

RD-ABG-986

**DIVERSIFIED AGRICULTURE RESEARCH PROJECT**

PROJECT NO: 383-0058

**QUARTERLY PROGRESS REPORT**

**APRIL-JUNE 1993**

**DEPARTMENT OF AGRICULTURE  
PERADENIYA, SRI LANKA**

**UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
COLOMBO, SRI LANKA**

**DEVELOPMENT ALTERNATIVES INCORPORATED  
BETHESDA, U.S.A.**

# TABLE OF CONTENTS

## EXECUTIVE SUMMARY

1.	INTRODUCTION	1
2.	BACKGROUND	1
3.	PROJECT PERSONNEL	1
4.	PROGRESS IN TECHNICAL AREAS OF CONCENTRATION	2
4.1	Commodity Analysis and Policy Review	2
4.2	Research Priorities and Strategy	2
4.3	Communications Technology	2
4.4	Research and Technology Transfer Programs	3
4.5	Seed Restructuring	4
4.6	Seed Technology	7
4.7	Organization and Management Systems	7
5.	MANAGEMENT AREAS OF CONCENTRATION	8
5.1	Participant Training	8
5.1.1	Long Term Training	8
5.1.2	Short Term Training	8
5.2	Coordination, Reporting and Evaluation	10
6.	ADMINISTRATION OF SPECIAL PROJECT FUNDS	10
7.	LEVEL OF EFFORT AND FINANCIAL STATUS	13

## Appendix A

## **EXECUTIVE SUMMARY**

At this stage of DARP activities, the influence of the Project on the directions and management of the DOA are being felt. Impacts at the level of the farmer and agricultural sector are also becoming increasingly evident.

The Final Impact Evaluation of the Project gives DARP very high marks in areas such as seed enterprise development, management skills development, and use of mass media in technology transfer. Indeed, Project activities are running at a rapid pace and will continue right up to the end of the Project, 31 August 1993.

As the final report for the DAR Project will be completed in August, the present report will be more abbreviated than usual.

The main activities in each of three central thrust areas of the Project were as follows:

### **Crop Diversification**

A massive crop demonstration program in Meda 1993 was successfully completed. Yala 1993 demonstrations are now underway.

The First National Horticultural Exhibition is underway as of this writing. It was inaugurated by His Excellency President D.B. Wijetunge and the Prime Minister Mr Ranil Wickramasinghe.

Training of 140 private nurserymen plus DOA officers and technicians in propagation of fruit crops and nursery management was completed. The Honourable Minister of Agricultural Development and Research, Mr R.M. Dharmadasa Banda, and the Director of the USAID Mission to Sri Lanka, Mr Richard Brown, presented awards and certificates to the participants.

A half-day seminar on onion production was chaired by the Honourable Minister bringing together nearly forty onion farmers from several districts with six outstanding farmers and a DOA officer, who successfully completed a DARP study tour leading the discussion.

### **Seed Policy and Enterprise Development**

Transfer of the first of four seed cleaners was approved by the Director of Agriculture, Dr SPR Weerasinghe and accepted by the Commissioner of Cooperatives.

Installation of seed cleaning equipment is nearly complete.

Five enterprises are producing virtually all of the chilli seed in the country.

Eight enterprises are producing about 25 percent of paddy seed.

Four enterprises are beginning production of bean seed.

### **Institutional Development**

Six long-term participants are scheduled to return before the close of the Project in August.

Short-term participant training was completed in Seed Certification, Economics, Plant Quarantine, Seed Enterprise Development, and Agricultural Economics.

Additional local training in software applications including desk-top publishing is underway.

A Seminar for senior officers on computerization of office systems was successfully carried out.

A seminar on Community Radio in Agricultural Development was held with the Honourable Minister.

Installation of the farm broadcasting recording studio is completed.

**DIVERSIFIED AGRICULTURE RESEARCH PROJECT  
SRI LANKA**

**PROJECT NO: 383-0058**

**QUARTERLY PROGRESS REPORT**

**APRIL-JUNE 1993**

**1. INTRODUCTION**

The Diversified Agriculture Research Project (DARP) is implemented under an agreement between the Department of Agriculture (DOA) and the Agency for International Development (USAID). Development Alternatives, Inc. (DAI), under contract number 383-0058-C-00-5023, provides technical assistance to the Project. The Institute of International Education (IIE) manages the participant training program under subcontract with DAI. Other active subcontractors are Resource Development Consultants (RDC), Training Resources Group (TRG), and the Queensland Department of Primary Industries (DPI).

**2. BACKGROUND**

As the DARP Project is scheduled to end on the PACD (Project Activities Completion Date) of 31 August, 1993, this will be the last quarterly progress report to be presented. As the final report will expand on Project accomplishments, it will encompass many of the activities occurring during the last few months of the Project. Therefore, this progress report will be purposely brief, mostly providing routine information in tabular form required by USAID for Project monitoring.

**3. PROJECT PERSONNEL**

The primary representatives of DOA, USAID, and DAI were as follows:

Dr S P R Weerasinghe, Director of Agriculture  
Dr Nimal Ranaweera, Deputy Director for Agricultural Economics and Planning  
Mr Gary Alex, USAID Project Officer  
Mr S H Charles, USAID Project Manager  
Mr Mahinda Agalawatte, DOA Project Manager  
Dr Preston S Pattie, Chief of Party/Agricultural Economist  
Dr S T W Kirinde, Deputy Chief of Party

Short-term advisors that served during the quarter included:

Mr Tilak Jayaratne, Broadcast Media Specialist, RDC  
Mr Bob Nissen, Tropical Fruits Specialist, DPI  
Mr Rufus Pinto, Horticultural Specialist, RDC

Mrs Jane Surlis, Management Specialist, TRG  
Mr P Abhayagoonawardhana, Management Specialist, TRG

Mr Upali Dahanayake is employed by DARP to assist the Seed Development Unit in promotion of commercial seed enterprises.

Local staff consisted of the following personnel: Ms Shirley Amunugama, Office Manager; Ms Dayani Kapuwatte, Training Coordinator (IIE); Mr S Srikanthan, Field Operations Facilitator; Ms Khema Senanayake, Secretary; Ms Nirmala Nadarajah, Grant Funds Manager; and Ms Chamari Kulatunga, Computer Operator.

## **4. PROGRESS IN TECHNICAL AREAS OF CONCENTRATION**

### **4.1 Commodity Analysis and Policy Review**

An onion study is pending publication with the Division of Agricultural Economics and Planning. Another study on rainfed farming systems is scheduled for completion in August. All other targets in this area have been met previously.

### **4.2 Research Priorities and Strategy**

All objectives in this technical area have been reached.

### **4.3 Communications Technology**

This technical area has flourished into a major cornerstone of the Project, reaching thousands of farmers with messages centered on around topics of interest and importance. Farmers have shown their receptivity to obtaining new information and their ability to apply new technologies in management of their crops and farming systems.

Objectives for the quarter were to:

- \* Complete installation of the farm broadcasting recording studio
- \* Initiate training in desk-top publishing.

It was also agreed to hold a special workshop on community radio for agricultural development.

**Expand Farm Broadcast Capability:** Last quarter the contract for this installation was awarded, however work did not begin until immediately after new years holidays in April. By the end of June the installation was nearly complete. The contractor has noted the inadequacy of the electrical supply to the building, which will make it impossible to run the air conditioner provided by the Project. Also the head of the Farm Broadcasting Service pointed out the need for special cabinets and furniture for the equipment and for storage of materials, included cassette tapes.

**Training in Desk-top Publishing:** A firm in Colombo was contracted to provide weekly training in various software programs specific to the Apple desktop publishing system. Seven DOA officers from the Technology Transfer Division's editing unit are attending the course, which is held primarily on weekends.

**Community Radio:** The Honourable Minister of Agricultural Development and Research, Mr Dharmadasa Banda, led a half-day seminar at the BMICH in Colombo on the topic of Community Radio. The seminar was organized by DARP consultant Tilak Jayaratne. The speakers presented the concept of community radio, which involves participation of the local population in selection of topics and design of programs. This two-way communication can only be achieved on a localized basis. However the costs of several small, localized radio stations does not appear to be prohibitive. It was proposed that the DOA or the MADR take the initiative and coordinate with other governmental agencies to create a community radio system for rural Sri Lanka. The Minister indicated his interest in including other media, such as television, in the concept as well.

Prior to the seminar, a 30 minute video was displayed depicting the activities of the DOA. This film had been prepared by the Audio Visual Center under the guidance of Mr Jayaratne during April and May.

**Summary:** Besides the above activities, the mass media campaigns have continued to run and gain in strength. Furthermore, the Audio Visual Center has been providing enormous support in preparation for the Horticultural Exhibition.

#### 4.4 Research and Technology Transfer Programs

During the first quarter of 1993, DARP organized a study tour with the dual purpose of gathering germplasm of tropical fruit varieties. For this quarter, a primary goal was to carry out five courses planned for tropical fruit propagation and nursery management.

Another objective was to support provincial extension with Yala season demonstrations of vegetables or other crops in paddy lands.

**Tropical Fruit Production:** The five courses in nursery management were carried out on schedule by the Seeds and Planting Materials Division in Bibile, Maha Illupalama, and Walpita. DARP consultants Bob Nissen and Rufus Pinto presented much of the theoretical discussion and virtually all of the practical training. Each course lasted 3 1/2 days.

The course was for DOA technical staff--budders, grafters and farm managers. The second was for DOA officers. The next three were for private nurserymen.

An awards ceremony was held with all 140 participants, the Honourable Minister, and the Director of the USAID Mission, Mr Richard Brown. High quality budding knives were presented to each participant along with a certificate for completion of the course.

**1993 Yala Season Demonstrations:** DARP is assisting with this on-going program through provision of Special Project Funds. We regret that it will not be possible to report on this year's activities adequately as the Project will reach its close before the season is completely over.

**First National Horticultural Exhibition:** Over US\$50,000 of Special Project Funds have been allocated for a massive horticultural exhibition presented by the Department of Agriculture near Peradeniya. The exhibition site comprises more than five acres of land, and will run for more than a week. Virtually every arm of the Department of Agriculture has carried out its role in making this exhibition a major success, getting national attention of the public and policy makers throughout the country.

**Summary:** All objectives are being met in these varied technical fields.

#### 4.5 Seed Restructuring

Targets from April 1993 to the end of the project were defined as follows:

- \* Prepare business plans/feasibility studies for production and marketing of green bean and chilli seed.
- \* Transfer of four seed cleaners to independent seed enterprises
- \* Development of a seed policy or formation of participatory bodies to help coordinate industry development and to make inputs into policy formulation.

Originally, DARP was to assist with the development of a national seed law. It is felt that this process should be postponed to a time when more interested participants are involved in the industry and have gained sufficient experience.

**Seed Enterprise Development:** Various enterprises have been formed through private sector initiative with technical support and guidance from the Department of Agriculture's Seed Development Unit and the Seed Certification Service. Mr Upali Dahanayake is employed by DARP to work through the SDU and SCS to encourage different organizations to become involved in seed production and marketing. Virtually no assistance other than technical support has been provided. However the results during the past year have been dramatic. Nearly all chilli seed produced in Sri Lanka now comes from five independent enterprises. It is expected that paddy seed production by enterprises may hit 20 percent by the end of this year, compared with virtually zero in prior years. Bean seed production is starting up among a few small enterprises.

Following is a summary of the enterprises and total production of seed at present.

### Enterprises Involved in Seed Paddy Production

1. Dematamalpelessa Seed Producer Association, Ampara, Eastern Province
2. Uhana Seed Producer Association, Ampara, Eastern Province.
3. Saliyapura Seed Producer Group (individual farmers) Anuradhapura North Central Province.
4. Ninthur Seed Producer Association, Ampara, Eastern Province.
5. Royal Seeds, Dimbulagala MPCS, Manmpitiya, Polonnaruwa, North Central Province.
6. Golden Seeds, Palugasdamana MPCS, Palugasdamana, Polonnaruwa,
7. Southern Pioneer Seeds, Hungama MPCS, Hungama, Ambalantota, Southern Province.
8. Pan West Seeds, Paduwasnuwara, North Western Province.
9. CIC Seeds, Malwanagama, Mahaweli H area, North Central Province.
10. Analytical Instruments, Anuradhapura, North Central Province.

Paddy Seed Produced by Seed Enterprises  
(Actual through 92/93 Maha, projections following)

	(Metric Tons)
90/91 Maha	0
91 Yala	0
91/92 Maha	5
92 Yala	20
92/93 Maha	450
93 Yala	1,000
93/94 Maha	2,000
94 Yala	1,500

### Enterprises Involved in Bean Seed Production

DUS Agricultural Company, 4/15 Pitakanda Rd, Aniwatte, Kandy.  
CIC Seeds, P.O. Box 352, Colombo.  
Sampath Seeds, No.5, Isurugama Rd, Kaikawala.  
Ricky Seeds, Galkadilla Elamulla, Central Province.

Bean Seed Produced by Seed Enterprises  
(Actual through 92/93 Maha, projections following)

	(Metric Tons)
90/91 Maha	0
91 Yala	0
91/92 Maha	10
92 Yala	5
92/93 Maha	15
93 Yala	6
93/94 Maha	30
94 Yala	7

## Enterprises Involved in Chili Seed Production

Lanka Dutch Agricultural Company,  
Sampath Seeds, No. 5, Isurugama, Kaikawela.  
Akenasco Lanka Seed Company, No.26, Kurunagala Rd, Dambulla.  
CIC Seeds, P.O. Box 352, Colombo..  
Samarakoon Seeds, Peradeniya Rd, Kandy.

Chilli Seed Produced by Seed Enterprises  
(Actual through 1992, projections following)

	(Metric Tons)
1991	0
1992	10
1993	25
1994	30

**Transfer and Procurement of Seed Equipment:** The transfer of the first seed cleaner to Royal Seeds through the Department of Cooperative Development has been officially agreed upon and scheduled. DARP is financing two additional cleaners which will also be transferred to cooperative enterprises.

**Summary:** Targets in this area have already been surpassed. It is important that a participatory system be put into place that will allow the industry to coordinate closely with the Department and other public organizations in the future.

### 4.6 Seed Technology

The only remaining objective in this technical area was to complete installation of new equipment in two DOA seed processing plants--Pelwehera and Aluththarama. DOA supervision of the installations was very effective, and both sites were nearing completion by the end of the quarter.

### 4.7 Organization and Management Systems

Objectives from the beginning of the quarter to the end of the Project were to:

- \* Hold Phase III Workshop to help the Department deal with issues arising during implementation of change.
- \* Carry out additional software training for another 100 officers.

**Management Training:** Results of the training needs assessment (TNA) for the Phase III (final) workshop, conducted by Mrs Jane Surles and Mr Piyadasa Abayagoonawardhana, were instrumental in defining the topic areas and focus of the training. Major areas of concern related to guiding an organization through the process of change. Not only are managers expected to adjust to change and

help others do so, but they are also expected to contribute positively to the process of change.

**Training in Software Applications:** DARP conducted a 3 hour seminar for senior executives on computer literacy. Basic terminology and concepts were covered, along with aspects related to the changes in the office environment that occur when automated data systems are adopted.

Training of an additional 100 DOA officers in software applications is underway with local computer firms in Kandy.

**Summary:** The remaining activity planned for this technical area is to conduct the Phase III Workshop. It is important during this exercise and for the planned restructuring of the DOA for the organization to further identify and characterize its clientele into meaningful groups. It is no longer sufficient to regard "the farmer" as the client for the DOA. Even plantation enterprises may be diversifying portions of their holdings into horticultural crops, and may therefore become more closely related to the DOA in the future. Some other possible groups are:

- General public
- Rural population
- Subsistence farmers
- Commercial farmers
- Part-time farmers
- Agricultural enterprises
- Organized farmer groups
- Persons engaged in marketing and handling
- Plant nurserymen and women
- Policy makers

This is not meant to be a definitive list, but instead to offer suggestions on some of the client groups to be considered. Developing a better understanding of the needs of these groups would help a great deal in defining the future role of the DOA.

## **5. MANAGEMENT AREAS OF CONCENTRATION**

### **5.1 Participant Training**

#### **5.1.1 Long Term Training**

Two of the eight scholars who commenced their training programmes under the Extension Phase returned after completing their degrees. The remaining six are still actively engaged in their programmes and will return by August 1993.

### 5.1.2 Short Term Training

In this quarter four more short term training programmes were carried out, bringing the total person-months to 90.

One officer from the Seed Certification & Plant Protection Division (SC&PP) attended the Plant Quarantine Training Programme at ASEAN PLANTI, Malaysia. At the conclusion of the training programme, this officer was joined by two more officers from the SC&PP Division to participate in a Study Tour organized by ASEAN PLANTI, Malaysia.

Two officers from the SC&PP Division attended the APPPC Workshop on Plant Quarantine Procedures, Kuala Lumpur, Malaysia.

One officer from the Division of Agric Econ and Planning attended a Training Course on Project Management and Evaluation at the Asian Institute of Technology, Thailand. This officer was joined by three more Economic Assistants of the DOA and participated in a study tour organized by CGPRT, Indonesia.

One officer from the Seeds Division is attending a USDA Training Course, Developing Markets for Agricultural Products at the Colorado State University, USA.

For more person-months of training within Sri Lanka, one-week intensive training programmes on Computer Software for DOA officers are being conducted. Up to now more than seventy five officers are attending these courses.

Seven officers of the Technology Transfer Division are attending a Desk Top Publishing course.

The onion farmers who participated in a study tour in India during the last quarter were invited by the Director of Agriculture, to share their experiences with the Honourable Minister, staff of the DOA and other farmers at a Workshop held in Peradeniya.

Long Term Training - Original and Extension Phase

Name	Current position	Station	Training relevant to position
<b>PHD</b>			
1 WGD Fernando	Left Dept		
2 DSDZ Abey Siriward	RO	A'pelessa	Yes
3 HM de Alwis	Left Dept		
3 GAC de Silva	Agric Economist	Peradeniya	Yes
5 LG Herat	RO	Bandarawela	Yes
6 L Amerasinghe	RO	Maha Illup.	Yes
<b>MSc</b>			
7 H Lansakkara	Left Dept		
8 TDW Siriwardena	RO	Gannoruwa	Yes
9 WP Madawanarachch	ADA	Peradeniya	Yes
10 GAMS Emitiyagoda	ADA Ext	Peradeniya	Yes
11 L Hathurusinghe	AO	Colombo	Yes
12 V Pemajayantha	Left Dept		
13 A Lecamwasam	DDR	A'ganwila	Yes
14 NPU Kuruppu	RO	Makandura	Yes
15 WHD Kularatne	Agric Economist	Maha Illup.	Yes
16 JDM Jayawardena	RO	Maha Illup.	Yes
17 K Subramaniam	Seg AO	N&E Province	Yes
18 GAW Wijesekera	RO	Gannoruwa	Yes
19 RM Nandasiri	ADA	A'pura	Yes
20 PBL Premnath	Seg AO	N Cent Prov	Yes
21 ST Dassanayake	ADA	Peradeniya	Yes
22 K Karunathileke	ADA	Peradeniya	Yes
23 KWS Abeyratne	Further studies	USA	
24 EMG Edirisinghe	ADA	Kegalle	Yes
25 APR Jayasinghe	ADA	Peradeniya	Yes
26 G Balasuriya	Agric Economist	Peradeniya	Yes
27 H Hemaratne	Agric Economist	Bombuwela	Yes
28 RA Wijesena	Asst Sec	Kegalle	Yes
29 H Kularatne	ADA	Kundasale	Yes
30 SGR de Silva	Seed Cert Off.	Gannoruwa	Yes
31 GM Chandrasena	ADA	Gannoruwa	Yes
32 WSC Perera	ADA	Getambe	Yes
33 H Rajapakse	Left Dept		
34 W Palitha	AO	Kurunegala	Yes
35 TA Booso	Lecturer, Ag Eng	Kundasale	Yes
36 A Jayatileke	ADA	A'pura	Yes
37 M A Ariyasinghe	ADA	Puliyankulam	Yes
38 MH Rafeek	Agric Economist	A'wila	Yes
39 S Kanagasunderam	Left Dept		
40 TD Jayaratne	Left Dept		
41 S Kandiah	Left Dept		
42 P Mylvagnam	Left Dept		
43 SC Gunasekera	Librarian	Gannoruwa	Yes
44 GDJL Sunil	ADA	Pelwehera	Yes
45 MA Wimal	Agric Engineer	FHRC, HI	Yes
46 A Wettasinghe	RO	Peradeniya	Yes
47 K Hettiarachchi	RO	Maha Illup.	Yes
48 DEDJ Abeysekera	ADA	Maha Illup.	Yes
49 KG Sriyapala	Asst Sec	Getambe	Yes
50 AHL Somatileke	ADA	Hatara	Yes
51 K Piyasena	ADA	Peradeniya	Yes
52 WJ Bandara	AO	Bentota	Yes
53 SN Jayawardena	RO	Maha Illup.	Yes
54 PHN Dayaratne	ADA	Ampara	Yes
55 ARM Mahrouf	Agric Economist	Bandarawela	Yes
56 SK Tharamarajah	RO	Bombuwela	Yes
57 DPP Jayakody	RO	Makandura	Yes

Extension Phase

	In program	USA	Retd date
58) PAP de Silva	"	"	
59) KSU Jayaratne	"	"	
60) J Abeygunasekera	"	"	
61) I Ariyaratne	"	"	
62) EMDSN Ekanayake	"	"	
63) I Hedagoda			26/5/93
64) HU Warnakulsuriya			23/6/93
65) GLB Delungahawatte	"	"	

## **5.2 Coordination, Reporting and Evaluation**

The Final Impact Evaluation of the DAR Project was completed by two external evaluators. The team found that DARP has been very successful in strengthening the DOA through technical assistance, training, computerization, provision of facilities and equipment, and through special project funds which facilitated the implementation of innovative activities. Lessons learned include the need for a) verification of design assumptions, b) design and implementation flexibility with changing project and policy environment, and c) ensuring that recipient agencies involve and build support of their ultimate clients.

## **6. ADMINISTRATION OF SPECIAL PROJECT FUNDS**

Use of Special Project Funds has continued at an accelerated rate under the Deputy COP, Dr Sidney Kirinde and his staff, Ms Nirmala Nadarajah, Grant Funds Manager, and Mr S Srikanthan, Field Operations Coordinator. Budgets were realigned at the end of June to reflect reallocation of funds toward activities of greater priority, including the National Horticultural Exhibition.

## Utilization of SPF - Table 1

**SUMMARY OF SPECIAL PROJECT FUNDS, JUNE 30, 1993  
EXPENDITURES AGAINST LINE ITEMS IN WORK PLAN BUDGET**

LINE ITEMS	BUDGET	APPROVED AMOUNT	EXPENDED THIS MONTH	EXPENDED TO DATE
			(US Dollars)	
<b>TECHNICAL AREA 1</b>				
1. Commodity Situation Studies				
2. Horticultural Assessment				
3. Plant Quarantine Review				
4. Ag. Policy Review	1,605	1,605		1,602.57
5. Special Studies	3,000	3,000	646.57	1,975.71
<b>TECHNICAL AREA 2</b>				
1. Develop Research Plan				
2. Review of Varietal Release Procedures				
<b>TECHNICAL AREA 3</b>				
1. Develop Comprehensive Plan				
2. Strengthen Communication Unit	4,000	4,000		
3. Expand Farm Broadcasting Capacity	30,000	30,000	10583.88	12,052.06
4. Expand Capabilities in Publishing				
5. Special Campaigns	142,560	142,560	1,098.61	121,287.71
<b>TECHNICAL AREA 4</b>				
1. Introduction of Germplasm	11,880	11,880		10,862.92
2. Varietal Development				
3. Pest Control Research				
4. Pilot Programme to Promote IPM				
5. Post Harvest Technology Development				
6. Onion Storage Structure Improvement	4,400	4,400	-61.81	4,316.51
7. Promote Cultivation in Heda	16,690	16,690	(103.81)	15,564.51
8. Block Demos OFC Technologies	17,785	17,785	852.79	9,629.28
9. Research Grant Programme	55,050	55,050	2,314.87	43,179.06
10. Horticulture Exhibition	67,350	67,350	26,299.40	52,574.73
<b>TECHNICAL AREA 5</b>				
1. Establish National Seed Policy				
2. Seed Marketing Promotion	23,600	23,600	1,074.82	20,299.22
3. Development of Seed Enterprises	40,000	40,000	2,432.82	32,665.93
<b>TECHNICAL AREA 6</b>				
1. Install Seed Equipment	60,500	60,500	7,238.77	32,277.96
2. Extend Certification Services	24,000	24,000	1,431.48	18,160.27
3. Demonstrate Large Onion Seed Prod.	4,200	4,200		4,161.70
<b>7. MANAGEMENT TRAINING</b>	37,380	37,380		23,835.42
<b>GRAND TOTAL</b>	544,000	544,000	53,808.39	404,445.56

Utilization of SPF - Table 2

EXPEND AGAINST SPECIFIC ACTIVITY BUDGETS WITHIN LINE ITEMS - JUNE'93

ACTIVITY	APPROVED AMOUNT	EXPENDED THIS MONTH	EXPENDED TO DATE
Line Item.Sub-line Item.Specific Activity		(US Dollars)	
1.4.01 Modifications to Computer Room	1,605		1,602.57
1.5.01 Special Studies	3,000	646.57	1,975.71
3.2.01 Strengthening Comm. Unit (Software)	4,000		
3.3.01 Expand Farm Broadcasting Capacity	30,000	10,583.88	12,052.06
3.5.01 Printing Technoguide	37,515		37,513.39
3.5.02 Newspaper Campaigns	30,045		30,041.82
3.5.03 Mass Media Campaigns	75,000	1,098.61	53,732.50
4.1.01 Orchids	10,000		9,984.00
4.1.02 Grapes Plant	1,000		
4.1.03 Tropical Fruits	880		878.92
4.6.01 Onion Storage Structure Improvement	4,400	(61.81)	4,316.51
4.7.01 Meda Demonstrations'92	1,690		1,686.78
4.7.02 Meda Demonstrations'93	15,000	(103.81)	13,877.73
4.8.01 Yala Demonstrations'92	8,785		8,776.49
4.8.02 Yala Demonstrations'93	9,000	852.79	852.79
4.9.01 Cross Protection	17,000	1,318.20	24,058.67
4.9.03 Mealy Bug	2,600	135.93	1,714.03
4.9.04 Leary Vegetables	2,600	17.19	884.04
4.9.05 Vegetable Pest	2,250	122.04	1,964.37
4.9.06 Ripening of Banana	4,000	46.88	1,959.76
4.9.07 Pre-basic Seed Potato	2,000		499.16
4.9.08 Apple and Pear Diseases	2,600	62.46	671.74
4.9.09 Cooking Quality of FLCG Crops	6,000	83.70	730.07
4.9.10 PGR and Cucubits Productivity	2,000		869.95
4.9.11 Latex in Mangosteen	2,500	48.94	1,195.48
4.9.12 Chilli NLD Studies	1,000		203.56
4.9.13 Insect Tests:Floriculture	3,200	111.02	1,977.97
4.9.14 Leaf Twister Disease:Onion	1,300	225.77	1,939.80
4.9.15 Tissue Culture:F. benjamina	2,000	1.77	1,350.03
4.9.16 Weaning Plantlets	2,000	140.97	1,775.76
4.9.17 Potato Tuberlet Production	2,000		1,384.67
4.9.18 Research Grants: Workshop			
4.10.01 Bio-Technology Workshop	7,850		2,288.99
4.10.02 Horticulture Exhibition	59,500	26,299.40	50,285.74
5.2.01 Seed Market Study	9,500		8,327.32
5.2.02 Farm Manager Training	1,500		1,493.00
5.2.03 Nurserymen Training	9,600	1,074.82	9,034.84
5.2.04 Seed Development Unit	3,000		1,444.06
5.3.01 Seed Enterprise Development	40,000	2,432.82	32,665.93
6.1.01 Install. of Seed Equip - Nikweratiya	21,000		18,006.19
6.1.02 Install. of Seed Equip - Pelwehera	19,500		7,033.00
6.1.03 Install. of Seed Equip - Aluttarama	20,000	7,238.77	7,238.77
6.2.01 Extend Certification Services	6,000	780.44	5,873.78
6.2.02 SC&PP Building Repairs	11,000		10,832.26
6.2.03 Labelling Mother Plants	7,000	651.04	1,454.23
6.3.01 Demonstrate Large Onion Seed Prod.	4,200		4,161.70
7.1.01 Management Training	20,000		13,791.55
7.1.02 DOA Management Workshop	1,380		
7.2.01 Software Training	16,000		10,043.87
<b>GRAND TOTAL</b>	<b>544,000</b>	<b>53,808.39</b>	<b>404,445.56</b>

## 7. LEVEL OF EFFORT AND FINANCIAL STATUS

A total of 105 person-months of technical assistance have been provided under the contract. The proportion of local versus expatriate short-term assistance has been greater than expected. Plans for the remainder of the Project include:

Long-term:	
Chief of Party/Ag Economist	2
Short-term Expatriate:	
Management Training	1
Short-term Local:	
Management Training	1

Table 3 shows the status of technical assistance provided up to now. Table 4 shows the financial status of the technical assistance and training budgets up to the end of the quarter.

**Table 3 PERSON-MONTHS OF TECHNICAL ASSISTANCE UNDER THE EXTENSION PHASE OF THE DAR PROJECT**

	Total in Contract	Provided during Quarter	Cumulative Total
(person-months)			
<b>Long-term Advisors</b>	<b>41</b>	<b>3</b>	<b>39</b>
Chief of Party/Pattie	34	3	32
Seed Specialist/Reusche	7	--	7
<b>Short-term Expatriate Advisors</b>	<b>50</b>	<b>2.0</b>	<b>42.5</b>
Plant Genetics/Paroda		---	0.5
Research Management/Nickel		---	4.0
Seed Farm Management/Hatfield		---	2.0
Fruits and Vegetables/William		---	1.0
Horticultural/Duncan		---	1.5
Tropical Fruits/Martin		---	1.0
Post-harvest Handling/Mannion		---	1.5
Special Ag Econ Studies/Price		---	1.5
Extension Communications/Kuhnle		---	12.0
Varietal Release/Marlowe		---	1.5
Plant Quarantine/Santacroce		---	2.0

Table 3 (continued)

Management Training/Jennings		---	2.0
Management Training/Surles		0.5	2.5
Uva Horticulture/Hurelbrink		---	2.5
Uva Horticulture/Marlowe		---	2.0
Uva Horticulture/Ross		---	2.0
Tropical Fruits/Chapman		---	1.5
Tropical Fruits/Nissen		1.5	1.5

---

<b>Short-term Local Advisors</b>	<b>10</b>	<b>4.0</b>	<b>23.5</b>
----------------------------------	-----------	------------	-------------

Computer Programming/Samarakoon		---	2.5
Varietal Release/Albert		---	1.5
Varietal Release/Pinto		---	1.5
Seed Legislation/Perera		---	2.5
Plant Quarantine/Premaratne		---	2.0
Plant Quarantine/Rajapakse		---	2.0
Plant Quarantine/de Silva		---	2.0
Management Training/Abhayagoonawardhana		0.5	2.5
Tropical Fruits/Pinto		2.0	3.5
Broadcast Media/Jayaratna		1.5	4.0

---

<b>TOTAL Person-months</b>	<b>101</b>	<b>9.0</b>	<b>105.0</b>
----------------------------	------------	------------	--------------

---

**Table 4 FINANCIAL STATUS OF TECHNICAL ASSISTANCE AND TRAINING DIVERSIFIED AGRICULTURAL RESEARCH PROJECT, MAY 31, 1993**

<b>CATEGORY</b>	<b>BUDGET AMOUNT (US \$)</b>	<b>EXPENDITURES TO DATE (US \$)</b>	<b>PERCENT OF BUDGET EXPENDED</b>
SALARIES & WAGES	1,329,749	1,382,309	104.0%
FRINGE BENEFITS	131,262	125,259	95.4%
OVERHEAD	1,002,062	1,032,122	103.0%
TRAVEL & TRANSPORTATION	318,690	184,696	58.0%
ALLOWANCES	557,457	574,791	103.1%
EQUIPMENT & SUPPLIES	88,251	91,057	103.2%
OTHER DIRECT COSTS	438,069	465,293	106.2%
SPECIAL PROJECT FUND	759,498	532,339	70.1%
PARTICIPANT TRAINING	4,154,957	3,945,771	95.0%
OTHER SUBCONTRACTORS	1,668,173	1,496,172	89.7%
FEE	442,502	379,114	85.7%
<b>TOTAL</b>	<b>\$10,800,670</b>	<b>10,208,922</b>	<b>93.7%</b>

## Appendix A

### CUMULATIVE TARGETS AND ACCOMPLISHMENTS FOR TECHNICAL AND MANAGERIAL AREAS

Below are Life-of-Project (LOP) targets for various outputs envisioned under DARP. The list is revised from time to time to reflect more closely the evolution in expectations of the DOA and USAID. The second column shows the number of accomplishments that have become due as of this date, and the third column shows the number actually completed up to now. In parentheses after the description of some of the output targets, a brief note explains the nature of the particular output which has been completed.

#### TECHNICAL AREA 1: COMMODITY ANALYSIS AND POLICY REVIEW

LOP TARGET	TARGET TO DATE	COMPLETED TO DATE	DESCRIPTION OF OUTPUT TARGET
		(Updates to June 30, 1993)	
4	4	3	One crop-sector study per quarter for 2nd, 3rd, and 4th quarters of 1991 and the 1st quarter of 1992 (completed: Maize, Soybean, Onion)
1	1	1	Horticultural Assessment identifying principal functions of the DOA and recommending programs for support of horticultural industry development by first quarter 1992 (completed)
2	2	2	Review of plant quarantine procedures, amendment to legislative acts by mid 1992 (completed)
1	1	0	Review of food crop and diversification policies by mid 1993 (in progress)
3	2	1	Special studies pointing to policy implications (ornamental plants completed, study of rainfed areas underway)

#### TECHNICAL AREA 2: RESEARCH PRIORITIES AND STRATEGY

1	1	1	Research Strategy and Work Plan by mid 1992 (complete)
1	1	1	Document identifying limitations of current varietal release procedures and actions for streamlining by mid 1992 (complete)
1	0	0	Incorporation of a section on economic significance in research designs and programs, by mid 1993

(action will depend on priorities of RD and DAEP)

**TECHNICAL AREA 3: COMMUNICATION TECHNOLOGY**

1	1	1	Print Crop Technoguide in English, Sinhala, and Tamil, by end 1992 (completed)
1	1	1	Comprehensive Action Plan, 1st quarter 1992 (completed)
1	1	1	Installation of recording studio by end of Project (completed)
1	1	1	Desk-top publishing system in place by early 1993 (completed, except for purchase of computer accessories underway)
4	4	4	Four multi media campaigns (Meda, Yala, Pesticide Safety, and Seed Quality completed or underway)

**TECHNICAL AREA 4: RESEARCH AND TECHNOLOGY TRANSFER PROGRAMS**

200	400	401	Introduce lines of horticultural plants (melon trials completed in NWP, orchid materials imported, tropical fruit plant materials imported. Import of grape plants pending)
100	100	0	100 lines of 14 OFCs to be introduced by DOA
20	17	17	Development and release of new varieties by DOA (17 released since 1985. Three more expected in 1993)
2	2	2	Steps in tropical fruit propagation by 3rd quarter 1993 (plan prepared, training in plant propagation completed)
2	0	0	Publish IPM strategies for 3 crops and develop action plan for a pesticide residue analysis service (dropped)
1	1	1	Intensive, focused mass media and extension campaign on pesticide safety (underway)

1	1	1	Develop a Strategy/Action Plan for Development of the horticultural industry in Uva Province (completed)
16	16	15	Construction of onion storage demonstration units (complete)
40	40	270	20 hectares of demonstrations in dry and intermediate zones in 1992 and 250 hectares in 1993 to promote cultivation in Meda (completed)
1	1	1	Mass media campaign to draw farmer attention to Meda season (completed)
20	20	20	Demonstrations in Yala season to demonstrate OFC production technology (1992 complete, 1993 underway)
18	16	16	Research grants administered (16 grants completed or underway)
1	0	0	Carry out a National Horticultural Exhibition, July 1993
<b>TECHNICAL AREA 5: SEED RESTRUCTURING AND ENTERPRISE DEVELOPMENT</b>			
1	1	1	Prepare Comprehensive Policy to guide development of the seed industry (completed, pending adoption by DOA)
1	1	0	Simplified seed law developed and presented for enactment (legal comments pending)
1	1	1	National seed market study (Analysis completed)
1	1	1	Promotional campaign for seed marketing with mass media and extension support (in progress)
2	2	2	Seed Farm Management Workshops (completed)
6	6	10	Formation of seed enterprises including producer groups that will be involved in seed production and distribution (Of about 15 enterprises, DARP can take credit for directly supporting about 10)

**TECHNICAL AREA 6: SEED TECHNOLOGY**

6	6	6	Installation of six lines of new seed equipment (virtually completed)
1	1	1	Certify horticultural planting materials by 1993
15	15	15	Large onion seed demo plots (completed)

**TECHNICAL AREA 7: ORGANIZATION AND MANAGEMENT SYSTEMS**

1	1	1	Needs assessment in second quarter of 1992 (completed)
3	2	2	Executive level management training, beginning 3rd quarter 1992 (first two phases completed)
1	1	1	Develop a payroll program for Accounts Division (completed)
200	150	150	Train officers and staff in use of software programs (original target of 100 complete. Now expanded target to about 200)

**MANAGEMENT AREA 1: CONSTRUCTION AND PROCUREMENT**

30	30	30	Completion of construction on 30 buildings at six sites (completed)
1	1	1	Delivery of all original project equipment
1	1	0	Complete all additional procurement by end of Project

**MANAGEMENT AREA 2: PARTICIPANT TRAINING AND MANAGEMENT TRAINING**

65	59	6	Degrees and non-degree training programs completed (remaining 6 scheduled to return by August)
90	90	88	Person-months of short-term training (two more short-term events scheduled for August July and August)
10	10	10	Person-months of local short-term training (completed)

**MANAGEMENT AREA 3: COORDINATION, REPORTING, AND EVALUATION**

3	3	3	Life-of-Project Work Plan and annual updates (Original Work Plan and two annual updates completed)
10	10	10	Quarterly progress reports. (The current report is the last quarterly progress report)
1	0	0	A final report comparing targets with progress, making recommendations for future projects
1	1	1	Completion of an external evaluation (completed)

20