

UN 4000

# **NATIONAL WORKSHOP ON RURAL WATER SUPPLY AND SANITATION.**

8 2 2

P K 8 8



LIBRARY  
INTERNATIONAL REFERENCE CENTRE  
FOR COMMUNITY WATER SUPPLY AND  
SANITATION (IRC)

5-7 April 1988

---

## **Aga Khan Rural Support Programme**

---

Sponsored by

**Ministry of Local Government and Rural Development  
Government of Pakistan**

in collaboration with

**International Bank for Reconstruction and Development  
and  
Canadian International Development Agency**

822-PK 88-822

NATIONAL WORKSHOP  
ON  
RURAL WATER SUPPLY AND SANITATION

DRAFT REVIEW  
OF  
AGA KHAN RURAL SUPPORT PROGRAMME

## I. EXECUTIVE SUMMARY

The AKRSP covers three districts in the North of Pakistan characterised by difficult terrain, poor soils and a mountainous desert climate with a wide annual range of temperature. The 0.8 million residents are poor with a per capita income estimated at 60% of the national average. Landholdings are small, estimated at 5 ha on average, and male migration has been high which has resulted in an increased burden upon women. There is significant religious, ethnic and lingual diversity. However, the relatively recent demise of feudal structures, the emergence of a new, but unproven, political leadership, widespread land ownership and a progressive religious leadership have created a favourable context for development. The recent opening of the KKH now links this region with the outside world and provides new opportunities for economic growth.

The AKRSP was launched in late 1982 with the objective of doubling per capita incomes within a decade. Its strategy emphasises the formation of broad-based Village Organisations (VOs) with representation from at least 75% of households that select and implement Productive Physical Infrastructure Projects (PPIs) that should benefit at least 80% of households which are supported by a one-time grant from AKRSP, part of which pays for village self-help labour. VOs must also organise regular monthly savings from households which are individually recorded but collectively banked that form the collateral for loans to support subsequent development projects.

AKRSP is able to provide technical advice to VOs through field engineers and extension staff. A cadre of well qualified and internally trained Social Organisers (SOs) provide the liaison between the village and this expertise and also support VOs. The SOs are accorded a status comparable to that of an agriculturalist or engineer and carry much of the responsibility for implementing the partnership that AKRSP attempts to create with each VO.

Entry to a community may be at the initiative of either party and proceeds through three dialogues. At the first, the General Manager explains the goals of the programme and invites the village to identify one PPI. A subsequent meeting explores the technical feasibility of the PPI resulting in a blueprint and estimates. During the third dialogue, the details of the scheme are discussed and the terms of the partnership between the village and AKRSP reviewed, resulting in the formation of the VO and the receipt of the first instalment of the AKRSP grant. The VO is responsible for the project for which it may call upon the advice of the technical staff of AKRSP, whose advice it can choose to ignore.

Staffing ratios appear reasonable with each SO responsible for about 31 VOs. Regular staff meetings are held as are meetings with VO

leaders. These allow for an exchange of experience and provides a forum for the discussion of issues and problems.

The Aga Khan Foundation has provided about a third of the programme's support to date but the philosophy and promise of the programme has also attracted significant donor support, particularly from Canada and Netherlands. Total costs have been about Rs 186 million which have been allocated as:

PPIs	42%
overheads	17%
research	15%
credit	12%
training	9%
capital	6%

In almost five years AKRSP's accomplishments include:

- the establishment of 705 VOs - about 55% of the potential number;
- the identification of 975 PPIs, of which 54% had been initiated and 34% completed, principally irrigation channels (174), link roads (59) and protective works (51);
- the disbursements of 62% of PPI allocations;
- the saving by VOs of Rs 29 million, which had been used as collateral for Rs 45 million loans;
- the training, in cooperation with GOP, of some 1300 villagers in agriculture, livestock, poultry and other areas.

AKRSP's emphasis upon productive projects has excluded its involvement in the potable water and sanitation sector. The lessons to be drawn from the programme for this sector are:

1. the importance of establishing a broadly based Village Organisation and giving it primacy in controlling the design and pace of development projects;
2. the provision of both technical advice, social animation and training;
3. well qualified and supported staff with reasonable workloads trained and supervised to ensure their work follows the programme approach and philosophy;
4. the continued attention to innovation and experimentation by both the VOs and AKRSP, accompanied by careful monitoring of the results, resulting in a "learning environment".

## II. BACKGROUND

### 1. Environmental Conditions

#### 1.1 Geographical Position

The AKRSP covers the districts of Gilgit and Baltistan in Pakistan's Northern Areas and the Chitral district of the NWFP. At an elevation of between 4,500 and 10,000 feet above sea level, the rocky landscape is criss-crossed with numerous streams and rivers in narrow valleys, and surrounded by the great mountain ranges of the Karakorams, the Hindu-Kush, the Himalayas and the Pamirs. The climate is that of a mountain desert with extremes of temperature ranging from -10 to +40°C. The annual precipitation of 4-10 inches falls mainly as snow in the upper regions. The silty soils are free draining, low in organic matter and have low natural fertility.

Access to the region has traditionally been difficult. Until the late 1970s, access was restricted to rough tracks, and the air service from Islamabad to Gilgit, Chitral and Skardu. The opening of the Karakoram Highway (KKH) from Islamabad to Khunjerab on the Chinese border, and the sealed road from the KKH to Skardu in 1984, have provided access to both cars and trucks. However, seasonal weather often causes landslides and damage to road structures resulting in temporary road closures. Access to many small villages is improving with the construction of rough shingle roads leading off the KKH and other established roads.

#### 1.2 Cultural and Social Environment

The area covered by the AKRSP is extremely diverse both ethnically and linguistically. At least five major languages - Shina, Burushaski, Balti, Wakhi and Khowar - are spoken, in addition to numerous dialects and minor languages. The area also contains three major Islamic sects; Ismaili, Shia and Sunni. Urdu is spoken widely in the Gilgit area and along the KKH, but in the more remote villages few people speak Urdu. In addition to the indigenous population there is a sizeable number of temporary residents, mainly from Punjab, employed in government and non-government organisations, and in the army and police forces.

Until 1973, much of the region today constituting the Northern Areas was divided into small fiefdoms ruled by hereditary princes, Mirs and Rajas. They had total authority over their subjects, and there was no intermediary class.

The people of the Northern Areas tend to be liberal and progressive in their outlook and are not rigidly bound by traditional customs or taboos. Villages are egalitarian in their social structures and since the abolition of the Mirs and Rajas they have been free from external controls. The ending of feudalism has roughly coincided with the opening of the KKH, introducing hitherto unimaginable new opportunities for economic growth, and linking the Northern Areas with the outside world. Since there is only a vestigial tribal system and no larger baradari patterns, the isolated communities have developed a high degree of self-sufficiency and independence.

The extreme poverty and the desperate need to increase food security and general living standards means that people are ready to respond to new opportunities. Religious leadership in the Shia and especially in the Ismaili communities tends to be progressive and receptive to change. In fact the Ismaili religious authorities have been responsible since the 1950's for the provision of educational services, in many Ismaili villages, through the Aga Khan's Diamond Jubilee schools.

Within villages, kinship relationships are strong and often form the basis of the community. However, one does not encounter the kind of strong loyalties to tribes, clans, baradaris, etc., found in other parts of Pakistan. Instead, people's loyalties are focused on religious identity, and although intermarriages between linguistic groups and distant villages often take place, they are extremely rare between the religious sects.

Before the abolition of the princedoms and mirdoms, all land was owned by the feudal families. Grants were made to villagers in return for forced unpaid labour as servants to the feudal households and on their lands. In addition, the villagers were granted communal usage rights to large tracts of forest and rangeland, known as "shamlaat" lands. The use of these lands was strictly controlled by the feudal authorities, thus creating a kind of enforced conservation of natural resources. With the abolition of the mirdoms, ownership of communal lands passed on to the federal government. Settlement has not occurred on the majority of these lands, although traditional usage rights are generally observed.

In addition, the overwhelming majority of people in the Northern Areas own individual lands ranging from 2 acres to 10 acres. There are very few landless people. However, fragmentation of landholdings is occurring rapidly with the growth in population.

### 1.3 Population Characteristics

The population of the project area is approximately 750,000, equally distributed between the Gilgit, Chitral and Baltistan districts. This population is geographically scattered over 66,000 square kilometres in remote locations. The 1,030 villages which make up the population vary in size from less than 100 to 1000 people. Family size is typically 8 to 9 persons. Settlements are generally found in the smaller valleys close to a source of water which may be a spring, stream, river or glacier. The programme area showing the spread of population centres is illustrated on the attached map.

### 1.4 Economic Climate

The Northern Areas are one of the poorest regions in Pakistan with an annual per capita income estimated to be about Rs 3,500 (60% of the national average) in 1987. The Northern Areas have a subsistence economy dependent on agriculture, horticulture and livestock. However, with the opening of the KKH, the economy is rapidly expanding to include a buoyant trade and services sector centring on wholesale and retail trade, tourism and transportation. Fruit processing and preserving has also started. Mechanisation of agriculture and use of HYV seeds and other inputs has resulted in increasing agriculture yields and a lessening of reliance on draught power, to some extent. Nevertheless, agriculture is still only at the subsistence level - average land holdings are of 5 acres and household incomes are supplemented by seeking permanent employment in Karachi and other parts of the country. It is estimated that 0.5 million people of the Northern Areas work outside the region. In addition, the NAFC is wholly manned by locals. This has resulted in a number of female-headed households and an extension of the traditional role of women in agriculture.

### 1.5 Origins of the Programme

The Northern Areas of Pakistan are a politically sensitive area which have a large Ismaili population concentrated mainly in the Hunza valley. In addition, the Northern Areas are among the poorest and most backward regions of the country. The opening of the KKH has also opened the area and its resources to exploitation by the commission agents and entrepreneurs of the plains. It was feared that these commission agents and entrepreneurs and not the people of NA would be the beneficiaries of the KKH unless the people of the NA could be supported in some way. These were the factors which led the Aga Khan, the

spiritual leader of the Ismailis, to create the Aga Khan Rural Support Programme. Officially the AKRSP was initiated by the Aga Khan Foundation which also supplied the seed money for the programme.

#### 1.6 Political Status

The Northern Areas are a federally administered area. Thus they have no representation in the National Assembly of Pakistan, nor do they have an elected legislative body for the area. However, they have an elected Advisory Council whose functions are to assist the federal government in governing the NA. This council has no executive powers. District and Union Councils, on the other hand, exist and function in the same way as for the rest of Pakistan.

The majority of the people of the NA strongly support the idea of setting up an elected legislative body for the area, thus giving the NA a provincial status. The traditional political power in the area, the families of the ex-Mirs and Rajas, are no longer acceptable to the people, as the recent elections have shown. The new political powers, however, have still to prove themselves. Nevertheless the people do seem to have considerable faith in their elected councillors and district council members.

The political situation in the NA is in a state of flux, with the old order having become ineffective and inoperative, and the new order still uncertain. However, the new local leaders are well-educated, young and have had considerable exposure to the world beyond the NA. They are at the same time old enough to remember the difficult conditions in the NA before the KKH became operative. Thus it can be assumed that they are development oriented.

#### 1.7 Historical Experience with Similar Development Programmes

The NA have not had any experience of development programmes similar to the AKRSP. The people, however, do have experience of working together under the control of the Mirs and Rajas for building irrigation water channels (khuls) and roads and for developing lands for agriculture. In addition, some Ismaili villages have operated schools through their village elders. These schools were financed by the Aga Khan Foundation.



### III. INTRODUCTION TO THE PROGRAMME

#### 1. Problems and Rationale for Programme

The NAs were territorially a part of the Dogra Empire of Kashmir. They gained independence from bondage in 1948 when the population rebelled and overthrew the Dogras and decided to join Pakistan. In 1973 the feudal power of the Mirs and Rajas was abolished, leaving behind an institutional vacuum and the removal of a cohesive force. Low incomes, lack of employment opportunities, a rapidly growing population and the institutional void were problems which needed urgent solutions.

To try to redress these issues the AKF established the AKRSP, based on five premises. These were:

1. government capacity to implement development schemes is limited;
2. local initiative needs to be supported through institution building, training and provision of capital to exploit opportunities for infrastructure development;
3. special attention should be paid to the long-term environmental impact of development;
4. funds are available - public and private; and
5. community participation is essential to the process of development - social, cultural, economic and physical.

The AKRSP was established to provide a sustainable and equitable improvement in living conditions for the people of the Northern Areas. This included a raising of the income level to bring it approximately in line with that of the rest of the country within 10 years. Beyond this general goal no fixed time scale was set for the achievement of specific objectives. The intention was that progressive community-based institutions capable of maintaining the programme would evolve. These institutions would be given an organisational shape in the second phase of the programme, leading to the creation of a separate "apex" organisation representing the various Village Organisations (VOs). The programme was also to evolve as a model capable of being repeated at other locations.

The primary targets to achieve these overall goals were the motivation of the people to form local organisations for development and the support of these organisations by the AKRSP.

This support was to be extended in the form of training people in organisational and technical skills so that they could plan and implement development projects. New activities and technologies were to be introduced where appropriate so that the villagers might enhance their incomes and further development. Subsequently a strategy would be developed for the productive and sustainable use of the natural resources of the area.

## 2. Programme Preparation and Approval

The programme was prepared by people well known in rural development circles throughout the world. The basic ideas have come from Akhtar Hameed Khan, who acts as consultant to the project. It was approved by the Aga Khan and began operations in December 1982.

#### IV. THE PROGRAMME

##### 1. Institutions

###### 1.1 Implementation Agency

The AKRSP is a private limited company and has a board of directors. The staff of AKRSP is headed by a general manager who reports to the board. He is supported by the deputy general manager and eight senior management staff, consisting of specialists in engineering, agriculture, economics, marketing, training, women in development, social organising, finance and accounting. All the senior staff reports directly to the GM along with the District Programme Officers in the district headquarters. In the same way the district programme specialists report directly to the district programme officers, while looking to programme specialists in Gilgit for guidance. Programme implementation is managed directly by the GM, assisted by the core management team of the senior staff.

The social organisers (SOs) are the contact staff with the VOs. These SOs assist in the creation of the VOs and equip it with basic organisational skills and various specialist functions.

To fulfill its objectives the AKRSP has adopted a methodology similar to that developed by Akhtar Hameed Khan for the Comilla project in East Pakistan. The first dialogue between the AKRSP and the village is initiated by the GM in which the objectives of the programme are explained. The villagers are invited to identify a productive physical infrastructure (PPI) item which they can undertake to construct. In the second dialogue the technical feasibility of the PPI is explored. Contact between AKRSP and the villages is managed by the social organisation units (SOUs). The products of the second dialogue are a blueprint and estimates for a PPI. The third dialogue starts with discussions on the finalised scheme, and the terms of partnership between AKRSP and the villagers are reviewed. AKRSP outlines the form and extent of assistance it can provide and villagers explain how they will plan and implement the scheme, develop skills, meet regularly and develop savings. The third dialogue ends with the formation of a VO (whose membership must include representatives from at least 75 percent of households), which then elects its president and manager and receives the first instalment of a grant from AKRSP for the PPI.

The organisation and management of the work is undertaken by the villagers with advice provided by the engineering wing of the AKRSP which may or may not be accepted. This interaction between

the engineering staff and the people, as well as the management of the execution of work, builds up the technical and management skills of the VO. Once the VO has emerged and become strong it can make collective use of the AKRSP's extension services for agricultural and livestock development. For these services and for maintenance of the PPIs the villagers have to pay from the VOs savings or get supplies on credit.

For the potential 1,280 VOs, the AKRSP has 248 staff members. There is one staff member for every 3.1 VOs (764 operating VOs); one professional for every 6.7 VOs; and one SO for every 32 VOs. There is one staff member for every 200 households contacted to date. The senior staff are all highly qualified professionals from Pakistan with many years of experience in their fields. The GM has worked on many famous projects in rural development and the chief consultant is considered one of the leading authorities in the world on the subject. The 24 SOs are all from the NA, have masters degrees and speak the local languages. Fund raising for the AKRSP rests with the Director of Special Programmes of the Aga Khan Foundation in Geneva, thus freeing the GM for full time involvement in the planning and implementation of the project.

The AKRSP staff's manner of operation is controlled by the AKRSP philosophy and methodology. This emphasises a constant contact with the people as advisors and motivators, with discussions among themselves, and an exchange of ideas through regular meetings. This creates flexibility and adaptability in the staff, makes them receptive to new ideas and develops the ability to learn from successes and failures. The basic philosophy of the primacy of the VO and methodology of dialogue between villagers and staff, however, remain constant.

## 1.2 External Agencies

The only role external agencies have played in the AKRSP has been of funding various components of the programme and evaluation. Major support has come from CIDA, OXFAM, Dutch Government, ODA, ZEC, Ford Foundation and the Women's Division of the Government of Pakistan.

## 1.3 Community Based Institutions and Organisations

The Northern Areas villages have not traditionally been organised on hierarchical lines, since there was relatively little economic inequality within the village, and overall authority was exercised by the feudal families. A village numberdar appointed

by the Mir and/or Raja acted as his representative for the supervision of local affairs, and elders of the village were accorded respect and deference. With the abolition of feudalism, the responsibility for appointing the numberdar went to the government, conditional on the acceptance of the villagers. The replacement of the feudal authority by central government functionaries has in fact reduced external control to a large extent, and no village level institutions or powerful individuals have emerged to exercise local control. As a result, villages are still egalitarian, more as a result of the power vacuum than as the product of democratic institutions. The AKRSP as one of its basic objectives, has attempted to initiate and promote the growth of village institutions, in the form of the VOs, which would be able to develop the capacity to fill this power vacuum. The VOs are not hierarchically structured in terms of authority, but they have two administrative functionaries, the secretary and the manager, chosen by consensus of the VOs. In addition to the VOs, the last eight years have seen the emergence of elected local government institutions, in the form of the Union and District Councils. Many councillors are VO members and work alongside the VOs in development activities.

Though no formal leadership exists in the villages, many of the younger, more enterprising and generally better educated men are emerging as community leaders, both at the Union Council level and as VO functionaries. The absence of entrenched power structures and the rapidly changing physical and economic circumstances of the Northern Areas create an environment which is highly favourable to the expression of innovative and entrepreneurial qualities. The VOs provide a forum for open discussion and the free exchange of ideas and opinions, and disputes are often resolved at this level through a process of mutual accommodation. In several cases, however, differences have proved to be irreconcilable in the absence of a higher authority.

The largest organised village-level institutions at present are the VOs. Their membership consists of at least 75 percent of the village households. Members are all male, generally the heads of households, though there may be more than one member from a given household. Membership is unstructured and non-hierarchical, with the exception of the two functional heads of the VO, the secretary and the manager/treasurer. Members have an equal say in decision-making, which is based on consensus. The VOs meet at regular intervals, generally fortnightly, to discuss progress with the PPIs or other projects, and to record joint savings. Savings are individually recorded but banked collectively. The VOs also select members who will go to the district headquarters for training as village specialists in agriculture and plant

protection, veterinary skills and accounting and management skills. In some villages there is also a forestry specialist.

Apart from the male-dominated VOs, there are also several "women's organisations" (WOs) which act as a counterpart to the VOs in productive and income-generating activities. The WOs make their own communal savings for women's projects. AKRSP thinking on the women's programme has undergone basic changes in recent years, and women's roles are now being viewed in the context of the "farm family" as a productive unit. Though this conceptual change has not yet been translated into a programmatic form, AKRSP recognises the need to find effective ways for women to participate in VO activities and decision-making. With the exodus of younger able-bodied and skilled men to urban employment and the tourist trade, women are left to shoulder a growing share of the burden of agricultural work. They are generally responsible for firewood collection, and in communities which have access to alpine pastures in summer, it is the women who take the animals to the pastures. With the spread of education, many tasks previously performed by older children now also fall to women, further increasing their burden.

The isolation and harsh environment in which the Northern Areas villages exist have imposed an almost total self-sufficiency on many communities. Self-help development, therefore, was always a matter of survival. The development of new lands and water resources, and the management of the irrigation system have traditionally been carried out on a communal basis, with a high degree of mutual dependence between households. A complex system of watersharing, known as "warabandi", both within and between villages, has evolved as a result of water scarcity and this has further cemented cooperation and the recognition of rights and responsibilities. As a result of this history of community self-help, the Northern Areas people are familiar with the concept of participatory development.

## 2. Objectives

The major objective of the AKRSP is to increase the production capacity of the local people. This is achieved by building PPIs, encouraging savings to facilitate credit, providing production and marketing support systems and by training. Thus human resource development is a major part of the AKRSP and takes place both formally and non-formally.

The process of dialogues with villagers, and the interaction between the AKRSP staff and the VO during PPI development creates an awareness in both villagers and AKRSP staff members. This is

further augmented by weekly meetings of senior staff members where progress reports are presented and problems discussed and analysed. In addition, monthly review workshops are held to which staff from all of the three districts are invited. This meeting reviews VO performance and discusses in detail the affairs of various VOs, which enhances their relationship with AKRSP and strengthens their managerial and technical competence.

Every three months, a meeting of the managers of the VOs is also held. In this meeting, the management staff and the field staff are also present. At this meeting implementation principles and practices are reinforced, progress is reviewed, experiences are shared, training lessons are repeated and the concerns of villagers on any topic of their choosing are aired publicly.

### 3. Sectoral Linkages

The AKRSP was not intended as a programme to supply potable water or sanitation. Neither was it intended to replace government departments, but rather to supplement their efforts in agricultural and infrastructural development. However, the broad based and multi-sectoral nature of the programme implies a number of sectoral linkages. The most important of these is with the agricultural sector. In this connection AKRSP has collaborated with the government's agriculture department in providing extension and training services. It has also formed an association with the PARC whose chairman is a member of the AKRSP's Board of Directors. The other link is with the nationalised banking and credit sector, especially Habib Bank Limited, where the VOs deposit their savings.

The AKRSP also has a significant linkage with the Ismaili community of which the Aga Khan is the spiritual leader. It is doubtful if the programme would have taken off so easily if the Ismaili community had not been its entry point.

A minor but important aspect of AKRSP is its role in facilitating the development of farm-to-market link roads.

As the organisational and managerial potential of the VOs has developed, their say in the affairs of the Union Councils (UCs) has increased. This is evident from the fact that a number of VO presidents and managers have been elected as councillors. The VOs also act as a pressure group on the councillors who are collaborating increasingly with the VOs, even to the extent of diverting their grants to projects undertaken by the VOs.

The AKRSP's attempts to work with the LB & RD's CBS programme has been less successful because of a lack of coordination and two

different philosophies of development. However, the existence of a VO in villages where the CBS has operated has facilitated the work of the CBS resulting in better constructed and better managed water supply projects.

#### 4. Financing and Financial Management Systems

##### 4.1 Access to Start-up Funds and Funding Reliability

AKRSP's seed money was provided by the AKF, mainly from its resources in Pakistan. First year AKF contributions amounted to Rs 14.9 million, of which nearly 74 percent was from the Pakistan arm. Initial year contributions were also made by CIDA, Alberta Aid, ODA, OXFAM and the Ford Foundation. A total of Rs 22.8 million was contributed in 1983. In the subsequent years, (see Table 1), contributions were also made by the Netherlands Government; USAID; EEC; Local Bodies and Rural Development Department, Northern Areas (LB & RD); Northern Areas Council and the Government of Pakistan.

Total funds generated in the form of grants is about Rs 186 million. The AKF network has contributed the largest share which amounts to 34.5 percent of the total. The other major donors have been CIDA, which has contributed Rs 46.5 million or 25 percent of the total and the Netherlands Government which has contributed Rs 32.4 million or 17.4 percent of the total. Contributions by and shares of individual donors to date may be seen in Table 1. Future funding to end-1990 has been committed by several donors and by the AKF network for a period of 10-15 years. Details of amounts committed were not readily available.



TABLE 1  
SOURCES OF FUNDS

(1983 to Sept. 1987)  
( Thousand Rupees)

	1983	1984	1985	1986	1987	Total	(%)
I. Total Donor Grants	22,781	22,951	36,211	50,389	49,561	181,893	97.7
AKF Network	14,851	10,048	12,819	17,410	9,099	64,227	34.5
CIDA	5,439	9,246	11,240	14,778	5,779	46,482	25.0
Netherlands			4,109	7,669	20,584	32,362	17.4
USAID			1,426	4,096	4,538	10,060	5.4
Alberta Aid	236	2,192	3,486	1,518	5,106	12,538	6.7
ODA (UK)	327	913	2,091	3,471	363	7,165	3.8
OXFAM	603	552	544	1,447	1,701	4,847	2.6
EEC					2,391	2,391	1.3
Ford Foundation	1,325		496			1,821	1.0
II. Total GOP Support		89	89	914	3,173	4,265	2.3
GOP				914	3,048	3,962	2.1
LB & RD		89	89			178	0.1
NA Council					125	125	0.1
TOTAL I + II	22,781	23,040	36,300	51,303	52,734	186,158	100

#### 4.2 Cost Recovery and Credit Schemes

The AKRSP methodology of establishing a VO to initially implement and operate a savings scheme and simultaneously execute a PPI scheme presupposes that villagers are unable to fund PPI costs. AKRSP gives the VOs the cost of the PPI as a grant which pays for both materials and community labour inputs.

Subsequent access to funds for land development, income generating activities, purchase of agricultural inputs and machinery, and marketing are made available to VOs in the form of short to medium term credits through AKRSP funds, through Habib Bank Limited and NDFC credit schemes. For land development AKRSP charges interest at 5 percent per annum and for other credits at 7.5 percent per annum. Purchase and marketing credits and PPI grants have been helpful in the establishment of links between the VOs, AKRSP and private sector traders. A very small, but

rapidly emerging, private sector trading community has established itself in and around Gilgit, to sell fertilizers, pesticides, agricultural machinery, cement and other inputs, and to service and repair agricultural machinery. It also purchases agricultural produce, mainly fruits and seed potato.

The credit scheme accounts as of September 1987 are shown in Table 2.

TABLE 2  
CREDIT DISBURSEMENT TO VILLAGE ORGANISATIONS

	Short-Term	Medium-Term
Number of loans	1,912	159
Number of beneficiary household	96,049	9,479
Amount disbursed	Rs 26.02 million	Rs 18.65 million
Amount in default	Rs 181,879	Nil
Rate of Loan Recovery	99.31%	100%

The extremely low default rates are due to the loans being given to the VOs rather than to individuals, and the need for VOs to repay these before a fresh credit is made available.

The credit scheme operated by AKRSP has been used for a variety of purposes. This is shown below in Table 3.

TABLE 3

## SHORT TERM LOANS

	Number of Borrowings		Amount
	VOs	Households	(Rs)
Fertilizer	1,517	74,929	19,406,935
Marketing	290	15,646	5,939,056
Seed	53	3,128	328,814
Poultry	37	1,515	230,315
Trees / Plants	15	831	113,400
<b>Total</b>	<b>1,912</b>	<b>96,049</b>	<b>26,018,520</b>

## MEDIUM TERM LOANS

	Number of Borrowings		Amount
	VOs	Households	(Rs)
Land Reclamation	98	5,806	11,522,959
Agricultural Machinery	36	2,461	6,168,000
Sulphur Tents	14	580	442,500
Development of Nursery	6	329	218,000
Saw-Mills	1	35	100,000
Sheep Breeding	1	45	60,000
Marketing	1	86	55,000
Development for Mixed Farming	1	36	50,000
Drill Machines	1	51	50,000
<b>Total</b>	<b>159</b>	<b>9,479</b>	<b>18,666,459</b>

## 4.3 Programme Costs and Achievements

By the end of September 1987 the AKRSP had used about Rs 155 million from its funds (see Table 4 for details). Rs 13.5 million or 8.7 percent of total expenses have been consumed for training. Research and survey costs have totalled about Rs 24 million or 15.4 percent of the total and office expenses and salaries to staff have accounted for 16.5 percent of the expenses.

PPI grants amounting to Rs 64.7 million (41.6 percent) of used funds have been channelled into 17 different types of schemes. Details are shown in Table 5. As of September 1987, 975 projects have been identified and are estimated to cost Rs 149 million of which 528 schemes costing Rs 81.9 millions have been initiated. A total of 331 projects (value not available) have been completed. Project disbursements with respect to initiated projects are 63 percent.

TABLE 4

USE OF PROGRAMME FUNDS  
(1983 to Sept. 1987)

(Thousand Rupees)

	1983	1984	1985	1986	1987	Total	(%)
PPI Grants	7,205	12,753	13,715	16,509	14,497	64,679	41.6
Office Expenses,							
Salaries & Benefits	3,109	4,146	6,439	5,716	5,966	25,376	16.5
Research & Survey	1,726	3,258	4,432	5,282	9,290	23,988	15.4
Credit Programme	-	-	-	6,530	12,617	19,147	12.3
Training	296	913	2,752	4,207	5,353	13,521	8.7
Capital Expenditure	1,792	1,992	2,673	2,152	-	8,609	5.5
<b>Total:</b>	<b>14,128</b>	<b>23,062</b>	<b>30,011</b>	<b>40,396</b>	<b>47,723</b>	<b>155,320</b>	<b>100</b>

TABLE 5

PRODUCTIVE PHYSICAL INFRASTRUCTURE  
ACHIEVEMENTS AS ON SEPTEMBER 30, 1987

PPI BY TYPE	IDENTIFIED		INITIATED		AMOUNT DISBURSED (Rs) (`000)	COMPLETED	
	No (Rs `000)	Value (Rs `000)	No (Rs `000)	Value (Rs `000)		No (disbursed)	(%)
1 Irrigation Channels	552	82,378	304	44,441	35,123	174	31.5
2 Link Roads	142	19,342	88	14,431	12,186	59	41.5
3 Protective Works	140	27,111	65	11,117	10,019	51	36.4
4 Storage Reservoirs	55	7,939	30	4,523	3,689	17	30.9
5 Bridges	38	2,719	10	1,639	1,462	8	21.1
6 Pony Tracks	6	767	6	767	688	6	100.0

7 Pipeline Irrigation	8	1,844	8	1,844	1,221	3	37.5
8 Lift Irrigation	5	1,050	2	247	245	2	40.0
9 Syphon Irrigation	4	3,592	2	1,544	1,479	2	50.0
10 Sedimentation Tanks	4	535	2	242	242	2	100.0
11 Bridge-cum-Link Road	2	204	2	204	185	2	100.0
12 Boundary Wall	2	192	2	192	192	2	100.0
13 Hydel Power	1	89	1	89	89	1	100.0
14 Mud-Flow Control	1	54	1	54	54	1	100.0
15 Super Passage	1	189	1	189	189	1	100.0
16 Land Development	10	838				0	0.0
17 Nursery	4	345	4	345	148	0	0.0
Total	975	149,188	528	81,868	67,211	331	62.0

## V. AKRSP SUPPORTED PROJECTS

### 1. Preparation, Selection and Approval

The case study team visited two groups of villages, the Chalt cluster in the Nagyr valley and Henzel Bala in the Punial valley. In both cases the AKRSP social organisers had contacted the villages for the first dialogue. Discussion between the village members had led to the second dialogue. The activists who promoted the acceptance of the AKRSP were in one case an ex-army man who had served outside Gilgit for 14 years, and in another, a superintendent of the Gilgit municipality. Thus both activists were men of above average awareness. The PPIs were identified by the older residents of the village and in both cases consisted of an irrigation channel to bring village communal land under cultivation. The older residents had earlier participated in channel construction and land reclamation when Gilgit was under feudal control. Thus their knowledge of what the PPI involved was crucial.

### 2. Project Management

In the Chalt cluster, consisting of Chalt Bala, Maymushding, Sohnikot and Rabat villages the 4 VOs came together to form a committee for the water channel. This committee then received a joint grant for the PPI from the AKRSP. Decisions taken to contract out part of the project to a village artisan, to make modifications to the designs of AKRSP engineers as and when required, and for purchase of materials and distribution of labour, were all taken collectively by the committee, very often with advice from other members of the community. In the villages of Henzel Bala and Henzel Paeen, there was initially one VO for both the villages. Here, however, decision-making was more centralised. As a number of villagers did not consider the PPI project feasible they did not participate. Accounts in both cases were kept by the managers and the project was discussed every week after Friday prayers with the VO members and their advice sought on progress and implementation. In both cases decision-making capacity was developed through the interaction between AKRSP's social and engineering staff and the VO. The VO made alterations to the AKRSP design which they feel have improved the PPI considerably.

No technical assistance was given to the projects from outside AKRSP. However, pipe for carrying irrigation water in one case was purchased from the Punjab and in the other it was manufactured by a welder in Gilgit from GMS sheets.

In Henzel, one of the villages visited, a major disagreement had arisen between two sections of the VO soon after the start of the PPI, resulting in the total withdrawal of almost half the VO members. However, AKRSP did not interfere in the matter, and the remaining members completed the irrigation scheme and divided up the new land among themselves.

In neither of the two villages visited was there an active WO. In Henzel, direct communication with the women was not possible as none of them spoke Urdu. The men, however, said that women would welcome the opportunity to form an organisation, although they were not clear as to what it could do beyond making savings.

### 3. Technologies

Technologies adopted for the execution of PPIs have been traditionally based and appropriate to the skills of the village people. This has resulted in extensive use of masonry on the construction of irrigation canals and water tanks. The AKRSP has not tried to discourage this approach; rather, it has tried to introduce new technologies by grafting them on to traditional skills. Where villages have expressed a desire to pursue a modern approach to solving a problem, AKRSP has assisted by providing the necessary design back-up and education. One such marrying of modern methods with old ways was seen at the village of Rahbat in Gilgit district. Here, an 8 inch diameter flanged steel pipeline is being constructed to form 3,300 feet long inverted syphon. This will carry water across a valley to feed a new channel irrigating some remote agricultural land beyond the village. The use of a pipeline has avoided the construction of thousands of feet of irrigation channel that would otherwise have been necessary to carry the water around the valley. The canal is not replaced entirely, however, as there is still a considerable distance from the point of discharge of the syphon to the agricultural land.

Procurement of the pipe was organised by the VO and fixing has been done by a working party of village residents. Assistance has been given by AKRSP in the form of a surveyor, and technical advice. Thus in opting for a pipeline, the community has acquired new practical skills and organisational experience.

In some cases, villages have determinedly disregarded suggestions made by engineers, preferring to follow their own ideas. This is often seen in the construction of channels where AKRSP staff have surveyed and marked construction levels. Communities have ignored such "assistance" and let the water flow to determine bed slopes in the manner they have been done for hundreds of years.

In another example, at Sust, villagers insisted on the construction of a tunnel through the mountains for their irrigation channel, despite advice from the AKRSP engineers to the contrary on cost grounds. Funds for the project were withheld but they still went ahead with the scheme at their own cost. AKRSP engineers' assistance was later reinstated when problems with alignment were encountered and payments were eventually resumed after the tunnel was successfully completed.

These examples illustrate the flexibility of the AKRSP approach and the ultimate primacy of the VO. The AKRSP argues that trying to impose a modern, scientific and efficient approach often results in inappropriate technologies being used. Introducing a new technology in conjunction with the old, as a Rahbat, is an important development tool. With the experience of pipe fitting gained in the construction of the syphon, further use of large pipes is now being made elsewhere in the village. A new aqueduct (using the same size pipe) carrying irrigation water across a small valley is being constructed as a flood prevention measure.

Organisation and supervision of construction has been done by the VOs, who have mobilised labour within the villages or sought expertise from outside. Where necessary and when requested, AKRSP has been able to provide technical assistance for village representatives, thus increasing their capacity to undertake works within the community.

As a result of the extensive community participation from planning to implementation, and the use of tried and tested techniques, operational problems rarely materialise. Maintenance work can usually be carried out by the labour force that undertake the original construction. Where replacement parts/new materials are required, the growing managerial ability of the VOs ensures that they are obtained quickly and economically.

Because of its emphasis upon productive projects potable water supply and sanitation projects have not formed part of the AKRSP. However, such projects have been undertaken by the Local Bodies and Rural Development Department's Community Basic Services (CBS) schemes in the district. CBS/UNICEF assisted water supply and sanitation schemes have been implemented in some villages through collaboration with the institutional framework formed under the AKRSP. In the two villages, Rahbat and Henzel, which were visited during this study, CBS water supply schemes had been constructed and at Henzel, the UNICEF sanitation programme has also been followed. Although outside the scope of the study, the technology and construction methods of these schemes have been briefly reviewed in an Appendix.



## 4. Project Costs

The cost of the Chalt Bala irrigation scheme is estimated to be Rs 444,000. This amount was given as a grant to the VOs of four villages jointly for the inverted syphon and irrigation channel. This includes a sum of Rs 275,900, nearly 62 percent of the total, as payment for labour input by the community. The scheme consists of 1,000 metres of pipe and about 1000 metres of channel, and will irrigate about 6,000 kanals (350 hectares) of new land. The scheme has not yet been completed.

Total costs for the Henzel Bala scheme were not available. The AKRSP has given a grant of Rs 205,000 for the scheme, 56 percent of which is towards community labour inputs. To this the VO claims to have added the value of 10,000 running feet of 8 inch diameter welded mild steel pipes. The scheme was completed in mid-1987, but has been damaged extensively as a result of rock-blasting during the construction of the Gilgit-Passu road. The VO estimates that they would require an additional Rs 250,000 to reconstruct the channel.

TABLE 6

## COST OF IRRIGATION CHANNEL SCHEMES FOR VOs VISITED

(In Rupees)

	Chalt Bala	Henzel
Grant by AKRSP	444,000	205,000
Of which:		
Construction of Tank	28,000	
Supervision of Pipe laying	37,500	
Skilled Labour	22,500	
Unskilled Labour for Pipe	24,000	
Cost of Pipes (3300 Rft @ Rs 17/-)	56,100	
Labour for Canal digging	275,900	115,000
Blasting material	90,000	
Community Inputs:		
8" dia mild steel welded pipes	Nil	Not Available
<b>TOTAL COST</b>	<b>444,000</b>	<b>Not Available</b>

### 5. Dynamic Evolution of Implementation Methods

The AKRSP's implementation methods flow directly from the basic model itself. Since the model has proved to be highly successful, only minor modifications of detail rather than substance have been required. The mechanism for responding to community needs is an integral part of the model itself. There is no fixed technology or set of targets to be implemented by a given date, and therefore, field methods evolve according to the specific local circumstances.

### 6. Programme Achievements

The only fixed target of the AKRSP was that it should double the income of the rural areas of the NA in 10 years. Specific targets are unrealistic where the programme depends entirely on the response of the community. As such, no effort is made to involve those villages where no interest is shown in the programme. Where VOs fail to complete projects due to internal reasons no pressure is put on them for recovering grant instalments already paid or for assisting them in sorting out their problems.

Targets, however, were essential for the purpose of getting donors to fund certain aspects of programmes and these were, by and large, met. Although the targets are not specific, the programme performance has been impressive. Since December 1982, 764 VOs have been created with a membership of about 48% of rural households. In the case of Gilgit district the figure is as high as 96.5 percent. The VOs have a savings deposit of Rs 34 million (December 1987) which means an average of Rs 45,000 per VO. 10 percent of this figure has been contributed by women. In addition a total of 975 projects were identified by September 1987 and 331 completed. Total credit of Rs 45 million has been mobilised divided among marketing (Rs 5.9 million), fertilizer (Rs 19.4 million), land development and agricultural machinery (Rs 17.7 million).

Formal training is given to VO members by the Human Resource Development division of the AKRSP. This division organises training through extension training and supply centres in each district. As AKRSP's training resources are limited, almost half the training is conducted by government specialists who receive an honorarium from the AKRSP. By May 1987, 207 persons had been trained in livestock development; 152 in plant protection; 152 in poultry development; 23 in accounting and 85 in marketing. 424 kits have been given to the technical people trained and 19 refresher courses arranged. Training has also been given to VO

office-bearers in book-keeping, preparation of agendas, meeting procedures and reporting. In addition, the functioning of the trained persons is monitored by the AKRSP.

In the villages of Chalt Bala, Rahbat, Maymushding and Sohnikot, training had been provided for two men from each village in improved veterinary practice and plant protection. Only veterinary training had been provided in Henzel. After training villagers pay the trained persons for the services they render. The supply centres of the AKRSP are well stocked so VO members prefer to purchase vaccines, fertilizer and seed from them rather than from the unreliable though subsidised government sources. In both the project areas VO members were making use of these AKRSP extension and supply centres.

## VI. KEYS TO SUCCESS AND PROGRAMME CONSTRAINTS

Several factors have contributed to the successes achieved by the AKRSP:

- The Aga Khan's influence and his high standing in the Ismaili communities of the NA.
- A favourable political and social climate in the programme area, and support by both the local and federal governments at the highest levels.
- The conceptual framework provided by Dr. A.H. Khan and the use of a successful model, already tested at Comilla. This model emphasises:
  1. broad-based village organisations
  2. consensual decision-making within VOs
  3. the primacy of the VO in decision-making
  4. priority to productive projects
  5. one-time only grants from AKRSP
  6. flexibility and learning from experience.
- A good management team with efficient separation of functions and a minimum of bureaucratic procedures and hierarchy.
- Adequate and reliable funding.
- High physical mobility due to a good supply of vehicles; an emphasis on field-orientation; decentralisation of offices.

## VII. RECOMMENDATIONS FOR SECTOR STRATEGY AND POLICY

For the potable water and sanitation sector the following recommendations are made, based on the experience of the AKRSP:

1. Sector agencies require a cadre of social animators or engineers with social animation skills to promote, establish and strengthen appropriate village organisations.
  - the village organisation should represent all or almost all of the households of the community.
  - projects should be designed to directly benefit all or almost all households.
  - training will be required to improve skills in construction, the control of funds and simple operations and maintenance.
2. Sector agency staff should be field-oriented, their workloads should be reasonable and they should receive adequate support for their assignments.
3. Sector investments should be locally controlled by a broadly based village organisation.
  - village organisations should be responsible for organising the inputs from the community into project construction, and the community contributions towards recurrent costs.
  - it should make the final decisions about the technology, design, location of water and sanitation projects, and the pace of the projects.
4. Technical staff from PHEDs or LGRDDs should work closely with village organisations in presenting the water and sanitation options for the community and their cost implications.
5. Innovative ways to meet water and sanitation needs should be attempted and carefully monitored.
  - conventional approaches are not always appropriate; new, more affordable ways can be developed through experimentation.

## APPENDIX I

## COMMUNITY BASIC SERVICES PROGRAMME

The programme was launched by the Local Bodies and Rural Development Department to provide the basic services of water supply, sanitation and health to the rural areas through community participation. The programme is funded by UNICEF, the AKF and the Government of Pakistan, and had been working in the NAs independently before the start of the AKRSP.

## Planning, Feasibility and Implementation:

The elected councillors apply for water supply schemes for their villages following which the CBS engineering cell prepares outline designs and estimates. Materials, consisting of pipes and bags of cement, are then handed over to these councillors to have the work implemented through community participation, sometimes under the nominal technical guidance of CBS engineers. On the base established by the water programme, a sanitation programme is then commenced.

## Operation and Maintenance:

As soon as the works are completed, they are handed over to the community for operation and maintenance, the costs of which are borne by the communities themselves.

## Interaction with AKRSP, success &amp; failures:

AKRSP and CBS are parallel programmes. Sometimes the village organisations set up under the AKRSP are used to promote community participation. However, CBS has so far been unable to use the VOs to its full advantage.

## Technical Assessment:

Each of the three villages visited, Chalt, Rahbat and Henzel had water supply and sanitation programmes developed through CBS. In all of these the technologies adopted are identical. Springs are tapped at some height and distance from the village with water being carried through pipelines to a ground tank, also located at an elevation. This tank is made of stone masonry and is finished internally with cement plaster. The roof consists of GMS sheets. All pipes are of GMS ranging from 2" to 1/2" dia and water is supplied through house connections. A few houses who cannot afford to obtain house connections, are supplied through stand posts. Workmanship is poor and the tanks visited leaked as did the distribution system in places. Complaints of shortages of supply were voiced, which could have been

due to faulty network or an inadequate source. So far no major operation and maintenance problems have been reported from any of the above three villages.

In the field of sanitation CBS, in collaboration with UNICEF, has set up demonstration ventilated pit latrines in selected villages. So far these have not become popular nor have they been promoted to any sizeable degree. Furthermore, no wastewater drainage of any kind has been installed.

## APPENDIX II

## ABBREVIATIONS AND ACRONYMS

AKF	Aga Khan Foundation
AKRSP	Aga Khan Rural Support Programme
CBS	Community Basic Services
CIDA	Canadian International Development Agency
EEC	European Economic Community
GM	General Manager
GMS	Galvanised Mild Steel
HYV	High Yielding Variety
KKH	Karakoram Highway
LB & RD	Local Bodies and Rural Development Department
NA	Northern Areas
NAFC	Northern Areas Frontier Constabulary
NWFP	North West Frontier Province
ODA	Overseas Development Administration (UK)
OXFAM	Oxford Famine Relief
PARC	Pakistan Agricultural Research Council
PPI	Productive Physical Infrastructure
SO	Social Organiser
SOU	Social Organisers Unit
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
VO	Village Organisation
WO	Women's Organisation