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REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO

THE ISLAMIC REPUBLIC OF PAKISTAN

FOR

THE BARANI VILLAGE DEVELOPMENT PROJECT



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CURRENCY EQUIVALENTS

Currency Unit	=	Pakistani Rupee (PKR)
USD 1.00	=	PKR 45
PKR 1.00	=	USD 0.022

WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.204 pounds (lb)
1 000 kg	=	1 metric tonne (t)
1 kilometre (km)	=	0.62 miles (mi)
1 metre (m)	=	1.09 yards (yd)
1 square metre (m ²)	=	10.76 square feet (ft ²)
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres

ABBREVIATIONS AND ACRONYMS

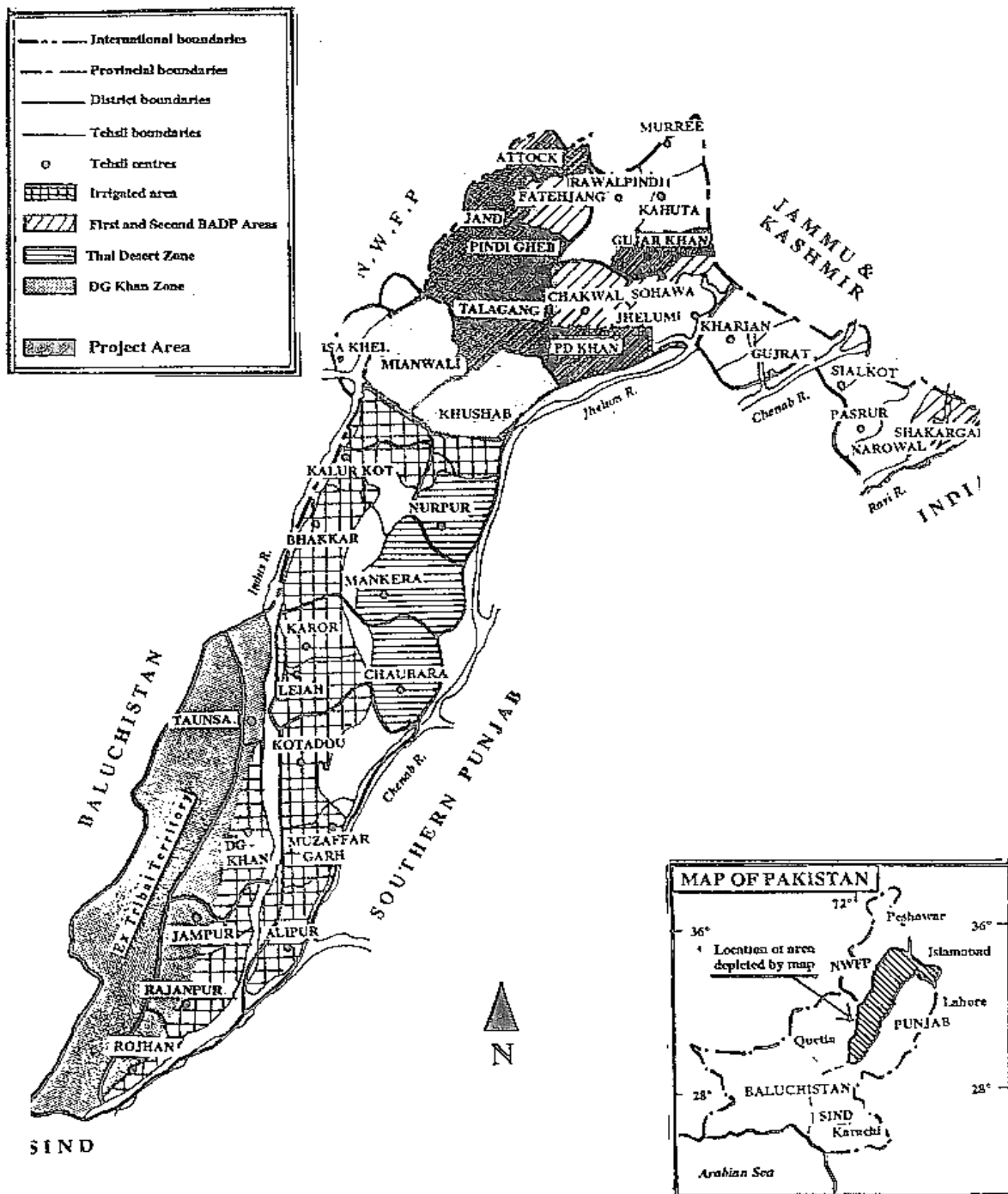
ABAD	Agency for Barani Area Development
AKRSP	Aga Khan Rural Support Programme
AWP/B	Annual Workplan and Budget
CDF	Community Development Fund
CO	Community Organization
CPE	Country Portfolio Evaluation
ERR	Economic Rate of Return
ICARDA	International Centre for Agricultural Research in the Dry Areas
MIS	Management Information System
NGO	Non-Governmental Organization
NRSP	National Rural Support Programme
P&D	Planning and Development Department
PCC	Project Coordination Committee
PMU	Project Management Unit
PPAF	Pakistan Poverty Alleviation Fund
PRA	Participatory Rural Appraisal
PSC	Project Steering Committee
RSP	Rural Support Programme
SBADP	Second Barani Area Development Project
SOE	Statement of Expenditures
TTC	Technical Training Centre
UNOPS	United Nations Office for Project Services
WCEW	Woman Community Extension Worker
WCLW	Woman Community Livestock Worker
WCO	Women's Community Organization

GOVERNMENT OF THE ISLAMIC REPUBLIC OF PAKISTAN

Fiscal Year

1 July – 30 June

MAP OF THE PROJECT AREA



Source: IFAD

The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.



ISLAMIC REPUBLIC OF PAKISTAN
BARANI VILLAGE DEVELOPMENT PROJECT
LOAN SUMMARY

INITIATING INSTITUTION:	IFAD
BORROWER:	Islamic Republic of Pakistan
EXECUTING AGENCY:	Planning and Development Department (P&D) of the Government of Punjab
TOTAL PROJECT COST:	USD 25.15 million
AMOUNT OF IFAD LOAN:	SDR 11.15 million (equivalent to approximately USD 15.26 million)
TERMS OF IFAD LOAN:	40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum
COFINANCIERS:	None
CONTRIBUTION OF BORROWER:	USD 5.22 million
CONTRIBUTION OF BENEFICIARIES:	USD 4.67 million
APPRAISING INSTITUTION:	IFAD
COOPERATING INSTITUTION:	United Nations Office for Project Services (UNOPS)



PROJECT BRIEF

- 1. The Target Group and Targeting.** The project will target about 176 000 households, representing 40% of the project area, composed mainly of farm households with less than 10 ha of land, sharecroppers and agricultural labourers. Most households live in poor conditions, with frequent crop failures due to unreliable climatic conditions. In general, the relatively poorer villages or communities are small, are located in the semi-arid areas with lower rainfall, have low average farm size and an above-average number of landless, and have poorly developed physical and social infrastructure. In order to prioritize project interventions, these characteristics will be developed into measurable indicators on the basis of a survey carried out by the project prior to the beginning of activities.
- 2. Reasons for Poverty.** The principal cause of poverty in the area is frequent crop failure or reduced yield because of unreliable or inadequate rainfall. This factor, combined with predominantly small and fragmented farms, weak agricultural services, and lack of research technology for low-rainfall areas, has further trapped a population in a poverty circle. Poverty has caused increased migration to generate income and reduced labour availability to increase productivity. Illiteracy is widespread, as parents face the dilemma of children's education and family labour availability. Despite these elements, poor people do not identify themselves as such, making it difficult to explicitly target them. Grass-roots contacts through the involvement of Non-Governmental Organizations (NGOs) are a prerequisite to targeting the poor.
- 3. Project Activities to Benefit the Target Groups.** The project will: (i) boost agricultural production and incomes through the development of irrigation, dissemination of extension information, adaptation of technologies for the low-rainfall areas, increased livestock productivity and vaccination, and the establishment or strengthening of community organizations; (ii) improve the status of women through targeted, culturally acceptable income-generating activities and increase employment opportunities for rural people; and (iii) improve the living conditions of the rural population and reduce the burden on women through investment in drinking water supply.
- 4.** About 32 300 households will benefit from irrigation and rainfed development. Some 50% of these will also benefit from livestock activities. In addition, a much larger number will benefit from overall improvement of agricultural services, applied research, water supply and microenterprise and income-generating activities. Women will benefit from most project activities, and more particularly from income-generating activities and community-based infrastructure such as water supply and sanitation. A number of microentrepreneurs will take advantage of the provision of training, support, and the removal of collateral requirements to access formal credit and establish their own activities. The strengthening of the line agencies and support to NGOs will have a further positive impact.
- 5. Beneficiary Participation.** The project has been formulated taking into account the very positive experience of IFAD-supported projects in the country and the country portfolio evaluation. A participatory rural appraisal (PRA) has been undertaken to ensure that beneficiary needs have been identified and prioritized. Participatory workshops were held during formulation and appraisal in which beneficiaries discussed the results of PRA and the proposed project design. The project will operate through community organizations to select priority infrastructure and development activities, in collaboration with the beneficiaries, who are expected to contribute to the investment cost and to take over responsibility of operation and maintenance. All project technical and social services will be provided according to the needs of the organizations in order to ensure their appropriateness, effectiveness and sustainability. A suitable NGO will be selected to assist in the formation of these organizations and in the training of their members to take over responsibility for the development of their respective villages.



**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD
TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO
THE ISLAMIC REPUBLIC OF PAKISTAN
FOR
THE BARANI VILLAGE DEVELOPMENT PROJECT**

I submit the following Report and Recommendation on a proposed loan to the Islamic Republic of Pakistan for SDR 11.15 million (equivalent to approximately USD 15.26 million) on highly concessional terms to help finance the Barani Village Development Project. The loan will have a term of 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum. It will be administered by the United Nations Office for Project Services (UNOPS) as IFAD's cooperating institution.

PART I – THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY¹

A. The Economy and Agricultural Sector

1. Pakistan covers an area of about 796 100 km² with a population estimated at 132 million increasing by 2.8% per annum. About 68% of the population is rural. The economy performed poorly in 1996/97 and is not expected to improve in 1998/99. GDP growth in 1996/97 was only about 3.1%, resulting in a virtually constant per capita income. The major macroeconomic problems facing the country are the fiscal deficit and the public-sector borrowing requirement, which have put continuous pressure on the Government to reduce development expenditure and to foster the free market. The current government has made a serious start on a new strategy of broad-based structural adjustment measures, including tariff and tax reforms, incentives for agriculture and industry, continued banking reforms and controls on public-sector expenditure and borrowing. Future directions will include the emphasizing of a tight monetary policy, demand management and a move to direct rather than indirect taxes.

2. Out of the total area of Pakistan, 20.9 million ha (26%) are cultivated. Nearly 76% of the cultivated area is irrigated. The remaining 24% is *barani* (rainfed) area and is subject to erratic rainfall. Forests cover about 3.7% of the total area. Agriculture is the largest single sector in the economy and accounts for 26% of GDP, 60% of export earnings and 48% of employment. Crops provide 66% of agricultural GDP and livestock 34%. The agricultural growth of about 4% per annum over the last 25 years was based on a rapid expansion of irrigation, the introduction of high-yielding varieties, subsidized inputs and public-sector investment in rural infrastructure such as roads and electricity. Despite this adequate aggregate growth rate, Pakistan still faces shortages of such essential commodities as wheat and edible oil.

3. Agricultural support services (extension, research, etc.) and their interlinks are weak, and are undermined by limited operational funding. Extension and, to a certain extent, research activities concentrate on the needs of better-off farmers with limited benefit to the poor. However a change is being noticed in many projects, notably IFAD-supported, in which extension and livestock service

¹ See Appendix I for additional information.



personnel at the *tehsil* level (an administrative unit) have been trained and are working successfully with community organizations rather than individual farmers in order to reach the majority of the poor. Similarly, rural financial services are poorly developed despite very substantial efforts by Government and donors over the last three decades to increase and deepen the flow of institutional credit to rural areas. Most rural people and the poor rely on informal sources for advances in cash or in kind, with interest rates reportedly as high as 60%. Government-established and supported NGOs have tended to fill this gap by providing credit to community organizations using a group-based approach, usually modelled along the lines of the Aga Khan Rural Support Programme (AKRSP). Their activities typically include the establishment of and support to village/community/women's organizations and promotion of savings and credit for income-generating activities, with particular emphasis on women.

B. Lessons Learned from Previous IFAD Experience

4. The proposed project design incorporates lessons from the experiences under AKRSP, IFAD-supported projects, the country portfolio evaluation and the experience of other donors. In particular, the following lessons from the IFAD/AsDB-supported Second Barani Area Development Project (SBADP) have been taken into account: (i) successful technical activities included environmentally friendly dug wells and ponds with a cost-sharing approach, successful soil and water-conservation activities, technical training, development of new varieties, women's extension and seed clubs, and rural roads; (ii) community development activities did not produce any tangible results. Their implementation was contracted to a consulting firm. This activity should be contracted to suitable NGOs, which establish and/or strengthen sustainable grass-roots organizations that will gradually assume responsibility for local development and linkages with the institutional structure; (iii) credit delivery was also disappointing, primarily due to institutional weaknesses of the Agricultural Development Bank of Pakistan in the administration of rural credit for small and landless farmers. Savings and credit will be promoted by an NGO through a group approach and will involve the communities in the credit process; (iv) management and monitoring systems have been generally acceptable but with room for improvement; (v) technological packages need to be specific to the socio-economic situation of the rural poor and the agro-ecological conditions of the project areas. Participatory, community-based extension methods involving line agencies and groups have so far yielded positive results and should be further developed; and (vi) opportunities for women, consistent with their customs and traditions, can be generated through the establishment of women's community organizations (WCOs), training in social and technical fields, advisory inputs for women and the promotion of labour-saving devices and income-generating activities.

C. IFAD's Strategy for Collaboration with Pakistan

Pakistan's Approach to Poverty Alleviation

5. The population below the poverty line has declined since the early 1970s in relative and absolute terms, although this hides the substantial variation from one area to another. Punjab, in fact, with its great proportion of landless and sharecroppers and the limited production potential of its *barani* areas, has one of the highest proportions of rural poor. In addition, despite some improvement in social infrastructure between the 1970s and 1990s, especially in women's indicators, Pakistan still lags behind the average of Asian countries in population growth, infant mortality, school enrolment and adult literacy. Aware of the critical importance of human development factors for the overall development of the country, the Government launched an ambitious Social Action Programme in 1993/94, with support from major multilateral and bilateral donors, which seeks to address the shortcomings in the fields of primary education, basic health care, family planning and rural water supply and sanitation.



6. After experience gained in community-based projects, the Government is evolving a national strategy of poverty alleviation based on the establishment of an institutional framework for community development that includes: (i) **rural support programmes (RSPs)** in the provinces; and (ii) the **Pakistan Poverty Alleviation Fund (PPAF)**. The Government of Punjab Province recently set up 18 new RSPs that will cover the irrigation command area, while the National Rural Support Programme (NRSP) will concentrate on the *barani* areas. The Government will finance RSP administrative costs, probably through PPAF, while funds for development activities are expected to be provided by both Government and donors. PPAF, recently established as a private limited company under the Companies Ordinance, is a non-profit organization, managed by a board of directors comprising representatives of the Government and the private sector, mostly NGOs. It will function as an apex organization in microfinance to provide microcredit to community organizations (COs) through NGOs. The International Development Association has expressed interest in supporting it. PPAF still has to work out its approach and procedures for lending to communities and is not expected to be operational before 1999. It will need some time to prove its efficiency before it could be used as a channel for providing credit to the IFAD target group.

7. Both initiatives indicate the level of commitment of the Government to poverty alleviation. However, with few exceptions, local NGOs are not available, which might lead RSPs to view themselves as institutions to implement government policy rather than people's priorities. Experience with existing government-established RSPs is mixed, with two NGOs functioning reasonably well (SRSC and NRSP), while the Barani Rural Support Programme is facing serious problems. All RSPs depend entirely on government/donor funding.

IFAD's Strategy in Pakistan

8. **Poverty-Eradication Activities of Other Major Donors.** Major donors support development in the *barani* areas, but none specifically in the project area. Their programmes include: (i) the Social Action Programme (AsDB/World Bank), now closed, which faced staffing problems; (ii) the Integrated Community-Based Water Supply, Sanitation and Hygiene Education Programme (UNICEF), executed at the Union Council level by the Local Government and Rural Development Department, has been successful; (iii) the Punjab Forestry Project (World Bank) has initiated a province-wide social forestry component through the establishment of village committees; and (iv) the Small Dams Project (AsDB), which supported investments in water storage development. Without the support of suitable NGOs, however, the water users' organizations formed were not effective and the actual use of the water did not lead to incremental production.

9. IFAD has supported 15 projects in Pakistan, with wide geographical and activity coverage and with increasing beneficiary participation and NGO involvement. The strategy of IFAD was further sharpened following the 1995 country portfolio evaluation (CPE), which comprehensively reviewed all IFAD-supported projects and drew a number of lessons that have since been taken into account in project design and implementation. Community organization has been given considerable attention as being the pillar of all demand-driven development.

10. The population in marginal areas with a high incidence of poverty is characterized by strong cohesion and interdependence at the community and/or tribal level. In undertaking activities with active beneficiary participation, IFAD-supported projects build on a long tradition of self-help and community-based work. IFAD development strategy seeks to improve villagers' opportunities, increase productivity and conservation of the environment, and mobilize the communities.



Project Rationale

11. **Rationale.** The six selected project *tehsils* are characterized by: (i) a low level of development and high incidence of poverty and, as such, a high-priority position in government development plans; (ii) exclusion from previous and ongoing major development activities; (iii) availability of untapped water resources for small-scale irrigation and of proven packages for irrigated and rainfed development in the Potwar Plateau, established by previous IFAD projects in neighbouring areas with similar agro-ecological conditions; (iv) a need to evolve and test options for the development of large areas of semi-arid rangelands in the *barani* tract that could be disseminated within and outside the project *tehsils*; and (v) potential for microenterprise development in all project *tehsils* to absorb at least part of the under-used labour force of the area.

12. **Project Approach.** Experience with the rural support programmes in the *barani* and other poor areas demonstrates that a participatory, bottom-up approach is more acceptable to and consistent with traditional community-level participatory practices than the conventional top-down approach of the public agencies. The approach enables communities to play a central role in the planning and implementation of rural development, and their organizations to provide a focal point for extension advice and other services. Another important design aspect will be to set project support to households at a level sufficiently attractive to the poor, but unattractive to rich people, thus helping to apply self-selection of target households under the ambit of COs.

13. To enhance productivity and the incomes of the rural population in the project area, the overall development strategy will include five elements: (i) improving villagers' access to irrigated land, markets, inputs and social services through support to economic and social infrastructure (irrigation works, water supply, etc.), credit (a revolving fund) and training; (ii) improving production, productivity and conservation of the environment by supporting the development and adoption of better technologies and alternative resource-management practices; (iii) mobilizing communities, strengthening their capacities for self-help and supporting the establishment of sound linkages with the public and private-sector services for technical assistance and input supply; (iv) strengthening of line agencies to provide the services required by communities; (v) opportunities for diversification of the production system and income-generation and microenterprise development; and (vi) coordinating by a Project Management Unit (PMU) within the Agency for Barani Area Development (ABAD) and coordinating committees at the province, project and *tehsil* level.

PART II – THE PROJECT

A. Project Area and Target Group

14. **Project Area.** The project area consists of six *tehsils* (Attock, Jand, Pindi Gheb, Talagang, Gujar Khan and Pind Dadan (P.D.) Khan) in the *barani* areas of Punjab. Ecologically the project area is part of two large plains divided by the Salt Range hills consisting of highly saline geological formations: the Potwar Plateau north of the Salt Range and the adjoining plains south of the Salt Range. Rainfall decreases from 800 mm in Attock in the north-west to 450 mm in P.D. Khan in the south-east. The Potwar Plateau is endowed with substantial, unexploited fresh ground and surface water resources, while south of the Salt Range the limited available ground and surface water is often saline and unfit for human consumption and irrigation. Cropping intensity in rainfed areas ranges from 75 to 85%. Due to a very unreliable rainfall pattern, rainfed crop production is risky and yields fluctuate widely from year to year, with crop failure in two to four of every ten years. Livestock is an important part of the farming system and virtually all farm families own livestock, though the number is low due to the limited amount of fodder and/or grazing available from the farm and communal grazing areas. Overgrazing is very common, degrading rangeland resources and requiring the urgent development and introduction of



rangeland management systems that are acceptable to farmers and that foster the integration of crop/rangeland/livestock production in a sustainable farming system.

15. The population of the project *tehsils* is about 2.1 million, about 83% of which is rural. There are about 235 000 rural households living in some 900 villages. Major occupations are self-employed farming (55%) and farm labour/sharecropping (15%). As much as 32% of the income of Punjab *barani* households comes from off-farm sources, since farm income cannot meet basic family needs. The main source of off-farm income is casual unskilled and construction work in large cities, furniture-making, trading activity, the national army, etc.

16. Out of the total area of about 1.1 million ha some 51% is classified as arable, the remainder is occupied by forests and rangelands (49%). Farms are generally small with an overall farm size of 5.6 ha, of which 2.5 ha are classified arable while the remainder consists of wasteland and rangeland. Only 1% of the farms own more than 10 ha, while about 65% of the landowners own less than 5 ha.

17. The PRA found that public health staff are limited and only 25% of the surveyed villages in the sample have medical care facilities, 40% have electricity and 30% have piped drinking water. Most of them either lack or have inadequately developed access roads, causing serious difficulties in the movement of people and such commodities as inputs and farm produce. Women are most affected by these limited basic facilities (in terms of health care, time and hardship).

18. **Target Group.** The absence of large farms and, further, the uneconomic, small average size of the holdings, together with the low productivity of current agricultural practices, place most of the households in the IFAD target group. This group is estimated at approximately 176 000 households, consisting of 122 000 farm households with less than 10 ha of land and 54 000 households with employment as agricultural labourers, sharecroppers and rural non-farm labour. In order to spread project benefits to a large number of participants, sites will be selected for project investments in irrigation that group a number of farmers, and the development per landowner should not exceed a maximum of 2 ha.

19. Recognizing the pivotal role played by women in the well-being of their families and the potential for their further contribution to the family and society, all rural women will be considered as a priority target group, in line with IFAD's focus on gender issues. Women will establish 30-40% of the community organizations, and a major portion of the project support in terms of training, microenterprise development and on and off-farm credit will be available to them. The project will further ensure support to women client groups through the placement of women extension officers and workers based on the experience of SBADP.

B. Objectives

20. The main objectives of the project will be to: (i) boost agricultural production and the incomes of populations living in poverty; (ii) establish and strengthen community organizations as the institutions through which technical and social services can be provided to IFAD's target group on a sustainable basis; (iii) improve the status of women by targeting them for special attention in a culturally acceptable manner, including the provision of support to income-generating activities; (iv) improve the living conditions of rural communities through community-based improvement of small-scale social infrastructure such as water supply; and (v) increase opportunities for on and off-farm employment in the project area.



C. Components

21. The proposed project will be executed over a period of six years and will consist of the following components: (i) community and women's development; (ii) agricultural development; (iii) microenterprise development; and (iv) a Project Management Unit (PMU).

Community and Women's Development

22. The project will support: (i) mobilization of target group households through the establishment of about 2 800 men's and women's COs, each with an average membership of 22, totalling 61 600 members at full development; (ii) development of a savings and credit scheme for each CO/WCO; and (iii) development of local leadership through the training of CO/WCO leaders and community activists in various fields. A suitable NGO with experience in the project area will be contracted by the project to undertake these activities and ensure their sustainability. The NGO will organize the beneficiaries and assist them in assessing and prioritizing their needs through participatory appraisal and the formulation of a participatory community development plan. While ensuring beneficiary participation, the NGO will facilitate the work of line agencies in implementing project activities (extension, irrigation, soil and water conservation, etc) and will establish appropriate linkages with public, private and other agencies for sustainable and self-reliant operation of group activities. The NGO will also establish a savings and credit scheme in each CO. A community development fund (CDF) of USD 2.7 million will finance such community infrastructure as water supply, sanitation, access roads, etc., in order to improve living conditions in general and those of women and children in particular.

Agricultural Development

23. The implementation of this component is demand-driven, and the different activities will depend on the needs identified by the beneficiaries and their prioritization with the assistance of the NGO. The needs as identified during the PRA and discussed during the Participatory Workshops have been used for the provisional quantification of this component. Activities to be implemented will include: (i) development of water resources from dugwells, minidams and ponds to irrigate about 6 600 ha, with a scheme size ranging from 3.25 to 8 ha each. Basic maps will be prepared (topographic, hydrological, agro-ecological, etc.) to ensure proper selection of potential sites. Communities will participate in the selection of beneficiaries and schemes (approved by at least 70% of the CO members). The schemes should also meet such criteria as technical feasibility, environmental soundness and financial viability and sustainability. Schemes should benefit as many CO members as possible, with a maximum of 2 ha irrigated land per beneficiary, and beneficiaries should agree to contribute 50% of investment costs and take over full responsibility for operation and maintenance. Modern water-saving methods will be demonstrated (piping, low-pressure drip, microsprinkler, etc.); (ii) soil and water conservation works on about 1 500 ha, including gully plugging, terracing, water-control structures, tree planting, hill torrent control, etc; (iii) crop development through improved agronomic packages, the strengthening of extension and the introduction of group extension. To ensure targeting of women, a women's extension service will be introduced taking into account the cultural conditions of the *barani* areas. In addition, at the community level, women community extension workers (WCEWS) will be selected from among the members and provided with adequate training. The project will demonstrate crop technologies on farmers' fields and support farmer-led seed production through the introduction of simple seed-cleaning and treatment equipment at the CO level and the training of seed growers selected by the COs. Training will be provided to men and women extension staff in participatory development, communication skills and the exchange of know-how and information; (iv) livestock development, including breed improvement through cross-breeding of local cattle and buffaloes, extension of



improved livestock management strategies, support to communities to establish some 90 community-based nurseries, support to animal health services, training of livestock officers, farmers and women, and demonstrations, particularly for women, in the initiation of small-ruminant fattening activities. To ensure that the needs of women are taken into account, women staff and women community livestock workers (WCLWs) will be engaged. Interested COs will be provided with breeding bulls, to be maintained by a selected farmer and used by community members against a service charge; and (v) adaptive research. Under SBADP, mainly on-station research was conducted, the results of which now need to be adapted to the farm level. Research should cover the need for extension packages on range management, soil and land-use management, and the integration of crops, livestock and rangelands in a sustainable farming system. The project will contract this activity to the International Centre for Agricultural Research in the Dry Areas (ICARDA), which will execute it in close cooperation with Pakistani research institutes.

Microenterprise Development

24. ABAD is presently providing technical training courses for school leavers in different trades in its 23 men's and 19 women's technical training centres (TTCs). To encourage successful training participants to set up their own small business, the project will introduce marketing and business skills training, on a pilot basis, as a supplement to the technical training in two men's and two women's TTCs, and will establish two production-cum-sales centres in the female training institutes to facilitate marketing of handicraft and other products. For this purpose two male and female TTCs will be improved and equipped adequately and small production-cum-sales centres will be attached to the latter. Technical assistance will be provided in the development of suitable training programmes and in marketing. Those TTC graduates setting up microenterprises will be supported through the provision of counselling and a credit facility. A revolving credit fund of about USD 2.7 million will be established with the selected NGO to cater to the credit needs of community members, and will cover microenterprises, income-generating activities, agricultural inputs and livestock, with a credit ceiling of about USD 1 000.

Project Management Unit (PMU)

25. The project will finance a Project Management Unit (PMU), in ABAD, responsible for the coordination and monitoring of activities executed by the communities with support from the NGO and relevant line departments. PMU staffing will include a project director, monitoring officer, engineer, community development officer, etc. For this purpose, project financing will include: (i) office equipment (computers, fax machine, etc.); (ii) transportation facilities; (iii) national technical assistance for the establishment of a Management Information System (MIS) and studies; and (iv) incremental operating expenses.

D. Costs and Financing

26. **Project Costs.** Total costs over the six-year period are estimated at USD 25.15 million, at May 1998 prices and including price and physical contingencies. Of this total, foreign exchange costs represent about 7%. Physical contingencies represent 13% of base costs. Price contingencies are estimated according to World Bank/IMF projections. Constant purchasing parity exchange rates have been used to estimate project costs. These rates reflect the likely depreciation of the PKR against major currencies due to the projected differential in domestic and foreign inflation rates. A cost summary is presented in Table 1.

TABLE 1: SUMMARY OF PROJECT COSTS^a
(USD '000)

Components	Local	Foreign	Total	% of Foreign Exchange	% of Base Costs
A. Community and women's development					
1. Community organization	1 710	87	1 796	5	8
2. Community development fund	2 430	270	2 700	10	12
Subtotal	4 140	357	4 496	8	20
B. Agricultural development					
1. Dugwells	4 078	317	4 395	7	20
2. Ponds/minidams	3 186	274	3 459	8	16
3. Soil conservation	1 050	81	1 131	7	5
4. Crops	1 732	52	1 784	3	8
5. Livestock	1 172	70	1 242	6	6
6. Adaptive research	1 222	386	1 608	24	7
Subtotal	12 439	1 180	13 619	9	61
C. Microenterprise development					
1. Men's enterprises	110	22	132	17	1
2. Women's enterprises	294	26	320	8	1
3. Revolving fund	2 700	0	2 700	0	12
Subtotal	3 104	48	3 152	2	14
D. Project Management Unit					
	907	74	981	8	4
Total base costs	20 591	1 658	22 248	7	100
Physical contingencies	1 019	89	1 108	8	5
Price contingencies	1 662	132	1 794	7	8
Total project costs	23 271	1 879	25 150	7	113

^a Discrepancies in totals are due to rounding.

27. **Project Financing.** Table 2 shows the project financing plan. IFAD will finance USD 15.26 million (61%), the Government USD 5.22 million (21%) and the beneficiaries USD 4.67 million (19%). The government contribution includes duties and taxes (USD 1.44 million or 5.7%). The beneficiaries' contribution will be mainly in the form of labour and materials/equipment for civil works associated with irrigation and other village infrastructure developments.

E. Procurement, Disbursement, Accounts and Audit

28. **Procurement** of goods and services will be in accordance with the IFAD Procurement Guidelines. Procurement of equipment, materials and vehicles common to all executing agencies will be bulked and undertaken by the PMU for all line departments. Contracts valued at USD 200 000 or more will be subject to international competitive bidding. Items costing between USD 10 000 and USD 200 000 will be procured through local competitive bidding; items costing less than USD 10 000 will be procured through local shopping. Community-based civil works such as dugwells, ponds and minidams, small water supply schemes and other community infrastructure will be carried out by force account when appropriate or contracted by the respective CO to local contractors. A suitable NGO will be contracted, initially for two years and renewable on successful performance, to implement the community development component and to manage the revolving credit fund. ICARDA will be contracted to implement the research sub-component in collaboration with national research institutes.



TABLE 2: FINANCING PLAN^a
(USD '000)

	Government		IFAD		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties and Taxes
	Amount	%	Amount	%	Amount	%	Amount	%			
A. Community and women's development											
1. Community organization	88.8	4.4	1,853.5	91.8	76.6	3.8	2,019.0	8.0	100.0	1,830.2	88.8
2. Community development fund	810.0	30.0	1,485.0	55.0	405.0	15.0	2,700.0	10.7	270.0	2,160.0	270.0
Subtotal	898.8	19.0	3,338.5	70.7	481.6	10.2	4,719.0	18.8	370.0	3,990.2	358.8
B. Agricultural development											
1. Dugwells	853.8	15.9	2,423.0	45.0	2,104.3	39.1	5,381.1	21.4	388.2	4,604.7	388.2
2. Ponds/minidams	670.2	16.0	1,843.1	44.0	1,675.5	40.0	4,188.9	16.7	331.6	3,525.7	331.6
3. Soil conservation	338.2	24.6	629.1	45.8	405.9	29.6	1,373.2	5.5	98.3	1,176.6	98.3
4. Crops	950.6	46.5	1,091.9	53.5	-	-	2,042.5	8.1	64.9	1,912.6	64.9
5. Livestock	299.1	21.6	1,083.0	78.4	-	-	1,382.1	5.5	73.7	1,233.2	75.2
6. Adaptive research	0.0	-	1,735.2	100.0	-	-	1,735.2	6.9	416.4	1,318.7	-
Subtotal	3,111.9	19.3	8,805.3	54.7	4,185.7	26.0	16,103.0	64.0	1,373.1	13,771.6	958.2
C. Microenterprise development											
1. Men's enterprises	91.7	60.7	59.5	39.3	-	-	151.2	0.6	24.9	102.4	23.8
2. Women's enterprises	229.1	62.8	135.6	37.2	-	-	364.7	1.5	29.0	311.7	24.0
3. Revolving fund	-	-	2,700.0	100.0	-	-	2,700.0	10.7	-	2,700.0	-
Subtotal	320.8	10.0	2,895.1	90.0	-	-	3,215.9	12.8	54.0	3,114.2	47.7
D. Project Management Unit	892.5	80.3	219.5	19.7	-	-	1,112.0	4.4	82.0	952.3	77.6
Total Disbursement	5,224.0	20.8	15,258.4	60.7	4,667.4	18.6	25,149.8	100.0	1,879.1	21,828.3	1,442.3

^a Discrepancies in totals are due to rounding.



29. **Disbursements, Accounts and Audit.** The loan will be disbursed for eligible expenditure incurred during the project period. A Special Account will be set up in the National Bank of Pakistan, or other suitable bank acceptable to IFAD, to facilitate the regular flow of funds. Upon loan effectiveness, IFAD will make an initial deposit of USD 1.8 million corresponding to about six months' requirements. The account will be replenished in accordance with established IFAD guidelines. Withdrawal from the loan for payments costing less than USD 50 000 will be made against certified statements of expenditures (SOEs), the documentation of which will be retained by ABAD for inspection during supervision missions.. A project account will be opened, into which the Government will deposit its contributions according to the agreed schedule. The closing date of the loan is 31 December 2005.

30. Based on annual, approved work plans and effective implementation, project funds from the Special Account will be channelled by the PMU to the line departments and the contracted agencies (NGO and ICARDA). All implementing agencies involved in the project will keep separate accounts of expenditures with regard to their activities undertaken with project funding. The accountant within the PMU will ensure that all accounts are kept in accordance with government practices acceptable to IFAD. The PMU accountant will also prepare quarterly, consolidated statements of project accounts as an integral part of the MIS. These consolidated statements will be submitted regularly to the Project Steering Committee (PSC) and IFAD. All accounts will be audited by the government auditor or other auditors acceptable to IFAD. The audited accounts and auditor's report, which include a separate opinion on the SOEs, will be forwarded to IFAD no later than six months after completion of each fiscal year.

F. Organization and Management

31. The Planning and Development Department (P&D) of the Government of Punjab, through ABAD, will have overall responsibility for project implementation. A PMU will be established for this task within ABAD and will be headed by a project director, with qualifications satisfactory to IFAD, who cannot be reposted for at least three years. Since ABAD plays an important role, the director general of ABAD, as well, should not be posted elsewhere unless the substitute has qualifications satisfactory to IFAD. All technical activities will be executed by the provincial line agencies in close cooperation with local government and the COs, the latter supported by the selected NGO. The NGO will manage the revolving credit fund to be provided under the project. Adaptive research under the project will be contracted to ICARDA to be executed in collaboration with concerned research institutes.

32. Coordination arrangements for the project will be undertaken in three interrelated committees: (i) at the provincial level, a Project Steering Committee (PSC), to meet twice a year, will be chaired by the chairman of P&D and include the heads of the line departments concerned. The director general of ABAD will act as the secretary. The PSC will be responsible for reviewing and approving the annual workplan and budget (AWP/B), reviewing overall performance of the project and resolving policy issues; (ii) at the project level, a Project Coordination Committee (PCC), to oversee the regular operation of the project, will be chaired by the director general of ABAD, and will include the heads of all participating agencies, the research institutes concerned and the selected NGO. The project director will act as the secretary to the committee. The PCC will meet at least quarterly and be responsible for progress reviews, approving work plans and budgets, supervising procurement activities and guiding the project director in the management of the project; and (iii) at the *tehsil* level, a Tehsil Coordination Committee, chaired by the project director, will review the monthly implementation progress of the project with local representatives of the executing line agencies and the NGO.



33. **Monitoring** of project activities and implementation and their effect on the beneficiaries will be carried out by the PMU, the implementing partners and the NGO. Key parameters² will include participation of beneficiaries with emphasis on women, microenterprise, savings and credit schemes, environmental impact, etc. A baseline survey, specific diagnostic and impact studies in selected areas, a mid-term review and a final impact evaluation study will also be conducted. The studies will be contracted by the PMU to suitable universities or consultants.

34. **Beneficiary Evaluation.** Farmers and other beneficiaries, both men and women, will be encouraged to analyse the implications of their involvement in the project. This will be done by organizing participatory evaluation exercises in the communities prior to the annual reviews. Selected communities will be invited to elect one of their members as their representative to attend the review and present their experiences and suggestions for improvement.

G. Economic Justification

35. **Benefits and Beneficiaries.** The project's agricultural development component will benefit about 32 300 households, including an estimated 24 000 and 8 300 families benefiting from rainfed and irrigation activities, respectively. Beneficiaries in the livestock subsector will include some 50% of all households organized in COs. Activities geared mainly to women include income-generation (about 1 200 beneficiaries anticipated) and women in charge of crop production due to the absence of male household members. Women will also be the principal beneficiaries of community-based investments from the CDF, which is expected to finance labour-saving water supply schemes, link roads, social infrastructure such as schools, etc. A number of microentrepreneurs will take advantage of improved access to formal credit to establish microenterprises.

36. The main quantifiable benefits arising from the project are: (i) increased crop production from expanded irrigation, improved rainfed and cultural practices; (ii) increased animal production resulting from an improvement in support services and an increase in the supply of crop residues; and (iii) increased production of honey, beeswax, milk and meat from income-generating activities. Main incremental production at full development is estimated to reach about 10 490 t of wheat, 2 500 t of maize, 23 400 t of vegetables, and 10 490 t of wheat straw as animal feed. Non-quantifiable benefits include the output of the adaptive research programme, production from pilot microenterprise activities and community-based activities to be financed through the CDF.

37. The project seeks to increase the income of the rural poor and women. Various representative crop and farm models have been prepared to test the financial viability of the different development proposals for rainfed and irrigated agriculture and for income-generating activities. It appears that the increase in income under rainfed conditions is modest (15-20%), but is substantial under irrigation using dugwells and minidams/ponds (180-200%). Income from income-generating activities such as apiculture and milk production is still limited (USD 178-200 per year respectively), although the financial rates of return are estimated at 80% and 25%, respectively, in view of the modest investment.

38. **Economic Analysis.** The economic rate of return (ERR), over a 20-year period, has been calculated at 11.4% for the whole project on the basis of a number of assumptions³. It was assumed that all costs except for those associated with adaptive research and microenterprise development were included, while benefits from adaptive research, microenterprise and the revolving funds were excluded on the grounds that benefits from these investments could not be quantified. However, if the investment cost of the CDF is excluded, the ERR is raised to 14%. The ERR is sensitive to changes in

² See Appendix V.

³ See Appendix VII.



prices of wheat and vegetables, the main incremental outputs, but is less sensitive to changes in on-farm investment costs. For a 10% increase or decrease in the wheat and vegetable prices, the economic internal rate of return (EIRR) increases 14.5% or decreases to 8.3%.

H. Risks

39. The first major risks could be the anticipated rate of CO/WCO formation, the partial inability of line departments to provide appropriate technical support to the beneficiaries and particularly women, and possible difficulties in coordination between the PMU and the NGO. To minimize these risks, the project was designed with the full participation of beneficiaries (PRA and workshops), line departments, ABAD and the NGOs working in the project area. Substantial funds and time are put into ensuring the proper formation of sustainable grass-roots organizations, training of officers and CO members, establishment of strong female extension services and the engagement of women extensionists at the community level (WCEW and WCLW). Clear responsibility of the NGO and PMU, clear procedures for the flow of funds between PMU and the NGO, release of funds based on implementation progress and good planning of activities will minimize the risk of any conflict between PMU and the NGO.

I. Environmental Impact

40. Soil losses through erosion due to the pressure on arable land, overgrazing and deforestation are the major environmental risks in the project area. The proposed project will address these problems through its soil and water-conservation and range-management activities. It will also help to create awareness of the problems and demonstrate the technical feasibility and the financial attractiveness of community-based conservation works and of tree-planting.

J. Innovative Features

41. The main innovative features include: (i) the introduction of adaptive research to develop applicable technology and farming systems for the semi-arid environment of *barani* areas, through institutional links with ICARDA, which will integrate crop, livestock and range management; and (ii) microbusiness need-based counselling service to TTC graduates and potential microentrepreneurs, both men and women, that includes assistance in feasibility-analysis and the start-up of businesses, identification of proper technology and sources, sources of raw materials and help in establishing linkages with potential markets.

PART III – LEGAL INSTRUMENTS AND AUTHORITY

42. A loan agreement between the Islamic Republic of Pakistan and IFAD constitutes the legal instrument for extending the proposed loan to the borrower. A summary of the important supplementary assurances included in the negotiated loan agreement is attached as an annex.

43. The Islamic Republic of Pakistan is empowered under its laws to borrow from IFAD.

44. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.



PART IV – RECOMMENDATION

45. I recommend that the Executive Board approve the proposed loan in terms of the following resolution:

RESOLVED: that the Fund shall make a loan to the Islamic Republic of Pakistan in various currencies in an amount equivalent to eleven million one hundred and fifty thousand Special Drawing Rights (SDR 11 150 000) to mature on and prior to 1 August 2038 and to bear a service charge of three fourths of one per cent (0.75%) per annum, and to be upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Fawzi H. Al-Sultan
President



SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES INCLUDED IN THE NEGOTIATED LOAN AGREEMENT

(Negotiations concluded on 20 October 1998)

1. (a) The Government of the Islamic Republic of Pakistan will cause the Government of Punjab Province to make available to ICARDA such amounts from the proceeds of the loan as will be necessary to carry out the applied research activities of the project, in accordance with the loan agreement and under the ICARDA agreement, acceptable to IFAD.

(b) The Government of Pakistan will cause the Government of Punjab Province to make available to an NGO, selected on the basis of the criteria set out in the loan agreement (the NGO), such amounts from the proceeds of the loan as shall be necessary to carry out the community and women's development component of the project in accordance with the loan agreement and under the NGO agreement, acceptable to IFAD.

2. In a bank satisfactory to IFAD, the Government of Pakistan will open and thereafter maintain a project account in Pakistani rupees, into which the Government of Punjab Province will deposit in a timely manner the required local counterpart funds as estimated in the AWP/B from its own resources. The project director will be authorized to operate the project accounts.

3. The Government of Pakistan will take reasonable measures to ensure that the project is carried out with due diligence with regard to environmental factors and in conformity with national environmental legislation and any international environmental treaties to which the Government of Pakistan may be a party, including the maintenance of appropriate agricultural pest-management practices where applicable. To that end, the Government of Pakistan will ensure that the pesticides procured under the project do not include any pesticide, either proscribed by the International Code of Conduct on the Distribution and Use of Pesticides of the Food and Agriculture Organization of the United Nations (FAO), as amended from time to time, or listed in Tables 1 (Extremely Hazardous) or 2 (Highly Hazardous) of the World Health Organization (WHO) recommended Classification of Pesticides by Hazard and Guidelines to Classification 1996-1997, as amended from time to time.

4. The Government of Pakistan will cause the Government of Punjab Province to establish and maintain, or cause the NGO to establish and maintain, a Revolving Fund for the project, and will keep therein the principal and interest, net of operating and other expenses, received on the credits made to farmers from the proceeds of the loan provided for in the Revolving Fund of the microenterprise development component. Amounts available in the Revolving Fund will be used by the NGO for the expansion of credit facilities to the beneficiaries in the project area, consistent with the loan agreement, at least until such date as the principal of, and interest and other charges on, the loan shall have been paid in full.

5. During the execution of the project, the Government of Pakistan and IFAD will periodically review the interest rates to be applied to the credits to be made out of the proceeds of the loan. The Government of Pakistan will take appropriate measures, consistent with its policies, in order to harmonize the interest rates on credits with the policy of IFAD on relending rates. In the implementation of the above, ABAD will ensure that the NGO minimizes its costs in executing the credit activities of the project as it affects its margin of the interest spread.



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6. The Planning and Development Department (PDD) of the Government of Punjab Province, through ABAD, will have overall responsibility for the project. The provincial line agencies, in close cooperation with local government and the community organizations (COs) within the project area, will be responsible for technical activities. An NGO to be contracted by ABAD will be responsible for managing the Revolving Fund and for providing support to the COs. ICARDA will be contracted to undertake adaptive research, which shall be executed in collaboration with the relevant provincial research institutes of Barani Agricultural Research Institute (BARI), Soil and Water Conservation Research Institute (SAWCRI) and Barani Livestock Production Research Institute (BLPRI).

7. The Government of Pakistan will cause the Government of Punjab Province to establish within ABAD a PMU headed by a project director and with four outposted assistant directors to coordinate project activities at the *tehsil* level. The PMU will be organized in sections and will consist of: Finance and Audit Sections; Administration Section; Monitoring and Evaluation Section (M&ES); Community Development Section; and Engineering Section.

8. The PMU will have the following responsibilities:

- (a) overseeing the day-to-day operations of the project;
- (b) coordinating the participating line agencies, the NGO and ICARDA;
- (c) preparing the AWP/B;
- (d) conducting procurement, financial management and accounting;
- (e) monitoring and reporting on progress; and
- (f) liaising with IFAD.

9. The project will be coordinated through interrelated committees as follows:

- (a) the PSC, which will be chaired by the chairman of PDD and have as its secretary the Director General of ABAD, will meet twice a year to approve the AWP/B, review the overall performance of the project and resolve policy issues;
- (b) the PCC, which will be chaired by the Director General of ABAD and have as its secretary the project director, will have as members the Directorate heads of all participating agencies and the NGO. It shall be responsible for progress reviews of the project, approving the work plans and budgets, supervising procurement activities and, accordingly, guiding the project director in the management of the project;
- (c) the *Tehsil* Coordination Committees (TCCs), which will be chaired by the project director and have as secretaries the assistant directors in charge of project coordination in their respective *tehsils*, will have as members the representatives of the executing line agencies and the NGO. These will be convened at the *tehsil* level for monthly reviews of project operations and will be responsible for coordination of project activities within their individual *tehsils*.

10. The NGO will be responsible for executing the community and women's development component of the project, on contractual terms and using its own procedures. The contracts with the NGO, satisfactory to IFAD, will initially be for two years with the possibility of a renewal.



11. In the Government of Punjab Province, the line agencies of the Directorates of Agricultural Extension (DAE) and of Soil Conservation (DSC), in the Department of Agriculture, the On-Farm Water Management Directorate (OFWM) and the Department of Livestock and Dairy Development (DLDD) will be responsible for providing technical assistance and other services to the COs and to WCOs, as described in the appraisal report. Notwithstanding the preceding obligations of OFWM and DSC, they will design and supervise the implementation of dugwells, mini-dams, ponds and soil-conservation works, as well as irrigation and soil-conservation investments, including planning, design and supervision. DAE will be specifically responsible for the implementation of crop development including: the project's seed multiplication programme and fruit tree nurseries; training of staff and farmers; arranging crop demonstrations; and organizing agricultural fairs, workshops and seminars.

12. Based on the work programmes and budgets prepared by each of the implementing agencies for the project, the Government of Pakistan will cause ABAD to submit the draft AWP/B to IFAD for its review and comments no later than two months before the commencement of each fiscal year of the Government of Pakistan. The Government of Pakistan will cause ABAD to consider the comments of IFAD on the AWP/B prior to its finalization.

13. A mid-term review (MTR) of the project will be carried out jointly by the Government of Pakistan, IFAD and the implementing agencies no later than in the fourth year of project implementation. The MTR will, *inter alia*, be used to evaluate the achievement of the objectives of the project and its constraints, as well as such design reorientation as may be required to achieve the objectives and remove the constraints. The findings of the MTR will be communicated promptly by the Fund to the Government of Pakistan for discussion with IFAD. The Government of Pakistan will ensure that the recommendations of the Fund resulting from the MTR will be implemented within a reasonable time thereafter and to the satisfaction of IFAD.

14. The Government of Pakistan will cause the Government of Punjab Province to ensure that: (a) the project director is a senior government officer or, in the case of unavailability of a suitably qualified government officer, a person from the private sector with qualifications satisfactory to the Fund; (b) the project director will not be posted elsewhere prior to completing three years of service, unless absolutely necessary, and in this case his successor will have qualifications satisfactory to IFAD; and (c) the Director General of ABAD is not posted elsewhere for at least three years following effectiveness of the project unless a suitable replacement is appointed, satisfactory to IFAD.

15. The Government of Pakistan will cause the Government of Punjab Province to cause the NGO to create a Credit Administration Manual (CAM) and to make the same available to the groups concerned, field unit officers and members of PCCs. The CAM may be reviewed and amended as required by the NGO in consultation and agreement with the PMU.

16. The Government of Pakistan will ensure that: (a) funds from the Government of Pakistan and IFAD are channelled quarterly from the Special Account and the project account, respectively, to the line departments and the contracted agencies, including ICARDA and the NGO, on the basis of the agreed annual work plans and contracted agreements; (b) activities undertaken by the line departments and the contracted agencies are scrutinized by the project director prior to the release of funds; and (c) all implementing agencies involved in the project keep separate accounts of expenditures for all activities funded under the project.



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17. The Government of Pakistan will:
- (a) cause ABAD to have semi-annual and annual reports prepared by the PMU within 45 days of the end of each reporting period and submitted to the Government of Pakistan and IFAD;
 - (b) the Government of Pakistan will cause the Government of Punjab Province to ensure the full participation of women in the project and their unobstructed access to project activities; and
 - (c) the Government of Pakistan will cause the Government of Punjab Province to ensure that the line departments give priority to project activities and that the project makes payments on the output achieved.
18. The selection criteria for short-listing suitable NGOs for the submission of proposals to undertake the community and women's development component of the project shall include:
- (a) ability to work in the project area;
 - (b) previous experience working in the project area; and
 - (c) previous experience in providing credit.
19. No disbursements will be made from the loan for the applied research activities and the community and women's development component until the Government of Pakistan will have caused the Government of Punjab Province to contract ICARDA and the NGO to carry out these activities, respectively, through procedures and agreements acceptable to IFAD.
20. The following are additional conditions precedent to the effectiveness of the loan agreement:
- (a) the Government of Pakistan will have caused the Government of Punjab Province to establish the PMU;
 - (b) the Government of Pakistan will have caused the Government of Punjab Province to appoint a project director with qualifications satisfactory to IFAD, who will head the PMU;
 - (c) the Government of Pakistan will have caused the Government of Punjab Province to establish the PSC, with composition, functions and responsibilities satisfactory to IFAD; and
 - (d) the PC-1 will have been approved by the Executive Committee of the National Economic Council (ECNEC) or by anticipatory approval from the Chairman of ECNEC.



COUNTRY DATA – PAKISTAN

Land area (km ² thousand) 1995 1/	771	GNP per capita (USD) 1996 2/	480
Total population (million) 1996 1/	134	Average annual real rate of growth of GNP per capita, 1990-96 2/	1.1
Population density (people per km ²) 1996 1/	170	Average annual rate of inflation, 1990-96 2/	11.3
Local currency	Pakistan iRupee	Exchange rate: USD 1 =	PKR 45
Social Indicators		Economic Indicators	
Population (average annual population growth rate) 1980-96 1/	3.0	GDP (USD million) 1996 1/	64 846
Crude birth rate (per thousand people) 1996 1/	37	Average annual rate of growth of GDP 1/	
Crude death rate (per thousand people) 1996 1/	8	1980-90	6.3
Infant mortality rate (per thousand live births) 1996 1/	88	1990-96	4.6
Life expectancy at birth (years) 1996 1/	63	Sectoral distribution of GDP, 1996 1/	
Number of rural poor (million) 1/	32	% agriculture	25.8
Poor as % of total rural population 1/	36.9	% industry	24.5
Total labour force (million) 1996 1/	48	% manufacturing	16.9
Female labour force as % of total, 1996 1/	26.8	% services	49.7
Education		Consumption, 1996 1/	
Primary school gross enrolment (% of relevant age group) 1995 1/	74.0	General government consumption (as % of GDP)	12.3
Adult literacy rate (% of total population) 1994 3/	37.1	Private consumption (as % of GDP)	73.4
Nutrition		Gross domestic savings (as % of GDP)	14.2
Daily calorie supply per capita, 1992 3/	2 316	Balance of Payments (USD million)	
Index of daily calorie supply per capita (industrial countries=100) 1992 3/	74	Merchandise exports, 1996 1/	9 266
Prevalence of child malnutrition (% of children under 5) 1990-96 1/	40.4	Merchandise imports, 1996 1/	11 812
Health		Balance of merchandise trade	-2 546
Health expenditure, total (as % of GDP) 1990-95 1/	3.5	Current account balances (USD million)	
Physicians (per thousand people) 1994 1/	0.5	before official transfers, 1996 1/	-6 813
Access to safe water (% of population) 1990-96 3/	74	after official transfers, 1996 1/	-4 208
Access to health service (% of population) 1990-95 3/	55	Foreign direct investment, 1996 1/	690
Access to sanitation (% of population) 1990-96 3/	47	Government Finance	
Agriculture and Food		Overall budget surplus/deficit (including grants) (as % of GDP) 1995 1/	-4.8
Food imports as percentage of total merchandise imports 1996 1/	15.2	Total expenditure (% of GDP) 1995 1/	23.2
Fertilizer consumption (hundreds of grams per ha of arable land) 1994-96 1/	1 085	Total external debt (USD million) 1996 1/	29 901
Food production index (1989-91=100) 1994-96 1/	125	Total external debt (as % of GNP) 1996 1/	39
Land Use		Total debt service (% of exports of goods and services) 1996 1/	27.4
Agricultural land as % of total land area, 1994 4/	34.4	Nominal lending rate of banks, 1996 1/	n.a.
Forest area (km ² thousand) 1995 1/	17	Nominal deposit rate of banks, 1996 1/	n.a.
Forest area as % of total land area, 1995 1/	2.3		
Irrigated land as % of cropland, 1994-96 1/	79.8		

n.a. not available.

Figures in italics indicate data that are for years or periods other than those specified.

1/ World Bank, *World Development Report*, 1998

2/ World Bank, *Atlas*, 1998

3/ UNDP, *Human Development Report*, 1997

4/ World Bank, *The World Development Indicators CD-ROM*, 1998



PREVIOUS IFAD LOANS IN PAKISTAN

Project Name	Initiating Institution	Cooperating Institution	Lending Terms	Board Approval	Loan Effectiveness	Current Closing Date	Loan/Grant Acronym	Currency	Approved Loan/ Grant Amount (million)	Disbursement (as % of approved amount)
Small Farmers' Credit Project	World Bank: IDA	World Bank: IDA	HC	27 Jun 79	04 Jun 80	31 Dec 85	L - I - 18 - PA	SDR	23.75	100%
South Rohri Fresh Groundwater Irrigation Project	AsDB	AsDB	HC	19 Dec 79	28 Mar 80	31 Dec 90	L - I - 33 - PA	SDR	12.40	37.2%
Barani Area Development Project	IFAD	AsDB	HC	03 Dec 80	27 Aug 81	31 Dec 90	L - I - 48 - PA	SDR	9.80	48.1%
On-Farm Water Management Project	World Bank: IDA	World Bank: IDA	HC	17 Dec 81	28 Jul 82	31 Dec 85	L - I - 83 - PA	SDR	10.50	84.8%
Small Farmers' Credit Project II	World Bank: IDA	World Bank: IDA	HC	13 Dec 83	09 Jul 84	31 Dec 87	L - I - 138 - PA	SDR	23.20	100%
Gujranwala Agricultural Development Project	IFAD	AsDB	HC	12 Dec 84	21 Jun 85	31 Dec 93	L - I - 162 - PA	SDR	8.65	99.6%
Chitral Area Development Project	IFAD	AsDB	I	10 Sep 87	25 Nov 88	31 Dec 97	L - I - 209 - PA	SDR	8.70	78.1%
Punjab Smallholder Dairy Development Project	IFAD	AsDB	I	30 Nov 88	18 Feb 91	30 Jun 98	L - I - 234 - PA	SDR	12.05	46.5%
Second Barani Area Development Project	IFAD	AsDB	I	19 Apr 90	18 Feb 91	30 Jun 98	L - I - 257 - PA	SDR	15.20	71.3%
Smallholder and Women's Rural Credit Project	IFAD	World Bank: IDA	I	02 Oct 90	19 Jun 92	30 Jun 96	L - I - 265 - PA	SDR	19.00	07.6%
Neelum and Jhelum Valleys Community Development Project	IFAD	UNOPS	I	04 Sep 91	05 Jun 92	30 Jun 99	L - I - 288 - PA	SDR	11.90	48.8%
Mansehra Village Support Project	IFAD	UNOPS	I	03 Dec 92	26 Mar 93	31 Dec 00	L - I - 319 - PA	SDR	10.35	46.5%
Pat Feeder Command Area Development Project	AsDB	AsDB	I	19 Apr 94	02 Feb 95	31 Dec 01	L - I - 353 - PK	SDR	20.25	30.4%
Dir Area Support Project	IFAD	UNOPS	HC	11 Sep 96	15 Apr 97	30 Sep 04	G - I - 15 - PK	USD	50.00	93.4%
Dir Area Support Project	IFAD	UNOPS	HC	11 Sep 96	15 Apr 97	30 Sep 04	L - I - 425 - PK	SDR	11.35	09.7%
Northern Areas Development Project	IFAD	UNOPS	HC	11 Sep 97		31 Dec 05	G - I - 34 - PK	USD	50.00	
Northern Areas Development Project	IFAD	UNOPS	HC	11 Sep 97		31 Dec 05	L - I - 453 - PK	SDR	10.75	

LOGICAL FRAMEWORK

Goal	Goal Level Targets	Goal Level Monitoring	Goal Level Assumptions
1.1.1 Poverty reduced	1.2.1 Farm and off-farm income increased	1.3.1 Project completion report	1.4.1 Stable political environment 1.4.2 Stable overall economic environment 1.4.3 Stable and attractive commodity price structure
Purpose	Purpose Level Targets	Purpose Level Monitoring	Purpose Level Assumptions
2.1.1 Agricultural production increased	2.2.1 Food grain production increased (13000t) 2.2.2 Vegetable/fruit production increased (23400t) 2.2.3 Livestock production improved 2.2.4 Rangeland improved	2.3.1 Project completion report 2.3.2 Benefit monitoring 2.3.3 Progress reports 2.3.4 Mid-term review (MTR)	2.4.1 Project well managed and coordinated 2.4.2 Farmers adopt improved crop and livestock practices 2.4.3 Communities and/or individual farmers maintain and operate infrastructure 2.4.4 CO/ line department linkages remain sustainable 2.4.5 Project-trained persons self-employed or find jobs 2.4.6 Women's groups become self-sustaining
2.1.2 Employment increased	2.2.5 Additional jobs created		
2.1.3 Status of women improved	2.2.6 Income of women increased		
Output	Output Level Targets	Output Level Monitoring	Output Level Assumptions
3.1.1 COs formed and functional	3.2.1 2800 COs organized of which at least 40% are women's groups 3.2.2 Linkages with line departments established	3.3.1 Completion report 3.3.2 Progress reports 3.3.3 Review mission	3.4.1 NGO staff competent and dedicated 3.4.2 Communities actively participate in COs/WCOs 3.4.3 Line departments respect the wishes of the communities 3.4.4 Water for irrigation from ground and surface sources available
3.1.2 Irrigated area and cropping intensity increased	3.2.3 Irrigated areas increased (6665ha) 3.2.4 Improved agronomic packages developed and introduced	3.3.4 MTR 3.3.5 MIS	3.4.5 Design and construction of civil works of good quality 3.4.6 Crops, rangeland and livestock packages accepted by farmers
3.1.3 Erosion controlled	3.2.5 Microwatersheds improved		
3.1.4 Crops improved	3.2.6 Rangeland packages developed and acceptable to communities		
3.1.5 Livestock improved	3.2.7 Livestock productivity increased		
3.1.6 Village water supply improved	3.2.8 Women's workload reduced through readily available water		
3.1.7 Skills for employment developed	3.2.9 Persons technically trained (1200) 3.2.10 Microentrepreneurs trained (1200) 3.2.11 Income-generating activities established (1200)		3.4.6 NGO is actively promoting microenterprise development & investments
3.1.8 Opportunities for self-employment	3.2.13 Microenterprise credit obtained		
Activities	Activity Level Targets	Activity Level Monitoring	Activity Level Assumptions
Community Development			
4.1.1 NGO selected and contracted	4.2.1 PY1	4.3.1 Progress reports	4.4.1 Staff recruited and trained
4.1.2 Social Organization Units established	4.2.2 No. 4.; PY1	4.3.2 NGO records	4.4.2 Communities receptive to group activities
4.1.3 Organization of COs/WCOs	4.2.3 PY1(600), PY2(900), PY3(900), PY4(400)		4.4.3 COs/WCOs ready for O&M of village infrastructure





Activities	Activity Level Targets	Activity Level Monitoring	Activity Level Assumptions
4.1.4 CO/WCO members trained	4.2.4 No. 3 800; PY1-4		
4.1.5 Community development plans prepared	4.2.5 PY1-4		
4.1.6 Linkages with LDs established	4.2.6 PY1-4		
4.1.7 Savings/credit schemes established	4.2.7 PY1-4		
4.1.8 CO/village infrastructure built	4.2.8 PY1-5		
Agricultural Development			
a. Irrigation			
5.1.1 Dugwells established	5.2.1 200 wells/year in PY 2-6	Progress reports	5.4.1 LDs work actively with COs/WCOs
5.1.2 Minidams established	5.2.2 PY2(25), PY3(40), PY4(40), PY5(25)	Records of DSC and OFWM	5.4.2 COs agree on cost-sharing arrangements
5.1.3 Ponds established	5.2.3 PY2(100), PY3(150), PY4(150), PY5(100)		5.4.3 COs take over O&M
5.1.4 Modern irr. methods demonstrated	5.2.4 18 ha each in PY2 and 3		
5.1.5 Basic maps established	5.2.5 4 sets of <i>tehsil</i> maps in PY1		
b. Crops			
5.1.6 Women AOs, FAs and FWs recruited	5.2.6 25 persons	Progress reports	5.4.4 DAE staff accept working with groups
5.1.7 Men/women CEAs recruited&trained	5.2.7 1 700 men and 1 100 women CEAs	Records of DAE	5.4.5 Farmers take active part in activities
5.1.8 Crop demos. established	5.2.8 600/year in PY1-5		5.4.6 WCOs work with women extension staff
5.1.9 Seed growers trained	5.2.9 160 farmers		
c. Livestock			
5.1.10 Vehicles purchased and used	5.2.10 No.6 in PY 1	Progress reports	5.4.7 DLDD staff works with groups
5.1.11 Bulls delivered and distributed	5.2.11 No. 170 in PY1-5	Records of DLDD	
5.1.12 Men/women CLAs recruited & trained	5.2.12 1 700 men and 1 100 women CLAs		
5.1.13 Women vet. ass. recruited & trained	5.2.13 12 persons		
5.1.14 DLDD staff trained	5.2.14 PY1 (45) and PY4 (45)		
d. Adaptive Research			
5.1.15 ICARDA contracted	5.2.15 PY1	Progress reports ANNEX	5.4.8 Research programmes relevant to farmers
5.1.16 Research staff recruited	5.2.16 PY1	Research publications	5.4.9 Research programmes executed on-farm
5.1.17 Transport and research equip. purch.	5.2.17 PY1	Records of ICARDA,	5.4.10 Research results ecologically and socio-
5.1.18 Detailed res. progr. developed	5.2.18 PY1	BARI, SAWCRI, BLPRI	economically acceptable
5.1.19 Research programmes carried out	5.2.19 PY 1-6		
Activities	Activity Level Targets	Activity Level Monitoring	Activity Level Assumptions
Microenterprise Development			
5.1.20 Business training introduced	5.2.20 40 each in PY1-6	Progress reports	5.4.11 Establishing microenterprise financial attractiveness
5.1.21 TTC managers and instr. trained	5.2.21 34 persons in PY1	TTC reports	5.4.12 Credit available at acceptable rates
5.1.22 Pro. & sales centers established	5.2.22 2 in PY1 attached to women's TTCs		
5.1.23 Master trainer and market dev.	5.2.23 PY1		
5.1.24 Business analysis	5.2.24 on contr. basis over project life		
5.1.25 Workshops,fairs,exhibitions organized	5.2.25 two each in PY2-6		
Project Management Unit			
5.1.26 Project Management Unit established and operational	2.2.26 PY1		5.4.13 Project director and staff capable and retained 5.4.14 Good working relationships with all partners



PROJECT IMPLEMENTATION

1. ABAD will prepare the PC-1 in line with the appraisal report and satisfactory to IFAD. Annual workplans and budgets (AWP/Bs) will be prepared jointly by the PMU and other implementing agencies. Since most of the project activities will depend on the progress of community organizations, the NGO will initiate the preparation of the annual workplan and budget by preparing an overview of the activities requested by community organizations for the next year. This will include requirements in terms of village infrastructure investments, crop and livestock activities, training and income-generating activities, microenterprise development, etc. Based on inputs jointly prepared by the NGO field unit and the *tehsil*-level staff of line departments, each line agency will prepare its proposals for AWP/Bs, which will be discussed and agreed upon at a TCC meeting. The individual proposals will be consolidated by the project director into a draft AWP/B, which will be discussed and finalized by the PCC, IFAD and its cooperating institution for review and approval.
2. Within each AWP/B, the implementing agencies will prepare quarterly work plans, which will be finalized by the project director after discussion within the PCCs. The implementing agencies will receive funds on a quarterly basis, based on the agreed work plan and following an assessment of technical and financial performance during the previous period. No payment will be made until the activities planned for the previous period have been completed.
3. Before starting the process of establishing AWP/Bs, annual review workshops will be carried out in all *tehsils* not later than April of each year to review implementation progress and the impact on beneficiaries, analyse the constraints encountered and make necessary adjustments for the following year. The beneficiaries and all parties involved in project implementation will participate in these workshops.

Community and Women's Development

4. The project's approach is based on the participation of the beneficiaries as members of men's and women's community organizations (COs/WCOs) in the identification, planning and implementation of project activities at the community level. The selected NGO will form community organizations through the effort of its social organizers posted in field units (FUs). It is expected that all villages will be covered during the life of the project. In the early years of the project, however, priority will be given to the poorer villages, selected on the basis of a number of pre-identified indicators including: (i) existing infrastructure (road access, water supply, electrification, health facilities, education facilities and existing irrigation schemes) to be identified on the basis of existing secondary data and field visits; and (ii) socio-economic indicators (family size, house ownership, farm size and tenancy, and source of income) to be based on a sample survey in settlements where the infrastructure indicators warrant further investigation.
5. Following the selection of the villages, group formation and development will start. The proposed methodology is flexible in application and is designed to establish and strengthen a community-based institution that can expand or change as it takes on the character of a locally managed non-governmental organization. The NGO Social Organizer (SO) will make the first contact through the village elders and local notables. All heads of households will be invited to participate in all the activities facilitated by the social organizers. After establishing regular contacts with the villages, the process of forming community organizations will include the following formal interaction phases.
 - (i) During the **First Interaction Phase**, the Social Organizer will carry out an initial reconnaissance of communities within a particular village and will discuss community



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- development and the group formation process with village members. The community will maintain a record ledger of meetings, agree on scheduling of regular CO meetings, and indicate its readiness to continue working with the NGO. The meetings with the community will concentrate on aspects of human resource development at the village level: group management, training, and the establishment of viable linkages with public and private-sector services.
- (ii) The **Second Interaction Phase** will concentrate on community analysis, i.e., identification and appraisal of resources and prioritization of concerns. A participatory rural appraisal (PRA) exercise will be carried out and will form the basis for the participatory community development plan (CDP). NGO and line agency staff will analyse the PRA data, and recommend the chronology for the events necessary to the development of the community. The emphasis during this stage will be on: selection and training of community activists, selection of possible men and women community extension workers (MCEW/WCLW) and community livestock workers (MCLW/WCLWs); the setting up of CO/WCO management; and (iii) training of selected people in various disciplines.
- (iii) The **Third Interaction Phase** focuses on the preparation and completion of a CDP. The NGO, other project staff and the line agencies will provide technical input into the CDP, which will then be finalized by the CO in collaboration with NGO staff. At least 80% of CO members should be involved in the CDP. The CDP will include: (i) the formation of CO subcommittees for social mobilization, agricultural development, credit and income-generation, specific infrastructure projects, etc.; (ii) training of various CO and subcommittee members; (iii) prioritization of activities in various sectors and establishment of feasibility and costs for proposed investments/activities by the respective line departments; and (iv) demonstrations of techniques. The results of the preparation in terms of costs, feasibility, acquisition of skills and size of community contributions to implementation will be reviewed and implementation plans with time frames drawn up. The general Terms of Partnership (TOP) between the CO and the project will be defined and agreed upon. The TOPs will cover all CO planned activities. For physical infrastructure works, however, a specific scheme agreement between the project and the CO will be made under the overall TOP. It will always include the agreement of the CO members to carry out all scheme-related operation and maintenance work.
- (iv) The **Fourth Interaction Phase** will commence after the CO has completed its CDP. During this phase, NGO staff will assist the CO and line departments in implementing productive technical packages and will establish demonstrations, training and other inputs. Selected CO members will receive intensive technical training in the particular production packages selected by the CO. Persons receiving this training will be expected to function as “knowledgeable resource persons” for the CO. Infrastructure works will be implemented during this phase.
- (v) The **Fifth Interaction Phase** will entail inputs and services to the CO resulting in CO consolidation. The most important indicators for determining institutional maturity are the completion of CDP and the start of the first project. Other indicators will include: various project investments in the organization, prompt response of line agencies to the requirements of the COs/WCOs, and improvements in linkages through training and follow-up of activities with various departments. This stage should also see tangible evidence of the establishment of cluster COs at the village level in the form of village development committees (VDCs), which could implement village-based social infrastructure such as water-supply schemes, school buildings, etc. The consolidation stage for a group will normally last from a year to a year and a half.



6. The long-term sustainability of the COs/WCOs and their potential for development will depend on: (i) COs/WCOs being formed on fundamental principles of participatory development; (ii) quality and training of community activists who will gradually take over the functions of the social organizer; (iii) formation of secondary associations above the CO/WCO, village and/or *tehsil* levels; (iv) their organizational and technical viability, which will be achieved through training and the promotion of local NGOs; and (v) their financial viability, which will be enhanced through savings, revolving loans and satisfactory cost recovery.

7. The COs/WCOs will undertake infrastructure investment works using locally available material and labour. The respective line department will provide assistance in procuring tools and materials where needed. The COs/WCOs will undertake all procurement using funds provided by the project. The CO/WCO will receive 20% of the estimated cost as a down payment upon signing the scheme agreement, with subsequent payments depending upon the progress of work as assessed by the relevant line department. Final payment will be made three months after completion of construction and upon the receipt of a completion certificate from the line department. COs/WCOs will keep a complete record of expenditure on the investment in accordance with the formats used by the line department. The design, costing and construction of individual schemes will be reviewed by the project engineer to ensure that the schemes are technically and financially feasible.

8. **Line agencies operations.** The relevant line agencies (e.g., Directorate of Agricultural Extension (DAE), Directorate of Soil Conservation (DSC), On-Farm Water Management Cell (OFWM), Department of Livestock and Dairy Development (DLDD), etc.) will provide technical assistance and other services to the COs/WCOs as described in the project documents. The participation of line agencies will be coordinated by the PMU and specified in the quarterly and monthly work plans to be prepared by the PMU in close cooperation with concerned line departments. The monthly work plan will specify the detailed day to day involvement of the various agencies at the CO/WCO level and will be prepared jointly by FU and *tehsil* staff. Funds for the line departments will be disbursed quarterly on the basis of the agreed quarterly work plans and progress made. Activities undertaken will be scrutinized by the PMU prior to the release of further funds.

9. **Development of water resources.** OFWM and DSC, in close cooperation with COs/WCOs and the NGO, will be responsible for the implementation of the dugwell/improved irrigation system and minidam/pond-development sub-components, respectively, including planning, design and supervision. The irrigation schemes will be identified by the COs/WCOs in the course of the establishment of the CDP. OFWM/DSC will make a preliminary appraisal on the basis of pre-set selection criteria to assess whether the site warrants further investigation. If so, a more detailed survey will be carried out by OFWM/DSC to determine the technical and economic feasibility of the proposal. Before submitting the proposal to the project for financing, the CO/WCO will approve the project, agree to provide 50% of the costs and undertake O&M of the scheme once construction is completed. Once approved, a scheme agreement will be signed between the project and the concerned CO/WCO. OFWM/DSC will issue a work order in favour of the respective CO/WCO and 20% of the total costs will be released to the CO/WCO, along with the design and work schedule. The construction work will then be executed by the community and supervised by OFWM/DSC. After completion, the scheme will be handed over to the water users' organization for operation and maintenance. OFWM will provide training to the water users in the proper running of the schemes.

10. **Social infrastructure.** Works such as link roads, water supply, river-bank protection, etc., will be implemented either by the COs or – in case several COs or an entire village are involved – by the VDC established for the purpose, with the endorsement of the Union Council and the technical assistance of the respective line department. Implementation procedures and maintenance and financing



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arrangements will be the same as described above for irrigation schemes. Cost sharing, however, will be different, with 85% of the costs provided by the project.

Agricultural Development

11. **Crop development.** DAE will be responsible for the implementation of this sub-component, which will include: extension; training of staff and farmers; arranging crop demonstrations including field days; organizing agricultural fairs, workshops and seminars; and seed multiplication through contract growers. The PMU will contract impact and other studies and research themes and the NGO will be responsible for CO/WCO mobilization and stabilization, and establishing work plans for and linkages with the above line departments/institutes.

12. **Extension.** At the start of each cropping season DAE, with facilitation by the NGO social organizers, and in consultation with the COs/WCOs, will prepare a schedule for the visits of the FAs to the COs/WCOs and a list of activities to be undertaken. The FAs along with the MCEWs/WCEWs will maintain a register in which minutes will be kept of the discussions with the COs and follow-up activities will be recorded for inspection by the agricultural officers (AOs) and the FAs. DAE, in consultation with BARI, will prepare curricula and a training calendar and supervise the training courses for its own staff and the MCEWs and WCEWs. DAE will also carry out evaluations and any other specific studies that may be required to assess crop development activities at the community as well as the farm level. Demonstration sites will be selected by the COs with the assistance of staff to ensure their suitability.

13. **Seed production.** DAE will be responsible for project's seed multiplication programme. The department, together with BARI, will identify suitable strains of maize, wheat and other seeds both for monocropped and double-cropped areas. It will also conduct training for contract growers, selected on the basis of criteria involving land-holding size, accessibility to land, etc. DAE will arrange procurement of basic seed from the relevant sources, provide this seed to contract growers after signing an agreement and assure technical back-up. Contract growers will sell the multiplied seed to fellow CO/WCO members on a rate consistent with the market prices of such seed.

14. **Livestock development.** The overall implementation of the livestock sub-component will be carried out by the COs and the WCOs with support provided by the staff of DLDD and the women veterinary officers. DLDD will provide adequate veterinary coverage to the farmers, disseminate appropriate and applicable husbandry techniques and provide training to men and women CLWs in order to forge sustainable linkages between the line department and client groups.

15. **Adaptive research.** The PMU will contract adaptive research to ICARDA, which will establish a small unit in ABAD. The research programmes will be executed in collaboration with the three relevant provincial research institutes, BARI, SAWCRI and BLPRI, which will be strengthened for this purpose.

Credit for Agricultural Development and Microenterprise

16. Credit under the project will be provided to COs/WCOs and/or their members to purchase inputs for the intensification of crop and livestock production, and to invest in income-generating activities and microenterprises. A revolving fund will be established with the selected NGO, which will be responsible for implementing credit support. A funding agreement, acceptable to IFAD, will be signed between the NGO and the Government of Punjab, detailing all conditions, lending terms and procedures. Repayments from on-lent amounts will be deposited in a revolving fund with the NGO that will be used to make further loans to the target group. Preference will be given to the landless and



women in borrowing from this revolving fund. Major elements of the agreement include the following: (i) the system will allow CO/WCO members to receive credits for individual or collective productive undertakings; (ii) the group will assume joint liability against credit extended to its individual members; (iii) for all types of lending under the project, the NGO will charge a service charge per annum on the declining loan balance according to its rates applied in other areas. At present the rate of NRSP and other smaller NGOs is 18%; and (iv) the NGO will ensure that the full amounts of loan proceeds are received by the respective individual group members and properly recorded at CO/WCO and field unit levels. Regular monthly checking of repayment records will be carried out by the field unit offices of the NGO.

17. The procedure includes the consolidation of credit applications by the CO/WCO, review by the FU and approval by at least 70% of the CO/WCO members. Upon approval of the loan, a cheque is made out in the name of the individual member(s). The loan is collectively guaranteed by the CO/WCO. The savings are invested in savings accounts or term deposits. The amount of a loan to a CO/WCO member is based on the enterprise to be financed but should not exceed the equivalent of USD 1 000. The service charge will be the same charged by the NGO outside the project. Changes in the service charge will need the approval of the PMU.

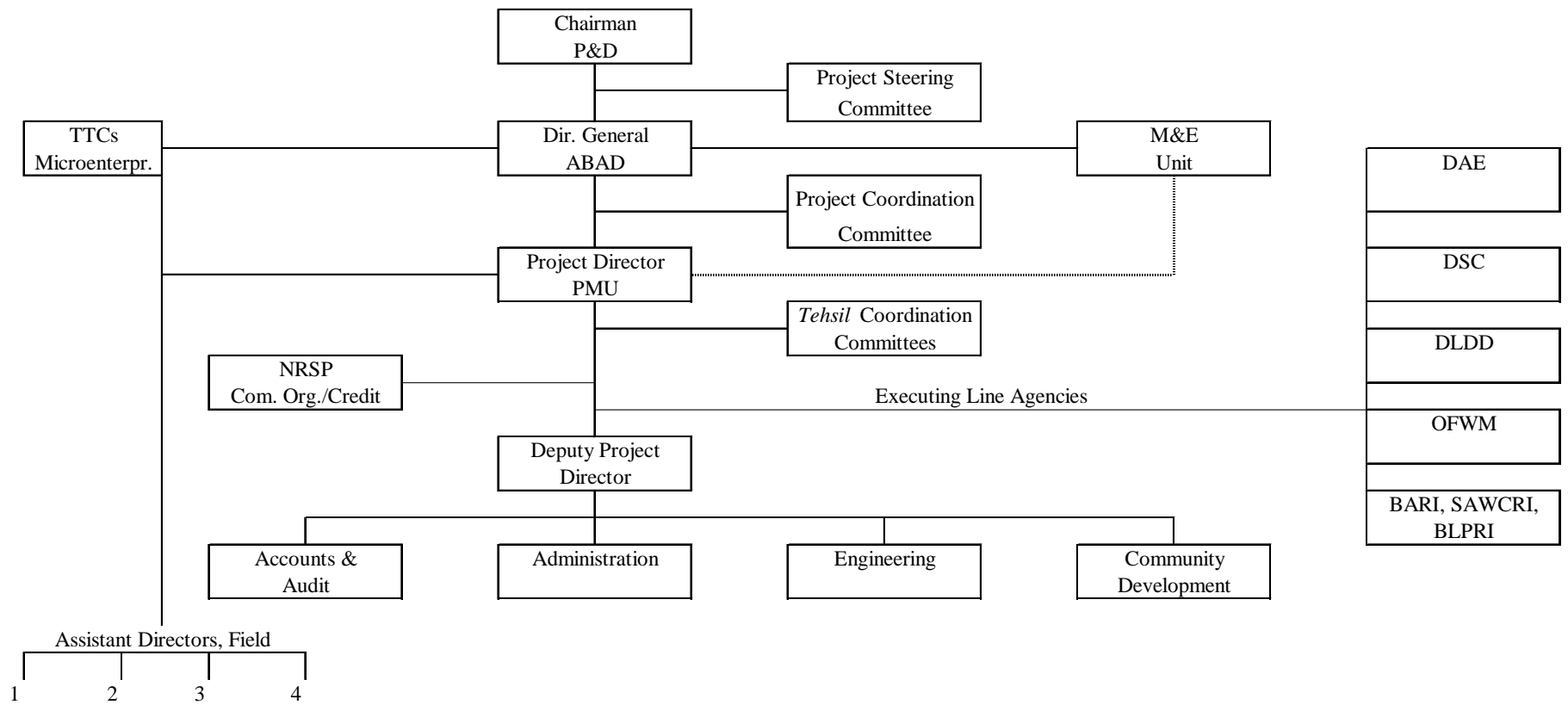
18. **Activities eligible for credit.** Credit will be provided in the following areas:

- (a) agricultural production inputs (seed, fertilizer, pesticides, animal feed, etc.) and short-term capital requirements to produce crops, saplings for plantation, etc. The maturity period for such credits will not exceed 12 months, with a ceiling of USD 1 000, and repayment may be on an instalment basis or lump sum;
- (b) livestock and rural poultry, including animals for milk production, beef and sheep and goat fattening, etc. Duration of such credits will be 12-24 months, with a ceiling of USD 1 000, and repayment may be in instalments or lump sum; and
- (c) establishment of microenterprises, including a wide variety of economic activities suitable to the project areas. Normally such undertakings will require hired labour in addition to the labour of family members. Duration of such credits will also be 12-24 months, with a ceiling of USD 1 000, repayable in instalments or lump sum.

19. The above list of the activities eligible for financing is only indicative. Depending on the characteristics of a particular area, any suitable productive activity within the given ceiling will be considered for financing. It is estimated that about 30% of the total credits will be demanded for agricultural inputs, 30% for livestock and 40% for microenterprises and other activities. If proposed microenterprises need a higher ceiling, more than one beneficiary could be supported jointly by the NGO or the NGO could establish linkages with appropriate financial institutions to finance the additional requirement.



Project Organizational Structure





PARTICIPATORY MONITORING AND EVALUATION INDICATORS

1. Although developed in consultation with the potential beneficiaries (PRA and participatory workshops) the monitoring indicators presented below are still indicative and will be reviewed regularly by the PMU in consultation with the beneficiaries, the NGO and the line departments. Data collected will be entered into an MIS system to ensure proper processing, analysis of data and prompt follow-up.

Community and Women's Development

2. Activity monitoring by COs/WCOs (of particular relevance for community self-monitoring) will include: (a) group membership numbers; (b) timing of and attendance at meetings; (c) drop-out rates and reasons by group; (d) training course timing and attendance; (e) record of issues discussed, action taken and outcome of action; (f) nature of relationship with project staff; (g) nature of relationship with government extension staff: frequency of visits by type of activity, assessment of quality of assistance; (h) nature of relationship with other organizations: frequency of visits, assessment of quality of assistance; (i) record of progress with projects (small infrastructure, income-generating activities (IGAs), credit, training, demonstrations, other).

3. Monitoring of outputs and initial effects will include: (a) record of rate of CO and WCO group formation relative to targets, analysed by location; (b) record of levels of savings by COs/WCOs; (c) record of implementation of group projects (small infrastructure, other); (d) record of training of group members by outside agencies; (e) record of training of group members by villages; (f) record of training of local NGOs; (g) record of individual income-generating projects; (h) record of group and individual loans; (i) establishment of VDCs and Apex organizations.

Agricultural Development

4. A two-level monitoring system will be established: at the community level, where the COs will record the events in the pre-designed information sheet (prepared and supplied by the M&E section of the PMU), and at the PMU. The indicators to be monitored will also be linked to the level and type of events, which will provide effective tools for evaluation. The tentative list of indicators includes:

- (i) at the CO/WCO level: (name of activities; date of establishment; cultural practices for crop technology demonstrations; amount of seeds procured and produced; attendance at farmer training sessions; farmers' field days; number of MCEWs/WCEWs trained; input-output mix; costs and returns; and field assistant (FA)/AO visits – number of days;
- (ii) at the PMU level: consolidation of indicators dealing with COs/WCOs and number of clients benefited; input-output mix of major field and horticultural crops; number participating and attendance at training of DAE staff; number of reviews and studies; adaptive research activities and acceptance of research results by the COs/WCOs.

5. **Development of water resources and soil conservation.** Monitoring of the water development/soil conservation sub-component will focus on sustainable achievements in addition to physical progress. The following information will be provided: (a) expenditure for works, broken down into specific activities; (b) labour: provision of unskilled labour by communities; (c) beneficiary participation: number of WUAs formed; composition of membership; arrangements to raise funds for farmers' contribution to construction and for O&M; (d) physical progress of works during the reporting period and cumulative progress: hectares of land under irrigation; (e) quality of works: comment on the



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quality of actions; (f) constraints that particular social, technical, administrative or financial problems or constraints that need to be investigated; and (g) follow-up action: ensure that prompt actions are taken to address the constraints.

6. **Livestock development.** Proposed monitoring indicators are: (a) number of MCLW/WCLWs trained; (b) number of animals vaccinated; (c) number of poultry vaccinated; (d) number of animals dewormed; (e) number of bulls provided and per cent of conception; (f) incremental volume of milk produced; (g) number of sick animals attended by CLA/SA/VO; (h) number of nurseries established; (i) incidence of animal/poultry disease outbreaks; (j) number of faecal samples examined for production of planting material for quick growing fodder trees.

Microenterprise Development/Income-Generating Activities

7. Record of new IGAs/microenterprises starting after contact with the project, by gender; type of project input (training in: marketing, business skills, enterprise, appropriate technology); and features of the new IGAs/microenterprises (employment created, revenue generated, sector).

Credit

8. The NGO will prepare a quarterly credit performance report, which will include the following information: (a) number and value of income-generating/microenterprise/input loan applications received, approved and disbursed by purpose and term to COs/WCOs and members; (b) the total amount of loans outstanding; (c) repayment rates achieved as a per cent of current and past dues; and (d) arrears statistics, including ageing of arrears.

Participatory Evaluation

9. Beneficiaries will be fully involved in the evaluation of project activities. Each year, before the annual review, IFAD's partners will encourage the communities and groups to meet for a brief stocktaking exercise. PRA techniques will be used to help them evaluate their experiences under the project. The emphasis will be placed on the changes in village life (both positive and negative). For community and women's participation, in particular, time mapping and ranking techniques will be used to investigate the implications of changes in: (a) the quality of the community's relationship with services: who made certain vital decisions (government or community leaders; men or women?); do they feel that government staff listen more or less than before?; (b) gender divisions of labour, responsibilities and decision-making within the community and analysis of their implications in terms of household and community welfare; and (c) the extent to which men and women feel in control of their lives.

10. **Mid-term review (MTR).** During the third quarter of PY3 an MTR will be undertaken that will focus on implementation progress in quantitative terms with respect to: (i) targets set at appraisal for the reaching of beneficiaries; (ii) effectiveness of training undertaken by the project; (iii) participation of beneficiaries in planning and execution of project activities; (iv) increase in the incomes of the beneficiaries over the base-line level; (v) types of credit extended. A major theme of the review will be organization and management, with particular reference to effectiveness in reaching the target group and sustainability. The overall environmental impact of the project will be closely evaluated. The MTR will be undertaken by consultants. IFAD and its cooperating institution, in close cooperation with the borrower, will evaluate the achievements and the constraints encountered during implementation and the requirements for design reorientation.

COSTS AND FINANCING

Expenditure Accounts by Components – Totals including Contingencies^a
(USD '000)

	Community and Womens' Development		Agricultural Development					Microenterprise Development			Project Management	Total	
	Community Organizing	Community Development Fund	Dugwells	Ponds/Minidams	Soil Conservation	Crops	Livestock	Adaptive Research	Men's Enterprises	Women's Enterprises	Revolving Fund		Unit
	I. Investment costs												
A. Civil works	0.0	0.0	3 679.8	3 039.5	1 352.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8 072.0
B. Equipment	48.1	0.0	1 580.9	1 149.5	0.0	0.0	0.0	0.0	13.1	71.6	0.0	25.1	2 888.5
C. Vehicles	191.7	0.0	0.0	0.0	0.0	0.0	164.3	0.0	32.9	27.4	0.0	107.2	523.4
D. Livestock	0.0	0.0	0.0	0.0	0.0	0.0	82.7	0.0	0.0	0.0	0.0	0.0	82.7
E. Community development fund	0.0	2 700.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 700.0
F. Revolving fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 700.0	0.0	2 700.0
G. Training and demonstrations	801.5	0.0	120.3	0.0	0.0	1 114.6	901.7	0.0	7.5	32.2	0.0	0.0	2 977.8
H. Research and studies	0.0	0.0	0.0	0.0	20.3	0.0	0.0	1 735.2	0.0	0.0	0.0	120.1	1 875.5
I. Contract services	977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	20.4	0.0	12.4	1 031.0
Total investment costs	2 019.0	2 700.0	5 381.1	4 188.9	1 373.2	1 114.6	1 148.7	1 735.2	73.9	151.7	2 700.0	264.9	22 851.0
II. Recurrent costs													
A. Incremental salaries/allowances	0.0	0.0	0.0	0.0	0.0	470.1	153.7	0.0	0.0	0.0	0.0	432.4	1 056.2
B. Other operating costs	0.0	0.0	0.0	0.0	0.0	457.8	79.8	0.0	77.2	213.1	0.0	414.7	1 242.5
Total recurrent costs	0.0	0.0	0.0	0.0	0.0	927.9	233.4	0.0	77.2	213.1	0.0	847.1	2 298.7
Total PROJECT COSTS	2 019.0	2 700.0	5 381.1	4 188.9	1 373.2	2 042.5	1 382.1	1 735.2	151.2	364.7	2 700.0	1 112.0	25 149.8
Taxes	88.8	270.0	388.2	331.6	98.3	64.9	75.2	0.0	23.8	24.0	0.0	77.6	1 442.3
Foreign exchange	100.0	270.0	388.2	331.6	98.3	64.9	73.7	416.4	24.9	29.0	0.0	82.0	1 879.1

^a Discrepancies in totals are due to rounding.





Disbursement Accounts by Financiers^a
(USD '000)

	Govt. Amount	%	IFAD Amount	%	Beneficiary Amount	%	Total Amount	%	For. Exch.	Local (Excl. Taxes)	Duties and Taxes
1. Civil works ^b	1 413.3	17.5	3 565.2	44.2	3 093.5	38.3	8 072.0	32.1	533.0	7 006.0	533.0
2. Vehicles and equipment	578.5	17.8	1 584.2	48.7	1 092.2	33.6	3 254.8	12.9	425.2	2 415.0	414.6
3. Community development fund ^c	810.0	30.0	1 485.0	55.0	405.0	15.0	2 700.0	10.7	270.0	2 160.0	270.0
4. Revolving fund ^d	0.0	0.0	2 700.0	100.0	0.0	0.0	2 700.0	10.7	0.0	2 700.0	0.0
5. Training and studies	34.7	1.5	2 335.3	98.5	0.0	0.0	2 370.0	9.4	34.7	2 300.6	34.7
6. NGO contract	88.8	4.4	1 853.5	91.8	76.6	3.8	2 019.0	8.0	100.0	1 830.2	88.8
7. Research contract	0.0	0.0	1 735.2	100.0	0.0	0.0	1 735.2	6.9	416.4	1 318.7	0.0
8. Recurrent costs	2 298.7	100.0	0.0	0.0	0.0	0.0	2 298.7	9.1	99.7	2 097.8	101.2
Total	5 224.0	20.8	15 258.4	60.7	4 667.4	18.6	25 149.8	100.0	1 879.1	21 828.3	1 442.3

^a Discrepancies in totals are due to rounding.

^b Dug wells, ponds, dams, etc.

^c Finance for village water supplies, hand pumps, school buildings, etc.

^d Credit for production inputs and investment in microenterprises and income-generating activities.

FINANCIAL AND ECONOMIC ANALYSIS

FINANCIAL ANALYSIS

1. To test the financial viability of project proposed activities, five representative farm models have been developed: Model (a) a 2.5 ha rainfed family farm in PD Khan; Model (b) a 2.5 ha rainfed family farm in the Potwar area, which is representative of the rainfed agricultural areas in the project *tehsils*; Model (c) a 4 ha dugwell-irrigated farm in the Potwar, owned by about five nucleus families; Model (d) a 3.25 ha pond-irrigated farm in the Potwar, owned by about four nucleus families; Model (e) an 8 ha minidam-irrigated farm in the Potwar, owned by about ten nucleus families. In addition, models have been prepared for two activities that are particularly appropriate for women – apiculture, based on four hives, and milk production using a single stall-fed buffalo.

2. Financial viability has been assessed for an individual family in the case of Models (a) and (b), and groups of families in the case of the remaining models. The value of grants to be provided under the project for Models (c), (d) and (e) (up to about 53% of the value of investments in dugwells, ponds and minidams) have accordingly been excluded from the analyses. Outputs of crop residues (by-products) in the household models have been valued at market prices in order to reflect the contribution of animal enterprises to the incomes of typical households.

3. Table 1 summarizes the financial results of the selected models. It is clear that the increase in household income from the rainfed models is quite modest (15 – 19) but is high from irrigation, although the return per additional labour day is lower than the average. It also appears that other activities such as apiculture could provide as much income as the 2.5 ha rainfed models in PD Khan or Potwar.

Table 1: Summary of Farm Model Results

	Financing Model	Net Revenue (PKR/yr)			Return to Labour (PKR/day)			Incremental Return to Labour (PKR/day)
		Without	With	% Change	Without	With	% Change	
Crop production farms:								
PD Khan rainfed 2.5 ha	650	6 447	7 400	15	280	285	2	318
Potwar rainfed 2.5 ha	1 345	10 253	12 194	19	366	370	1	388
Dugwell irrigated 4 ha	38 000	16 357	45 994	181	363	282	-22	251
Pond irrigated 3.25 ha	26 000	13 316	44 903	237	360	335	-7	326
Minidam irrigated 8 ha	50 000	32 713	113 388	247	363	348	-4	342
Enterprises:								
Apiculture	9 800		8 430			281		
Milk production	25 500		9 126			304		

4. In addition, to test the viability of some of the income-generating activities and microenterprise, four representative enterprises have been developed (tailoring, shoemaking, machinery repair and goat-fattening) of those expected to be taken up as pilot activities under the project. In view of the difficulty of quantifying their overall number, they have not been included in the economic analysis. Table 2 summarizes the financial results of these activities.

**Table 2: Summary Results of Representative Enterprises (PKR)**

Enterprise	Investment Cost	Income at Full Development	Operating Cost	Net Income	Incremental Returns
Tailoring	23 080	65 540	41 300	24 240	187
Shoemaking	24 150	378 000	277 000	101 000	488
Tractor repairs	34 500	112 000	64 800	47 200	269
Goat-fattening	2 500	33 250	29 000	4 250	176

Economic Analysis

5. **Costs.** Investment costs are total costs excluding price contingencies. Project implementation and management costs, including all the costs of the contracted NGO, together with the operating costs of both productive enterprises and support services, have been included. On-farm investments are assumed to have a twenty-year life, with no residual value. Vehicles and office equipment financed by the project are assumed to have a zero residual value, although provision is made for periodic replacement. Import parity prices for wheat, maize, urea and DAP have been used to value them. All other input prices are financial values multiplied by the standard conversion factor (SCF) estimated at 0.9.

6. The following project costs have been excluded from the analysis in order to more closely reflect the costs of the activities for which it has been possible to estimate benefits: (a) the revolving fund, as funds are already included in the respective models (inputs and income-generating activities) or used for microenterprise financing, for which no benefits have been taken into account due to its pilot character; and (b) adaptive research.

7. **Benefits.** The main quantifiable benefits arising from the project are the following production figures at full development: wheat (10 490 t), wheat straw, which is an important roughage for animal feeding (10 490 t), maize grain (2 498 t) and vegetables (23 400 t). The total annual labour requirement for crop activities is estimated at about 1.2 million person days, an increment of about 395 000 person days.

8. Other benefits, which are likely to arise but which have not been quantified, include the output of the adaptive research programme, production from pilot microenterprise activities and community-based activities to be financed through the village development fund. Agricultural enterprises are assumed to maintain their without-project production levels, input use and labour requirements for the life of the project. Prices are also assumed to remain constant.

9. **Markets and prices.** Incremental agricultural production will be consumed by households or sold to traders. As the area is in deficit with respect to foodgrains and vegetables and adjacent to the major consumption centres of Rawalpindi and Islamabad, marketing difficulties are unlikely to arise although surpluses in vegetable markets could occur from time to time as a result of unusual seasonal factors. Furthermore, the build-up in production of vegetables will be constrained by the rate at which community organizations can be formed and physical facilities constructed (wells, dams, etc.), allowing time for market outlets to expand. Animal products are also expected to be marketed without difficulty – there is already a keen demand from traders for milk within the project area.

10. **Economic rate of return.** The ERR for the project is 11.4%. If the investment cost of the community development fund is excluded, the ERR rises to 14%. The rate of return is sensitive to changes in prices of wheat and vegetables, but is less sensitive to changes in on-farm investment costs. For a 10% increase in the wheat price, the ERR is 13.2% for the base case (15% if the CDF is



excluded), while for a 10% increase in the price of wheat and vegetables together, the ERR is 14.5% for the base case (17.3% if the cost of the CDF is excluded). If the price of vegetables should decline by 10%, the ERR will be 10.3% for the base case (12.6% excluding the CDF), or 8.3% for the base case (10.5% if the CDF is excluded) for a 10% total decline for wheat and vegetables. If on-farm investment costs are assumed to rise by 10%, the ERR for the base case is 10.8%, or about 13% if the CDF is excluded.