consistent with an acceptance that the GOP is the entity which is likely to be the major funder of basic infrastructure and social service investment in the Northern Region. External donors and large NGOs like AKRSP can assist in financing development. However, the most valuable contribution that AKRSP can make to sustainable development is to ensure that there is a community-level institutional and human resource capacity to enable effective and equitable use of development funds from whatever source.

7.6 The SDC report notes that an appropriate regional development strategy must consider equity issues and the sustainability of resources use, along with the encouragement of individual entrepreneurship. The evaluation mission believes that a more overt categorization of communities and household types to reflect the diversity existing within the region could help to ensure that the Program interventions are responsive to these multiple objectives.

7.7 The diversity associated with climate has traditionally oriented AKRSP's agricultural programs into single, transitional and double crop zones. Other factors in locational diversity are accessibility to markets, resource endowments in irrigated land resource and, to a lesser extent, utilizable grazing land per household. Good access not only widens opportunities for input supply, product sales and business opportunities, but also for nonagricultural employment. Those communities with an abundance of usable land resources have a different set of opportunities from those subject to scarcity. Rating communities on the extent to which social and religious norms allow active involvement of women in non-household activities could also be a useful classification.

7.8 The development investments undertaken in a community with AKRSP support have been derived from a dialogue process which articulates, and is responsive to, the demands of villagers. This is legitimate, and has no doubt contributed significantly to the success of the Program. However, the knowledge that AKRSP can accumulate on local and national demographic and economic trends and opportunities is an important asset it can contribute to its partnership with VO/WOs. The type of categorization suggested above can identify the bounds and potential of different types of sustainable development interventions for various types of communities. It can offer guidance on priorities which should be considered in dialogues with communities, and in planning the various implementation and facilitative programs of AKRSP, as well as being a useful framework for staff orientation and training. It should be possible to categorize villages largely on the basis of data already available on existing benchmark surveys and IMI studies, although these may have to be supplemented by some rapid survey techniques in areas of poor coverage.

7.9 Within communities, an appreciation of the resource and socioeconomic characteristics of different types of household is especially important to guide the development and dissemination of relevant technology (paras. 3.124-3.132), and the programming of service interventions to be both effective and equitable. The benchmark surveys and the completed ad hoc household studies, complemented by the information generated by the pilot participatory planning and appraisal exercises being undertaken in each of the regions in 1995, should provide sufficient data to characterize the common types of household systems. This would assist in program planning, in staff orientation and also as a framework for the training of village specialists.

Village Organizations

7.10 The objective of having mature VOs with capable management which is responsive to the needs of all community members has legitimately been maintained by AKRSP. Continuation of the policy of training selected members in village management and bookkeeping/accounting will undoubtedly contribute to a general improvement in the capability of VOs to act effectively on behalf of members with outside entities as well as to efficiently manage internal VO affairs. However, AKRSP needs to keep in mind that there is a large variation in the maturity of VOs and in management capability. The plan to develop a master manager class by giving special training to more capable managers is justified in order to demonstrate how VOs can effectively participate in development planning, not only in their own community but in inter-village planning and investment. This should not, however, be allowed to detract from the program to improve the management capacity of all VOs. It would also be very desirable to increase the depth of management capability within VOs by having a program of courses for potential leaders (other than existing managers) who are literate.

7.11 Even with adequately trained management, as pointed out in Chapter 3 (paras. 3.5-3.8), the VOs are only likely to persist if individual households appreciate that there are significant advantages in their continued participation. Further investment through some form of PPI could provide a temporary stimulus (paras. 3.53-3.55), but more permanent benefits need to be developed to ensure sustainability.

7.12 Accessibility to credit and savings services can provide the incentive to continue participation, but this is a relatively narrow area of interest. The major opportunity lies in having members see their VO as an entity which can act on their behalf to access the services and investments available through government and nongovernment programs, and allow them to participate in their own development. This supports the emphasis being given by AKRSP to developing effective linkages between VOs and outside entities, which capitalizes on the current favorable perception of VOs as representatives of communities and as responsible cooperators in development.

7.13 Despite the obvious benefits in AKRSP's adopting a more active catalytic or facilitative role, it should not be assumed that this will evolve without difficulty. AKRSP will need to put considerable resources into interacting with external agencies and VO management to ensure that model agreements are developed which clearly define the expected contributions of each party within specific periods, and the responsibilities for operation and maintenance of any facility created by the joint investment. Final ownership should be indicated, and enforceable penalties for delinquency by any party should be considered. As initial ventures are likely to be of a pilot nature, these should be carefully monitored.

7.14 Joint operations of this nature, based on voluntary participation of communities through their VOs with external agencies, can only expect to be successful if each cooperating party sees advantages in the arrangement. This will be particularly so for government agencies and elected officials. While a joint program must have the support of very senior officials to be initiated, this may not guarantee a favorable attitude amongst managers and staff at the operational level. Government agencies usually operate in a supply-driven program environment, which does not involve significant consultation with beneficiaries. AKRSP could provide an extremely useful role not only in helping to design and in monitoring effective processes, but also in educating the

staff of government agencies in the institutional aspects of VOs and in how to effectively interact with them (paras. 3.25, 3.33 and 5.16).

7.15 It is possible, and even likely, that more GOP development funds will be channeled through elected local officials. It will be imperative that VOs not be perceived as competition by these officials, but rather as instruments to increase the effectiveness and leverage of their development budgets. Promoting the VOs as independent institutions which solely represent the collective views of their membership should assist in alleviating any unwarranted concerns. Despite this, AKRSP will be seen as the original sponsoring body for the VOs. Consequently, the more AKRSP can create the image that it is a nonpolitical, nonsectarian support organization, the better for the role of VOs as cooperators in government-funded development.

7.16 It can be expected that many future infrastructural projects, with or without government funding, will require the cooperation of a number of villages, as will any programs which involve action on common property resources above the irrigation channels. The "cluster" concept has not proven easy to manage in the past, largely due to individual communities considering that they lost control of decision-making. AKRSP will have to provide guidance in the development of workable organizational models. A model which shows promise is that which requires ratification by VO membership of any decisions taken by their representatives in the VO cluster organization created for the cooperative endeavor. The creation of a semi-permanent, formal organization with a legal structure for governance, representing the VOs in part of a valley or a watershed, will likely be a later development as more VOs mature and can have greater confidence in delegating their voting rights to selected community representatives. Eventually, this type of organizational development could lead to a formal apex institution in each district or in a region. However, it is likely in the foreseeable future that an established entity such as AKRSP will be needed to maximize the credibility and recognition which should be given to individual VOs and clusters of VOs.

7.17 Similarly there is merit in the argument that VOs be kept as informal organizations as long as possible; this enables members to perceive themselves as fully participating in and controlling their own organization. However it will likely be necessary to introduce a legal or quasi-legal structure of some kind to enable VOs to fully capitalize on potential development assistance and to maximize their benefits from the proposed credit system. AKRSP is networking with other NGOs that are addressing this issue in Pakistan.

Infrastructural Development

7.18 There is a general awareness of the substantial unrealized potential for economic development which can be attained through further investment infrastructure such as irrigation channels, link roads, bridges or hydels, on a village or multi-village scale. There is an especially big potential to bring more land into irrigated agriculture in Baltistan, where the average on-farm and off-farm income per household is less than in other regions. In the formulation of future strategy, emphasis has been on physical planning and participation by AKRSP to ensure the desirable engineering and organizational aspects of the project, but "without incurring all the (non-beneficiary) capital costs associated with the project."

7.19 This is a logical evolution of the development process which was initiated through VOs and PPIs; infrastructure would be looked at in its own right, rather than as a PPI used as an incentive to install the VO. In some cases, such as in investment in hydels, it is likely that

AKRSP intervention in planning, design and engineering supervision will suffice, with investment funding being provided by beneficiaries in cash, in kind or as borrowed funds. However, in more costly, slower returning investments, or in projects with a high "common good" element in which a specific share is not easily attributed to each group of beneficiaries, it is likely that a grant element will also be necessary to ensure viability. Government development programs, and NGO or other donor-financed projects will hopefully provide a large part of these funds. But in many instances a capacity for AKRSP to make a grant contribution as part of the funding package should have advantages in improving implementation efficiency by its being a participating partner, and in allowing it to encourage more equitable development investment. Such participation should not preclude AKRSP from receiving payment for service contracts from other parties in design or supervision.

7.20 Although coverage of communities in the Program area is substantial and inequity in distribution of PPI investments between communities does not appear to be a significant problem, there are areas in Chitral and Baltistan which have still not directly benefited from AKRSP (paras. 2.36-2.38) activities, largely due to extremely difficult access. In adherence to the principle of providing equitable opportunity, it would be worthwhile to review the circumstances of these isolated communities to ascertain if there are realistic economic development opportunities. This would be consistent with the expanded role for PIES in the broader aspects of development planning.

NRM

7.21 Available data indicate that AKRSP has had a significant impact in the Program area in vegetable, fruit, potato, forestry, and poultry production, through its services and technology packages, and very likely also in animal health. However, many of these programs still have deficiencies which limit their impact. The programs dealing with cereals and the animal nutrition/fodder program have had poorer results, despite the key roles these activities play in the typical household production systems.

7.22 Some ad hoc evaluators have specified lack of adequate follow-up and technical support and insufficient attention to marketing as explanations for adoption or performance limitations. Others, however, have questioned the appropriateness of the technology package itself; the contention is that if a package is not relevant to the circumstances of the individual households, it will not be adopted. This observation is not new, and also was an issue highlighted in the 1989 OED review.

7.23 As pointed out in Chapter 3 (paras. 3.125-3.131), the evaluation team believes that the persistence of this problem is linked to insufficient attention to developing a thorough understanding of the various types of household farming systems. This knowledge should not only guide the development or acquisition of technology and the formulation of packages, but also influence the dialogues with communities to arrive at appropriate interventions.

7.24 The physical integration of the technical sections into NRM, and the attempt to promote more responsiveness to local needs through the FMU concept should encourage a farming system perspective. However, on their own, these measures are unlikely to overcome excessive reliance on standard packages and target-driven programs to meet farmers' technological needs. Having satisfactory arrangements to ensure that appropriate technology, once identified, is

transferred to target groups is important, but the most essential element is to produce the relevant technology, and package and present it so that it can be easily seen as relevant.

7.25 An improved process for the development or acquisition of relevant technology will involve a number of key elements. These are:

- The mobilization of farmers' knowledge of their own circumstances, including current technology and constraints on income
- Staff who are able to recognize particular farming systems, and to understand how household priorities and farmer strategies to achieve food security and income affect decisions, within the constraints of the household resource base and cultural and social obligations
- Identification of production aspects which have a potential for improvement to better meet priority needs of the household
- Accessing all available sources of technological innovation to acquire relevant technology
- Evaluation of identified technologies to determine their apparent relevance to the major categories of farming systems
- Direct involvement of farmers in the process of identifying and adapting technological improvements they see as relevant to the particular circumstances of their local VO/WOs
- Ensuring that identified and adapted technologies are effectively disseminated and supported by the supply of inputs needed to adopt and implement them.

7.26 The principle which pervades placing VO/WOs in categories, and indeed all the above elements, is finding technology for small farmers through the use of a systems perspective. The approach also implies a new attitude to experimentation, with farmers having a much greater responsibility for identifying and evaluating new technologies. Recent experience is showing that farmers can often select for the characteristics most suited to their own local conditions much more efficiently than scientists can (Sperling et al 1993).

7.27 Research has not absorbed a large amount of AKRSP resources in the past. While cooperation with PARC and NARC continues, these public sector institutions still suffer from severe funding constraints and also from the lack of an effective interface with small farmers. With limited support for the expansion of activities within AKRSP, it may be difficult to command the resources needed to modify the technology development process. Nevertheless, the evaluation team believes that the need is sufficient to warrant a concerted effort either to divert resources from current NRM activities or to mobilize support for a specially funded technology development program. This would require a proposal which quantifies and justifies the resource use, and which includes strong linkages with the national research institutes (PARC/NARC) and their local stations to enhance the prospects for its long-term sustainability. There are international NGOs specializing in this type of participatory research (e.g., ILEIA in the Netherlands) who could be interested in cooperating in such a proposal. The International Agricultural Research Centers with experience in research with small farmers would be an

alternative source. Existing or new donors to AKRSP may agree to provide funding for a specific scheme.

7.28 On the assumption that improvement in the technology development process is considered essential, the outline of a scheme which should meet requirements is elaborated in Annex 2. In the scheme the maximum use is made of experienced farmers (as has been traditionally done in the technology transfer process in AKRSP through village specialists and master trainers), but as outlined it would also require one senior and as many as nine junior professional staff to be dedicated to research. This is recognized as ambitious considering the difficulties incurred to date in attracting and retaining suitable technical professionals for NRM, especially in Chitral and Baltistan. However, there is interest within PARC in developing a sound interface with small farmers and this presents an opportunity for AKRSP to be a role model for Pakistan in adaptive agricultural research as it has been in social organization. If the scheme has prestige as an innovative and highly professional adaptive research project, the staffing problem may be overcome.

Human Resource Development

7.29 AKRSP policies for development of staff capabilities are generally appropriate. The scholarship program to improve the qualifications of locally recruited professionals should be continued so as to increase the number of locals in management positions.

7.30 The Program is based on the principle of participatory development, and staff are generally very conscious of this in their interaction with communities. However, this report has noted that a tendency has developed to offer standard solutions to problems. This is evident in the relatively uniform outcome of the dialogues with villages with respect to packages and services offered, in the limited adoption of a number of improvement packages, and in the tendency towards a supply-driven character in the forestry program. This suggests that there is a need to renew the Program commitment to not only interact with communities and households but also to be responsive to their particular needs.

7.31 The recent improved dialogue exercise in Astore which is being repeated in all districts in 1995 should instill a greater awareness in staff of the importance of understanding the needs of beneficiaries, but it does not appear to have encouraged initiative in providing responses to these needs. The Program should be in a position to not only listen but also to constructively contribute to the dialogue. The limiting constraints for different groups of households should not only be identified, but applicable solutions (where feasible) should be developed with Program staff contributing from an array of possible measures, each appropriate to particular circumstances.

7.32 In NRM, if the recommended increased emphasis on developing a farming or production system perspective is carried through in staff training, this should have positive effects in increasing the responsiveness of the Program. The same principle needs to be instilled in all AKRSP units.

7.33 The emphasis on training community members is especially commendable, and has been responsive to evolving circumstances, especially in the area of marketing and enterprise development. The move to give more emphasis to master trainers (paras. 3.64 and 3.88) is appropriate as, inter alia, this will provide the opportunity to give them a greater depth of

training/education in their specializations. This should increase their effectiveness in being able to be more responsive to the particular needs of their colleagues rather than offering only standard treatments. The latter appears to have been a characteristic of the village technical specialist program and has likely contributed to the variable results obtained. Nevertheless, it may be possible to improve the training at the specialist level by introducing simple case studies which demonstrate different responses for a limited number of different but commonly occurring circumstances.

7.34 In management and accounting, there is a need to increase the depth of management capacity in communities by giving training to potential leaders. The case for more village accountants is elaborated below in discussion of requirements for the proposed banking system (para. 7.45). Women in communities also have special training needs as noted below (paras. 7.58 - 7.61).

Savings and Credit

7.35 AKRSP's history of relatively good performance in savings and credit operations creates a sound platform for growth and innovation. It also can be improved. The future direction that is most useful can be described in general terms as the professionalization of financial intermediation, which is made possible by the experience and skills accumulated by the Program and its beneficiaries since 1983.

7.36 Professionalization is basically an exercise in increasing specialization. Areas where professionalization could be most helpful include a shift in strategic focus from meeting credit needs to creating debt capacity, building financial information systems and introducing other measures to control and manage risk, improving operations support and training at the VO/WO level and increasing controls and other internal prudential oversight.

7.37 Specific institutional issues are how NRDB would interact with VO/WOs, which constitute the fundamental basis for its market niche, and how it can deploy its strength based on a unique financial structure. The major issue for ESC is how to manage and contain the risks that its founders expect it to embrace.

7.38 *Strategic focus:* By taking the leap to form a new bank, AKRSP has made the decision to seek sustainable solutions that have evolved from its experimentation and refinement of its activities for more than 10 years. A change in objective will assist the quest for sustainability, and this consists of a shift in strategic focus from meeting credit needs to creating debt capacity. Debt capacity is the amount of credit that a borrower can command on a sustainable basis.

7.39 The relevant time horizon for determining sustainability of a credit relationship depends on the nature of the borrower's activities. For an industrial concern the period could be the length of a business cycle. For a farm it could be from planting to harvest or from bad year to bad year, or from an excellent year to the next excellent year. The key to ascertaining debt capacity is to estimate the borrower's repayment capacity in a bad year or other adverse situation, after allowing for "senior claims" that the borrower regards as more important than paying the lender. These include continuation of a business, maintaining a certain standard of living for a family, and socially important expenditures as determined by the local culture, for example. Loan size would then be a function of this risk-adjusted repayment capacity, more specifically the amount of risk that the lender is willing to take in the adverse situation. This risk can be measured by the

cost of arrears on the lender's books and bad debt losses. Lenders willing to take larger risks will make larger loans, other things being equal, than lenders with less interest in risk-bearing.

7.40 Using realistic projections of cash flow to determine loan size contrasts with the conventional approach that relates loan size to the incremental cost of an investment to be undertaken by a loan applicant. Many lenders arbitrarily make the decision regarding the proportion of the investment to be financed by debt, such as 80 percent, 90 percent or 100 percent. The conventional approach often leads to high proportions of debt financing and correspondingly high debt service burdens. Relatively large debt service obligations can easily lead to delinquencies and bad debt losses when the borrower encounters adversity. This danger is most apparent in AKRSP's microenterprise (MECP) loan portfolio. It is least apparent in its traditional fertilizer loans because the costs of fertilizer are small relative to the borrower's cash flow, and to the value of the harvest or the amount of the harvest that is sold.

7.41 Basing loan size on cash flow projections also assists in determining realistic repayment schedules. AKRSP has relied largely on single maturity instruments, with amounts falling due in a lump sum. These indeed have a logic in agricultural lending because funds are clearly available just after harvest and may be unavailable at most other times. Single maturities keep transaction costs low, but may fail to capitalize on the periodic meetings of VO/WOs as occasions for installment payments, or to recognize cash flow patterns in many microenterprise activities.

7.42 Attention to borrowers' cash flows, and to generation and application of the information required to lend realistically, can build strong relationships that are valuable to clients. Borrowers are less likely to default when they value their relationship with their creditor. The debt capacity approach is based on measures to control and manage risk, beginning with simple farm, enterprise or firm models using adjustments for reasonably expected adversity. Experience with such models can provide insights into real risks, i.e., the things that go wrong, their causes and ways to minimize their adverse impact. Responses to risk could range from the promotion of savings accounts and savings plans as hedges or cushions against risk, to agricultural and business training to enable farmers and other entrepreneurs to evaluate risks and respond to them effectively, to other ways to increase incomes such as has been done with apricot processing, for example.

7.43 *Financial information systems:* Building financial information systems can help to control risk. A simple collection performance measure, for example, would be to compare collections of debt service payments to amounts of principal and interest falling due. This organizes data in such a way that early warnings are provided which are superior to those produced by current procedures that record how long it takes to recover principal amounts of loans issued during a given period. The latter is a useful measure and should be retained, but it could usefully be supplemented by collection ratios.

7.44 Financial information systems were not explored in technical detail by the evaluation team. The formation of a new bank from AKRSP savings and credit activities, however, provides a natural opportunity to develop new systems, including those incorporated in hardware and software packages available in the market. A critical decision in the design of NRDB is the level at which VO/WOCP transactions are analyzed, summarized and used for management decisions. These transactions are the primary source of information about credit and savings behavior that are currently available to AKRSP. They should be mined to ascertain patterns and to create individual credit and savings histories for VO/WO members. At the most elementary level, for

example, someone who deposits Rs.20 regularly at twice-monthly VO meetings can probably handle a loan that requires twice-monthly repayments of Rs. 20 each.

7.45 *Operations support and training:* Whatever division of labor is used between NRDB and VO/WOs, there are many opportunities to improve operations support and training at the VO/WO level. Training would have to be more detailed, intense and widespread if the VO/WOs are to act as self-contained financial intermediaries under the umbrella of NRDB, largely responsible for their own credit decisions, funding and record keeping. Even if most of these functions were assumed by NRDB directly, there will be a large requirement for more accountants and credit officers—probably far more, by an order of several times—than projected in the staffing plans of NRDB or AKRSP. If a decentralized structure is established, NRDB will have a huge prudential oversight responsibility in its dealings with VO/WOs.

7.46 *Transparency:* Increasing the number of these professional staff will be important for the maintenance of controls and for the more systematic establishment of internal regulation or prudential oversight. Transparency has always been a hallmark of AKRSP savings and credit operations, but these should be further demystified for more people, so that the system generates increased confidence among clients and potential clients and encourages disciplined repayment. AKRSP is also well placed to be at the forefront of financial disclosure by keeping books that realistically reflect the actual condition of NRDB and its portfolio in a timely manner. It may be in a position to be a leader in this regard among banks in Pakistan and also among donor-supported lenders to the poor. A good starting point would be periodic calculations of break-even interest rates equal to the opportunity cost of capital, using the Subsidy Dependence Index, and the creation of reserves, equal to expected loss experience, at the time loans are issued.

7.47 *NRDB's unique financial structure* gives it the financial strength to explore several alternatives in its outreach to clients. One of these is to undertake more lending than indicated by its projections. A means of doing this would be to lend at longer terms; a trend in this direction is found in the projections. This would increase the risk in its portfolio, because risk is created by longer-term commitments. The strategic basis for taking greater risk is superior market information that permits the lender to build relationships with clients that clients value immensely, and therefore want to protect by abiding by loan contracts. Superior information systems would permit NRDB profitably to leverage its financial strength into risk.

7.48 A second possibility would be to subsidize lending rates beyond projected levels, which are based primarily on the low cost of NRDB's funding. This type of strategy, even when limited to subsidizing social infrastructure lending, can create expectations that are hard to contain, while creating incentives to deal with losses in a nontransparent manner. Subsidized lending rates can set an organizational tone that works against the important core values required for commercially successful banking. It can also promote the trend toward deteriorating collection performance that appears to characterize so many development finance activities.

7.49 Subsidized funding easily attracts "rent seeking" by individuals or organizations that want cheap money, and that have the political or organizational leverage to get concessional funds. These are usually not the most deserving or those for whom the subsidies were originally intended. Cheap funds create a false demand for loans, which can greatly exceed the true demand consisting of bankable projects backed by credible sponsors. For social infrastructure projects with a large "common good" element, the inclusion of a transparent grant element in the

investment package to complement and enable a loan on regular terms may be more appropriate than use of a special subsidized rate.

7.50 Finally, NRDB could choose to subsidize savings through attractive interest rates and the staff costs required to operate an aggressive savings Program in a relatively remote geographical area. VO/WOCP appears to have captured relatively little of members' savings. A relatively small subsidy may be required to support aggressive savings mobilization because the volume of savings, to judge from development finance experiences elsewhere, is probably larger than the amount that can be prudently loaned in the Program area. Since all VO/WO members save, and because others in the area also save, a subsidy for savings would benefit the greatest possible number of people.

7.51 Accumulation of savings, continued attention to VO/WOs as centerpieces of financial intermediation and community development, and a certain amount of decentralization of savings and of credit decisions could facilitate local infrastructure investment directly by VO/WOs or their members. This initiative could to some degree substitute for subsidized lending for social infrastructure, which appears to be the most problematic activity envisaged for NRDB.

7.52 *Venture capital risks and their management:* ESC has the usual feature of donor-supported term lenders, which is inability to lend profitably for activities that are assumed to have tremendous social and catalytic benefits. However, it is unusual in that its business projections clearly show that it is unlikely to be profitable, a tribute to AKRSP's dedication to transparency. It also has a number of other features that could permit it to interact effectively with local markets and entrepreneurs. These include market development, research and training, all of which can be exceedingly challenging if the objective is to create commercially viable activities.

7.53 If failure to repay, for any reason, is material, widely witnessed and not effectively dealt with, some of those who are in a position to repay may decide to attempt to evade repayment. In this way default culture spreads, often beyond the institution primarily responsible for its creation. One way of avoiding the formation of this culture is to ensure that borrowers lose more than lenders when loans are not repaid. Another means of reducing the risks that ESC would be regarded as a soft lender would be for ESC to act as a broker or syndicate leader for infrastructure finance raised from multiple sources, including citizens directly and also from VO/WOs with funds to invest in instruments similar to the municipal bonds so widely used in the United States.

7.54 Because of these containment problems, NRDB's lending for social infrastructure might usefully be transferred to ESC. The expected loan purposes and loss rates on NRDB's social infrastructure lending more closely resemble ESC's portfolio than they do NRDB's other activities, although their target clientele is more similar to NRDB's customer base than to ESC's. This transfer would enable NRDB to be entirely commercial, slowing or reversing any tendencies for villagers and others to project ESC's tolerance of losses onto NRDB.

The Gender Issue

7.55 The WO has proved to be an accepted and viable forum for village women's participation in the development process in the Northern Region, and it should be strengthened in the next phase of AKRSP's work. While requests from new communities should be met, AKRSP

should now focus upon quality of interaction with the existing WOs, along with encouraging more household coverage in each community.

7.56 Improvement in staff monitoring and follow-up of the WOs is called for, and more flexible implementation of various packages is also necessary. This entails more contact time with the specific villages, and more in-depth understanding of community and household dynamics.

7.57 AKRSP's activities over the years in the area of appropriate technology should be carefully reviewed. The introduction of viable labor-saving technology which is accepted by the local populace is crucial—especially for women—but has not been very successful to date. Systems of local knowledge in each specific technology type should be examined, along with previous failures in AKRSP's activities, and new pilots should be fostered which entail careful training, monitoring, and follow-up.

7.58 With AKRSP's plans for future Program activities of a more sophisticated financial nature, it will be important that women are not left out of the process. This calls for intensive training of selected promising women in additional entrepreneurial skills. Training in planning, management, and marketing is sorely lacking among many WOs. Should the emerging credit institutional arrangements mean that women entrepreneurs are disadvantaged because of their inherent cultural and educational constraints, a targeted credit line could be instituted to facilitate their business activities.

7.59 At the other end of the continuum of WO membership are the vulnerable women of poor households, which may often be female-headed. These women, who are most in need of assistance, are often left out of WO activities. Special subprojects should be developed for these individuals. The SO must come to understand their needs and aspirations, along with identifying and encouraging the participation of other poor women in the community who may not even be members of the WO.

7.60 Self-sufficiency of WOs must continue to be fostered; although change is occurring, at present most WOs are heavily dependent upon AKRSP staff and local VOs. The low female literacy rate is indeed a drawback. As more literate women join WOs, the situation will improve. However, in the interim, an emphasis on training and the development of entrepreneurial skills among women will improve self-sufficiency. The successful linking of WOs with other agencies providing social sector investments and services will also encourage self-confidence.

7.61 The training of female accountants and managers is a positive development and should be encouraged. Training of production package specialists and master trainers should also be intensified and improved. More monitoring and follow-up of these individuals is also necessary in order to improve their performance.

7.62 With the necessity to improve the frequency and quality of AKRSP staff contact with existing WOs, care should be taken that the WO/SOs and other field staff are not assigned an overwhelming number of tasks. Decentralization of AKRSP work should provide the opportunity for staff to reach communities more frequently and in a more coordinated manner.

7.63 In MER's future research, the following topics pertaining to women's lifestyles and participation should also be explored to enable responsive programming:

- women's utilization of credit
- functioning of female-headed households
- household energy strategies
- impact of hydels upon women's workload.

7.64 The process of integration of gender-related staff and activities into the mainstream Program should be continued, but not without careful planning and constant evaluation of this complex process. The role of the WID Monitors in each region will be especially important in monitoring the effects of the integration process. Additional gender-related workshops should be organized to encourage open discussion of difficulties which will inevitably occur.

Management, Organization and Governance

7.65 The new management of AKRSP has already demonstrated a capacity to address management, personnel and operational issues effectively. However, recent instability in the organization, and expectations of staff reductions and changes as the emerging strategy is implemented, have led to low staff morale which must be affecting performance (paras. 5.2 and 5.3). The transition into the next phase of the Program will require very careful personnel management. Intensive communication between personnel at all levels in the institution will be essential if the Program is to return to its former levels of efficiency and productivity. In particular, effects of the decentralization process (FMU) will have to be carefully monitored, and may require significant adjustments to respond to evolving circumstances (para. 5.7).

7.66 As the NRDB is put into place, an important decision will have to be made on the role of SOs. This particularly concerns the extent to which AKRSP SO staff can be expected to undertake credit activities at the village level, where they would fit in the institutional arrangements, and how the non-credit functions of SOs would be adequately catered for. Similarly, the relationship between EDD and the proposed ESC will need definition.

7.67 AKRSP has adopted an appropriate strategy in attempting to expand development and social service investments in the Northern Region by acting as facilitator between government and nongovernment organizations and VO/WOs. To do this effectively, it will have to maintain a reputation as an unbiased, nonsectarian, development support institution. A completely transparent structure and relationship between its owners, its Board and its management will support its position. The emergence of the two new institutions, NRDB and ESC, make this transparency even more essential, as these will involve control over considerable financial resources in the region.

7.68 MER has accumulated extensive evaluation data especially over the last five years, which enables management to make more informed decisions on Program strategy and content. However, this wealth of information is not being properly utilized. Of particular importance is the household income and VO/WO performance data. This can make a very useful contribution to developing greater understanding of the circumstances of different types of households in the various parts of the Program area, which is necessary to develop a total household perspective when considering project interventions. Categorization and description of the population should feed into most types of training, and into the formulation of AKRSP's longer-term and annual programs (paras. 7.6-7.9).

7.69 MER's anticipated increased role in training programs and interactions with other Program sections will make more demands on its resources. It would appear appropriate that MER should develop and adhere to an annual plan of activities based on defined priorities. This would provide a basis for refusal to respond to the many ad hoc requests it receives for data collation and analysis, should the latter not represent a legitimate use of scarce resources. Within its evaluation function, there is a need for MER to extract broader "lessons learned" which will be of assistance to AKRSP's management, Board and other rural development schemes.

Table A1.1
Achievements in Program Areas
December 1982-December 1994

<i>Program Area</i>	<i>Gilgit*</i>	<i>Chitral</i>	<i>Baltistan</i>	<i>Program Area</i>
I. Social Organization				
Total No. of Organizations	1,055	775	772	2,602
Village Organizations	623	581	630	1,834
Women Organizations	432	194	142	768
Total Number of Members	43,634	28,742	28,928	101,304
Village Organizations	28,018	22,601	24,596	75,215
Women Organizations	15,616	6,141	4,332	26,089
Total Savings (Rs. Millions)	128.95	49.96	30.69	209.60
Village Organizations	102.28	44.56	29.80	176.64
Women Organizations	26.67	5.40	0.89	32.96
II. Women in Development				
Credit disbursed**	25.02	1.75	0.06	26.83
Group loans	528	48	3	579
Beneficiary households	21,199	1,505	89	22,793
WO Specialists	1,680	1,163	650	3,493
Participants in Demonstrations	4,796	745	1,686	7,227
III. Productive Infrastructure and Engineering Services				
PPIs initiated	402	560	539	1,501
Beneficiary households	35,429	25,754	24,006	85,189
Cost of initiated PPIs (mil. Rs.)	80.58	126.89	77.53	285.00
PPIs completed	331	449	424	1,204
Physical progress (%)	82	80	79	79
IV. Agriculture				
Improved seeds (Kg.)	146,227	76,915	120,831	343,973
Total fruit trees (million)	1.54	0.44	0.45	2.43
VO/WO Agriculture Specialists	1,596	1,278	1,061	3,935

* Includes Astore

** Includes short-term, medium-term and WO credit

Source: AKRSP 1994 Annual Review.

Table A1.2
Program Area Social Data: Gilgit, Chitral, Baltistan and Astore Regions, End-1994

	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>	<i>Astore</i>	<i>Total</i>
Area (sq. km)	28,500	14,850	25,850	5,000	74,200
Population (1994 est)	343,400	314,800	336,900	70,800	1,065,900
Population (urban)	73,300	39,400	47,800	0	160,500
Population (rural)	270,100	275,400	289,100	70,800	905,400
Average Household size	8	8	8	8	8
No. of Rural Households	33,763	34,425	36,138	8,850	113,175
No. of Villages (approx)	306	500	244	99	1,149
Potential VOs	655	750	665	127	2,197
Average Population/VO	524	420	507	557	485
Av. No. of Households/VO	52	46	54	70	52

Source: AKRSP MER, with population, household, and village data based on Northern Areas Census, 1981; data on VOs from AKRSP 1994 Annual Review.

Table A1.3
Cumulative Growth of Village Organizations, 1983-94

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Gilgit												
Number of VOs Established	129	286	312	345	371	409	446	470	494	501	539	559
Membership (households)	12050	23120	24950	26412	26500	26500	26500	26500	26500	26500	26500	24793
Percentage of Total Rural Households												73
(33,762) in VOs in 1994												
Chitral												
Number of VOs Established	49	115	149	168	224	323	370	436	480	522	559	581
Membership (households)	3399	7492	9615	10667	12383	15236	16655	18574	19856	21124	21742	22601
Percentage of Total Rural Households												66
(34,419) in VOs in 1994												
Balistan												
Number of VOs Established	-	-	22	53	159	247	342	446	514	565	597	630
Membership (households)	-	-	1204	2882	6145	9089	12162	17286	20084	22126	23416	24596
Percentage of Total Rural Households												68
(36,134) in VOs in 1994												
Astore												
Number of VOs Established	-	-	-	-	-	-	-	-	-	-	33	64
Membership (households)	-	-	-	-	-	-	-	-	-	-	1642	3225
Percentage of Total Rural Households												36
(8,848) in VOs in 1994												
Total												
Number of VOs Established	178	401	483	566	754	979	1158	1352	1488	1588	1728	1834
Membership (households)	15449	30612	35769	39961	45028	50825	55317	62360	66440	69750	73300	75215
Percentage of Total Rural Households												67
(113,163) in VOs in 1994												

Source: AKRSP 12th Annual Review, 1994 and Table A1.2.

Table A1.4
Social Organization, Membership and Bank Deposits

PROGRAM AREA	Additions During Each Year		
	Year	No. of VOs	Membership
A. Village Organizations			
1983	178	15,449	0.84
1984	223	15,163	5.16
1985	82	5,157	4.55
1986	83	4,192	5.35
1987	188	5,067	15.09
1988	225	5,797	15.52
1989	179	4,492	14.27
1990	194	7,043	14.46
1991	136	4,080	14.12
1992	100	3,310	20.12
1993	140	3,550	32.21
1994	106	1,947	34.95
Total	1,834	75,247	176.64
B. Women's Organizations			
1983	5	302	0.03
1984	76	3,701	0.53
1985	27	1,183	0.76
1986	21	614	0.65
1987	37	1,446	1.38
1988	69	1,913	1.49
1989	57	1,851	2.81
1993	106	3,484	2.71
1990	89	2,527	3.24
1992	84	2,538	4.09
1993	103	3,451	5.30
1994	94	3,079	9.96
Total	768	26,089	32.95

Source: AKRSP 1994 Annual Review.

Table A1.5
Summary Indicators of Progress in Institution Building and Technology Transfer for Women's Programs, by District, 1986-1994

Indicator	Gilgit										Chitral										Baltistan										Azore	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1987	1988	1989	1990	1991	1992	1993	1994	1986	1987	1988	1989	1990	1991	1992	1993	1994	1993	1994	1993	1994		
Organization	129	146	186	215	245	270	306	349	372	20	49	64	104	136	161	178	194	194	-	-	-	13	49	81	104	124	142	23	60			
No. of Women's Organizations	197	318	442	671	846	1105	1393	1818	2611	0.17	0.42	0.92	1.82	2.37	3.31	3.96	5.40	5.40	-	-	-	0.02	0.08	0.18	0.45	0.6	0.88	0.25	0.32			
Savings (cumulative)	15,271	21,781	23,763	31,209	34,531	40,926	45,523	52,092	70,188	8,500	8,571	14,375	17,500	17,426	20,559	22,247	27,835	27,835	-	-	-	1,538	1,633	2,222	4,327	4,839	6,197	10,852	5,333			
Total (Rs. millions)																																
Per Group (Rs.)																																
Credit	0.01	0.49	2.06	2.9	3.07	3.4	3.73	3.93	4.15	0	0	0	0	0	0.003	0.35	0.087	0.087	0	0	0	0	0	0	0.005	0.005	0.005	na	na			
Short-term (Rs. millions)	10	62	185	226	238	267	283	302	313	0	0	0	0	0	1	2	4	4	0	0	0	0	0	0	2	2	2	na	na			
No. of Organizations	0	0.2	0.62	1.00	0.97	1.09	1.27	1.27	1.27	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	na	na			
Medium-term (Rs. millions)	0	5	12	23	23	25	26	26	26	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	na	na	na			
No. of Organizations	-	-	-	0.6	2.04	1.55	5.504	10.399	19.601	-	-	-	-	-	0.184	0.54	1.564	1.564	-	-	-	-	-	-	-	-	-	-	-	-		
WOCP (Rs. millions)	-	-	-	2	25	44	72	118	189	-	-	-	-	-	5	13	43	43	-	-	-	-	-	-	-	-	-	-	-	-		
No. of Organizations																																
Production Packages & Training (no. of groups participating)																																
Vegetable Demonstration	0	23	32	41	0	12	46	1	2	4	8	48	0	50	6	10	3	3	4	12	0	0	0	32	9	0	10	-	-			
Plow/year	6	0	1	12	6	0	10	0	41	4	9	3	3	4	0	0	0	0	0	0	0	0	0	0	1	1	0	38	5			
Nurseries/year	0	0	0	3	59	9	21	28	36	37	2	0	7	64	117	0	0	0	12	13	41	90	29	51	0	11	-	-	-			
Home-based poultry/year	6	23	36	112	15	33	84	37	80	10	17	58	67	171	6	10	3	3	16	25	41	125	62	61	0	59	-	-	-			
Total Production Packages/year																																
Labor-saving Packages (no. of groups participating)	37	52	2	53	0	0	0	0	0	10	0	10	0	0	0	0	0	0	21	16	44	3	8	6	6	0	na	na	na			
Nut-cracking Machines/year	0	0	47	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	15	8	3	3	3	0	na	na	na			
Butter Churners/year	0	30	0	0	0	0	0	0	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	na	na	na			
Improved Stoves/year	0	0	12	0	0	0	0	0	0	10	11	27	8	8	0	0	0	0	1	2	0	3	0	0	0	0	na	na	na			
Spinning Wheels/year	37	82	61	99	0	0	0	0	0	234	21	37	8	8	0	0	0	0	22	28	59	14	11	9	9	0	0	0	0			
Total Labor-saving Packages/year																																

Source: AKRSP MIER

Table A1.6
Productive Physical Infrastructure Projects, by District and by Type
(cumulative)

<i>District/Type of project</i>	<i>Initiated</i>	<i>Completed</i>	<i>%</i>
Gilgit			
Irrigation	244	217	89
Feeder Channels/Pipe Irrigation	205	182	89
Lift Irrigation	7	6	86
Storage reservoir	27	24	89
Syphon irrigation	2	2	100
Sedimentation tank	3	3	100
Channelization of rivers	0	0	0
Transport	74	71	96
Link roads	62	59	95
Bridge/Link Road	9	9	100
Pony tracks	3	3	100
Foot Bridges	0	0	0
Other	42	40	95
Protective works	30	30	100
Boundary walls	2	2	100
Nursery	5	5	100
Hydel scheme	2	1	50
Flour mill	0	0	0
Mud-flow Control	2	1	50
Super Passage	1	1	100
Total	360	328	91
Chitral			
Irrigation	280	216	77
Feeder Channels/Pipe Irrigation	246	191	78
Lift Irrigation	2	2	100
Storage reservoir	19	16	84
Syphone irrigation	9	7	78
Sedimentation tank	1	0	0
Channelization of rivers	3	0	0
Transport	188	158	84
Link roads	164	140	85
Bridge/Link Road	21	16	76
Pony tracks	2	2	100
Foot bridges	1	0	0
Other	92	75	82
Protective works	60	58	97
Boundary walls	0	0	0
Nursery	0	0	0
Hydel scheme	31	16	52
Flour mill	1	1	100
Mud-flow Control	0	0	0
Super Passage	0	0	0
Total	560	449	80
Baltistan			
Irrigation	311	228	73
Feeder Channels/Pipe Irrigation	273	196	72
Lift Irrigation	12	10	83
Storage reservoir	24	22	92
Syphone irrigation	2	0	0
Sedimentation tank	0	0	0
Channelization of rivers	0	0	0
Transport	87	77	89
Link roads	44	37	84
Bridge/Link Road	0	0	0
Pony tracks	36	34	94
Foot bridges	7	6	86
Other	141	119	84
Protective works	69	65	94
Boundary walls	71	53	75
Nursery	0	0	0
Hydel scheme	1	1	100
Flour mill	0	0	0
Mud-flow Control	0	0	0
Super Passage	0	0	0
Total	539	424	79

Table A1.6 (Continued)
Productive Physical Infrastructure Projects, by District and by Type
 (cumulative)

<i>District/Type of project</i>	<i>Initiated</i>	<i>Completed</i>	<i>%</i>
Astore			
Irrigation	27	1	4
Feeder Channels/Pipe Irrigation	26	1	4
Lift Irrigation	0	0	0
Storage reservoir	1	0	0
Syphone irrigation	0	0	0
Sedimentation tank	0	0	0
Channelization of rivers	0	0	0
Transport	10	2	20
Link roads	7	1	14
Bridge/Link Road	3	1	33
Pony tracks	0	0	0
Foot bridges	0	0	0
Other	5	0	0
Protective works	3	0	0
Boundary walls	0	0	0
Nursery	0	0	0
Hydel scheme	2	0	0
Flour mill	0	0	0
Mud-flow Control	0	0	0
Super Passage	0	0	0
Total	42	3	7
Four Districts			
Irrigation	862	662	77
Feeder channels/pipe irrigation	750	570	76
Lift irrigation	21	18	86
Storage reservoir	71	62	87
Syphone irrigation	13	9	69
Sedimentation tank	4	3	75
Channelization of rivers	3	0	0
Transport	359	308	86
Link roads	277	237	86
Bridge/Link Road	33	26	79
Pony tracks	41	39	95
Foot bridges	8	6	75
Other	280	234	84
Protective works	162	153	94
Boundary walls	73	55	75
Nursery	5	5	100
Hydel scheme	36	18	50
Flour mill	1	1	100
Mud-flow Control	2	1	50
Super Passage	1	1	100
Total	1501	1204	80

Source: AKRSP MER. Source: AKRSP MER. Source: AKRSP MER. Source: AKRSP MER. Source: AKRSP MER. Source: AKRSP MER.

Table A1.7
Productive Infrastructure Projects, Costs and Construction Progress, by Type of Project, as of December 1994
(cumulative)

Type of Project	No. of Projects	AKRSP		Disbursement		Completion (a)	
		Rs. '000	grant	Rs. '000	Percent	No.	Percent
Gilgit							
Irrigation	245	45590		41086	90	218	89
Feeder Channels	198	35007		30653	88	177	89
Pipe/Syphon irrig.	9	2399		2419	101	7	78
Lift irrigation	7	2700		2580	96	6	86
Storage reservoirs	27	4745		4765	100	24	89
Sedimentation tank	3	550		480	87	3	100
Tunnel	1	189		189	100	1	100
Channelization of rivers	0	0		0	0	0	0
Transport	74	13727		12984	95	71	96
Link roads	62	11476		10797	94	59	95
Bridge/Link Road	9	1741		1697	97	9	100
Pony tracks	3	510		490	96	3	100
Foot Bridges	0	0		0	0	0	0
Other	42	7397		6757	91	40	95
Protective works	30	5663		5273	93	30	100
Flour mill	0	0		0	0	0	0
Boundary walls	2	190		180	95	2	100
Nursery	5	490		450	92	5	100
Hydel scheme	2	644		504	78	1	50
Mud-flow Control	2	220		190	86	1	50
Super Passage	1	190		160	84	1	100
Total	361	66714		60827	91	329	91
Chitral							
Irrigation	280	63180		58240	92	216	77
Feeder Channels	241	52600		48460	92	186	77
Pipe/Syphon irrig.	14	4910		4790	98	12	86
Lift irrigation	2	350		320	91	2	100
Storage reservoirs	19	4110		3980	97	16	84
Sedimentation tank	1	290		290	100	0	0
Tunnel	0	0		0	0	0	0
Channelization of rivers	3	920		400	43	0	0
Transport	188	42010		38990	93	158	84
Link roads	164	35870		33750	94	140	85
Bridge/Link Road	21	5400		4640	86	16	76
Pony tracks	2	440		350	80	2	100
Foot Bridges	1	300		250	83	0	0
Other	92	21690		19680	91	75	82
Protective works	60	13010		12730	98	58	97
Flour mill	1	140		140	100	1	100
Boundary walls	0	0		0	0	0	0
Nursery	0	0		0	0	0	0
Hydel scheme	31	8540		6810	80	16	52
Mud-flow Control	0	0		0	0	0	0
Super Passage	0	0		0	0	0	0
Total	560	126880		116910	92	449	80
Baltistan							
Irrigation	311	46160		38970	84	228	73
Feeder Channels	238	34350		27620	80	162	68
Pipe/Syphon irrig.	37	6310		6070	96	34	92
Lift irrigation	12	2910		2810	97	10	83
Storage reservoirs	24	2590		2470	95	22	92
Sedimentation tank	0	0		0	0	0	0
Tunnel	0	0		0	0	0	0
Channelization of rivers	0	0		0	0	0	0
Transport	87	11020		9910	90	77	89
Link roads	44	5690		4890	86	37	84
Bridges/Link Road	0	0		0	0	0	0
Pony tracks	36	4120		3900	95	34	94
Foot Bridges	7	1210		1120	93	6	86
Other	141	20360		18470	91	119	84
Protective works	69	11760		11240	96	65	94
Flour mill	0	0		0	0	0	0
Boundary walls	71	8240		6890	84	53	75
Nursery	0	0		0	0	0	0
Hydel scheme	1	360		340	94	1	100
Mud-flow Control	0	0		0	0	0	0
Super Passage	0	0		0	0	0	0
Total	539	77540		67350	87	424	79

Table A1.7 (Continued)
Productive Infrastructure Projects, Costs and Construction Progress, by Type of Project, as of December 1994
(cumulative)

Type of Project	No. of Projects	AKRSP		Percent	Completion (a)	
		grant Rs. '000	Disbursement Rs. '000		No.	Percent
Astore						
Irrigation	27	9509	3143	33	1	4
Feeder Channels	22	7853	2157	27	0	0
Pipe/Syphon irrig.	4	1491	931	62	1	25
Lift irrigation	0	0	0	0	0	0
Storage reservoirs	1	165	55	33	0	0
Sedimentation tank	0	0	0	0	0	0
Tunnel	0	0	0	0	0	0
Channelization of rivers	0	0	0	0	0	0
Transport	10	2533	956	38	2	20
Link roads	7	1604	603	38	1	14
Bridges/Link Road	3	929	353	0	1	0
Pony tracks	0	0	0	0	0	0
Foot Bridges	0	0	0	0	0	0
Other	5	2023	1103	55	0	0
Protective works	3	1137	517	45	0	0
Flour mill	0	0	0	0	0	0
Boundary walls	0	0	0	0	0	0
Nursery	0	0	0	0	0	0
Hydel scheme	2	886	586	66	0	0
Mud-flow Control	0	0	0	0	0	0
Super Passage	0	0	0	0	0	0
Total	42	14065	5202	37	3	7
Four Districts						
Irrigation	863	164439	141439	86	663	77
Feeder Channels	699	129810	108890	84	525	75
Pipe/Syphon irrig.	64	15110	14210	94	54	84
Lift irrigation	21	5960	5710	96	18	86
Storage reservoirs	71	11610	11270	97	62	87
Sedimentation tank	4	840	770	92	3	75
Tunnel	1	189	189	100	1	100
Channelization of rivers	3	920	400	43	0	0
Transport	359	69290	62840	91	308	86
Link roads	277	54640	50040	92	237	86
Bridges/Link Road	33	8070	6690	83	26	79
Pony tracks	41	5070	4740	93	39	95
Foot Bridges	8	1510	1370	91	6	75
Other	280	51470	46010	89	234	84
Protective works	162	31570	29760	94	153	94
Flour mill	1	140	140	100	1	100
Boundary walls	73	8430	7070	84	55	75
Nursery	5	490	450	92	5	100
Hydel scheme	36	10430	8240	79	18	50
Mud-flow Control	2	220	190	86	1	50
Super Passage	1	190	160	84	1	100
Total	1502	285199	250289	88	1205	80

(a) Refers to projects on which construction has started.
Source: AKRSP MER.

Table A1.8
Summary Data of PPIs by Districts, December 1994

	District				<i>Total</i>
	<i>Gilgit</i>	<i>Chitral</i>	<i>Baltistan</i>	<i>Astore</i>	
No. of Projects Initiated	360	560	539	42	1501
Cost of Projects Initiation (Rs. million)	67	127	78	14	285
No. of Beneficiary Households	32575	25754	24006	2854	85189
Physical Progress of Projects	82	80	79	29	80
No. of Projects Completed	328	449	424	3	1201

Source: AKRSP 12th Annual Review.

Table A1.9
Productive Physical Infrastructure

SUMMARY			
Additions During Each Year			
PROGRAM AREA			
<i>Year</i>	<i>PPIs Initiated</i>	<i>Cost (Rs. million)</i>	<i>Completed PPIs Yearwise</i>
1983	104	15.30	23
1984	112	17.50	91
1985	103	21.90	81
1986	93	17.50	62
1987	159	24.60	116
1988	186	32.30	139
1989	144	25.49	118
1990	166	35.10	133
1991	137	26.71	119
1992	111	23.04	113
1993	110	26.07	128
1994	76	19.49	81
Total	1,501	285.00	1,204

Source: AKRSP 1994 Annual Review.

Table A1.10
The Training Program, Number of Trainees

PROGRAM AREA	SUBJECT										
	Year	Agriculture	Forestry	Livestock	Poultry	Marketing	Accounts	App. Tech.	Farm Machinery	Cluster Hatchery	All Subjects
A. Regular Courses											
1983	46	0	45	0	0	0	0	0	0	0	91
1984	45	0	61	69	0	0	0	0	0	0	175
1985	67	0	85	72	38	0	0	0	0	0	262
1986	136	0	89	58	49	0	0	0	0	0	332
1987	143	0	124	58	49	16	0	0	0	0	390
1988	207	0	200	217	48	33	28	0	0	0	733
1989	331	50	124	139	47	60	74	0	0	0	825
1990	481	48	158	290	47	153	37	0	0	0	1,214
1991	339	138	111	156	21	300	222	31	0	0	1,318
1992	254	196	91	162	18	274	0	0	4	0	999
1993	245	104	124	96	9	216	32	0	8	0	834
1994	205	90	81	184	64	90	59	0	8	0	781
Total	2,499	626	1,293	1,501	390	1,142	452	31	20	0	7,954
B. Refresher and Other Courses											
1984	89	0	60	0	0	0	0	0	0	0	149
1985	27	0	68	14	0	0	0	0	0	0	109
1986	97	0	151	18	32	0	0	0	0	0	298
1987	119	0	141	25	24	0	0	0	0	0	309
1988	129	0	76	15	15	22	0	0	0	0	257
1989	70	0	195	12	23	0	0	0	0	0	300
1990	369	25	475	89	21	0	0	0	0	0	979
1991	390	43	536	60	20	0	37	0	0	0	1,086
1992	440	68	635	178	23	115	0	0	0	0	1,459
1993	1,069	68	798	325	25	188	0	0	0	0	2,473
1994	988	124	876	400	161	339	6	0	0	0	2,894
Total	3,787	328	4,011	1,136	344	664	43	0	0	0	10,313

Source: AKRSP 1994 Annual Review.

Table A1.11
The Training Program, Number of Courses

PROGRAM AREA	SUBJECT										
	Year	Agriculture	Forestry	Livestock	Poultry	Marketing	Accounts	App. Tech.	Farm Machinery	Cluster Hatchery	All Subjects
A. Regular Courses											
1983	2	0	2	0	0	0	0	0	0	0	4
1984	2	0	3	3	0	0	0	0	0	0	8
1985	5	0	4	3	2	0	0	0	0	0	14
1986	8	0	5	1	2	0	0	0	0	0	16
1987	9	0	5	4	4	1	0	0	0	0	23
1988	12	0	9	10	4	2	2	0	0	0	39
1989	8	2	6	10	4	3	5	0	0	0	38
1990	25	3	7	15	4	12	5	0	0	0	71
1991	21	7	6	13	2	24	21	1	0	0	95
1992	15	10	5	15	2	21	0	0	1	0	69
1993	18	7	7	8	1	14	3	0	1	1	59
1994	16	5	5	14	5	5	4	0	1	1	55
Total	141	34	64	96	30	82	40	1	3		491
B. Refresher and Other Courses											
1984	2	0	3	0	0	0	0	0	0	0	5
1985	3	0	5	1	0	0	0	0	0	0	9
1986	6	0	6	1	2	0	0	0	0	0	15
1987	7	0	3	2	2	0	0	0	0	0	14
1988	4	0	3	1	2	1	0	0	0	0	11
1989	3	0	5	1	2	0	0	0	0	0	11
1990	19	2	20	6	2	0	0	0	0	0	49
1991	22	3	32	5	3	0	10	0	0	0	75
1992	23	4	26	8	2	8	0	0	0	0	71
1993	39	4	33	15	2	8	0	0	0	0	101
1994	36	9	33	29	8	18	1	0	0	0	134
Total	164	22	169	69	25	35	11	0	0		495

Source: AKRSP 1994 Annual Review.

Table A1.12
AKRSP Production Packages for Women's Organisations by Districts
 (Cumulative to 1994)

	<i>Gilgit¹</i>	<i>Chitral</i>	<i>Baltistan</i>	<i>Total</i>
Appropriate Technology (items)				
- Grant	292	658	436	1386
- Loan	1,659	253	1,102	3014
Nursery Development Project	76	23	40	139
Orchard Development Project	115	18	18	151
Vegetable Demo Plot	157	129	122	408
Home Based Poultry (# VOs/WOs)	193	188	222	603
Goat/Sheep Nos.	127	0	0	127
Commercial Vegetable Villages	36	0	0	36
Commercial Vegetable Plots	24	0	12	36
Cluster Hatchery	8	3	5	16
Semi Commercial Poultry				
- No. of WOs	22	0	14	36
- No. of participants	104	0	17	121
Credit Disbursement				
Short-term				
- Group loans	313	4	2	319
- Amount (million Rs.)	4.15	0.09	0.01	4.25
- Beneficiary households	11,037	61	51	11149
Medium-term				
- Group loans	26	1	0	27
- Amount (million Rs.)	1.27	0.10	0.00	1.37
- Beneficiary households	1,199	60	0	1259
WO Credit				
- Group loans	189	43	1	233
- Amount (million Rs.)	19.601	1.564	0.050	21.215
- Beneficiary households	8,963	1,384	38	10385
Village Specialists	1,680	1,163	650	3493
Agriculture ²	570	488	378	1436
Livestock ³	149	0	0	149
Poultry ⁴	752	430	264	1446
Forest Nursery	46	0	0	46
Appropriate Technology ⁵	139	222	0	361
Cluster Hatcheries	8	4	8	20
Accounts	16	19	0	35
Participants in Demos	4,796	745	1,686	7227
Agriculture ⁶	518	160	710	1388
Livestock (silage)	54	0	0	54
Appropriate Technology	4,214	562	938	5714
Forestry	10	23	38	71

¹ Includes Astore

² Agri. nursery, PPP, Vegetable growing

³ Disease control & Goat management

Source: AKRSP MER.

⁴ Disease control & management

⁵ Spinning wheel, Butter churn, Nut cracker

⁶ Vegetable Cultivation

Table A1.13
Girls' and Boys' Schools in the Northern Areas and Chitral (1994)

School Level	Gilgit ¹		Chitral		Baltistan ²		Total		% of Girls' Schools		
	Government		Government		Government		Government				
	M	F	M	F	M	F	M	F			
Primary	243	54	-	74	250	98	216	45	709	306	30%
Middle	65	16	-	44	30	13	43	8	138	96	22%
Secondary	47	10	-	8	39	3	30	4	116	26	18%
Total	355	80	-	126	319	114	289	57	963	428	30%

¹ Includes Diamer and Ghizer

² Includes Skardu and Ghanche/Khaplu

Source: Northern Areas Secretariat 1994; EDC 1994.

Table A1.14
AKRSP Sources of Income, by Donors
('000 Rs)

Donor	1982-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994*	Total	%
AKF Network	14,852	10,048	12,819	17,411	14,200	8,346	9,253	8,262	18,481	8,422	7,079	15,339	144,512	12
AKF Pakistan	10,960	7,160	5,901	7,663	7,778	5,251	7,819	6,959	17,078	7,101	5,086	12,676		
AKF Canada	1,420	2,357	1,398	1,199	2,013	1,107	720	1,303	1,403	1,321	1,993	2,663		
AKF USA	1,329		3,193	4,430	3,992									
AKF UK	1,143	531	2,327	4,119	417	1,988	714							
CIDA	5,439	9,245	11,240	14,778	18,595	27,533	38,093	15,062	20,635	46,044	37,401	77,063	321,128	28
Alberta Aid	236	2,192	3,486	4,062				467			545		10,988	1
USAID			1,426	4,097	5,820	5,950							17,293	1
Ford Foundation	1,325		496										1,821	0
Heifer International				1,518		40	139						1,697	0
CIDA	327	913	2,092	3,471	181	33,809	21,946	22,013	65,900	17,977	34,582	19,316	222,527	19
OXFAM	603	552	544	1,447	1,701	283	530	3,481	9,069	822	857	13,726	7,339	1
CEC				2,391	2,428					4,618	16,046		51,759	4
Eastern Electricity										176	88	249	513	0
The Netherlands Government			4,109	7,669	20,584	30,899	37,662	15,386	26,660	37,340	31,177	41,324	252,810	22
Konrad Adenauer Foundation				1,299	1,814	1,299	1,814	3,387	10,731	4,595	4,026	10,525	36,377	3
IUCN								1,198	1,701				2,899	0
NORAD									14,034	13,498	15,392	22,586	65,510	6
GTZ/BMZ											8,897	4,906	13,803	1
The World Bank											860	2,610	3,470	0
Local Bodies & Rural Development		89	89	30									208	0
Northern Areas Council				884	195								1,079	0
Government of Pakistan				3,048			334						3,382	0
JICA												1,309		
Total	22,782	23,039	36,301	51,305	70,777	110,587	109,771	69,256	168,033	133,527	156,093	208,953	1,159,115	100
US\$'000 equiv.	1,739	1,572	2,279	3,081	4,068	6,144	5,344	3,192	7,060	5,324	5,555	6,835	52,193	

Source: AKRSP MER.

Table A1.15
AKRSP Annual Expenditure since Start-up
 (000s Rs)

Expenditure	1982-1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Total	%
Capital Expenditure	1,931	1,992	2,673	3,715	3,367	7,191	3,203	5,002	11,315	8,715	15,797	2,237	67,138	6
Salaries	1,798	2,577	3,893	6,305	9,812	18,907	20,961	25,557	31,831	34,774	36,774	60,151	253,340	24
Travel	485	471	742	1,161	1,420	4,251	4,130	5,620	7,022	6,726	7,425	7,404	46,857	4
Administration	36	131	141	239	196	5,059	4,636	5,545	3,421	6,516	9,249	5,222	40,391	4
Office Maintenance	370	576	1,076	1,828	2,279	1,671	2,311	2,907	6,753	4,772	5,307	4,446	34,296	3
Vehicle Operation	264	341	577	515	527	2,750	3,537	4,688	7,098	7,333	9,592	10,382	47,604	5
Total Operating Cost	4,884	6,088	9,102	13,763	17,601	39,829	38,778	49,319	67,440	68,836	84,144	89,842	489,626	46
Training	296	913	2,752	4,575	6,839	4,794	8,960	8,944	8,895	10,122	11,197	11,221	79,508	8
Research, Survey and Demonstration	1,726	3,289	4,492	3,802	9,414	3,054	3,916	9,663	11,688	13,248	16,859	22,595	103,746	10
Infrastructure Projects	7,204	12,083	13,665	15,490	20,519	26,397	27,046	35,928	27,411	24,575	26,879	19,326	256,523	24
Credit Programme (Net)	517	153	5,745	6,727	15,065	13,796	8,874	2,290	707	12,874	29,584	31,643	127,975	12
Total	14,627	22,526	35,756	44,357	69,438	87,870	87,574	106,144	116,141	129,655	168,663	174,627	1,957,378	100
US\$'000 equivalent	1,116	1,603	2,244	2,664	3,990	4,881	4,263	4,891	4,882	5,169	6,002	5,713	47,418	

Source : AKRSP MER.

Table A1.16
AKRSP Staff Strength, 1987-1994

Category	1987	1988	1989	1990	1991	1992	1993	1994	Distr. %
Management Group	9	10	10	13	153	13	12	13	3
Senior Professionals	21	16	25	50	49	52	55	53	12
Junior Professionals	61	62	78	100	112	105	104	126	29
Support Staff	53	49	55	59	51	57	56	77	17
Drivers/Auxiliaries	89	100	102	95	100	116	127	172	39
Total	233	237	270	317	327	343	354	441	100
% Increase		2	14	17	3	5	3	25	

Source : AKRSP MER.

Table A1.17
Consolidated Picture of RSPs (as of December 1994)

<i>Rural Support Programs</i>	<i>AKRSP</i> 1983	<i>BRSP</i> ¹ 1991	<i>IRDP</i> ² 1990	<i>KIDP</i> 1987	<i>NRSP</i> ³ 1992	<i>SIAP</i> 1990	<i>SRSC</i> 1990	<i>Total</i>
Year of initiation								
1. No. of Districts	6	12	1	1	8	1	4	33
2. No. of VO/CO/WUA	1,834	299	100	132	555	46	225	3,191
3. No. of WOs	768	124	46	7	232	-	98	1,273
4. Total No. of Orgs. (2+3)	2,602	423	146	139	787	46	321	4,464
5. Membership Male	76,084	6,267	4,186	7,351	13,746	536	7,150	115,002
6. Membership Female	26,089	1,744	1,780	215	6,237	-	2,769	38,834
7. Total Membership (6+8)	102,653	8,011	5,966	7,566	19,905	536	9,919	154,634
8. Average Membership of VO/CO (5/2)	42	21	42	58	25	12	32	36
9. Average Membership of WOs (8/3)	34	14	39	31	27	-	29	31
10. VO/CO/WUA Savings (mill. Rs.)	170.64	7.20	1.71	0.50	52.77	0.07	3.75	194.70
11. WO Savings (mill. Rs)	32.96	0.66	-	-	0.94	-	0.73	35.29
12. Total Savings (10+11) (mill. Rs.)	211.80	7.92	1.71	0.50	3.71	0.07	4.48	229.99
13. No. of infrastructure schemes	1,501	343	161	124	90	-	150	2,389
14. Infrastructure Investment (mill. Rs. com)	285.00	57.40	47.41	10.00	6.64	0.73	30.00	437.18
15. Cumulative credit disbursed (mill. Rs.)	349.53	19.79	-	0.18	8.30	-	7.82	385.81
16. Total investment (14+15) (mill. Rs.)	634.53	77.19	47.41	10.18	14.94	0.73	37.82	822.79
17. VO/CO/WO Office-bearers trained	5,212	422	279	23	1,574	-	2,093	9,580
18. Village Specialists trained	7,954	94	541	471	1,649	-	685	10,945
19. General Training	13,166	1,454	103	494	1,600	-	325	3,953
20. Total village cadre trained (17+18+19)		1,970	923	494	1	-	3,103	24,479
21. Management staff	13	5	4		9		9	40
22. Professional staff	179	84	6		58		92	419
23. Support staff	249	66	59		108		74	556
24. Total staff strength (21+22+23)	441	155	69		175		175	1,015
25. Expenditure to date ⁴	1,197.29	279.55	42,000	55,000	145.60	4,288	95.24	1,717.68
26. Estimated direct beneficiaries	655,555	43,860	42,000	55,000	181,864	4,288	84,000	1,066,567

¹ BRSP, the successor institution of the Pak German Help Project implemented by GTZ and LBRRD, was established as an NGO in 1991.

² IRDP data is from April 1, 1995; IRDP does not disburse loans but supports internal lending from savings within VOs.

³ Mixed COs (with male and female members) formed by NRSP have been included under COs.

⁴ Since BRSP inherited the PGHCP's assets and organization achievements, BRSP data include Rs 95 million expended during the PGHSP phase.

Source: RSP Network, Islamabad 1995.

The Technology Development Process

In Chapter 3 the need for a more effective technology development process was emphasized. The existing arrangements have not been adequately responsive to the real needs of the various production systems, especially with respect to the traditional cereal crops and animal nutrition. The evaluation believes that the categorization of the production/farming systems would provide a basis for managing the diversity in agriculture across the Program area. It would encourage the development of technology relevant to the different systems and permit a more informed dialogue with communities. The mission returned to this theme in Chapter 7 where it set out the principles which could drive an improved process for technology acquisition, generation and adaptation. This annex 2 outlines one scheme which AKRSP might consider.

The Scheme

In keeping with the emphasis on beneficiary participation, the description of the scheme starts at the level of the farmer participant. Limitations on resources dictate that the operational level for technology development would be a cluster of villages rather than the single village. The partnership between farmers and the research program would be at the cluster level.

The Master Farmer (MF). Representatives from a cluster of VOs would be partners in the process. They would be chosen by their communities for their expertise and innovativeness in local farming (Ashby 1995). Perhaps called master farmers (MF), they would be at the same level as the master trainer cadre. Two MFs could be chosen for each cluster. The wealthier and poorer categories of households in the cluster each would have their representative. MFs would need to be paid for the time involved in their participation.

Groups of MFs would meet with the AKRSP junior professional staff in charge of research sites, which would be the locational interface for technology development. Preferably, nine sites close to FMUs would be selected to cover the three broad types of farming determined by ecological zone in each region. Technically, only one site for each of the ecological zones would be sufficient, and the initial establishment could be on this basis. However, the need for frequent interaction between AKRSP junior professionals and MFs at these sites, and difficulties of access in the Program area, suggest that having each zone represented in each of the three regions is more realistic. The experience gained in managing early sites would influence this decision. Moving MF groups by helicopter would perhaps reduce the number of sites required, but would introduce an element of heavy dependence on the availability of this resource.

Under such an arrangement, assuming 8-10 VOs in a cluster, each with an average of two MFs, the Program area would have 400 MFs in 200 clusters. That is, 40-50 MFs per research site. Arranging for groups of 20 MFs to visit research sites, on-farm trials and innovative local farmers and, assuming three visits a year for each MF, would require each junior professional in charge of a site to organize six to eight group visits a year.

Further synergies could be created by bringing MFs together in research fora for the single, transitional and double crop zones. These would widen the dialogue both between MFs and with AKRSP staff. From these fora, representative MFs could be appointed to cross-regional

committees concerned with farming systems in a particular zone. Visits could be arranged for these committees to research sites and local farmers who had new practices to demonstrate.

Work at each research site would cater for the other dimensions of diversity important in the farming of the Program area:

- crop, livestock and forest interventions under an NRM systems umbrella,
- subsistence and market production opportunities,
- village land and water endowment differences, and
- interhousehold differences, and women's programs.

At least one site in each region would have researcher-managed experiments under controlled conditions and all three sites in a region would have experiments on farmers' fields for adapting technologies and widening their exposure to farmers. Dialogues with MFs would be the foundation for planning both types of investigation, and *groups of master farmers would review both researcher-managed and on-farm experiments.*

AKRSP Staff. AKRSP would be represented in the partnership by junior professionals who would be in charge of the research sites and interact with MF groups. A major task for such professionals would be understanding MF perspectives and using these in the design and evaluation of experiments. The three site professionals in each region would be under the day-to-day supervision of the Regional NRM manager and would involve the regional technical specialists in the planning and evaluation of experiments together with the MF groups. Overall coordination of research would be by a senior professional on the core staff in Gilgit who would be responsible for establishing and overseeing the linkages with local public and private research institutions. He/she would need to understand the needs of the categories of farming systems and look worldwide to identify candidate technologies for local evaluation. As indicated at the outset, with nine sites this research hierarchy would absorb one senior and nine junior professionals.

Expertise. This scheme would have to go through a pilot phase to establish operational procedures and to train staff, especially the junior professional cadre, in their roles. Its introduction would require specialized expertise which would have to be purchased or, as suggested earlier, a cooperative agreement with an institution which already has such expertise may be feasible.

Apart from retraining of AKRSP professionals in the systems perspective, specific training for MFs would also be necessary. Importantly, the concept would have to be explained and promoted through VO manager conferences and through master trainers and village specialists, so that the communities identify with the process and take ownership of it through their selected MFs.

Technology Diffusion. The village specialists and master trainers would continue to play the key role in diffusion of relevant technology to beneficiary households through the VO. The FMU could coordinate interactions and the flow of information between master farmers, research sites and master trainers, bridging the generation and diffusion of technologies. The FMU would

Savings and Credit Operations

By the end of 1994, the Aga Khan Rural Support Program's credit program had made 10,831 loans with total disbursements of about Rs 350 million. More than 75,000 households are included in AKRSP's outreach through Village Organizations (VOs). All of these save as part of their participation, and total savings balances exceeded Rs 210 million at the end of 1994. More than half of all VOs take loans for distribution to their members. The majority of members in these VOs have also borrowed. Loan disbursements during 1994 were Rs 91 million, classified under four different credit windows: 10 percent was for short-term loans, 1 percent was for medium-term loans, 74 percent was disbursed under the Village Organization/Women's Organization Credit Program (VO/WOCP), and 13 percent was disbursed under the Micro-enterprise Credit Program (MECP).

Credit operations are directed by the Credit and Savings Section of AKRSP in Gilgit. This section is responsible for recommending policies, defining procedures, providing training, collecting performance data and working with VOs and WOs. The supervisory and developmental field presence for these operations consists of 14 Field Accountants and 130 Village Accountants.

This annex describes and evaluates AKRSP's savings and credit operations. It is organized into five sections which are devoted to: 1) the development of AKRSP savings and credit operations, 2) performance trends, 3) strengths and weaknesses, 4) activities directed toward developing a bank and enterprise support operation, and 5) issues and measures to improve performance.

1. Development of Savings and Credit Operations

a. Village and Women's Organizations' Credit and Savings Functions

1.1 Credit and savings constitute a central part of AKRSP's activities. These services are operated by each Village Organization (VO) and Women's Organization (WO). VO formation occurs at the initial stage of Program implementation consisting of the three Dialogues between AKRSP staff and villagers that constitute the project identification phase. Part of the contract between a community and the Program is the formation of a VO and the undertaking by members to make a deposit at every meeting, which is usually semi-monthly. Some VOs agree on a minimum deposit, such as Rs 5, that each member has to make at each meeting, while in others each member determines the amount he or she will deposit, which need not be the same at every meeting. Member saving has been a feature of the Program since its beginning in 1983. At that time the role of savings in enhancing the quality of donor-sponsored rural finance was not widely appreciated, and the Program was a pioneering effort in this area.

1.2 Saving targets have been set by many VOs and also by the Program, expressed as percentage increases from year to year. The savings effort has produced impressive results, as indicated in Table A3.1. (Trends in savings will be discussed later.)

Table A3.1: Savings by Members of Village Organizations (VOs) and Women's Organizations (WOs), by District, 1983-1994 (in millions of Rs)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Village Organizations												
Gilgit	0.67	5.15	8.11	10.59	20.57	28.81	36.31	42.28	49.29	55.99	77.00	100.51
Chitral	0.17	0.85	2.21	4.45	7.90	13.15	17.49	22.00	25.14	33.45	38.63	44.56
Baltistan			0.23	0.86	2.52	4.55	6.98	10.96	14.93	20.04	25.43	29.81
Astore											0.63	1.76
VO Subtotal	0.84	6.00	10.55	15.90	30.99	46.51	60.78	75.24	89.36	109.48	141.69	176.64
Women's Organizations												
Organizations	0.30	0.56	1.32	1.97	3.35	4.84	7.65	10.36	13.60	17.69	23.06	34.16
VO and WO Total	1.14	6.56	11.87	17.87	34.34	51.35	68.43	85.60	102.96	127.17	164.75	210.80

1.3 Savings tend to be highly concentrated. Approximately 70 percent of total savings balances have been accumulated by 25 percent of VO/WOs. Savings vary greatly by program district. Average savings balances per VO member were Rs 3650 in Gilgit., Rs 1971 in Chitral and Rs 1212 in Baltistan at the end of 1994. In Astore the average was Rs 258. Average balances for WO members in the three major districts were Rs 1708, Rs 880 and Rs 204, respectively. These averages are influenced to some degree by the length of time the program has been active in each area, as suggested by the data in Table A3.1. The ranking of average savings balances appears primarily to be related to the economic opportunities in each district and to the strength of AKRSP VO/WO activity in each area.

1.4 Each VO elects its own president and manager. The president is often an older person of local prestige, who may be illiterate. The manager is usually literate. Most are farmers, but some are teachers or shopkeepers. Men who have had experience outside the village as migrant workers, civil servants or soldiers, are often selected as managers, too. The manager may maintain the savings and credit records of the VO and its members, or may share this task with a Village Accountant (VA) trained by AKRSP. VAs usually cover more than a single village. The manager is often remunerated for his services through a commission charged on loans, depending upon the VO/WO.

1.5 The AKRSP credit and savings management system used by VO/WOs is based on nine types of records: 1) a minutes book that records the holding of VO/WO meetings and decisions taken, including loan approvals; 2) a combined savings and attendance register, 3) savings passbooks for each member, 4) a cash book, 5) a general ledger, 6) a member savings register, 7) a members' credit register, 8) a VO/WO credit passbook, and 9) a passbook issued by a bank or similar institution at which the VO/WO maintains its cash balances.

1.6 Certain procedures are used to provide transparency and also to focus on members' performance. Individual members are supposed to be informed of their savings balances at each meeting. Members are supposed to be apprised of any changes in the status of their collective savings and investment in a bank time deposit, for example, about the profits or interest earned on these assets, and about any pledges against these that have been used to secure VO/WO borrowings. Final statements of account are to be prepared every six months and these have to be submitted to the VO or WO for its approval. Books are to be audited at least once a year by an AKRSP Field Accountant.

1.7 Cash collected at VO/WO meetings is usually deposited in a profit and loss sharing (PLS) account (essentially a savings account) at a commercial bank, or in a post office, by the VO/WO manager or possibly by another person designated to do so. This involves a trip to a

nearby town. In inaccessible areas frequent trips may not be feasible and cash is held locally for some period between visits to the bank or post office.

b. AKRSP's Savings-based Strategy

1.8 Emphasis on savings reflects a central concern of AKRSP, which is to mobilize funds locally and to deploy them locally. Initially this concern reflected the objective of empowerment through making the project area self-sufficient. This concept has been modified in response to the opportunities provided by linking the area with the national economy through the Karakoram Highway and as a result of migration of able-bodied males. Savings are now seen as a means of encouraging employment locally, especially self-employment by members of VO/WOs. The Program seeks to promote local enterprise in its service area, helping locals seize opportunities that might otherwise attract more experienced businessmen from other parts of Pakistan. Saving within WOs and by women in mixed gender VOs is also seen as a means of elevating the status of women.

1.9 Emphasis on savings also reflects AKRSP's strategy of experimentation as a means of discovering sustainable development opportunities. Savings provide an incentive to the community to value the program with which they place their funds, while at its worst a credit-only strategy, poorly implemented, can provide the community an incentive to destroy the credit program through nonrepayment of loans. Savings also tend to be more permanent, while for most people loans are occasional. As noted above, savings are also a highly participatory part of AKRSP's outreach.

c. Specific Purpose Short- and Medium-Term Loans

1.10 The PPI (productive physical infrastructure) project that is a major element of the contract between a village and AKRSP, kicks off activities and provides the major developmental incentive for participation. Frequently, the economic impact of the PPI will offer scope for the provision of credit by AKRSP through the VO. For example, an irrigation channel that increases arable land or a road that facilitates access to a market creates a demand for modern inputs such as fertilizer, for which AKRSP provides short-term, seasonal credit. Short-term credit has also supported marketing of farm produce, inputs and other seasonal activities. Likewise, medium-term land development loans have been issued to help capitalize on the opportunities created by irrigation. Credit for these and other purposes helps VO members to realize the benefits from the PPI and from social organization through their VO.

1.11 Short-term credit has been a project feature since inception in 1983. These loans from the Program to the VO for distribution to VO members were initially interest-free, in accordance with government policy. This policy was abandoned by the government in 1988, at which time AKRSP instituted an 8 percent service charge. Standard maturities on short-term loans have been six months and 12 months, which would cover a cropping cycle but not extend for more than one year.

1.12 Fertilizer loans, the principal type of short-term loan, are not collateralized, but applicants are approved by their VOs and hence the savings of the VO are considered as a sort of informal collateral in a transaction that requires AKRSP approval. Crop marketing loans are 100 percent collateralized by the borrower's savings. These are used to facilitate sale at an

advantageous time, enabling VO/WO members to obtain better prices than if they sold their crop just after harvest. In the typical case, a very high proportion of VO members would qualify for and receive short-term loans. Basic data concerning short-term loans are given in Table A3.2.

Table A3.2 Short-term Credit Disbursed by Loan Purpose and Group Membership, 1983-1994 (in millions of Rs)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Purpose by VO/WO												
Village Organizations												
Fertilizer	0.98	2.47	3.78	5.79	7.67	14.01	11.00	8.82	7.70	8.06	8.28	7.45
Marketing		0.20	0.80	2.11	3.86	6.24	3.18	0.52	0.72	1.70	2.20	1.98
Other: livestock, plants, seeds, chemicals, etc.	0.02	0.01	0.06	0.10	0.38	0.72	2.06	0.27	0.20	0.23	0.04	0.00
Women's Organizations		0.01	0.06	0.05	0.37	1.36	1.06	0.15	0.32	0.34	0.19	0.23
Total	1.00	2.69	4.70	8.05	12.28	22.33	17.30	9.76	8.94	10.33	10.71	9.66

1.13 Medium-term loans have also been issued since 1985. These loans are for purposes such as land development to take advantage of irrigation made possible by PPIs, for sulfur tents for apricot drying, for agricultural machinery and other rural activities. The maturities on these loans were from two to five years. AKRSP issued these loans to VOs, which were the borrowers.

1.14 Medium-term loans were 30 percent secured by time deposit receipts (TDRs) representing VO/WO deposits at commercial banks or similar institutions. This security would protect AKRSP against 30 percent of its losses on this lending to specific VO/WOs. Basic data concerning medium-term loans are given in Table A3.3.

Table A3.3 Medium-term Credit Disbursed, 1984-94 (in millions of Rs)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Land development	0.47	2.50	2.37	9.74	7.73	8.22	0.43	0.07	0.08		
Agricultural machinery		1.24	1.88	3.25	3.35	3.47	1.02	1.06	1.61	1.12	
Sulphur tents				0.44	0.77	1.10	0.01				
Other: marketing, drills, sawmills, breeding, etc.			0.24	0.14	1.08	2.40	0.16	1.37	1.12	0.01	0.54
Total	0.47	3.74	4.49	13.57	12.93	15.19	1.62	2.50	2.81	1.13	0.54

1.15 Medium-term loans have been virtually discontinued because of poor performance. Some of the tasks to which they were dedicated were too complex for VOs to handle effectively. Others funded applications of technology that was inappropriate or that could not be managed well collectively, such as tractors. Other losses arose from the communal disturbances in 1988 that disrupted economic activity.

d. Village Organization and Women's Organization Credit Program (VO/WOCP)

1.16 An innovation in savings and credit operations began in 1989 with the introduction of the Village Organization Credit Program and the Women's Organization Credit Program, collectively referred to as VO/WOCP. (At the outset the term "banking" rather than "credit" was used in the titles of these programs, but the term was changed because of legal restrictions on use of "banking.") Any VO can join VOCP if meets some basic conditions. The first is that its savings exceed Rs 50,000. The minimum loan that a VO can receive under VOCP is also Rs 50,000. Second, all of its short-term and medium-term loans have to be paid off. Third, the VO must have a generally good repayment record and sufficient trained management. A VO or WO has to agree to the terms, conditions and operating guidelines of VO/WOCP to participate.

- 1.17 Other than those already listed, conditions include the establishment of a reserve fund, distribution of profits proportionately to savings, and remuneration of officers for their services. Conditions for WOCP do not include the Rs 50,000 minimum savings balance requirement, and there is no minimum loan size requirement for a WO. VO/WOCP credit replaces the short-term loans initially taken by VO/WO members, which is reflected in the decline of short-term credit disbursements in Table A3.2. Maturities on loans to members can be as short as three months and do not exceed one year. However, rollovers are possible as explained below.
- 1.18 Objectives of VO/WOCP are many. Principal goals are to decentralize and simplify credit operations and to make savings more accessible and hence more attractive. Local development remains a priority. The program is also aimed at improving the financial and managerial skills of VO/WO managers and office bearers, and to encourage self-reliance and sustainability. VO/WOCP is also a basis for formation of a locally-owned financial institution. The most notable steps in this direction are the emphasis on training and decentralization, on the establishment of a reserve fund which is essentially VO/WO capital, and remuneration of the manager.
- 1.19 Decentralization is accomplished by placing on VO/WOs the responsibility for approval and issue of loans to individual VO/WO members. Loan approval authority is frequently delegated by VO/WOs to a credit committee consisting of up to seven members. Loan accounting has always been a responsibility of the VO/WOs. No further decentralization of this function was required with the introduction of VO/WOCP, although AKRSP has decentralized its support for these programs, as discussed in section 3.
- 1.20 Savings were made more attractive by enabling members to borrow against their balances. Prior to the introduction of VO/WOCP individuals did not have access to their savings. Under VO/WOCP savings remain generally nonwithdrawable except with the special approval of AKRSP. However, the VO/WO can borrow from AKRSP up to a limit equal to members' savings. Individual members can borrow up to a limit equal to their savings, or larger amounts with the approval of two guarantors who have not borrowed up to their limits. Thus, one member can borrow his or her own savings plus the unencumbered balances of two friends in the same VO/WO. Loans are fully secured by the member's savings balance, plus those of his or her guarantors when the loan is larger than the borrower's own savings.
- 1.21 Saving was also made more attractive by increasing the returns to savers. This is accomplished in two ways. The first is through access to AKRSP loan funds. AKRSP funding is used rather than tapping VO/WO savings directly. This permits AKRSP to maintain some control over the credit operation, such as encouraging VO/WOs to ensure that 80 percent of their loans outstanding are for productive purposes. This guideline was considered desirable, as the introduction of VO/WOCP greatly expanded the range of declared loan purposes. With an eye to curbing unproductive expenditures by members, some VO/WOs have adopted rules regarding the amount members may spend on weddings, for example.
- 1.22 AKRSP loans to VO/WOs under VO/WOCP are for one year, which is the same maximum maturity permitted on VO/WOs' loans to their members under this facility. AKRSP rolls over its VO/WOCP loans for up to three years (i.e., for two additional years) if interest is fully paid by the VO/WO to which the loan is issued. Amounts borrowed may be increased by 10 percent each year under the rollover procedures if interest payments are up to date and the VO is in good order.

1.23 AKRSP introduced a Rs 20,000 borrowing limit under VO/WOCP early in 1995. The limit was originally applied to households, but was relaxed to apply to members, benefiting some households having more than one member in a VO or WO. Several reasons led to the introduction of a loan cap. One was a potential future limitation of AKRSP funds available to support the lending program. Another consisted of equity considerations. Finally, the amount was decided upon after a review of the cost of living of a representative household, which was estimated at Rs 20,000 annually. However, loans in excess of Rs 20,000 are still obtainable, but with the permission of AKRSP and at an AKRSP service charge of 18 percent (service charges are discussed in the paragraph below). There had been little use of this exception by mid-1995, in part because some members with extraordinarily large balances were able to withdraw their savings. In fact, the limit would affect few of the members in VO/WOs visited by the evaluation team. The overwhelming majority of savings balances were less than Rs 20,000. With the borrowing limit in place, it is likely that few balances will exceed Rs 20,000.

1.24 AKRSP funding of credit simplifies savings and credit accounting and administration by keeping both separate. This funding is subsidized: AKRSP has charged 7 percent on these funds, but in December 1994 raised the annual fee to 10 percent for VO/WOs using an initial rollover that would extend the original maturity by two years and to 18 percent for subsequent rollovers. The initial 7 percent rate was equal to the interest paid by commercial banks on PLS accounts. Banks clearly would be unwilling to lend at this rate, and the rate has little to do with AKRSP's costs of running the credit program or the risk of such lending.

1.25 VO/WOs add an additional 5 percent to cover their own administrative costs, such as a 2 percent payment for the manager for his bookkeeping efforts, and 3 percent to cover the cost of stationery and to create a reserve for contingencies. In addition, most VO/WOs follow the Program's advice that an additional fee be added to reward savers. Twelve percent per year is recommended, but those actually charged range from zero to 24 percent, resulting in total service charges to borrowers that range from 12 percent to 36 percent, with a median of 24 percent consisting of 7 percent to AKRSP, 5 percent for overheads and 12 percent to reward savers.

1.26 In addition to the return paid by borrowers, savers also benefit from the investment of their funds by the VO/WO. This investment takes the form of term deposits with banks or the post office or in the form of government securities intended for the retail market. It has often been possible for VO/WOs to obtain 12 percent on three-year deposits, which is distributed to savers. Hence, the return on savings can approximate 24 percent, consisting of the investment return plus the recommended 12 percent service charge paid by borrowers. The inflation rate in Pakistan is currently around 12 percent, so the returns on savings give VO/WO members a positive real return.

1.27 The exact return received by any member depends on the relationship between the amount the member saves and the amount the member borrows. If borrowing approximates savings, as is often the case, payment of the service charge levied to reward savers results in the borrower's increasing his own savings by the amount of the service charge. If the member is only a saver, income from the service charge paid by borrowers is a net gain. If the member borrows more than his own savings, the service charge paid is larger than the amount that is returned on the borrower's savings, with the balance in effect credited to all other members' accounts on a basis proportional to their saving balances. Attractive returns, credited to members' accounts, have increased savings balances (see Table A3.1) and have also encouraged members to save more through deposits.

1.28 As shown in Table A3.4, VO/WOCP lending volume has generally increased steadily in each district every year since the program's inception. Progress is most impressive in Gilgit. AKRSP research has documented that economic opportunities are greatest in Gilgit and that VO/WO performance tends to be more dynamic here as a result.

Table A3.4 VO/WOCP Loan Disbursements to Members, 1989-1994 (in millions of Rs)

	1989	1990	1991	1992	1993	1994
District						
Gilgit	2.86	12.41	9.30	15.86	27.31	57.13
Chitral	0.29	0.94	3.64	3.86	5.56	9.36
Baltistan	0.05	0.48	1.25	2.67	3.40	2.76
Astora						0.06
Total	3.20	13.83	14.19	22.39	36.27	69.31

e. Microenterprise Credit Program (MECP)

1.29 The Microenterprise Credit Program (MECP) was introduced in 1992. Its purpose is to build a small business base centered on local people, through investment that creates jobs for VO/WO members. Loans are made by AKRSP to individuals who are members of VO/WOs. The loan approval process requires the consent of the member's VO/WO and approval by the manager and president, and review of the loan purpose and applicant by AKRSP, which also provides support services. Lending is otherwise uncollateralized. Loans are for a period of from six months to one year, due in a single installment. The service charge is 18 percent per year, which AKRSP considers a market rate for this type of facility.

1.30 Loan sizes range from Rs 5000 up to a Rs 40,000 project ceiling. As of April 1995 the largest loan made was Rs 20,000. Borrowers would usually begin with a Rs 5000 loan and then would be able to obtain increasingly larger loans if their performance in business and as a borrower is satisfactory. Specifically, they would have to use the loan as agreed, repay on time, and demonstrate visible improvement in their business in order to obtain a subsequent, larger loan.

1.31 MECP activity has been characterized by rapid increases in amounts disbursed, as summarized in Table A3.5.

Table A3.5 Microenterprise Credit Program (MECP) Disbursements, 1992-1994 (in millions of Rs)

	1992	1993	1994
District			
Gilgit	0.56	1.16	3.60
Chitral	0.10	0.50	2.82
Baltistan		0.22	4.43
Astora			0.55
Total	0.66	1.88	11.40

1.32 The strategy adopted for MECP departs considerably from the basis on which AKRSP has historically allocated credit. The MECP strategy might be called a portfolio approach. Part of the cost of identifying good entrepreneurs is assumed to consist of bad debt losses. These losses

are expected to occur primarily on the Rs 5000 starter loans. Losses are expected to be material for the portfolio as a whole, which will consist of a relatively large number of loans. AKRSP believes this approach is justified economically and managerially by the difficulty of obtaining precise information about the situations in which microenterprise and specific aspiring microentrepreneurs can flourish, the importance of enabling local people to be among the first to set up businesses in the Program area, and the relatively low costs of losses of Rs 5,000 and less per loan issued. In addition, the 18 percent annual service charge will help cushion bad debt losses. Nevertheless, MECP may involve substantial risks, which are noted in section 3 of this report.

1.33 A feature that reduces risk is that many MECP borrowers are already well-known to AKRSP. These include master trainers and activists such as VO managers who may also have businesses such as shops, or who want to start businesses based on their specializations. These businesses are normally located in the village in which the owner lives, which helps to ensure that the quality of market information is high.

1.34 The MECP Rs 40,000 loan ceiling is specified by the Microenterprise Project (Loan 3318-PAK), sponsored by the World Bank and the Government of the Netherlands. This Project provides Dutch funds to MECP on a grant basis.

f. Corporate or Commercial Credit

1.35 At the beginning of 1995 AKRSP established a new credit program designed to support enterprises linked directly with VO/WO commercial interests. This new program had not yet become operational by the time of the evaluation mission's visit to AKRSP in April 1995. Several enterprises had already received AKRSP credit, and these will be moved into the new program.

1.36 Borrowers now include GAMA and BAMA, which are agricultural marketing associations for Gilgit and Baltistan, respectively, that were formed by AKRSP, in part as extensions of its efforts to upgrade apricot production. Loans to these organizations help fund acquisition of facilities and inventories. GAMA, located in Hunza, has attempted to become a distributor of seed potatoes, with mixed results. It is also involved in apricot drying and marketing, and has succeeded in exporting sun-dried apricots to the United States and Brazil. Vented greenhouses are superior for sun drying, and several have been constructed. Farmgate prices have increased greatly as unsorted, open-air sun-dried, mixed variety apricots have been replaced by apricots that are washed, graded, dried on trays and preserved with sulfur powder.

1.37 BAMA is located in Skardu and conducts similar operations in Baltistan, purchasing apricots from growers who are members of VO/WOs. Purchases have to occur at and shortly after harvest, while sales continue throughout the year. Major purchasers from GAMA and BAMA include the Army and down-country markets, where well-presented apricots from the North command premium prices. Sales are in bulk and in 250 and 500 gram labeled plastic bags. Experimentation is underway by these organizations to add more value through packaging and processing—GAMA intends to open grading and packing facilities soon.

1.38 Tanzeem Corporation is a supply cooperative in Ghizar, dealing in basic commodities such as soap, cement, cooking oil, tea, and flour. It has suffered from a sizable purchase of a type of rice that is not highly regarded by its 3000 shareholders, and which consequently was

disposed of at a loss. A change in management has helped it to recover. This problem indicates a risk of supply businesses. BAMA also has faced small margins that reflect the competitiveness of the markets in which it deals, and has suffered from slow collection of receivables.

1.39 Ramoshay Tanzeem is also a borrower. It supplies animal health products and other farm inputs. It was started in 1994 as a partnership consisting of 10 AKRSP animal health master trainers who each took loans of Rs 10,000 which they supplemented by an equal amount of their own funds. Ramoshay Tanzeem has a shop in Skardu that serves as its head office, and branches in other locations in Baltistan, each operated by one of its partners. This form of enterprise is a means of commercializing AKRSP functions and enabling people within its orbit to become entrepreneurs based on their functions under the project. AKRSP continues to assist through credit and also by permitting this firm to send supplies to its branches using AKRSP vehicles when these are departing from Skardu on regular visits to areas where the branches are located. Livestock specialists in Gilgit are considering setting up a similar enterprise.

g. Total Savings Balances and Loan Disbursements

1.40 Table A3.6 indicates the total savings balances and the total disbursements of AKRSP credit programs. The general pattern consists of increases in both savings and loan disbursements. The absolute amount of increases in total savings is most impressive following the introduction of VO/WOCP in 1989. Annual loan disbursements are consistently smaller than savings balances.

Table A3.6 Total AKRSP Members' Savings and Loan Disbursements, 1983-1994 (in millions of Rs and in percent)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Savings balances	1	7	12	18	34	51	68	86	103	127	165	211
Annual increase		475%	81%	51%	92%	50%	33%	25%	20%	24%	30%	28%
Annual increase		5	5	6	16	17	17	17	17	24	38	46
Loan disbursements												
All programs and uses	1	3	8	13	26	35	36	25	26	36	50	91
Cumulative	1	4	13	25	51	86	122	147	173	209	259	350
Annual increase		216%	167%	49%	106%	36%	1%	-29%	2%	41%	38%	82%

Note rounding errors. Calculations based on rounding to Rs 10,000 in Tables x.1 through x.5.

h. Operating Expenses

1.41 AKRSP's Credit and Savings Section is responsible for implementation of the savings and credit program. The Section's expenses and their relation to indicators of the scale of operations, as of year-end, are found in Table A3.7.

Table A3.7 AKRSP Credit and Savings Section Expenses, 1993-1995 (in millions of Rs and in percent)

	1993 actual	1994 actual	1995 actual
Administrative Expenses:			
Salaries	2.01	2.90	3.57
Travel	0.62	0.75	1.07
Miscellaneous	--	--	--
Total Administrative Expenses	2.62	3.64	4.64
Training Expenses:	0.50	0.39	2.12
Total Section Expenses	5.75	7.68	11.40
Annual Gross Loan Disbursements	49.99	90.91	157.41
Credit Outstanding	91.70	122.94	191.70
Savings Balances	164.75	210.80	255.96
Total Portfolios	256.45	333.74	447.66
Total Section Expenses:			
as % of Gross Loan Disbursements	11.50%	8.45%	7.24%
as % of Credit Outstanding	6.27%	6.25%	5.95%
as % of Total Portfolios	2.24%	2.30%	2.55%

Note: 1994 savings balances are projected amounts.

1.42 The 1995 data suggest that total operating expenses equal about 2.5 percent of the total portfolios, which are the sum of credit outstanding plus savings balances at year-end. Expenses equal about 6 percent of credit outstanding at year-end and have been falling from 11.5 percent to 7.2 percent of gross loan disbursements.

1.43 Using 1994 figures for convenience, a better picture of total costs can be constructed. Credit and Savings Section expenses were Rs 7.68 million in 1994. The recommended remuneration of VO management, equal to 2 percent of (average) loans outstanding, would raise expenses by about Rs 2.15 million assuming that average loans outstanding approximated Rs 107 million, derived from year-end data for 1993 and 1994. Rounding up to Rs 10 million (from Rs 9.83 million), total expenses would approximate 3.2 percent of the total portfolios at year-end, a figure that seems quite reasonable compared, for example, with commercial bank norms.

1.44 An expense not recorded under Savings and Credit Section headings is the time spent on credit and savings by Social Organizers, who are AKRSP's main point of contact with VO/WOs. Social Organizers are estimated to spend about half of their time on credit, which would justify allocating to savings and credit operations about half of their cost, which was budgeted at Rs 10 million in 1994. Accordingly, Rs 5 million could be added, bringing total expenses to Rs 15 million. Likewise, about half of the Women in Development budget of Rs 7 million in 1994, or Rs 3 million, could be added, raising the total to Rs 18 million. The Monitoring, Evaluation and Research Section also spends time and effort on credit and savings, and its 1994 budget approximated Rs 4 million. Assume that Rs 1 million of this could be allocated to savings and credit operations, raising these expenses to Rs 19 million. The 1994 General Administration budget was Rs 31 million; it might be reasonable to allocate 20 percent of this to savings and credit, or Rs 6 million making total expenses of Rs 25 million.

1.45 Total allocable overheads to about Rs 25 million amount to 8 percent of the total loan and savings portfolios as of year-end 1994. Rs 25 million amounts to about 20 percent of the loans outstanding at year-end 1994.

1.46 These levels are not excessive for an NGO or a rural development project. A review of 11 outstanding microenterprise credit programs that was undertaken by USAID, for example, found that nonfinancial costs as a proportion of loan portfolios ranged from 9 percent to 35 percent, with five of the 11 organizations clustered in a range of from 17 percent to 21 percent. (See Robert Peck Christen, Elisabeth Rhyne and Robert C. Vogel, 1993 "Maximizing the Outreach of Microenterprise Finance: The Emerging Lessons of Successful Programs." IMCC, 2101 Wilson Blvd., Suite 900, Arlington VA 22201, U S A)

1.47 Total allocable operating expenses equal to about 20 percent of the loan portfolio give an initial indication of the minimum rate of interest that would be required to sustain AKRSP savings and credit activities. To these would have to be added the cost of funds, bad debt losses on loans outstanding, and depreciation or a similar measure of the cost of capital equipment required for these operations. For example, if these amounted to 10 percent, 7 percent and 3 percent, respectively, the break-even average interest rate on loans would be 40 percent.

2. Trends in Portfolio Performance and Possible Causes

2.1 AKRSP styles itself as an experimental project. This enables it to try a number of different initiatives and to abandon those that for whatever reason do not work. This process appears to have helped to infuse the Program with a good deal of vibrancy, a tolerance of ambiguity and space for VO/WO members to experiment on their own. Saving and credit operations exhibit these characteristics. This section explores savings patterns, loan delinquency and issues related to risk and its management.

a. Savings Patterns and Performance

2.2 Savings activity tends to be most intense in the early stages of a VO/WO, when the PPI is underway and when initial enthusiasm is high. Over time, a decline in additional amounts deposited appears to set in. This reflects a decline in regularity of deposits as well as a reduction in the amounts deposited by individual members whenever a transaction occurs. Also, the number of formal VO/WO meetings may decline as the business to be conducted diminishes following the completion of the PPI. In some cases members are reported to send in their deposits with another member or with a child in lieu of attending the VO meeting. This is especially likely to occur when a missed deposit results in a fine to the VO member. Also, members may continue to save without formal VO meetings through what may be called "savings days," often on the twice-monthly dates when meetings are scheduled. Members or someone else on behalf of a member simply take their deposits on that day to the VO/WO manager, who processes them.

2.3 These developments are not surprising: deposits remain generally nonwithdrawable and the purpose of saving was not really linked with loans until the introduction of VO/WOCP, which established credit limits equal to savings balances. Declines in savings activity do not necessarily pose a threat to the success of AKRSP saving and credit operations, except to the extent to which they might reflect a lack of commitment or a conflict among VO/WO members.

2.4 Additions to savings can be expected to become more difficult to mobilize as long as savings remain largely nonwithdrawable. This has been exhibited elsewhere by the history of credit unions (thrift and credit cooperatives) which often have begun their operations on this basis as in Korea and Ireland since the 1950s, for example. Members can recover their savings only by dying, renouncing their membership or borrowing from the credit union. Eventually new savings services have to be introduced as members seek more convenience or as they begin to question why they are paying interest to borrow their own money.

2.5 An indication of the attractiveness of greater flexibility in savings and credit is the boost in deposit balances such as those occurring in Gilgit in 1992 and 1993 as indicated in Table A3.8. These are unlikely to have been forthcoming without the introduction of VO/WOCP several years previously. It is not possible to isolate that portion of total increases in any of the district after 1989 attributable directly to VO/WOCP. Other contributors include the formation of more VO/WOs and economic conditions. Neither is it possible to isolate that portion of the increase that is due to VO/WOCP and that results from better returns on savings rather than from accessibility to savings through the fully-secured loan window. These returns are from the distribution of the VO/WO's service charge levied on borrowers that is distributed to savers.

However, the acceleration in the upward trend is significant. This effect was much smaller or absent in the other districts, due both to the greater commercialization of much of Gilgit, and also the slower introduction of VO/WOCP in these other areas. Greater commercialization apparently makes VO/WO members more responsive to financial returns and loan services.

Table A3.8 Rates of Increase in VO/WO Savings, by District
(in millions of Rs and in percent)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Village Organizations												
Gilgit	0.67	5.15	8.11	10.59	20.57	28.81	36.31	42.28	49.29	55.99	77.00	100.51
Annual increase		4.48	2.96	2.48	9.98	8.24	7.50	5.97	7.01	6.70	21.01	23.51
Annual increase		669%	57%	31%	94%	40%	26%	16%	17%	14%	38%	31%
Chitral	0.17	0.85	2.21	4.45	7.90	13.15	17.49	22.00	25.14	33.45	38.63	44.56
Annual increase		0.68	1.36	2.24	3.45	5.25	4.34	4.51	3.14	8.31	5.18	5.93
Annual increase		400%	160%	101%	78%	66%	33%	26%	14%	33%	15%	15%
Baltistan			0.23	0.86	2.52	4.55	6.98	10.96	14.93	20.04	25.43	29.81
Annual increase				0.63	1.66	2.03	2.43	3.98	3.97	5.11	5.39	4.38
Annual increase				274%	193%	81%	53%	57%	36%	34%	27%	17%
Astore												0.63
Annual increase												1.76
Annual increase												1.13
Subtotal	0.84	6.00	10.55	15.90	30.99	46.51	60.78	75.24	89.36	109.48	141.69	176.64
Annual increase		5.16	4.55	5.35	15.09	15.52	14.27	14.46	14.12	20.12	32.21	34.95
Annual increase		614%	76%	51%	95%	50%	31%	24%	19%	23%	29%	25%
Women's Organizations												
Organizations	0.30	0.56	1.32	1.97	3.35	4.84	7.65	10.36	13.60	17.69	23.06	34.16
Annual increase		0.26	0.76	0.65	1.38	1.49	2.81	2.71	3.24	4.09	5.37	11.10
Annual increase		87%	136%	49%	70%	44%	58%	35%	31%	30%	30%	48%

2.6 Since the introduction of VO/WOCP, some members appear to save only the amount they expect to borrow, preferring to keep additional funds with other institutions or in other investments. This may explain why some VO/WOs have taken loans equal to their savings, with each member's loan essentially equal to his or her savings balance in the most elementary case. Other motives for this behavior could include a lack of confidence in the VO/WO, in which case the loans represent a "run" on deposits, although in slow motion.

2.7 A more calculating explanation would be that taking a loan equal to the amount of savings is a bargain. For example: assume 12 percent is earned on savings. This is equal to the sum of the service charge levied by AKRSP (7 percent) and the service charge that remunerates the VO/WO for its costs (5 percent), creating a break-even situation. The service charge added to the loan for the benefit of savers is returned to the saver/borrower, another essentially costless transaction. From this perspective, VO/WOCP arrangements provide considerable incentive to borrow. They likewise appear to offer an incentive to save, as saving is the key to borrowing. This balance between the cost of borrowing and the return to saving is consistent with the nonwithdrawable nature of VO/WO savings arrangements.

2.8 Members may also be reluctant to increase their savings if they perceive that the VO/WO is not entirely sound or if they are doubtful about its future. At the very worst, a VO could conceivably wither away following the completion of the PPI, especially one that requires relatively little maintenance. It would then exist only to deal with saving and credit and with any other activities members brought before it, such as resolution of conflicts. If no other activities were generated, the VO/WO could fail to take on a life of its own and interest could easily decline. AKRSP lists a few "dormant" and "dead" VOs, usually resulting from dissension among members that cannot be settled by the formation of a new VO by disaffected members.

2.9 Individual members may also not want to save much more than others if they feel that this would expose them to more requests for loans or assistance from less fortunate members of their village. Savings balances are read out by the manager at meetings, especially when the returns from lending and from time deposits are distributed, which increases account balances. No evidence of this sort of socially evasive strategy was found in research reports or in field visits, but it was noted that savings balances tend to cluster in a certain range within a VO. Where a large depositor was prominent in villages visited, this depositor was often the VO manager.

b. Slower Loan Repayments and Rising Bad Debts

2.10 A trend generally found in donor-funded credit projects is that repayment performance tends to deteriorate over time. This tends to occur regardless of how repayment performance is measured, although some measures accent it more heavily than others. In the case of AKRSP the trend can be illustrated by the Program's principal measure of repayment performance, which is cumulative recovery of each year's disbursements of loan principal classified according to the year in which repayment was received. Evidence of the trend using this measure is shown in Table A3.9, which contains data for short-term loans.

2.11 The trend is most noticeable in the Gilgit portfolio, which is the largest of the districts included in AKRSP. As years pass, it takes progressively longer to reach 100 percent recovery of principal, using a rounding factor that treats recoveries of more than 99.5 percent as equal to 100 percent. At any given time period elapsed following the loan due date, the recovery percentage tends generally to decline (reading horizontally in the percentage rows of the table). The performance for Chitral has these tendencies to a much lesser degree, while Baltistan conforms to this tendency somewhat (with a data problem for 1992).

Table A3.9 Lags in Loan Principal Collection Performance, by District, 1983-1993
(in thousands Rs and in percent)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Gilgit											
Amount disbursed	867	2560	3815	5085	7605	15468	10701	4119	3679	3049	3091
Recovered on due date "t"	853	2531	3639	4762	7296	13582	8863	3425	2907	2334	2721
Collection rate "t"	98%	99%	95%	94%	96%	88%	83%	83%	79%	77%	88%
Recovered in following year "t+1"	12	21	79	181	213	648	702	475	341	254	200
Collection rate "t+1"	100%	100%	97%	97%	99%	92%	89%	95%	88%	85%	95%
Recovered in following year "t+2"	2	8	58	126	90	296	309	89	239	283	n.a.
Collection rate "t+2"	100%	100%	99%	100%	100%	94%	92%	97%	97%	95%	94%
Recovered in following year "t+3"			39	16	6	248	127	30	45		
Collection rate "t+3"			100%	100%	100%	100%	100%	96%	93%	n.a.	
Recovered in following year "t+4"						39	176	46			
Collection rate "t+4"						100%	100%	100%			
Chitral											
Amount disbursed	126	134	767	2366	3129	4614	4116	2617	2524	3224	2803
Recovered on due date "t"	91	120	766	2356	2951	3834	3443	2260	2315	2183	1676
Collection rate "t"	72%	90%	100%	100%	94%	83%	84%	86%	92%	92%	60%
Recovered in following year "t+1"	0	0	0	2	116	197	6	n.a.	160	340	657
Collection rate "t+1"	72%	90%	100%	100%	98%	87%	84%		98%	98%	83%
Recovered in following year "t+2"	0	14	1	9	40	3	1	n.a.	45	279	
Collection rate "t+2"	72%	100%	100%	100%	99%	87%	84%	99%	100%	100%	
Recovered in following year "t+3"	19				1	0	127	6	3		
Collection rate "t+3"	87%				99%		99%	99%	100%		
Recovered in following year "t+4"	0							176			
Collection rate "t+4"	87%							100%			
Recovered in following year "t+5"	16							100%			
Collection rate "t+5"	100%										
Baltistan											
Amount disbursed				593	1551	2252	2491	3026	2714	4218	4720
Recovered on due date "t"				556	1422	2007	1972	2694	2308	3581	3616
Collection rate "t"				94%	92%	89%	100%	89%	85%	85%	77%
Recovered in following year "t+1"				15	50	132	355	239	234	599	200
Collection rate "t+1"				96%	95%	95%	93%	97%	94%	99%	81%
Recovered in following year "t+2"				20	26	44	160	55	88	112	
Collection rate "t+2"				100%	97%	97%	100%	99%	97%	102%	
Recovered in following year "t+3"				2	22	38	4	1	12	n.a.	
Collection rate "t+3"					98%	99%	100%	99%	97%		
Recovered in following year "t+4"						33	6		0		
Collection rate "t+4"						100%	99%		99%		
Recovered in following year "t+5"											
Collection rate "t+5"											
Recovered in following year "t+6"											
Collection rate "t+6"											

2.12 The causes of generally declining performance have not been empirically documented or analyzed in the development or banking literature, and likewise cannot be ascertained with certainty for AKRSP. However, several plausible reasons can be cited and their applicability to AKRSP can be identified.

2.13 The first possibility is that the intensity of the organizing effort is greatest initially, and decreases with expansion of the Program. This pattern is logical and is clearly discernible in AKRSP. The three Dialogs are intensive for AKRSP staff as well as for the villagers contemplating a partnership with AKRSP. Likewise, considerable dedication is required to complete the PPI. After that the role of the VO may decline if no further activities of equal intensity are found. Well managed VO/WOs visited by the evaluation team appeared to continue to operate at a high level of intensity, moving on to new PPIs that are often financed entirely internally. However, activities are significantly reduced in other villages, as documented by AKRSP monitoring and evaluation data. Accordingly and as with the declining pattern of savings deposits and amounts, attention to loan repayment may also become less intense, both by

Program staff as well as by borrowers and their VO member peers, in which case repayment rates could be expected to decline and bad debts would begin to appear.

2.14 AKRSP has, however, generally increased its efforts to recover loans as delinquencies have mounted. This has occurred primarily through Social Organizers, more recently assisted by Field Accountants, as discussed in section 3. Where no other path appeared suitable, VO deposits held as collateral have been seized.

2.15 Causes of dormancy among VOs are numerous, but include a lack of transparency or good order in financial matters. Examples are the failure to distribute profits from time deposit interest and members' service charges on loans, misuse of savings by office bearers, little participation in the credit program (which is probably symptomatic of other problems in the VO), failure of VO officers to inform members of their savings and loan balances and of the financial position of the VO, and nonrepayment of VOCP credit by a VO following repayment by members of their individual loans.

2.16 When a VO fails to repay, AKRSP begins a series of steps. These include notice served by AKRSP staff at a VO meeting, and a request for a statement of the reasons for nonrepayment in the form of a resolution by the VO. The VO is visited by a team of AKRSP staff that offer to assist in investigations and consultations. A VO that categorically refuses to repay ceases to participate in AKRSP. The status of these cases is monitored by a Default Recovery Review Committee at the regional level, consisting of accounting, credit and program officers appointed by the Regional Program Officer.

2.17 To return to the possibility of decreasing intensity and energy devoted to credit operations as they age: a supportive and slightly different interpretation would be that the Program creates a "Hawthorne Effect." This refers to the realization from early studies of industrial workers that people perform better when they are being observed, even when this scrutiny is not supervisory in nature. Attention gets results. The three Dialogs and the PPI make villagers the subject of attention by AKRSP staff and also among themselves. As this attention relaxes or is no longer novel, performance may taper off.

2.18 A second possibility is that borrowers and Program staff alike tend to gravitate toward the lowest risk activities first. As experience is gained, increases in income and wealth are realized and horizons expand. Attention then turns toward more risky activities which hold out the prospect of higher returns. In AKRSP experience this could be illustrated by comparing fertilizer loans with microenterprise loans. Fertilizer use is not very risky in irrigated agriculture, while microenterprise can be quite risky, especially when the loan supports an activity that is new for the borrower.

2.19 A variant on this observation is that loan sizes may increase over time and become increasingly difficult to repay on time. Fertilizer loans are small relative to the value of the harvest and to the incremental value created by the use of fertilizer. Microenterprise loans may be quite large relative to the borrower's means and to the size of the business. Likewise, VO/WOCP loans that equal the amount saved may be larger than fertilizer loans.

2.20 Factors such as these appear to have characterized medium-term loans, which were given to groups for relatively large investments. These investments involved more risk, in part because of the managerial and consensus challenges they presented. More risk was also created by the

simple fact that they had longer lives, during which more could wrong than would be likely to go wrong during the life of a short-term loan.

2.21 A third contributing factor consists of loan repayment terms that are in some way unrealistic in the sense that due dates and the availability of cash are unlikely to coincide. An example would be a land development loan on which payments are to begin before the first harvest on the land being put into production. Another is a dairying loan due in a series of single annual installments, while milk is sold every day during lactation periods. Where outside sources of income are available these inconsistencies recede in importance. However, installments or repayment amounts that are large relative to the borrower's income may make it extremely difficult for the borrower to accumulate a large sum to meet the repayment on its due date.

2.22 AKRSP seems generally to have avoided this type of pitfall. An exception may be microenterprise lending, where loans are repayable in six or 12 months in a single installment. It may be difficult for a shopkeeper, for example, to accumulate sufficient cash for a lump sum repayment unless the shop has a heavy seasonal sales cycle at the end of which stocks would be low and cash in hand would be substantial. Poultry production cycles, for example, may not coincide precisely with a six or 12-month loan term. In cases where there is a mismatch of this sort, numerous small installments may be an easier method of repayment. AKRSP has encouraged some borrowers to repay in this manner so that when the due date occurs at the end of six or 12 months, settlement of any balance remaining outstanding is a simple matter.

2.23 A fourth and less innocent possibility is that borrowers probe a credit operation's weaknesses, either intentionally or inadvertently. A small delay in repayment that remains unchecked may prompt the borrower to engage in longer delays. Borrowers who contemplate repaying in full and on time may consider doing otherwise when they observe others who do not repay in full and on time and suffer no adverse consequences. As delinquencies accumulate, staff may become stretched too thinly and are less able to apply the pressure required to ensure timely repayment. This is quite possible in AKRSP where VO/WOs do not have regular meetings and where the condition of the portfolio is not discussed periodically at well attended meetings.

2.24 A fifth possibility is low expectation on the part of project designers, who may feel that the poor cannot repay. This approach would lead to inattention to collections. However, this possibility appears to be highly unlikely in AKRSP because the entire thrust of the project is on empowerment through organization and training and saving, that is, on what villagers can do. This contrasts with other projects that employ versions of "consciousness raising" that help beneficiaries speculate about why they are poor, who their exploiters are and what their entitlements should be.

2.25 A sixth possibility is that the lender is unwilling to exert the discipline required to collect loan repayments. Doing so could alienate beneficiaries, the people whose collaboration is required for the project to realize its *raison d'être*. To most development workers, collecting overdue loans is clearly a much less pleasant task than working with villagers to improve their condition and the condition of their communities. This possibility appears to have occurred to varying degrees in AKRSP. Short-term special purpose loans have probably been the least affected by this attitude. Medium-term loans were more affected, especially through the complications of communal strife. AKRSP has attempted to keep communications open with defaulting VO/WOs. It is difficult to say whether this reflects a strength or weakness. However, it appears that as delinquencies have mounted so have efforts to recover arrears, including the

seizing of VO deposits held as collateral, as noted above. The rollovers of VO/WOCP loans would fit this possibility the most strongly, creating ambiguity and postponing the moment of reckoning.

2.26 A seventh possibility is that project designers and managers lack a well-known, widely replicable model of how bad and doubtful debts can be collected. Project staff may not be experienced in banking, for example, as is often the case in AKRSP. The banks, development finance institutions and other credit schemes in the country concerned may not be effective debt collectors, offering no credible local model of systems of debt collection. To the extent that AKRSP has not had a specific loan recovery model in mind, it has followed the correct instinct, which is to endeavor to create strong relationships with borrowers. In fact, borrowing under the Program can be viewed as one aspect of a much larger relationship based on the VO/WO and on regular contact through SOs, Field Accountants and other AKRSP officials. These relationships and contacts create an atmosphere of confidence and attentiveness that promotes good loan repayment performance.

2.27 Finally, repayment rates may tend to decline because project designers are not prepared and have no responses developed in advance to deal with inevitable *force majeure*. In the case of AKRSP this is seen in the communal strife that occurred in 1988. Loans were forgiven outright in the most seriously affected villages and new loans were given in less affected areas. Apparently insufficient effort was made to impress upon those receiving new loans that these were not grants to help deal with distress. Recipients claim that they were not informed that repayment was expected, and this ambiguity still affects relations with the VOs concerned because of unpaid balances outstanding. A tradition of forgiving loans in such cases, dating back at least to the early days of the Raj, also works against the Program. This situation is also complicated by communal differences, which make it more difficult for the Project to build trust and confidence with non-Ismaili Muslims.

2.28 Plausible reasons why the repayment performance of borrowers who are VO/WO members has declined may be summarized as follows. Primary contributors appear to be: a) decreasing program intensity over time; b) rational selection of lowest risk activities at the outset and gravitation toward larger, more risky ventures over time; c) borrowers' probing the effects of delays in repayment; coupled with d) a reluctance by AKRSP to move forcefully but rather to try to reach a solution through dialogue, which is possibly the only course when loans are unsecured; and e) lack of a plan to deal with loans affected by catastrophic situations such as communal strife, before these situations arise. The single maturity for MECF loans, discussed below, may lead to repayment problems because f) repayment terms are not consistent with the cash flow of the activities being financed.

2.29 A less plausible possibility is lack of a well-known, widely replicable model for dealing with bad and doubtful debts. A hypothesis that can be rejected is that AKRSP has low expectations regarding repayment by borrowers.

c. Lack of Centralized Information on VO/WOCP Lending

2.30 VO/WOCP is highly decentralized. Loan approval and accounting is taken care of by the VOs and WOs, which receive loans from AKRSP under the program. Members' loans are fully secured by their savings, or by the savings of other members who stand as guarantors for a member who borrows beyond the amount of his or her savings. Members' repayment

performance records are not routinely communicated to AKRSP, although Village Accountants and Field Accountants routinely process, review and audit this information.

2.31 AKRSP rolls over its VO/WOCP loans for up to three years if interest is fully paid by the VO/WO to which the loan is issued. This reflects in part the difficulty posed by an annual maturity date when the entire amount is supposed to be repaid. In turn, many of the loans made by VOs and WOs to their members carry roughly the same maturity date. This implies that an entire village is expected to mobilize a sum on a certain date equal to the total of its savings through the VO/WO. It would be difficult to do this based on the sale locally of stored produce or similar transactions, because most people would be trying to sell something to other villagers all at the same time. Selling things in markets frequented by people from outside the village would of course mitigate this potential cash squeeze.

2.32 This squeeze would not be serious if the amount due were relatively trivial in relation to the size of the village economy and the amount of cash held in the village or by villagers in other savings institutions. There is some evidence that this may be the case: research in 1990 estimated that only 8 percent of VO/WO members' savings were held in VO/WO accounts. The remainder was on deposit with banks and other institutions, loaned to friends and family members, kept in cash and in investments in kind. While savings deposits have increased greatly since 1990 (see Table 3.10) their relative "market share" of members' savings may still be fairly small.

2.33 The manner in which VO/WOs conduct VO/WOCP varies greatly with the sophistication of the VO/WO which often depends upon the level of development in the community and the presence of strong leadership. As noted above, in less sophisticated VO/WOs all members often borrow up to their limit, which is the amount of these savings. All such loans have a 12-month maturity.

2.34 In highly sophisticated VO/WOs there is a large variety of borrowing behavior. Some is identical to that exhibited by the simpler VO/WOs, while at the other extreme borrowers use VO/WOCP facilities as lines of credit. This type of behavior consists of borrowing, repaying various amounts at various times, taking another loan even if the first is not fully repaid, and continuing in this manner within the member's credit limit. This pattern of transactions, an alternative to repaying in full and taking out a new loan whenever more funds are wanted, is typical of overdraft lending by commercial banks. It suggests that members in this category are involved in a number of commercial activities.

d. MECP Risks and Performance

2.35 MECP responds to VO/WO members who have businesses of their own or who would like to start or expand their activities. Accordingly, this program presents new risks. The Rs 5000 minimum loan size is large relative to previous loans issued to individuals for purposes of fertilizer purchase, for example, and is approximately double the average savings balance. These loans are also unsecured, which is consistent with loans previously made to individuals but a departure from VO/WOCP practice. Experience elsewhere indicates that collateral is feasible on microenterprise credit in circumstances where title to household goods, for example, can be obtained simply through a bill of sale, as in Jamaica. In cases where these procedures are cumbersome or nonexistent, however, transaction costs are reduced by unsecured lending as practiced by AKRSP.

2.36 MECP loans are likely to become more risky after the initial round of activity that consists of lending to people who are already established, such as AKRSP master trainers who want to commercialize their activities fully and on a larger scale. After the initial round it is quite possible that more loans will be given for start-up rather than for an expansion of a continuing activity. These risks would be lowest for agricultural and food processing activities because these are related to borrowers' experiences and knowledge. In new ventures in other areas of commerce or manufacturing the borrower may not fully understand the requirements of commercial success, and it may be difficult to judge the market for the new product or service.

2.37 Loans may finance a high proportion of the cash costs of the microenterprise. This leads to a relatively high debt service burden, increasing the probability of default (defined as any breach of a loan contract, such as failure to repay on time). The microentrepreneur may have few additional sources of funds and may also feel, because the loan is relatively so large, that AKRSP is a sort of partner that should share in any loss. This view would be consistent with AKRSP's willingness to bear greater losses under this program than under others it operates, so that local entrepreneurs can be early entrants into markets that would attract down-country entrepreneurs and that bad debt losses are an inevitable part of an aggressive microenterprise lending program. The willingness to accept losses arises from a calculation that information costs are high and have to be balanced with bad debt costs.

2.38 Bad debt losses take time to become apparent: all credit programs begin with none. Table A3.10 shows that at the end of 1994, arrears amounted to 20 percent of MECP loans disbursed and accounted for 27 percent of amounts outstanding. Loans overdue for more than six months accounted for only 3 percent of amounts outstanding, but this proportion will probably rise for reasons explored earlier in this section. Rapid portfolio growth may cause this proportion to grow slowly or even shrink, but eventually the weight of arrears can overwhelm a portfolio as good loans are repaid and bad ones stay on the books unless they are written off.

Table A3.10 Status of Microenterprise (MECP) Loans as of December 31, 1994
(in numbers of borrowers, thousands of Rs and percent)

Region	Number of Borrowers	Disbursed	Outstanding	Overdue	Overdue as % of		Overdue > 6 Months	
					Disbursed	Outstanding	Amount	As % of Outstanding
Gilgit	745	5,289	3,610	964	18%	27%	205	6%
Chitral	380	3,318	2,611	343	10%	13%	100	4%
Baltistan	424	4,653	3,460	1,302	28%	38%	33	1%
Total	1,549	13,260	9,681	2,609	20%	27%	305	3%

2.39 Reserving against bad debts or writing them off is one means of keeping accounting data consistent with reality. AKRSP creates reserves at year-end equal to 100 percent of the outstanding amounts of loans that are more than 36 months overdue. It does not routinely write off amounts greatly in arrears, and this practice is consistent with that followed by banks in many countries. Whatever the rationale, this appears to reflect a common assumption that once a loan is written off, efforts to recover the delinquent amount cease or that debtors are no longer expected to repay. This confuses the administrative question of continuing efforts to collect with the accounting decision to keep books that show true and fair value. Amounts written off can easily be transferred to a separate, off balance sheet ledger and effort to recover can continue. This method helps maintain a more realistic view of portfolio quality.

2.40 Detailed portfolio data indicate that 266 MECP borrowers were in arrears, out of a total of 1549 who had taken loans. Repayments in full had been received from 383, while 900 had loans that had not yet fallen due. In other words, 41 percent of borrowers whose loans had fallen due were in arrears. Almost all were in arrears for the total amount of their loan. A contributing factor is that MECP loans have single or balloon maturities. Installments may be easier for microentrepreneurs to handle than relatively large maturities due all at once, depending upon the pattern of their activities. It appears probable that MECP bad debt losses may exceed those experienced by AKRSP in its other credit programs, and that these may eventually require a revision of basic MECP design features such as interest rates and the scheduling of repayments.

3. Strengths and Weaknesses in AKRSP Credit, Savings Strategy and Operations

3.1 As an experimental project, AKRSP uses its weakness to add to its strengths. Activities that do not work out as planned can be jettisoned or redesigned to perform better. For this process to be successful, a powerful and comprehensive institutional memory is essential to ensure that mistakes are not repeated and that the reasons for failure or poor performance are clearly and widely understood. The basis of an experimental activity is its flexibility, and this is a major strength of AKRSP in the conduct of its savings and credit activities. Additional aspects discussed in this section include responsiveness, strategic focus, subsidy dependence, and support, training and oversight.

a. Flexibility

3.2 AKRSP's outreach has to respond to many conditions, and therefore it is flexible. For example, VO/WOs develop at their own pace. Those in areas closer to major roads and markets have an opportunity to develop commercially more rapidly than those that are remote, for example. Their transaction costs and information costs are lower and their opportunities are less limited. This is reflected in Gilgit, which has much greater average member savings balances and greater lending activity than found in Chitral and Baltistan. Within Gilgit savings and loans are also concentrated in the better VO/WOs.

3.3 A concern of AKRSP management and of some observers is that different levels of activity inherently reflect inequity. In other words, disparate results may reflect an underlying tendency to favor some groups at the expense of others. No direct evidence of such a tendency was discovered during the evaluation of savings and credit operations. Disparate results appear to be based on differing levels of vitality and intensity of different VO/WOs. These in turn appear to reflect the skills and dedication of the activist who is often the manager, the openness of the village to change, economic opportunities related to access to markets and infrastructure, problems of trust across communal lines, and, quite possibly, luck. It is possible that those VO/WOs that are doing well get more attention than those that are doing poorly, although no direct evidence of this was discovered. If this be the case, it could represent efforts by AKRSP management to economize. It could also be consistent with the AKRSP approach of helping villagers to help themselves: too much initiative by AKRSP that is not matched by local efforts is unlikely to produce lasting results.

3.4 A related concern is that savings and credit may reinforce or lead to inequity because different people will save and borrow different amounts. AKRSP's position on savings is that each VO/WO member should save according to his or her capacity. Some VO/WOs, however, prescribe that each member save an equal amount at each meeting. This may be a symbol of solidarity and equity, or it may be used to exclude those who are relatively poor. Some VO/WOs also want everyone to borrow, which increases service charge income and hence the return for distribution to savings. Some members, however, may not want to borrow for religious reasons or because they can fund their expenditures from other sources. This is consistent with the use by AKRSP of instruments to create equitable opportunities: credit is available to all, but the complementary resources needed to utilize credit productively will be accessible to varying degrees by different households. Consequently, different amounts of borrowing are to be expected. They may exaggerate income disparities while also providing the possibility for those

in lower income categories to improve their situations by making use of the credit that they can use productively and repay as scheduled without embarrassment.

3.5 The example of greatest flexibility in credit and savings operations and strategy is VO/WOCP. Guidelines are general. For example, VOs and WOs are encouraged to use 80 percent of their lending capacity for productive purposes, but this guideline is not strictly enforced, permitting members' flexibility in what is essentially the use of their own funds. This practice can be justified on several grounds. The most important is that people borrow when they need money.

3.6 Rural credit programs have amply demonstrated that if the only or cheapest source of credit is a fertilizer loan, many will borrow for fertilizer and use the funds they would have spent on fertilizer for some other purpose that is more important to them than the use of fertilizer. This is known as loan substitution. It does not compromise loan contracts nor does it imply malicious intent. It may pose dangers to repayment if the more important purpose somehow undermines the capacity to repay the loan. Or, borrowers will buy the fertilizer on credit and sell it to someone else in order to obtain funds for their own purposes. This is called loan diversion. It is fraudulent because intention is misrepresented. Substitution and diversion may be difficult to monitor. Thus, strict enforcement of "productive" uses of loans is costly. One means of diminishing these problems is by pricing loans at market rates, reducing opportunistic borrowing.

3.7 AKRSP staff reported that some fertilizer loans were substituted, and that diversion also occurred. When VO/WOCP began, some borrowers continued to obtain "fertilizer" loans because they seemed such a sure thing. Staff encouraged members to state what they really wanted to use the funds for, and a more complete picture of borrowers' priorities and behavior emerged. Dialogs are now held between AKRSP staff and VO/WOs to verify loan use, and the Field Accountant reports on the status of loan use whenever a renewal or rollover is requested. This information is valuable for designing new financial services because it allows more responsiveness on the part of the lender and increases transparency in the loan application and approval process.

3.8 VO/WOCP is also flexible because it offers relatively long maturities, i.e., one year, compared to the crop cycle that dominates the village economy. Here the merits of flexibility are less clear because the time at which funds are due may not necessarily coincide with the period when borrowers are most likely to have cash, which is usually shortly after harvest. Fertilizer loans, by contrast, usually fell due within six months, encompassing the growing season.

3.9 One response of AKRSP to the problem of having all loans fall due at the same time under VO/WOCP has been to roll over its loans to VOs and WOs. This is permitted when interest payments are up to date and when not all members have repaid their loans taken from their VOs and WOs. This procedure has given VO/WOs more capacity to deal with problems and to do so on their own terms. However, it may also lead to more severe problems when AKRSP finally collects these loans, after two annual rollovers. This would end a period of flexibility. If villagers are not able to repay, AKRSP would be in the position of having to decide whether to seize the saving account balances that secure VO/WOCP loans. This could create bad feelings and complicate VO/WOCP activities and AKRSP efforts at outreach. Not to realize collateral, however, would be much more damaging by undermining loan discipline.

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3.10 AKRSP has decided to begin calling in all VO/WOCP loans as they fall due, starting with those maturing late in 1995. AKRSP believes that the use of annual rollovers may become counterproductive over time by encouraging laxness in dealings between VO/WOs and their members. New loans would be given following the call-in, beginning a fresh cycle. Depending upon the extent of member indebtedness relative to member liquidity, a massive call-in could create embarrassing situations. AKRSP has announced its intentions, which should give VO/WOs time to prepare. If difficulties develop, alternatives that could provide more flexibility include scheduling repayments in installments rather than in a lump sum, further increasing annual service charges on rollovers so that VO/WOs would have an increased incentive to repay, and phasing in access to the proposed new financial institutions (discussed in section 4) based on repayment in full of outstanding loans. This latter procedure was applied to short- and medium-term loans as a criterion for VO/WO participation in VO/WOCP.

b. Responsiveness

3.11 Flexibility permits responsiveness in AKRSP outreach and design. Major demonstrations of responsiveness in the evolution of the program are seen in the discontinuation of medium-term credit following bad experience with collective projects following execution of the PPI, and in the introduction of VO/WOCP. The latter program enables VOs and WOs more scope for providing savings and credit tailored to their members' situations. Loan approval has less to do with the specified loan purpose, and members determine their own borrowing limits which are equal to their savings balances, possibly supplemented by enlisting guarantors who have not exhausted their borrowing power.

3.12 Introduction of MECP enables AKRSP to move rapidly in an area which has always been central to its mission, which is to encourage local businesses and to create local employment. Dimensions of MECP that prompt skepticism include its faddishness among donors, creating enthusiasm on the basis of insufficient information about the performance of these types of loans in many countries. Is MECP's design a homegrown response to VO/WO members, or an enlightened transfer from experience elsewhere? Is its tolerance of bad debt losses, as a trade-off against information costs, in the best interests of all concerned? Will any weaknesses that arise in MECP work to the detriment of other AKRSP credit activities? Insufficient experience has accumulated to permit responses to these questions. Sustainability would demonstrate that MECP is a brilliant means of furthering AKRSP objectives, but the program will have to be carefully monitored to ensure that this is achieved.

3.13 AKRSP responsiveness is also demonstrated by its reaction to communal strife in May 1988 which resulted in damages to several villages. Loans were forgiven the following month for those most seriously affected and new loans were issued to those less seriously hit. An operational problem arose that still overshadows this response. The less seriously affected VOs argue that they should also have received a repayment waiver. This dispute still festers, impeding the activity of these VOs and souring relations between AKRSP and the community concerned. A Social Organizer assigned to these VOs complained that he has become a debt collector rather than an agent for change.

3.14 The responsiveness of the program is also seen at the VO/WO level. One dimension of this is the development of artful "get around," or bending rules or interpreting them loosely. This seems most likely to occur in dynamic VO/WOs. Examples observed by the evaluation or documented by researchers include:

- introduction of freely withdrawable deposits, outside VO/WOCP guidelines
- borrowing and lending between VOs and between VOs and WOs for purposes of liquidity management
- VOs' borrowing from their members, often at relatively high interest rates (e.g., 17 percent) for purposes of liquidity management
- VO/WO lending to nonmembers at interest rates higher than those charged to members
- emerging use of VO/WOCP facilities as lines of credit for business purposes, with frequent withdrawals and deposits (rather than repaying in full and applying for a new loan on each occasion)
- prepayment of fertilizer and land development loans to reduce service charges
- use of member savings to fund VO commercial activities, such as a village general store
- borrowing from a WO for a purpose involving both husband and wife when the husband has borrowed up to his limit at the VO
- borrowing by WOs when related VOs would face higher service charges by repeatedly rolling over their loans from AKRSP
- disregard of individual loan limits
- use of "savings days" in lieu of VO meetings when there is no business to be transacted other than savings
- members' use of loans to lend, with higher service charges, to nonmembers
- providing a foreign currency account for a VO member, in a case observed by the evaluation team
- funding a reserve out of annual profit rather than from a WO's service charge
- adoption of improved bookkeeping and reporting formats by outstanding VO managers.

3.15 In addition, every member's borrowing up to his VOCP limit, found in unsophisticated VOs, may also constitute a strategy to get around the provision that savings deposits are nonwithdrawable.

3.16 Most of these activities are innovative. They lower members' costs or increase their returns; they increase the amounts that can be borrowed or that are likely to be deposited; they facilitate VO/WOCP management; or they contribute to the welfare of the community. They indicate the types of financial services that will be most valuable in the future, i.e., those that are

flexible and that permit the client to use funds freely. For this type of development to work, however, controls and finely tuned management information systems are required to decrease the possibility of abuse and to provide early warning when deviations from prescribed practice or expectations do not work out.

c. Strategic Focus

3.17 Several strategic elements underlie the performance of AKRSP savings and credit operations. These begin with the central role of the Village Organizations and Women's Organizations. These are delivery vehicles for savings and credit and other AKRSP services and also self-help vehicles for their members. The energy and health of the VO/WO appear to be major determinants of savings levels and credit use, and of the quality of the credit portfolio. Hence, AKRSP outreach to the VO/WO is essential to establishing successful savings and credit operations.

3.18 The most effective VOs appear to center around a "social activist" who is the manager or possibly the president of the VO. This individual has frequently worked outside the village for a number of years and has a broader vision and experience organizing people to get things done. This person often is considerably richer than average villagers, having saved over the years and often having a pension that is a material sum by village standards. This exceptional activist leader is able to encourage his VO to undertake additional large projects following the completion of the PPI. These may include additional civil works, plus schools, community buildings and the establishment of a VO provision store, and training in useful skills. This type of VO goes from strength to strength and continually engages its members.

3.19 Another strategic element of AKRSP is the objective of keeping money in the local area for investment in local employment- and income-generating activities. An interesting aspect of this basis for savings mobilization is that at the outset it appears that AKRSP had no concrete strategy or expectation about how savings would be channeled to productive uses. The separation of savings from credit was an excellent policy, however, because it safeguarded villagers' savings. Had these savings been used to fund loans and been made subject to credit risk, problems could have developed from inexperience in lending, poor information about the scope for investment, and losses occasioned by unexpected risks. The loss of savings as a result of nonrepayment of loans funded by these savings could easily dissolve VOs and create enmity among members that could take years to heal.

3.20 With VO/WOCP, AKRSP in effect linked saving performance to lending opportunities, putting savings at risk, while continuing to serve an intermediary function that retained some control and access to information. It appears that only recently is AKRSP taking steps to use savings directly to fund lending through the proposed bank (described in section 4). Waiting to see how things would work, and advancing through a series of incremental steps, seems to have been highly useful. However, a casualty of this strategy was failure to mobilize savings aggressively.

3.21 A strategy of aggressive savings mobilization would seek to obtain high returns for depositors directly by lending out funds to obtain the highest risk-adjusted returns wherever these can be found. Of course, the returns to VO/WO members' savings are in fact quite high as a result of the pooling of funds into high-yielding time deposits and the return from lending

AKRSP funds, that are subsidized, to local borrowers. A cost, from members' perspective, is the awkwardness of having access to their savings only through borrowing.

3.22 Use of AKRSP resources to fund loans in fact results in the movement of savings balances down-country by the banks or other institutions that receive time deposits from VO/WOs. This appears to be inconsistent with or to frustrate AKRSP's objective, but this situation is basically temporary because new subsidy from AKRSP is unlikely to continue forever. At some point VO/WOs will have to lend their own savings, or to do so through a financial institution related to the program. The test of such an institution by this standard would be the extent to which it can retain in the program area a higher proportion of its assets than alternative modes of saving or than institutions, such as commercial banks, already in place in parts of the project area.

3.23 For example, a Rs 100 note hoarded in a pot in a home represents a transfer to the government, which received Rs 100 worth of goods or services when it placed the note in circulation. If the Rs 100 were deposited in a commercial bank immediately after issue, the additional amount received by the government would equal the proportion of the deposit that was absorbed by reserve requirements and the bank's investment in government securities. If the bank receiving the deposit can expand its volume of good loans in the area, its willingness to invest in government securities will decline, keeping more funds in the area than would occur when loan-to-deposit ratios are low.

3.24 An aggressive savings mobilization strategy would include a willingness to provide attractive savings services that would certainly have to include freely withdrawable deposits. If this strategy were adopted, savings balances would probably increase markedly, to levels much higher than could be prudently loaned in the project area. One rationale for establishing a bank or similar financial intermediary to provide retail financial services in the project area would be to intermediate or even absorb the savings and credit functions of the VO/WOs. Such an intermediary would have to move a substantial portion of its funds out of the area to earn a satisfactory return.

3.25 Another strategic focus of AKRSP credit operations is to meet the "credit needs" of VO/WO members. This focus and terminology is consistent with traditional credit projects throughout developing countries, and also with the wording of community banking and credit union legislation and regulations in, for example, the United States. However, attention to credit needs has not provided sufficient vision to make donor-supported credit projects successful in developing countries. The usual result is declining performance, subsidy dependence and lack of sustainability. This result can be expected to the extent that "need" is seen as a basis for extending credit.

3.26 Basically, "needs" are infinite and expand as programs age or become politicized, while credit is sustainable only when repayment capacity is coupled with incentives for good loan contracts. "Needs" easily lead to patronizing outreach, often translated into outright patronage when political considerations are injected into project design or implementation. "Needs" tend to invite political responses that are inconsistent in the long run with a lender's portfolio quality. This is not surprising because of the different interests and time horizons involved.

3.27 AKRSP has not yet experienced these problems to a significant degree. It may become more vulnerable over time and as new financial institutions are established that will be less

closely linked with AKRSP management, and that will be sufficiently prominent and independent to attract political attention.

3.28 A superior focus for AKRSP and most other credit projects is on creation of debt capacity, defined as the amount that an individual or entity can borrow on a sustainable basis. Creation of debt capacity requires attention to risks facing borrower and lender. Risk tends to reduce repayment capacity and risk management is one function of financial markets. Attention to the ingredients of durable loan contracts leads to more responsive financial services, more responsible financial behavior and to efforts to manage real (i.e., nonfinancial) risks facing borrowers, such as livestock mortality or dissension within a VO/WO. A revision in AKRSP's focus could provide a more elevated view of clients and a clearer vision of the ingredients of sustainability of financial intermediation, which have eluded many credit projects similar to AKRSP.

3.29 Finally, AKRSP's flexibility and responsiveness have produced lots of information in the form of savers and borrowers' financial flows. When and in what quantities do VO/WOs and their members make deposits and take loans? These patterns provide insights into the quality of financial services offered and for the design of promising new services. AKRSP may not always have treated these flows as a rich vein of information. Its imposition of the Rs 20,000 VO/WOCP borrowing limit, and the incentives that led all members of many VO/WOs to borrow up to their limit, diminished the information value of these flows, for example. More focus of strategic attention on savings and credit patterns could be useful in defining the role of the bank or other financial intermediary that could eventually take over AKRSP's savings and credit operations. Banking records offer a good basis for designing experiments, and social science research can assist.

d. Subsidy Dependence

3.30 Rural development projects invariably include subsidized services, and AKRSP credit operations are subsidized. Several rationales are invoked to justify subsidies in rural development. The most prominent in AKRSP's approach to savings and credit is that subsidies can initiate certain activities that will eventually be self-sustaining. AKRSP has consistently moved toward increasing cost recovery, toward higher rates of interest on credit and toward institutional evolution that is expected to culminate in the establishment of a bank and enterprise support operation as described in section 4. AKRSP's initial lending rate on short-term loans was zero percent, in accordance with government policy. When this policy changed, AKRSP introduced an 8 percent lending service charge. This has been increased to 10 percent on VO/WOCP rollovers and to 18 percent on MECP lending and on VO/WOCP loans in excess of Rs 20,000. Further increases would be required if subsidies were reduced.

3.31 AKRSP does not yet recover the costs of its credit operations. This can be demonstrated by calculation of the Subsidy Dependence Index (SDI), a measure devised in the World Bank that is increasingly being used by other development agencies. An SDI of 100 percent indicates that the lender would have to double its lending rate to achieve a return equal to the opportunity cost of capital. Estimates used for this calculation, taken from 1994 AKRSP reports and data provided by management, are as follows, organized according to the statement of the SDI formula:

$$S = A(m - c) + [(E \times m) - P] + K,$$

with S = annual subsidy received by AKRSP for credit operations, derived as follows:

A = AKRSP concessional borrowed funds outstanding used to fund the credit portfolio	Rs 127 million
m = interest rate that AKRSP would have to pay for funds if it could no longer obtain concessional funds	12%
c = interest rate paid by AKRSP on concessional borrowed funds outstanding	0%
E = average annual equity or net worth of the credit operation	Rs 200 million
P = reported annual profit (not adjusted for inflation)	Rs 9.1 million
K = sum of all other types of annual subsidies received by AKRSP for its credit operations	- 0 -

$$S = 127(12\% - 0) + [(200 \times 12\%) - 9.1] + 0$$

$$= 30.1$$

The SDI, which indicates the proportion by which the lending rate would have to be raised in order for the lending program to earn a return equal to the opportunity cost of capital, is derived as follows:

$$SDI = S/(LP \times n), \text{ with}$$

LP = average annual outstanding loan portfolio	Rs 127 million
n = the rate of interest or service charge on AKRSP loans	7%

$$SDI = 30.1/(127 \times 7\%)$$

$$= 3.38 \text{ or } 338\%$$

3.32 Thus, elimination of subsidy would require an estimated increase in the service charge to 31 percent, derived as follows and based on the observation that an SDI of 100 percent requires a doubling of the interest rate, 200 percent a tripling, etc.: $7\% \times 4.38 = 31\%$. If VO costs were added and allowances made for bad debts at the VO level, the rate would probably approach 40 percent. These estimates should be regarded only as a broad order of magnitude, but they do suggest that a sustainable commercial rate would be approximately double the 18 percent regarded by AKRSP as a "market" rate.

3.33 Experience elsewhere has demonstrated that while annual rates that are consistent with sustainability sound high to those from developed countries used to thinking in terms of annual rates, equivalent monthly rates do not to those from developing countries who are accustomed to thinking in terms of monthly rates. Compare, for example, 42 percent per year with 3 percent per month. In Bolivia, where a bank has been formed by an NGO, microentrepreneurs are willing and able to pay more than 60 percent (or 4 percent per month) for short-term credit in a low-inflation economy. Short-term loans issued in rural areas in Indonesia by the village units of the

Bank Rakyat Indonesia carry rates approximating 40 percent, while wretchedly poor women members of Grameen Bank in Bangladesh pay effective rates of more than 25 percent on loans repayable in 52 weekly installments. Lending costs could be expected to be higher in the Northern Areas of Pakistan because of higher transport and communication costs imposed by the inaccessibility of many VOs. Increasing the level of accounting assistance and audit oversight, described immediately below, would also add to costs.

3.34 In sum, it appears that AKRSP could continue its credit operations without subsidy, although this would require significant changes in pricing that would greatly influence the behavior of savers and borrowers. It is likely that the service charges required would be competitive with informal market rates, although AKRSP has paid relatively little attention to documenting informal finance. As will be pointed out in section 4, AKRSP's subsidy in the form of grants received provides an equity base that would enable the proposed bank to cover some of its costs from investment income, cross-subsidizing service charges on loans to its clients.

e. Support, Training and Oversight

3.35 AKRSP provides support, training and oversight of the savings and credit activities conducted by or through VOs and WOs. This contribution consists of training and systems of organization, promotion and control. The long-run health of financial activities requires considerable attention to the framework of intermediation because of the complexity of recordkeeping, the difficulty of collecting arrears and limiting bad debt losses, and the temptation to fraudulent behavior that is present wherever other people's money is concerned.

3.36 At the level of the project, separate from the activities of the VO/WOs, VOCP is subject to various types of monitoring. Monitoring of record keeping is the province of Field Accountants, FMU Accountants and Village Accountants. Credit utilization is monitored by the Social Organizers who are responsible for supporting VO/WOs. AKRSP policy is to broaden its outreach base to incorporate more fully Field Accountants and other staff, who in the past have been much less prominent than Social Organizers. Social Organizers are central to the credit process: the evaluation team was informed that Social Organizers in Chitral spend about half their time on credit activities. This reaffirms the great importance of credit in AKRSP.

3.37 Overall guidance and central records and systems are the responsibility of AKRSP core staff, headed by the Director of Finance and by the Program Manager for Credit and Savings who is in charge of the Credit and Savings Section. The functions of the section are to help VO/WOs develop financial assets and their optimum utilization, to devise mechanisms that promote equal access to finance and financial services, to accelerate village development, to leverage capital, to help create local investment opportunities and job opportunities, to transfer financial and managerial skills, and to establish sustainable and decentralized financial operations.

3.38 Problem identification occurs through the work of all those field and core staff mentioned above plus special initiatives by AKRSP's Monitoring, Evaluation and Research Section (MER). MER staff and visiting researchers have produced highly valuable insights through a number of studies of credit operations. Credit impact studies have been attempted by MER and external consultants. Credit impact, although widely discussed in development circles, is not usually a useful concept when borrowers have multiple sources and uses of funds as in the case of villagers in the project area.

3.39 Village Accountants (VAs) work directly with VO/WOs. Their principal task is to assist the VO/WO manager with recordkeeping. Great variation in bookkeeping performance was observed in VOs visited by the evaluation team. In some cases records were meticulously kept. In others this was not the case, although basic data seemed sufficient to enable a VA or FA to make reconciliations and construct summary statements. A shortcut used by one VO to avoid burdensome calculations was to allocate to each member an equal share of interest earned on a time deposit, regardless of the member's savings balance. In another VO that used this procedure the rationale appeared to be that it promoted equity within the VO.

3.40 VAs are often relatively young people who have completed 10 years of schooling ("matriculation"), who are given a hand calculator and an 11-day introductory training course to prepare them for their activities. They are paid Rs 50 per audit plus Rs 1000 per month. VAs typically cover several VO/WOs in contiguous villages. As of early 1995, the 130 VAs covered 1195 of AKRSP's approximately 1850 villages. This means that about one-third of VO/WOs lack VAs. In those cases where the secretary is highly skilled in recordkeeping this gap has little detrimental effect. Where VAs are active, however, they may not be able to realize their potential because of their limited training. VAs seen by the evaluation team seemed eager for more training.

3.41 By the end of 1994 about 1800 people had received training in 117 courses devoted to accounts. These constituted about 10 percent of the individuals participating in AKRSP training, and about 12 percent of all courses given by AKRSP. Many participants are VAs and VO/WO managers, demonstrating a substantial commitment to this function by AKRSP. However, even this level appears insufficient, and in many villages there is no back-up support: the VA is the only person in the area capable of performing his task. The present system could be improved by using highly skilled VO/WOCP managers, and possibly very good VAs, as trainers.

3.42 The VAs and VO/WOs are supervised by Field Accountants (FAs) and, more recently, by Field Management Unit (FMU) accountants. The introduction of FMUs in early 1995, as a means of organizing, coordinating and focusing field staff, was designed to decentralize AKRSP's field functions and to bring staff closer to the villages. Decision processes were changed to enable FAs and VOs to make their lending decisions independently of centralized offices in AKRSP, permitting much more rapid processing, measured in days rather than in weeks. FAs and FMU accountants periodically audit the books of the VO/WOs, and VO/WOs generally appear to regard this procedure as helpful and useful. Annual or more frequent audits would be desirable, but this is often not possible. As of April 1995 there were 14 FAs and FMU accountants, compared to 2602 VO/WOs comprised of 101,304 individual members. It is expected that the number of FAs and FMU accountants will increase.

3.43 The majority of members would have two accounts, one savings and one loan account. Saving accounts could have as many as 24 transactions per year, assuming VO/WO meetings or "savings days" every two weeks. Loan accounts would frequently have less activity, possibly as few as one disbursement and one repayment. The repayment would require interest calculations. In addition, FAs verify time deposit and other deposit balances with the banks or other institutions with which they are held.

3.44 FAs and FMU accountants often oversee the calculation of the distribution of time deposit earnings to the accounts of individual VO/WO members. This calculation is supposed to be made twice a year, in August and February for distributions received in June and December. It

requires that the total earnings be divided according to each member's savings balance or average balance. Although this is not conceptually difficult, it does require a number of calculations that may be taxing to some managers and VAs. Likewise the calculation of loan interest may involve several steps. Records observed by the evaluation team showed the FA's calculations, corrections and notes in colored ink. All records seen were kept in ink and many VO/WO managers use "white-out" fluid to cover mistakes, with the corrected sums written over the error. Good accounting practice dictates that errors be corrected by reversing mistaken entries, which makes the process transparent.

3.45 Their functions enable FAs and FMU accountants to give informal guidance to VAs and VO/WO managers. They also provide formal instruction in the courses for VAs. The manager of one VO visited by the evaluation team had taken seven weeks of AKRSP training in accounting, others reported having two weeks of instruction. Other duties of FAs and FMU accountants, in collaboration with Social Organizers, include screening and processing all requests for credit from VO/WOs and individual MECP borrowers, loan recovery and management of defaulted loans. It is clear from the list of their functions and the volume of transactions they are supposed to audit that FAs and FMU Accountants are stretched pathetically thin.

3.46 Until recently their movements were more restricted than those of the Social Organizers, who had vehicles. Recent policy changes have led to the sharing of vehicles by AKRSP field staff, upgrading the FAs from the motorcycles they previously used; while requiring more coordination, it enables FAs to work more closely with VO/WOs. They now perform savings and credit tasks that were previously performed largely by Social Organizers. Some AKRSP managers felt that a FA could perform an audit for a typical VO/WO in an hour, but this appears unlikely in many cases. In the simpler VO/WOs more corrections may be needed, while in the more active and sophisticated ones the larger volume of transactions would require more verification. In sum, it appears that FAs and FMU accountants are too few to implement accounting controls effectively.

3.47 Reported cases of fraud by VO/WO managers are relatively few. These are more frequent in lending activities than in savings, possibly reflecting more respect for neighbors' funds than for those provided by AKRSP. Fewer than 100 cases have been noted by FAs and by researchers at AKRSP, compared to a volume of more than 11,000 loans made to VO/WOs through mid-1995. A number of these involved more than one instance by a single manager. Better coverage of VO/WOs by FAs and FMU accountants would no doubt expose more abuse, although the number of instances and the amounts concerned are unlikely to be of great magnitude because of the quality of the leadership and the social cohesion of VOs.

3.48 Another instance of lack of accounting controls is the absence of audit of the FAs and FMU accountants' inspections of VO/WO records. Geographical rotation of these officials is practiced, often on a three or four-year cycle, which provides some control. However, control remains loose in the absence of more checks and balances. It is also not clear that all regional offices of AKRSP are subjected to internal audit.

3.49 AKRSP urges VO/WOs to pay their managers. There is no uniform practice in this regard, and a number of VO/WO managers receive no pay at all. AKRSP advises that managers, or management if more than one person is very actively involved, should receive remuneration equal to 2 percent of loans outstanding, taken out of the 5 percent service charge levied by the VO/WO under VO/WOCP.

3.50 An embarrassing situation seems to arise when the prescribed level or the level of remuneration approved by the VO is regarded by the manager as being trivial, such as less than Rs 3000 per year. A reaction is to refuse this payment; to accept it could be viewed as demeaning. This probably discourages some managers, causing them to lose interest. This may be the intent of a VO that is not satisfied with its manager, but it could also lead to a loss of leadership when a respectable stipend might entice a manager to be more active and creative.

f. Logistics

3.51 AKRSP faces unique challenges because of the unforgiving geography of the Northern Areas. Some areas are isolated in the winter and transport is generally difficult most of the time. This makes it difficult to conduct banking business rapidly. Bank offices are found in towns and centers, but access to these may require a walk and ride of several hours for many VO/WO managers.

3.52 It has often taken two months or more between the time that AKRSP writes a check in favor of a VO to fund loans and the receipt of good funds in the VO's bank account. Several ways have been found to reduce this lag. Checks used to be issued at AKRSP regional offices, and VO managers would have to come to these offices to pick up the checks. Now checks are given to managers by AKRSP staff at VO meetings. Check issue has been decentralized to FMUs. To facilitate check cashing, AKRSP has negotiated with its banks for cash shipments to a number of villages against instructions including the amount of the check that will be presented, the name of the VO/WO and the manager's name. Banks have been willing to oblige because AKRSP's balances with them are relatively large compared to those of other depositors in the area. Loan repayments can be made by VO/WO managers directly to the account of AKRSP at the branches of several banks in the project area.

4. Efforts to Establish a Bank and an Enterprise Support Operation

4.1 AKRSP's longer-term objectives include development of a prosperous local economy. In such an economy AKRSP would have fewer functions because citizens would be more capable of improving their conditions without outside support. Local people and institutions could deal more effectively with the larger economy and national institutions. Also, the level of commercial development of the economy would be relatively high and self-sustaining.

4.2 To achieve and operate at this level of independence, financial institutions can be very helpful. Their roles as savings mobilizers and as allocators of credit can stimulate independence, encourage greater productivity and contribute to economic efficiency. The present formal financial infrastructure in AKRSP's service area has not exhibited the level of dynamism that would be associated with the desired development trends, or that would respond to opportunities as perceived by AKRSP.

4.3 One of the functions of banks is to move funds toward financial centers where large-scale business opportunities exist. The financial markets of London, New York, Tokyo, and Frankfurt are examples of how this works on a global scale. The existence of financial centers usually requires that funds are moved out of the hinterlands of these centers. In Pakistan the Northern Areas are a hinterland for down-country financial centers such as Karachi and Lahore. This status of the Northern Areas is reflected in very low loan-to-deposit ratios in the branches of commercial banks in the Northern Areas. These are usually below 10 percent and averaged about 5 percent at the end of 1993, or Rs 65 million in loans against deposits of Rs 1,400 million. In many developed countries banks, but not necessarily all their individual branches, would expect to have loan-to-deposit ratios of between 50 percent and 80 percent. Ratios would be lower in Pakistan because regulations require that large reserves be maintained with the central bank, decreasing loanable funds.

4.4 Savings accounts generate about half of deposit balances in banks in Gilgit and Baltistan. This demonstrates that commercial banks clearly provide a highly useful and apparently convenient service to depositors, more than 83,000 of them in Gilgit and Baltistan at the end of 1993. But banks invest few of these funds locally. Domestic commercial banks in Pakistan are required to have branches in all Provinces, which makes it especially easy for the country's financial centers to mobilize funds from the hinterlands.

4.5 Some observers report that some managers of branches in the project area have been posted there against their will, presumably diminishing their dedication to development of the local market for loans. Negative comments about bankers abound in most countries, but the Northern Areas are clearly not accorded a high priority by Pakistani commercial banks except as sources of deposits. However, VO/WO managers interviewed by the evaluation team reported favorably on the banks at which deposits are kept and about the individuals they deal with in these banks.

4.6 AKRSP staff reported that banks were willing to provide exceptional services to the project because it has relatively large balances with bank branches in its service area. These services include free cash deliveries to VO/WOs when VO/WOCP loans are being disbursed, for example.

4.7 Against this backdrop, the rationale for decentralized banking or a local bank that would lend to the poor would be to develop lending opportunities in areas that other banks are unwilling to penetrate. To succeed, the new lender would have to obtain good information about business prospects and about individual clients. It would have to build good, highly valued relationships with large numbers of poor people. A local bank would presumably have a greater incentive to work at these tasks than would a nationwide bank that would naturally have to prioritize its activities geographically.

4.8 Another rationale for a local bank is that AKRSP's financial services involving VO/WOs could benefit from increased professionalization. This is not meant to imply that AKRSP has not been professional in its approach or that its staff are unqualified. Quite the contrary: all 19 financial professionals reporting to the Director of Finance have university degrees. Fifteen have B.Com.s, two have B.A.s, one has an M.Sc. and one is an MBA. The Savings and Credit Section is fully computerized; meaningful records are maintained. However, as noted elsewhere, more accountants are needed and more training would be useful. Upgrading the system would require more attention to design of new services, leveraging deposits into loans where this could be done prudently, better follow-up of arrears (which amounted to more than one-third of short- and medium-term loans outstanding at the end of 1993), improved accounting and controls, risk-based measurement of results, and, hopefully, more aggressive deposit mobilization.

a. AKRSP Efforts to Develop Financial Services

4.9 In the early 1990s AKRSP began to explore the scope for establishing a commercial bank or development finance institution that would be responsive to opportunities in the local market in the Northern Areas. Specialists from abroad and local experts assisted in this effort; several reports were produced. The latest of these, dated August 1994, forms part of the basis for the discussion in this section: (Iqbal Hussain of IDS (pvt.) Ltd. and Mary Houghton and Ronald Grzywinski of Shorebank Corp., "An Integrated Approach to Development Finance." Institutional arrangements and financial projections discussed here are for Option 4 as identified by the consultants and as supported by AKRSP at the time of the evaluation mission's visit in April 1995.)

4.10 A number of options have been explored in several comprehensive reviews and analyses. By early 1995 AKRSP was close to a consensus for establishment of a retail commercial bank and an enterprise support division or company that would promote small businesses, provide funds to businesses and social infrastructure projects, and bear relatively high risks. Clients of both institutions would be members of VO/WOs and others living in the Northern Areas. The proposed bank and company would work closely with each other and could collaborate in the financing of certain borrowers.

4.11 The most perplexing problem delaying realization of this objective has appeared to be requirements imposed by banking laws and regulations or by cooperative laws and regulations. It seemed in early 1995 that suitable arrangements could be made with national banking authorities to exempt these special institutions from laws and regulations that are not appropriate to their operation. This would be justified in part because these institutions have origins and objectives materially different from those of mainstream formal financial institutions in Pakistan. Criteria of appropriateness include safety and soundness, transaction cost economies, a regional focus and ability to serve large numbers of poor people.

b. The Functions of the Northern Region Development Bank

4.12 Commercial banking functions of accepting deposits, issuing and administering loans, and making payments would be carried out by a new institution: the Northern Region Development Bank (NRDB). The seeming contradiction between the proposed institution's name and functions probably reflects a marketing or image strategy, and may also be related to legal and regulatory issues that provide development banks a certain flexibility not available to commercial banks. One aspect of this could be greater emphasis on term lending. NRDB operations would be limited to the Northern Areas. It would establish branches initially in Gilgit, Chitral and Skardu. It would be the only commercial bank in Pakistan permitted to operate at a sub-national level.

4.13 NRDB would be a for-profit institution that would completely take over the credit operations of AKRSP. NRDB would be funded by the transfer of donor funds committed to AKRSP, amounting to Rs 230 million as of August 1994, plus Rs 20 million in service charges earned by AKRSP on its lending operations, and Rs 50 million in new money to be raised externally. The Rs 50 million would fund social infrastructure lending, while the Rs 250 million would be a revolving fund for commercial banking activities. The consultants proposed that the bank and the company both be owned by a holding company or that they be owned by AKRSP, which is a registered company.

4.14 The mandate of NRDB would be to provide credit through the VO/WO system, to promote development of enterprises at the village level, to improve credit appraisal procedures, to eliminate subsidies in order to achieve sustainability and reduce financial market distortions, and to be a stable and permanent source of funding. Activities that are regarded by AKRSP as attractive for local development include a) agribusiness, such as apricot production and marketing, seed potato marketing and poultry development; b) tourism, primarily small hotels and catering establishments; c) local craft products; d) furniture making from wood available locally; e) light engineering; and f) credit for women entrepreneurs.

4.15 Social and physical infrastructure activities that NRDB could fund include small-scale hydro power (hydels), metalled roads, land reclamation and irrigation, primary schools and dispensaries. Loans would be made to individuals and to VO/WOs that would develop and operate these activities. These loans would be relatively large, an estimated Rs 1 million each according to the projections, and infrequent, about 15 a year after that level is reached in year 3. Because of a perception that social benefits would be greater than private returns, the consultants who assisted AKRSP with the development of proposals suggested that social infrastructure lending could merit concessional lending rates. No financial institutions in the project area presently will lend for these types of activities, yet they could stimulate all types of enterprise by lowering transaction costs and increasing output.

4.16 NRDB would have two divisions: Rural Banking would work only with VO/WOs and Commercial Banking would deal with urban clients in the Northern Areas. The consultants' report suggests that sub-branches be established in each of the 14 subdivisions in AKRSP's service area, each headed by a "Social Organizer." AKRSP Field Accountants would likewise be part of the staff of NRDB, and their number would be doubled to a staffing strength of 28 so that they could visit each VO/WO at least once every three months. Full staffing, projected for the third year of operations, would consist of 72 persons. (The question of using Social Organizers as sub-branch managers deserves review. Would people with accounting and finance

backgrounds be more appropriate? What sort of training in finance would Social Organizers require to run a sub-branch effectively?)

c. The Role of the Enterprise Support Division or Company

4.17 Enterprise support consists of promoting new businesses through provision of capital and critical business information through training and guidance. These functions would be undertaken by an enterprise support division or company. The former term was used in the consultants' report, while the latter was preferred by AKRSP as of early 1995. Accordingly, ESC is used here to refer to a company.

4.18 ESC would promote enterprises in the Northern Areas. The company would have three divisions: Strategic Opportunity Development and Enterprise Promotion would work with groups of entrepreneurs, providing services broadly to develop markets, as for example, by providing market information and advice about technology. Enterprise Development would offer management, marketing, product development and training to individual business operators. A network of consultants will assist entrepreneurs to improve the profitability of their operations. Fees for services are expected to cover 50 percent of the costs of services provided. Sub-bank Finance would provide funding through loans, partnerships, leasing and other vehicles that will help fledgling businesses facing risks greater than those customarily suitable for commercial bank funding. ("Sub-bank" does not seem to be a standard term, at least internationally, and may thus be confusing. "Development finance" or "Venture finance" might be more widely understood.) Losses are expected to equal between 5 percent and 15 percent of amounts put at risk by ESC. This unit would also undertake long-term infrastructure financing.

4.19 ESC is expected to be launched with an equity base of Rs 150 million to be provided by external sources. This level of funding is projected to enable ESC to be self-sufficient in the long run. ESC would not accept deposits, as these liabilities would limit its ability to take risks and engage in "aggressive financing." Full staffing projected to occur during the third year of operation would consist of 21 persons.

d. Spin-Off Issues and Strategies: NRDB

4.20 The spin-off of NRDB and ESC from AKRSP raises certain issues. Those highlighted by the consultants include selection of management with sufficient vision to manage these new organizations, rapidly moving AKRSP savings and credit operations and appropriately-qualified staff to NRDB, and a strategy that would enable the new organizations to have appropriate legal form and capacity to operate effectively. These issues are indeed important and at the time of the evaluation mission's visit were receiving the considerable attention they require. Related concerns at that time focused on the governance structure that would link NRDB and ESC.

4.21 Several other strategic concerns should also be noted. Starting points for discussion for NRDB include the implications of its financial structure and its relations with VO/WOs. These points are explored below.

4.22 NRDB's proposed financial structure is unique, initially consisting entirely of grant funds. This provides a tremendous source of subsidy, because no interest or dividends need be paid, and it also provides a tremendous capacity to bear risk. Enormous volumes of funds could

be lost before depositors would bear any risk. This is an excellent funding formula for a bank with the mandate given to NRDB, and is consistent with the experimental approach of AKRSP, its parent. The extent of this uniqueness is exhibited by the consultants' projections that show a return on assets of 3.6 percent in year 5, 11.5 percent in year 10 and 14.4 percent in year 15. Commercial bankers in many developed countries are pleased when they can report a 1 percent annual return on total assets, ecstatic if they ever reach 2 percent. Free funds enable NRDB to achieve extraordinary profits for reinvestment in operations.

4.23 (Provision of representative industry ratios in this text are not meant to imply that NRDB should seek to look like other banks or the average bank. It would always be a special sort of bank with its own logic and structure. Data on industry norms are provided to demonstrate NRDB's uniqueness and occasionally to raise questions of feasibility, accordant to context.)

4.24 The consultant's projections also move NRDB toward interest rate or markup levels that would be more consistent with sustainability than those currently charged by AKRSP. This is reflected in assumptions that show operations initially charging and paying rates similar to those charged by AKRSP, and increasing most of these rates by 7 percent per year (compounded at 1.07 times the initial rate, not a rate increase of 7 percent per year) each year for seven years, after which they are held constant. The 19 percent initial rate for short-term commercial loans and microenterprise loans, for example, rises eventually through compounding to about 30.5 percent. The proportion of interest income or markup to total loans rises from 12.5 percent in year 1 to 24.1 percent in year 8.

4.25 One form of incentive that does not seem to have been considered by AKRSP or by its consultants consists of interest rebates for borrowers who make all their payments on time. This has been used quite effectively by Bank Rakyat Indonesia. This permits banks to quote higher rates than they might otherwise, and also not to have to bother with penalty rates on arrears, which are usually hard to enforce.

4.26 NRDB is expected to become profitable in project year 3. Its retained profits are projected by the consultants to equal 4 percent of total assets in year 5, 30 percent in year 10, and 59 percent in year 15 (Table A3.11). There is no other source of capital (i.e., net worth or equity): the initial transfers of donor grants and service charge income accumulated by AKRSP are treated as liabilities in the analyses. An international standard capital-to-assets ratio is 8 percent (adjusted for risk); some very well-capitalized banks in developed countries have 10 percent unadjusted ratios that are directly comparable with those projected for NRDB.

Table A3.11 NRDB Financial Projections, Years 1, 5, 10 and 15
(in millions of Rs)

	<i>Year 1</i>	<i>Year 5</i>	<i>Year 10</i>	<i>Year 15</i>
ASSETS				
Cash and investments	241	176	100	372
Net loans and advances				
Social infrastructure	5	64	146	231
Other	71	249	572	1030
Net banking assets	317	489	818	1633
Other assets	28	8	0	13
TOTAL ASSETS	345	497	818	1646
LIABILITIES AND NET WORTH				
Deposits	99	177	275	372
Grant for infrastructure loans	50	50	50	50
Loans	0	0	0	0
Revolving fund from AKRSP	200	250	250	250
TOTAL LIABILITIES	349	477	575	672
NET WORTH				
Capital	0	0	0	0
Accumulated Profit	-4	20	243	974
TOTAL LIABILITIES AND NET WORTH	345	497	818	1646
REVENUE				
Markup or interest income	28	75	189	371
Fees commissions, etc.	0	3	8	15
TOTAL INCOME	28	78	197	386
DIRECT EXPENSES				
Markup or interest paid	5	23	44	60
Bad debt expense	1	5	14	26
TOTAL DIRECT EXPENSES	6	28	58	86
NET FINANCIAL INCOME	22	50	139	300
OTHER EXPENSES	26	32	45	63
TRANSFER TO ENTERPRISE SUPPORT COMPANY	0	0	010	15
NET PROFIT	-4	18	84	222

Source: Iqbal Hussain, Mary Houghton and Ronald Grzywinski, "An Integrated Approach to Development Finance: Analysis and Preliminary Business Plan." Volume III, Tables L-10 and L-11.

4.27 The proposed bank is also unique in being highly liquid: its cash and investments would in some years equal or exceed its deposit liabilities. Liquidity as a proportion of deposits is highly variable but would range around 35 percent in many banks, although high reserve requirements lead to ratios higher than this in Pakistan. High levels of liquidity would give NRDB great flexibility in strategic decision-making, innovation and resource allocation.

4.28 Would these extraordinary levels of earnings, capital and liquidity be achieved? Expectations of extraordinarily high returns and liquidity reflect analytical technique used in the

projections, which demonstrate that the bank would have a high degree of flexibility based on its capital, earnings and liquidity, which are indicators of safety and soundness. This style of analysis is not necessarily meant to reflect precisely what could or would be accomplished, but rather to give a point of reference, a relatively straightforward baseline situation. From this perspective, the consultants' projections suggest that NRDB would occupy a position of extraordinary strength. How could NRDB capitalize on this strength to fulfill its mission?

4.29 One possibility, consisting of the normal commercial response, would be to fill some of the "space" implied by these ratios by engaging in more lending and in more risky lending. More lending could soak up liquidity and earn a better interest return than investment in government bonds or on funds placed with other banks. For example, the projections assume a return on investments beginning at approximately four percent, while the initial interest rates or markup on most loans would be 19 percent. These rates increase over time and the spread between them narrows, but increasing the loan portfolio by pulling funds out of the investment portfolio helps profitability and outreach, so long as increased operating expenses and bad debt losses do not consume the incremental revenue from lending.

4.30 More risky lending could also produce better interest yields if NRDB were willing to charge differential rates that reflect different levels of risk. The projections assume that all loans of a specified type would carry the same interest rate. The projected composition of the loan portfolio is given in Table A3.12.

4.31 Losses from more risky lending could reduce profits and capital levels. Bad debt losses as a proportion of total loans outstanding are projected to rise from 0.6 percent in year 1 to 2 percent in year 12. These proportions seem far too low, approximating commercial banking norms in highly developed countries where legal recourse is a feasible option for creditors, which it is not in small-scale lending in most developing countries. There is managerial merit in establishing a zero-defect policy and expectation that there will be no delinquencies and bad debt losses, as this would encourage loan officers and managers to be diligent and set high commercial standards for borrowers. However, reality will be different, as suggested by AKRSP experience.

4.32 The projections deal with bad debt losses as a proportion of loan amounts falling due each year. An accounting issue raised by this treatment is that it might fail to recognize the balances that are not yet due on loans that are affected by arrears. A portion of the portfolio much larger than 2 percent could be ultimately uncollectable. A superior treatment would be to recognize the bad debt loss expectation each year at the time a loan is made. Using the 2 percent assumption, for example, a reserve for bad debts equal to 2 percent of each loan issued would be established at the time the loan is disbursed. Another loss reserve equal to 2 percent of interest earned, assuming accrual accounting, could also be established. If losses were greater than 2 percent, the excess could be written off each year. If losses were less, recoveries in excess of the expected loss 2 percent could be used to reduce the reserve or written back. This treatment would be much more transparent and would also greatly diminish the confusion surrounding the significance of a reserve or write-off. Setting up a reserve or taking a write-off does not mean that efforts to collect arrears necessarily cease. This approach to accounting would put NRDB in the forefront of disclosure in donor-supported development lending, and also possibly at the forefront among banks in Pakistan.

Table A3.12 Projected Composition of NRDB Loan Portfolio
(in million of Rs and in percent)

	Project Year				Initial Interest Rate	Bad Debt Loss Expectation
	1	5	10	15		
Loan type:						
Agricultural						
Short-term	2.7	21.4	45.0	70.1	15%	1%
Medium-term	1.1	14.4	37.6	60.0	15%	3%
Subtotal	3.8	35.8	82.6	130.1		
Commercial						
Short-term	9.0	74.7	180.5	322.9	19%	2%
Medium- and long-term	6.0	61.5	203.8	447.9	19%	5%
Subtotal	15.0	136.2	384.3	770.8		
VOCP	48.0	72.0	102.0	132.0	10%	0%
Microenterprise	5.0	9.0	14.0	19.0	19%	1%
Social Infrastructure	5.0	63.9	146.2	230.9	8%	10%
Total	76.8	316.9	729.1	1282.8		
Composition:						
Agricultural	4.9%	11.3%	11.3%	10.1%		
Commercial	19.5%	43.0%	52.7%	60.1%		
VOCP	62.5%	22.7%	14.0%	10.3%		
Microenterprise	6.5%	2.8%	1.9%	1.5%		
Social Infrastructure	6.5%	20.2%	20.1%	18.0%		
Short-term	84.0%	56.0%	47.0%	42.0%		
Medium- and Long-term	16.0%	44.0%	53.0%	58.0%		

Notes:

Interest rates on VOCP loans are projected at 10% for years 1-3, 11% for years 4-5 and 13% thereafter.

Interest rates on all other loans are projected to increase by 7% annually through year 8, i.e., compounding at 1.07 times the previous year's rate.

Bad debt loss expenses apply to principal plus interest or markup falling due each year. No losses are expected for VOCP loans, which are fully secured by VOCP deposits.

Short-term loans include: short-term agricultural, short-term commercial, VOCP and microenterprise loans.

Medium- and long-term loans include these categories of agricultural and commercial loans plus social infrastructure loans.

4.33 Meaningful comparison with other programs is difficult because of selective or poor reporting of bad debt losses by many development finance and NGO lenders and by donors for the programs they finance. In addition, microenterprise lending, for example, is not yet mature, making norms hard to establish. Christen, Rhyne and Vogel reported delinquencies ranging from nil to 20 percent of loans outstanding by 11 relatively successful large microfinance institutions, with annual write-offs ranging from nil to 4 percent of their total portfolios. However, reporting norms and standards differ and some skepticism is in order in the interpretation of these data.

4.34 A second possibility for NRDB would be to subsidize services massively, reducing profits and hence the bank's capital base. The consultants advocated concessional rates of interest for investments that seem worthwhile socially. Their projections assume an initial 8 percent interest rate and a 10 percent bad debt loss expectation on social infrastructure lending, which would be funded from donor grants. However, concessional rates should be treated with

skepticism, especially in poor countries where the sources of subsidy are few and uncertain in the long run. AKRSP has always embraced the objective of creating sustainable systems. Reliance on subsidy easily leads to dependence and to attitudes and expectations that do not lead to sustainable solutions to local problems such as infrastructure construction and maintenance.

4.35 Hydels, for example, have been adopted by a number of villages in the Northern Areas without subsidy, by subscriptions provided by the villagers themselves. Land development and irrigation have benefited greatly from AKRSP grants, however, and outright grants rather than concessional interest rates could assist transparency, and not impede the development of rational financial markets. Roads, primary schools and dispensaries could presumably be organized in ways that ensure high levels of cost recovery.

4.36 A third means of filling the space created by NRDB's unique financial structure would be to mobilize deposits aggressively, which would increase costs and narrow margins. However, NRDB is so substantially funded that for many years it will not have to be very dependent on savings, and will not have a financial or commercial incentive to mobilize savings aggressively. The strategy proposed by the consultants restricts deposit-taking until sufficient lending volume has developed to cover the costs of deposits, which are projected to be about 8 percent per year initially on non-VO/WO deposits and 11.58 percent for VO/WO deposits. Interest or markup expense on deposits is expected to rise from 11.1 percent in year 1 to 20 percent in year 11. Total deposits projected for year 1 are Rs 99 million; for year 15, Rs 372 million. These seem low compared to VO/WOCP savings balances of Rs 210 million in 1994 (Table A3.1), implying that VO/WOs would continue to hold much of their funds in commercial banks and similar institutions where they now have balances.

4.37 Deposits are a source of cost as well as a source of funds. NRDB projections suggest that the former are to be avoided and the latter are not needed. There are a number of reasons, however, why deposit mobilization is a positive factor in developing banking institutions. AKRSP's early insistence on linking savings and credit hints at these features. Deposits give the community a stake in a bank. Institutions that are lenders only may be regarded as alien and hence not highly valued; local values may regard it as acceptable to default on a lender that appears to have lots of money and that offers a narrow range of services. Deposit flows or patterns are also a valuable source of information about the local economy in general and individual depositors in particular.

4.38 NRDB might usefully subsidize deposit services as a means of serving a wider clientele and encouraging thrift. Most people save, even if for very short periods of time. The agricultural calendar creates scope for large savings and also a necessity for large savings. Most people, especially the poor, want to have funds on hand for emergencies and special opportunities. Hence, savings relationships between banks and clients tend to be long-term. Loans, by contrast, are often taken for specific purposes and for limited periods of time. Banks typically have on their books many more deposit accounts than loan accounts. Deposit balances also tend to exceed loan balances, and the consultants' projections reflect this by assuming that VO deposits would equal 175 percent of loans outstanding to VOs.

4.39 NRDB projections indicate that VOCP deposits would remain the core deposit base, with other retail deposits, largely from urban areas, beginning at a level equal to about 18 percent of VOCP deposits, and rising to a level equal to about 61 percent of VOCP deposits. The projected

mix of deposit types consists of demand deposits, 5 percent; profit and loss sharing (or savings) accounts, 45 percent; and time deposits, 50 percent.

4.40 NRDB's relationships with VO/WOs are not fully explored in the consultants' reports or strategy documents. This is an extremely important issue for several reasons. One is the amount of effort that AKRSP has devoted to building VO/WOs, which are really the centerpiece of the project. Another is the opportunities that are presented by the strength of VO/WOCP. These possibilities may be considered by looking at two extremes. One is that all banking business be conducted by NRDB, which would leave no savings and credit roles for VO/WOs except possibly as a means of gathering deposits. The other extreme would be for VO/WOs to act as local financial intermediaries served by NRDB.

4.41 Upgrading VO/WOCP into intermediaries in their own right raises certain legal issues because VO/WOs have no legal form and are unlikely to obtain any soon because of political considerations, and restrictions on the range of corporate forms permitted in Pakistan. However, they might be included in the organizational and governance structure of an NRDB with decentralized village units. This could include village credit committees, investment committees and audit committees, as well as sub-branch or agency management including accounting functions.

4.42 The case for having a decentralized network is based on the performance of VO/WOs, as suggested above, and on risk management and cost concerns. Linking local deposits to local lending could be an excellent tool for maintaining credit discipline. Problems dealing with broken contracts would first of all be a VO/WO issue. Village banks might be cheaper to run than a more centralized system because a manager's pay could be based on the level of activity of the VO/WO rather than on a standard scale, as is currently the case with the 2 percent commission on loans. NRDB's projected staffing and operating costs cannot be judged excessive: in year 1 they are expected to equal 11.6 percent of total assets, declining rapidly to 7.2 percent in year two, and thereafter declining gently to 4.1 percent in year 15. Operating expenses are expected to begin at about Rs 19 million per year and increase to Rs 49 million annual in year 15. These expenses would consume about 70 percent to total income in year one, declining to about 13 percent in year 15.

4.43 Local lending need not be limited to the local deposit base, but the link would be useful because it could ensure that the community shares part of the risk of loss. The nonwithdrawable feature of traditional deposits could be utilized to create some sort of capital base, along with reserves that are now being established and maintained from the VO/WO's commission on loans. Finally, if credit is really the glue that holds the VO/WO together, a strong case can be made for decentralization of credit operations.

4.44 Certain types of lending, such as for urban activities where there is no VO/WO, or for relatively large industrial purposes and for social infrastructure, might best be handled on a more centralized and professional basis beyond the VO/WOs. But even in these cases, VO/WOs with some attachment or relation to the activity might want to participate in funding. Where losses are expected to be great and the social benefits overwhelming, it could be unfair to expose VO/WOs to these risks. Most of these situations are likely to arise from concerns and initiatives outside the villages.

4.45 Examples of decentralized systems that contain some sort of center with relatively independent decentralized operations include credit unions and the village units of Bank Rakyat Indonesia (BRI). The credit union model incorporates central federations that provide banking services to member credit unions; systems and procedures specifying governance structure and practices, and how business is to be conducted at the local level; research to assist risk management and innovation; and audit services, which are often compulsory. The BRI model is a more conventional branch banking model, but with strong pecuniary performance incentives for branch staff, and with special services for clients of these village units, such as savings accounts geared to rural savings behavior.

e. Spin-Off Issues and Strategies: ESC

4.46 The major issue arising from the ESC projections is its losses, which are expected to equal between 5 percent and 15 percent of funds at risk, depending on the type of borrower. These losses arise from risks created by innovative lending against borrowers' expected future cash flow and the general absence of meaningful collateral. Lending against cash flow rather than against the value of assets is at the heart of developmental lending.

4.47 Lending against collateral means that loan size is determined by collateral value. Lending against expected cash flow permits loan size to be related to opportunities that the borrower can master. However, much greater analytical detail is required for cash flow lending because of the greater impact of risk on repayment capacity. Also, relationships with clients have to be much deeper and broader in order to generate the flow of information that creates confidence on the part of the lender. Cash flow lending strategies do not have to preclude taking collateral, of course, but meaningful types of collateral seem difficult to identify and to realize in cases of default in the Northern Areas.

4.48 ESC would have three sources of income: from enterprise infrastructure loans, from sub-bank loans and from investments in which it would store cash. This cash begins with the Rs 150 million of start-up funding, which is treated as equity capital on which no dividends would be paid. Cash balances diminish through year 12 as lending volume increases. It would also receive transfers from NRDB, taken out of NRDB's profits, which are projected to be quite healthy (Table A3.11). Transfers of between Rs 10 million and Rs 25 million are projected annually beginning in year 6. These are taken straight to equity and not to income. ESC earns an operating loss in each of the 15 years covered by the consultants' projections. This annual loss peaks at Rs 4.8 million in year 6, declines to Rs 3.4 million in year 15 and would eventually be eliminated (Table A3.13).

Table A3.13 ESC Financial Projections, Years 1, 5, 10 and 15
(in millions of Rs)

	Year 1	Year 5	Year 10	Year 15
ASSETS				
Cash and investments				
Net loans and advances	132	74	56	72
Infrastructure	2	18	33	46
Sub-bank	5	42	83	119
Net banking assets	139	134	172	237
Other assets (net)	8	0	0	0
TOTAL ASSETS	147	134	172	237
LIABILITIES AND NET WORTH				
TOTAL LIABILITIES	0	0	0	0
NET WORTH				
Capital	150	150	150	150
Transfers from NRDB	0	0	55	140
Accumulated Profit	-3	-16	-33	-53
TOTAL LIABILITIES AND NET WORTH	147	134	172	237
REVENUE				
Markup or interest income on loans	1	9	22	34
Investment income	12	9	8	10
TOTAL INCOME	13	18	30	44
EXPENSES				
Depreciation	2	2	3	4
Bad debt expense	0	2	5	8
Operating and other expenses	14	18	25	35
TOTAL EXPENSES	16	22	33	47
NET PROFIT	-3	-4	-3	-3

Source: Iqbal Hussain, Mary Houghton and Ronald Grzywinski, "An Integrated Approach to Development Finance: Analysis and Preliminary Business Plan." Volume III, Tables L-48 and L-49.

4.49 Enterprise infrastructure loans are expected to be repayable in equal installments over 10 years, with an initial markup or interest rate of 10 percent and a 10 percent bad debt loss on principal and interest. These are expected to be large loans. The projections assume they amount to Rs 1 million each. Two would be issued in year one and four every subsequent year, with loan size increasing by a factor equal to the rate of inflation. Sub-bank loans are also repayable in 10 years at an initial interest rate of 15 percent, and projected bad debt expense equals 15 percent of principal and interest. The return on investment is estimated at 10 percent. These assumptions confirm that ESC is not expected to be highly profitable.

4.50 However, interest rates would ratchet up at a compounded rate of seven percent annually. The initial 10 percent on enterprise infrastructure loans would reach 16.06 percent in year eight, following which this rate would remain constant. Sub-bank loan rate would likewise increase from 15 percent to 22.61 percent in year seven and remain at that rate thereafter. These

increases would affect only new loans as they are issued. All loans issued in year one, for example, would retain the original interest rates, either 10 percent or 15 percent, throughout their lives.

4.51 The primary difficulty with high loss expectations in development lending is containment. For reasons outlined in section two, recoveries tend to deteriorate. This can easily nurture a default culture, especially where the lender is viewed as distant, somehow different culturally, or as fundamentally a charitable institution, a cachet that unfortunately often accompanies development assistance, and that is imputed to the attitude of donor institutions and officials.

4.52 Specifically, what will ESC do to persuade its borrowers that it expects repayment in full when it is hemorrhaging at a rate of 15 percent on certain loans? This dimension of development lending by ESC will require a robust strategy and intense management. One fundamental would be that its borrowers lose more than the 10 percent or 15 percent ESC expects to lose. This would deter some opportunistic applicants. It cannot be claimed that AKRSP has found a solution to this problem with its own lending. Its Strategy Development Committee reported in September 1994 that delinquencies amounted to 11 percent of its active portfolio and that their level was rising.

4.53 From the perspective of containment, AKRSP should consider vesting in ESC the social infrastructure loans that NRDB is expected to make. These are also large loans that are expected to create losses of 10 percent of principal and interest. This redefinition of functions would help to erect something of a wall between clients' expectations regarding NRDB, which would operate on an entirely commercial basis, and ESC which would suffer more setbacks in activities that have a larger venture capital element. However, ESC would be dealing with larger clients, and the poor clients of NRDB might begin to wonder why they are supposed to repay in full and on time when larger borrowers, or borrowers for larger projects, in the end do not.

5. Issues and Measures to Improve Performance

5.1 AKRSP's history of relatively good performance in savings and credit operations creates a wonderful platform for growth and innovation. It also can be improved. The future direction that is most useful can be described in general terms as the professionalization of financial intermediation, which is made possible by the experience and skills accumulated by the program and its beneficiaries since 1983. This concluding section gives a brief, general overview of major findings and recommendations from previous sections.

5.2 Professionalization is basically an exercise in increasing specialization. This is a well-worn path, but not without challenges. Areas where professionalization could be most helpful include a shift in strategic focus from meeting credit needs to creating debt capacity, building financial information systems and introducing other measures to control and manage risk, improving operations support and training at the VO/WO level, and increasing controls and other internal prudential oversight.

5.3 Institutional form is also an issue, created by the innovative decision to spin off credit and savings operations to a new bank, the NRDB, that would be primarily a commercial bank but with an unusual capacity to make term loans, and an ESC that would assist market development and business formation, lend at relatively long maturities and take risks beyond those that commercial banks would customarily be prepared to accept.

5.4 Specific institutional issues are how NRDB would interact with VO/WOs, which constitute the fundamental basis for its market niche, and how it can deploy its strength based on a unique financial structure. The major issue for ESC is how to manage and contain the risks that its founders expect it to embrace.

5.5 *Strategic focus:* It is easy to lend for credit needs and to lose money doing so. This is the fate of most donor-supported credit programs, which are unsustainable. Needs are not subject to very precise quantification, are subjective and tend to expand as time passes and as programs are politicized. Needs also tend to create or encourage dependence.

5.6 By taking the leap to form a new bank, AKRSP has made the decision to seek sustainable solutions that have evolved from its experimentation and refinement of its activities for more than 10 years. A change in objective will assist the quest for sustainability, and this consists of a shift in strategic focus from meeting credit needs to creating debt capacity. Debt capacity is the amount of credit that a borrower can command on a sustainable basis. This requires that relationships between borrowers and lenders center on good loans, defined as loans that are repaid as agreed at the time the loan contract was signed. Good loans are also characterized by a balance between the borrower's own contribution to his or her venture and the lender's contribution. This balance requires careful attention to the proportion of financing that is provided by debt.

5.7 The relevant time horizon for determining sustainability of a credit relationship depends on the nature of the borrower's activities. For an industrial concern the period could be the length of a business cycle. For a farm it could be from planting to harvest or from bad year to bad year, or from an excellent year to the next excellent year. The key to ascertaining debt capacity is to estimate the borrower's repayment capacity in a bad year or other adverse situation, after

allowing for "senior claims" that the borrower regards as more important than paying the lender. These include continuation of a business, maintaining a certain standard of living for a family, and socially important expenditures as determined by the local culture, for example. Loan size would then be a function of this risk-adjusted repayment capacity, more specifically the amount of risk that the lender is willing to take in the adverse situation. This risk can be measured by the cost of arrears on the lender's books and bad debt losses. Lenders willing to take larger risks will make larger loans, other things being equal, than lenders with less interest in risk-bearing.

5.8 Using realistic projections of cash flow to determine loan size contrasts with the conventional approach that relates loan size to the incremental cost of an investment to be undertaken by a loan applicant. Many lenders arbitrarily make the decision regarding the proportion of the investment to be financed by debt, such as 80 percent, 90 percent or 100 percent. The conventional approach often leads to high proportions of debt financing and correspondingly high debt service burdens. Relatively large debt service obligations can easily lead to delinquencies and bad debt losses when the borrower encounters adversity. This danger is most apparent in AKRSP's microenterprise (MECP) loan portfolio. It is least apparent in its traditional fertilizer loans because the costs of fertilizer are small relative to the borrower's cash flow, and to the value of the harvest or the amount of the harvest that is sold.

5.9 Basing loan size on cash flow projections also assists in determining realistic repayment schedules. AKRSP has relied largely on single maturity instruments, with amounts falling due in a lump sum. These indeed have a logic in agricultural lending because funds are clearly available just after harvest and may be unavailable at most other times. Single maturities keep transaction costs low, but may fail to capitalize on the periodic meetings of VO/WOs as occasions for installment payments or to recognize cash flow patterns in many microenterprise activities.

5.10 Other measures that AKRSP could usefully take also relate to building debt capacity. Attention to borrowers' cash flows, and to generation and application of the information required to lend realistically, can build strong relationships that are valuable to clients. Borrowers are less likely to default when they value their relationship with their creditor. The debt capacity approach is based on measures to control and manage risk, beginning with simple farm, enterprise or firm models using adjustments for reasonably expected adversity. Experience with such models can provide insights into real risks, i.e., the things that go wrong, their causes and ways to minimize their adverse impact. Responses to risk could range from the promotion of savings accounts and savings plans as hedges or cushions against risk, to agricultural and business training to enable farmers and other entrepreneurs to evaluate risks and respond to them effectively, to other ways to increase incomes such as has been done with apricot processing, for example.

5.11 *Financial information systems:* Building financial information systems can also help to control risk. A simple collection performance measure, for example, would be to compare collections of debt service payments to amounts of principal and interest falling due. This organizes data in such a way that early warnings are provided which are superior to those produced by current procedures that record how long it takes to recover principal amounts of loans issued during a given period. The latter is a useful measure and should be retained, but it could usefully be supplemented by collection ratios.

5.12 Financial information systems were not explored in technical detail by the evaluation team. The formation of a new bank from AKRSP savings and credit activities, however, provides

a natural opportunity to develop new systems, including those incorporated in hardware and software packages available in the market. A critical decision in the design of NRDB is the level at which VO/WOCP transactions are analyzed, summarized and used for management decisions. These transactions are the primary source of information about credit and savings behavior that are currently available to AKRSP. They should be mined to ascertain patterns and to create individual credit and savings histories for VO/WO members. At the most elementary level, for example, someone who deposits Rs 20 regularly at twice-monthly VO meetings can probably handle a loan that requires twice-monthly repayments of Rs 20 each.

5.13 *Operations support and training:* Whatever division of labor is used between NRDB and VO/WOs, there are many opportunities to improve operations support and training at the VO/WO level. Training would have to be more detailed, intense and widespread if the VO/WOs are to act as self-contained financial intermediaries under the umbrella of NRDB, largely responsible for their own credit decisions, funding and record keeping. Even if most of these functions were assumed by NRDB directly, there will be a large requirement for more accountants and credit officers—probably far more, by an order of several times, than projected in the staffing plans of NRDB or AKRSP. If a decentralized structure is established, NRDB will have a huge prudential oversight responsibility in its dealings with VO/WOs.

5.14 *Transparency:* Increasing the number of these professional staff will be important for the maintenance of controls, and for the more systematic establishment of internal regulation or prudential oversight. Transparency has always been a hallmark of AKRSP savings and credit operations, but these should be further demystified for more people, so that the system generates increased confidence among clients and potential clients and encourages disciplined repayment. AKRSP is also well placed to be at the forefront of financial disclosure by keeping books that realistically reflect the actual condition of NRDB and its portfolio in a timely manner. It may be in a position to be a leader in this regard among banks in Pakistan and also among donor-supported lenders to the poor. A good starting point would be periodic calculations of break-even interest rates equal to the opportunity cost of capital, using the Subsidy Dependence Index, and the creation of reserves, equal to expected loss experience, at the time loans are issued.

5.15 *NRDB's unique financial structure* gives it the financial strength to explore several alternatives in its outreach to clients. One of these is to undertake more lending than indicated by its projections. A means of doing this would be to lend at longer terms; a trend in this direction is found in the projections. This would increase the risk in its portfolio, because risk is created by longer-term commitments. The strategic basis for taking greater risk is superior market information that permits the lender to build relationships with clients that clients value immensely and therefore want to protect by abiding by loan contracts. Superior information systems would permit NRDB profitably to leverage its financial strength into risk.

5.16 A second possibility would be to subsidize lending rates beyond projected levels, which are based primarily on the low cost of NRDB's funding. Cross subsidy of money-losing activities from investment income would be one means of doing this. This type of strategy, even when limited to social infrastructure lending, can create expectations that are hard to contain, while creating incentives to deal with losses in a nontransparent manner. Why report unfavorably on something that is supposed to promote the common good? Subsidized lending rates can set an organizational tone that works against the important core values required for commercially successful banking. It can also promote the trend toward deteriorating collection performance that appears to characterize so many development finance activities.

5.17 Subsidized funding easily attracts "rent seeking" by individuals or organizations that want cheap money and that have the political or organizational leverage to get concessional funds. These are usually not the most deserving or those for whom the subsidies were originally intended. Cheap funds create a false demand for loans, which can greatly exceed the true demand consisting of bankable projects backed by credible sponsors.

5.18 Finally, NRDB could choose to subsidize savings through attractive interest rates and the staff costs required to operate an aggressive savings program in a relatively remote geographical area. VO/WOCP appears to have captured relatively little of members' savings, suggesting a tremendous market potential. A relatively small subsidy may be required to support aggressive savings mobilization. The volume of savings, to judge from development finance experiences elsewhere, is probably larger than the amount that can be prudently loaned in the program area. Since all VO/WO members save, and because others in the area also save, a subsidy for savings would benefit the greatest possible number of people.

5.19 Accumulation of savings, continued attention to VO/WOs as centerpieces of financial intermediation and community development, and a certain amount of decentralization of savings and of credit decisions could facilitate local infrastructure investment directly by VO/WOs or their members. This initiative could to some degree substitute for subsidized lending for social infrastructure, which appears to be the most problematic activity envisaged for NRDB.

5.20 *Venture capital risks and their management:* ESC has the usual feature of donor-supported term lenders, which is inability to lend profitably for activities that are assumed to have tremendous social and catalytic benefits. However, it is unusual in that its business projections clearly show that it is unlikely to be profitable, a tribute to AKRSP's dedication to transparency. It also has a number of other features that could permit it to interact effectively with local markets and entrepreneurs. These include market development, research and training, all of which can be exceedingly challenging if the objective is to create commercially viable activities.

5.21 AKRSP's initial thrust in all villages is the PPI (productive physical infrastructure) project. These are funded by grants and community contributions and have been tremendously successful. Could not ESC perform something of the same role, but as a lender? The PPIs apparently did not create an expectation that subsidies for more projects would be forthcoming. This may in part reflect the level of effort required of the villagers to design, complete and implement their projects. The dynamics of credit may differ from those of the PPIs, however, even ignoring the religious or ethical issues that surround interest rates and charitable transfers in most cultures.

5.22 If failure to repay, for any reason, is material, widely witnessed and not effectively dealt with, some of those who are in a position to repay may decide to attempt to evade repayment. In this way default culture spreads, often beyond the institution primarily responsible for its creation. One way of avoiding the formation of this culture is to ensure that borrowers lose more than lenders when loans are not repaid. Another means of reducing the risks that ESC would be regarded as a soft lender would be for ESC to act as a broker or syndicate leader for infrastructure finance raised from multiple sources, including citizens directly and also from VO/WOs with funds to invest in instruments similar to the municipal bonds so widely used in the United States.

5.23 Because of these containment problems, NRDB's lending for social infrastructure might usefully be transferred to ESC. The expected loan purposes and loss rates on NRDB's social infrastructure lending more closely resemble ESC's portfolio than they do NRDB's other activities, although their target clientele is more similar to NRDB's customer base than to ESC's. This transfer would enable NRDB to be entirely commercial, slowing or reversing any tendencies for villagers and others to project ESC's tolerance of losses onto NRDB.

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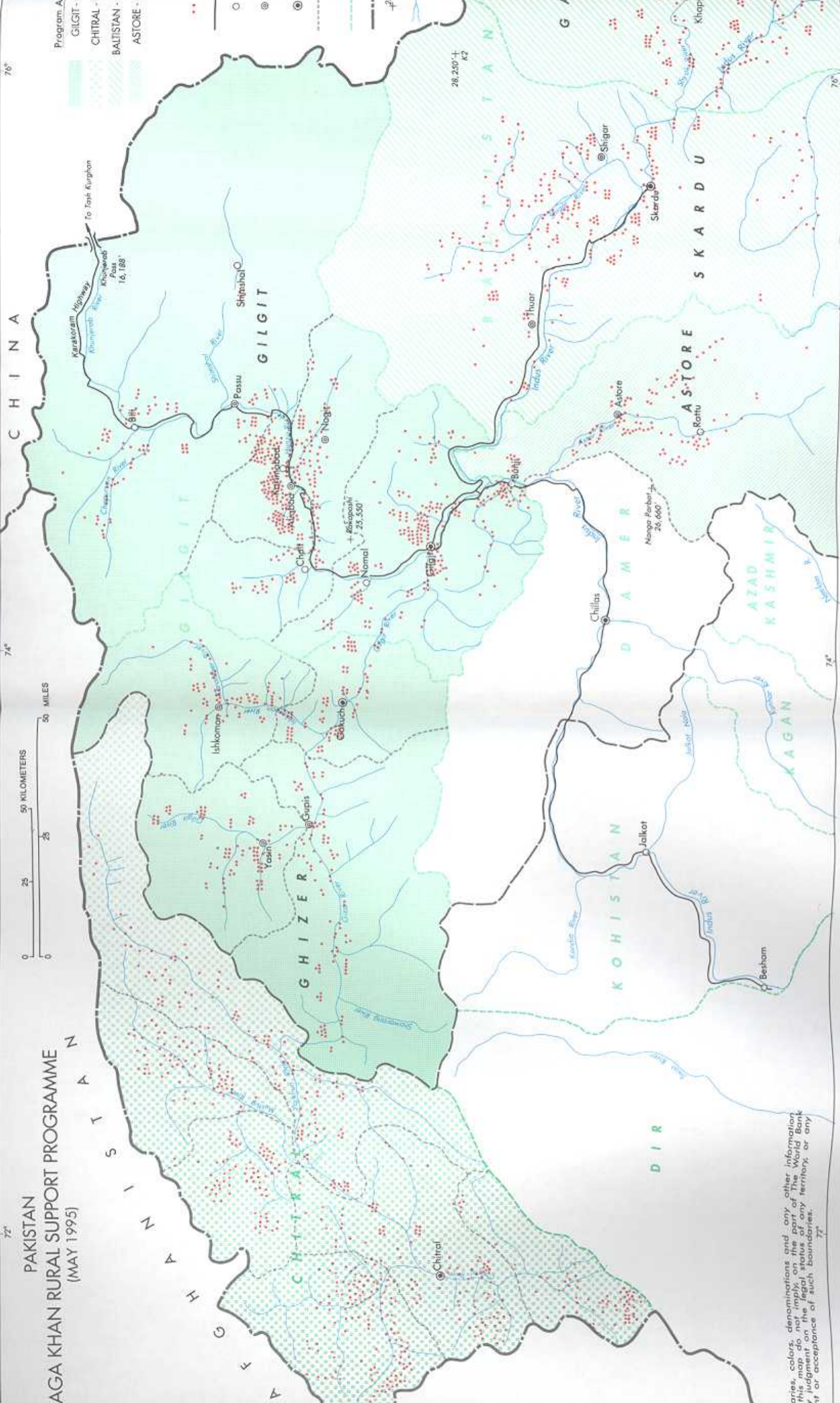
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PAKISTAN
AGHA KHAN RURAL SUPPORT PROGRAMME
 (MAY 1995)

Program Area
 GILGIT - On
 CHITRAL - Plc
 BALTIKIAN - Plc
 ASTORE - On

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