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UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
MISSION TO PAKISTAN

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18 - Sixth Avenue, Ramna 5,  
Post Office Box 1028  
Islamabad, Pakistan  
November 22, 1989

Mr. Nasrat R. Fadda  
Director General  
International Center for Agricultural Research in Dry Areas (ICARDA)  
P.O. Box 5466  
Aleppo, Syria

Subject: MART Project (391-0489))  
Grant No. 391-0489-G-00-0501-00

Dear Mr. Fadda:

Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D." or "Grantor") hereby grants to the International Center for Agricultural Research in Dry Areas (hereinafter referred to as "ICARDA" or "Grantee"), the sum of \$1,415,244 to provide institutional development support for the Arid Zone Research Institute, Quetta, Pakistan, as described in the Schedule (Attachment 1) and the Program Description (Attachment 2) of this grant.

This grant is effective and obligation is made as of December 1, 1989 and shall apply to commitments made by the Grantee in furtherance of program objectives during the period beginning with the effective date and ending September 30, 1991.

This grant is made to ICARDA, on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment 1, entitled "Schedule", Attachment 2, entitled "Program Description," and Attachment 3 entitled "Standard Provisions," which have been agreed to by your organization.

Please sign the original and 10 copies of this letter to acknowledge your receipt of the grant, and return the original and 9 copies to the Office of Contracts and Commodities (O/CC), USAID, Islamabad.

Sincerely yours,

*Marilyn B. Buchan*  
Marilyn B. Buchan  
Grant Officer

Attachments:

1. Schedule
2. Program Description
3. Standard Provisions
4. Optional Standard Provisions

MISSION AUTHORIZATIONS

FM/LMD (if Loan)

FM/PAFD

GC/ANE

ANE/TR Officer

ANE Desk ✓

ANE/DP

PFC/PB/RPA

ANE/PD Officer & File

ACKNOWLEDGED:



Nasrat R. Fadda  
Director General

DATE: \_\_\_\_\_

FISCAL DATA

Appropriation:	72-1191021
Budget Plan Code:	QDNA-89-27391-KG13
PIO/T No.:	391-0489-3-80149
Project No.:	391-0489
Total Estimated Amount:	\$1,415,244
Total Obligated Amount:	\$ 900,000
IRS Employer Identification Number:	NA
Funding Source:	AID/W [ ] USAID [ X ]
Financial Management Paying Office:	Office of Financial Management(O/FM) USAID/Islamabad

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SCHEDULE

A. Purpose of Grant

The purpose of this Grant is to provide support for institutional development of Avid Zone Research Institute at Quetta, Pakistan, as more fully described in Attachment 2 to this Grant entitled "Program Description."

B. Period of Grant

1. a. Basic. The effective date of this Grant is December 1, 1989. The expiration date of this Grant is September 30, 1991.

b. Option. Period for option phase will be effective Oct. 1, 1991 and completion date Nov. 30, 1992 subject to extension of PACD and the availability of funds.

2. Funds obligated hereunder are available for program expenditures for the estimated period from December 1, 1989 to September 30, 1991.

C. Method of Payment and Amount of Grant

1. Payment shall be made to the Grantee in accordance with procedures set forth in Attachment 4, Standard Provision No. 1, entitled "Payment - Periodic Advance."

2. AID hereby obligates the amount of \$ 900,000 for purposes of this Grant.

3. The total estimated amount of this Grant is \$1,415,244.

4. Additional funds up to the total amount of the grant shown in C.3. above may be obligated by AID subject to the availability of funds, and to the requirements of the Standard Provision of the Grant, entitled "Revision of Budget".

D. Budget

The following is the Budget for this Grant, including local cost financing items. Revisions to this Plan shall be made in accordance with the Standard Provision of this Grant, entitled "Revision of Budget."

1. Basic Period

	<u>ICARDA SHARE</u>	<u>USAID SHARE</u>
Salaries	\$163,574	\$ 649,333
Travel	54,724	148,426
Training	50,000	151,557
Research Operating Cost and Other Direct Costs.	20,000	272,529
Indirect Costs	13,538	193,399
GRAND TOTAL	<u>301,836</u>	<u>1,415,244</u>

## 2. Option Period

Salaries	\$113,174	\$ 398,630
Travel	26,468	77,000
Training	25,000	85,544
Research Operating Cost and Other Direct Costs.	10,000	176,628
Indirect Costs	<u>8,349</u>	<u>119,272</u>
GRAND TOTAL	182,991	857,074

### E. Reporting and Evaluation

1. Progress Reports: Progress reports are required every six months. The ICARDA will submit progress reports stating what has been accomplished to date, including as an attachment the Financial Status Report. These reports are due within thirty days following the reporting period ending June 30 and December 31 for each year of the grant, beginning June 30, 1990 and should be submitted to MART Project Officer, USAID/Pakistan with a copy each to O/FM and Contracts Office. The first report is due on July 30, 1990.

2. The Financial Status Report (SF-269) is required every six months and will be submitted as an attachment to the progress report.

3. Voucher Paying Officer - Controller, USAID/Pakistan

### F. Title to Property

Title to property acquired under this grant will vest in in the Government of Pakistan name and Optional Standard Provision 22 "Title to and Care of Property (Cooperating Country Title) will apply.

### G. Order of Precedence and Entire Agreement

The Cover letter, this Schedule, the Program Description, the Mandatory Standard Provisions and the Optional Standard Provisions constitute the entire Agreement. In event of inconsistency between the provisions of this Grant, the inconsistency shall be resolved by giving precedence as follows (a) Letter, (b) Schedule, (c) Mandatory provisions (d) Standard Provisions and (e) Program Description.

### H. Overhead Rate

<u>Type of Rate</u>	<u>Rate</u>	<u>Period</u>	<u>Base</u>
Overhead	25%	Provisional Until Amended	All costs except travel and other direct costs (ODC)

### I. Cost Sharing/Matching

The Grantee agrees to expend from its own funds amounts specified in the Budget in Paragraph D above.

### J. Address for submitting SF-270

The grantee shall submit Request for Advance on SF-270 to O/ARD, USAID, P.O. Box 1028, Islamabad.

Program Description

As fully described in the ICARDA Technical Proposal which is made a part of this grant by reference, the purpose of this grant is to provide support for institutional development of Arid Zone Research Institute at Quetta and improving the agricultural productivity of Dry Areas in Pakistan.

The grantee is expected to coordinate its activities closely with the Host Country institutions involved in Arid zone Research.

REQUEST FOR A GRANT FOR  
AN ARID ZONE COLLABORATIVE RESEARCH PROGRAM AND  
INSTITUTIONAL STRENGTHENING IN THE  
UPLAND AREAS OF PAKISTAN

A. PURPOSE OF GRANT AND DESCRIPTION

Improving the agricultural productivity of dry areas has been highlighted by the Report of the National Commission on Agriculture (Government of Pakistan, 1988) as a national priority and the Pakistan Agricultural Research Council's (PARC) Arid Zone Research Institute (AZRI) is the principal research agency through which planned increases in the productivity of dryland agricultural areas are to be realized. The purpose of this grant request is to permit ICARDA to maintain its international collaborative research program at AZRI and to assist in the strengthening and development of AZRI to become a key PARC institute for arid-land research. This will assist in the development of the Institute's human resources and research capabilities. This research support role was initiated in 1980 and further strengthened in 1985 under the financial sponsorship of the MART Project AZR component. During the grant period AZRI will continue to develop its cadre of scientists that are trained and experienced in dryland agricultural research and simultaneously maintain its current level of research effort. In consequence, AZRI will be able to become a key research agency in the development of ICARDA's research network of collaborative institutes in the highlands of W. Asia and N. Africa.

The principal target group of beneficiaries from Pakistan, as a result of the grant, will be the Arid Zone Research Institute and its staff, and indirectly, collaborating provincial research and extension agencies will also receive assistance. The activities that the grant will finance will be a combination of both research and counterpart training, i.e. Researchers/Advisers and operational funding. Training and commodities required for those activities will be financed by PARC, ICARDA and USAID according to the attached budget. ICARDA will post three technical advisers with skills in range/livestock management, water harvesting/agronomy and agricultural economics at AZRI and they will be further supported by short term consultants in other areas of dryland agricultural research, such as agricultural engineering, germplasm evaluation and agricultural extension/communication.

At the end of the period of the grant, which will be September 30, 1991; with the possibility of extension if mutually agreeable between PARC, USAID and ICARDA for a further year; it is expected that AZRI will have in place trained professionals in most of its appropriate disciplinary areas. However, even though they may still be relatively inexperienced in research management in some discipline areas, they will be capable of maintaining and developing AZRI's research program largely or completely independent of resident assistance. The two years proposed under this grant and possible time extension will be filling a vital interim period while key AZRI staff are absent on

long term training assignments. By the end of the grant period AZRI's dryland agricultural research program will have demonstrated the potential for a substantial impact on the dryland farming communities in the upland areas of Pakistan. Continuing linkages with other Pakistan and International Research Centers will be required, and a further period of assistance of a somewhat different nature with less emphasis on resident support may be needed.

The Pakistan Agricultural Research Council (PARC) will continue to support AZRI at increasing budgetary and staff levels according to the AZRI's Strategic Plan (plus inflationary increases), and will assist AZRI nominees to achieve necessary clearances for long-term training abroad with maximum despatch.

USAID will, to the extent funds available, provide for the support of long-term higher degree and short-term trainees (overseas) from the AZRI staff as part of its overall support project for long-term training in Pakistan and these costs will not form part of the expenditure under this grant.

ICARDA will provide the services of one of the resident advisers from their core staff and post graduate training at ICARDA from resources outside this grant.

#### B. BACKGROUND

Arid and semi-arid non-irrigated land represents more than half of the total land area of Pakistan. The majority of this area is found in Balochistan, approximately 34 million hectares, of which approximately 15 million hectares of higher potential productivity is at an elevation greater than 1000m.

A second smaller but contiguous area of arid and semi-arid land is found in the elevated regions of the southern and western sectors of North West Frontier Province (NWFP). This ecological zone has a continental Mediterranean climate which is unique in Pakistan. As such ecological conditions are central to the scientific and regional mandate of ICARDA; ICARDA places strong emphasis on its continued collaborative research linkages with AZRI. In addition, this ecological zone is the most important production area for small ruminants in Pakistan. In Balochistan the livestock sector produces an estimated 25% of the Gross Agricultural Product of the province and 30% of the population depends upon livestock in part or in whole for their livelihood. Increased livestock production from this zone is one of the principal recommendations from the National Commission on Agriculture's report (1988).

With reference to the experience gained in the MART/AZR Project, the grant program will address problems of:

- Ineffective small ruminant and range management.
- Inadequate feed resources.
- Poor prophylactic health care.

- Insufficient water availability for forage and crop production and,
- The socio-economic aspects of the current small ruminant and forage production industries.

These issues have been discussed in ICARDA Research Publication 138, the AZRI strategic plan (MART/AZR Research Report 23), and the AZRI development plan (MART/AZR Research Report in press).

ICARDA has the capacity, mandate and experience for achieving the objectives of the grant. ICARDA was the primary contractor in the MART Project AZR component 1985-89, and maintains a head office staff of 60+ professional dryland agricultural scientists, representing a wide range of disciplines, who are currently engaged in related studies throughout West Asia and North Africa.

#### Institutions Involved:

AZRI - The Arid Zone Research Institute, a federal agricultural research organization which is part of the PARC network of agricultural support agencies with national responsibilities, AZRI is currently under the authority of the PARC Member for Natural Resources. Headquarters address: AZRI, P.O. Box 63, Brewery Road, Quetta, Pakistan.

PARC - The Pakistan Agricultural Research Council, the federal government's coordinating agency for national agricultural research. Headquarters address: PARC, P.O. Box 1031, Islamabad, Pakistan.

ICARDA - The International Center for Agricultural Research in Dry Areas, part of the USAID supported non-profit making CGIAR group with responsibility for dryland agricultural research, principally in West Asia and North Africa. Headquarters address: ICARDA, P.O. Box 5466, Aleppo, Syria; and in Pakistan: ICARDA, P.O. Box 362, Quetta, Pakistan.

#### C. PROJECT

##### Objectives:

The objectives of this grant are to:

1. Ensure the continuity of the collaborative research program between ICARDA and AZRI, headquartered in Quetta, Balochistan. To help strengthen and develop AZRI to become a key PARC institute for arid-lands research. Strengthen the capability and capacity of AZRI to plan and conduct applied research and to generate appropriate technologies that will improve livestock production and availability of animal feed (range improvement, forage production, dual purpose props etc.) in the arid and semi-arid uplands of Pakistan.

2. To reinforce the link between federal, provincial and international agencies to provide Pakistan with an integrated research effort in finding solutions for the problems of agricultural production in the dry, rainfed, high elevation areas of the country; and in addition, coordinate activities with other research agencies working in the arid, subtropical ecological zones of the country.

At the end of the grant period it is envisaged that AZRI and its staff will have the competency to play a leading role, in partnership with provincial agricultural agencies and ICARDA, in helping Pakistan achieve its goals of developing the dry, rainfed areas of the country in which small ruminant production is the predominant sustainable agricultural activity.

To achieve these objectives the grantee shall assist AZRI scientists in the joint planning and implementation of a research program relating to:

- a. Improved animal feed supply from rangeland rehabilitation, creation of forage shrub reserves, annual and perennial forage crops, and improved production of nutritious crop residues from dual purpose crops (wheat, barley, lentil, etc.);
- b. Improved livestock management especially concentrating on ruminants;
- c. Improved techniques of water harvesting in crop and rangelands to ensure a more sustained level of production overtime;
- d. Improved understanding of the socio-economic issues influencing the currently poor offtake and yield levels of livestock and crop producers.

Given the collaborative research and institutional strengthening focus of this grant, it is expected that the grantee shall also contribute to the research program outlined by providing on-the-job training for AZRI staff in all aspects of the research process, that is, management, administration, planning, implementation, reporting, evaluation and determining impact. In addition, ICARDA will continue to supply to AZRI advanced germplasm from its crop breeding programs and will share information on new dryland agricultural technologies developed under ICARDA's auspices in other areas of W. Asia and N. Africa.

#### Scope of Work:

##### 1. General Responsibilities:

The grantee will work in three general areas of research which are emphasized in AZRI's strategic research plan:

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- (a) Improvement of livestock and rangeland management;
- (b) Forage and dual purpose cropping assisted by water harvesting techniques and;
- (c) Socio-economic aspects of small ruminant and animal feed production and marketing. This will involve a mixture of field activities in both outreach and on-station locations, laboratory studies and surveys as well as the development of economic and social strategies. All these research efforts will be complemented by appropriate modes of training for both AZRI staff and collaborating provincial scientists. Research work will be carried out in an integrated interdisciplinary manner in fulfilment of the goals of AZRI's strategic and development plans.

In each research group linkages with the appropriate provincial extension agencies will be fostered to ensure their commitment to extend AZRI generated technologies.

Opportunities for training will be maximized in a variety of ways including on-the-job training, in-country workshops and training courses and etc. Grantee assistance to AZRI in determining suitable candidates for short, medium and long term training will be given and help with their placement overseas, where appropriate, will be provided.

## 2. Specific Responsibilities:

### a. Research Staff:

The grantees will provide and be responsible for the recruitment, transfer and support of staff. This includes: three long term technical research advisers (22 person months each, (one of the three adviser positions is funded from ICARDA core budget), ICARDA or consultant short term technical assistance, home office accountancy support (12 person months), home office managerial support (4 person months), local office and research support staff (3 people x 22 months each), drivers/maintenance personnel, (6 people x 22 months), English language tutor (18 person months).

It is assumed that FARC will provide adequate staff at AZRI.

### i. Range/Livestock Management Group:

The Range/Livestock Management group supported by T.A. provided by the grantee will carry out the following activities:

- a. Examination of options for the rehabilitation of rangeland vegetation. This will include testing introductions of perennial grasses, forage legumes and forage shrubs into range plant communities. In conjunction with these introductions, land treatment practices designed to improve precipitation, capture and

moisture retention in the root zone such as ripping, contouring, micro-catchment formation and other types of runoff capture technology will be tested in order to improve plant establishment and productivity.

- b. Alternative grazing management strategies will be examined in the light of their effect on range rehabilitation and long-term sustainable forage production.
- c. Effect of improved quantities and quality of animal feed on sheep and goats throughout the annual cycle of production will be studied. The relationships between different and variable sources of feed and key animal production parameters will be determined.
- d. Use of alternative management feeding strategies which could include the use of introduced forage plants in flushing and for supplemental feeding pastures, the use of mineral/protein/energy blocks on rangelands, allocation of dam's milk to offspring and alternative breeding schedules will be examined.
- e. Relationships between livestock diseases and parasites to fertility, mortality and productivity of grazing animals will be investigated.

ii. Agronomy Water Harvesting:

The Agronomy Water Harvesting group supported by T.A. supplied by the grantee will carry out the following activities:

- a. Examination of water capture strategies and distribution within fields for growth of annual crops. This will include study of contour bund design, desert terraces, spillways in bunds, field levelling with locally available technology, surface sealing technologies and etc.
- b. Utility of range forage shrub reserve plantations will be examined on marginal crop land and sites with preferential subsoil moisture availability and the potential for water harvesting. This will include the possibility of dual purpose forage and fuel wood species.
- c. Alternative agronomic strategies will be investigated in the presence of improved methods of water harvesting to determine if they can be profitable and can assist in ensuring a better, and more stable return to investment by farmers than the current uncertain, subsistence system. Emphasis would be placed on producing more abundant and alternative, sources of animal feed for sale or for direct consumption in mixed livestock/crop enterprises. In conjunction with the agricultural economist, the social and economic acceptability of alternate water harvesting

strategies will be assessed.

- d. Range Management specialist will be assisted in examining ways in which small scale runoff catchment technology can assist in the achievement of better and more sustained productivity of range vegetation.
- e. The introduction of improved germplasm of forage and dual purpose crop species (barley, vetch, lentil, wheat etc.) with improved water catchment systems will be studied.

iii. Agricultural Economics/Farming Systems Group:

The Agricultural Economist provided by the grantee will assist this AZRI group in the following areas of research:

- a. Profitability and compatibility of AZRI-generated technologies with current agricultural systems will be examined. This will require assessment of both individual technologies and enterprise option studies in order to maximize farm/flock production efficiency and minimize the longterm risk experienced by communities supported largely by agriculture.
- b. Socio-economic constraints to livestock production in the upland areas of Pakistan such as marketing, credit and collateral relationships, influences of potential GOP price support, feed subsidies and other policies generally affecting upland livestock producers will be investigated. Aspects of off-farm employment, labour availability, etc. will be assessed.
- c. Investigative surveys in upland areas to assess additional constraints to production not being addressed, or given due emphasis, by AZRI's research program.
- d. The ongoing and future impact of AZRI technologies and the likely impact of research in progress will be assessed.
- e. AZRI linkage with and assistance to provincial Farming Systems Research efforts will be provided mainly by this group.

b. Training:

i. Graduate Degree Training:

The grantee's staff at post will advise the AZRI directorate on appropriate candidates and their subject matter, for external higher degree positions which will be allocated specifically to AZRI and will be subdivided according to discipline as outlined in the AZRI Development Plan. The grantee's staff will have a primary role in defining the training program but would not be responsible for placement at US universities or the administrative support of long-term training candidates. Candidates will perform their thesis field work at an AZRI research location unless this is

inappropriate. Their research topic will be an integral part of AZRI's research program.

#### 11. Overseas Short Term Training:

The grantee's staff will make recommendations to AZRI and PARC for at least 18 person months of short term overseas or local training. ICARDA will provide opportunities for short term training in a wide range of disciplinary areas including: germplasm evaluation, improved livestock and crop husbandary, agricultural economics etc. Any support required for this short term training will be provided for outside the grant.

If suitable senior candidates can be identified, the grantee will arrange for them to take up positions as senior visiting scientists at ICARDA head office in Aleppo, Syria. These posts will be for one year and involve a combination of research and training designed to improve research managerial skills. Three such posts will be available at ICARDA during the grant period. Any support required will be provided outside the grant

In addition, the grantee will be responsible for making recommendations to PARC for AZRI staff, provincial collaborating scientists and long term advisers to attend together professional conferences abroad in their areas of discipline speciality. Funds are allocated in the budget to accomplish this. AZRI and the grantee's staff will present papers at such conferences or participate in a similar active manner (e.g. chairman, rapporteurs, poster papers, etc.)

#### - iii. English language training

The grantee, will recruit from local sources a native English speaking trained teacher, preferably with an ESL specialization, for up to nine months per year to assist in providing AZRI with an in-house English language training capacity. This has been outlined as a major continuing training need in AZRI's strategic and development plans with particular reference to assisting candidates achieve a score level sufficient to qualify for intensive English training at CIELS Islamabad prior to higher degree training. Also this training will help to maximize the value of on-the-job and in-country workshop training. Furthermore the English language teacher will be a substantial support to the training program designed to improve scientific writing at AZRI. This program is crucial in enabling AZRI to rapidly and widely disseminate the results of its research activities.

#### 1v. In-country workshops and training courses

The grantee's team at post, with possible assistance from head office or PARC sources, will hold approximately four local training workshops or courses per year for each year of the grant. They will be designed to improve specific skill levels for the AZRI staff and should be open, in general, to scientists from collaborating

provincial research and extension agencies.

c. Research Operating Costs/Commodities

The grantee will provide up to the total provision in the budget selected commodities and research operating costs required to support the collaborative research program. These funds will be budgeted jointly by grantee T.A. with AZRI Director and Research area leaders. An illustrative list of commodities is attached as annex.1.

Economic impact assessment

The grant will have a decisive impact on the viability of the Arid Zone Research Institute in ensuring adequate staffing levels of appropriately trained personnel and in maintaining the full scale of its current research activities. This research has the capacity to assist the farming communities of Balochistan (more than three million people) at very low per capita cost by developing low cost improved technologies for dryland agriculture and thus will be an indirect investment in assisting a very underprivileged income group.

Appropriateness of technologies to be employed

The research proposed will investigate technologies largely within reach of the current economic status of the farming community and these technologies will be designed to ensure better biological sustainability and a more consistent return to cropping and herding activities. For example see ICARDA Research Publication 138, the annual report of the MART/AZR Project for 1988.

Institutional capacity for grant program implementation

ICARDA, in collaboration with AZRI, currently has the capacity to undertake the grant program. This is demonstrated by the output from the ICARDA/AZRI research program (1985-89), the strength of ICARDA's overall research facility and the considerable enhancement of AZRI's capabilities under the previous phase of MART Project funding. Furthermore, PARC has agreed to further upgrade AZRI's staff resources. ICARDA and AZRI have a staff complement sufficient to carry out the research program envisaged under this grant. However, the AZRI staff are currently deficient in research management experience and lack the specific advanced skills that are required in some discipline areas that are new to, or underrepresented in Pakistan. Hence, there is a need for a continuing higher degree training program and interim resident technical assistance. Some further major items of capital expenditure will be required to support AZRI, but the requirement will not delay implementation of the grant proposals. The existing operational infrastructure is currently active under the MART/AZR project. It is therefore largely replacement items that will be required during the grant support period.

Institutionalization

The grant program is specifically designed to ensure the

continued institutionalization of ICARDA and AZRI's collaborative research program and AZRI's ability to function independently without research assistance after the end of the grant period.

#### D. GRANT PROGRAM DESIGN AND IMPLEMENTATION

##### 1. Description

The program will be carried out under a grant to ICARDA, as part of the overall ICARDA medium-term plan 1990-94, in support of national research agencies working in arid highland areas. ICARDA will support selected activities described in the Strategic and Development plans of the Arid Zone Research Institute (MART/AZR Research Report 23, and MART/AZR Research Report in press, 1989). No subcontracts or subgrants will be used with the exception of personal service agreements with short term consultants. These will only be used when the necessary consultancy expertise can be provided by a member of ICARDA staff.

##### 2. Disbursement

The total amount of the grant requested is \$1.5m. Advances will be made on a six monthly basis in US \$ for proper control and cash flow. First tranche to be obligated at the start of the grant period.

##### 3. Procurement procedures

All shelf and small item (<5,000\$) procurement will follow USAID Handbook 13 and the general provisions of this grant. The amount authorized to be expended is specified in the attached budget.

##### 4. Reporting

All reports shall be in the English language and shall be in such a form as is mutually agreed upon by AZRI and ICARDA and will include:

- a. Annual workplans describing the Institute's program for a 12-month period will be prepared jointly by AZRI and the grantee's team and will be discussed in a planning meeting open to participation from cooperating scientists from outside of AZRI.
- b. Quarterly progress reports will be prepared by the grantee's team for the periods ending December 31st, March 31st, June 30th and September 30th.
- c. Short term consultant's reports will be submitted, including an executive summary of recommendations (where appropriate), at the end of the consultant's work period.
- d. End-of-tour reports will be submitted by each long term resident adviser summarizing accomplishments, constraints

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and recommendation in the execution of this contract in support of the Arid Zone Research Institute.

- e. Special reports as may reasonably be requested by PARC and/or the USAID Project Officer.

5. Program controls and authority

The research program to be supported by the Grant will be administered by the PARC, DG, AZRI. The grant will be directly administered by the ICARDA Chief of Party who will report to the DG AZRI and the Assistant Director General for International Cooperation at ICARDA head office, Aleppo, Syria; pending the appointment of a Coordinator of the highlands coordinated research program (See ICARDA organisational chart medium term plan). Recruitment or transfer of long term technical advisers under the grant will be the responsibility of the Director-General of ICARDA or his nominee with the concurrence of USAID and PARC.

6. Monitoring mechanism

The grant program will be technically monitored by:

- a. a joint PARC/ICARDA steering committee (to be established).
- b. the office of the Assist. Director General International Cooperation ICARDA on a routine basis.
- c. the ICARDA Board of Trustees and Directorate as part of ICARDA's regular biennial review of research activities and
- d. USAID/ARD or its representatives.

The grantee's resident technical team will be available, when called upon, to participate as resource personnel in evaluations conducted by PARC of the Arid Zone Research Institute's activities when mutually agreed by PARC and the grantee. In addition, ICARDA will participate in USAID review procedures of the grant program when requested.

7. Schedule of action, accomplishments and monitoring

The conditions at AZRI at the completion of the MART Project AZR component (i.e. October 1989) can be determined from AZRI's strategic and development plans and the final reports of the current technical advisory team and the MART January 1989 Evaluation Report.

The status of research activities and the attainment of grant objectives will be assessed in four ways:

- a. By the project annual report (available in draft in January of each year).
- b. By the minutes of the annual June semi-public project planning and coordination meeting,

- c. the research plans for the Institute presented at that meeting and
- d. from quarterly reports for matters of project detail.

Evaluation by the ICARDA Board of Trustees will be available from open session minutes and the reports of periodic reviews as requested by USAID or PARC.

#### Schedule and Benchmark progress measures

October 1st, 1989 start up date for the grant activities and financial commitment.

In November 1989, the current MART/AZR Project phase 1 will terminate.

By January 1990 the ICARDA team should be in place.

By March 1990 research work-plans in draft in preparation for June annual review.

By June 1990 first consideration of the grant program by the ICARDA Board of Trustees meeting.

Benchmark measure 1: By June 1990 research work-plans should be completed which will incorporate the new research thrusts of the grant period.

By mid-September 1990 the first batch of longterm and short term trainees should have departed to the US, ICARDA.

Benchmark measure 2: By January 1991 the first formal compilation of research results will be available in printed form.

Benchmark measure 3: By January 1991 the first four in-country training courses or workshops will have been held by AZRI.

By August 1991 the second batch of trainees should have departed.

By June 1991 second consideration of the grant by the ICARDA Board of Trustees.

Benchmark measure 4: By June 1991 second year research plans.

Benchmark measure 5: By September 1991 the final reports of the technical assistance team will be available unless options to extend the life of the grant are taken up. The grant is for a 3 year period initially.

## E. SPECIAL GRANT REQUIREMENTS

### 1. Period of Grant

The estimated starting date of this grant is December 1st 1989 and the estimated completion date is September 30th 1991. The grant may be extended for an additional year and budget subject to the approval of PARC and ICARDA and subject to the availability of funds in the amended MART project.

### 2. Logistic Support

Logistic support for the grantee's in-country staff will be budgeted for in this grant but the implementation will remain the responsibility of the grantee. PARC will assist the grantee in obtaining privileged status for the grantee's employees and will arrange the provision of the necessary visas and clearances required by the GOP to permit the employee to work and live with his family in Pakistan. This clause incorporates the terms of the formal agreement of cooperation (1980) between the grantee and PARC and amendment (1989).

### 3. Personnel policy conditions

For the employees of the grantee compensation leave, allowances provisions, pay scales etc. will be according to the regulations of the grantee (ICARDA Personnel policy - International staff) unless these are in conflict with the laws of the Government of Pakistan and USAID rules and regulations.

### 4. Approval of Grantee's in-country Technical Assistance

Before appointment of staff to long term posts under this grant the proposed staff must be approved by PARC.

### 5. Reporting of accounts

A financial status report will be provided to USAID every six months against the advances of US dollars.

### 6. Estimated Cost

The estimated cost of this grant is \$1.5 million

### 7. Budget

The following itemized budget sets forth the estimates for reimbursement of individual line items of cost. Without prior approval of USAID the grantee may not overspend line items by more

than 15% and cannot exceed the total estimated cost as set forth in the budget.

Period 22 months December 1989 - September, 1991

	USAID	.000 ICARDA	US Dollars PARC	*	TOTAL
1. Salaries & Related costs	710	355	500		
2. Travel & Transport	150	10	50		
3. Training Short term and local	150	70			
4. Res. Op. costs and selected commodities	290		300		
5. Indirect cost Provisional (25%)	200	50			
Subtotal	1500	485	850		
Grand total					2,835

\* = Excluding support to AZRI substations  
 1\$ = 20 rupees

## memorandum

DATE: October 29, 1989 *Curt Nissly*

REPLY TO  
ATTN OF: Curtis R. Nissly, Project Officer (MART Project 391-0489), O/ARD

SUBJECT: Memorandum pertaining to Selection of ICARDA as Grant Recipient

TO: Marilyn B. Buchan, Contracting Officer

ICARDA has been successfully implementing its contract to assist PARC/AZRI under the Arid Zone Research component of the MART project since May 1985 under the direct USAID/Pakistan-ICARDA contract 391-0489-C-00-5042-00. ICARDA is supplying long and short term Technical Assistance, training and commodities to PARC's Arid Zone Research Institute (AZRI). The existing contract terminates on November 30, 1989.

In order to continue the ICARDA/AZRI collaborative research program and the strengthening of research capacity at AZRI under the MART Project Arid Zone Research Component, PARC requested ICARDA to submit a proposal for funding future collaborative research activities through a USAID grant. PARC received ICARDA's application and after review of the proposal requested USAID to provide a two year grant to ICARDA to continue research efforts at AZRI.

The USAID/Pakistan's technical office, ARD, has reviewed ICARDA's proposal and finds it unique and most appropriate, in line with and supportive of MART project objectives. ICARDA as contractor was originally selected in accordance with AIDAR 715.613-71, Collaborative Assistance Selection procedures. That decision made on July 22, 1983, was based on an evaluation of two international agricultural research centers and one American university consortium qualifying under the dryland agriculture research capacity evaluation criteria. ICARDA received the highest numerical score from all panel members and was selected as having predominant capability and the advantage of economy in cost because of its location in Syria. ICARDA is on the approved list of international research centers and is part of the AID supported Consultative Group for International Agricultural Research (CGIAR).

At this time, ICARDA remains the sole international agricultural research institute whose mandate is developing improved technologies for high elevation arid zones. Furthermore, by fact of its long term experience and relationship with USAID and GOP, ICARDA is uniquely qualified for this collaborative research activity. ICARDA has shown itself fully capable of the independent mode of operations characteristic of grants.

ICARDA is proposed as the recipient of a 2 year grant to carry out the statement of work described in attachment-1 based on their capabilities and unique application to PARC. AID Handbook 13, Chapter 2B, 3.b. states that "competition is not required for assistance awards for which one recipient is considered to have exclusive or predominant capability, based on experience, specialized facilities or technical competence, or based on an existing relationship with the cooperating country or beneficiaries."

Based upon the above justification, it is recommended that you award a grant to ICARDA on a non-competitive basis.